Table I. Adopted Prompt and Decay Gamma Rays from Thermal Neutron Capture for all Elements

	Eγ-keV	σ(Eγ)-barns	k_0
Hydrogen (Z=1), *At.Wt.=1.00794(7),* σ_γ*=0.3326(7)*			
^{1}H	**2223.24835(9)**	**0.3326(7)**	**1.0000(21)**
^{2}H	*6250.243(3)*	*0.000519(7)*[a]	*0.001560(21)*
Helium (Z=2), *At.Wt.=4.002602(2),* σ_γ*=4.2(12)×10^{-11}*			
^{3}He	**20520.46**	**4.2(12)×10^{-11}**	**3.2(9)×10^{-11}**
Lithium (Z=3), *At.Wt.=6.941(2),* σ_γ*=0.045(3)*			
		σ_α*(^{6}Li)=71.3(5)*	
^{6}Li	477.595(3)	0.00153(8)	0.00067(4)
^{7}Li	**980.53(7)**	**0.00415(13)**	**0.00181(6)**
^{7}Li	**1051.90(7)**	**0.00414(12)**	**0.00181(5)**
^{7}Li	**2032.30(4)**	**0.0381(8)**	**0.0166(4)**
^{6}Li	6768.81(4)	0.00151(9)	0.00066(4)
^{6}Li	7245.91(4)	0.00247(14)	0.00108(6)
Beryllium (Z=4), *At.Wt.=9.012182(3),* σ_γ*=0.0088(4)*			
^{9}Be	**853.630(12)**	**0.00208(24)**	**0.00070(8)**
^{9}Be	**2590.014(19)**	**0.00191(15)**	**0.00064(5)**
^{9}Be	**3367.448(25)**	**0.00285(22)**	**0.00096(7)**
^{9}Be	**3443.406(20)**	**0.00098(7)**	**0.000330(24)**
^{9}Be	5956.53(3)	1.46(12)×10^{-4}	4.9(4)×10^{-5}
^{9}Be	**6809.61(3)**	**0.0058(5)**	**0.00195(17)**
Boron (Z=5), *At.Wt.=10.811(7),* σ_γ*=0.104(20)*			
		σ_α*(^{10}B)=764(25)*	
^{10}B(n,α)	**477.595(3)**	**716(25)**	**201(7)**
^{10}B	*6739.67(17)*	*0.0113(10)*	*0.0032(3)*
Carbon (Z=6), *At.Wt.=12.0107(8),* σ_γ*=0.00351(5)*			
^{12}C	**1261.765(9)**	**0.00124(3)**	**0.000313(8)**
^{12}C	**3683.920(9)**	**0.00122(3)**	**0.000308(8)**
^{12}C	**4945.301(3)**	**0.00261(5)**	**0.000659(13)**
^{13}C	*8174.04(18)*	*1.09(6)×10^{-5}*	*2.75(15)×10^{-6}*
Nitrogen (Z=7), *At.Wt.=14.0067(2),* σ_γ*=0.0795(14)*			
		σ_p*(^{14}N)=1.82(3)*	
^{14}N	583.59(3)	0.000429(14)	9.3(3)×10^{-5}
^{14}N	**1678.281(14)**	**0.0063(3)**	**0.00136(7)**
^{14}N	1681.24(5)	0.00129(8)	0.000279(17)
^{14}N	1853.922(19)	0.000508(10)	1.099(22)×10^{-4}
^{14}N	**1884.821(16)**	**0.01470(18)**	**0.00318(4)**
^{14}N	1988.632(20)	0.000289(16)	6.3(4)×10^{-5}
^{14}N	**1999.690(16)**	**0.00323(4)**	**0.000699(9)**
^{14}N	**2520.457(17)**	**0.00441(24)**	**0.00095(5)**
^{14}N	2830.789(17)	0.00134(3)	0.000290(7)
^{14}N	3013.482(21)	0.00057(5)	1.23(11)×10^{-4}
^{14}N	**3531.981(15)**	**0.0071(4)**	**0.00154(9)**
^{14}N	**3677.732(13)**	**0.0115(6)**	**0.00249(13)**
^{14}N	3855.577(19)	0.000626(16)	1.35(4)×10^{-4}
^{14}N	3884.242(18)	0.000436(13)	9.4(3)×10^{-5}
^{14}N	**4508.731(12)**	**0.0132(7)**	**0.00286(15)**
^{14}N	**5269.159(13)**	**0.0236(3)**	**0.00511(7)**
^{14}N	**5297.821(15)**	**0.01680(23)**	**0.00363(5)**
^{14}N	**5533.395(14)**	**0.0155(8)**	**0.00335(17)**
^{14}N	**5562.057(13)**	**0.0084(5)**	**0.00182(11)**
^{15}N	*6128.63(4)d*	*5.90(12)×10^{-8}*	*1.28×10^{-8}[100%]*
^{14}N	**6322.428(12)**	**0.01450(22)**	**0.00314(5)**
^{14}N	**7298.983(17)**	**0.00746(12)**	**0.00161(3)**
^{14}N	**8310.161(19)**	**0.00330(6)**	**0.000714(13)**
^{14}N	9148.98(5)	0.00129(6)	0.000279(13)
^{14}N	**10829.120(12)**	**0.0113(8)**	**0.00244(17)**
Oxygen (Z=8), *At.Wt.=15.9994(3),* σ_γ*=1.90(19)×10^{-4}*			
^{18}O	*197.142(4)d*	*3.15(22)×10^{-7}*	*6.0×10^{-8}[99%]*
^{16}O	**870.68(6)**	**1.77(11)×10^{-4}**	**3.35(21)×10^{-5}**
^{16}O	**1087.75(6)**	**1.58(7)×10^{-4}**	**2.99(13)×10^{-5}**
^{17}O	*1981.95(9)*	*2.0(4)×10^{-7}*	*3.8(8)×10^{-8}*
^{16}O	**2184.42(7)**	**1.64(7)×10^{-4}**	**3.11(13)×10^{-5}**
^{16}O	**3272.02(8)**	**3.53(23)×10^{-5}**	**6.7(4)×10^{-6}**
Fluorine (Z=9), *At.Wt.=18.9984032(5),* σ_γ*=0.0096(5)*			
^{19}F	**166.700(20)**	**0.000413(18)**	**6.6(3)×10^{-5}**
^{19}F	325.606(24)	4.0(3)×10^{-5}	6.4(5)×10^{-6}
^{19}F	556.40(4)	2.01(8)×10^{-4}	3.21(13)×10^{-5}
^{19}F	**583.561(16)**	**0.00356(12)**	**0.000568(19)**
^{19}F	**656.006(18)**	**0.00197(7)**	**0.000314(11)**
^{19}F	661.647(21)	2.24(14)×10^{-4}	3.57(22)×10^{-5}

	Eγ-keV	σ(Eγ)-barns	k_0
Fluorine (Z=9), continued			
^{19}F	662.25(10)	1.02(15)×10^{-4}	1.63(24)×10^{-5}
^{19}F	**665.207(18)**	**0.00149(6)**	**2.38(10)×10^{-4}**
^{19}F	822.700(19)	2.20(9)×10^{-4}	3.51(14)×10^{-5}
^{19}F	978.19(5)	6.8(6)×10^{-5}	1.08(10)×10^{-5}
^{19}F	**983.538(20)**	**0.00116(4)**	**1.85(6)×10^{-4}**
^{19}F	1045.98(3)	1.79(8)×10^{-4}	2.86(13)×10^{-5}
^{19}F	**1056.776(17)**	**0.00095(3)**	**1.52(5)×10^{-4}**
^{19}F	1148.077(20)	0.000258(12)	4.12(19)×10^{-5}
^{19}F	1187.725(25)	4.5(3)×10^{-5}	7.2(5)×10^{-6}
^{19}F	1282.15(4)	8.5(5)×10^{-5}	1.36(8)×10^{-5}
^{19}F	**1309.126(17)**	**0.00076(3)**	**1.21(5)×10^{-4}**
^{19}F	1371.520(24)	1.44(7)×10^{-4}	2.30(11)×10^{-5}
^{19}F	**1387.901(20)**	**0.00082(3)**	**1.31(5)×10^{-4}**
^{19}F	1392.191(23)	8.3(5)×10^{-5}	1.32(8)×10^{-5}
^{19}F	1542.498(20)	0.000271(11)	4.32(18)×10^{-5}
^{19}F	***1633.53(3)d***	***0.0096(4)***	***0.00153[100%]***
^{19}F	1644.538(25)	7.3(6)×10^{-5}	1.16(10)×10^{-5}
^{19}F	**1843.688(20)**	**0.000600(23)**	**9.6(4)×10^{-5}**
^{19}F	1935.52(3)	7.3(5)×10^{-5}	1.16(8)×10^{-5}
^{19}F	1970.726(20)	8.5(6)×10^{-5}	1.36(10)×10^{-5}
^{19}F	2009.52(6)	4.6(4)×10^{-5}	7.3(6)×10^{-6}
^{19}F	2043.858(20)	7.0(4)×10^{-5}	1.12(6)×10^{-5}
^{19}F	2143.248(21)	1.95(8)×10^{-4}	3.11(13)×10^{-5}
^{19}F	2179.091(20)	8.9(6)×10^{-5}	1.42(10)×10^{-5}
^{19}F	2194.159(21)	1.32(6)×10^{-4}	2.11(10)×10^{-5}
^{19}F	2229.75(9)	5.3(5)×10^{-5}	8.5(8)×10^{-6}
^{19}F	2255.83(3)	8.5(5)×10^{-5}	1.36(8)×10^{-5}
^{19}F	2309.929(25)	4.5(3)×10^{-5}	7.2(5)×10^{-6}
^{19}F	2324.12(3)	1.18(5)×10^{-4}	1.88(8)×10^{-5}
^{19}F	2427.82(3)	1.89(8)×10^{-4}	3.01(13)×10^{-5}
^{19}F	**2431.084(10)**	**0.000392(24)**	**6.3(4)×10^{-5}**
^{19}F	2431.425(19)	7(3)×10^{-5}	1.1(5)×10^{-5}
^{19}F	2447.574(21)	1.44(7)×10^{-4}	2.30(11)×10^{-5}
^{19}F	2469.34(3)	1.94(9)×10^{-4}	3.09(14)×10^{-5}
^{19}F	2504.658(25)	3.8(4)×10^{-5}	6.1(6)×10^{-6}
^{19}F	2519.02(3)	6.8(5)×10^{-5}	1.08(8)×10^{-5}
^{19}F	**2529.212(18)**	**0.00061(3)**	**9.7(5)×10^{-5}**
^{19}F	2529.553(18)	9(3)×10^{-5}	1.4(5)×10^{-5}
^{19}F	2623.16(3)	4.5(3)×10^{-5}	7.2(5)×10^{-6}
^{19}F	2636.09(3)	9.6(5)×10^{-5}	1.53(8)×10^{-5}
^{19}F	2655.70(3)	7.6(6)×10^{-5}	1.21(10)×10^{-5}
^{19}F	2920.96(3)	9.6(5)×10^{-5}	1.53(8)×10^{-5}
^{19}F	2930.284(21)	8.5(5)×10^{-5}	1.36(8)×10^{-5}
^{19}F	2965.854(22)	9.3(5)×10^{-5}	1.48(8)×10^{-5}
^{19}F	**3014.568(10)**	**0.000405(15)**	**6.46(24)×10^{-5}**
^{19}F	3025.10(3)	8.4(9)×10^{-5}	1.34(14)×10^{-5}
^{19}F	3051.435(20)	0.000297(12)	4.74(19)×10^{-5}
^{19}F	3074.78(3)	1.86(8)×10^{-4}	2.97(13)×10^{-5}
^{19}F	3112.693(18)	2.36(9)×10^{-4}	3.76(14)×10^{-5}
^{19}F	3220.00(3)	6.1(4)×10^{-5}	9.7(6)×10^{-6}
^{19}F	3293.23(4)	3.8(8)×10^{-5}	6.1(13)×10^{-6}
^{19}F	3387.58(9)	6.1(5)×10^{-5}	9.7(8)×10^{-6}
^{19}F	**3488.064(18)**	**0.00073(3)**	**1.16(5)×10^{-4}**
^{19}F	3586.186(10)	0.000286(13)	4.56(21)×10^{-5}
^{19}F	3589.45(3)	1.79(8)×10^{-4}	2.86(13)×10^{-5}
^{19}F	3679.79(3)	8.7(8)×10^{-5}	1.39(13)×10^{-5}
^{19}F	3741.46(3)	5.7(5)×10^{-5}	9.1(8)×10^{-6}
^{19}F	3823.093(24)	1.07(6)×10^{-4}	1.71(10)×10^{-5}
^{19}F	**3964.872(20)**	**0.000435(18)**	**6.9(3)×10^{-5}**
^{19}F	4046.504(23)	6.0(16)×10^{-5}	1.0(3)×10^{-5}
^{19}F	4081.71(3)	5.6(4)×10^{-5}	8.9(6)×10^{-6}
^{19}F	4094.85(10)	5.1(17)×10^{-5}	8(3)×10^{-6}
^{19}F	4173.527(23)	1.66(7)×10^{-4}	2.65(11)×10^{-5}
^{19}F	4200.68(4)	1.11(6)×10^{-4}	1.77(10)×10^{-5}
^{19}F	4245.68(3)	9.5(5)×10^{-5}	1.52(8)×10^{-5}
^{19}F	4335.08(4)	4.6(4)×10^{-5}	7.3(6)×10^{-6}
^{19}F	**4556.817(20)**	**0.000517(23)**	**8.2(4)×10^{-5}**
^{19}F	4708.007(20)	5.1(4)×10^{-5}	8.1(6)×10^{-6}
^{19}F	4735.16(4)	5.6(4)×10^{-5}	8.9(6)×10^{-6}
^{19}F	4756.957(23)	1.86(9)×10^{-4}	2.97(14)×10^{-5}
^{19}F	4951.90(3)	6.2(6)×10^{-5}	9.9(10)×10^{-6}
^{19}F	**5033.530(23)**	**0.00063(3)**	**1.00(5)×10^{-4}**
^{19}F	**5279.360(20)**	**0.000421(20)**	**6.7(3)×10^{-5}**
^{19}F	5291.420(19)	2.35(11)×10^{-4}	3.75(18)×10^{-5}
^{19}F	5360.986(21)	1.17(5)×10^{-4}	1.87(8)×10^{-5}

[a]Deuterium isotopic cross section uncorrected for abundance

Table I. Adopted Prompt and Decay Gamma Rays from Thermal Neutron Capture for all Elements, continued

	Eγ-keV	σ(Eγ)-barns	k_0
Fluorine (Z=9), continued			
^{19}F	**5543.713(10)**	**0.000407(17)**	**6.5(3)×10^{-5}**
^{19}F	5554.51(3)	5.1(4)×10^{-5}	8.1(6)×10^{-6}
^{19}F	5616.933(23)	1.41(8)×10^{-4}	2.25(13)×10^{-5}
^{19}F	5935.179(20)	9.1(8)×10^{-5}	1.45(13)×10^{-5}
^{19}F	**6016.802(16)**	**0.00094(4)**	**1.50(6)×10^{-4}**
^{19}F	**6600.175(16)**	**0.00096(3)**	**1.53(5)×10^{-4}**
Neon (Z=10), *At.Wt.=20.1797(6),* σ_γ*=0.039(4)*			
^{20}Ne	**350.72(6)**	**0.0198(4)**	**0.00297(6)**
^{22}Ne	*439.986d*	*0.001400(5)*	*2.102×10^{-4}[99%]*
^{20}Ne	768.55(7)	2.5(4)×10^{-4}	3.8(6)×10^{-5}
^{20}Ne	964.41(7)	0.00029(11)	4.4(17)×10^{-5}
^{22}Ne	**1017.00(20)**	**0.0030(5)**	**0.00045(8)**
^{20}Ne	**1071.34(7)**	**0.0054(4)**	**0.00081(6)**
^{21}Ne	1274.542(7)	0.0018(5)	0.00027(8)
^{22}Ne	1364.8(3)	0.00091(12)	1.37(18)×10^{-4}
^{22}Ne	1822.40(20)	0.00052(5)	7.8(8)×10^{-5}
^{20}Ne	**1931.08(6)**	**0.00591(22)**	**0.00089(3)**
^{22}Ne	**1979.89(6)**	**0.00306(17)**	**0.00046(3)**
^{22}Ne	2013.8(4)	0.00040(5)	6.0(8)×10^{-5}
^{20}Ne	**2035.67(20)**	**0.0245(25)**	**0.0037(4)**
^{21}Ne	2082.5(4)	0.0011(3)	1.7(5)×10^{-4}
^{21}Ne	2165.9(7)	0.00084(21)	1.3(3)×10^{-4}
^{22}Ne	2203.58(6)	0.00238(23)	0.00036(4)
^{20}Ne	2437.84(25)	0.00036(7)	5.4(11)×10^{-5}
^{20}Ne	**2793.94(5)**	**0.00900(11)**	**0.001352(17)**
^{22}Ne	2819.22(16)	0.00052(5)	7.8(8)×10^{-5}
^{20}Ne	**2895.32(10)**	**0.00252(7)**	**0.000378(11)**
^{21}Ne	2987.8(5)	0.00086(22)	1.3(3)×10^{-4}
^{21}Ne	3181.8(16)	0.00048(12)	7.2(18)×10^{-5}
^{22}Ne	3220.42(16)	0.00057(23)	9(4)×10^{-5}
^{20}Ne	3971.98(15)	0.00039(3)	5.9(5)×10^{-5}
^{21}Ne	4018.3(5)	0.00090(23)	1.4(4)×10^{-4}
^{20}Ne	**4374.13(6)**	**0.01910(22)**	**0.00287(3)**
^{21}Ne	4634.83	0.00042(11)	6.3(17)×10^{-5}
^{21}Ne	4840.1(5)	0.00038(10)	5.7(15)×10^{-5}
^{20}Ne	5688.97(6)	0.00214(3)	0.000321(5)
^{20}Ne	6760.06(6)	0.002100(25)	0.000315(4)
^{21}Ne	9087.3(5)	0.00028(7)	4.2(11)×10^{-5}
Sodium (Z=11), *At.Wt.=22.989770(2),* σ_γ*=0.530(5)*			
^{23}Na	**90.9920(10)**	**0.235(3)**	**0.0310(4)**
^{23}Na	***472.202(9)d***	***0.478(4)***	***0.0630[100%]***
^{23}Na	499.381(5)	0.0143(3)	0.00189(4)
^{23}Na	501.347(13)	0.00314(13)	0.000414(17)
^{23}Na	563.1920(20)	0.0085(3)	0.00112(4)
^{23}Na	711.967(10)	0.00430(22)	0.00057(3)
^{23}Na	778.221(9)	0.0058(3)	0.00076(4)
^{23}Na	781.435(11)	0.0175(5)	0.00231(7)
^{23}Na	835.292(18)	0.0109(3)	0.00144(4)
^{23}Na	**869.210(9)**	**0.1080(13)**	**0.01424(17)**
^{23}Na	**874.389(6)**	**0.0760(11)**	**0.01002(15)**
^{23}Na	886.749(11)	0.00402(16)	0.000530(21)
^{23}Na	1006.23(4)	0.00370(18)	0.000488(24)
^{23}Na	1150.002(17)	0.00528(21)	0.00070(3)
^{23}Na	1282.764(8)	0.0055(3)	0.00073(4)
^{23}Na	1322.262(14)	0.0062(3)	0.00082(4)
^{23}Na	1337.73(4)	0.00313(20)	0.00041(3)
^{23}Na	1344.607(11)	0.0217(5)	0.00286(7)
^{23}Na	***1368.66(3)d***	***0.530(8)***	***0.0699[2.3%]***
^{23}Na	1373.751(8)	0.0079(19)	0.00104(25)
^{23}Na	1504.92(7)	0.00293(23)	0.00039(3)
^{23}Na	1562.470(21)	0.00256(20)	0.00034(3)
^{23}Na	1620.49(4)	0.00294(22)	0.00039(3)
^{23}Na	1633.080(23)	0.0074(4)	0.00098(5)
^{23}Na	**1636.293(21)**	**0.0250(7)**	**0.00330(9)**
^{23}Na	1712.43(20)	0.0112(6)	0.00148(8)
^{23}Na	1885.421(14)	0.0039(3)	0.00051(4)
^{23}Na	1899.06(4)	0.0081(4)	0.00107(5)
^{23}Na	1899.86(3)	0.0036(16)	0.00047(21)
^{23}Na	1914.44(3)	0.00606(21)	0.00080(3)
^{23}Na	1928.16(4)	0.00480(19)	0.000633(25)
^{23}Na	1928.37(4)	0.0055(5)	0.00073(7)
^{23}Na	1950.112(23)	0.0087(3)	0.00115(4)
^{23}Na	2019.50(8)	0.0025(3)	0.00033(4)

	Eγ-keV	σ(Eγ)-barns	k_0
Sodium (Z=11), continued			
^{23}Na	**2025.139(22)**	**0.0341(8)**	**0.00450(11)**
^{23}Na	2027.104(25)	0.0038(5)	0.00050(7)
^{23}Na	2030.318(23)	0.0219(7)	0.00289(9)
^{23}Na	2071.78(3)	0.0059(3)	0.00078(4)
^{23}Na	**2208.40(3)**	**0.0259(9)**	**0.00341(12)**
^{23}Na	2361.026(21)	0.0084(3)	0.00111(4)
^{23}Na	2397.433(25)	0.0069(4)	0.00091(5)
^{23}Na	**2414.457(21)**	**0.0237(5)**	**0.00312(7)**
^{23}Na	2505.439(21)	0.0167(5)	0.00220(7)
^{23}Na	**2517.81(3)**	**0.0699(15)**	**0.00921(20)**
^{23}Na	2595.49(3)	0.0052(3)	0.00069(4)
^{23}Na	2630.66(3)	0.00289(14)	0.000381(18)
^{23}Na	2715.87(3)	0.00306(16)	0.000403(21)
^{23}Na	**2752.271(23)**	**0.0654(12)**	**0.00862(16)**
^{23}Na	***2754.13(6)d***	***0.530(8)***	***0.0699[2.3%]***
^{23}Na	2763.17(7)	0.0053(12)	0.00070(16)
^{23}Na	2808.468(22)	0.0168(7)	0.00221(9)
^{23}Na	2860.355(20)	0.0177(5)	0.00233(7)
^{23}Na	2865.534(22)	0.0130(4)	0.00171(5)
^{23}Na	2904.89(3)	0.0059(3)	0.00078(4)
^{23}Na	2940.91(3)	0.00347(18)	0.000457(24)
^{23}Na	2981.97(3)	0.0142(6)	0.00187(8)
^{23}Na	3025.99(4)	0.0146(6)	0.00192(8)
^{23}Na	3092.50(5)	0.0025(4)	0.00033(5)
^{23}Na	3093.79(8)	0.00280(20)	0.00037(3)
^{23}Na	3096.78(3)	0.0199(7)	0.00262(9)
^{23}Na	3099.99(3)	0.0160(9)	0.00211(12)
^{23}Na	3116.97(4)	0.00523(24)	0.00069(3)
^{23}Na	3209.59(10)	0.00381(20)	0.00050(3)
^{23}Na	3214.22(4)	0.0054(4)	0.00071(5)
^{23}Na	3277.32(10)	0.00377(17)	0.000497(22)
^{23}Na	3369.94(4)	0.0133(4)	0.00175(5)
^{23}Na	3409.39(3)	0.00237(11)	0.000312(15)
^{23}Na	3413.97(3)	0.00441(18)	0.000581(24)
^{23}Na	3504.94(3)	0.00676(23)	0.00089(3)
^{23}Na	3546.00(3)	0.00454(22)	0.00060(3)
^{23}Na	**3587.460(25)**	**0.0596(11)**	**0.00786(15)**
^{23}Na	3643.655(20)	0.0067(3)	0.00088(4)
^{23}Na	3878.10(3)	0.0218(6)	0.00287(8)
^{23}Na	**3981.450(25)**	**0.0677(11)**	**0.00892(15)**
^{23}Na	4187.49(3)	0.0073(5)	0.00096(7)
^{23}Na	5113.007(16)	0.00250(14)	0.000330(18)
^{23}Na	5612.274(16)	0.0026(11)	0.00034(15)
^{23}Na	5614.239(18)	0.005(3)	0.0007(4)
^{23}Na	5617.452(17)	0.016(5)	0.0021(7)
^{23}Na	**6395.478(15)**	**0.1000(20)**	**0.0132(3)**
Magnesium (Z=12), *At.Wt.=24.3050(6),* σ_γ*=0.0666(13)*			
^{24}Mg	**389.670(21)**	**0.00586(24)**	**0.00073(3)**
^{24}Mg	**585.00(3)**	**0.0314(11)**	**0.00392(14)**
^{26}Mg	*843.71(3)d*	*0.00298(14)*	*0.000372[78%]*
^{24}Mg	862.96(3)	0.000410(21)	5.1(3)×10^{-5}
^{24}Mg	**974.66(3)**	**0.00663(24)**	**0.00083(3)**
^{26}Mg	984.88(4)	0.00064(4)	8.0(5)×10^{-5}
^{25}Mg	1003.14(3)	0.00161(6)	2.01(8)×10^{-4}
^{25}Mg	**1129.575(23)**	**0.00891(25)**	**0.00111(3)**
^{25}Mg	1411.70(3)	0.00130(5)	1.62(6)×10^{-4}
^{26}Mg	1615.11(4)	0.00070(4)	8.7(5)×10^{-5}
^{24}Mg	1712.92(4)	0.00118(7)	1.47(9)×10^{-4}
^{25}Mg	1775.31(3)	0.00129(5)	1.61(6)×10^{-4}
^{25}Mg	**1808.668(22)**	**0.0180(5)**	**0.00224(6)**
^{25}Mg	1896.72(3)	0.00094(4)	1.17(5)×10^{-4}
^{24}Mg	1978.25(3)	0.00111(5)	1.38(6)×10^{-4}
^{25}Mg	2132.67(3)	0.00089(4)	1.11(5)×10^{-4}
^{25}Mg	2189.57(4)	0.000592(22)	7.4(3)×10^{-5}
^{25}Mg	2353.27(4)	0.000447(21)	5.6(3)×10^{-5}
^{25}Mg	2426.12(3)	0.000519(20)	6.47(25)×10^{-5}
^{24}Mg	**2438.54(3)**	**0.00473(19)**	**0.000590(24)**
^{25}Mg	2510.02(4)	0.00058(3)	7.2(4)×10^{-5}
^{25}Mg	2523.65(4)	0.00100(4)	1.25(5)×10^{-4}
^{25}Mg	2541.21(3)	0.00148(7)	1.85(9)×10^{-4}
^{24}Mg	**2828.172(25)**	**0.0240(8)**	**0.00299(10)**
^{26}Mg	2881.64(3)	0.00272(14)	0.000339(17)
^{25}Mg	2938.159(25)	0.00094(4)	1.17(5)×10^{-4}
^{24}Mg	**3054.00(3)**	**0.0083(3)**	**0.00103(4)**

Table I. Adopted Prompt and Decay Gamma Rays from Thermal Neutron Capture for all Elements, continued

	Eγ-keV	σ(Eγ)-barns	k_0
Magnesium (Z=12), continued			
^{25}Mg	3208.97(4)	0.000398(19)	$4.96(24)\times10^{-5}$
^{24}Mg	**3301.41(3)**	**0.00620(24)**	**0.00077(3)**
^{25}Mg	3319.65(3)	0.00100(4)	$1.25(5)\times10^{-4}$
^{25}Mg	3341.00(4)	0.00046(3)	$5.7(4)\times10^{-5}$
^{25}Mg	3406.41(16)	0.0014(5)	$1.7(6)\times10^{-4}$
^{24}Mg	**3413.10(3)**	**0.00401(16)**	**0.000500(20)**
^{25}Mg	3551.19(3)	0.00109(4)	$1.36(5)\times10^{-4}$
^{26}Mg	3561.29(3)	0.00249(12)	0.000310(15)
^{24}Mg	3691.02(3)	0.00068(4)	$8.5(5)\times10^{-5}$
^{25}Mg	3744.00(3)	0.00136(5)	$1.70(6)\times10^{-4}$
^{25}Mg	3810.13(4)	0.00097(4)	$1.21(5)\times10^{-4}$
^{25}Mg	**3831.480(24)**	**0.00418(14)**	**0.000521(17)**
^{26}Mg	3843.00(5)	0.00033(3)	$4.1(4)\times10^{-5}$
^{24}Mg	**3916.84(3)**	**0.0320(11)**	**0.00399(14)**
^{25}Mg	4216.38(3)	0.00145(5)	$1.81(6)\times10^{-4}$
^{25}Mg	4410.13(3)	0.00067(4)	$8.4(5)\times10^{-5}$
^{24}Mg	4528.55(9)	0.00035(3)	$4.4(4)\times10^{-5}$
^{25}Mg	4602.93(3)	0.000363(17)	$4.53(21)\times10^{-5}$
^{24}Mg	4766.69(4)	0.000327(22)	$4.1(3)\times10^{-5}$
^{25}Mg	4967.19(3)	0.00162(7)	$2.02(9)\times10^{-4}$
^{25}Mg	5067.14(3)	0.00096(4)	$1.20(5)\times10^{-4}$
^{25}Mg	5452.025(25)	0.00206(7)	0.000257(9)
^{24}Mg	6354.98(3)	0.00106(6)	$1.32(8)\times10^{-4}$
^{26}Mg	6442.52(3)	0.00039(4)	$4.9(5)\times10^{-5}$
^{25}Mg	6742.14(3)	0.000411(19)	$5.12(24)\times10^{-5}$
^{25}Mg	8153.448(21)	0.00285(11)	0.000355(14)
^{25}Mg	9282.642(20)	0.000438(18)	$5.46(22)\times10^{-5}$
Aluminum (Z=13), *At.Wt.=26.981538(2),* σ_γ*=0.231(3)*			
^{27}Al	**30.6380(10)**	**0.0798(20)**	**0.00896(22)**
^{27}Al	400.589(25)	0.00141(4)	$1.58(5)\times10^{-4}$
^{27}Al	831.426(22)	0.00269(7)	0.000302(8)
^{27}Al	865.84(3)	0.00087(3)	$9.8(3)\times10^{-5}$
^{27}Al	941.75(3)	0.00246(5)	0.000276(6)
^{27}Al	**982.951(10)**	**0.00902(14)**	**0.001013(16)**
^{27}Al	1013.588(10)	0.00555(10)	0.000623(11)
^{27}Al	1073.94(4)	0.00100(4)	$1.12(5)\times10^{-4}$
^{27}Al	1102.06(4)	0.00103(4)	$1.16(5)\times10^{-4}$
^{27}Al	1125.289(14)	0.00083(4)	$9.3(5)\times10^{-5}$
^{27}Al	1193.476(22)	0.00097(4)	$1.09(5)\times10^{-4}$
^{27}Al	1283.693(12)	0.00222(6)	$2.49(7)\times10^{-4}$
^{27}Al	1342.320(20)	0.00209(6)	$2.35(7)\times10^{-4}$
^{27}Al	1408.344(9)	0.00640(13)	0.000719(15)
^{27}Al	1526.246(12)	0.00339(9)	0.000381(10)
^{27}Al	1589.62(3)	0.00247(7)	0.000277(8)
^{27}Al	**1622.877(18)**	**0.00989(15)**	**0.001111(17)**
^{27}Al	1705.509(22)	0.00080(5)	$9.0(6)\times10^{-5}$
^{27}Al	***1778.92(3)d***	***0.232(4)***	***0.0261[95%]***
^{27}Al	1864.33(3)	0.00091(4)	$1.02(5)\times10^{-4}$
^{27}Al	1927.527(25)	0.00262(7)	0.000294(8)
^{27}Al	1983.978(14)	0.00207(8)	$2.32(9)\times10^{-4}$
^{27}Al	2108.197(10)	0.00549(11)	0.000617(12)
^{27}Al	2138.833(10)	0.00424(9)	0.000476(10)
^{27}Al	2170.70(3)	0.00082(5)	$9.2(6)\times10^{-5}$
^{27}Al	2255.37(3)	0.00109(5)	$1.22(6)\times10^{-4}$
^{27}Al	2271.686(21)	0.00396(10)	0.000445(11)
^{27}Al	**2282.794(9)**	**0.00890(17)**	**0.001000(19)**
^{27}Al	2451.565(11)	0.00106(7)	$1.19(8)\times10^{-4}$
^{27}Al	2577.701(12)	0.00412(10)	0.000463(11)
^{27}Al	**2590.193(9)**	**0.00807(16)**	**0.000906(18)**
^{27}Al	2625.859(14)	0.00264(6)	0.000297(7)
^{27}Al	2709.62(3)	0.00140(7)	$1.57(8)\times10^{-4}$
^{27}Al	2821.444(7)	0.00752(15)	0.000845(17)
^{27}Al	2954.47(7)	0.00098(5)	$1.10(6)\times10^{-4}$
^{27}Al	**3033.896(6)**	**0.0179(3)**	**0.00201(3)**
^{27}Al	3265.538(13)	0.00082(6)	$9.2(7)\times10^{-5}$
^{27}Al	3303.146(10)	0.00241(7)	0.000271(8)
^{27}Al	3346.970(13)	0.00111(5)	$1.25(6)\times10^{-4}$
^{27}Al	3391.699(23)	0.00117(5)	$1.31(6)\times10^{-4}$
^{27}Al	**3465.058(7)**	**0.0146(3)**	**0.00164(3)**
^{27}Al	3560.555(8)	0.00206(8)	$2.31(9)\times10^{-4}$
^{27}Al	**3591.189(8)**	**0.01000(21)**	**0.001123(24)**
^{27}Al	3708.939(14)	0.00088(8)	$9.9(9)\times10^{-5}$
^{27}Al	3789.326(12)	0.00191(8)	$2.15(9)\times10^{-4}$
^{27}Al	3823.909(23)	0.00114(7)	$1.28(8)\times10^{-4}$

	Eγ-keV	σ(Eγ)-barns	k_0
Aluminum (Z=13), continued			
^{27}Al	3849.111(8)	0.00699(17)	0.000785(19)
^{27}Al	3875.487(8)	0.00618(14)	0.000694(16)
^{27}Al	4015.658(13)	0.00166(7)	$1.86(8)\times10^{-4}$
^{27}Al	**4133.407(7)**	**0.0149(3)**	**0.00167(3)**
^{27}Al	**4259.534(7)**	**0.0153(3)**	**0.00172(3)**
^{27}Al	4377.618(12)	0.00103(8)	$1.16(9)\times10^{-4}$
^{27}Al	4428.414(13)	0.00185(8)	$2.08(9)\times10^{-4}$
^{27}Al	4660.043(5)	0.00605(16)	0.000680(18)
^{27}Al	**4690.676(5)**	**0.01090(24)**	**0.00122(3)**
^{27}Al	**4733.844(11)**	**0.0126(3)**	**0.00142(3)**
^{27}Al	4736.92(10)	0.00100(22)	$1.12(25)\times10^{-4}$
^{27}Al	4754.377(24)	0.00080(7)	$9.0(8)\times10^{-5}$
^{27}Al	4764.477(11)	0.00210(10)	$2.36(11)\times10^{-4}$
^{27}Al	4903.113(6)	0.00716(18)	0.000804(20)
^{27}Al	5103.711(8)	0.00097(6)	$1.09(7)\times10^{-4}$
^{27}Al	5134.343(8)	0.00722(23)	0.00081(3)
^{27}Al	5302.642(11)	0.00124(9)	$1.39(10)\times10^{-4}$
^{27}Al	5411.077(8)	0.00481(19)	0.000540(21)
^{27}Al	5585.651(11)	0.00279(12)	0.000313(13)
^{27}Al	5709.853(13)	0.00148(8)	$1.66(9)\times10^{-4}$
^{27}Al	5766.296(25)	0.00091(8)	$1.02(9)\times10^{-4}$
^{27}Al	6101.529(18)	0.00570(21)	0.000640(24)
^{27}Al	6198.143(11)	0.00210(14)	$2.36(16)\times10^{-4}$
^{27}Al	6316.024(9)	0.00500(20)	0.000562(22)
^{27}Al	6440.650(11)	0.00147(8)	$1.65(9)\times10^{-4}$
^{27}Al	6619.73(4)	0.00093(7)	$1.04(8)\times10^{-4}$
^{27}Al	6710.699(10)	0.00220(12)	$2.47(13)\times10^{-4}$
^{27}Al	**7693.397(4)**	**0.0081(3)**	**0.00091(3)**
^{27}Al	**7724.027(4)**	**0.0493(15)**	**0.00554(17)**
Silicon (Z=14), *At.Wt.=28.0855(3),* σ_γ*=0.172(5)*			
^{30}Si	752.215(23)	0.00316(10)	0.000341(11)
^{30}Si	*1266.15(10)d*	*$2.5(4)\times10^{-6}$*	*2.7×10^{-7}[12%]*
^{28}Si	**1273.349(17)**	**0.0289(6)**	**0.00312(7)**
^{28}Si	1446.176(22)	0.00134(13)	$1.45(14)\times10^{-4}$
^{28}Si	1867.32(3)	0.00129(14)	$1.39(15)\times10^{-4}$
^{28}Si	**2092.902(18)**	**0.0331(6)**	**0.00357(7)**
^{29}Si	2235.227(22)	0.00250(11)	0.000270(12)
^{28}Si	2425.767(23)	0.00494(15)	0.000533(16)
^{30}Si	2780.552(22)	0.00241(13)	0.000260(14)
^{30}Si	3054.321(23)	0.00245(14)	0.000264(15)
^{29}Si	3101.19(3)	0.00149(8)	$1.61(9)\times10^{-4}$
^{28}Si	**3538.966(22)**	**0.1190(20)**	**0.01284(22)**
^{28}Si	3660.713(23)	0.00703(21)	0.000759(23)
^{29}Si	3864.900(23)	0.00166(9)	$1.79(10)\times10^{-4}$
^{28}Si	3954.39(3)	0.00449(19)	0.000484(21)
^{28}Si	**4933.889(24)**	**0.1120(23)**	**0.01209(25)**
^{28}Si	5106.693(22)	0.0064(3)	0.00069(3)
^{28}Si	**6379.801(21)**	**0.0207(6)**	**0.00223(7)**
^{29}Si	6743.25(3)	0.00170(9)	$1.83(10)\times10^{-4}$
^{28}Si	**7199.199(23)**	**0.0125(4)**	**0.00135(4)**
^{28}Si	8472.209(23)	0.00381(18)	0.000411(19)
Phosphorus (Z=15), *At.Wt.=30.973761(2),* σ_γ*=0.172(6)*			
^{31}P	**78.083(20)**	**0.059(3)**	**0.0058(3)**
^{31}P	**512.646(19)**	**0.079(4)**	**0.0077(4)**
^{31}P	558.46(7)	0.0010(3)	$1.0(3)\times10^{-4}$
^{31}P	**636.663(21)**	**0.0311(14)**	**0.00304(14)**
^{31}P	744.99(5)	0.00101(5)	$9.9(5)\times10^{-5}$
^{31}P	1034.16(4)	0.00206(11)	$2.02(11)\times10^{-4}$
^{31}P	**1071.217(23)**	**0.0249(12)**	**0.00244(12)**
^{31}P	1149.298(19)	0.00380(19)	0.000372(19)
^{31}P	1244.64(3)	0.00357(17)	0.000349(17)
^{31}P	1322.72(3)	0.00529(25)	0.000518(24)
^{31}P	1353.56(5)	0.00126(7)	$1.23(7)\times10^{-4}$
^{31}P	1508.85(3)	0.00318(16)	0.000311(16)
^{31}P	1676.84(3)	0.00405(20)	0.000396(20)
^{31}P	1739.14(5)	0.00201(10)	$1.97(10)\times10^{-4}$
^{31}P	1873.52(4)	0.00320(16)	0.000313(16)
^{31}P	1941.05(3)	0.00413(20)	0.000404(20)
^{31}P	**2114.47(3)**	**0.0115(5)**	**0.00113(5)**
^{31}P	**2151.52(4)**	**0.0100(5)**	**0.00098(5)**
^{31}P	**2156.90(4)**	**0.0128(6)**	**0.00125(6)**
^{31}P	2227.50(5)	0.00248(15)	$2.43(15)\times10^{-4}$
^{31}P	2229.59(3)	0.00080(9)	$7.8(9)\times10^{-5}$

Table I. Adopted Prompt and Decay Gamma Rays from Thermal Neutron Capture for all Elements, continued

	Eγ-keV	σ(Eγ)-barns	k_0
Phosphorus (Z=15), continued			
^{31}P	2234.07(6)	0.00123(8)	1.20(8)×10^{-4}
^{31}P	2426.29(3)	0.00265(13)	0.000259(13)
^{31}P	2514.65(4)	0.00156(9)	1.53(9)×10^{-4}
^{31}P	2579.27(6)	0.00082(6)	8.0(6)×10^{-5}
^{31}P	**2586.00(4)**	**0.0089(4)**	**0.00087(4)**
^{31}P	2657.35(6)	0.00252(14)	2.47(14)×10^{-4}
^{31}P	2740.11(5)	0.00085(5)	8.3(5)×10^{-5}
^{31}P	2863.01(7)	0.00359(18)	0.000351(18)
^{31}P	2885.99(3)	0.0064(3)	0.00063(3)
^{31}P	**3058.17(4)**	**0.0110(4)**	**0.00108(4)**
^{31}P	3185.61(3)	0.00326(12)	0.000319(12)
^{31}P	**3273.98(4)**	**0.0083(3)**	**0.00081(3)**
^{31}P	3365.98(5)	0.00112(5)	1.10(5)×10^{-4}
^{31}P	3444.06(5)	0.00121(5)	1.18(5)×10^{-4}
^{31}P	**3522.59(3)**	**0.0219(8)**	**0.00214(8)**
^{31}P	3548.73(4)	0.00135(6)	1.32(6)×10^{-4}
^{31}P	3554.31(5)	0.00084(4)	8.2(4)×10^{-5}
^{31}P	**3899.89(3)**	**0.0294(10)**	**0.00288(10)**
^{31}P	3922.87(7)	0.00302(12)	0.000295(12)
^{31}P	3926.48(5)	0.00368(14)	0.000360(14)
^{31}P	3930.52(5)	0.00108(5)	1.06(5)×10^{-4}
^{31}P	3957.10(3)	0.00102(5)	9.98(5)×10^{-5}
^{31}P	4008.59(5)	0.00122(5)	1.19(5)×10^{-4}
^{31}P	4199.87(4)	0.0055(3)	0.00054(3)
^{31}P	4359.57(3)	0.00195(7)	1.91(7)×10^{-4}
^{31}P	4364.30(4)	0.0073(3)	0.00071(3)
^{31}P	4491.00(4)	0.00323(12)	0.000316(12)
^{31}P	4628.94(4)	0.00082(10)	8.0(10)×10^{-5}
^{31}P	4661.07(4)	0.00568(21)	0.000556(21)
^{31}P	**4671.37(3)**	**0.0194(7)**	**0.00190(7)**
^{31}P	4876.87(4)	0.00111(9)	1.09(9)×10^{-4}
^{31}P	4912.30(5)	0.00114(5)	1.12(5)×10^{-4}
^{31}P	5194.91(5)	0.00236(23)	2.31(23)×10^{-4}
^{31}P	5265.51(4)	0.0058(4)	0.00057(4)
^{31}P	5277.66(6)	0.00188(9)	1.84(9)×10^{-4}
^{31}P	5699.99(4)	0.00102(4)	9.98(4)×10^{-5}
^{31}P	5705.37(3)	0.00428(16)	0.000419(16)
^{31}P	5778.06(4)	0.00152(6)	1.49(6)×10^{-4}
^{31}P	**6785.504(24)**	**0.0267(15)**	**0.00261(15)**
^{31}P	**7422.022(25)**	**0.0082(3)**	**0.00080(3)**
^{31}P	7856.48(3)	0.00150(8)	1.47(8)×10^{-4}
Sulfur (Z=16), *At.Wt.=32.065(5),* σ_γ*=0.534(10)*			
^{36}S	*646.171(14)*	*4.5(5)×10^{-5}*	*4.3(5)×10^{-6}*
^{32}S	**840.993(13)**	**0.347(6)**	**0.0328(6)**
^{32}S	1472.401(14)	0.00870(19)	0.000822(18)
^{34}S	1572.333(6)	0.00408(12)	0.000386(11)
^{32}S	1697.24(3)	0.01250(25)	0.001181(24)
^{32}S	1964.86(3)	0.00659(22)	0.000623(21)
^{32}S	1967.11(3)	0.00357(18)	0.000337(17)
^{33}S	*2127.491(12)*	*0.00246(10)*	*2.32(10)×10^{-4}*
^{32}S	2216.722(17)	0.01210(23)	0.001144(22)
^{32}S	2313.354(17)	0.00366(13)	0.000346(12)
^{34}S	2347.695(7)	0.0060(3)	0.00057(3)
^{32}S	**2379.661(14)**	**0.208(5)**	**0.0197(5)**
^{32}S	2490.14(3)	0.0125(3)	0.00118(3)
^{32}S	2753.16(3)	0.0277(5)	0.00262(5)
^{32}S	2867.580(23)	0.00425(15)	0.000402(14)
^{32}S	**2930.67(3)**	**0.0832(13)**	**0.00786(12)**
^{36}S	*3103.36d*	*2.8(14)×10^{-5}*	*2.7×10^{-6}[88%]*
^{32}S	**3220.588(17)**	**0.117(5)**	**0.0111(5)**
^{32}S	3369.70(4)	0.0271(5)	0.00256(5)
^{32}S	3397.37(3)	0.00544(15)	0.000514(14)
^{32}S	3723.54(4)	0.0133(3)	0.00126(3)
^{32}S	4430.60(4)	0.0262(6)	0.00248(6)
^{34}S	4637.981(14)	0.00734(22)	0.000694(21)
^{32}S	**4869.61(3)**	**0.0650(13)**	**0.00614(12)**
^{32}S	5047.10(3)	0.0163(4)	0.00154(4)
^{32}S	**5420.574(24)**	**0.308(7)**	**0.0291(7)**
^{32}S	5583.50(3)	0.0086(3)	0.00081(3)
^{32}S	5887.96(3)	0.00373(17)	0.000353(16)
^{32}S	7799.815(24)	0.0144(5)	0.00136(5)
^{32}S	8640.594(25)	0.0098(7)	0.00093(7)

	Eγ-keV	σ(Eγ)-barns	k_0
Chlorine (Z=17), *At.Wt.=35.453(2),* σ_γ*=33.1(3)*			
^{35}Cl	292.177(8)	0.0893(10)	0.00763(9)
^{35}Cl	436.222(4)	0.3090(20)	0.02641(17)
^{35}Cl	508.866(4)	0.108(17)	0.0092(15)
^{35}Cl	**517.0730(10)**	**7.58(5)**	**0.648(4)**
^{35}Cl	632.437(5)	0.1110(16)	0.00949(14)
^{35}Cl	**786.3020(10)**	**3.420(7)**	**0.2923(6)**
^{35}Cl	**788.4280(10)**	**5.42(5)**	**0.463(4)**
^{35}Cl	936.920(8)	0.1720(13)	0.01470(11)
^{35}Cl	1034.27(22)	0.100(16)	0.0085(14)
^{35}Cl	1131.250(9)	0.626(3)	0.0535(3)
^{35}Cl	1162.7390(20)	0.76(3)	0.065(3)
^{35}Cl	**1164.8650(10)**	**8.91(4)**	**0.762(3)**
^{35}Cl	1170.946(4)	0.154(5)	0.0132(4)
^{35}Cl	1327.405(9)	0.4020(23)	0.03436(20)
^{35}Cl	1372.872(12)	0.105(4)	0.0090(3)
^{35}Cl	**1601.072(4)**	**1.210(7)**	**0.1034(6)**
^{35}Cl	1627.04(8)	0.094(5)	0.0080(4)
^{35}Cl	1640.099(10)	0.158(17)	0.0135(15)
^{35}Cl	1648.306(9)	0.174(5)	0.0149(4)
^{35}Cl	1729.929(9)	0.107(12)	0.0091(10)
^{35}Cl	1787.82(8)	0.177(6)	0.0151(5)
^{35}Cl	1828.49(4)	0.111(5)	0.0095(4)
^{35}Cl	1936.97(5)	0.153(9)	0.0131(8)
^{35}Cl	**1951.1400(20)**	**6.33(4)**	**0.541(3)**
^{35}Cl	**1959.346(4)**	**4.10(3)**	**0.350(3)**
^{35}Cl	1975.22(7)	0.214(22)	0.0183(19)
^{37}Cl	*1980.94(7)*	*0.045(4)*	*0.0038(3)*
^{35}Cl	2022.091(7)	0.161(6)	0.0138(5)
^{35}Cl	2034.63(3)	0.239(5)	0.0204(4)
^{35}Cl	2041.40(6)	0.121(5)	0.0103(4)
^{35}Cl	2075.440(13)	0.252(7)	0.0215(6)
^{35}Cl	2104(5)	0.105(7)	0.0090(6)
^{35}Cl	2156.19(4)	0.205(7)	0.0175(6)
^{37}Cl	*2166.90(20)d*	*0.0568(15)*	*0.00486[40%]*
^{35}Cl	2179.51(4)	0.12(5)	0.010(4)
^{35}Cl	2200.10(4)	0.123(5)	0.0105(4)
^{35}Cl	2289.78(16)	0.102(14)	0.0087(12)
^{35}Cl	2311.38(4)	0.35(10)	0.030(9)
^{35}Cl	2468.1830(20)	0.097(8)	0.0083(7)
^{35}Cl	2469.97(3)	0.24(3)	0.021(3)
^{35}Cl	2478(5)	0.101(20)	0.0086(17)
^{35}Cl	2489.74(9)	0.141(6)	0.0121(5)
^{35}Cl	2492.223(9)	0.11(4)	0.009(3)
^{35}Cl	2529.2(11)	0.121(13)	0.0103(11)
^{35}Cl	2537.25(7)	0.135(14)	0.0115(12)
^{35}Cl	2549.74(7)	0.090(15)	0.0077(13)
^{35}Cl	2622.86(5)	0.178(6)	0.0152(5)
^{35}Cl	2676.31(3)	0.533(4)	0.0456(3)
^{35}Cl	2797.90(4)	0.095(10)	0.0081(9)
^{35}Cl	2800.96(12)	0.183(7)	0.0156(6)
^{35}Cl	2808.86(7)	0.10(5)	0.009(4)
^{35}Cl	2810.988(9)	0.144(7)	0.0123(6)
^{35}Cl	2845.50(3)	0.349(3)	0.0298(3)
^{35}Cl	**2863.819(12)**	**1.820(10)**	**0.1556(9)**
^{35}Cl	2866.9(5)	0.192(12)	0.0164(10)
^{35}Cl	2876.49(5)	0.164(7)	0.0140(6)
^{35}Cl	2896.212(8)	0.146(6)	0.0125(5)
^{35}Cl	2975.21(7)	0.377(4)	0.0322(3)
^{35}Cl	2994.548(15)	0.279(8)	0.0238(7)
^{35}Cl	3001.07(5)	0.216(7)	0.0185(6)
^{35}Cl	3015.97(4)	0.328(3)	0.0280(3)
^{35}Cl	**3061.82(4)**	**1.130(7)**	**0.0966(6)**
^{35}Cl	3116.04(5)	0.297(3)	0.0254(3)
^{35}Cl	3332.87(8)	0.241(7)	0.0206(6)
^{35}Cl	3374.7(11)	0.179(7)	0.0153(6)
^{35}Cl	3428.83(5)	0.271(3)	0.0232(3)
^{35}Cl	3500.35(9)	0.100(6)	0.0085(5)
^{35}Cl	3561.37(7)	0.21(4)	0.018(3)
^{35}Cl	3566.32(4)	0.093(24)	0.0079(21)
^{35}Cl	3589.16(13)	0.18(5)	0.015(4)
^{35}Cl	3599.350(9)	0.164(6)	0.0140(5)
^{35}Cl	3604.14(17)	0.119(6)	0.0102(5)
^{35}Cl	3634.75(3)	0.098(6)	0.0084(5)
^{35}Cl	3749.91(10)	0.096(5)	0.0082(4)
^{35}Cl	3821.33(16)	0.320(10)	0.0274(9)

Table I. Adopted Prompt and Decay Gamma Rays from Thermal Neutron Capture for all Elements, continued

	Eγ-keV	σ(Eγ)-barns	k_0
Chlorine (Z=17), continued			
^{35}Cl	3825.22(13)	0.250(9)	0.0214(8)
^{35}Cl	3827.06(12)	0.238(17)	0.0203(15)
^{35}Cl	3962.67(4)	0.118(8)	0.0101(7)
^{35}Cl	3980.98(8)	0.331(7)	0.0283(6)
^{35}Cl	4054.25(5)	0.194(8)	0.0166(7)
^{35}Cl	4082.67(7)	0.263(5)	0.0225(4)
^{35}Cl	4138.39(9)	0.113(17)	0.0097(15)
^{35}Cl	4138.73(4)	0.095(10)	0.0081(9)
^{35}Cl	4298.33(4)	0.122(10)	0.0104(9)
^{35}Cl	4440.39(4)	0.377(4)	0.0322(3)
^{35}Cl	4524.87(4)	0.148(7)	0.0127(6)
^{35}Cl	4547.5(5)	0.146(8)	0.0125(7)
^{35}Cl	4616.45(9)	0.210(10)	0.0180(9)
^{35}Cl	4728.94(4)	0.223(9)	0.0191(8)
^{35}Cl	4944.36(4)	0.379(8)	0.0324(7)
^{35}Cl	4945.25(3)	0.194(18)	0.0166(15)
^{35}Cl	**4979.759(20)**	**1.230(10)**	**0.1051(9)**
^{35}Cl	4989.66(12)	0.10(6)	0.009(5)
^{35}Cl	5017.74(7)	0.161(8)	0.0138(7)
^{35}Cl	5246.958(21)	0.195(10)	0.0167(9)
^{35}Cl	5517.25(4)	0.560(5)	0.0479(4)
^{35}Cl	5584.525(23)	0.158(11)	0.0135(9)
^{35}Cl	5603.76(9)	0.11(3)	0.009(3)
^{35}Cl	5702.58(6)	0.127(10)	0.0109(9)
^{35}Cl	**5715.244(21)**	**1.820(16)**	**0.1556(14)**
^{35}Cl	5733.56(3)	0.161(11)	0.0138(9)
^{35}Cl	5902.74(3)	0.372(4)	0.0318(3)
^{35}Cl	6086.804(20)	0.295(15)	0.0252(13)
^{35}Cl	**6110.842(18)**	**6.59(6)**	**0.563(5)**
^{35}Cl	6267.63(4)	0.13(4)	0.011(3)
^{35}Cl	**6619.615(19)**	**2.530(23)**	**0.2163(20)**
^{35}Cl	**6627.821(18)**	**1.470(16)**	**0.1257(14)**
^{35}Cl	6977.836(19)	0.741(10)	0.0633(9)
^{35}Cl	**7413.968(18)**	**3.29(5)**	**0.281(4)**
^{35}Cl	**7790.330(18)**	**2.66(3)**	**0.227(3)**
^{35}Cl	8578.575(18)	0.883(13)	0.0755(11)
Argon (Z=18), *At.Wt.=39.948(1),* σ_γ*=0.675(10)*			
^{40}Ar	**167.30(20)**	**0.53(5)**	**0.040(4)**
^{40}Ar	348.7(3)	0.044(9)	0.0033(7)
^{40}Ar	**516.0(3)**	**0.167(17)**	**0.0127(13)**
^{40}Ar	518.7	0.0060(20)	0.00046(15)
^{40}Ar	**837.7(3)**	**0.063(7)**	**0.0048(5)**
^{40}Ar	867.3(6)	0.0070(20)	0.00053(15)
^{40}Ar	1044.3(4)	0.040(8)	0.0030(6)
^{40}Ar	**1186.8(3)**	**0.34(3)**	**0.0258(23)**
^{40}Ar	1354.0(4)	0.015(4)	0.0011(3)
^{36}Ar	1409.7(10)	0.0060(12)	0.00046(9)
^{40}Ar	1828.8(12)	0.0070(20)	0.00053(15)
^{40}Ar	1881.5(10)	0.009(3)	0.00068(23)
^{40}Ar	2130.8(8)	0.029(5)	0.0022(4)
^{40}Ar	2432.5(8)	0.0055(14)	0.00042(11)
^{36}Ar	2490.8(8)	0.0088(22)	0.00067(17)
^{40}Ar	2566.1(8)	0.018(4)	0.0014(3)
^{40}Ar	2614.4(8)	0.019(4)	0.0014(3)
^{40}Ar	**2771.9(8)**	**0.057(9)**	**0.0043(7)**
^{40}Ar	2781.8(15)	0.011(3)	0.00083(23)
^{40}Ar	2810.6(8)	0.039(8)	0.0030(6)
^{40}Ar	2842.6(10)	0.0058(14)	0.00044(11)
^{40}Ar	3089.5(10)	0.0070(20)	0.00053(15)
^{40}Ar	3150.3(10)	0.026(5)	0.0020(4)
^{40}Ar	3365.6(10)	0.028(6)	0.0021(5)
^{40}Ar	3452.0(10)	0.013(3)	0.00099(23)
^{40}Ar	**3700.6(8)**	**0.065(7)**	**0.0049(5)**
^{40}Ar	**4745.3(8)**	**0.36(4)**	**0.027(3)**
^{40}Ar	**5582.4(8)**	**0.077(8)**	**0.0058(6)**
^{36}Ar	6298.9(10)	0.0076(19)	0.00058(14)
Potassium (Z=19), *At.Wt.=39.0983(1),* σ_γ*=2.06(19)*			
^{39}K	**29.8300(10)**	**1.380(20)**	**0.1070(16)**
^{41}K	106.836(7)	0.0320(6)	0.00248(5)
^{39}K	522.319(7)	0.0347(7)	0.00269(5)
^{39}K	646.222(5)	0.0451(8)	0.00350(6)
^{41}K	681.937(8)	0.0149(5)	0.00115(4)
^{39}K	**770.3050(20)**	**0.903(12)**	**0.0700(9)**
Potassium (Z=19), continued			
^{39}K	843.468(10)	0.0197(5)	0.00153(4)
^{39}K	891.385(13)	0.019(4)	0.0015(3)
^{39}K	1086.707(16)	0.0222(7)	0.00172(5)
^{39}K	**1158.887(10)**	**0.1600(25)**	**0.01240(19)**
^{39}K	1247.193(11)	0.0784(13)	0.00608(10)
^{40}K	*1293.589(5)*	*0.0041(8)*	*0.00032(6)*
^{39}K	1303.515(19)	0.0550(12)	0.00426(9)
^{39}K	1373.227(18)	0.0251(7)	0.00195(5)
^{40}K	***1460.822(6)***	***3.24(5) $s^{-1}g^{-1}$***	
^{39}K	1480.024(24)	0.0353(9)	0.00274(7)
^{39}K	1489.676(10)	0.0277(8)	0.00215(6)
^{41}K	*1524.6(3)d*	*0.02000(4)*	*0.001550[2.8%]*
^{39}K	1613.756(10)	0.1190(20)	0.00922(16)
^{39}K	1618.973(10)	0.1300(21)	0.01008(16)
^{39}K	1704.656(23)	0.0244(8)	0.00189(6)
^{39}K	1795.438(24)	0.0292(8)	0.00226(6)
^{39}K	1825.815(19)	0.0147(7)	0.00114(5)
^{39}K	1929.169(10)	0.0397(9)	0.00308(7)
^{39}K	1956.515(24)	0.0406(11)	0.00315(9)
^{39}K	2007.69(3)	0.0513(12)	0.00398(9)
^{39}K	2017.472(11)	0.0540(12)	0.00419(9)
^{39}K	2039.924(18)	0.0519(13)	0.00402(10)
^{39}K	2047.301(11)	0.0537(13)	0.00416(10)
^{39}K	2069.752(18)	0.0363(10)	0.00281(8)
^{39}K	2073.793(19)	0.1370(24)	0.01062(19)
^{39}K	2153.86(3)	0.0158(7)	0.00122(5)
^{39}K	2206.22(4)	0.0166(12)	0.00129(9)
^{39}K	2206.26(3)	0.0157(17)	0.00122(13)
^{39}K	2230.54(3)	0.0202(10)	0.00157(8)
^{39}K	2290.420(19)	0.0582(13)	0.00451(10)
^{39}K	2346.22(4)	0.0138(7)	0.00107(5)
^{39}K	2367.30(3)	0.0157(7)	0.00122(5)
^{39}K	2389.245(10)	0.0301(10)	0.00233(8)
^{39}K	2545.99(3)	0.0536(12)	0.00415(9)
^{39}K	2609.97(3)	0.0213(7)	0.00165(5)
^{39}K	2614.18(3)	0.0165(6)	0.00128(5)
^{39}K	2638.866(24)	0.0144(6)	0.00112(5)
^{39}K	2726.780(24)	0.0225(9)	0.00174(7)
^{39}K	2756.678(17)	0.0404(22)	0.00313(17)
^{39}K	2799.04(3)	0.0145(7)	0.00112(5)
^{39}K	2806.42(3)	0.0256(9)	0.00198(7)
^{39}K	2938.17(3)	0.0140(9)	0.00109(7)
^{39}K	3055.30(3)	0.0464(12)	0.00360(9)
^{39}K	3262.28(4)	0.0376(11)	0.00291(9)
^{39}K	3304.17(4)	0.0146(7)	0.00113(5)
^{39}K	3338.05(6)	0.036(17)	0.0028(13)
^{39}K	3348.72(3)	0.0172(8)	0.00133(6)
^{39}K	3403.58(3)	0.0167(8)	0.00129(6)
^{39}K	3453.38(3)	0.0247(14)	0.00191(11)
^{39}K	3518.77(6)	0.0186(9)	0.00144(7)
^{39}K	3526.97(3)	0.0170(9)	0.00132(7)
^{39}K	3545.71(3)	0.0746(18)	0.00578(14)
^{39}K	3650.37(3)	0.0355(13)	0.00275(10)
^{39}K	3688.54(3)	0.0276(11)	0.00214(9)
^{39}K	3694.91(4)	0.0231(10)	0.00179(8)
^{39}K	3736.81(3)	0.0193(6)	0.00150(5)
^{39}K	3778.97(4)	0.0143(7)	0.00111(5)
^{39}K	3911.43(5)	0.0168(9)	0.00130(7)
^{39}K	3930.63(4)	0.0275(11)	0.00213(9)
^{39}K	3943.78(3)	0.0205(11)	0.00159(9)
^{39}K	3959.10(3)	0.0252(10)	0.00195(8)
^{39}K	3977.89(3)	0.0219(10)	0.00170(8)
^{39}K	4001.80(3)	0.0263(11)	0.00204(9)
^{39}K	4060.91(3)	0.0244(10)	0.00189(8)
^{39}K	4135.586(23)	0.0563(17)	0.00436(13)
^{39}K	4200.04(3)	0.0398(14)	0.00308(11)
^{39}K	4360.201(25)	0.0776(21)	0.00601(16)
^{39}K	4384.88(3)	0.0247(11)	0.00191(9)
^{39}K	4507.03(3)	0.0159(9)	0.00123(7)
^{39}K	4670.76(3)	0.0138(9)	0.00107(7)
^{39}K	4991.34(3)	0.0432(14)	0.00335(11)
^{39}K	5012.48(3)	0.0226(11)	0.00175(9)
^{39}K	5042.507(25)	0.0351(15)	0.00272(12)
^{39}K	5068.870(21)	0.0224(12)	0.00174(9)
^{39}K	5173.196(21)	0.048(3)	0.00372(23)

Table I. Adopted Prompt and Decay Gamma Rays from Thermal Neutron Capture for all Elements, continued

	Eγ-keV	σ(Eγ)-barns	k_0
Potassium (Z=19), continued			
^{39}K	**5380.018(16)**	**0.146(4)**	**0.0113(3)**
^{39}K	5508.660(21)	0.066(4)	0.0051(3)
^{39}K	5695.442(20)	0.114(3)	0.00884(23)
^{39}K	5729.308(22)	0.0437(18)	0.00339(14)
^{39}K	5751.758(17)	0.108(3)	0.00837(23)
^{39}K	6998.758(14)	0.0447(20)	0.00346(16)
^{39}K	7768.919(14)	0.117(7)	0.0091(5)
Calcium (Z=20), *At.Wt.=40.078(4),* σ_γ*=0.431(19)*			
^{44}Ca	174.12(7)	0.0168(4)	0.00127(3)
^{40}Ca	**519.66(5)**	**0.0503(13)**	**0.00380(10)**
^{40}Ca	660.00(5)	0.00487(18)	0.000368(14)
^{40}Ca	727.17(5)	0.0117(4)	0.00088(3)
^{43}Ca	1126.12(10)	0.00471(23)	0.000356(17)
^{40}Ca	1150.95(5)	0.0052(3)	0.000393(23)
^{43}Ca	1156.94(12)	0.0088(4)	0.00067(3)
^{44}Ca	1260.62(6)	0.00394(24)	0.000298(18)
^{40}Ca	1389.82(5)	0.0106(4)	0.00080(3)
^{40}Ca	1481.67(5)	0.0051(3)	0.000386(23)
^{40}Ca	1670.60(6)	0.0069(3)	0.000522(23)
^{44}Ca	1725.71(7)	0.0090(4)	0.00068(3)
^{40}Ca	**1942.67(3)**	**0.352(7)**	**0.0266(5)**
^{40}Ca	**2001.31(3)**	**0.0659(15)**	**0.00498(11)**
^{40}Ca	**2009.84(3)**	**0.0409(10)**	**0.00309(8)**
^{46}Ca	*2013.57(20)*	*2.9×10^{-5}*	*2.2×10^{-6}*
^{40}Ca	2290.43(5)	0.0077(4)	0.00058(3)
^{40}Ca	2605.34(6)	0.0061(4)	0.00046(3)
^{40}Ca	2660.37(7)	0.0074(4)	0.00056(3)
^{40}Ca	2767.92(7)	0.0070(15)	0.00053(11)
^{40}Ca	2810.06(5)	0.0167(5)	0.00126(4)
^{48}Ca	*3084.40(10)d*	*0.00190(21)*	*1.44×10^{-4}[79%]*
^{40}Ca	3584.77(7)	0.0100(5)	0.00076(4)
^{40}Ca	3609.80(6)	0.0283(9)	0.00214(7)
^{40}Ca	3759.48(7)	0.0117(5)	0.00088(4)
^{40}Ca	**4418.52(5)**	**0.0708(18)**	**0.00535(14)**
^{40}Ca	4516.54(17)	0.0049(3)	0.000371(23)
^{40}Ca	4749.21(7)	0.0134(7)	0.00101(5)
^{40}Ca	4962.79(7)	0.0067(4)	0.00051(3)
^{48}Ca	*5146.19(21)*	*0.00147(20)*	*$1.11(15)\times10^{-4}$*
^{44}Ca	5514.55(14)	0.0104(8)	0.00079(6)
^{40}Ca	5692.53(6)	0.0067(5)	0.00051(4)
^{42}Ca	*5885.87(16)*	*0.0024(4)*	*$1.8(3)\times10^{-4}$*
^{40}Ca	5900.02(6)	0.0258(12)	0.00195(9)
^{40}Ca	**6419.59(5)**	**0.176(5)**	**0.0133(4)**
Scandium (Z=21), *At.Wt.=44.955910(8),* σ_γ*=27.20(20)*			
^{45}Sc	**52.0110(10)**	**0.87(3)**	**0.0586(20)**
^{45}Sc	***142.528(8)d***	***4.88(7)***	***0.329[99%]***
^{45}Sc	**147.011(10)**	**6.08(9)**	**0.410(6)**
^{45}Sc	**216.44(4)**	**2.49(4)**	**0.168(3)**
^{45}Sc	**227.773(12)**	**7.13(11)**	**0.481(7)**
^{45}Sc	**228.716(12)**	**3.31(5)**	**0.223(3)**
^{45}Sc	280.726(12)	0.248(7)	0.0167(5)
^{45}Sc	**295.243(10)**	**3.97(11)**	**0.268(7)**
^{45}Sc	399.691(19)	0.202(7)	0.0136(5)
^{45}Sc	402.87(5)	0.107(6)	0.0072(4)
^{45}Sc	442.254(13)	0.096(6)	0.0065(4)
^{45}Sc	478.14(13)	0.073(10)	0.0049(7)
^{45}Sc	486.026(21)	0.593(14)	0.0400(9)
^{45}Sc	**539.437(20)**	**0.738(19)**	**0.0497(13)**
^{45}Sc	547.15(4)	0.373(12)	0.0251(8)
^{45}Sc	**554.44(4)**	**1.82(4)**	**0.123(3)**
^{45}Sc	**584.785(13)**	**1.77(3)**	**0.1193(20)**
^{45}Sc	**627.462(18)**	**2.23(5)**	**0.150(3)**
^{45}Sc	643.037(25)	0.259(9)	0.0175(6)
^{45}Sc	685.71(3)	0.149(9)	0.0100(6)
^{45}Sc	711.21(6)	0.104(8)	0.0070(5)
^{45}Sc	721.841(17)	0.487(15)	0.0328(10)
^{45}Sc	773.851(17)	0.572(13)	0.0386(9)
^{45}Sc	807.754(20)	0.523(13)	0.0353(9)
^{45}Sc	835.16(4)	0.265(8)	0.0179(5)
^{45}Sc	843.494(23)	0.138(6)	0.0093(4)
^{45}Sc	860.707(19)	0.396(13)	0.0267(9)
^{45}Sc	899.27(5)	0.133(9)	0.0090(6)
^{45}Sc	941.95(5)	0.107(24)	0.0072(16)

	Eγ-keV	σ(Eγ)-barns	k_0
Scandium (Z=21), continued			
^{45}Sc	1015.22(3)	0.256(12)	0.0173(8)
^{45}Sc	1057.89(3)	0.322(14)	0.0217(9)
^{45}Sc	1082.52(4)	0.160(11)	0.0108(7)
^{45}Sc	1123.17(5)	0.380(14)	0.0256(9)
^{45}Sc	1134.43(8)	0.132(9)	0.0089(6)
^{45}Sc	1166.45(6)	0.386(14)	0.0260(9)
^{45}Sc	1227.77(4)	0.332(13)	0.0224(9)
^{45}Sc	1251.68(6)	0.101(9)	0.0068(6)
^{45}Sc	1251.69(6)	0.129(23)	0.0087(16)
^{45}Sc	1268.87(6)	0.10(3)	0.0067(20)
^{45}Sc	1270.49(3)	0.269(13)	0.0181(9)
^{45}Sc	1285.34(4)	0.373(19)	0.0251(13)
^{45}Sc	1321.18(4)	0.206(23)	0.0139(16)
^{45}Sc	1321.96(4)	0.139(9)	0.0094(6)
^{45}Sc	1335.05(3)	0.640(22)	0.0431(15)
^{45}Sc	1510.13(6)	0.13(4)	0.009(3)
^{45}Sc	1575.27(3)	0.317(13)	0.0214(9)
^{45}Sc	1592.71(17)	0.11(3)	0.0074(20)
^{45}Sc	1618.36(6)	0.362(19)	0.0244(13)
^{45}Sc	1658.21(7)	0.107(12)	0.0072(8)
^{45}Sc	1693.30(4)	0.465(19)	0.0313(13)
^{45}Sc	1707.94(5)	0.077(10)	0.0052(7)
^{45}Sc	1753.85(4)	0.170(12)	0.0115(8)
^{45}Sc	1763.12(10)	0.077(10)	0.0052(7)
^{45}Sc	1777.43(11)	0.125(12)	0.0084(8)
^{45}Sc	1803.69(12)	0.075(9)	0.0051(6)
^{45}Sc	1814.92(4)	0.271(13)	0.0183(9)
^{45}Sc	1829.68(6)	0.152(10)	0.0102(7)
^{45}Sc	1857.59(4)	0.393(17)	0.0265(11)
^{45}Sc	1870.06(5)	0.206(13)	0.0139(9)
^{45}Sc	1885.97(7)	0.090(11)	0.0061(7)
^{45}Sc	1900.85(4)	0.274(11)	0.0185(7)
^{45}Sc	1913.59(6)	0.077(7)	0.0052(5)
^{45}Sc	1966.59(8)	0.080(8)	0.0054(5)
^{45}Sc	1975.36(6)	0.078(8)	0.0053(5)
^{45}Sc	2005.24(4)	0.351(11)	0.0237(7)
^{45}Sc	2058.84(9)	0.097(10)	0.0065(7)
^{45}Sc	2106.25(8)	0.143(11)	0.0096(7)
^{45}Sc	2110.20(10)	0.117(11)	0.0079(7)
^{45}Sc	2114.14(6)	0.210(13)	0.0142(9)
^{45}Sc	2129.69(4)	0.101(10)	0.0068(7)
^{45}Sc	2203.45(13)	0.102(10)	0.0069(7)
^{45}Sc	2243.06(6)	0.110(11)	0.0074(7)
^{45}Sc	2351.59(15)	0.074(9)	0.0050(6)
^{45}Sc	2362.36(9)	0.085(9)	0.0057(6)
^{45}Sc	2373.41(17)	0.086(9)	0.0058(6)
^{45}Sc	2404.82(7)	0.127(10)	0.0086(7)
^{45}Sc	2410.40(4)	0.087(9)	0.0059(6)
^{45}Sc	2477.42(6)	0.145(14)	0.0098(9)
^{45}Sc	2502.20(10)	0.082(12)	0.0055(8)
^{45}Sc	2635.55(8)	0.301(15)	0.0203(10)
^{45}Sc	2667.03(11)	0.127(14)	0.0086(9)
^{45}Sc	2693.90(9)	0.107(14)	0.0072(9)
^{45}Sc	2697.12(8)	0.084(14)	0.0057(9)
^{45}Sc	2721.37(16)	0.096(8)	0.0065(5)
^{45}Sc	2797.52(10)	0.105(11)	0.0071(7)
^{45}Sc	2991.04(11)	0.092(14)	0.0062(9)
^{45}Sc	2995.96(11)	0.079(13)	0.0053(9)
^{45}Sc	3011.73(8)	0.278(19)	0.0187(13)
^{45}Sc	3049.06(7)	0.106(12)	0.0071(8)
^{45}Sc	3080.8(5)	0.087(12)	0.0059(8)
^{45}Sc	3265.48(7)	0.146(14)	0.0098(9)
^{45}Sc	3281.87(8)	0.08(4)	0.005(3)
^{45}Sc	3309.70(9)	0.08(3)	0.0054(20)
^{45}Sc	3351.10(12)	0.121(14)	0.0082(9)
^{45}Sc	3458.45(19)	0.156(15)	0.0105(10)
^{45}Sc	3596.86(10)	0.077(14)	0.0052(9)
^{45}Sc	3623.19(10)	0.13(6)	0.009(4)
^{45}Sc	3799.13(8)	0.125(13)	0.0084(9)
^{45}Sc	3878.05(12)	0.088(11)	0.0059(7)
^{45}Sc	3999.48(12)	0.086(17)	0.0058(11)
^{45}Sc	4006.31(10)	0.091(17)	0.0061(11)
^{45}Sc	4021.46(9)	0.092(17)	0.0062(11)
^{45}Sc	4059.52(8)	0.18(3)	0.0121(20)
^{45}Sc	4065.97(9)	0.079(19)	0.0053(13)

Table I. Adopted Prompt and Decay Gamma Rays from Thermal Neutron Capture for all Elements, continued

	Eγ-keV	σ(Eγ)-barns	k_0
Scandium (Z=21), continued			
^{45}Sc	4109.60(9)	0.073(10)	0.0049(7)
^{45}Sc	4173.36(17)	0.11(3)	0.0074(20)
^{45}Sc	4231.81(16)	0.073(9)	0.0049(6)
^{45}Sc	4237.72(10)	0.096(17)	0.0065(11)
^{45}Sc	4293.30(21)	0.073(11)	0.0049(7)
^{45}Sc	4377.46(8)	0.127(15)	0.0086(10)
^{45}Sc	4465.89(13)	0.106(13)	0.0071(9)
^{45}Sc	4498.85(11)	0.149(15)	0.0100(10)
^{45}Sc	4617.93(9)	0.089(15)	0.0060(10)
^{45}Sc	4679.04(18)	0.112(14)	0.0075(9)
^{45}Sc	4720.86(11)	0.171(16)	0.0115(11)
^{45}Sc	4823.18(9)	0.078(11)	0.0053(7)
^{45}Sc	4883.71(13)	0.128(13)	0.0086(9)
^{45}Sc	4891.84(10)	0.094(12)	0.0063(8)
^{45}Sc	4919.38(11)	0.092(13)	0.0062(9)
^{45}Sc	4974.76(9)	0.498(24)	0.0336(16)
^{45}Sc	4993.58(10)	0.177(15)	0.0119(10)
^{45}Sc	5085.09(10)	0.103(14)	0.0069(9)
^{45}Sc	5128.48(12)	0.093(15)	0.0063(10)
^{45}Sc	5163.42(10)	0.149(20)	0.0100(13)
^{45}Sc	5210.11(12)	0.085(15)	0.0057(10)
^{45}Sc	5267.04(7)	0.38(3)	0.0256(20)
^{45}Sc	5286.20(8)	0.123(15)	0.0083(10)
^{45}Sc	5335.89(8)	0.20(3)	0.0135(20)
^{45}Sc	5346.19(10)	0.094(19)	0.0063(13)
^{45}Sc	5445.75(8)	0.170(19)	0.0115(13)
^{45}Sc	5481.62(9)	0.142(19)	0.0096(13)
^{45}Sc	5555.57(10)	0.079(14)	0.0053(9)
^{45}Sc	5583.82(10)	0.118(16)	0.0080(11)
^{45}Sc	5624.09(8)	0.198(20)	0.0133(13)
^{45}Sc	5665.71(9)	0.145(19)	0.0098(13)
^{45}Sc	5678.79(13)	0.077(16)	0.0052(11)
^{45}Sc	5743.38(7)	0.184(17)	0.0124(11)
^{45}Sc	5781.24(15)	0.072(15)	0.0049(10)
^{45}Sc	5896.94(8)	0.42(3)	0.0283(20)
^{45}Sc	5904.31(12)	0.084(17)	0.0057(11)
^{45}Sc	5977.32(10)	0.075(12)	0.0051(8)
^{45}Sc	6046.15(9)	0.144(19)	0.0097(13)
^{45}Sc	6055.05(5)	0.265(24)	0.0179(16)
^{45}Sc	6097.64(10)	0.082(12)	0.0055(8)
^{45}Sc	6170.22(4)	0.47(5)	0.032(3)
^{45}Sc	6201.40(13)	0.073(8)	0.0049(5)
^{45}Sc	6300.79(8)	0.183(25)	0.0123(17)
^{45}Sc	6309.27(11)	0.075(8)	0.0051(5)
^{45}Sc	6317.86(4)	0.58(4)	0.039(3)
^{45}Sc	6329.00(13)	0.185(22)	0.0125(15)
^{45}Sc	6349.80(4)	0.53(4)	0.036(3)
^{45}Sc	6364.43(9)	0.119(20)	0.0080(13)
^{45}Sc	6457.68(7)	0.099(14)	0.0067(9)
^{45}Sc	6468.55(13)	0.122(21)	0.0082(14)
^{45}Sc	6507.47(10)	0.107(12)	0.0072(8)
^{45}Sc	6557.06(6)	0.384(24)	0.0259(16)
^{45}Sc	6640.96(6)	0.150(23)	0.0101(16)
^{45}Sc	6646.04(6)	0.113(12)	0.0076(8)
^{45}Sc	6716.79(4)	0.312(22)	0.0210(15)
^{45}Sc	**6839.09(4)**	**0.95(4)**	**0.064(3)**
^{45}Sc	**6840.34(4)**	**0.76(11)**	**0.051(7)**
^{45}Sc	6874.18(7)	0.125(14)	0.0084(9)
^{45}Sc	7117.46(3)	0.39(3)	0.0263(20)
^{45}Sc	7233.39(5)	0.110(14)	0.0074(9)
^{45}Sc	7489.58(3)	0.077(12)	0.0052(8)
^{45}Sc	7635.84(3)	0.40(3)	0.0270(20)
^{45}Sc	7924.84(4)	0.095(18)	0.0064(12)
^{45}Sc	8132.507(25)	0.48(3)	0.0324(20)
^{45}Sc	**8175.176(21)**	**1.80(6)**	**0.121(4)**
^{45}Sc	8315.73(4)	0.41(3)	0.0276(20)
^{45}Sc	8470.363(20)	0.120(14)	0.0081(9)
^{45}Sc	**8532.122(20)**	**0.89(4)**	**0.060(3)**
^{45}Sc	8759.850(20)	0.168(16)	0.0113(11)
Titanium (Z=22), *At.Wt.=47.867(1),* σ_γ*=6.08(19)*			
^{48}Ti	137.504(8)	0.0542(9)	0.00343(6)
^{46}Ti	*159.376(14)*	*0.0090(8)*	*0.00057(5)*
^{50}Ti	*320.076(6)d*	*0.00860(9)*	*0.000544[86%]*
^{48}Ti	**341.706(5)**	**1.840(21)**	**0.1165(13)**
^{47}Ti	983.517(4)	0.1140(16)	0.00722(10)
^{49}Ti	1121.130(6)	0.0630(14)	0.00399(9)
^{50}Ti	*1166.6(4)*	*3.9×10^{-3}*	*2.5×10^{-4}*
^{48}Ti	**1381.745(5)**	**5.18(12)**	**0.328(8)**
^{48}Ti	1498.663(7)	0.297(5)	0.0188(3)
^{49}Ti	1553.786(6)	0.0967(22)	0.00612(14)
^{48}Ti	**1585.941(5)**	**0.624(8)**	**0.0395(5)**
^{48}Ti	1589.282(10)	0.0524(16)	0.00332(10)
^{48}Ti	1761.974(7)	0.311(4)	0.01969(25)
^{48}Ti	1793.476(8)	0.1530(24)	0.00969(15)
^{48}Ti	2836.1(7)	0.055(12)	0.0035(8)
^{48}Ti	2836.9(7)	0.055(12)	0.0035(8)
^{48}Ti	2943.07(3)	0.0614(18)	0.00389(11)
^{48}Ti	3026.704(20)	0.145(3)	0.00918(19)
^{48}Ti	3027.0(7)	0.13(3)	0.0082(19)
^{48}Ti	3475.58(3)	0.1020(25)	0.00646(16)
^{48}Ti	3733.627(20)	0.0873(25)	0.00553(16)
^{48}Ti	3920.404(22)	0.0839(23)	0.00531(15)
^{48}Ti	3923.4(7)	0.13(3)	0.0082(19)
^{48}Ti	4713.859(25)	0.0661(21)	0.00418(13)
^{48}Ti	4881.394(15)	0.308(7)	0.0195(4)
^{48}Ti	4966.802(15)	0.196(5)	0.0124(3)
^{48}Ti	**6418.426(14)**	**1.96(6)**	**0.124(4)**
^{48}Ti	6555.911(14)	0.334(8)	0.0211(5)
^{48}Ti	**6760.084(14)**	**2.97(9)**	**0.188(6)**
Vanadium (Z=23), *At.Wt.=50.9415(1),* σ_γ*=4.96(4)*			
^{51}V	**17.152(6)**	**0.260(20)**	**0.0155(12)**
^{51}V	22.764(3)	0.0700(20)	0.00416(12)
^{51}V	**124.453(4)**	**0.23(5)**	**0.014(3)**
^{51}V	**125.082(3)**	**1.61(4)**	**0.0958(24)**
^{51}V	**147.846(3)**	**0.253(6)**	**0.0151(4)**
^{51}V	**295.023(14)**	**0.164(4)**	**0.00976(24)**
^{51}V	**419.475(13)**	**0.249(6)**	**0.0148(4)**
^{51}V	**436.627(13)**	**0.397(9)**	**0.0236(5)**
^{51}V	**645.703(13)**	**0.769(17)**	**0.0457(10)**
^{51}V	682.031(17)	0.0180(10)	0.00107(6)
^{51}V	698.104(13)	0.049(4)	0.00291(24)
^{51}V	712.907(19)	0.0597(23)	0.00355(14)
^{51}V	**793.546(13)**	**0.199(5)**	**0.0118(3)**
^{51}V	**823.184(13)**	**0.320(8)**	**0.0190(5)**
^{51}V	**845.948(13)**	**0.252(7)**	**0.0150(4)**
^{51}V	886.631(21)	0.0171(7)	0.00102(4)
^{51}V	982.175(19)	0.0307(17)	0.00183(10)
^{51}V	1001.583(21)	0.0651(21)	0.00387(12)
^{51}V	1254.878(17)	0.0257(13)	0.00153(8)
^{51}V	1270.951(15)	0.022(5)	0.0013(3)
^{51}V	1272.67(3)	0.0291(21)	0.00173(12)
^{51}V	1307.279(17)	0.0410(19)	0.00244(11)
^{51}V	1322.664(22)	0.047(10)	0.0028(6)
^{51}V	1322.98(3)	0.0260(21)	0.00155(12)
^{51}V	1333.52(3)	0.0345(21)	0.00205(12)
^{51}V	1358.498(19)	0.151(5)	0.0090(3)
^{51}V	1401.641(16)	0.070(4)	0.00416(24)
^{51}V	1418.793(15)	0.068(4)	0.00405(24)
^{51}V	***1434.10(3)d***	***4.81(10)***	***0.286[91%]***
^{51}V	**1558.843(18)**	**0.323(8)**	**0.0192(5)**
^{50}V	1609.220(20)	0.0359(17)	0.00214(10)
^{51}V	1611.758(25)	0.0236(15)	0.00140(9)
^{51}V	1622.296(25)	0.0206(7)	0.00123(4)
^{51}V	1634.068(22)	0.0359(19)	0.00214(11)
^{51}V	1635.382(24)	0.020(4)	0.00119(24)
^{51}V	1664.192(17)	0.0519(24)	0.00309(14)
^{51}V	1732.563(20)	0.0161(16)	0.00096(10)
^{51}V	1775.431(21)	0.027(6)	0.0016(4)
^{51}V	**1777.961(19)**	**0.169(13)**	**0.0101(8)**
^{51}V	1952.964(14)	0.0677(25)	0.00403(15)
^{51}V	2020.749(18)	0.0214(17)	0.00127(10)
^{51}V	2083.652(14)	0.0339(19)	0.00202(11)
^{51}V	2100.804(14)	0.0239(15)	0.00142(9)
^{51}V	2145.826(18)	0.140(4)	0.00833(24)
^{51}V	2168.589(18)	0.0166(12)	0.00099(7)
^{51}V	2410.436(21)	0.0253(17)	0.00151(10)
^{51}V	2422.18(3)	0.112(24)	0.0067(14)
^{51}V	2841.64(3)	0.0333(19)	0.00198(11)

Table I. Adopted Prompt and Decay Gamma Rays from Thermal Neutron Capture for all Elements, continued

	Eγ-keV	σ(Eγ)-barns	k_0
Vanadium (Z=23), continued			
^{51}V	3032.60(9)	0.0249(20)	0.00148(12)
^{51}V	3502.64(4)	0.0306(18)	0.00182(11)
^{51}V	3534.07(3)	0.0243(21)	0.00145(12)
^{51}V	3577.98(3)	0.0271(20)	0.00161(12)
^{51}V	3715.86(3)	0.0256(21)	0.00152(12)
^{51}V	4116.821(23)	0.094(4)	0.00559(24)
^{51}V	4452.20(3)	0.050(10)	0.0030(6)
^{51}V	4486.46(3)	0.0187(20)	0.00111(12)
^{51}V	4772.17(3)	0.018(6)	0.0011(4)
^{51}V	4883.379(24)	0.073(4)	0.00434(24)
^{51}V	4992.94(4)	0.036(3)	0.00214(18)
^{51}V	**5142.363(23)**	**0.200(6)**	**0.0119(4)**
^{51}V	**5210.143(19)**	**0.244(20)**	**0.0145(12)**
^{51}V	**5515.813(23)**	**0.39(4)**	**0.0232(24)**
^{51}V	5551.32(3)	0.027(3)	0.00161(18)
^{51}V	5578.358(24)	0.019(3)	0.00113(18)
^{51}V	**5752.064(22)**	**0.366(24)**	**0.0218(14)**
^{51}V	5892.101(20)	0.126(7)	0.0075(4)
^{51}V	**6464.887(18)**	**0.43(4)**	**0.0256(24)**
^{51}V	**6517.282(19)**	**0.78(4)**	**0.0464(24)**
^{51}V	**6874.157(19)**	**0.49(6)**	**0.029(4)**
^{51}V	**7162.898(15)**	**0.59(4)**	**0.0351(24)**
^{51}V	7287.961(15)	0.056(4)	0.00333(24)
^{51}V	7293.572(16)	0.089(5)	0.0053(3)
^{51}V	**7310.721(15)**	**0.227(9)**	**0.0135(5)**
Chromium (Z=24), *At.Wt.=51.9961(6)*, σ_γ=*3.07(15)*			
^{50}Cr	27.97(7)	0.124(4)	0.00723(23)
^{52}Cr	564.05(12)	0.1130(20)	0.00659(12)
^{50}Cr	**749.09(3)**	**0.569(9)**	**0.0332(5)**
^{53}Cr	**834.849(22)**	**1.38(3)**	**0.0804(17)**
^{50}Cr	888.95(7)	0.015(5)	0.0009(3)
^{53}Cr	989.074(23)	0.0139(5)	0.00081(3)
^{50}Cr	1149.83(3)	0.0214(4)	0.001247(23)
^{53}Cr	1241.33(7)	0.0140(5)	0.00082(3)
^{54}Cr	*1528.00(20)d*	*3.800(12)×10^{-6}*	*2.215×10^{-7}[92%]*
^{53}Cr	**1784.70(4)**	**0.1760(20)**	**0.01026(12)**
^{50}Cr	1898.90(3)	0.0852(21)	0.00497(12)
^{53}Cr	1994.52(6)	0.0545(14)	0.00318(8)
^{50}Cr	2001.05(5)	0.0199(10)	0.00116(6)
^{52}Cr	2105.8(5)	0.021(4)	0.00122(23)
^{53}Cr	**2239.04(8)**	**0.186(3)**	**0.01084(17)**
^{52}Cr	2320.8(3)	0.136(3)	0.00793(17)
^{50}Cr	2348.52(7)	0.0164(10)	0.00096(6)
^{50}Cr	2376.49(5)	0.0362(9)	0.00211(5)
^{53}Cr	2558.19(11)	0.0197(7)	0.00115(4)
^{53}Cr	2601.79(8)	0.0404(12)	0.00235(7)
^{52}Cr	2669.8(5)	0.0263(12)	0.00153(7)
^{50}Cr	3021.27(12)	0.0139(8)	0.00081(5)
^{53}Cr	3177.78(15)	0.0234(8)	0.00136(5)
^{52}Cr	3616.7(4)	0.0260(12)	0.00152(7)
^{53}Cr	3719.70(6)	0.0675(24)	0.00393(14)
^{52}Cr	4322.1(3)	0.0269(15)	0.00157(9)
^{53}Cr	4847.56(8)	0.0346(15)	0.00202(9)
^{53}Cr	4871.96(8)	0.0180(10)	0.00105(6)
^{50}Cr	5220.72(12)	0.0184(17)	0.00107(10)
^{53}Cr	5268.15(11)	0.0465(25)	0.00271(15)
^{52}Cr	5268.9(5)	0.050(6)	0.0029(4)
^{50}Cr	5489.85(14)	0.024(4)	0.00140(23)
^{50}Cr	5493.99(12)	0.016(3)	0.00093(17)
^{52}Cr	5617.9(3)	0.132(5)	0.0077(3)
^{53}Cr	5706.94(16)	0.024(4)	0.00140(23)
^{53}Cr	5858.72(9)	0.0266(21)	0.00155(12)
^{53}Cr	5999.80(7)	0.085(7)	0.0050(4)
^{50}Cr	6134.58(9)	0.078(4)	0.00455(23)
^{54}Cr	*6245.89(17)*	*0.0056(9)*	*0.00033(5)*
^{53}Cr	6282.90(9)	0.036(3)	0.00210(17)
^{53}Cr	6326.49(12)	0.0212(23)	0.00124(13)
^{50}Cr	6370.15(10)	0.028(17)	0.0016(10)
^{53}Cr	**6645.61(8)**	**0.183(13)**	**0.0107(8)**
^{53}Cr	6890.11(7)	0.042(3)	0.00245(17)
^{53}Cr	**7099.91(6)**	**0.146(9)**	**0.0085(5)**
^{50}Cr	7361.12(8)	0.092(4)	0.00536(23)
^{52}Cr	7374.49(22)	0.080(4)	0.00466(23)
^{52}Cr	**7938.46(23)**	**0.424(11)**	**0.0247(6)**

	Eγ-keV	σ(Eγ)-barns	k_0
Chromium (Z=24), continued			
^{50}Cr	**8482.80(9)**	**0.169(7)**	**0.0098(4)**
^{50}Cr	**8510.77(8)**	**0.233(8)**	**0.0136(5)**
^{53}Cr	**8884.36(5)**	**0.78(5)**	**0.045(3)**
^{53}Cr	**9719.06(5)**	**0.260(18)**	**0.0152(10)**
Manganese (Z=25), *At.Wt.=54.938049(9)*, σ_γ=*13.36(5)*			
^{55}Mn	**26.560(20)**	**3.42(4)**	**0.1887(22)**
^{55}Mn	**83.884(23)**	**3.11(5)**	**0.172(3)**
^{55}Mn	**104.611(23)**	**1.74(3)**	**0.0960(17)**
^{55}Mn	118.77(4)	0.0526(22)	0.00290(12)
^{55}Mn	123.46(4)	0.0612(23)	0.00338(13)
^{55}Mn	188.521(22)	0.330(6)	0.0182(3)
^{55}Mn	**212.039(21)**	**2.13(3)**	**0.1175(17)**
^{55}Mn	215.150(22)	0.168(3)	0.00927(17)
^{55}Mn	230.096(24)	0.193(4)	0.01065(22)
^{55}Mn	**271.198(22)**	**0.94(6)**	**0.052(3)**
^{55}Mn	274.32(5)	0.075(6)	0.0041(3)
^{55}Mn	**314.398(20)**	**1.460(20)**	**0.0805(11)**
^{55}Mn	335.502(24)	0.147(3)	0.00811(17)
^{55}Mn	341.01(3)	0.0912(25)	0.00503(14)
^{55}Mn	354.12(4)	0.093(4)	0.00513(22)
^{55}Mn	375.192(22)	0.124(3)	0.00684(17)
^{55}Mn	**454.378(21)**	**0.388(7)**	**0.0214(4)**
^{55}Mn	459.754(23)	0.210(5)	0.0116(3)
^{55}Mn	499.57(4)	0.0402(20)	0.00222(11)
^{55}Mn	504.74(4)	0.096(4)	0.00530(22)
^{55}Mn	716.20(5)	0.055(3)	0.00303(17)
^{55}Mn	***846.754(20)d***	***13.10(4)***	***0.7226[12%]***
^{55}Mn	***1810.72(4)d***	***3.62(11)***	***0.200[12%]***
^{55}Mn	2016.47(5)	0.0527(25)	0.00291(14)
^{55}Mn	2043.99(5)	0.243(5)	0.0134(3)
^{55}Mn	2045.76(15)	0.0384(23)	0.00212(13)
^{55}Mn	2062.81(4)	0.179(5)	0.0099(3)
^{55}Mn	***2113.05(4)d***	***1.91(5)***	***0.105[12%]***
^{55}Mn	2175.91(5)	0.111(4)	0.00612(22)
^{55}Mn	2210.29(9)	0.080(5)	0.0044(3)
^{55}Mn	2294.42(7)	0.112(6)	0.0062(3)
^{55}Mn	2330.55(7)	0.191(8)	0.0105(4)
^{55}Mn	2469.99(12)	0.083(6)	0.0046(3)
^{55}Mn	2677.20(19)	0.068(10)	0.0038(6)
^{55}Mn	2873.23(11)	0.070(4)	0.00386(22)
^{55}Mn	2953.77(11)	0.069(5)	0.0038(3)
^{55}Mn	3002.85(15)	0.055(5)	0.0030(3)
^{55}Mn	3267.17(7)	0.188(6)	0.0104(3)
^{55}Mn	3408.61(5)	0.303(10)	0.0167(6)
^{55}Mn	3641.21(13)	0.061(5)	0.0034(3)
^{55}Mn	3751.50(15)	0.054(5)	0.0030(3)
^{55}Mn	3813.99(9)	0.088(8)	0.0049(4)
^{55}Mn	3820.48(16)	0.042(5)	0.0023(3)
^{55}Mn	3927.8(3)	0.044(6)	0.0024(3)
^{55}Mn	3979.0(3)	0.039(5)	0.0022(3)
^{55}Mn	4222.85(17)	0.066(5)	0.0036(3)
^{55}Mn	4267.69(12)	0.078(6)	0.0043(3)
^{55}Mn	4379.90(16)	0.073(6)	0.0040(3)
^{55}Mn	4445.06(20)	0.077(8)	0.0042(4)
^{55}Mn	4549.70(23)	0.056(6)	0.0031(3)
^{55}Mn	4566.56(10)	0.197(9)	0.0109(5)
^{55}Mn	4588.23(18)	0.053(5)	0.0029(3)
^{55}Mn	4643.40(13)	0.073(10)	0.0040(6)
^{55}Mn	4689.14(11)	0.120(9)	0.0066(5)
^{55}Mn	4724.84(8)	0.281(10)	0.0155(6)
^{55}Mn	4840.72(16)	0.064(6)	0.0035(3)
^{55}Mn	4874.52(13)	0.069(5)	0.0038(3)
^{55}Mn	4907.36(19)	0.070(7)	0.0039(4)
^{55}Mn	4934.09(18)	0.055(6)	0.0030(3)
^{55}Mn	4949.21(8)	0.274(10)	0.0151(6)
^{55}Mn	4969.28(21)	0.043(5)	0.0024(3)
^{55}Mn	**5014.37(7)**	**0.737(20)**	**0.0407(11)**
^{55}Mn	5034.60(15)	0.108(8)	0.0060(4)
^{55}Mn	5067.87(9)	0.265(12)	0.0146(7)
^{55}Mn	5110.97(22)	0.050(5)	0.0028(3)
^{55}Mn	**5180.89(8)**	**0.412(13)**	**0.0227(7)**
^{55}Mn	5198.52(13)	0.095(7)	0.0052(4)
^{55}Mn	5253.98(12)	0.132(13)	0.0073(7)
^{55}Mn	5403.7(3)	0.050(6)	0.0028(3)

Table I. Adopted Prompt and Decay Gamma Rays from Thermal Neutron Capture for all Elements, continued

	Eγ-keV	σ(Eγ)-barns	k_0
Manganese (Z=25), continued			
^{55}Mn	5437.71(15)	0.087(7)	0.0048(4)
^{55}Mn	**5527.08(8)**	**0.788(22)**	**0.0435(12)**
^{55}Mn	5761.23(11)	0.200(12)	0.0110(7)
^{55}Mn	**5920.39(8)**	**1.06(3)**	**0.0585(17)**
^{55}Mn	6031.03(18)	0.067(7)	0.0037(4)
^{55}Mn	6104.29(12)	0.213(10)	0.0117(6)
^{55}Mn	6430.04(19)	0.088(7)	0.0049(4)
^{55}Mn	**6783.74(12)**	**0.378(17)**	**0.0209(9)**
^{55}Mn	6929.22(13)	0.248(12)	0.0137(7)
^{55}Mn	**7057.89(9)**	**1.22(3)**	**0.0673(17)**
^{55}Mn	**7159.63(10)**	**0.643(24)**	**0.0355(13)**
^{55}Mn	**7243.52(9)**	**1.36(3)**	**0.0750(17)**
^{55}Mn	**7270.14(12)**	**0.362(15)**	**0.0200(8)**
Iron (Z=26), *At.Wt.=55.845(2),* σ_γ*=2.56(13)*			
^{56}Fe	**14.411(14)**	**0.149(3)**	**0.00809(16)**
^{56}Fe	**122.077(14)**	**0.096(3)**	**0.00521(16)**
^{56}Fe	136.488(14)	0.0118(3)	0.000640(16)
^{56}Fe	230.270(13)	0.0274(5)	0.00149(3)
^{58}Fe	*287.025(19)*	*0.00218(15)*	*1.18(8)×10^{-4}*
^{56}Fe	**352.347(12)**	**0.273(3)**	**0.01481(16)**
^{56}Fe	366.758(10)	0.0497(7)	0.00270(4)
^{54}Fe	411.57(21)	0.022(5)	0.0012(3)
^{56}Fe	569.885(19)	0.0139(3)	0.000754(16)
^{56}Fe	657.46(11)	0.0067(18)	0.00036(10)
^{56}Fe	**691.960(19)**	**0.1370(18)**	**0.00743(10)**
^{57}Fe	810.71(3)	0.0274(9)	0.00149(5)
^{57}Fe	863.80(5)	0.0072(4)	0.000391(22)
^{57}Fe	867.4(4)	~0.007	~0.0004
^{56}Fe	898.27(3)	0.0540(10)	0.00293(5)
^{56}Fe	920.839(19)	0.0199(6)	0.00108(3)
^{56}Fe	1018.93(3)	0.0507(11)	0.00275(6)
^{56}Fe	**1260.448(19)**	**0.0684(11)**	**0.00371(6)**
^{56}Fe	1358.540(22)	0.0211(6)	0.00115(3)
^{56}Fe	**1612.786(18)**	**0.1530(22)**	**0.00830(12)**
^{56}Fe	1627.197(20)	0.0100(5)	0.00054(3)
^{57}Fe	1674.31(21)	~0.007	~0.0004
^{57}Fe	1674.49(6)	~0.007	~0.0004
^{56}Fe	1722.38(10)	0.0074(6)	0.00040(3)
^{56}Fe	**1725.288(21)**	**0.181(3)**	**0.00982(16)**
^{56}Fe	1810.54(16)	0.0067(7)	0.00036(4)
^{56}Fe	1965.39(15)	0.0078(14)	0.00042(8)
^{56}Fe	2066.08(6)	0.0146(7)	0.00079(4)
^{56}Fe	2129.47(7)	0.0206(7)	0.00112(4)
^{54}Fe	2469.24(13)	0.0116(7)	0.00063(4)
^{56}Fe	2526.34(7)	0.0112(5)	0.00061(3)
^{56}Fe	2682.69(11)	0.0114(9)	0.00062(5)
^{56}Fe	2697.10(11)	0.0090(9)	0.00049(5)
^{56}Fe	2721.21(4)	0.0384(13)	0.00208(7)
^{56}Fe	2755.93(19)	0.015(5)	0.0008(3)
^{56}Fe	2832.84(10)	0.0142(22)	0.00077(12)
^{56}Fe	2835.82(7)	0.0067(14)	0.00036(8)
^{56}Fe	2873.00(7)	0.0099(14)	0.00054(8)
^{56}Fe	2954.12(10)	0.0110(7)	0.00060(4)
^{56}Fe	3103.26(7)	0.0172(7)	0.00093(4)
^{56}Fe	3168.40(10)	0.0092(7)	0.00050(4)
^{56}Fe	3185.86(9)	0.0183(8)	0.00099(4)
^{56}Fe	3225.33(7)	0.0105(7)	0.00057(4)
^{56}Fe	3239.74(7)	0.0094(13)	0.00051(7)
^{56}Fe	3267.25(8)	0.0367(13)	0.00199(7)
^{56}Fe	3291.06(5)	0.0072(6)	0.00039(3)
^{56}Fe	3356.67(12)	0.0098(6)	0.00053(3)
^{56}Fe	3413.13(5)	0.0449(14)	0.00244(8)
^{56}Fe	3436.66(9)	0.045(4)	0.00244(22)
^{57}Fe	3486.74(11)	0.0114(6)	0.00062(3)
^{56}Fe	3776.90(6)	0.0075(7)	0.00041(4)
^{54}Fe	3790.80(25)	0.0075(7)	0.00041(4)
^{56}Fe	3842.43(9)	0.0086(7)	0.00047(4)
^{56}Fe	3854.51(6)	0.0333(12)	0.00181(7)
^{56}Fe	3921.5(8)	0.036(4)	0.00195(22)
^{56}Fe	**4218.27(5)**	**0.099(3)**	**0.00537(16)**
^{56}Fe	4274.74(12)	0.0141(8)	0.00077(4)
^{56}Fe	4378.56(8)	0.0067(6)	0.00036(3)
^{56}Fe	4406.07(7)	0.0453(13)	0.00246(7)
^{56}Fe	4463.01(10)	0.0162(11)	0.00088(6)
Iron (Z=26), continued			
^{56}Fe	4674.99(11)	0.0125(11)	0.00068(6)
^{56}Fe	4724.54(10)	0.0075(11)	0.00041(6)
^{56}Fe	4809.99(7)	0.0416(13)	0.00226(7)
^{56}Fe	4948.70(11)	0.0173(10)	0.00094(5)
^{54}Fe	5507.29(19)	0.0247(15)	0.00134(8)
^{56}Fe	**5920.449(21)**	**0.225(5)**	**0.0122(3)**
^{56}Fe	**6018.532(20)**	**0.227(5)**	**0.0123(3)**
^{56}Fe	6380.67(3)	0.0187(20)	0.00101(11)
^{56}Fe	**7278.838(10)**	**0.137(4)**	**0.00743(22)**
^{56}Fe	**7631.136(14)**	**0.653(13)**	**0.0354(7)**
^{56}Fe	**7645.5450(10)**	**0.549(11)**	**0.0298(6)**
^{54}Fe	8886.18(23)	0.0162(12)	0.00088(7)
^{54}Fe	**9297.68(19)**	**0.0747(25)**	**0.00405(14)**
Cobalt (Z=27), *At.Wt.=58.933200(9),* σ_γ*=37.18(6)*			
^{59}Co	*58.603(7)d*	*0.411(4)*	*0.02113[75%]*
^{59}Co	**158.517(17)**	**1.200(15)**	**0.0617(8)**
^{59}Co	195.90(3)	0.190(4)	0.00977(21)
^{59}Co	224.12(7)	0.106(23)	0.0055(12)
^{59}Co	**229.879(17)**	**7.18(8)**	**0.369(4)**
^{59}Co	**254.379(17)**	**1.290(16)**	**0.0663(8)**
^{59}Co	**277.161(17)**	**6.77(8)**	**0.348(4)**
^{59}Co	337.296(18)	0.226(4)	0.01162(21)
^{59}Co	349.954(24)	0.124(4)	0.00638(21)
^{59}Co	**391.218(15)**	**1.080(14)**	**0.0555(7)**
^{59}Co	**435.677(17)**	**0.789(10)**	**0.0406(5)**
^{59}Co	**447.711(19)**	**3.41(4)**	**0.1754(21)**
^{59}Co	461.061(18)	0.519(9)	0.0267(5)
^{59}Co	**484.257(16)**	**0.804(11)**	**0.0413(6)**
^{59}Co	**497.269(16)**	**2.16(4)**	**0.1111(21)**
^{59}Co	**555.972(13)**	**5.76(6)**	**0.296(3)**
^{59}Co	602.71(4)	0.132(7)	0.0068(4)
^{59}Co	665.48(3)	0.0769(24)	0.00395(12)
^{59}Co	680.15(3)	0.273(5)	0.0140(3)
^{59}Co	**717.310(18)**	**0.845(14)**	**0.0435(7)**
^{59}Co	726.640(21)	0.448(10)	0.0230(5)
^{59}Co	781.79(4)	0.146(6)	0.0075(3)
^{59}Co	**785.628(21)**	**2.41(7)**	**0.124(4)**
^{59}Co	798.97(7)	0.120(10)	0.0062(5)
^{59}Co	854.06(4)	0.187(6)	0.0096(3)
^{59}Co	862.30(6)	0.079(8)	0.0041(4)
^{59}Co	883.11(4)	0.075(5)	0.0039(3)
^{59}Co	884.98(4)	0.156(6)	0.0080(3)
^{59}Co	901.28(3)	0.418(9)	0.0215(5)
^{59}Co	908.37(3)	0.100(4)	0.00514(21)
^{59}Co	928.48(3)	0.145(9)	0.0075(5)
^{59}Co	930.612(23)	0.408(22)	0.0210(11)
^{59}Co	944.07(6)	0.18(7)	0.009(4)
^{59}Co	**945.314(17)**	**0.98(4)**	**0.0504(21)**
^{59}Co	947.41(6)	0.121(7)	0.0062(4)
^{59}Co	963.58(3)	0.191(11)	0.0098(6)
^{59}Co	972.82(16)	0.082(8)	0.0042(4)
^{59}Co	1005.668(22)	0.127(6)	0.0065(3)
^{59}Co	1023.64(3)	0.22(3)	0.0113(15)
^{59}Co	1075.66(10)	0.099(7)	0.0051(4)
^{59}Co	1103.73(6)	0.277(12)	0.0142(6)
^{59}Co	1117.76(8)	0.106(5)	0.0055(3)
^{59}Co	1206.47(3)	0.072(11)	0.0037(6)
^{59}Co	1207.77(3)	0.202(12)	0.0104(6)
^{59}Co	1215.96(3)	0.520(9)	0.0267(5)
^{59}Co	1216.44(18)	0.24(22)	0.012(11)
^{59}Co	1226.78(5)	0.100(4)	0.00514(21)
^{59}Co	1238.566(24)	0.290(7)	0.0149(4)
^{59}Co	1274.32(4)	0.205(6)	0.0105(3)
^{59}Co	1277.46(3)	0.175(6)	0.0090(3)
^{59}Co	1283.22(7)	0.194(6)	0.0100(3)
^{59}Co	1334.74(6)	0.155(9)	0.0080(5)
^{59}Co	1362.53(4)	0.092(6)	0.0047(3)
^{59}Co	1419.30(8)	0.077(6)	0.0040(3)
^{59}Co	1472.04(3)	0.195(8)	0.0100(4)
^{59}Co	1507.33(3)	0.463(9)	0.0238(5)
^{59}Co	**1515.720(25)**	**1.740(25)**	**0.0895(13)**
^{59}Co	1553.65(3)	0.120(6)	0.0062(3)
^{59}Co	1556.08(9)	0.099(6)	0.0051(3)
^{59}Co	1690.72(3)	0.215(14)	0.0111(7)

Table I. Adopted Prompt and Decay Gamma Rays from Thermal Neutron Capture for all Elements, continued

	Eγ-keV	σ(Eγ)-barns	k_0
Cobalt (Z=27), continued			
^{59}Co	1692.83(5)	0.214(14)	0.0110(7)
^{59}Co	1703.91(10)	0.074(5)	0.0038(3)
^{59}Co	1774.65(4)	0.30(8)	0.015(4)
^{59}Co	1786.01(17)	0.157(9)	0.0081(5)
^{59}Co	1787.45(4)	0.08(5)	0.004(3)
^{59}Co	1799.92(4)	0.269(7)	0.0138(4)
^{59}Co	1808.82(7)	0.211(7)	0.0109(4)
^{59}Co	1808.98(10)	0.15(8)	0.008(4)
^{59}Co	1818.58(5)	0.179(7)	0.0092(4)
^{59}Co	**1830.800(25)**	**1.700(23)**	**0.0874(12)**
^{59}Co	1844.96(8)	0.092(5)	0.0047(3)
^{59}Co	1852.70(3)	0.456(10)	0.0234(5)
^{59}Co	1888.77(4)	0.089(6)	0.0046(3)
^{59}Co	1933.82(8)	0.094(6)	0.0048(3)
^{59}Co	2022.51(16)	0.082(6)	0.0042(3)
^{59}Co	2032.83(7)	0.393(11)	0.0202(6)
^{59}Co	2074.83(8)	0.102(9)	0.0052(5)
^{59}Co	2099.19(7)	0.089(8)	0.0046(4)
^{59}Co	2221.61(4)	0.261(8)	0.0134(4)
^{59}Co	2279.78(6)	0.079(11)	0.0041(6)
^{59}Co	2281.57(9)	0.123(11)	0.0063(6)
^{59}Co	2309.66(10)	0.087(6)	0.0045(3)
^{59}Co	2319.46(10)	0.122(7)	0.0063(4)
^{59}Co	2453.82(20)	0.072(5)	0.0037(3)
^{59}Co	2527.12(7)	0.146(8)	0.0075(4)
^{59}Co	2557.46(21)	0.086(6)	0.0044(3)
^{59}Co	2569.92(9)	0.154(7)	0.0079(4)
^{59}Co	2607.47(10)	0.165(8)	0.0085(4)
^{59}Co	2680.64(24)	0.11(3)	0.0057(15)
^{59}Co	2692.02(15)	0.076(7)	0.0039(4)
^{59}Co	2727.19(13)	0.100(7)	0.0051(4)
^{59}Co	2740.06(18)	0.103(7)	0.0053(4)
^{59}Co	2790.22(20)	0.080(19)	0.0041(10)
^{59}Co	2900.50(24)	0.076(20)	0.0039(10)
^{59}Co	2926.19(18)	0.116(8)	0.0060(4)
^{59}Co	2978.11(17)	0.075(7)	0.0039(4)
^{59}Co	2995.43(13)	0.097(7)	0.0050(4)
^{59}Co	3193.65(16)	0.089(6)	0.0046(3)
^{59}Co	3216.43(19)	0.105(13)	0.0054(7)
^{59}Co	3238.16(19)	0.089(8)	0.0046(4)
^{59}Co	3283.78(13)	0.101(8)	0.0052(4)
^{59}Co	3335.29(14)	0.104(7)	0.0053(4)
^{59}Co	3380.22(14)	0.210(10)	0.0108(5)
^{59}Co	3664.13(21)	0.080(9)	0.0041(5)
^{59}Co	3677.05(13)	0.109(8)	0.0056(4)
^{59}Co	3749.21(7)	0.415(13)	0.0213(7)
^{59}Co	3815.20(19)	0.081(7)	0.0042(4)
^{59}Co	3823.54(19)	0.073(7)	0.0038(4)
^{59}Co	3840.83(15)	0.129(8)	0.0066(4)
^{59}Co	3897.02(17)	0.092(7)	0.0047(4)
^{59}Co	3929.84(12)	0.272(11)	0.0140(6)
^{59}Co	3966.15(18)	0.239(11)	0.0123(6)
^{59}Co	3994.92(24)	0.095(17)	0.0049(9)
^{59}Co	4026.26(12)	0.272(10)	0.0140(5)
^{59}Co	4032.03(18)	0.208(9)	0.0107(5)
^{59}Co	4148.74(21)	0.086(21)	0.0044(11)
^{59}Co	4155.64(24)	0.128(8)	0.0066(4)
^{59}Co	4208.01(12)	0.255(13)	0.0131(7)
^{59}Co	4212.56(14)	0.082(9)	0.0042(5)
^{59}Co	4329.00(18)	0.105(8)	0.0054(4)
^{59}Co	4350.40(12)	0.091(13)	0.0047(7)
^{59}Co	4370.46(19)	0.078(12)	0.0040(6)
^{59}Co	4377.29(19)	0.119(10)	0.0061(5)
^{59}Co	4395.62(11)	0.128(11)	0.0066(6)
^{59}Co	4547.05(11)	0.115(9)	0.0059(5)
^{59}Co	4607.00(7)	0.311(13)	0.0160(7)
^{59}Co	4624.29(16)	0.104(8)	0.0053(4)
^{59}Co	4646.83(15)	0.081(10)	0.0042(5)
^{59}Co	4666.15(10)	0.085(8)	0.0044(4)
^{59}Co	4706.11(13)	0.137(9)	0.0070(5)
^{59}Co	4731.06(17)	0.089(8)	0.0046(4)
^{59}Co	4884.30(10)	0.237(10)	0.0122(5)
^{59}Co	4893.76(10)	0.217(11)	0.0112(6)
^{59}Co	4906.17(7)	0.43(3)	0.0221(15)
^{59}Co	4921.85(9)	0.285(13)	0.0147(7)
^{59}Co	5003.24(8)	0.264(11)	0.0136(6)
^{59}Co	5040.76(16)	0.086(8)	0.0044(4)
^{59}Co	5068.69(9)	0.109(10)	0.0056(5)
^{59}Co	5127.84(9)	0.205(12)	0.0105(6)
^{59}Co	5150.08(9)	0.302(13)	0.0155(7)
^{59}Co	**5181.77(7)**	**0.912(23)**	**0.0469(12)**
^{59}Co	5211.98(6)	0.072(11)	0.0037(6)
^{59}Co	5217.09(20)	0.081(10)	0.0042(5)
^{59}Co	5270.15(4)	0.404(11)	0.0208(6)
^{59}Co	5358.44(8)	0.160(8)	0.0082(4)
^{59}Co	5370.21(8)	0.188(9)	0.0097(5)
^{59}Co	5510.56(6)	0.163(11)	0.0084(6)
^{59}Co	5602.97(4)	0.434(16)	0.0223(8)
^{59}Co	5614.67(5)	0.399(15)	0.0205(8)
^{59}Co	5639.03(4)	0.379(15)	0.0195(8)
^{59}Co	**5660.93(4)**	**1.89(6)**	**0.097(3)**
^{59}Co	5704.28(5)	0.177(9)	0.0091(5)
^{59}Co	**5742.53(4)**	**0.766(23)**	**0.0394(12)**
^{59}Co	5852.04(5)	0.110(10)	0.0057(5)
^{59}Co	5925.89(4)	0.643(18)	0.0331(9)
^{59}Co	**5975.98(4)**	**2.9(4)**	**0.149(21)**
^{59}Co	6040.60(4)	0.166(13)	0.0085(7)
^{59}Co	6110.81(6)	0.213(11)	0.0110(6)
^{59}Co	6149.99(7)	0.186(9)	0.0096(5)
^{59}Co	6274.84(3)	0.222(11)	0.0114(6)
^{59}Co	6283.91(4)	0.204(11)	0.0105(6)
^{59}Co	**6485.99(3)**	**2.32(5)**	**0.119(3)**
^{59}Co	**6706.01(3)**	**3.02(6)**	**0.155(3)**
^{59}Co	**6877.16(3)**	**3.02(6)**	**0.155(3)**
^{59}Co	6948.87(3)	0.249(11)	0.0128(6)
^{59}Co	**6985.41(3)**	**1.05(13)**	**0.054(7)**
^{59}Co	7055.92(3)	0.666(19)	0.0342(10)
^{59}Co	7203.22(3)	0.369(16)	0.0190(8)
^{59}Co	**7214.42(3)**	**1.38(3)**	**0.0710(15)**
^{59}Co	7433.07(3)	0.083(7)	0.0043(4)
^{59}Co	**7491.54(3)**	**1.16(3)**	**0.0596(15)**
Nickel (Z=28), *At.Wt.=58.6934(2),* σ_γ*=4.39(15)*			
^{62}Ni	155.500(16)	0.0666(12)	0.00344(6)
^{60}Ni	**282.917(18)**	**0.211(3)**	**0.01089(15)**
^{58}Ni	**339.420(11)**	**0.1670(21)**	**0.00862(11)**
^{62}Ni	362.385(18)	0.0342(5)	0.00177(3)
^{58}Ni	**464.978(12)**	**0.843(10)**	**0.0435(5)**
^{62}Ni	483.351(20)	0.0156(3)	0.000805(15)
^{62}Ni	845.733(18)	0.0184(3)	0.000950(15)
^{58}Ni	**877.977(11)**	**0.236(3)**	**0.01219(15)**
^{61}Ni	*1172.84(5)*	*0.0122(4)*	*0.000630(21)*
^{58}Ni	1188.781(13)	0.0559(9)	0.00289(5)
^{58}Ni	1301.434(13)	0.052(3)	0.00268(15)
^{58}Ni	1340.230(20)	0.0200(5)	0.00103(3)
^{64}Ni	*1481.84(5)d*	*0.003300(7)*	*1.704×10^{-4}[13%]*
^{60}Ni	1502.04(6)	0.0154(4)	0.000795(21)
^{58}Ni	1536.920(16)	0.0194(5)	0.00100(3)
^{58}Ni	1734.687(16)	0.0172(4)	0.000888(21)
^{58}Ni	1949.911(17)	0.0476(10)	0.00246(5)
^{60}Ni	2123.93(3)	0.0379(10)	0.00196(5)
^{58}Ni	2554.116(19)	0.0431(9)	0.00223(5)
^{58}Ni	2842.130(17)	0.0463(10)	0.00239(5)
^{58}Ni	3221.146(23)	0.0157(11)	0.00081(6)
^{58}Ni	3675.24(3)	0.0281(7)	0.00145(4)
^{58}Ni	4858.59(3)	0.0442(10)	0.00228(5)
^{58}Ni	5312.674(24)	0.0536(13)	0.00277(7)
^{58}Ni	5435.77(4)	0.0188(6)	0.00097(3)
^{60}Ni	5695.80(3)	0.0416(12)	0.00215(6)
^{58}Ni	5817.219(20)	0.1090(22)	0.00563(11)
^{62}Ni	5836.37(3)	0.0348(10)	0.00180(5)
^{58}Ni	5973.06(3)	0.0258(8)	0.00133(4)
^{64}Ni	*6034.60(11)*	*0.013(3)*	*0.00067(15)*
^{58}Ni	6105.215(22)	0.0706(17)	0.00365(9)
^{62}Ni	6319.67(3)	0.0236(9)	0.00122(5)
^{58}Ni	6583.831(19)	0.0830(20)	0.00429(10)
^{62}Ni	**6837.50(3)**	**0.458(8)**	**0.0236(4)**
^{60}Ni	**7536.637(25)**	**0.190(4)**	**0.00981(21)**
^{58}Ni	7697.163(18)	0.0374(14)	0.00193(7)
^{60}Ni	**7819.517(21)**	**0.336(6)**	**0.0173(3)**

Table I. Adopted Prompt and Decay Gamma Rays from Thermal Neutron Capture for all Elements, continued

	Eγ-keV	σ(Eγ)-barns	k_0
Nickel (Z=28), continued			
^{58}Ni	8120.567(16)	0.133(3)	0.00687(15)
^{58}Ni	**8533.509(17)**	**0.721(13)**	**0.0372(7)**
^{58}Ni	**8998.414(15)**	**1.49(3)**	**0.0769(15)**
Copper (Z=29), *At.Wt.=63.546(3)*, σ_γ=*3.795(17)*			
^{65}Cu	**89.08(4)**	**0.0970(17)**	**0.00463(8)**
^{63}Cu	**159.281(5)**	**0.648(10)**	**0.0309(5)**
^{63}Cu	184.618(13)	0.0106(9)	0.00051(4)
^{65}Cu	**185.96(4)**	**0.244(3)**	**0.01164(14)**
^{63}Cu	**202.950(8)**	**0.193(3)**	**0.00920(14)**
^{63}Cu	212.389(15)	0.0362(9)	0.00173(4)
^{63}Cu	214.99(7)	0.0112(14)	0.00053(7)
^{65}Cu	237.80(4)	0.0230(4)	0.001097(19)
^{63}Cu	247.58(6)	0.0119(15)	0.00057(7)
^{63}Cu	261.33(8)	0.0095(14)	0.00045(7)
^{63}Cu	264.869(22)	0.0289(7)	0.00138(3)
^{63}Cu	**278.250(14)**	**0.893(15)**	**0.0426(7)**
^{65}Cu	315.69(4)	0.0250(4)	0.001192(19)
^{63}Cu	318.80(4)	0.0120(4)	0.000572(19)
^{63}Cu	330.52(3)	0.0107(8)	0.00051(4)
^{63}Cu	**343.898(14)**	**0.215(4)**	**0.01025(19)**
^{63}Cu	376.80(3)	0.0250(6)	0.00119(3)
^{63}Cu	384.45(5)	0.0700(14)	0.00334(7)
^{65}Cu	**385.77(3)**	**0.1310(18)**	**0.00625(9)**
^{65}Cu	436.909(20)	0.0112(4)	0.000534(19)
^{63}Cu	449.486(22)	0.0382(10)	0.00182(5)
^{63}Cu	460.78(3)	0.0143(5)	0.000682(24)
^{65}Cu	**465.14(3)**	**0.1350(21)**	**0.00644(10)**
^{63}Cu	467.95(5)	0.0668(14)	0.00319(7)
^{63}Cu	494.81(5)	0.0242(6)	0.00115(3)
^{63}Cu	503.41(4)	0.0596(13)	0.00284(6)
^{63}Cu	533.25(11)	0.0148(8)	0.00071(4)
^{63}Cu	534.28(5)	0.021(6)	0.0010(3)
^{65}Cu	543.86(3)	0.0256(5)	0.001221(24)
^{63}Cu	**579.75(3)**	**0.0898(15)**	**0.00428(7)**
^{63}Cu	**608.766(23)**	**0.270(6)**	**0.0129(3)**
^{63}Cu	617.47(6)	0.0270(4)	0.001288(19)
^{63}Cu	632.24(4)	0.0092(4)	0.000439(19)
^{63}Cu	**648.80(3)**	**0.102(3)**	**0.00486(14)**
^{63}Cu	662.69(4)	0.072(3)	0.00343(14)
^{63}Cu	739.03(3)	0.0096(3)	0.000458(14)
^{63}Cu	767.77(3)	0.0254(17)	0.00121(8)
^{65}Cu	822.673(24)	0.0238(17)	0.00114(8)
^{65}Cu	831.14(4)	0.0160(10)	0.00076(5)
^{63}Cu	878.17(5)	0.0421(20)	0.00201(10)
^{63}Cu	897.07(17)	0.0102(4)	0.000486(19)
^{63}Cu	927.05(3)	0.0119(3)	0.000568(14)
^{63}Cu	946.65(7)	0.0091(8)	0.00043(4)
^{63}Cu	962.76(4)	0.0152(9)	0.00072(4)
^{65}Cu	972.11(3)	0.0115(7)	0.00055(3)
^{65}Cu	997.63(3)	0.0093(11)	0.00044(5)
^{63}Cu	1019.59(4)	0.0141(12)	0.00067(6)
^{65}Cu	*1038.97(3)d*	*0.0598(13)*	*0.00285[88%]*
^{65}Cu	1052.01(5)	0.0117(8)	0.00056(4)
^{63}Cu	1076.44(4)	0.0097(5)	0.000463(24)
^{63}Cu	1081.72(3)	0.0117(3)	0.000558(14)
^{63}Cu	1138.82(3)	0.0296(10)	0.00141(5)
^{63}Cu	1158.833(15)	0.0267(6)	0.00127(3)
^{63}Cu	1194.92(4)	0.0106(3)	0.000506(14)
^{65}Cu	1212.53(4)	0.0105(5)	0.000501(24)
^{63}Cu	1231.98(4)	0.0110(3)	0.000525(14)
^{63}Cu	1241.52(9)	0.0345(16)	0.00165(8)
^{63}Cu	1242.61(9)	0.0181(22)	0.00086(10)
^{63}Cu	1298.10(3)	0.0147(7)	0.00070(3)
^{63}Cu	1320.25(8)	0.0263(10)	0.00125(5)
^{65}Cu	1355.16(3)	0.0133(16)	0.00063(8)
^{63}Cu	1361.75(4)	0.0167(5)	0.000796(24)
^{63}Cu	1417.27(6)	0.0097(4)	0.000463(19)
^{63}Cu	1438.66(4)	0.013(6)	0.0006(3)
^{65}Cu	1439.37(5)	0.0111(16)	0.00053(8)
^{63}Cu	1521.03(4)	0.0143(5)	0.000682(24)
^{65}Cu	1559.84(7)	0.0305(10)	0.00145(5)
^{65}Cu	1582.50(4)	0.0094(7)	0.00045(3)
^{65}Cu	1637.46(5)	0.0135(15)	0.00064(7)
^{63}Cu	1682.98(7)	0.0167(8)	0.00080(4)
Copper (Z=29), continued			
^{65}Cu	1743.30(7)	0.014(4)	0.00067(19)
^{63}Cu	1852.57(8)	0.0141(10)	0.00067(5)
^{63}Cu	2141.61(12)	0.0091(5)	0.000434(24)
^{63}Cu	2153.51(5)	0.0105(11)	0.00050(5)
^{63}Cu	2291.40(10)	0.0115(8)	0.00055(4)
^{63}Cu	2497.85(7)	0.0252(13)	0.00120(6)
^{63}Cu	2932.30(13)	0.0101(7)	0.00048(3)
^{63}Cu	3152.95(16)	0.0099(9)	0.00047(4)
^{63}Cu	3315.5(3)	0.0097(7)	0.00046(3)
^{63}Cu	3464.49(14)	0.0094(15)	0.00045(7)
^{63}Cu	3588.50(9)	0.0122(14)	0.00058(7)
^{63}Cu	3844.49(15)	0.0176(11)	0.00084(5)
^{63}Cu	4089.19(14)	0.0090(5)	0.000429(24)
^{63}Cu	4133.04(12)	0.0138(10)	0.00066(5)
^{63}Cu	4204.26(19)	0.0091(5)	0.000434(24)
^{63}Cu	4286.55(15)	0.0121(6)	0.00058(3)
^{63}Cu	4312.76(24)	0.0104(8)	0.00050(4)
^{63}Cu	4319.92(9)	0.047(5)	0.00224(24)
^{65}Cu	4384.92(9)	0.0206(12)	0.00098(6)
^{63}Cu	4404.91(18)	0.0111(5)	0.000529(24)
^{63}Cu	4443.9(3)	0.0110(11)	0.00052(5)
^{63}Cu	4475.88(13)	0.0171(6)	0.00082(3)
^{63}Cu	4503.94(12)	0.0174(7)	0.00083(3)
^{63}Cu	4563.20(7)	0.0112(5)	0.000534(24)
^{63}Cu	4603.01(20)	0.0196(6)	0.00093(3)
^{63}Cu	4658.55(9)	0.0278(7)	0.00133(3)
^{63}Cu	5019.16(12)	0.0100(15)	0.00048(7)
^{65}Cu	5042.68(6)	0.0346(14)	0.00165(7)
^{65}Cu	5047.56(7)	0.0206(14)	0.00098(7)
^{63}Cu	5085.54(11)	0.0118(5)	0.000563(24)
^{63}Cu	5151.98(15)	0.0096(4)	0.000458(19)
^{63}Cu	5183.55(17)	0.0132(6)	0.00063(3)
^{63}Cu	5189.81(11)	0.0241(7)	0.00115(3)
^{65}Cu	5245.59(4)	0.043(3)	0.00205(14)
^{63}Cu	5258.73(7)	0.0372(9)	0.00177(4)
^{65}Cu	5320.08(8)	0.0362(21)	0.00173(10)
^{63}Cu	5408.64(17)	0.0144(6)	0.00069(3)
^{63}Cu	5418.45(5)	0.0668(12)	0.00319(6)
^{63}Cu	5555.38(19)	0.0098(5)	0.000467(24)
^{63}Cu	5614.96(12)	0.0178(6)	0.00085(3)
^{63}Cu	5636.11(7)	0.0147(5)	0.000701(24)
^{63}Cu	5771.47(9)	0.0183(8)	0.00087(4)
^{63}Cu	5823.60(20)	0.0108(22)	0.00052(10)
^{63}Cu	6010.80(5)	0.0574(12)	0.00274(6)
^{65}Cu	6048.73(5)	0.0101(6)	0.00048(3)
^{63}Cu	6063.24(9)	0.0218(6)	0.00104(3)
^{63}Cu	6166.7(3)	0.0133(21)	0.00063(10)
^{65}Cu	6243.14(4)	0.0144(9)	0.00069(4)
^{63}Cu	6321.58(6)	0.0130(5)	0.000620(24)
^{63}Cu	6394.76(5)	0.0503(10)	0.00240(5)
^{63}Cu	6595.52(8)	0.0227(8)	0.00108(4)
^{65}Cu	6600.63(4)	0.085(5)	0.00405(24)
^{63}Cu	6617.66(5)	0.0407(11)	0.00194(5)
^{63}Cu	6673.15(9)	0.053(3)	0.00253(14)
^{63}Cu	6674.76(5)	0.0719(21)	0.00343(10)
^{65}Cu	6680.00(4)	0.081(6)	0.0039(3)
^{65}Cu	6790.72(4)	0.0155(10)	0.00074(5)
^{63}Cu	**6988.68(5)**	**0.126(6)**	**0.0060(3)**
^{63}Cu	7037.55(5)	0.0140(7)	0.00067(3)
^{65}Cu	7065.72(4)	0.0132(8)	0.00063(4)
^{63}Cu	7169.51(5)	0.0109(7)	0.00052(3)
^{63}Cu	**7176.68(5)**	**0.0925(17)**	**0.00441(8)**
^{63}Cu	**7253.01(5)**	**0.1500(23)**	**0.00715(11)**
^{63}Cu	**7306.93(4)**	**0.321(17)**	**0.0153(8)**
^{63}Cu	7571.77(4)	0.0629(12)	0.00300(6)
^{63}Cu	**7637.40(4)**	**0.54(7)**	**0.026(3)**
^{63}Cu	7756.36(4)	0.0571(12)	0.00272(6)
^{63}Cu	**7915.62(4)**	**0.869(20)**	**0.0414(10)**
Zinc (Z=30), *At.Wt.=65.409(4)*, σ_γ=*1.30(8)*			
^{64}Zn	53.972(17)	0.0109(6)	0.00051(3)
^{64}Zn	61.2530(20)	0.0290(9)	0.00134(4)
^{66}Zn	91.267(5)	0.0046(3)	$2.13(14)\times10^{-4}$
^{66}Zn	93.311(5)	0.0344(8)	0.00159(4)
^{64}Zn	**115.225(18)**	**0.167(3)**	**0.00774(14)**

Table I. Adopted Prompt and Decay Gamma Rays from Thermal Neutron Capture for all Elements, continued

	Eγ-keV	σ(Eγ)-barns	k_0
Zinc (Z=30), continued			
^{64}Zn	153.095(21)	0.0322(6)	0.00149(3)
^{66}Zn	184.578(6)	0.0321(4)	0.001487(19)
^{64}Zn	207.067(22)	0.0101(3)	0.000468(14)
^{66}Zn	300.219(7)	0.0201(6)	0.00093(3)
^{66}Zn	393.530(7)	0.00486(22)	$2.25(10)\times10^{-4}$
^{68}Zn	417.30(4)	0.0043(5)	$1.99(23)\times10^{-4}$
^{68}Zn	434.03(3)	0.0128(16)	0.00059(7)
^{68}Zn	*438.634(18)d*	*0.0128(5)*	*0.000593[2.5%]*
^{68}Zn	531.44(3)	0.0163(20)	0.00076(9)
^{67}Zn	578.48(5)	0.0121(5)	0.000561(23)
^{64}Zn	653.51(7)	0.0050(14)	$2.3(7)\times10^{-4}$
^{66}Zn	749.29(7)	0.0058(13)	0.00027(6)
^{64}Zn	751.69(3)	0.0307(10)	0.00142(5)
^{68}Zn	759.29(9)	0.0039(5)	$1.81(23)\times10^{-4}$
^{64}Zn	768.74(7)	0.0040(4)	$1.85(19)\times10^{-4}$
^{64}Zn	794.44(3)	0.0089(5)	0.000412(23)
^{67}Zn	**805.79(3)**	**0.045(3)**	**0.00208(14)**
^{68}Zn	**834.77(3)**	**0.037(5)**	**0.00171(23)**
^{64}Zn	**855.69(3)**	**0.066(6)**	**0.0031(3)**
^{64}Zn	864.43(6)	0.0094(6)	0.00044(3)
^{64}Zn	909.66(3)	0.0187(8)	0.00087(4)
^{64}Zn	932.10(6)	0.0047(4)	$2.18(19)\times10^{-4}$
^{66}Zn	958.24(7)	0.0058(5)	0.000269(23)
^{64}Zn	993.35(6)	0.0059(6)	0.00027(3)
^{68}Zn	**1007.809(25)**	**0.056(7)**	**0.0026(3)**
^{64}Zn	1047.32(7)	0.0036(5)	$1.67(23)\times10^{-4}$
^{67}Zn	**1077.335(16)**	**0.356(5)**	**0.01649(23)**
^{67}Zn	1126.100(25)	0.0229(6)	0.00106(3)
^{68}Zn	1178.55(9)	0.0102(13)	0.00047(6)
^{68}Zn	1252.07(5)	0.0073(9)	0.00034(4)
^{67}Zn	**1261.15(3)**	**0.0431(10)**	**0.00200(5)**
^{64}Zn	1262.58(6)	0.0053(15)	$2.5(7)\times10^{-4}$
^{64}Zn	1293.02(8)	0.0061(6)	0.00028(3)
^{67}Zn	1300.96(6)	0.010(4)	0.00046(19)
^{67}Zn	**1340.14(3)**	**0.0457(16)**	**0.00212(7)**
^{64}Zn	1354.42(5)	0.0103(9)	0.00048(4)
^{64}Zn	1415.67(5)	0.0043(7)	$2.0(3)\times10^{-4}$
^{67}Zn	1546.33(8)	0.0082(7)	0.00038(3)
^{64}Zn	1593.0(3)	0.0053(13)	$2.5(6)\times10^{-4}$
^{68}Zn	1594.05(9)	0.0051(6)	$2.4(3)\times10^{-4}$
^{67}Zn	1673.46(4)	0.0260(10)	0.00120(5)
^{67}Zn	1744.47(5)	0.0147(7)	0.00068(3)
^{68}Zn	1813.18(8)	0.0051(6)	$2.4(3)\times10^{-4}$
^{64}Zn	1826.45(6)	0.0161(10)	0.00075(5)
^{67}Zn	1882.09(10)	0.0056(15)	0.00026(7)
^{67}Zn	**1883.12(3)**	**0.0718(18)**	**0.00333(8)**
^{64}Zn	2087.44(9)	0.0047(6)	$2.2(3)\times10^{-4}$
^{67}Zn	2106.74(6)	0.0071(7)	0.00033(3)
^{67}Zn	2209.73(9)	0.0269(13)	0.00125(6)
^{64}Zn	2212.10(16)	0.0071(17)	0.00033(8)
^{68}Zn	2344.60(8)	0.0100(12)	0.00046(6)
^{67}Zn	2347.58(14)	0.0048(7)	$2.2(3)\times10^{-4}$
^{67}Zn	2352.10(8)	0.0059(9)	0.00027(4)
^{68}Zn	2378.6(3)	0.0039(5)	$1.81(23)\times10^{-4}$
^{67}Zn	2418.53(10)	0.0095(7)	0.00044(3)
^{64}Zn	2432.3(5)	0.0037(8)	$1.7(4)\times10^{-4}$
^{67}Zn	2648.75(21)	0.0056(10)	0.00026(5)
^{67}Zn	2698.91(17)	0.0061(9)	0.00028(4)
^{67}Zn	2857.91(10)	0.0070(8)	0.00032(4)
^{64}Zn	3109.05(25)	0.0073(10)	0.00034(5)
^{67}Zn	3287.02(9)	0.0088(9)	0.00041(4)
^{67}Zn	3331.21(20)	0.0049(5)	$2.27(23)\times10^{-4}$
^{67}Zn	3458.14(17)	0.0048(4)	$2.22(19)\times10^{-4}$
^{67}Zn	3832.94(25)	0.0048(5)	$2.22(23)\times10^{-4}$
^{68}Zn	4071.4(4)	0.0036(5)	$1.67(23)\times10^{-4}$
^{68}Zn	4103.3(3)	0.0089(21)	0.00041(10)
^{68}Zn	4137.29(10)	0.0205(25)	0.00095(12)
^{68}Zn	4430.69(14)	0.0055(13)	0.00025(6)
^{67}Zn	4504.5(4)	0.0042(13)	$1.9(6)\times10^{-4}$
^{64}Zn	4582.9(4)	0.00507(10)	$2.35(5)\times10^{-4}$
^{68}Zn	4652.3(4)	0.0059(7)	0.00027(3)
^{67}Zn	4782.8(3)	0.0045(4)	$2.08(19)\times10^{-4}$
^{67}Zn	4795.0(11)	0.0037(9)	$1.7(4)\times10^{-4}$
^{64}Zn	4828.4(3)	0.00676(11)	0.000313(5)
^{64}Zn	4870.0(3)	0.00380(10)	$1.76(5)\times10^{-4}$
^{68}Zn	4887.82(13)	0.0080(10)	0.00037(5)
^{67}Zn	4899.63(19)	0.0053(5)	$2.46(23)\times10^{-4}$
^{67}Zn	4914.15(20)	0.0044(4)	$2.04(19)\times10^{-4}$
^{68}Zn	5229.78(11)	0.0044(5)	$2.04(23)\times10^{-4}$
^{67}Zn	5245.84(15)	0.0058(6)	0.00027(3)
^{67}Zn	5287.4(3)	0.0048(6)	$2.2(3)\times10^{-4}$
^{67}Zn	5346.37(21)	0.0039(6)	$1.8(3)\times10^{-4}$
^{67}Zn	5402.8(5)	0.0043(24)	$2.0(11)\times10^{-4}$
^{68}Zn	**5474.02(10)**	**0.042(5)**	**0.00195(23)**
^{64}Zn	5521.5(3)	0.0076(11)	0.00035(5)
^{64}Zn	5541.0(5)	0.0047(7)	$2.2(3)\times10^{-4}$
^{64}Zn	5559.82(15)	0.01110(15)	0.000514(7)
^{68}Zn	5647.05(10)	0.0082(10)	0.00038(5)
^{67}Zn	5662.23(18)	0.0066(8)	0.00031(4)
^{67}Zn	5677.3(3)	0.0053(7)	$2.5(3)\times10^{-4}$
^{67}Zn	5685.90(19)	0.0051(4)	$2.36(19)\times10^{-4}$
^{64}Zn	5776.31(10)	0.01360(17)	0.000630(8)
^{67}Zn	5789.15(21)	0.0045(6)	$2.1(3)\times10^{-4}$
^{66}Zn	5909.4(3)	0.0110(11)	0.00051(5)
^{64}Zn	6037.28(8)	0.01490(20)	0.000690(9)
^{67}Zn	6262.43(12)	0.0085(6)	0.00039(3)
^{68}Zn	6481.75(10)	0.0100(12)	0.00046(6)
^{64}Zn	6509.27(8)	0.01190(16)	0.000551(7)
^{66}Zn	6658.6(3)	0.019(4)	0.00088(19)
^{67}Zn	6701.79(12)	0.0066(4)	0.000306(19)
^{67}Zn	6768.21(10)	0.0112(9)	0.00052(4)
^{66}Zn	6867.5(3)	0.0254(17)	0.00118(8)
^{67}Zn	6910.58(11)	0.0194(14)	0.00090(7)
^{66}Zn	**6958.8(3)**	**0.043(3)**	**0.00199(14)**
^{64}Zn	7069.20(7)	0.0204(3)	0.000945(14)
^{64}Zn	7111.95(7)	0.0198(3)	0.000917(14)
^{67}Zn	7188.40(8)	0.0131(7)	0.00061(3)
^{67}Zn	7859.07(8)	0.0084(7)	0.00039(3)
^{64}Zn	**7863.55(7)**	**0.1410(19)**	**0.00653(9)**
^{67}Zn	8314.37(8)	0.0105(5)	0.000486(23)
^{67}Zn	9120.06(7)	0.0136(6)	0.00063(3)
Gallium (Z=31), *At.Wt.=69.723(1)*, σ_γ*=2.90(7)*			
^{71}Ga	**16.43(3)**	**0.078(5)**	**0.00339(22)**
^{71}Ga	41.89(4)	0.0050(4)	$2.17(17)\times10^{-4}$
^{71}Ga	46.97(4)	0.013(3)	0.00057(13)
^{71}Ga	79.75(4)	0.0224(10)	0.00097(4)
^{71}Ga	88.86(4)	0.0305(9)	0.00133(4)
^{71}Ga	***103.25(3)d***	***0.0526(11)***	***0.00229[100%]***
^{71}Ga	110.06(4)	0.0118(8)	0.00051(4)
^{71}Ga	**112.36(3)**	**0.155(3)**	**0.00674(13)**
^{71}Ga	121.01(3)	0.0142(6)	0.00062(3)
^{71}Ga	128.76(4)	0.0063(9)	0.00027(4)
^{71}Ga	132.07(11)	0.013(3)	0.00057(13)
^{71}Ga	**145.14(3)**	**0.466(7)**	**0.0203(3)**
^{71}Ga	153.78(3)	0.0319(8)	0.00139(4)
^{71}Ga	162.90(4)	0.021(5)	0.00091(22)
^{71}Ga	181.54(4)	0.040(3)	0.00174(13)
^{71}Ga	**184.09(3)**	**0.1040(21)**	**0.00452(9)**
^{69}Ga	**187.84(3)**	**0.1080(21)**	**0.00469(9)**
^{71}Ga	**192.11(3)**	**0.194(3)**	**0.00843(13)**
^{71}Ga	**194.66(4)**	**0.1070(21)**	**0.00465(9)**
^{71}Ga	**197.94(5)**	**0.1330(24)**	**0.00578(10)**
^{71}Ga	210.37(11)	0.019(7)	0.0008(3)
^{71}Ga	210.50(20)	0.0343(8)	0.00149(4)
^{71}Ga	**212.58(4)**	**0.0583(12)**	**0.00253(5)**
^{71}Ga	228.97(4)	0.0379(10)	0.00165(4)
^{71}Ga	231.06(4)	0.0111(6)	0.00048(3)
^{71}Ga	246.91(20)	0.0118(19)	0.00051(8)
^{71}Ga	**248.89(4)**	**0.136(8)**	**0.0059(4)**
^{71}Ga	264.03(4)	0.0238(9)	0.00103(4)
^{71}Ga	266.14(3)	0.0361(11)	0.00157(5)
^{71}Ga	306.11(14)	0.015(4)	0.00065(17)
^{71}Ga	306.62(12)	0.0097(8)	0.00042(4)
^{71}Ga	313.62(11)	0.0209(8)	0.00091(4)
^{71}Ga	315.40(6)	0.0275(9)	0.00120(4)
^{69}Ga	**318.87(3)**	**0.0592(14)**	**0.00257(6)**
^{69}Ga	344.79(7)	0.0070(6)	0.00030(3)
^{69}Ga	363.93(13)	0.0048(6)	$2.1(3)\times10^{-4}$
^{69}Ga	374.37(4)	0.0303(10)	0.00132(4)

Table I. Adopted Prompt and Decay Gamma Rays from Thermal Neutron Capture for all Elements, continued

Eγ-keV	σ(Eγ)-barns	k_0
Gallium (Z=31), continued		
^{71}Ga 384.17(5)	0.0058(6)	0.00025(3)
^{71}Ga **390.66(4)**	**0.0476(12)**	**0.00207(5)**
^{69}Ga 393.26(3)	0.021(3)	0.00091(13)
^{71}Ga **393.28(3)**	**0.1340(23)**	**0.00582(10)**
^{71}Ga 402.86(4)	0.0172(8)	0.00075(4)
^{71}Ga 408.44(20)	0.0179(9)	0.00078(4)
^{71}Ga 411.07(14)	0.019(5)	0.00083(22)
^{71}Ga 411.13(4)	0.0384(11)	0.00167(5)
^{71}Ga 439.26(6)	0.0154(7)	0.00067(3)
^{71}Ga 444.65(6)	0.021(5)	0.00091(22)
^{71}Ga 458.54(12)	0.0092(7)	0.00040(3)
^{71}Ga 488.81(4)	0.017(4)	0.00074(17)
^{71}Ga 488.81(4)	0.0227(8)	0.00099(4)
^{69}Ga **508.19(3)**	**0.349(6)**	**0.0152(3)**
^{69}Ga 516.564(25)	0.012(4)	0.00052(17)
^{71}Ga 547.90(5)	0.0090(8)	0.00039(4)
^{69}Ga 561.97(5)	0.0078(3)	0.000339(13)
^{71}Ga 564.29(5)	0.0097(3)	0.000422(13)
^{71}Ga 579.55(12)	0.0068(9)	0.00030(4)
^{71}Ga ***601.21(6)d***	***0.471(22)***	***0.0205[2.4%]***
^{71}Ga 603.24(4)	0.0155(7)	0.00067(3)
^{71}Ga 619.63(5)	0.0053(12)	$2.3(5)\times10^{-4}$
^{71}Ga 620.23(14)	0.0052(11)	$2.3(5)\times10^{-4}$
^{71}Ga ***629.96(5)d***	***0.490(22)***	***0.0213[2.4%]***
^{69}Ga 632.34(4)	0.0183(7)	0.00080(3)
^{69}Ga **651.09(3)**	**0.1030(22)**	**0.00448(10)**
^{69}Ga **690.943(24)**	**0.305(4)**	**0.01326(17)**
^{71}Ga ***786.17(16)d***	***0.160(22)***	***0.0070[2.4%]***
^{71}Ga ***834.08(3)d***	***1.65(5)***	***0.0717[2.4%]***
^{69}Ga 851.34(7)	0.0127(9)	0.00055(4)
^{69}Ga 868.3(3)	0.0071(15)	0.00031(7)
^{71}Ga 894.84(20)	0.0111(9)	0.00048(4)
^{71}Ga ***894.91(11)d***	***0.35(3)***	***0.0152[2.4%]***
^{69}Ga 904.91(7)	0.0149(10)	0.00065(4)
^{71}Ga 976.37(13)	0.0101(8)	0.00044(4)
^{69}Ga 995.68(5)	0.0173(9)	0.00075(4)
^{71}Ga 1002.71(25)	0.0073(8)	0.00032(4)
^{69}Ga 1010.34(6)	0.0146(8)	0.00063(4)
^{69}Ga 1014.99(8)	0.0077(7)	0.00033(3)
^{69}Ga 1044.90(15)	0.0107(11)	0.00047(5)
^{71}Ga ***1050.69(5)d***	***0.119(13)***	***0.0052[2.4%]***
^{71}Ga 1051.25(17)	0.0114(10)	0.00050(4)
^{71}Ga 1075.6(5)	0.0053(8)	$2.3(4)\times10^{-4}$
^{69}Ga 1140.37(4)	0.0422(16)	0.00183(7)
^{71}Ga 1200.3(3)	0.0078(9)	0.00034(4)
^{69}Ga 1203.40(6)	0.0286(14)	0.00124(6)
^{71}Ga 1217.5(9)	0.0075(21)	0.00033(9)
^{71}Ga 1296.9(7)	0.0065(9)	0.00028(4)
^{69}Ga 1306.73(12)	0.0140(20)	0.00061(9)
^{69}Ga 1311.89(6)	0.0259(12)	0.00113(5)
^{69}Ga 1359.50(9)	0.0148(11)	0.00064(5)
^{71}Ga 1359.53(17)	0.0148(11)	0.00064(5)
^{69}Ga 1456.39(7)	0.0168(11)	0.00073(5)
^{71}Ga ***1464.00(7)d***	***0.0609(19)***	***0.00265[2.4%]***
^{69}Ga 1518.21(8)	0.0219(13)	0.00095(6)
^{71}Ga 1532.91(17)	0.0172(12)	0.00075(5)
^{71}Ga ***1596.68(8)d***	***0.0732(16)***	***0.00318[2.4%]***
^{69}Ga 1621.55(12)	0.0096(10)	0.00042(4)
^{69}Ga 1725.48(8)	0.0108(7)	0.00047(3)
^{69}Ga 1794.15(13)	0.0088(9)	0.00038(4)
^{69}Ga 1846.5(3)	0.0053(10)	$2.3(4)\times10^{-4}$
^{71}Ga ***1861.09(6)d***	***0.0904(19)***	***0.00393[2.4%]***
^{69}Ga 1866.6(5)	0.0060(17)	0.00026(7)
^{69}Ga 1907.63(13)	0.0089(11)	0.00039(5)
^{69}Ga 1930.5(3)	0.0058(11)	0.00025(5)
^{69}Ga 2115.98(17)	0.0066(8)	0.00029(4)
^{69}Ga 2142.88(14)	0.0085(9)	0.00037(4)
^{69}Ga 2164.1(7)	0.0056(13)	$2.4(6)\times10^{-4}$
^{71}Ga ***2201.91(13)d***	***0.52(4)***	***0.0226[2.4%]***
^{71}Ga ***2491.6(3)d***	***0.17(4)***	***0.0074[2.4%]***
^{71}Ga ***2507.40(12)d***	***0.28(4)***	***0.0122[2.4%]***
^{71}Ga ***3034.6(4)d***	***0.15(3)***	***0.0065[2.4%]***
^{71}Ga 4543.3(5)	0.0104(11)	0.00045(5)
^{71}Ga 4578.2(7)	0.0058(12)	0.00025(5)
^{71}Ga 4595.4(5)	0.0093(13)	0.00040(6)
Gallium (Z=31), continued		
^{71}Ga 4686.8(5)	0.0066(9)	0.00029(4)
^{71}Ga 4719.2(9)	0.0052(8)	$2.3(4)\times10^{-4}$
^{71}Ga 4761.5(4)	0.0078(9)	0.00034(4)
^{71}Ga 4792.6(3)	0.0207(17)	0.00090(7)
^{71}Ga 4839.89(23)	0.040(3)	0.00174(13)
^{71}Ga 4868.2(3)	0.0189(14)	0.00082(6)
^{71}Ga 4890.5(3)	0.0191(14)	0.00083(6)
^{69}Ga 4955.2(4)	0.0095(13)	0.00041(6)
^{71}Ga 5054.0(4)	0.0094(11)	0.00041(5)
^{71}Ga 5091.8(9)	0.0070(9)	0.00030(4)
^{69}Ga 5133.6(6)	0.0051(11)	$2.2(5)\times10^{-4}$
^{71}Ga 5160.69(21)	0.0154(13)	0.00067(6)
^{69}Ga 5189.2(9)	0.0074(20)	0.00032(9)
^{71}Ga 5195.1(5)	0.034(3)	0.00148(13)
^{71}Ga 5223.3(7)	0.0157(13)	0.00068(6)
^{71}Ga 5233.57(25)	0.0344(19)	0.00150(8)
^{71}Ga 5272.7(6)	0.0057(15)	$2.5(7)\times10^{-4}$
^{71}Ga 5313.3(8)	0.0049(10)	$2.1(4)\times10^{-4}$
^{69}Ga 5334.13(18)	0.0271(18)	0.00118(8)
^{71}Ga 5334.9(5)	0.020(7)	0.0009(3)
^{71}Ga 5340.45(25)	0.0406(21)	0.00176(9)
^{71}Ga 5390.2(5)	0.0049(10)	$2.1(4)\times10^{-4}$
^{71}Ga 5487.2(13)	0.0090(25)	0.00039(11)
^{69}Ga 5488.31(17)	0.0296(19)	0.00129(8)
^{71}Ga 5497.6(5)	0.0091(13)	0.00040(6)
^{69}Ga 5510.0(4)	0.0047(9)	$2.0(4)\times10^{-4}$
^{71}Ga 5543.83(19)	0.0142(17)	0.00062(7)
^{71}Ga 5577.0(6)	0.0058(18)	0.00025(8)
^{71}Ga **5601.75(25)**	**0.063(4)**	**0.00274(17)**
^{71}Ga 5625.35(24)	0.0077(16)	0.00033(7)
^{71}Ga 5644.8(7)	0.0065(21)	0.00028(9)
^{71}Ga 5651.3(4)	0.0134(20)	0.00058(9)
^{71}Ga 5664.0(5)	0.0099(11)	0.00043(5)
^{71}Ga 5692.2(3)	0.0211(13)	0.00092(6)
^{71}Ga 5721.1(13)	0.020(4)	0.00087(17)
^{69}Ga 5722.9(3)	0.0067(25)	0.00029(11)
^{71}Ga 5779.11(18)	0.022(4)	0.00096(17)
^{69}Ga 5783.8(4)	0.0114(13)	0.00050(6)
^{69}Ga 5806.4(3)	0.0152(15)	0.00066(7)
^{71}Ga 5883.55(19)	0.0096(4)	0.000417(17)
^{71}Ga 5900.55(14)	0.0173(14)	0.00075(6)
^{71}Ga 5919.38(15)	0.0131(12)	0.00057(5)
^{71}Ga **6007.25(14)**	**0.069(5)**	**0.00300(22)**
^{71}Ga **6111.72(24)**	**0.055(4)**	**0.00239(17)**
^{71}Ga 6127.57(14)	0.0227(23)	0.00099(10)
^{69}Ga 6134.5(5)	0.0058(14)	0.00025(6)
^{71}Ga 6190.14(17)	0.0218(19)	0.00095(8)
^{69}Ga 6238.6(4)	0.0067(10)	0.00029(4)
^{71}Ga 6311.64(14)	0.0194(16)	0.00084(7)
^{71}Ga 6322.20(14)	0.0186(16)	0.00081(7)
^{69}Ga 6346.4(3)	0.0140(15)	0.00061(7)
^{71}Ga **6358.61(14)**	**0.138(5)**	**0.00600(22)**
^{69}Ga 6513.06(18)	0.0325(20)	0.00141(9)
^{71}Ga 6520.12(14)	0.017(3)	0.00074(13)
^{69}Ga 7002.30(16)	0.0203(12)	0.00088(5)
Germanium (Z=32), *At.Wt.=72.64(1)*, σ_γ=*2.30(6)*		
^{72}Ge 68.750(17)	0.0201(7)	0.00084(3)
^{70}Ge **175.05(3)**	**0.164(4)**	**0.00684(17)**
^{70}Ge *175.05(3)d*	*0.078(5)*	*0.00325[100%]*
^{74}Ge 177.49(4)	0.0118(5)	0.000492(21)
^{70}Ge 247.27(5)	0.0123(6)	0.000513(25)
^{74}Ge 253.21(5)	0.0609(16)	0.00254(7)
^{72}Ge 284.98(5)	0.0164(7)	0.00068(3)
^{72}Ge 297.41(3)	0.0414(12)	0.00173(5)
^{70}Ge 306.18(4)	0.0136(8)	0.00057(3)
^{72}Ge 325.74(3)	0.0649(18)	0.00271(8)
^{70}Ge 326.83(3)	0.058(5)	0.00242(21)
^{70}Ge 391.43(4)	0.0253(10)	0.00106(4)
^{72}Ge 430.34(5)	0.0161(7)	0.00067(3)
^{72}Ge 432.86(5)	0.0125(6)	0.000521(25)
^{73}Ge **492.933(5)**	**0.133(3)**	**0.00555(13)**
^{70}Ge **499.87(3)**	**0.162(6)**	**0.00676(25)**
^{73}Ge 516.19(4)	~0.02	~0.0008
^{70}Ge 517.78(8)	0.0114(10)	0.00048(4)

Table I. Adopted Prompt and Decay Gamma Rays from Thermal Neutron Capture for all Elements, continued

	Eγ-keV	σ(Eγ)-barns	k_0
Germanium (Z=32), continued			
^{73}Ge	531.654(7)	0.0133(7)	0.00055(3)
^{72}Ge	541.77(4)	0.0154(6)	0.000642(25)
^{70}Ge	572.27(5)	0.018(4)	0.00075(17)
^{74}Ge	574.91(3)	0.0306(12)	0.00128(5)
^{73}Ge	**595.851(5)**	**1.100(24)**	**0.0459(10)**
^{73}Ge	606.80(4)	0.015(12)	0.0006(5)
^{73}Ge	**608.353(4)**	**0.250(6)**	**0.01043(25)**
^{73}Ge	701.509(8)	0.0642(19)	0.00268(8)
^{70}Ge	708.15(3)	0.0825(24)	0.00344(10)
^{73}Ge	770.211(8)	0.0135(8)	0.00056(3)
^{70}Ge	788.60(7)	0.014(3)	0.00058(13)
^{70}Ge	808.14(4)	0.030(5)	0.00125(21)
^{73}Ge	808.218(10)	0.0197(18)	0.00082(8)
^{70}Ge	831.30(3)	0.0445(16)	0.00186(7)
^{70}Ge	851.70(13)	0.012(7)	0.0005(3)
^{73}Ge	**867.899(5)**	**0.553(12)**	**0.0231(5)**
^{73}Ge	878.130(19)	0.0112(8)	0.00047(3)
^{73}Ge	939.249(11)	0.0315(13)	0.00131(5)
^{73}Ge	**961.055(7)**	**0.129(4)**	**0.00538(17)**
^{73}Ge	999.775(8)	0.0581(19)	0.00242(8)
^{70}Ge	1095.42(5)	0.053(5)	0.00221(21)
^{70}Ge	1098.62(5)	0.0165(10)	0.00069(4)
^{73}Ge	**1101.282(6)**	**0.134(3)**	**0.00559(13)**
^{73}Ge	1105.557(10)	0.0708(20)	0.00295(8)
^{73}Ge	1131.360(8)	0.0487(15)	0.00203(6)
^{70}Ge	1139.27(6)	0.0441(23)	0.00184(10)
^{73}Ge	1150.441(22)	0.0127(8)	0.00053(3)
^{73}Ge	1200.75(10)	~0.01	~0.0005
^{73}Ge	1200.89(18)	~0.01	~0.0005
^{73}Ge	1200.94(3)	~0.01	~0.0005
^{73}Ge	**1204.199(6)**	**0.141(4)**	**0.00588(17)**
^{73}Ge	1205.862(13)	0.0114(21)	0.00048(9)
^{73}Ge	1228.20(9)	0.0116(9)	0.00048(4)
^{76}Ge	*1250.55(10)*	*0.0110(21)*	*0.00046(9)*
^{72}Ge	1251.30(7)	0.032(9)	0.0013(4)
^{70}Ge	1298.61(6)	0.049(4)	0.00204(17)
^{73}Ge	1332.081(11)	0.0122(10)	0.00051(4)
^{70}Ge	1378.73(6)	0.017(4)	0.00071(17)
^{73}Ge	1471.712(10)	0.083(3)	0.00346(13)
^{73}Ge	1489.491(24)	0.0234(12)	0.00098(5)
^{73}Ge	1509.719(11)	0.0422(17)	0.00176(7)
^{73}Ge	1513.41(8)	~0.01	~0.0005
^{73}Ge	1513.74(9)	~0.01	~0.0005
^{73}Ge	1573.87(3)	0.0115(9)	0.00048(4)
^{73}Ge	1617.539(14)	0.0197(12)	0.00082(5)
^{70}Ge	1631.1(3)	0.0189(13)	0.00079(5)
^{73}Ge	1631.83(7)	0.0175(12)	0.00073(5)
^{73}Ge	1635.84(7)	0.0138(11)	0.00058(5)
^{73}Ge	1640.749(12)	0.0128(10)	0.00053(4)
^{73}Ge	1712.780(20)	0.0129(9)	0.00054(4)
^{73}Ge	1755.86(3)	0.014(4)	0.00058(17)
^{73}Ge	1940.422(12)	0.0382(16)	0.00159(7)
^{70}Ge	1964.98(5)	0.0112(11)	0.00047(5)
^{73}Ge	2014.478(24)	0.0127(12)	0.00053(5)
^{73}Ge	2073.746(14)	0.0205(14)	0.00086(6)
^{73}Ge	4423.23(6)	0.014(3)	0.00058(13)
^{73}Ge	4423.81(8)	0.014(4)	0.00058(17)
^{74}Ge	4706.98(23)	0.0151(13)	0.00063(5)
^{70}Ge	4881.79(4)	0.017(3)	0.00071(13)
^{73}Ge	5165.56(5)	0.013(9)	0.0005(4)
^{73}Ge	5361.77(6)	0.0111(12)	0.00046(5)
^{70}Ge	5383.85(7)	0.0131(15)	0.00055(6)
^{70}Ge	5450.69(5)	0.028(4)	0.00117(17)
^{72}Ge	5518.30(4)	0.0290(17)	0.00121(7)
^{72}Ge	5650.80(6)	0.0115(12)	0.00048(5)
^{72}Ge	5740.07(10)	0.0151(15)	0.00063(6)
^{70}Ge	5817.17(4)	0.028(3)	0.00117(13)
^{70}Ge	6036.90(6)	0.045(3)	0.00188(13)
^{70}Ge	6117.02(7)	0.043(6)	0.00179(25)
^{73}Ge	6199.96(5)	0.0120(13)	0.00050(5)
^{74}Ge	6251.97(6)	0.0188(18)	0.00078(8)
^{73}Ge	6265.84(6)	0.015(4)	0.00063(17)
^{70}Ge	6276.35(6)	0.0214(21)	0.00089(9)
^{70}Ge	6320.19(5)	0.0153(14)	0.00064(6)
^{72}Ge	6390.29(5)	0.0299(19)	0.00125(8)
^{72}Ge	6418.62(4)	0.0178(15)	0.00074(6)
^{70}Ge	6707.43(3)	0.0388(25)	0.00162(10)
^{72}Ge	6716.00(4)	0.0160(15)	0.00067(6)
^{73}Ge	6717.462(23)	0.020(5)	0.00083(21)
^{70}Ge	6915.69(3)	0.031(5)	0.00129(21)
^{73}Ge	7091.164(15)	0.0170(11)	0.00071(5)
^{73}Ge	7260.187(14)	0.0270(15)	0.00113(6)
^{70}Ge	7415.510(23)	0.016(5)	0.00067(21)
^{73}Ge	8030.317(13)	0.0117(9)	0.00049(4)
^{73}Ge	8498.388(13)	0.0120(9)	0.00050(4)
^{73}Ge	8731.744(13)	0.0128(8)	0.00053(3)
Arsenic (Z=33), *At.Wt.=74.92160(2),* σ_γ*=4.23(8)*			
^{75}As	**44.4250(10)**	**0.560(20)**	**0.0227(8)**
^{75}As	**46.0980(10)**	**0.337(15)**	**0.0136(6)**
^{75}As	**74.8720(10)**	**0.12(3)**	**0.0049(12)**
^{75}As	81.4110(20)	0.0107(15)	0.00043(6)
^{75}As	83.2840(10)	0.0142(16)	0.00057(7)
^{75}As	**86.7880(10)**	**0.579(11)**	**0.0234(4)**
^{75}As	91.3670(10)	0.0218(17)	0.00088(7)
^{75}As	**116.7550(10)**	**0.107(18)**	**0.0043(7)**
^{75}As	117.3320(10)	0.071(18)	0.0029(7)
^{75}As	118.680(3)	0.0140(10)	0.00057(4)
^{75}As	**120.2580(10)**	**0.402(8)**	**0.0163(3)**
^{75}As	**122.2470(10)**	**0.227(5)**	**0.00918(20)**
^{75}As	127.5090(20)	0.096(3)	0.00388(12)
^{75}As	**135.4110(10)**	**0.156(4)**	**0.00631(16)**
^{75}As	136.3430(10)	0.031(3)	0.00125(12)
^{75}As	137.0270(10)	0.0391(19)	0.00158(8)
^{75}As	141.2150(20)	0.0625(21)	0.00253(9)
^{75}As	142.4590(10)	0.0211(16)	0.00085(7)
^{75}As	**144.5480(10)**	**0.1000(22)**	**0.00404(9)**
^{75}As	152.8430(20)	0.0114(13)	0.00046(5)
^{75}As	155.0830(10)	0.0423(19)	0.00171(8)
^{75}As	156.8900(20)	0.0136(18)	0.00055(7)
^{75}As	**157.7450(10)**	**0.117(24)**	**0.0047(10)**
^{75}As	162.6820(10)	0.0257(19)	0.00104(8)
^{75}As	**165.0490(10)**	**0.996(16)**	**0.0403(7)**
^{75}As	178.0190(10)	0.0979(23)	0.00396(9)
^{75}As	178.831(3)	0.0169(11)	0.00068(4)
^{75}As	180.121(3)	0.0136(7)	0.00055(3)
^{75}As	180.2100(10)	0.0157(8)	0.00064(3)
^{75}As	186.0720(10)	0.0285(17)	0.00115(7)
^{75}As	186.734(3)	0.0103(6)	0.000417(24)
^{75}As	187.3130(20)	0.0152(8)	0.00061(3)
^{75}As	188.0620(10)	0.090(3)	0.00364(12)
^{75}As	191.2620(20)	0.0117(17)	0.00047(7)
^{75}As	193.273(3)	0.0119(15)	0.00048(6)
^{75}As	198.8550(10)	0.089(3)	0.00360(12)
^{75}As	200.446(3)	0.011(3)	0.00044(12)
^{75}As	201.1800(20)	0.0140(18)	0.00057(7)
^{75}As	**211.1470(10)**	**0.113(3)**	**0.00457(12)**
^{75}As	220.3810(10)	0.0373(23)	0.00151(9)
^{75}As	221.5320(10)	0.0534(25)	0.00216(10)
^{75}As	224.004(4)	0.0126(12)	0.00051(5)
^{75}As	225.7020(10)	0.0803(24)	0.00325(10)
^{75}As	**235.8770(10)**	**0.181(4)**	**0.00732(16)**
^{75}As	238.9960(10)	0.023(10)	0.0009(4)
^{75}As	241.6580(10)	0.0262(13)	0.00106(5)
^{75}As	246.2030(20)	0.0223(14)	0.00090(6)
^{75}As	256.0350(10)	0.045(11)	0.0018(4)
^{75}As	**263.8940(10)**	**0.18(4)**	**0.0073(16)**
^{75}As	271.7540(10)	0.013(4)	0.00053(16)
^{75}As	281.5750(10)	0.085(20)	0.0034(8)
^{75}As	297.248(10)	0.010(4)	0.00040(16)
^{75}As	297.5420(10)	0.055(3)	0.00222(12)
^{75}As	300.4610(10)	0.051(3)	0.00206(12)
^{75}As	301.654(7)	0.0109(24)	0.00044(10)
^{75}As	306.639(9)	0.011(3)	0.00044(12)
^{75}As	308.3190(10)	0.018(3)	0.00073(12)
^{75}As	311.004(5)	0.0161(25)	0.00065(10)
^{75}As	314.243(3)	0.031(3)	0.00125(12)
^{75}As	322.572(4)	0.016(3)	0.00065(12)
^{75}As	326.9120(20)	0.015(3)	0.00061(12)
^{75}As	330.100(7)	0.023(3)	0.00093(12)

Table I. Adopted Prompt and Decay Gamma Rays from Thermal Neutron Capture for all Elements, continued

	Eγ-keV	σ(Eγ)-barns	k_0
Arsenic (Z=33), continued			
^{75}As	340.1560(20)	0.0413(21)	0.00167(9)
^{75}As	352.3620(20)	0.071(3)	0.00287(12)
^{75}As	357.4070(10)	0.074(3)	0.00299(12)
^{75}As	360.3830(20)	0.0228(14)	0.00092(6)
^{75}As	363.9040(10)	0.059(3)	0.00239(12)
^{75}As	378.976(3)	0.030(3)	0.00121(12)
^{75}As	379.3230(20)	0.0231(20)	0.00093(8)
^{75}As	384.002(5)	0.0186(18)	0.00075(7)
^{75}As	394.231(8)	0.0131(20)	0.00053(8)
^{75}As	399.3490(20)	0.0465(23)	0.00188(9)
^{75}As	402.7440(20)	0.061(3)	0.00247(12)
^{75}As	412.7930(20)	0.0117(12)	0.00047(5)
^{75}As	**426.5750(10)**	**0.100(3)**	**0.00404(12)**
^{75}As	428.187(3)	0.0130(14)	0.00053(6)
^{75}As	430.7920(20)	0.0134(12)	0.00054(5)
^{75}As	436.8030(10)	0.0113(12)	0.00046(5)
^{75}As	460.7790(20)	0.0111(10)	0.00045(4)
^{75}As	463.647(3)	0.0333(23)	0.00135(9)
^{75}As	467.965(13)	0.0165(19)	0.00067(8)
^{75}As	**471.0000(10)**	**0.203(5)**	**0.00821(20)**
^{75}As	**473.1540(10)**	**0.176(5)**	**0.00712(20)**
^{75}As	477.584(9)	0.0124(18)	0.00050(7)
^{75}As	479.102(5)	0.0115(17)	0.00047(7)
^{75}As	480.137(6)	0.0126(18)	0.00051(7)
^{75}As	487.393(4)	0.0139(20)	0.00056(8)
^{75}As	494.105(7)	0.0100(17)	0.00040(7)
^{75}As	506.4970(20)	0.0283(23)	0.00114(9)
^{75}As	517.873(10)	0.024(3)	0.00097(12)
^{75}As	529.907(8)	0.0111(18)	0.00045(7)
^{75}As	550.460(3)	0.071(3)	0.00287(12)
^{75}As	554.937(24)	0.0230(24)	0.00093(10)
^{75}As	***559.10(5)d***	***2.00(10)***	***0.081[1.3%]***
^{75}As	565.547(7)	0.0463(25)	0.00187(10)
^{75}As	582.291(5)	0.0115(15)	0.00047(6)
^{75}As	585.492(8)	0.0161(17)	0.00065(7)
^{75}As	624.685(6)	0.0225(20)	0.00091(8)
^{75}As	628.7440(10)	0.0116(17)	0.00047(7)
^{75}As	632.396(24)	0.0219(20)	0.00089(8)
^{75}As	640.119(10)	0.0141(20)	0.00057(8)
^{75}As	644.329(23)	0.015(3)	0.00061(12)
^{75}As	***657.05(5)d***	***0.279(14)***	***0.0113[1.3%]***
^{75}As	669.113(4)	0.0278(13)	0.00112(5)
^{75}As	687.103(8)	0.010(5)	0.00040(20)
^{75}As	687.618(7)	0.0126(15)	0.00051(6)
^{75}As	706.783(4)	0.0339(22)	0.00137(9)
^{75}As	725.909(24)	0.0118(18)	0.00048(7)
^{75}As	731.840(9)	0.0102(17)	0.00041(7)
^{75}As	822.346(23)	0.0303(22)	0.00123(9)
^{75}As	848.593(9)	0.0282(21)	0.00114(9)
^{75}As	859.76(22)	0.0210(21)	0.00085(9)
^{75}As	880.326(9)	0.0234(21)	0.00095(9)
^{75}As	941.116(13)	0.0194(19)	0.00078(8)
^{75}As	942.240(8)	0.0161(8)	0.00065(3)
^{75}As	944.229(8)	0.0146(19)	0.00059(8)
^{75}As	***1216.08(5)d***	***0.155(8)***	***0.0063[1.3%]***
^{75}As	5527.02(12)	0.0112(7)	0.00045(3)
^{75}As	**5533.94(3)**	**0.151(7)**	**0.0061(3)**
^{75}As	5540.51(15)	0.0131(9)	0.00053(4)
^{75}As	5546.04(8)	0.0181(11)	0.00073(4)
^{75}As	5568.99(5)	0.0354(18)	0.00143(7)
^{75}As	5580.21(3)	0.019(3)	0.00077(12)
^{75}As	5601.37(7)	0.0138(8)	0.00056(3)
^{75}As	5612.9(4)	0.0103(21)	0.00042(9)
^{75}As	5614.99(13)	0.015(3)	0.00061(12)
^{75}As	5629.53(7)	0.0181(11)	0.00073(4)
^{75}As	5645.75(8)	0.0119(7)	0.00048(3)
^{75}As	5655.22(6)	0.0172(9)	0.00070(4)
^{75}As	5663.81(3)	0.019(4)	0.00077(16)
^{75}As	5675.89(3)	0.026(4)	0.00105(16)
^{75}As	5684.20(4)	0.0414(19)	0.00167(8)
^{75}As	5690.54(3)	0.023(4)	0.00093(16)
^{75}As	5698.05(3)	0.0479(22)	0.00194(9)
^{75}As	5723.39(7)	0.0160(9)	0.00065(4)
^{75}As	5757.22(3)	0.015(3)	0.00061(12)
^{75}As	5778.12(3)	0.0482(23)	0.00195(9)

	Eγ-keV	σ(Eγ)-barns	k_0
Arsenic (Z=33), continued			
^{75}As	5786.82(3)	0.026(4)	0.00105(16)
^{75}As	5816.39(5)	0.0247(12)	0.00100(5)
^{75}As	5834.21(7)	0.0210(11)	0.00085(4)
^{75}As	5854.92(13)	0.0218(16)	0.00088(7)
^{75}As	5869.65(7)	0.015(4)	0.00061(16)
^{75}As	5877.68(6)	0.0276(14)	0.00112(6)
^{75}As	5884.72(3)	0.0504(24)	0.00204(10)
^{75}As	5906.24(8)	0.0128(8)	0.00052(3)
^{75}As	5931.22(9)	0.0143(9)	0.00058(4)
^{75}As	5942.97(9)	0.0119(7)	0.00048(3)
^{75}As	5970.12(5)	0.0210(10)	0.00085(4)
^{75}As	5976.18(5)	0.0199(10)	0.00080(4)
^{75}As	6006.34(5)	0.0297(15)	0.00120(6)
^{75}As	6014.00(8)	0.0224(12)	0.00091(5)
^{75}As	6019.17(11)	0.0161(10)	0.00065(4)
^{75}As	6027.524(22)	0.020(3)	0.00081(12)
^{75}As	6059.483(22)	0.026(3)	0.00105(12)
^{75}As	6142.79(3)	0.014(3)	0.00057(12)
^{75}As	6171.99(9)	0.0105(6)	0.000425(24)
^{75}As	6180.14(5)	0.0264(13)	0.00107(5)
^{75}As	6203.57(4)	0.016(3)	0.00065(12)
^{75}As	6223.06(3)	0.012(3)	0.00049(12)
^{75}As	6231.24(4)	0.0413(19)	0.00167(8)
^{75}As	6294.295(25)	0.064(6)	0.00259(24)
^{75}As	6303.71(22)	0.024(4)	0.00097(16)
^{75}As	6305.37(3)	0.085(4)	0.00344(16)
^{75}As	6342.976(15)	0.010(3)	0.00040(12)
^{75}As	6357.58(7)	0.0204(10)	0.00083(4)
^{75}As	6370.124(9)	0.0274(13)	0.00111(5)
^{75}As	6388.768(10)	0.0329(18)	0.00133(7)
^{75}As	6393.133(12)	0.032(4)	0.00129(16)
^{75}As	6403.761(12)	0.022(3)	0.00089(12)
^{75}As	6419.378(23)	0.031(4)	0.00125(16)
^{75}As	6465.17(12)	0.0111(24)	0.00045(10)
^{75}As	6526.051(13)	0.0123(7)	0.00050(3)
^{75}As	6534.932(9)	0.0316(15)	0.00128(6)
^{75}As	6542.669(10)	0.0408(19)	0.00165(8)
^{75}As	6583.556(10)	0.027(3)	0.00109(12)
^{75}As	6587.038(13)	0.045(3)	0.00182(12)
^{75}As	6600.71(3)	0.0372(17)	0.00150(7)
^{75}As	6620.59(5)	0.0304(15)	0.00123(6)
^{75}As	6659.378(9)	0.0227(11)	0.00092(4)
^{75}As	6691.241(9)	0.0246(12)	0.00100(5)
^{75}As	6699.744(8)	0.0109(7)	0.00044(3)
^{75}As	6718.514(11)	0.0101(6)	0.000409(24)
^{75}As	6778.047(9)	0.0143(9)	0.00058(4)
^{75}As	6784.456(9)	0.0133(25)	0.00054(10)
^{75}As	**6808.872(8)**	**0.160(8)**	**0.0065(3)**
^{75}As	**6810.898(8)**	**0.56(3)**	**0.0227(12)**
^{75}As	6823.272(8)	0.0133(8)	0.00054(3)
^{75}As	6828.896(9)	0.0161(9)	0.00065(4)
^{75}As	6857.474(8)	0.0168(10)	0.00068(4)
^{75}As	6881.302(8)	0.0162(9)	0.00066(4)
^{75}As	6926.635(8)	0.061(4)	0.00247(16)
^{75}As	6976.101(9)	0.0130(21)	0.00053(9)
^{75}As	**7020.139(8)**	**0.104(7)**	**0.0042(3)**
^{75}As	7027.998(8)	0.0534(25)	0.00216(10)
^{75}As	7048.154(8)	0.0103(21)	0.00042(9)
^{75}As	7063.648(8)	0.045(3)	0.00182(12)
^{75}As	7163.396(8)	0.0181(9)	0.00073(4)
^{75}As	7208.183(8)	0.0127(7)	0.00051(3)
^{75}As	7241.649(8)	0.0167(20)	0.00068(8)
^{75}As	7284.007(8)	0.036(3)	0.00146(12)
Selenium (Z=34), *At.Wt.=78.96(3),* σ_γ*=12.0(7)*			
^{76}Se	51.3610(10)	~0.03	~0.001
^{76}Se	87.8660(10)	0.210(4)	0.00806(15)
^{74}Se	112.3880(10)	0.0317(15)	0.00122(6)
^{76}Se	125.8440(10)	0.074(17)	0.0028(7)
^{76}Se	**139.2270(10)**	**0.543(9)**	**0.0208(4)**
^{74}Se	141.3140(20)	0.0246(21)	0.00094(8)
^{76}Se	***161.9220(10)d***	***0.855(23)***	***0.0328[99%]***
^{76}Se	180.751(3)	0.0291(12)	0.00112(5)
^{76}Se	**200.4530(20)**	**0.233(9)**	**0.0089(4)**
^{76}Se	231.4270(20)	0.105(3)	0.00403(12)

Table I. Adopted Prompt and Decay Gamma Rays from Thermal Neutron Capture for all Elements, continued

	Eγ-keV	σ(Eγ)-barns	k_0
Selenium (Z=34), continued			
^{76}Se	**238.9980(10)**	**2.06(3)**	**0.0791(12)**
^{77}Se	248.43(8)	0.023(5)	0.00088(19)
^{76}Se	**249.7880(10)**	**0.538(9)**	**0.0206(4)**
^{76}Se	281.6400(20)	0.124(5)	0.00476(19)
^{74}Se	**286.5710(20)**	**0.280(6)**	**0.01075(23)**
^{74}Se	292.8430(20)	0.0297(21)	0.00114(8)
^{76}Se	**297.2160(20)**	**0.337(7)**	**0.0129(3)**
^{76}Se	303.7930(20)	0.052(3)	0.00200(12)
^{76}Se	331.2210(20)	0.0526(25)	0.00202(10)
^{76}Se	368.733(4)	0.026(3)	0.00100(12)
^{76}Se	378.9540(20)	0.022(3)	0.00084(12)
^{76}Se	384.9800(20)	0.032(5)	0.00123(19)
^{76}Se	390.8920(20)	0.029(4)	0.00111(15)
^{78}Se	432.12(14)	0.0227(15)	0.00087(6)
^{76}Se	**439.4510(20)**	**0.319(8)**	**0.0122(3)**
^{80}Se	467.81(10)	0.128(4)	0.00491(15)
^{76}Se	484.5440(20)	0.125(4)	0.00480(15)
^{80}Se	491.46(22)	0.022(3)	0.00084(12)
^{76}Se	504.7970(20)	0.024(5)	0.00092(19)
^{76}Se	**518.1810(20)**	**0.273(7)**	**0.0105(3)**
^{76}Se	**520.6370(20)**	**1.260(18)**	**0.0484(7)**
^{77}Se	545.297(12)	0.0635(25)	0.00244(10)
^{76}Se	565.7300(20)	0.0398(23)	0.00153(9)
^{76}Se	568.0660(20)	0.103(8)	0.0040(3)
^{76}Se	569.185(4)	0.024(8)	0.0009(3)
^{76}Se	574.6420(20)	0.054(3)	0.00207(12)
^{76}Se	**578.8550(20)**	**0.243(5)**	**0.00933(19)**
^{76}Se	585.4320(20)	0.077(4)	0.00296(15)
^{76}Se	607.471(4)	0.027(5)	0.00104(19)
^{76}Se	610.3800(20)	0.0345(21)	0.00132(8)
^{74}Se	610.7130(20)	0.0316(22)	0.00121(8)
^{77}Se	**613.724(3)**	**2.14(5)**	**0.0821(19)**
^{76}Se	645.8300(20)	0.099(3)	0.00380(12)
^{77}Se	687.251(5)	0.063(5)	0.00242(19)
^{77}Se	**694.914(4)**	**0.443(10)**	**0.0170(4)**
^{76}Se	707.9800(20)	0.0281(20)	0.00108(8)
^{76}Se	749.6060(20)	0.042(3)	0.00161(12)
^{76}Se	755.3920(20)	0.186(4)	0.00714(15)
^{76}Se	817.8520(20)	0.174(5)	0.00668(19)
^{77}Se	828.188(12)	0.0300(17)	0.00115(7)
^{76}Se	881.840(4)	0.040(3)	0.00154(12)
^{77}Se	884.867(7)	0.100(6)	0.00384(23)
^{76}Se	**885.8270(20)**	**0.262(7)**	**0.0101(3)**
^{77}Se	889.095(9)	0.096(6)	0.00368(23)
^{76}Se	889.108(4)	0.180(5)	0.00691(19)
^{76}Se	890.981(5)	0.083(4)	0.00319(15)
^{76}Se	946.9760(20)	0.089(4)	0.00342(15)
^{76}Se	951.809(6)	0.047(3)	0.00180(12)
^{76}Se	990.377(4)	0.028(3)	0.00107(12)
^{76}Se	991.629(6)	0.057(5)	0.00219(19)
^{76}Se	1005.1770(20)	0.117(5)	0.00449(19)
^{76}Se	1091.64(3)	0.026(5)	0.00100(19)
^{76}Se	1128.104(4)	0.023(4)	0.00088(15)
^{77}Se	1144.952(16)	0.076(3)	0.00292(12)
^{76}Se	1161.828(5)	0.079(4)	0.00303(15)
^{76}Se	1163.476(4)	0.087(4)	0.00334(15)
^{76}Se	1172.617(5)	0.058(3)	0.00223(12)
^{76}Se	1186.973(3)	0.033(3)	0.00127(12)
^{76}Se	1194.111(10)	0.022(3)	0.00084(12)
^{77}Se	1198.72(10)	0.0379(23)	0.00145(9)
^{80}Se	1202.0(3)	0.037(3)	0.00142(12)
^{77}Se	1240.206(12)	0.106(4)	0.00407(15)
^{76}Se	**1296.986(7)**	**0.240(7)**	**0.0092(3)**
^{76}Se	1306.540(10)	0.061(6)	0.00234(23)
^{77}Se	**1308.632(5)**	**0.317(8)**	**0.0122(3)**
^{77}Se	1338.817(12)	0.0354(19)	0.00136(7)
^{76}Se	1378.172(7)	0.048(4)	0.00184(15)
^{77}Se	1382.159(6)	0.069(3)	0.00265(12)
^{76}Se	1384.131(6)	0.080(4)	0.00307(15)
^{76}Se	1395.42(3)	0.024(6)	0.00092(23)
^{76}Se	1402.471(4)	0.032(4)	0.00123(15)
^{76}Se	1411.612(5)	0.115(6)	0.00441(23)
^{76}Se	1475.746(10)	0.030(20)	0.0012(8)
^{76}Se	1529.27(15)	0.034(6)	0.00130(23)
^{77}Se	1529.71(5)	0.061(13)	0.0023(5)

	Eγ-keV	σ(Eγ)-barns	k_0
Selenium (Z=34), continued			
^{76}Se	1578.621(7)	0.042(4)	0.00161(15)
^{76}Se	1623.124(6)	0.063(5)	0.00242(19)
^{76}Se	1677.06(3)	0.023(4)	0.00088(15)
^{76}Se	1712.75(5)	0.023(3)	0.00088(12)
^{77}Se	1713.544(22)	0.163(8)	0.0063(3)
^{76}Se	1714.739(10)	0.033(3)	0.00127(12)
^{77}Se	1721.43(8)	0.078(4)	0.00299(15)
^{80}Se	1724.88(18)	0.044(5)	0.00169(19)
^{76}Se	1790.24(7)	0.036(4)	0.00138(15)
^{76}Se	1847.93(5)	0.046(4)	0.00177(15)
^{76}Se	1872.21(5)	0.048(4)	0.00184(15)
^{77}Se	1923.32(10)	0.068(5)	0.00261(19)
^{76}Se	1963.15(7)	0.034(4)	0.00130(15)
^{76}Se	1980.40(5)	0.022(16)	0.0008(6)
^{77}Se	1995.871(6)	0.119(5)	0.00457(19)
^{76}Se	2035.26(5)	0.043(5)	0.00165(19)
^{76}Se	2074.08(5)	0.033(20)	0.0013(8)
^{76}Se	2142.65(8)	0.040(4)	0.00154(15)
^{76}Se	2212.02(9)	0.033(3)	0.00127(12)
^{76}Se	2249.88(12)	0.0221(21)	0.00085(8)
^{77}Se	2257.48(13)	0.022(3)	0.00084(12)
^{76}Se	2264.68(17)	0.031(4)	0.00119(15)
^{77}Se	2284.36(6)	0.054(5)	0.00207(19)
^{77}Se	2319.4(4)	0.025(10)	0.0010(4)
^{77}Se	2391.87(10)	0.043(4)	0.00165(15)
^{77}Se	2391.89(9)	0.038(7)	0.0015(3)
^{76}Se	2417.59(12)	0.024(17)	0.0009(7)
^{77}Se	2572.70(8)	0.025(4)	0.00096(15)
^{76}Se	2590.77(5)	0.039(13)	0.0015(5)
^{76}Se	2600.85(8)	0.0221(21)	0.00085(8)
^{76}Se	2614.09(5)	0.047(5)	0.00180(19)
^{77}Se	2674.47(6)	0.060(5)	0.00230(19)
^{76}Se	2749.78(15)	0.023(5)	0.00088(19)
^{77}Se	2769.87(8)	0.035(3)	0.00134(12)
^{76}Se	2809.08(7)	0.034(24)	0.0013(9)
^{76}Se	2872.93(9)	0.046(3)	0.00177(12)
^{77}Se	2873.47(9)	0.061(8)	0.0023(3)
^{76}Se	2922.68(11)	0.0214(21)	0.00082(8)
^{76}Se	2982.82(11)	0.030(9)	0.0012(4)
^{76}Se	3039.95(11)	0.038(16)	0.0015(6)
^{77}Se	3072.64(13)	0.0257(17)	0.00099(7)
^{76}Se	3206.54(17)	0.027(14)	0.0010(5)
^{77}Se	3242.39(12)	0.033(7)	0.0013(3)
^{76}Se	3279.09(12)	0.023(4)	0.00088(15)
^{76}Se	3296.55(13)	0.028(4)	0.00107(15)
^{77}Se	3385.13(12)	0.038(11)	0.0015(4)
^{77}Se	3439.40(13)	0.028(3)	0.00107(12)
^{76}Se	3466.82(17)	0.022(4)	0.00084(15)
^{76}Se	3517.60(17)	0.032(5)	0.00123(19)
^{76}Se	3550.31(20)	0.042(17)	0.0016(7)
^{76}Se	3620.46(17)	0.028(4)	0.00107(15)
^{76}Se	3636.29(17)	0.030(4)	0.00115(15)
^{76}Se	3693.06(20)	0.024(9)	0.0009(4)
^{76}Se	3700.14(12)	0.034(24)	0.0013(9)
^{76}Se	3858.09(11)	0.037(6)	0.00142(23)
^{76}Se	3866.33(10)	0.024(5)	0.00092(19)
^{76}Se	3873.00(12)	0.025(4)	0.00096(15)
^{76}Se	3901.06(17)	0.073(8)	0.0028(3)
^{76}Se	3945.94(17)	0.033(5)	0.00127(19)
^{76}Se	3968.30(13)	0.040(4)	0.00154(15)
^{76}Se	4003.78(5)	0.025(4)	0.00096(15)
^{76}Se	4020.78(7)	0.0225(16)	0.00086(6)
^{76}Se	4056.54(11)	0.031(5)	0.00119(19)
^{76}Se	4064.52(11)	0.0229(14)	0.00088(5)
^{76}Se	4174.76(12)	0.037(7)	0.0014(3)
^{76}Se	4185.94(13)	0.042(10)	0.0016(4)
^{76}Se	4243.49(13)	0.0220(13)	0.00084(5)
^{76}Se	4354.79(9)	0.040(5)	0.00154(19)
^{76}Se	4367.73(15)	0.024(3)	0.00092(12)
^{76}Se	4378.36(8)	0.085(16)	0.0033(6)
^{76}Se	4435.83(11)	0.032(7)	0.0012(3)
^{76}Se	4526.75(5)	0.115(8)	0.0044(3)
^{76}Se	4545.72(9)	0.049(5)	0.00188(19)
^{76}Se	4565.56(5)	0.156(11)	0.0060(4)
^{76}Se	4609.57(7)	0.058(9)	0.0022(4)

Table I. Adopted Prompt and Decay Gamma Rays from Thermal Neutron Capture for all Elements, continued

	Eγ-keV	σ(Eγ)-barns	k_0
Selenium (Z=34), continued			
^{76}Se	4641.97(5)	0.027(6)	0.00104(23)
^{76}Se	4702.43(15)	0.023(4)	0.00088(15)
^{76}Se	4926.78(7)	0.048(8)	0.0018(3)
^{76}Se	4963.217(24)	0.039(5)	0.00150(19)
^{76}Se	5025.80(5)	0.150(12)	0.0058(5)
^{76}Se	5078.75(5)	0.033(11)	0.0013(4)
^{76}Se	5098.56(10)	0.031(8)	0.0012(3)
^{76}Se	5154.33(7)	0.053(5)	0.00203(19)
^{76}Se	5169.734(22)	0.031(4)	0.00119(15)
^{76}Se	5206.60(9)	0.045(5)	0.00173(19)
^{76}Se	5275.98(9)	0.024(9)	0.0009(4)
^{76}Se	**5600.995(21)**	**0.301(14)**	**0.0116(5)**
^{76}Se	5703.864(23)	0.029(5)	0.00111(19)
^{76}Se	5795.473(21)	0.127(16)	0.0049(6)
^{77}Se	5813.24(10)	0.0269(13)	0.00103(5)
^{76}Se	**6006.973(21)**	**0.289(20)**	**0.0111(8)**
^{76}Se	6016.113(21)	0.101(10)	0.0039(4)
^{77}Se	6049.20(13)	0.0291(13)	0.00112(5)
^{76}Se	6231.597(21)	0.10(4)	0.0038(15)
^{80}Se	6232.9(5)	0.10(3)	0.0038(12)
^{77}Se	6244.07(13)	0.043(3)	0.00165(12)
^{77}Se	6315.30(9)	0.044(3)	0.00169(12)
^{76}Se	6413.379(21)	0.192(15)	0.0074(6)
^{77}Se	6498.52(12)	0.047(4)	0.00180(15)
^{76}Se	**6600.690(21)**	**0.623(20)**	**0.0239(8)**
^{77}Se	6811.00(13)	0.0257(22)	0.00099(8)
^{77}Se	6905.75(8)	0.0234(22)	0.00090(8)
^{77}Se	7113.76(8)	0.037(3)	0.00142(12)
^{76}Se	**7179.492(21)**	**0.261(25)**	**0.0100(10)**
^{77}Se	7209.15(6)	0.056(3)	0.00215(12)
^{76}Se	**7418.467(21)**	**0.350(13)**	**0.0134(5)**
^{77}Se	7491.71(9)	0.0295(15)	0.00113(6)
^{74}Se	7734.052(18)	0.13(6)	0.0050(23)
^{77}Se	8162.11(9)	0.058(3)	0.00223(12)
^{77}Se	8170.00(4)	0.054(4)	0.00207(15)
^{77}Se	8501.35(3)	0.048(3)	0.00184(12)
^{77}Se	9188.52(3)	0.150(8)	0.0058(3)
^{77}Se	**9883.35(3)**	**0.220(22)**	**0.0084(8)**
^{77}Se	10496.99(3)	0.0221(25)	0.00085(10)
Bromine (Z=35), *At.Wt.=79.904(1)*, σ_γ*=6.39(7)*			
^{81}Br	**29.1130(10)**	**0.1680(20)**	**0.00637(8)**
^{79}Br	***37.0520(20)d***	***0.428(12)***	***0.0162[7.5%]***
^{79}Br	**37.054(3)**	**0.160(10)**	**0.0061(4)**
^{79}Br	50.112(3)	0.0081(6)	0.000307(23)
^{79}Br	**59.471(4)**	**0.202(5)**	**0.00766(19)**
^{81}Br	72.0210(20)	0.0121(4)	0.000459(15)
^{79}Br	74.972(3)	0.0323(7)	0.00123(3)
^{81}Br	85.267(7)	0.0096(4)	0.000364(15)
^{79}Br	124.028(3)	0.0268(5)	0.001016(19)
^{79}Br	126.280(3)	0.0174(4)	0.000660(15)
^{79}Br	146.904(3)	0.0184(7)	0.00070(3)
^{79}Br	159.044(4)	0.0171(7)	0.00065(3)
^{79}Br	159.800(4)	0.0232(7)	0.00088(3)
^{79}Br	175.084(3)	0.0173(12)	0.00066(5)
^{81}Br	184.6440(10)	0.0258(12)	0.00098(5)
^{79}Br	**195.602(4)**	**0.434(14)**	**0.0165(5)**
^{79}Br	197.607(3)	0.0175(11)	0.00066(4)
^{79}Br	211.594(3)	0.0454(21)	0.00172(8)
^{79}Br	213.816(5)	0.0104(11)	0.00039(4)
^{79}Br	218.785(4)	0.019(8)	0.0007(3)
^{79}Br	**219.377(3)**	**0.399(14)**	**0.0151(5)**
^{81}Br	221.0950(20)	0.0123(14)	0.00047(5)
^{79}Br	**223.627(3)**	**0.153(5)**	**0.00580(19)**
^{79}Br	226.53(5)	0.0080(20)	0.00030(8)
^{79}Br	**234.320(3)**	**0.205(10)**	**0.0078(4)**
^{79}Br	236.454(3)	0.0372(23)	0.00141(9)
^{79}Br	**244.237(3)**	**0.45(3)**	**0.0171(11)**
^{81}Br	**244.8310(10)**	**0.15(5)**	**0.0057(19)**
^{79}Br	**245.203(4)**	**0.80(3)**	**0.0303(11)**
^{81}Br	245.54(3)	0.018(4)	0.00068(15)
^{81}Br	250.2080(20)	0.0145(19)	0.00055(7)
^{79}Br	263.460(8)	0.0105(25)	0.00040(10)
^{81}Br	264.4350(10)	0.035(3)	0.00133(11)
^{79}Br	**271.374(3)**	**0.462(7)**	**0.0175(3)**

	Eγ-keV	σ(Eγ)-barns	k_0
Bromine (Z=35), continued			
^{79}Br	**274.532(5)**	**0.158(3)**	**0.00599(11)**
^{79}Br	278.186(3)	0.0238(14)	0.00090(5)
^{81}Br	278.3620(20)	0.014(5)	0.00053(19)
^{81}Br	**287.7390(20)**	**0.253(4)**	**0.00960(15)**
^{79}Br	**294.349(3)**	**0.1160(22)**	**0.00440(8)**
^{79}Br	296.908(4)	0.0307(15)	0.00116(6)
^{79}Br	299.886(4)	8.0×10^{-2}	3.0×10^{-3}
^{79}Br	303.02(5)	0.008(3)	0.00030(11)
^{79}Br	311.090(6)	0.0080(12)	0.00030(5)
^{79}Br	**314.982(3)**	**0.460(9)**	**0.0174(3)**
^{79}Br	315.524(17)	0.030(8)	0.0011(3)
^{81}Br	315.770(5)	0.022(8)	0.0008(3)
^{81}Br	316.8510(20)	0.017(5)	0.00064(19)
^{79}Br	321.937(8)	0.0262(18)	0.00099(7)
^{79}Br	329.551(4)	0.0213(16)	0.00081(6)
^{81}Br	339.881(3)	0.0134(14)	0.00051(5)
^{79}Br	**343.405(3)**	**0.118(4)**	**0.00448(15)**
^{81}Br	**345.0060(10)**	**0.154(4)**	**0.00584(15)**
^{79}Br	345.580(4)	0.023(4)	0.00087(15)
^{81}Br	346.986(4)	0.0122(18)	0.00046(7)
^{81}Br	350.3830(20)	0.0188(15)	0.00071(6)
^{79}Br	**366.604(4)**	**0.233(6)**	**0.00884(23)**
^{79}Br	370.530(5)	0.0171(19)	0.00065(7)
^{79}Br	370.531(3)	0.0171(9)	0.00065(3)
^{79}Br	373.44(5)	0.0140(19)	0.00053(7)
^{81}Br	374.1180(10)	0.011(3)	0.00042(11)
^{79}Br	377.397(14)	0.0100(19)	0.00038(7)
^{81}Br	379.988(12)	0.0190(11)	0.00072(4)
^{79}Br	385.598(11)	0.0232(9)	0.00088(3)
^{79}Br	389.189(4)	0.0486(13)	0.00184(5)
^{81}Br	397.147(3)	0.0125(18)	0.00047(7)
^{81}Br	400.906(20)	0.0234(16)	0.00089(6)
^{81}Br	402.743(3)	0.0170(16)	0.00064(6)
^{79}Br	408.55(8)	0.0116(20)	0.00044(8)
^{79}Br	409.002(6)	0.0150(20)	0.00057(8)
^{79}Br	414.04(7)	0.0332(17)	0.00126(6)
^{79}Br	432.216(4)	0.0783(14)	0.00297(5)
^{79}Br	450.906(5)	0.0170(13)	0.00064(5)
^{79}Br	452.611(5)	0.0679(24)	0.00258(9)
^{79}Br	455.830(3)	0.0230(13)	0.00087(5)
^{79}Br	459.775(4)	0.0455(19)	0.00173(7)
^{81}Br	465.89(3)	0.026(4)	0.00099(15)
^{81}Br	466.63(3)	0.008(4)	0.00030(15)
^{79}Br	**468.980(3)**	**0.29(3)**	**0.0110(11)**
^{79}Br	470.619(16)	0.018(3)	0.00068(11)
^{79}Br	479.082(10)	0.018(9)	0.0007(3)
^{79}Br	482.813(21)	0.0120(20)	0.00046(8)
^{81}Br	483.886(3)	0.042(18)	0.0016(7)
^{79}Br	492.884(4)	0.0292(10)	0.00111(4)
^{79}Br	494.045(7)	0.009(5)	0.00034(19)
^{81}Br	495.0380(20)	0.0342(14)	0.00130(5)
^{79}Br	498.19(3)	0.0336(13)	0.00127(5)
^{81}Br	**512.488(20)**	**0.21(3)**	**0.0080(11)**
^{79}Br	529.247(7)	0.0321(9)	0.00122(3)
^{81}Br	538.219(20)	0.0109(10)	0.00041(4)
^{81}Br	541.856(9)	0.0151(23)	0.00057(9)
^{79}Br	**542.515(6)**	**0.114(5)**	**0.00432(19)**
^{79}Br	545.667(7)	0.0094(14)	0.00036(5)
^{79}Br	549.559(3)	0.0593(14)	0.00225(5)
^{81}Br	552.1730(20)	0.0161(11)	0.00061(4)
^{81}Br	***554.3480(20)d***	***0.838(8)***	***0.0318(3)***
^{79}Br	557.257(21)	0.0315(23)	0.00119(9)
^{81}Br	566.0990(20)	0.0551(12)	0.00209(5)
^{81}Br	581.2860(20)	0.0231(11)	0.00088(4)
^{81}Br	595.2120(20)	0.0177(11)	0.00067(4)
^{81}Br	599.27(3)	0.0124(9)	0.00047(3)
^{79}Br	604.61(5)	0.013(5)	0.00049(19)
^{81}Br	608.115(19)	0.0438(13)	0.00166(5)
^{79}Br	***616.3(5)d***	***0.39(4)***	***0.0148[62%]***
^{81}Br	***619.106(4)d***	***0.515(5)***	***0.01953(19)***
^{79}Br	619.17(3)	0.0308(12)	0.00117(5)
^{79}Br	630.710(12)	0.0224(13)	0.00085(5)
^{79}Br	636.681(8)	0.018(4)	0.00068(15)
^{81}Br	643.291(6)	0.0373(20)	0.00141(8)
^{79}Br	**660.561(4)**	**0.082(3)**	**0.00311(11)**

Table I. Adopted Prompt and Decay Gamma Rays from Thermal Neutron Capture for all Elements, continued

	Eγ-keV	σ(Eγ)-barns	k_0
Bromine (Z=35), continued			
^{79}Br	678.69(4)	0.0089(19)	0.00034(7)
^{81}Br	684.885(3)	0.050(3)	0.00190(11)
^{79}Br	684.94(5)	0.0120(20)	0.00046(8)
^{79}Br	686.930(5)	0.014(3)	0.00053(11)
^{81}Br	687.02(8)	0.0157(20)	0.00060(8)
^{79}Br	**689.994(16)**	**0.083(4)**	**0.00315(15)**
^{81}Br	***698.374(5)d***	***0.337(3)***	***0.01278(12)***
^{79}Br	702.025(9)	0.0648(14)	0.00246(5)
^{81}Br	716.14(8)	0.0420(23)	0.00159(9)
^{81}Br	717.756(20)	0.0373(8)	0.00141(3)
^{79}Br	721.417(12)	0.026(6)	0.00099(23)
^{79}Br	723.983(5)	0.019(3)	0.00072(11)
^{79}Br	731.147(4)	0.0139(6)	0.000527(23)
^{81}Br	746.970(23)	0.0091(14)	0.00035(5)
^{79}Br	751.014(10)	0.029(3)	0.00110(11)
^{79}Br	755.728(11)	0.0126(17)	0.00048(6)
^{79}Br	765.957(10)	0.0537(16)	0.00204(6)
^{81}Br	***776.517(3)d***	***0.990(10)***	***0.0375(4)***
^{79}Br	809.28(3)	0.0084(22)	0.00032(8)
^{81}Br	816.578(20)	0.0191(15)	0.00072(6)
^{79}Br	827.31(4)	0.015(3)	0.00057(11)
^{81}Br	***827.828(6)d***	***0.285(3)***	***0.01081(11)***
^{79}Br	830.856(14)	0.0413(12)	0.00157(5)
^{79}Br	845.70(3)	0.0257(21)	0.00097(8)
^{79}Br	850.93(4)	0.0082(14)	0.00031(5)
^{81}Br	856.13(3)	0.0081(11)	0.00031(4)
^{79}Br	860.488(18)	0.0450(19)	0.00171(7)
^{79}Br	876.59(4)	0.0111(7)	0.00042(3)
^{79}Br	883.60(6)	0.0278(10)	0.00105(4)
^{81}Br	888.599(20)	0.0224(15)	0.00085(6)
^{79}Br	889.949(11)	0.0128(17)	0.00049(6)
^{81}Br	895.87(5)	0.0213(10)	0.00081(4)
^{79}Br	908.97(9)	0.0144(9)	0.00055(3)
^{81}Br	910.73(3)	0.0400(12)	0.00152(5)
^{79}Br	914.574(7)	0.0508(14)	0.00193(5)
^{79}Br	919.36(5)	0.016(3)	0.00061(11)
^{81}Br	932.794(25)	0.0216(10)	0.00082(4)
^{79}Br	933.823(12)	0.010(3)	0.00038(11)
^{79}Br	952.58(9)	0.0182(8)	0.00069(3)
^{81}Br	976.508(24)	0.0459(13)	0.00174(5)
^{79}Br	977.431(12)	0.013(3)	0.00049(11)
^{81}Br	1013.03(3)	0.023(3)	0.00087(11)
^{79}Br	1022.385(10)	0.0167(14)	0.00063(5)
^{81}Br	1034.706(23)	0.0231(9)	0.00088(3)
^{81}Br	1036.890(9)	0.0081(7)	0.00031(3)
^{81}Br	***1044.002(5)d***	***0.323(3)***	***0.01225(12)***
^{81}Br	1079.99(5)	0.0350(19)	0.00133(7)
^{79}Br	1087.46(3)	0.0092(10)	0.00035(4)
^{81}Br	1133.427(20)	0.0110(15)	0.00042(6)
^{79}Br	1143.370(21)	0.0225(18)	0.00085(7)
^{79}Br	1147.96(4)	0.0205(17)	0.00078(6)
^{81}Br	1157.506(25)	0.0210(17)	0.00080(6)
^{79}Br	1175.25(3)	0.0116(11)	0.00044(4)
^{79}Br	1190.73(5)	0.0216(10)	0.00082(4)
^{81}Br	1201.13(3)	0.0185(8)	0.00070(3)
^{79}Br	1248.801(12)	0.0527(22)	0.00200(8)
^{81}Br	***1317.473(10)d***	***0.314(3)***	***0.01191(12)***
^{79}Br	1320.19(4)	0.012(5)	0.00046(19)
^{79}Br	1321.96(11)	0.0152(14)	0.00058(5)
^{81}Br	***1474.880(10)d***	***0.1930(20)***	***0.00732(8)***
^{81}Br	6349.19(4)	0.0168(12)	0.00064(5)
^{81}Br	6360.18(3)	0.015(5)	0.00057(19)
^{81}Br	6413.36(3)	0.0136(11)	0.00052(4)
^{81}Br	6437.69(5)	0.0328(17)	0.00124(6)
^{79}Br	6533.28(8)	0.0196(14)	0.00074(5)
^{79}Br	6570.15(13)	0.0285(13)	0.00108(5)
^{81}Br	6570.27(3)	0.008(3)	0.00030(11)
^{81}Br	6621.81(3)	0.0104(22)	0.00039(8)
^{79}Br	6643.30(8)	0.0318(18)	0.00121(7)
^{79}Br	6668.16(11)	0.0306(18)	0.00116(7)
^{79}Br	6689.13(9)	0.0321(14)	0.00122(5)
^{79}Br	6701.38(9)	0.0168(10)	0.00064(4)
^{81}Br	6746.030(22)	0.0386(16)	0.00146(6)
^{79}Br	6894.78(8)	0.0101(7)	0.00038(3)
^{79}Br	6977.51(8)	0.0110(8)	0.00042(3)
^{79}Br	7031.43(8)	0.0447(22)	0.00170(8)
^{79}Br	7078.18(8)	0.0566(24)	0.00215(9)
^{79}Br	7126.18(8)	0.0154(15)	0.00058(6)
^{79}Br	7168.08(8)	0.0103(8)	0.00039(3)
^{81}Br	7172.612(22)	0.0238(12)	0.00090(5)
^{81}Br	7229.873(22)	0.0250(14)	0.00095(5)
^{81}Br	7301.888(22)	0.0101(8)	0.00038(3)
^{79}Br	7422.77(8)	0.0495(18)	0.00188(7)
^{79}Br	7511.57(8)	0.0108(9)	0.00041(3)
^{79}Br	**7577.04(8)**	**0.108(3)**	**0.00410(11)**
^{79}Br	7610.73(8)	0.0093(8)	0.00035(3)
Krypton (Z=36), *At.Wt.=83.798(2)*, σ_γ=*25.8(12)*			
^{82}Kr	*9.4050(10)d*	*0.122(24)*	*0.0044[17%]*
^{83}Kr	367.7(5)	0.532(10)	0.0192(4)
^{83}Kr	419.4(5)	0.630(10)	0.0228(4)
^{83}Kr	**425.30(11)**	**2.960(19)**	**0.1070(7)**
^{83}Kr	448.11(11)	0.590(19)	0.0213(7)
^{83}Kr	541.50(12)	0.295(12)	0.0107(4)
^{83}Kr	546.98(12)	0.328(12)	0.0119(4)
^{83}Kr	605.5(4)	0.398(25)	0.0144(9)
^{83}Kr	612.0(3)	0.42(3)	0.0152(11)
^{83}Kr	637.13(18)	0.251(22)	0.0091(8)
^{83}Kr	708.24(21)	0.220(21)	0.0080(8)
^{83}Kr	737.0(9)	0.31(6)	0.0112(22)
^{83}Kr	802.62(8)	1.520(22)	0.0550(8)
^{83}Kr	**881.74(11)**	**20.8(3)**	**0.752(11)**
^{83}Kr	919.79(19)	0.222(17)	0.0080(6)
^{83}Kr	938.12(13)	0.449(21)	0.0162(8)
^{83}Kr	943.36(14)	0.713(8)	0.0258(3)
^{83}Kr	946.5(5)	0.447(19)	0.0162(7)
^{83}Kr	963.44(13)	0.660(22)	0.0239(8)
^{83}Kr	987.69(19)	0.256(25)	0.0093(9)
^{83}Kr	1016.2(3)	1.08(7)	0.0391(25)
^{83}Kr	1077.55(25)	0.47(3)	0.0170(11)
^{83}Kr	1124.44(6)	1.420(21)	0.0514(8)
^{83}Kr	**1213.42(12)**	**8.28(17)**	**0.299(6)**
^{83}Kr	1230.82(11)	0.310(12)	0.0112(4)
^{83}Kr	1293.20(13)	0.383(25)	0.0139(9)
^{83}Kr	1331.89(13)	0.39(6)	0.0141(22)
^{83}Kr	1443.43(11)	0.237(10)	0.0086(4)
^{83}Kr	**1463.86(6)**	**7.10(8)**	**0.257(3)**
^{86}Kr	*1475.94(17)*	*$2.4(4)\times10^{-4}$*	*$8.7(14)\times10^{-6}$*
^{83}Kr	1543.27(19)	0.486(17)	0.0176(6)
^{83}Kr	1623.20(20)	0.327(15)	0.0118(5)
^{83}Kr	1656.15(18)	0.28(5)	0.0101(18)
^{83}Kr	1682.0(3)	0.212(17)	0.0077(6)
^{83}Kr	1741.7(3)	0.437(19)	0.0158(7)
^{83}Kr	**1897.79(8)**	**2.24(3)**	**0.0810(11)**
^{83}Kr	1979.34(11)	1.070(22)	0.0387(8)
^{83}Kr	2160.48(7)	0.577(15)	0.0209(5)
^{83}Kr	2200.86(11)	0.241(10)	0.0087(4)
^{83}Kr	2544.72(19)	0.27(3)	0.0098(11)
^{83}Kr	6281.4(7)	2.7×10^{-1}	9.8×10^{-3}
^{83}Kr	6306.8(7)	4.8×10^{-1}	1.7×10^{-2}
^{83}Kr	6519.1(7)	8.8×10^{-1}	3.2×10^{-2}
^{83}Kr	6803.5(8)	6.4×10^{-1}	2.3×10^{-2}
^{83}Kr	6880.7(7)	$1.3\times10^{+00}$	4.7×10^{-2}
^{83}Kr	6931.7(8)	5.4×10^{-1}	2.0×10^{-2}
^{83}Kr	7207.5(9)	2.5×10^{-1}	9.0×10^{-3}
Rubidium (Z=37), *At.Wt.=85.4678(3)*, σ_γ=*0.38(7)*			
^{85}Rb	54.01(6)	0.006(3)	$2.1(11)\times10^{-4}$
^{85}Rb	**59.75(6)**	**0.010(4)**	**0.00035(14)**
^{85}Rb	84.85(8)	0.0052(22)	$1.8(8)\times10^{-4}$
^{85}Rb	96.87(10)	0.0026(9)	$9(3)\times10^{-5}$
^{85}Rb	113.76(4)	0.00535(14)	$1.90(5)\times10^{-4}$
^{85}Rb	119.94(4)	0.00267(9)	$9.5(3)\times10^{-5}$
^{87}Rb	166.01(3)	0.00215(8)	$7.6(3)\times10^{-5}$
^{85}Rb	176.2(9)	0.0031(13)	$1.1(5)\times10^{-4}$
^{87}Rb	**196.34(3)**	**0.00964(19)**	**0.000342(7)**
^{85}Rb	198.96(10)	0.00266(9)	$9.4(3)\times10^{-5}$
^{85}Rb	224.31(6)	0.00132(7)	$4.68(25)\times10^{-5}$
^{87}Rb	240.76(3)	0.00224(8)	$7.9(3)\times10^{-5}$
^{85}Rb	283.80(8)	0.00092(6)	$3.26(21)\times10^{-5}$

Table I. Adopted Prompt and Decay Gamma Rays from Thermal Neutron Capture for all Elements, continued

	Eγ-keV	σ(Eγ)-barns	k_0
Rubidium (Z=37), continued			
^{85}Rb	316.13(4)	0.00138(8)	$4.9(3)\times10^{-5}$
^{85}Rb	322.80(4)	0.00254(10)	$9.0(4)\times10^{-5}$
^{87}Rb	362.62(5)	0.00314(12)	$1.11(4)\times10^{-4}$
^{85}Rb	362.78(9)	0.0061(22)	$2.2(8)\times10^{-4}$
^{87}Rb	390.60(4)	0.00179(8)	$6.3(3)\times10^{-5}$
^{85}Rb	**421.50(3)**	**0.0259(5)**	**0.000918(18)**
^{85}Rb	**487.89(4)**	**0.0494(12)**	**0.00175(4)**
^{85}Rb	514.57(4)	0.00653(20)	$2.32(7)\times10^{-4}$
^{85}Rb	529.9(9)	0.0031(13)	$1.1(5)\times10^{-4}$
^{85}Rb	**536.48(4)**	**0.0167(5)**	**0.000592(18)**
^{85}Rb	**538.66(4)**	**0.0169(5)**	**0.000599(18)**
^{85}Rb	***555.61(3)d***	***0.0407(10)***	***0.00144[98%]***
^{85}Rb	**556.82(3)**	**0.0913(24)**	**0.00324(9)**
^{85}Rb	565.37(4)	0.00383(10)	$1.36(4)\times10^{-4}$
^{85}Rb	**638.93(5)**	**0.0101(13)**	**0.00036(5)**
^{85}Rb	640.20(10)	0.0032(7)	$1.13(25)\times10^{-4}$
^{85}Rb	668.76(7)	0.00211(10)	$7.5(4)\times10^{-5}$
^{85}Rb	691.57(5)	0.00725(18)	0.000257(6)
^{85}Rb	726.98(5)	0.00421(15)	$1.49(5)\times10^{-4}$
^{85}Rb	747.67(4)	0.00268(12)	$9.5(4)\times10^{-5}$
^{85}Rb	816.59(6)	0.0031(9)	$1.1(3)\times10^{-4}$
^{87}Rb	834.79(6)	0.00197(13)	$7.0(5)\times10^{-5}$
^{85}Rb	**872.94(4)**	**0.0321(5)**	**0.001138(18)**
^{85}Rb	881.50(4)	0.00480(17)	$1.70(6)\times10^{-4}$
^{85}Rb	913.12(6)	0.00497(15)	$1.76(5)\times10^{-4}$
^{85}Rb	944.49(9)	0.0035(13)	$1.2(5)\times10^{-4}$
^{85}Rb	945.72(7)	0.00390(15)	$1.38(5)\times10^{-4}$
^{85}Rb	**1026.55(6)**	**0.0218(4)**	**0.000773(14)**
^{85}Rb	**1032.32(5)**	**0.0227(4)**	**0.000805(14)**
^{85}Rb	***1076.64(20)d***	***0.0301(5)***	***0.001067[<0.1%]***
^{85}Rb	**1105.52(10)**	**0.0151(3)**	**0.000535(11)**
^{87}Rb	1141.49(15)	0.00113(11)	$4.0(4)\times10^{-5}$
^{85}Rb	1178.86(10)	0.0044(13)	$1.6(5)\times10^{-4}$
^{85}Rb	1219.80(9)	0.00446(21)	$1.58(7)\times10^{-4}$
^{87}Rb	1245.20(6)	0.00253(12)	$9.0(4)\times10^{-5}$
^{85}Rb	**1304.48(4)**	**0.0204(5)**	**0.000723(18)**
^{85}Rb	1389.32(7)	0.00809(21)	0.000287(7)
^{85}Rb	1438.31(4)	0.00200(15)	$7.1(5)\times10^{-5}$
^{85}Rb	1666.74(9)	0.00774(23)	0.000274(8)
^{85}Rb	**1890.7(4)**	**0.017(4)**	**0.00060(14)**
^{85}Rb	2130.59(17)	0.0031(5)	$1.10(18)\times10^{-4}$
^{85}Rb	2149.4(7)	0.00153(19)	$5.4(7)\times10^{-5}$
^{85}Rb	2179.33(16)	0.00168(17)	$6.0(6)\times10^{-5}$
^{85}Rb	2353.43(17)	0.00122(9)	$4.3(3)\times10^{-5}$
^{87}Rb	2391.86(21)	0.00094(12)	$3.3(4)\times10^{-5}$
^{85}Rb	2461.41(17)	0.00251(17)	$8.9(6)\times10^{-5}$
^{85}Rb	2476.2(7)	0.0013(4)	$4.6(14)\times10^{-5}$
^{85}Rb	2568.8(5)	0.0017(4)	$6.0(14)\times10^{-5}$
^{85}Rb	2585.58(16)	0.00240(18)	$8.5(6)\times10^{-5}$
^{87}Rb	3690.17(20)	0.00184(18)	$6.5(6)\times10^{-5}$
^{87}Rb	4640.79(25)	0.00292(19)	$1.04(7)\times10^{-4}$
^{87}Rb	5220.8(3)	0.00176(18)	$6.2(6)\times10^{-5}$
^{87}Rb	5886.30(24)	0.00217(17)	$7.7(6)\times10^{-5}$
^{85}Rb	6065.13(17)	0.0047(3)	$1.67(11)\times10^{-4}$
^{85}Rb	6081.9(5)	0.00097(16)	$3.4(6)\times10^{-5}$
^{87}Rb	6082.4(4)	0.00097(16)	$3.4(6)\times10^{-5}$
^{85}Rb	6143.2(4)	0.00132(19)	$4.7(7)\times10^{-5}$
^{85}Rb	6189.29(18)	0.0036(3)	$1.28(11)\times10^{-4}$
^{85}Rb	6319.4(8)	0.00107(18)	$3.8(6)\times10^{-5}$
^{85}Rb	6351.44(17)	0.00173(16)	$6.1(6)\times10^{-5}$
^{85}Rb	6385.11(25)	0.00148(19)	$5.2(7)\times10^{-5}$
^{85}Rb	6471.37(17)	0.0049(3)	$1.74(11)\times10^{-4}$
^{85}Rb	6501.3(7)	0.00165(19)	$5.9(7)\times10^{-5}$
^{85}Rb	6520.11(18)	0.0064(4)	$2.27(14)\times10^{-4}$
^{85}Rb	6831.64(10)	0.0064(4)	$2.27(14)\times10^{-4}$
^{85}Rb	6942.98(13)	0.00161(15)	$5.7(5)\times10^{-5}$
^{85}Rb	7212.34(10)	0.00129(17)	$4.6(6)\times10^{-5}$
^{85}Rb	7346.16(10)	0.0059(3)	$2.09(11)\times10^{-4}$
^{85}Rb	7545.10(13)	0.00099(14)	$3.5(5)\times10^{-5}$
^{85}Rb	**7624.07(11)**	**0.0114(5)**	**0.000404(18)**
^{85}Rb	8093.76(10)	0.00211(20)	$7.5(7)\times10^{-5}$
^{85}Rb	8650.52(10)	0.0022(4)	$7.8(14)\times10^{-5}$

	Eγ-keV	σ(Eγ)-barns	k_0
Strontium (Z=38), *At.Wt.=87.62(1),* σ_γ*=1.30(21)*			
^{84}Sr	*231.68(4)*	*0.0017(3)*	$5.9(10)\times10^{-5}$
^{86}Sr	*388.526(22)d*	*0.0785(23)*	*0.00272[11%]*
^{87}Sr	434.925(20)	0.0346(8)	0.00120(3)
^{86}Sr	484.822(14)	0.0315(12)	0.00109(4)
^{87}Sr	585.613(14)	0.0703(14)	0.00243(5)
^{87}Sr	**850.657(12)**	**0.275(4)**	**0.00951(14)**
^{87}Sr	**898.055(11)**	**0.702(10)**	**0.0243(4)**
^{87}Sr	934.49(3)	0.024(4)	0.00083(14)
^{87}Sr	1218.523(16)	0.0599(13)	0.00207(5)
^{87}Sr	1323.92(6)	0.013(3)	0.00045(10)
^{87}Sr	1368.677(25)	0.038(8)	0.0013(3)
^{87}Sr	1382.44(4)	0.0239(8)	0.00083(3)
^{87}Sr	1407.89(5)	0.0104(20)	0.00036(7)
^{87}Sr	1436.264(17)	0.0124(6)	0.000429(21)
^{87}Sr	1493.06(3)	0.0130(8)	0.00045(3)
^{87}Sr	1534.561(22)	0.0317(9)	0.00110(3)
^{87}Sr	1565.48(5)	0.0136(12)	0.00047(4)
^{87}Sr	1565.54(5)	0.027(4)	0.00093(14)
^{87}Sr	1706.62(4)	0.0231(8)	0.00080(3)
^{87}Sr	1717.804(23)	0.0674(15)	0.00233(5)
^{87}Sr	1736.33(7)	0.0140(14)	0.00048(5)
^{87}Sr	1736.54(3)	0.018(3)	0.00062(10)
^{87}Sr	1799.06(3)	0.0356(11)	0.00123(4)
^{87}Sr	**1836.067(21)**	**1.030(18)**	**0.0356(6)**
^{87}Sr	2111.36(3)	0.0279(10)	0.00096(4)
^{87}Sr	2202.92(3)	0.0341(10)	0.00118(4)
^{87}Sr	2276.52(3)	0.0431(13)	0.00149(5)
^{87}Sr	2391.09(3)	0.0471(15)	0.00163(5)
^{87}Sr	2463.52(4)	0.0131(6)	0.000453(21)
^{87}Sr	2577.85(4)	0.0246(9)	0.00085(3)
^{87}Sr	3009.39(3)	0.0575(15)	0.00199(5)
^{88}Sr	*4078.39(5)*	*0.0055(9)*	$1.9(3)\times10^{-4}$
^{87}Sr	4604.81(6)	0.0169(7)	0.000585(24)
^{87}Sr	5161.37(5)	0.0138(6)	0.000477(21)
^{86}Sr	5361.652(25)	0.0104(6)	0.000360(21)
^{87}Sr	5423.43(8)	0.0146(7)	0.000505(24)
^{87}Sr	5684.81(4)	0.0131(9)	0.00045(3)
^{87}Sr	5791.07(4)	0.0196(9)	0.00068(3)
^{87}Sr	5999.31(5)	0.0109(6)	0.000377(21)
^{87}Sr	6101.72(4)	0.0477(17)	0.00165(6)
^{87}Sr	6266.87(4)	0.077(3)	0.00266(10)
^{87}Sr	6660.40(3)	0.0644(23)	0.00223(8)
^{87}Sr	6671.58(4)	0.0132(7)	0.000457(24)
^{87}Sr	6698.39(5)	0.0127(6)	0.000439(21)
^{87}Sr	6885.14(3)	0.0478(20)	0.00165(7)
^{87}Sr	6941.93(3)	0.0502(20)	0.00174(7)
^{87}Sr	7527.490(25)	0.0687(24)	0.00238(8)
^{86}Sr	8039.250(19)	0.0260(14)	0.00090(5)
^{87}Sr	8378.069(23)	0.0197(7)	0.000681(24)
Yttrium (Z=39), *At.Wt.=88.90585(2),* σ_γ*=1.280(20)*			
^{89}Y	176.923(22)	0.0129(7)	0.000440(24)
^{89}Y	**202.53(3)**	**0.289(7)**	**0.00985(24)**
^{89}Y	*202.53(3)d*	*0.0018(5)*	6.1×10^{-5}*[10%]*
^{89}Y	**574.106(20)**	**0.174(7)**	**0.00593(24)**
^{89}Y	604.99(3)	0.0084(7)	0.000286(24)
^{89}Y	**776.613(18)**	**0.659(9)**	**0.0225(3)**
^{89}Y	953.534(21)	0.0135(11)	0.00046(4)
^{89}Y	1211.573(22)	0.0453(22)	0.00154(8)
^{89}Y	1214.060(23)	0.0096(12)	0.00033(4)
^{89}Y	1369.099(23)	0.0087(12)	0.00030(4)
^{89}Y	1371.124(20)	0.0404(22)	0.00138(8)
^{89}Y	1416.566(22)	0.0173(13)	0.00059(4)
^{89}Y	1558.459(23)	0.0163(11)	0.00056(4)
^{89}Y	1571.604(22)	0.0148(11)	0.00050(4)
^{89}Y	1640.913(22)	0.0146(15)	0.00050(5)
^{89}Y	1760.964(23)	0.0086(10)	0.00029(3)
^{89}Y	1780.70(6)	0.0082(18)	0.00028(6)
^{89}Y	1815.15(3)	0.0223(15)	0.00076(5)
^{89}Y	2139.11(4)	0.0101(12)	0.00034(4)
^{89}Y	2196.10(3)	0.0107(10)	0.00036(3)
^{89}Y	2273.38(4)	0.0121(24)	0.00041(8)
^{89}Y	2327.31(5)	0.0108(18)	0.00037(6)
^{89}Y	2405.36(4)	0.0095(18)	0.00032(6)
^{89}Y	2504.60(4)	0.0139(17)	0.00047(6)

Table I. Adopted Prompt and Decay Gamma Rays from Thermal Neutron Capture for all Elements, continued

	Eγ-keV	σ(Eγ)-barns	k_0
Yttrium (Z=39), continued			
^{89}Y	2546.68(3)	0.0219(17)	0.00075(6)
^{89}Y	2589.56(5)	0.0137(15)	0.00047(5)
^{89}Y	2749.181(24)	0.0246(19)	0.00084(7)
^{89}Y	2756.47(5)	0.0103(12)	0.00035(4)
^{89}Y	2819.38(5)	0.0096(9)	0.00033(3)
^{89}Y	2847.23(7)	0.0096(9)	0.00033(3)
^{89}Y	2922.48(3)	0.0090(9)	0.00031(3)
^{89}Y	3160.17(4)	0.0109(6)	0.000372(20)
^{89}Y	3164.64(5)	0.0120(6)	0.000409(20)
^{89}Y	3229.29(3)	0.0116(6)	0.000395(20)
^{89}Y	3254.87(4)	0.0119(6)	0.000406(20)
^{89}Y	3282.41(4)	0.0192(10)	0.00065(3)
^{89}Y	3301.23(3)	0.0276(18)	0.00094(6)
^{89}Y	3380.87(4)	0.0159(8)	0.00054(3)
^{89}Y	3544.52(4)	0.0163(10)	0.00056(3)
^{89}Y	3696.70(4)	0.0138(8)	0.00047(3)
^{89}Y	3713.08(4)	0.0078(4)	0.000266(14)
^{89}Y	3870.79(5)	0.0089(5)	0.000303(17)
^{89}Y	4009.64(7)	0.0089(6)	0.000303(20)
^{89}Y	4098.82(3)	0.0108(6)	0.000368(20)
^{89}Y	4107.68(3)	0.067(12)	0.0023(4)
^{89}Y	4352.26(4)	0.0207(16)	0.00071(6)
^{89}Y	4380.97(4)	0.0085(5)	0.000290(17)
^{89}Y	4490.91(3)	0.0093(6)	0.000317(20)
^{89}Y	4660.75(3)	0.0088(5)	0.000300(17)
^{89}Y	5645.236(25)	0.029(3)	0.00099(10)
^{89}Y	**6080.171(22)**	**0.76(4)**	**0.0259(14)**
Zirconium (Z=40), *At.Wt.=91.224(2)*, σ_γ=*0.19(3)*			
^{94}Zr	101.17(9)	0.0026(3)	$8.6(10)\times10^{-5}$
^{96}Zr	160.94(10)	0.0111(7)	0.000369(23)
^{92}Zr	266.78(16)	0.0091(5)	0.000302(17)
^{91}Zr	273.036(5)	0.0029(4)	$9.6(13)\times10^{-5}$
^{91}Zr	403.898(13)	0.00137(25)	$4.6(8)\times10^{-5}$
^{91}Zr	448.217(5)	0.0067(3)	$2.23(10)\times10^{-4}$
^{91}Zr	492.398(8)	0.0027(3)	$9.0(10)\times10^{-5}$
^{91}Zr	**560.958(3)**	**0.0285(5)**	**0.000947(17)**
^{94}Zr	569.5(3)	0.0013(3)	$4.3(10)\times10^{-5}$
^{91}Zr	571.171(5)	0.0022(3)	$7.3(10)\times10^{-5}$
^{90}Zr	652.8(4)	0.0029(14)	$1.0(5)\times10^{-4}$
^{96}Zr	*743.36(3)d*	*0.00101(6)*	*3.36×10^{-5}[2.0%]*
^{91}Zr	844.206(4)	0.0095(4)	0.000316(13)
^{91}Zr	902.861(8)	0.0047(5)	$1.56(17)\times10^{-4}$
^{91}Zr	912.766(7)	0.0117(5)	0.000389(17)
^{91}Zr	**934.4640(10)**	**0.125(5)**	**0.00415(17)**
^{94}Zr	939.11(10)	0.0017(5)	$5.6(17)\times10^{-5}$
^{92}Zr	946.6(5)	0.0020(5)	$6.6(17)\times10^{-5}$
^{94}Zr	953.77(15)	0.0030(5)	$9.97(17)\times10^{-5}$
^{91}Zr	972.332(10)	0.0025(17)	$8(6)\times10^{-5}$
^{91}Zr	990.540(7)	0.0029(5)	$9.6(17)\times10^{-5}$
^{94}Zr	1030.83(24)	0.0013(4)	$4.3(13)\times10^{-5}$
^{94}Zr	1054.75(16)	0.0037(5)	$1.23(17)\times10^{-4}$
^{90}Zr	1067.5(7)	0.0017(8)	$6(3)\times10^{-5}$
^{96}Zr	**1102.67(6)**	**0.0235(8)**	**0.00078(3)**
^{91}Zr	1132.126(4)	0.0100(7)	0.000332(23)
^{94}Zr	1198.25(19)	0.0042(5)	$1.40(17)\times10^{-4}$
^{90}Zr	**1205.6(7)**	**0.042(5)**	**0.00140(17)**
^{91}Zr	1222.44(4)	0.0018(4)	$6.0(13)\times10^{-5}$
^{91}Zr	1248.100(12)	0.0038(4)	$1.26(13)\times10^{-4}$
^{94}Zr	1300.1(5)	0.0015(5)	$5.0(17)\times10^{-5}$
^{94}Zr	1323.20(25)	0.0025(5)	$8.3(17)\times10^{-5}$
^{91}Zr	**1405.159(3)**	**0.0301(10)**	**0.00100(3)**
^{92}Zr	1425.2(4)	0.00287(20)	$9.5(7)\times10^{-5}$
^{91}Zr	1463.814(8)	0.0017(7)	$5.6(23)\times10^{-5}$
^{90}Zr	**1465.7(7)**	**0.063(15)**	**0.0021(5)**
^{92}Zr	1650.1(5)	0.0029(12)	$1.0(4)\times10^{-4}$
^{91}Zr	1847.220(7)	0.0084(8)	0.00028(3)
^{90}Zr	**1880.4(4)**	**0.016(4)**	**0.00053(13)**
^{94}Zr	1892.9(4)	0.0034(7)	$1.13(23)\times10^{-4}$
^{92}Zr	1917.2(9)	0.0017(8)	$6(3)\times10^{-5}$
^{91}Zr	1956.66(4)	0.0035(5)	$1.16(17)\times10^{-4}$
^{91}Zr	1974.91(4)	0.0024(5)	$8.0(17)\times10^{-5}$
^{91}Zr	1988.71(3)	0.0049(5)	$1.63(17)\times10^{-4}$
^{90}Zr	**2042.2(4)**	**0.032(8)**	**0.0011(3)**
^{91}Zr	2105.16(5)	0.0025(5)	$8.3(17)\times10^{-5}$

	Eγ-keV	σ(Eγ)-barns	k_0
Zirconium (Z=40), continued			
^{91}Zr	2132.84(3)	0.0014(3)	$4.7(10)\times10^{-5}$
^{92}Zr	2190.2(5)	0.0044(5)	$1.46(17)\times10^{-4}$
^{91}Zr	2328.10(4)	0.0019(8)	$6(3)\times10^{-5}$
^{91}Zr	2436.92(3)	0.0015(7)	$5.0(23)\times10^{-5}$
^{90}Zr	2533.2(5)	0.0037(14)	$1.2(5)\times10^{-4}$
^{91}Zr	2537.17(19)	0.0014(5)	$4.7(17)\times10^{-5}$
^{90}Zr	**2557.8(8)**	**0.016(4)**	**0.00053(13)**
^{90}Zr	**2577.3(14)**	**0.016(4)**	**0.00053(13)**
^{90}Zr	2640.1(8)	0.0105(25)	0.00035(8)
^{91}Zr	2693.79(3)	0.006(3)	$2.0(10)\times10^{-4}$
^{91}Zr	2705.74(9)	0.0019(8)	$6(3)\times10^{-5}$
^{90}Zr	3082.6(12)	0.0096(25)	0.00032(8)
^{91}Zr	3371.36(3)	0.0020(5)	$6.6(17)\times10^{-5}$
^{92}Zr	3459.4(15)	0.00137(17)	$4.6(6)\times10^{-5}$
^{90}Zr	**3475.8(15)**	**0.019(5)**	**0.00063(17)**
^{91}Zr	3830.13(8)	0.0017(5)	$5.6(17)\times10^{-5}$
^{90}Zr	**3982.3(15)**	**0.015(4)**	**0.00050(13)**
^{94}Zr	4104.3(3)	0.0029(5)	$9.6(17)\times10^{-5}$
^{92}Zr	4278.1(7)	0.00147(10)	$4.9(3)\times10^{-5}$
^{91}Zr	4994.61(18)	0.0027(5)	$9.0(17)\times10^{-5}$
^{91}Zr	5006.56(16)	0.0049(7)	$1.63(23)\times10^{-4}$
^{90}Zr	5150.3(9)	0.0017(12)	$6(4)\times10^{-5}$
^{91}Zr	5182.73(17)	0.0019(4)	$6.3(13)\times10^{-5}$
^{91}Zr	5263.42(17)	0.0064(8)	$2.1(3)\times10^{-4}$
^{92}Zr	5309.9(7)	0.0024(4)	$8.0(13)\times10^{-5}$
^{91}Zr	5372.23(17)	0.0016(4)	$5.3(13)\times10^{-5}$
^{96}Zr	5574.9(4)	0.0023(4)	$7.6(13)\times10^{-5}$
^{91}Zr	**6295.13(16)**	**0.0279(20)**	**0.00093(7)**
^{94}Zr	6357.8(4)	0.0026(4)	$8.6(13)\times10^{-5}$
Niobium (Z=41), *At.Wt.=92.90638(2)*, σ_γ=*1.15(5)*			
^{93}Nb	**17.810(7)**	**0.0579(14)**	**0.00189(5)**
^{93}Nb	54.704(7)	0.0058(7)	$1.89(23)\times10^{-4}$
^{93}Nb	78.6680(10)	0.0169(3)	0.000551(10)
^{93}Nb	**99.4070(10)**	**0.196(9)**	**0.0064(3)**
^{93}Nb	**113.4010(10)**	**0.117(3)**	**0.00382(10)**
^{93}Nb	135.47(6)	0.0029(9)	$9(3)\times10^{-5}$
^{93}Nb	136.21(12)	0.0027(7)	$8.8(23)\times10^{-5}$
^{93}Nb	138.614(8)	0.0089(19)	0.00029(6)
^{93}Nb	140.10(3)	0.00226(21)	$7.4(7)\times10^{-5}$
^{93}Nb	150.711(22)	0.00201(21)	$6.6(7)\times10^{-5}$
^{93}Nb	161.2610(20)	0.0190(5)	0.000620(16)
^{93}Nb	193.96(13)	0.0022(4)	$7.2(13)\times10^{-5}$
^{93}Nb	**253.115(5)**	**0.1320(19)**	**0.00431(6)**
^{93}Nb	**255.9290(20)**	**0.176(3)**	**0.00574(10)**
^{93}Nb	270.45(4)	0.0046(3)	$1.50(10)\times10^{-4}$
^{93}Nb	**293.206(4)**	**0.0651(16)**	**0.00212(5)**
^{93}Nb	**309.915(8)**	**0.0690(17)**	**0.00225(6)**
^{93}Nb	319.703(14)	0.00320(23)	$1.04(8)\times10^{-4}$
^{93}Nb	329.178(12)	0.0108(4)	0.000352(13)
^{93}Nb	329.185(10)	0.0080(9)	0.00026(3)
^{93}Nb	**337.527(7)**	**0.054(6)**	**0.00176(20)**
^{93}Nb	338.661(19)	0.0080(19)	0.00026(6)
^{93}Nb	355.3360(20)	0.0056(3)	$1.83(10)\times10^{-4}$
^{93}Nb	450.98(9)	0.00238(20)	$7.8(7)\times10^{-5}$
^{93}Nb	454.60(5)	0.00328(22)	$1.07(7)\times10^{-4}$
^{93}Nb	456.20(10)	0.0058(7)	$1.89(23)\times10^{-4}$
^{93}Nb	**458.467(10)**	**0.0240(5)**	**0.000783(16)**
^{93}Nb	482.72(3)	0.0032(5)	$1.04(16)\times10^{-4}$
^{93}Nb	484.14(5)	0.0073(6)	$2.38(20)\times10^{-4}$
^{93}Nb	**499.426(8)**	**0.0648(18)**	**0.00211(6)**
^{93}Nb	**518.113(12)**	**0.0579(13)**	**0.00189(4)**
^{93}Nb	525.81(3)	0.0074(6)	$2.41(20)\times10^{-4}$
^{93}Nb	527.595(9)	0.0127(7)	0.000414(23)
^{93}Nb	547.73(7)	0.0045(4)	$1.47(13)\times10^{-4}$
^{93}Nb	**562.328(9)**	**0.0293(11)**	**0.00096(4)**
^{93}Nb	573.07(4)	0.0020(3)	$6.5(10)\times10^{-5}$
^{93}Nb	583.837(11)	0.0022(3)	$7.2(10)\times10^{-5}$
^{93}Nb	590.627(14)	0.0086(5)	0.000281(16)
^{93}Nb	600.43(3)	0.0035(5)	$1.14(16)\times10^{-4}$
^{93}Nb	635.80(5)	0.0059(5)	$1.92(16)\times10^{-4}$
^{93}Nb	636.081(16)	0.0043(5)	$1.40(16)\times10^{-4}$
^{93}Nb	640.995(9)	0.0048(5)	$1.57(16)\times10^{-4}$
^{93}Nb	642.62(4)	0.0069(5)	$2.25(16)\times10^{-4}$
^{93}Nb	645.40(5)	0.0022(7)	$7.2(23)\times10^{-5}$

Table I. Adopted Prompt and Decay Gamma Rays from Thermal Neutron Capture for all Elements, continued

Eγ-keV	σ(Eγ)-barns	k_0
Niobium (Z=41), continued		
^{93}Nb 672.30(5)	0.0023(4)	$7.5(13)\times10^{-5}$
^{93}Nb 689.79(5)	0.0164(6)	0.000535(20)
^{93}Nb 693.74(4)	0.0085(4)	0.000277(13)
^{93}Nb 711.47(4)	0.0024(3)	$7.8(10)\times10^{-5}$
^{93}Nb 748.71(11)	0.0028(4)	$9.1(13)\times10^{-5}$
^{93}Nb 751.671(11)	0.0143(6)	0.000466(20)
^{93}Nb 755.354(8)	0.0123(6)	0.000401(20)
^{93}Nb 775.93(3)	0.0158(6)	0.000515(20)
^{93}Nb 782.247(11)	0.0042(6)	$1.37(20)\times10^{-4}$
^{93}Nb 783.02(7)	0.0065(5)	$2.12(16)\times10^{-4}$
^{93}Nb 801.91(18)	0.0020(4)	$6.5(13)\times10^{-5}$
^{93}Nb 812.64(7)	0.0084(5)	0.000274(16)
^{93}Nb **835.72(3)**	**0.0376(8)**	**0.00123(3)**
^{93}Nb 850.93(5)	0.0025(5)	$8.2(16)\times10^{-5}$
^{93}Nb 853.98(3)	0.0028(5)	$9.1(16)\times10^{-5}$
^{93}Nb *871.06d*	*0.00390(8)*	*1.27×10^{-4}[85%]*
^{93}Nb 876.64(11)	0.0077(5)	0.000251(16)
^{93}Nb 878.61(5)	0.0191(17)	0.00062(6)
^{93}Nb 883.42(5)	0.0192(7)	0.000626(23)
^{93}Nb 894.45(11)	0.0185(7)	0.000603(23)
^{93}Nb 898.58(5)	0.0144(7)	0.000470(23)
^{93}Nb 911.476(15)	0.0176(7)	0.000574(23)
^{93}Nb 932.65(3)	0.0020(4)	$6.5(13)\times10^{-5}$
^{93}Nb 944.61(4)	0.0056(4)	$1.83(13)\times10^{-4}$
^{93}Nb **957.28(5)**	**0.0248(7)**	**0.000809(23)**
^{93}Nb 976.71(4)	0.0021(5)	$6.8(16)\times10^{-5}$
^{93}Nb 1001.82(11)	0.0037(5)	$1.21(16)\times10^{-4}$
^{93}Nb 1100.05(5)	0.0067(6)	$2.19(20)\times10^{-4}$
^{93}Nb 1106.86(5)	0.0076(7)	$2.48(23)\times10^{-4}$
^{93}Nb 1117.85(5)	0.0080(11)	0.00026(4)
^{93}Nb **1118.54(3)**	**0.022(7)**	**0.00072(23)**
^{93}Nb 1120.54(7)	0.0062(8)	$2.0(3)\times10^{-4}$
^{93}Nb 1122.55(7)	0.0106(13)	0.00035(4)
^{93}Nb 1128.97(6)	0.0175(15)	0.00057(5)
^{93}Nb 1151.47(7)	0.0071(6)	$2.32(20)\times10^{-4}$
^{93}Nb 1159.61(10)	0.0066(6)	$2.15(20)\times10^{-4}$
^{93}Nb 1188.45(5)	0.0074(6)	$2.41(20)\times10^{-4}$
^{93}Nb 1191.06(3)	0.0137(7)	0.000447(23)
^{93}Nb **1206.26(5)**	**0.0284(10)**	**0.00093(3)**
^{93}Nb 1214.31(10)	0.0073(7)	$2.38(23)\times10^{-4}$
^{93}Nb 1216.09(9)	0.0021(5)	$6.8(16)\times10^{-5}$
^{93}Nb 1219.01(7)	0.0050(6)	$1.63(20)\times10^{-4}$
^{93}Nb 1222.41(9)	0.0121(7)	0.000395(23)
^{93}Nb 1227.8(4)	0.0114(7)	0.000372(23)
^{93}Nb 1230.13(7)	0.0051(7)	$1.66(23)\times10^{-4}$
^{93}Nb 1240.22(9)	0.0096(7)	0.000313(23)
^{93}Nb 1256.97(9)	0.0059(8)	$1.9(3)\times10^{-4}$
^{93}Nb 1258.90(8)	0.0039(8)	$1.3(3)\times10^{-4}$
^{93}Nb 1264.5(7)	0.0021(5)	$6.8(16)\times10^{-5}$
^{93}Nb 1273.72(7)	0.0052(12)	$1.7(4)\times10^{-4}$
^{93}Nb 1291.52(7)	0.0097(7)	0.000316(23)
^{93}Nb 1308.1(4)	0.0068(13)	$2.2(4)\times10^{-4}$
^{93}Nb 1361.66(19)	0.0043(5)	$1.40(16)\times10^{-4}$
^{93}Nb 1392.73(7)	0.0105(8)	0.00034(3)
^{93}Nb 1394.0(4)	0.0058(13)	$1.9(4)\times10^{-4}$
^{93}Nb 1419.39(11)	0.0048(6)	$1.57(20)\times10^{-4}$
^{93}Nb 1440.05(9)	0.0068(15)	$2.2(5)\times10^{-4}$
^{93}Nb 1442.0(4)	0.0061(6)	$1.99(20)\times10^{-4}$
^{93}Nb 1459.6(7)	0.0095(6)	0.000310(20)
^{93}Nb 1460.02(9)	0.0097(22)	0.00032(7)
^{93}Nb 1478.58(14)	0.0029(6)	$9.5(20)\times10^{-5}$
^{93}Nb 1481.19(13)	0.0039(8)	$1.3(3)\times10^{-4}$
^{93}Nb 1487.9(4)	0.0039(8)	$1.3(3)\times10^{-4}$
^{93}Nb 1492.55(24)	0.0022(5)	$7.2(16)\times10^{-5}$
^{93}Nb 1614.72(8)	0.0028(5)	$9.1(16)\times10^{-5}$
^{93}Nb 1620.12(8)	0.0022(5)	$7.2(16)\times10^{-5}$
^{93}Nb 1678.05(17)	0.0033(5)	$1.08(16)\times10^{-4}$
^{93}Nb 1716.16(8)	0.0034(5)	$1.11(16)\times10^{-4}$
^{93}Nb 1763.20(10)	0.0034(5)	$1.11(16)\times10^{-4}$
^{93}Nb 1863.63(8)	0.0028(6)	$9.1(20)\times10^{-5}$
^{93}Nb 1878.88(8)	0.0081(7)	0.000264(23)
^{93}Nb 1881.96(10)	0.0036(7)	$1.17(23)\times10^{-4}$
^{93}Nb 1919.51(8)	0.0024(4)	$7.8(13)\times10^{-5}$
^{93}Nb 1974.93(9)	0.0052(6)	$1.70(20)\times10^{-4}$
^{93}Nb 2001.4(3)	0.0025(6)	$8.2(20)\times10^{-5}$

Eγ-keV	σ(Eγ)-barns	k_0
Niobium (Z=41), continued		
^{93}Nb 2019.49(9)	0.0021(5)	$6.8(16)\times10^{-5}$
^{93}Nb 2285.80(21)	0.0026(5)	$8.5(16)\times10^{-5}$
^{93}Nb 2313.81(9)	0.0046(8)	$1.5(3)\times10^{-4}$
^{93}Nb 2319.95(12)	0.0022(9)	$7(3)\times10^{-5}$
^{93}Nb 2896.68(12)	0.0025(5)	$8.2(16)\times10^{-5}$
^{93}Nb 2922.70(12)	0.0021(6)	$6.8(20)\times10^{-5}$
^{93}Nb 3194.65(19)	0.0021(5)	$6.8(16)\times10^{-5}$
^{93}Nb 3241.04(12)	0.0026(3)	$8.5(10)\times10^{-5}$
^{93}Nb 3260.34(12)	0.0041(5)	$1.34(16)\times10^{-4}$
^{93}Nb 3266.45(12)	0.0042(5)	$1.37(16)\times10^{-4}$
^{93}Nb 3267.12(20)	0.0021(6)	$6.8(20)\times10^{-5}$
^{93}Nb 3319.93(12)	0.0028(6)	$9.1(20)\times10^{-5}$
^{93}Nb 3343.94(12)	0.0023(6)	$7.5(20)\times10^{-5}$
^{93}Nb 3353.64(12)	0.0028(6)	$9.1(20)\times10^{-5}$
^{93}Nb 3361.64(12)	0.0027(3)	$8.8(10)\times10^{-5}$
^{93}Nb 3367.05(12)	0.0020(6)	$6.5(20)\times10^{-5}$
^{93}Nb 3383.54(12)	0.0022(6)	$7.2(20)\times10^{-5}$
^{93}Nb 3388.53(12)	0.0034(6)	$1.11(20)\times10^{-4}$
^{93}Nb 3428.34(12)	0.0020(3)	$6.5(10)\times10^{-5}$
^{93}Nb 3430.66(20)	0.0031(6)	$1.01(20)\times10^{-4}$
^{93}Nb 3431.74(12)	0.0030(4)	$9.8(13)\times10^{-5}$
^{93}Nb 3458.34(12)	0.0030(6)	$9.8(20)\times10^{-5}$
^{93}Nb 3465.55(14)	0.0025(3)	$8.2(10)\times10^{-5}$
^{93}Nb 3502.64(12)	0.0022(3)	$7.2(10)\times10^{-5}$
^{93}Nb 3508.04(12)	0.0041(5)	$1.34(16)\times10^{-4}$
^{93}Nb 3538.94(12)	0.00198(22)	$6.5(7)\times10^{-5}$
^{93}Nb 3543.43(12)	0.0021(6)	$6.8(20)\times10^{-5}$
^{93}Nb 3561.54(12)	0.0027(3)	$8.8(10)\times10^{-5}$
^{93}Nb 3634.02(12)	0.0027(5)	$8.8(16)\times10^{-5}$
^{93}Nb 3646.03(12)	0.0022(3)	$7.2(10)\times10^{-5}$
^{93}Nb 3651.22(12)	0.0023(5)	$7.5(16)\times10^{-5}$
^{93}Nb 3658.53(12)	0.0023(3)	$7.5(10)\times10^{-5}$
^{93}Nb 3676.62(12)	0.0028(6)	$9.1(20)\times10^{-5}$
^{93}Nb 3680.54(12)	0.0028(3)	$9.1(10)\times10^{-5}$
^{93}Nb 3720.63(12)	0.0033(6)	$1.08(20)\times10^{-4}$
^{93}Nb 3740.94(12)	0.0021(3)	$6.8(10)\times10^{-5}$
^{93}Nb 3745.55(14)	0.0033(4)	$1.08(13)\times10^{-4}$
^{93}Nb 3760.94(12)	0.00200(22)	$6.5(7)\times10^{-5}$
^{93}Nb 3773.94(12)	0.0045(5)	$1.47(16)\times10^{-4}$
^{93}Nb 3837.12(12)	0.0020(5)	$6.5(16)\times10^{-5}$
^{93}Nb 3867.53(12)	0.0026(3)	$8.5(10)\times10^{-5}$
^{93}Nb 3879.13(12)	0.0048(6)	$1.57(20)\times10^{-4}$
^{93}Nb 3888.74(12)	0.0051(6)	$1.66(20)\times10^{-4}$
^{93}Nb 3892.83(12)	0.0039(5)	$1.27(16)\times10^{-4}$
^{93}Nb 3907.03(12)	0.00207(23)	$6.8(8)\times10^{-5}$
^{93}Nb 3912.73(12)	0.0022(3)	$7.2(10)\times10^{-5}$
^{93}Nb 3919.65(12)	0.0038(7)	$1.24(23)\times10^{-4}$
^{93}Nb 3927.83(12)	0.0026(3)	$8.5(10)\times10^{-5}$
^{93}Nb 3931.73(12)	0.0024(3)	$7.8(10)\times10^{-5}$
^{93}Nb 3936.72(12)	0.0033(7)	$1.08(23)\times10^{-4}$
^{93}Nb 3972.03(12)	0.0030(4)	$9.8(13)\times10^{-5}$
^{93}Nb 3978.62(12)	0.0024(3)	$7.8(10)\times10^{-5}$
^{93}Nb 4000.22(12)	0.0033(4)	$1.08(13)\times10^{-4}$
^{93}Nb 4010.72(12)	0.0033(4)	$1.08(13)\times10^{-4}$
^{93}Nb 4015.91(12)	0.0055(7)	$1.79(23)\times10^{-4}$
^{93}Nb 4090.53(12)	0.0021(4)	$6.8(13)\times10^{-5}$
^{93}Nb 4109.13(12)	0.0027(3)	$8.8(10)\times10^{-5}$
^{93}Nb 4115.32(12)	0.0026(3)	$8.5(10)\times10^{-5}$
^{93}Nb 4130.33(12)	0.0063(7)	$2.05(23)\times10^{-4}$
^{93}Nb 4143.52(12)	0.0021(3)	$6.8(10)\times10^{-5}$
^{93}Nb 4153.82(12)	0.0028(6)	$9.1(20)\times10^{-5}$
^{93}Nb 4191.06(12)	0.00196(21)	$6.4(7)\times10^{-5}$
^{93}Nb 4196.68(11)	0.0027(6)	$8.8(20)\times10^{-5}$
^{93}Nb 4208.36(11)	0.0029(6)	$9.5(20)\times10^{-5}$
^{93}Nb 4237.17(13)	0.0020(5)	$6.5(16)\times10^{-5}$
^{93}Nb 4260.84(12)	0.0036(6)	$1.17(20)\times10^{-4}$
^{93}Nb 4304.78(12)	0.0049(8)	$1.6(3)\times10^{-4}$
^{93}Nb 4314.26(12)	0.0022(6)	$7.2(20)\times10^{-5}$
^{93}Nb 4327.32(11)	0.0027(3)	$8.8(10)\times10^{-5}$
^{93}Nb 4330.80(12)	0.0043(7)	$1.40(23)\times10^{-4}$
^{93}Nb 4347.62(11)	0.0027(7)	$8.8(23)\times10^{-5}$
^{93}Nb 4384.27(11)	0.0029(3)	$9.5(10)\times10^{-5}$
^{93}Nb 4389.04(11)	0.00196(21)	$6.4(7)\times10^{-5}$
^{93}Nb 4395.07(9)	0.0044(12)	$1.4(4)\times10^{-4}$
^{93}Nb 4431.97(9)	0.0043(9)	$1.4(3)\times10^{-4}$

Table I. Adopted Prompt and Decay Gamma Rays from Thermal Neutron Capture for all Elements, continued

Eγ-keV	σ(Eγ)-barns	k_0
Niobium (Z=41), continued		
^{93}Nb 4455.30(10)	0.0027(3)	8.8(10)×10^{-5}
^{93}Nb 4459.03(11)	0.0030(6)	9.8(20)×10^{-5}
^{93}Nb 4466.50(10)	0.0028(3)	9.1(10)×10^{-5}
^{93}Nb 4470.69(11)	0.0033(7)	1.08(23)×10^{-4}
^{93}Nb 4501.43(10)	0.0056(7)	1.83(23)×10^{-4}
^{93}Nb 4505.78(10)	0.0029(3)	9.5(10)×10^{-5}
^{93}Nb 4524.10(9)	0.0038(6)	1.24(20)×10^{-4}
^{93}Nb 4538.64(9)	0.0058(7)	1.89(23)×10^{-4}
^{93}Nb 4553.99(10)	0.0033(4)	1.08(13)×10^{-4}
^{93}Nb 4558.53(11)	0.0049(7)	1.60(23)×10^{-4}
^{93}Nb 4594.44(9)	0.0047(7)	1.53(23)×10^{-4}
^{93}Nb 4606.89(13)	0.0046(6)	1.50(20)×10^{-4}
^{93}Nb 4629.91(9)	0.0049(7)	1.60(23)×10^{-4}
^{93}Nb 4635.44(9)	0.0047(6)	1.53(20)×10^{-4}
^{93}Nb 4662.32(9)	0.0028(6)	9.1(20)×10^{-5}
^{93}Nb 4672.16(9)	0.0065(7)	2.12(23)×10^{-4}
^{93}Nb 4681.99(9)	0.0059(7)	1.92(23)×10^{-4}
^{93}Nb 4711.67(10)	0.0052(7)	1.70(23)×10^{-4}
^{93}Nb 4739.00(8)	0.0153(9)	0.00050(3)
^{93}Nb 4749.12(9)	0.0038(6)	1.24(20)×10^{-4}
^{93}Nb 4756.28(9)	0.0039(6)	1.27(20)×10^{-4}
^{93}Nb 4772.35(8)	0.0045(7)	1.47(23)×10^{-4}
^{93}Nb 4791.62(13)	0.0071(7)	2.32(23)×10^{-4}
^{93}Nb 4828.2(4)	0.0057(6)	1.86(20)×10^{-4}
^{93}Nb 4913.65(9)	0.0078(7)	0.000254(23)
^{93}Nb 4927.94(8)	0.0027(6)	8.8(20)×10^{-5}
^{93}Nb 4942.7(4)	0.0029(3)	9.5(10)×10^{-5}
^{93}Nb 4949.70(10)	0.0051(7)	1.66(23)×10^{-4}
^{93}Nb 4982.53(9)	0.0078(7)	0.000254(23)
^{93}Nb 4997.97(8)	0.0033(6)	1.08(20)×10^{-4}
^{93}Nb 5032.08(8)	0.0058(7)	1.89(23)×10^{-4}
^{93}Nb 5052.89(9)	0.0022(5)	7.2(16)×10^{-5}
^{93}Nb 5065.65(8)	0.0034(6)	1.11(20)×10^{-4}
^{93}Nb 5070.27(7)	0.0102(8)	0.00033(3)
^{93}Nb 5087.36(8)	0.0030(5)	9.8(16)×10^{-5}
^{93}Nb **5103.34(7)**	**0.0232(12)**	**0.00076(4)**
^{93}Nb 5129.16(8)	0.0034(5)	1.11(16)×10^{-4}
^{93}Nb 5179.99(7)	0.0072(7)	2.35(23)×10^{-4}
^{93}Nb 5193.62(18)	0.0114(8)	0.00037(3)
^{93}Nb 5207.96(9)	0.0072(7)	2.35(23)×10^{-4}
^{93}Nb 5213.75(9)	0.00196(21)	6.4(7)×10^{-5}
^{93}Nb 5252.52(9)	0.0080(8)	0.00026(3)
^{93}Nb 5257.70(9)	0.00214(23)	7.0(8)×10^{-5}
^{93}Nb 5284.14(8)	0.0050(7)	1.63(23)×10^{-4}
^{93}Nb 5290.46(8)	0.0022(3)	7.2(10)×10^{-5}
^{93}Nb 5301.22(8)	0.0031(6)	1.01(20)×10^{-4}
^{93}Nb 5307.94(8)	0.0063(7)	2.05(23)×10^{-4}
^{93}Nb 5348.57(8)	0.0082(7)	0.000267(23)
^{93}Nb 5363.82(8)	0.0073(7)	2.38(23)×10^{-4}
^{93}Nb 5368.1(4)	0.0039(6)	1.27(20)×10^{-4}
^{93}Nb 5399.86(7)	0.0050(7)	1.63(23)×10^{-4}
^{93}Nb 5447.70(7)	0.0026(3)	8.5(10)×10^{-5}
^{93}Nb 5450.96(7)	0.0053(7)	1.73(23)×10^{-4}
^{93}Nb **5496.24(10)**	**0.0205(14)**	**0.00067(5)**
^{93}Nb 5507.79(7)	0.0041(5)	1.34(16)×10^{-4}
^{93}Nb 5511.28(8)	0.0053(7)	1.73(23)×10^{-4}
^{93}Nb 5532.16(8)	0.0027(5)	8.8(16)×10^{-5}
^{93}Nb 5572.33(8)	0.0037(5)	1.21(16)×10^{-4}
^{93}Nb 5591.31(6)	0.0080(7)	0.000261(23)
^{93}Nb 5607.32(8)	0.0041(5)	1.34(16)×10^{-4}
^{93}Nb 5612.72(8)	0.0037(5)	1.21(16)×10^{-4}
^{93}Nb 5645.93(7)	0.0026(4)	8.5(13)×10^{-5}
^{93}Nb 5769.77(7)	0.0054(6)	1.76(20)×10^{-4}
^{93}Nb 5880.80(9)	0.0035(4)	1.14(13)×10^{-4}
^{93}Nb 5895.01(7)	0.0183(8)	0.00060(3)
^{93}Nb 5946.31(9)	0.0045(6)	1.47(20)×10^{-4}
^{93}Nb 5954.41(10)	0.0025(3)	8.2(10)×10^{-5}
^{93}Nb 5964.58(7)	0.0055(6)	1.79(20)×10^{-4}
^{93}Nb 5980.27(5)	0.0029(5)	9.5(16)×10^{-5}
^{93}Nb 5995.47(3)	0.0033(5)	1.08(16)×10^{-4}
^{93}Nb 6068.67(5)	0.0026(4)	8.5(13)×10^{-5}
^{93}Nb 6292.06(11)	0.0033(4)	1.08(13)×10^{-4}
^{93}Nb 6331.751(16)	0.0029(4)	9.5(13)×10^{-5}
^{93}Nb 6434.833(18)	0.0047(4)	1.53(13)×10^{-4}
^{93}Nb 6595.867(18)	0.0020(3)	6.5(10)×10^{-5}

Eγ-keV	σ(Eγ)-barns	k_0
Niobium (Z=41), continued		
^{93}Nb 6831.141(14)	0.0175(8)	0.00057(3)
^{93}Nb 6915.546(15)	0.0024(3)	7.8(10)×10^{-5}
^{93}Nb 7186.449(14)	0.0089(6)	0.000290(20)
Molybdenum (Z=42), *At.Wt.=95.94(2)*, σ_γ=*2.51(6)*		
^{98}Mo *140.5110(10)d*	*0.0276(7)*	*0.000872[<0.1%]*
^{100}Mo *180.711(15)*	*0.0017(4)*	*5.4(13)×10^{-5}*
^{98}Mo *198.38(11)*	*0.0108(9)*	*0.00034(3)*
^{94}Mo *204.20(5)*	*0.0117(6)*	*0.000370(19)*
^{95}Mo 349.77(4)	0.0327(13)	0.00103(4)
^{95}Mo 369.68(9)	0.0319(19)	0.00101(6)
^{95}Mo 480.57(3)	0.028(5)	0.00088(16)
^{96}Mo 480.97(13)	0.0604(23)	0.00191(7)
^{95}Mo 568.88(3)	0.0280(11)	0.00088(4)
^{95}Mo 591.21(3)	0.0315(14)	0.00100(4)
^{95}Mo 608.744(14)	0.121(4)	0.00382(13)
^{95}Mo **719.528(14)**	**0.310(10)**	**0.0098(3)**
^{95}Mo 721.54(4)	0.025(3)	0.00079(10)
^{97}Mo 723.338(19)	0.051(11)	0.0016(4)
^{95}Mo 736.820(14)	0.119(4)	0.00376(13)
^{95}Mo **778.221(10)**	**2.02(6)**	**0.0638(19)**
^{97}Mo 787.39(3)	0.168(6)	0.00531(19)
^{95}Mo 812.26(5)	0.0264(15)	0.00083(5)
^{95}Mo **847.603(11)**	**0.324(9)**	**0.0102(3)**
^{95}Mo **849.85(3)**	**0.43(3)**	**0.0136(10)**
^{95}Mo 852.93(3)	0.0444(17)	0.00140(5)
^{92}Mo *943.6(3)*	*0.0075(9)*	*2.4(3)×10^{-4}*
^{95}Mo 968.46(5)	0.0323(19)	0.00102(6)
^{95}Mo 1091.289(20)	0.201(6)	0.00635(19)
^{95}Mo 1106.36(4)	0.0309(18)	0.00098(6)
^{95}Mo 1190.28(6)	0.0240(14)	0.00076(4)
^{95}Mo 1200.10(3)	0.124(4)	0.00392(13)
^{97}Mo 1230.13(5)	0.0253(15)	0.00080(5)
^{95}Mo 1317.35(8)	0.091(6)	0.00287(19)
^{95}Mo 1497.742(17)	0.122(4)	0.00385(13)
^{95}Mo 1625.817(15)	0.0264(15)	0.00083(5)
^{95}Mo 1702.78(4)	0.0220(15)	0.00069(5)
^{95}Mo 1846.26(15)	0.022(3)	0.00069(10)
^{95}Mo 1923.47(13)	0.0250(18)	0.00079(6)
^{95}Mo 2011.87(5)	0.0226(16)	0.00071(5)
^{95}Mo 2663.47(9)	0.0455(21)	0.00144(7)
^{95}Mo 5602.15(15)	0.0242(17)	0.00076(5)
^{95}Mo 5711.98(12)	0.048(4)	0.00152(13)
^{95}Mo 6363.55(10)	0.0235(17)	0.00074(5)
^{97}Mo 6624.801(20)	0.027(10)	0.0009(3)
^{95}Mo 6919.05(9)	0.106(6)	0.00335(19)
^{95}Mo 7527.75(9)	0.0264(20)	0.00083(6)
Ruthenium (Z=44), *At.Wt.=101.07(2)*, σ_γ=*2.75(21)*		
^{104}Ru 75.251(25)	0.0233(22)	0.00070(7)
^{98}Ru *89.69(10)*	*0.0036(7)*	*1.08(21)×10^{-4}*
^{104}Ru 107.917(14)	0.0153(14)	0.00046(4)
^{100}Ru 127.18(8)	0.049(4)	0.00147(12)
^{102}Ru 136.05(4)	0.066(6)	0.00198(18)
^{104}Ru 143.206(9)	0.0206(20)	0.00062(6)
^{104}Ru 159.303(16)	0.0179(20)	0.00054(6)
^{102}Ru 174.27(3)	0.076(7)	0.00228(21)
^{96}Ru *189.24(4)*	*0.0099(11)*	*0.00030(3)*
^{102}Ru 250.78(6)	0.0238(23)	0.00071(7)
^{102}Ru 270.58(8)	0.034(3)	0.00102(9)
^{102}Ru 294.66(4)	0.071(6)	0.00213(18)
^{104}Ru 301.75(5)	0.0192(19)	0.00058(6)
^{104}Ru 321.526(24)	0.0175(18)	0.00052(5)
^{102}Ru 346.23(6)	0.030(3)	0.00090(9)
^{104}Ru 358.57(7)	0.0173(24)	0.00052(7)
^{102}Ru 403.10(5)	0.062(6)	0.00186(18)
^{99}Ru 403.18(8)	0.050(10)	0.0015(3)
^{101}Ru 418.531(22)	0.033(4)	0.00099(12)
^{99}Ru 424.87(5)	0.0170(21)	0.00051(6)
^{102}Ru 432.00(6)	0.0267(25)	0.00080(8)
^{104}Ru 462.93(7)	0.025(3)	0.00075(9)
^{101}Ru 468.69(4)	0.049(5)	0.00147(15)
^{101}Ru **475.0950(20)**	**0.98(9)**	**0.029(3)**
^{102}Ru 500.96(10)	0.0175(19)	0.00052(6)
^{99}Ru 518.92(4)	0.026(3)	0.00078(9)

Table I. Adopted Prompt and Decay Gamma Rays from Thermal Neutron Capture for all Elements, continued

Eγ-keV	σ(Eγ)-barns	k_0
Ruthenium (Z=44), continued		
^{99}Ru **539.538(15)**	**1.53(13)**	**0.046(4)**
^{102}Ru 545.44(5)	0.0253(25)	0.00076(8)
^{102}Ru 554.54(7)	0.027(3)	0.00081(9)
^{104}Ru 562.70(6)	0.028(3)	0.00084(9)
^{102}Ru 562.86(12)	0.017(4)	0.00051(12)
^{99}Ru 590.91(6)	0.053(5)	0.00159(15)
^{101}Ru **627.970(22)**	**0.176(16)**	**0.0053(5)**
^{101}Ru **631.22(4)**	**0.30(3)**	**0.0090(9)**
^{99}Ru 631.48(6)	0.017(5)	0.00051(15)
^{101}Ru 636.86(6)	0.033(3)	0.00099(9)
^{104}Ru 640.16(7)	0.0171(22)	0.00051(7)
^{101}Ru 680.57(6)	0.0162(22)	0.00049(7)
^{99}Ru **686.907(17)**	**0.52(5)**	**0.0156(15)**
^{101}Ru 692.28(9)	0.025(3)	0.00075(9)
^{101}Ru 695.53(9)	0.039(5)	0.00117(15)
^{101}Ru 697.31(15)	0.020(3)	0.00060(9)
^{99}Ru 700.53(3)	0.018(3)	0.00054(9)
^{99}Ru 710.70(4)	0.034(3)	0.00102(9)
^{104}Ru *724.30(3)d*	*0.0760(11)*	*0.00228[7.4%]*
^{99}Ru 734.60(6)	0.0254(25)	0.00076(8)
^{101}Ru 739.614(21)	0.0196(20)	0.00059(6)
^{101}Ru 766.82(10)	0.019(3)	0.00057(9)
^{99}Ru 822.579(22)	0.137(12)	0.0041(4)
^{99}Ru 836.20(3)	0.029(5)	0.00087(15)
^{99}Ru 849.23(4)	0.030(3)	0.00090(9)
^{101}Ru 940.42(3)	0.038(4)	0.00114(12)
^{101}Ru 1046.498(3)	0.103(9)	0.0031(3)
^{102}Ru 1075.37(14)	0.0188(21)	0.00056(6)
^{101}Ru 1103.062(22)	0.100(9)	0.0030(3)
^{101}Ru 1105.54(6)	0.055(5)	0.00165(15)
^{99}Ru 1107.20(5)	0.0236(24)	0.00071(7)
^{99}Ru 1207.93(8)	0.022(6)	0.00066(18)
^{99}Ru 1266.58(4)	0.0178(20)	0.00053(6)
^{99}Ru 1325.51(4)	0.034(4)	0.00102(12)
^{99}Ru 1341.50(3)	0.137(12)	0.0041(4)
^{99}Ru 1362.111(24)	0.111(13)	0.0033(4)
^{99}Ru 1365.29(4)	0.023(3)	0.00069(9)
^{99}Ru 1520.71(8)	0.022(3)	0.00066(9)
^{99}Ru 1523.10(3)	0.034(4)	0.00102(12)
^{99}Ru 1535.75(19)	0.0155(21)	0.00046(6)
^{99}Ru 1559.51(6)	0.027(3)	0.00081(9)
^{101}Ru 1568.383(20)	0.044(4)	0.00132(12)
^{99}Ru 1627.32(3)	0.129(12)	0.0039(4)
^{99}Ru 1701.11(7)	0.032(3)	0.00096(9)
^{102}Ru 1730.6(3)	0.0176(23)	0.00053(7)
^{99}Ru 1827.09(5)	0.045(4)	0.00135(12)
^{99}Ru 1865.04(4)	0.028(3)	0.00084(9)
^{99}Ru 1929.77(4)	0.025(3)	0.00075(9)
^{102}Ru **1959.30(7)**	**0.210(19)**	**0.0063(6)**
^{99}Ru 1996.62(6)	0.0223(25)	0.00067(8)
^{102}Ru 2074.98(20)	0.022(3)	0.00066(9)
^{99}Ru 3016.61(9)	0.0175(21)	0.00052(6)
^{99}Ru 3981.1(3)	0.0186(24)	0.00056(7)
^{102}Ru 4627.38(14)	0.0187(24)	0.00056(7)
^{104}Ru 4943.1(3)	0.020(3)	0.00060(9)
^{100}Ru 6266.6(3)	0.0180(13)	0.00054(4)
^{101}Ru 6274.68(4)	0.017(3)	0.00051(9)
^{99}Ru 6340.59(6)	0.024(4)	0.00072(12)
^{101}Ru 6627.200(20)	0.093(9)	0.0028(3)
^{101}Ru 6978.81(16)	0.041(5)	0.00123(15)
^{99}Ru 7103.08(8)	0.018(3)	0.00054(9)
^{99}Ru 7792.04(3)	0.132(13)	0.0040(4)
Rhodium (Z=45), *At.Wt.=102.90550(2),* σ_γ*=145.0(20)*		
^{103}Rh 32.18(4)	0.25(5)	0.0074(15)
^{103}Rh 35.56(13)	0.65(7)	0.0191(21)
^{103}Rh 46.20(5)	0.37(5)	0.0109(15)
^{103}Rh ***51.50(3)d***	***5.2(3)***	***0.153[90%]***
^{103}Rh **51.50(3)**	**16.0(4)**	**0.471(12)**
^{103}Rh 55.46(4)	0.76(15)	0.022(4)
^{103}Rh 80.80(3)	0.73(16)	0.021(5)
^{103}Rh 83.74(3)	0.63(14)	0.019(4)
^{103}Rh **85.19(3)**	**3.2(3)**	**0.094(9)**
^{103}Rh 85.97(4)	0.30(6)	0.0088(18)
^{103}Rh **97.14(3)**	**19.5(4)**	**0.574(12)**

Eγ-keV	σ(Eγ)-barns	k_0
Rhodium (Z=45), continued		
^{103}Rh **100.74(4)**	**4.96(10)**	**0.146(3)**
^{103}Rh 105.40(6)	0.47(4)	0.0138(12)
^{103}Rh 118.10(3)	0.570(15)	0.0168(4)
^{103}Rh 119.50(3)	1.5(3)	0.044(9)
^{103}Rh **127.20(3)**	**5.27(21)**	**0.155(6)**
^{103}Rh 129.37(3)	0.465(20)	0.0137(6)
^{103}Rh 131.86(6)	0.437(24)	0.0129(7)
^{103}Rh **134.54(3)**	**6.8(4)**	**0.200(12)**
^{103}Rh 135.16(4)	0.66(16)	0.019(5)
^{103}Rh 137.65(3)	0.45(4)	0.0133(12)
^{103}Rh 138.74(4)	0.54(4)	0.0159(12)
^{103}Rh 146.72(3)	1.5(3)	0.044(9)
^{103}Rh 157.00(3)	1.05(3)	0.0309(9)
^{103}Rh 159.49(3)	0.380(16)	0.0112(5)
^{103}Rh 161.55(4)	1.00(3)	0.0294(9)
^{103}Rh 165.20(4)	0.89(4)	0.0262(12)
^{103}Rh 168.21(5)	0.45(10)	0.013(3)
^{103}Rh **169.16(5)**	**2.88(19)**	**0.085(6)**
^{103}Rh 170.08(6)	0.64(19)	0.019(6)
^{103}Rh 177.64(4)	1.85(12)	0.054(4)
^{103}Rh **178.66(4)**	**3.27(14)**	**0.096(4)**
^{103}Rh **180.87(3)**	**22.6(15)**	**0.67(4)**
^{103}Rh 186.04(3)	1.50(5)	0.0442(15)
^{103}Rh 196.55(5)	0.80(16)	0.024(5)
^{103}Rh 198.89(4)	0.52(10)	0.015(3)
^{103}Rh 202.85(6)	1.6(3)	0.047(9)
^{103}Rh 213.05(3)	1.27(3)	0.0374(9)
^{103}Rh **215.340(22)**	**5.20(12)**	**0.153(4)**
^{103}Rh 215.36(3)	1.54(12)	0.045(4)
^{103}Rh **216.54(8)**	**5.0(10)**	**0.15(3)**
^{103}Rh **217.82(3)**	**7.38(13)**	**0.217(4)**
^{103}Rh 218.44(4)	0.30(6)	0.0088(18)
^{103}Rh 219.85(4)	0.480(19)	0.0141(6)
^{103}Rh 222.74(5)	0.26(3)	0.0077(9)
^{103}Rh 235.93(6)	0.345(10)	0.0102(3)
^{103}Rh 245.07(5)	0.29(4)	0.0085(12)
^{103}Rh 245.45(4)	0.387(17)	0.0114(5)
^{103}Rh 246.61(5)	0.27(5)	0.0080(15)
^{103}Rh 247.55(5)	0.387(17)	0.0114(5)
^{103}Rh 261.38(5)	1.09(3)	0.0321(9)
^{103}Rh **266.84(3)**	**2.66(17)**	**0.078(5)**
^{103}Rh 269.18(3)	1.42(11)	0.042(3)
^{103}Rh 273.62(3)	0.814(18)	0.0240(5)
^{103}Rh 284.36(4)	0.26(3)	0.0077(9)
^{103}Rh 286.18(8)	0.42(4)	0.0124(12)
^{103}Rh 303.59(5)	0.794(17)	0.0234(5)
^{103}Rh 305.7(3)	1.070(21)	0.0315(6)
^{103}Rh 317.07(4)	0.74(3)	0.0218(9)
^{103}Rh 323.48(4)	1.54(19)	0.045(6)
^{103}Rh 324.64(4)	0.57(9)	0.017(3)
^{103}Rh **333.44(3)**	**3.27(8)**	**0.0963(24)**
^{103}Rh 352.99(3)	0.668(19)	0.0197(6)
^{103}Rh 352.99(3)	0.668(19)	0.0197(6)
^{103}Rh 356.82(3)	0.668(19)	0.0197(6)
^{103}Rh 370.48(7)	0.429(18)	0.0126(5)
^{103}Rh 374.826(23)	1.300(25)	0.0383(7)
^{103}Rh 379.823(5)	0.301(21)	0.0089(6)
^{103}Rh 382.24(3)	0.374(25)	0.0110(7)
^{103}Rh 385.10(3)	0.819(19)	0.0241(6)
^{103}Rh 391.18(5)	0.358(17)	0.0105(5)
^{103}Rh 403.96(11)	0.350(15)	0.0103(4)
^{103}Rh 408.16(4)	0.293(18)	0.0086(5)
^{103}Rh 420.62(3)	2.06(4)	0.0607(12)
^{103}Rh 427.44(3)	1.12(3)	0.0330(9)
^{103}Rh 431.91(12)	0.461(23)	0.0136(7)
^{103}Rh 440.55(3)	2.23(10)	0.066(3)
^{103}Rh 459.69(6)	0.555(17)	0.0163(5)
^{103}Rh **470.40(3)**	**2.61(7)**	**0.0769(21)**
^{103}Rh 482.230(25)	1.78(6)	0.0524(18)
^{103}Rh 497.80(4)	0.88(4)	0.0259(12)
^{103}Rh 503.00(13)	0.23(6)	0.0068(18)
^{103}Rh 529.98(5)	0.885(21)	0.0261(6)
^{103}Rh **538.04(3)**	**2.43(7)**	**0.0716(21)**
^{103}Rh 542.31(8)	0.48(3)	0.0141(9)
^{103}Rh 550.87(8)	0.31(3)	0.0091(9)

Table I. Adopted Prompt and Decay Gamma Rays from Thermal Neutron Capture for all Elements, continued

Eγ-keV	σ(Eγ)-barns	k_0
Rhodium (Z=45), continued		
^{103}Rh ***555.81(4)d***	***3.14(9)***	***0.092[98%]***
^{103}Rh 562.78(4)	0.299(22)	0.0088(7)
^{103}Rh 574.07(5)	0.539(20)	0.0159(6)
^{103}Rh 577.92(5)	0.342(19)	0.0101(6)
^{103}Rh 597.65(3)	0.997(23)	0.0294(7)
^{103}Rh 609.55(12)	0.58(3)	0.0171(9)
^{103}Rh 633.45(6)	0.239(17)	0.0070(5)
^{103}Rh 680.61(6)	0.25(5)	0.0074(15)
^{103}Rh 689.47(5)	0.35(8)	0.0103(24)
^{103}Rh 695.38(7)	1.07(3)	0.0315(9)
^{103}Rh 702.72(7)	0.869(25)	0.0256(7)
^{103}Rh 707.67(6)	0.843(25)	0.0248(7)
^{103}Rh 710.69(5)	0.46(4)	0.0135(12)
^{103}Rh 718.26(6)	0.267(10)	0.0079(3)
^{103}Rh 720.58(9)	0.297(9)	0.0087(3)
^{103}Rh 722.81(4)	0.255(11)	0.0075(3)
^{103}Rh 734.90(7)	0.68(5)	0.0200(15)
^{103}Rh 762.83(6)	0.339(21)	0.0100(6)
^{103}Rh 787.12(4)	1.16(3)	0.0342(9)
^{103}Rh 790.43(12)	0.7(4)	0.021(12)
^{103}Rh 791.41(7)	0.84(5)	0.0247(15)
^{103}Rh 817.71(8)	0.5(3)	0.015(9)
^{103}Rh 834.94(7)	0.277(13)	0.0082(4)
^{103}Rh 868.28(6)	0.56(3)	0.0165(9)
^{103}Rh 872.24(4)	0.440(16)	0.0130(5)
^{103}Rh 907.66(7)	0.28(6)	0.0082(18)
^{103}Rh 951.96(6)	1.090(24)	0.0321(7)
^{103}Rh 5798.18(14)	0.59(3)	0.0174(9)
^{103}Rh 5917.43(5)	1.31(4)	0.0386(12)
^{103}Rh 6046.79(6)	0.88(4)	0.0259(12)
^{103}Rh 6082.98(7)	0.58(4)	0.0171(12)
^{103}Rh 6110.21(6)	0.278(19)	0.0082(6)
^{103}Rh 6172.33(5)	0.75(3)	0.0221(9)
^{103}Rh 6211.62(4)	0.89(3)	0.0262(9)
^{103}Rh 6354.87(7)	0.46(3)	0.0135(9)
^{103}Rh 6785.66(4)	0.470(20)	0.0138(6)
Palladium (Z=46), *At.Wt.=106.42(1)*, σ_γ*=6.9(4)*		
^{108}Pd 113.4010(10)	0.335(5)	0.00954(14)
^{106}Pd *115.86(7)*	*0.0141(13)*	*0.00040(4)*
^{102}Pd *118.68(3)*	*0.0042(11)*	*1.2(3)×10^{-4}*
^{108}Pd 152.9420(10)	0.1450(22)	0.00413(6)
^{108}Pd 178.0340(10)	0.1090(22)	0.00310(6)
^{108}Pd *188.9900(10)d*	*0.0273(15)*	*0.00078[89%]*
^{108}Pd 197.346(5)	0.0650(20)	0.00185(6)
^{108}Pd 211.8840(20)	0.0540(18)	0.00154(5)
^{108}Pd 245.0790(20)	0.250(4)	0.00712(11)
^{108}Pd 266.3430(20)	0.0515(12)	0.00147(3)
^{108}Pd 276.289(6)	0.0562(18)	0.00160(5)
^{104}Pd *280.65(6)*	*0.0158(14)*	*0.00045(4)*
^{108}Pd 291.4350(20)	0.1040(20)	0.00296(6)
^{108}Pd 325.2840(20)	0.208(3)	0.00592(9)
^{108}Pd 326.8690(20)	0.0793(20)	0.00226(6)
^{108}Pd 333.960(4)	0.1110(25)	0.00316(7)
^{108}Pd 339.5290(20)	0.195(3)	0.00555(9)
^{108}Pd 359.4290(20)	0.120(3)	0.00342(9)
^{108}Pd 378.1890(20)	0.0411(20)	0.00117(6)
^{108}Pd 428.409(4)	0.0504(21)	0.00144(6)
^{105}Pd 429.63(4)	0.145(3)	0.00413(9)
^{108}Pd 433.5640(20)	0.097(3)	0.00276(9)
^{105}Pd **511.843(20)**	**4.00(4)**	**0.1139(11)**
^{105}Pd **616.192(20)**	**0.629(9)**	**0.0179(3)**
^{105}Pd 621.95(6)	0.126(7)	0.00359(20)
^{108}Pd 685.914(8)	0.042(7)	0.00120(20)
^{105}Pd **717.356(22)**	**0.777(9)**	**0.0221(3)**
^{105}Pd 748.34(5)	0.0802(23)	0.00228(7)
^{108}Pd 754.894(9)	0.0474(18)	0.00135(5)
^{105}Pd 804.33(4)	0.091(3)	0.00259(9)
^{105}Pd 846.29(10)	0.0452(18)	0.00129(5)
^{105}Pd 848.16(6)	0.1000(25)	0.00285(7)
^{108}Pd 1019.872(9)	0.0467(25)	0.00133(7)
^{105}Pd 1045.82(3)	0.321(7)	0.00914(20)
^{105}Pd 1050.31(4)	0.360(8)	0.01025(23)
^{105}Pd 1053.68(9)	0.057(3)	0.00162(9)
^{105}Pd 1128.03(3)	0.323(6)	0.00920(17)

Eγ-keV	σ(Eγ)-barns	k_0
Palladium (Z=46), continued		
^{105}Pd 1168.16(8)	0.0588(22)	0.00167(6)
^{105}Pd 1397.54(7)	0.089(3)	0.00253(9)
^{105}Pd 1572.54(7)	0.207(25)	0.0059(7)
^{105}Pd 1909.40(11)	0.0423(20)	0.00120(6)
^{105}Pd 1927.25(10)	0.041(3)	0.00117(9)
^{105}Pd 1988.14(12)	0.060(4)	0.00171(11)
^{105}Pd 2484.73(25)	0.052(4)	0.00148(11)
^{108}Pd 4794.02(12)	0.112(10)	0.0032(3)
^{108}Pd 5212.31(12)	0.061(5)	0.00174(14)
^{110}Pd *5531.9(4)*	*0.0120(20)*	*0.00034(6)*
Silver (Z=47), *At.Wt.=107.8682(2)*, σ_γ*=63.3(8)*		
^{109}Ag 68.36(4)	0.113(8)	0.00317(22)
^{109}Ag **72.67(5)**	**~0.9**	**~0.03**
^{107}Ag **78.91(4)**	**3.90(12)**	**0.110(3)**
^{109}Ag **79.91(6)**	**~1.0**	**~0.03**
^{109}Ag 93.34(5)	0.5(3)	0.014(8)
^{107}Ag 101.55(8)	0.189(20)	0.0053(6)
^{109}Ag **105.95(6)**	**0.87(13)**	**0.024(4)**
^{107}Ag 110.24(7)	0.273(22)	0.0077(6)
^{107}Ag 113.51(6)	0.52(3)	0.0146(8)
^{109}Ag **117.45(8)**	**3.85(7)**	**0.1082(20)**
^{109}Ag 124.86(5)	0.158(12)	0.0044(3)
^{107}Ag 143.94(4)	0.121(5)	0.00340(14)
^{107}Ag 147.11(4)	0.114(5)	0.00320(14)
^{107}Ag 148.79(3)	0.214(6)	0.00601(17)
^{109}Ag 152.58(4)	0.326(6)	0.00916(17)
^{107}Ag 155.22(11)	0.081(13)	0.0023(4)
^{109}Ag 161.69(5)	0.217(8)	0.00610(22)
^{109}Ag 166.62(4)	0.295(10)	0.0083(3)
^{107}Ag 178.32(4)	0.208(8)	0.00584(22)
^{107}Ag **191.39(3)**	**1.81(5)**	**0.0509(14)**
^{107}Ag **192.90(3)**	**2.20(6)**	**0.0618(17)**
^{109}Ag 194.56(14)	~0.2	~0.006
^{109}Ag 195.33(6)	0.50(3)	0.0140(8)
^{109}Ag **198.72(4)**	**7.75(13)**	**0.218(4)**
^{107}Ag 201.31(6)	0.45(3)	0.0126(8)
^{107}Ag 204.02(9)	0.088(22)	0.0025(6)
^{107}Ag **206.46(3)**	**3.58(7)**	**0.1006(20)**
^{107}Ag 212.30(4)	0.26(4)	0.0073(11)
^{107}Ag **215.15(4)**	**1.55(3)**	**0.0435(8)**
^{109}Ag 220.77(10)	~0.08	~0.002
^{109}Ag 231.46(5)	0.224(12)	0.0063(3)
^{109}Ag **235.62(4)**	**4.62(7)**	**0.1298(20)**
^{107}Ag **236.85(4)**	**1.95(3)**	**0.0548(8)**
^{109}Ag **236.89(7)**	**1.3(9)**	**0.037(25)**
^{107}Ag 237.63(3)	0.26(5)	0.0073(14)
^{107}Ag 239.10(4)	0.327(11)	0.0092(3)
^{107}Ag 244.56(6)	0.146(20)	0.0041(6)
^{107}Ag 249.15(6)	0.087(7)	0.00244(20)
^{109}Ag 252.17(5)	0.096(6)	0.00270(17)
^{107}Ag **259.17(3)**	**1.560(25)**	**0.0438(7)**
^{107}Ag 262.31(6)	0.161(11)	0.0045(3)
^{109}Ag **267.08(3)**	**2.73(6)**	**0.0767(17)**
^{109}Ag 269.05(4)	0.6(5)	0.017(14)
^{109}Ag 269.97(4)	0.565(25)	0.0159(7)
^{109}Ag 282.66(6)	0.079(10)	0.0022(3)
^{107}Ag 286.91(4)	0.400(25)	0.0112(7)
^{107}Ag **294.39(3)**	**2.05(12)**	**0.058(3)**
^{107}Ag 295.22(18)	0.10(4)	0.0028(11)
^{107}Ag **299.95(3)**	**1.15(5)**	**0.0323(14)**
^{107}Ag 301.75(7)	0.187(15)	0.0053(4)
^{109}Ag 302.83(13)	0.129(14)	0.0036(4)
^{109}Ag 304.43(15)	0.135(9)	0.00379(25)
^{109}Ag 316.88(3)	0.206(7)	0.00579(20)
^{107}Ag 320.36(6)	0.091(7)	0.00256(20)
^{107}Ag **328.99(3)**	**0.795(12)**	**0.0223(3)**
^{109}Ag 338.74(3)	0.595(10)	0.0167(3)
^{107}Ag 349.95(3)	0.70(4)	0.0197(11)
^{107}Ag 350.99(9)	0.145(12)	0.0041(3)
^{109}Ag 357.82(5)	0.561(22)	0.0158(6)
^{109}Ag **360.41(3)**	**1.55(3)**	**0.0435(8)**
^{107}Ag 365.41(23)	0.16(4)	0.0045(11)
^{109}Ag 366.97(10)	0.21(4)	0.0059(11)
^{107}Ag 372.1(3)	0.09(3)	0.0025(8)

Table I. Adopted Prompt and Decay Gamma Rays from Thermal Neutron Capture for all Elements, continued

Eγ-keV	σ(Eγ)-barns	k_0
Silver (Z=47), continued		
^{107}Ag 376.71(9)	0.294(13)	0.0083(4)
^{109}Ag 378.11(6)	0.744(20)	0.0209(6)
^{107}Ag **380.90(3)**	**1.59(3)**	**0.0447(8)**
^{109}Ag 380.97(15)	0.7(5)	0.020(14)
^{107}Ag 384.31(13)	0.128(22)	0.0036(6)
^{107}Ag 386.18(13)	0.192(24)	0.0054(7)
^{109}Ag 387.99(7)	0.121(21)	0.0034(6)
^{107}Ag 396.25(4)	0.138(6)	0.00388(17)
^{107}Ag 399.87(7)	0.093(6)	0.00261(17)
^{109}Ag 408.61(4)	0.459(9)	0.01290(25)
^{107}Ag 410.31(6)	0.142(6)	0.00399(17)
^{109}Ag 416.93(5)	0.243(13)	0.0068(4)
^{109}Ag 427.96(16)	0.273(11)	0.0077(3)
^{107}Ag 429.09(7)	0.253(11)	0.0071(3)
^{109}Ag 431.36(7)	0.248(13)	0.0070(4)
^{107}Ag 437.713(15)	0.079(10)	0.0022(3)
^{107}Ag 438.26(12)	0.191(11)	0.0054(3)
^{107}Ag 439.69(12)	0.216(11)	0.0061(3)
^{107}Ag 441.79(8)	0.181(21)	0.0051(6)
^{109}Ag 446.10(7)	0.183(10)	0.0051(3)
^{109}Ag 450.80(7)	0.098(16)	0.0028(5)
^{109}Ag 461.56(6)	0.265(16)	0.0074(5)
^{107}Ag 464.04(12)	0.236(20)	0.0066(6)
^{107}Ag 465.37(6)	0.46(3)	0.0129(8)
^{109}Ag 468.65(7)	0.166(9)	0.00466(25)
^{107}Ag 479.36(7)	0.095(12)	0.0027(3)
^{109}Ag 484.18(8)	0.253(18)	0.0071(5)
^{107}Ag 485.68(13)	0.098(7)	0.00275(20)
^{109}Ag 488.66(6)	0.149(12)	0.0042(3)
^{109}Ag **495.71(3)**	**1.080(18)**	**0.0303(5)**
^{107}Ag 497.57(8)	0.157(9)	0.00441(25)
^{107}Ag 499.97(4)	0.265(13)	0.0074(4)
^{107}Ag 522.43(9)	0.125(7)	0.00351(20)
^{109}Ag **524.47(3)**	**0.804(11)**	**0.0226(3)**
^{109}Ag 526.07(8)	0.364(7)	0.01023(20)
^{107}Ag 527.23(5)	0.371(10)	0.0104(3)
^{109}Ag **536.13(3)**	**1.090(16)**	**0.0306(5)**
^{109}Ag 544.14(5)	0.34(3)	0.0096(8)
^{109}Ag **549.56(3)**	**1.540(24)**	**0.0433(7)**
^{107}Ag 563.91(5)	0.191(6)	0.00537(17)
^{107}Ag 572.10(6)	0.080(6)	0.00225(17)
^{107}Ag 574.77(3)	0.299(7)	0.00840(20)
^{109}Ag 586.85(3)	0.459(8)	0.01290(22)
^{109}Ag 593.86(4)	0.484(11)	0.0136(3)
^{107}Ag 599.87(4)	0.37(3)	0.0104(8)
^{109}Ag 610.33(15)	0.105(25)	0.0029(7)
^{107}Ag 611.98(18)	0.09(3)	0.0025(8)
^{109}Ag 614.15(8)	0.20(5)	0.0056(14)
^{107}Ag 616.89(4)	0.20(4)	0.0056(11)
^{109}Ag 620.07(5)	0.40(5)	0.0112(14)
^{107}Ag 626.41(4)	0.39(6)	0.0110(17)
^{107}Ag 629.499(20)	0.12(3)	0.0034(8)
^{109}Ag 632.47(10)	0.42(12)	0.012(3)
^{107}Ag 636.53(4)	0.31(11)	0.009(3)
^{107}Ag 640.18(4)	0.24(6)	0.0067(17)
^{107}Ag 652.041(20)	0.117(19)	0.0033(5)
^{109}Ag 652.96(5)	0.255(12)	0.0072(3)
^{109}Ag 655.02(11)	0.107(14)	0.0030(4)
^{109}Ag ***657.50(10)d***	***1.86(5)***	***0.0523[99%]***
^{107}Ag 662.55(11)	0.088(12)	0.0025(3)
^{107}Ag 664.91(3)	0.329(22)	0.0092(6)
^{107}Ag 670.53(7)	0.104(17)	0.0029(5)
^{107}Ag 674.07(6)	0.094(16)	0.0026(5)
^{107}Ag 685.8(3)	0.081(20)	0.0023(6)
^{107}Ag 687.48(8)	0.35(5)	0.0098(14)
^{109}Ag 698.44(6)	0.158(6)	0.00444(17)
^{107}Ag 718.17(6)	0.199(12)	0.0056(3)
^{109}Ag 724.75(5)	0.393(14)	0.0110(4)
^{107}Ag 746.21(19)	0.088(10)	0.0025(3)
^{109}Ag 748.40(6)	0.328(9)	0.00921(25)
^{109}Ag 750.77(4)	0.529(11)	0.0149(3)
^{109}Ag 767.01(5)	0.31(4)	0.0087(11)
^{109}Ag 773.32(8)	0.22(3)	0.0062(8)
^{107}Ag 781.21(11)	0.094(22)	0.0026(6)
^{109}Ag 785.57(5)	0.34(4)	0.0096(11)

Eγ-keV	σ(Eγ)-barns	k_0
Silver (Z=47), continued		
^{107}Ag 796.15(8)	0.38(4)	0.0107(11)
^{107}Ag 812.10(6)	0.131(5)	0.00368(14)
^{107}Ag 819.26(8)	0.291(6)	0.00818(17)
^{107}Ag 845.19(14)	0.085(19)	0.0024(5)
^{107}Ag 881.01(7)	0.178(7)	0.00500(20)
^{107}Ag 895.48(3)	0.376(8)	0.01056(22)
^{107}Ag 918.97(11)	0.124(22)	0.0035(6)
^{107}Ag 938.04(5)	0.186(6)	0.00523(17)
^{107}Ag 960.13(4)	0.199(10)	0.0056(3)
^{107}Ag 972.69(7)	0.078(9)	0.00219(25)
^{107}Ag 1013.11(3)	0.698(13)	0.0196(4)
^{107}Ag 1051.36(5)	0.225(8)	0.00632(22)
^{107}Ag 1079.68(13)	0.165(15)	0.0046(4)
^{109}Ag 5539.17(21)	0.106(9)	0.00298(25)
^{109}Ag 5545.6(3)	0.106(12)	0.0030(3)
^{109}Ag 5554.8(3)	0.111(10)	0.0031(3)
^{109}Ag 5580.62(19)	0.302(14)	0.0085(4)
^{109}Ag 5615.11(20)	0.208(11)	0.0058(3)
^{109}Ag 5642.24(22)	0.199(12)	0.0056(3)
^{109}Ag 5701.49(19)	0.716(18)	0.0201(5)
^{109}Ag 5710.22(20)	0.229(10)	0.0064(3)
^{109}Ag 5773.12(21)	0.225(9)	0.00632(25)
^{109}Ag 5795.0(3)	0.513(14)	0.0144(4)
^{109}Ag 5913.3(5)	0.084(7)	0.00236(20)
^{109}Ag 5996.81(10)	0.154(7)	0.00433(20)
^{109}Ag 6022.46(10)	0.250(10)	0.0070(3)
^{109}Ag 6034.70(11)	0.080(6)	0.00225(17)
^{109}Ag 6057.25(9)	0.663(19)	0.0186(5)
^{109}Ag 6101.98(11)	0.080(5)	0.00225(14)
^{107}Ag 6268.80(24)	0.146(7)	0.00410(20)
^{107}Ag 6372.7(9)	0.11(4)	0.0031(11)
^{109}Ag 6540.92(9)	0.259(11)	0.0073(3)
^{107}Ag 6707.6(3)	0.083(7)	0.00233(20)
^{109}Ag 6807.13(11)	0.083(3)	0.00233(8)
^{107}Ag 6892.1(3)	0.079(6)	0.00222(17)
^{107}Ag 6977.2(3)	0.121(8)	0.00340(22)
^{107}Ag 7065.3(3)	0.103(8)	0.00289(22)
^{107}Ag 7078.5(3)	0.291(13)	0.0082(4)
^{107}Ag 7271.8(3)	0.284(14)	0.0080(4)
Cadmium (Z=48), *At.Wt.=112.411(8)*, σ_γ*=2522(50)*		
^{113}Cd 95.88(4)	21.2(6)	0.572(16)
^{110}Cd 171.3(3)	57(6)	1.54(16)
^{110}Cd **245.3(3)**	**274(25)**	**7.4(7)**
^{110}Cd 284.3(3)	29(3)	0.78(8)
^{110}Cd 342.2(3)	$1.0\times10^{+02}$	$2.7\times10^{+00}$
^{113}Cd **558.32(3)**	**1860(30)**	**50.1(8)**
^{113}Cd 576.04(3)	107.0(17)	2.88(5)
^{111}Cd *617.54(15)*	*2.9(4)*	*0.078(11)*
^{110}Cd 620.3(3)	38(4)	1.02(11)
^{113}Cd 648.79(10)	34.1(9)	0.919(24)
^{113}Cd **651.19(3)**	**358(5)**	**9.65(13)**
^{113}Cd 654.47(4)	34.1(9)	0.919(24)
^{113}Cd 707.39(3)	29.3(5)	0.790(13)
^{113}Cd 725.19(3)	107.0(13)	2.88(4)
^{113}Cd 748.04(6)	37(3)	1.00(8)
^{113}Cd 805.85(3)	134.0(18)	3.61(5)
^{113}Cd 1209.65(4)	122.0(19)	3.29(5)
^{113}Cd 1283.45(4)	47.5(9)	1.281(24)
^{113}Cd 1300.98(5)	31.1(11)	0.84(3)
^{113}Cd 1364.30(4)	123.0(21)	3.32(6)
^{113}Cd 1370.55(5)	30.2(9)	0.814(24)
^{113}Cd 1399.54(4)	97.7(15)	2.63(4)
^{113}Cd 1489.53(4)	68.5(11)	1.85(3)
^{113}Cd 1660.36(5)	66.7(13)	1.80(4)
^{113}Cd 1826.19(7)	25.2(7)	0.679(19)
^{113}Cd 2102.39(8)	24.0(9)	0.647(24)
^{113}Cd 2398.27(12)	22.4(8)	0.604(22)
^{113}Cd 2455.93(7)	87.3(18)	2.35(5)
^{113}Cd 2550.30(8)	38.7(11)	1.04(3)
^{113}Cd 2659.96(7)	64.0(15)	1.73(4)
^{113}Cd 2767.67(13)	22.4(13)	0.60(4)
^{113}Cd 2799.98(9)	27.6(9)	0.744(24)
^{113}Cd 2999.69(12)	29.1(14)	0.78(4)
^{113}Cd 3109.08(12)	28.6(12)	0.77(3)

Table I. Adopted Prompt and Decay Gamma Rays from Thermal Neutron Capture for all Elements, continued

	Eγ-keV	σ(Eγ)-barns	k_0
Cadmium (Z=48), continued			
^{113}Cd	3218.96(12)	19.0(9)	0.512(24)
^{113}Cd	5824.31(16)	69.1(18)	1.86(5)
^{113}Cd	5934.39(20)	19.3(10)	0.52(3)
Indium (Z=49), *At.Wt.=114.818(3)*, σ_γ=*272(8)*			
^{115}In	**22.796(7)**	**7(3)**	**0.18(8)**
^{115}In	**60.9160(10)**	**15.8(11)**	**0.42(3)**
^{115}In	76.7580(20)	0.41(3)	0.0108(8)
^{115}In	84.3080(20)	1.32(9)	0.0348(24)
^{115}In	**85.5690(20)**	**22.1(16)**	**0.58(4)**
^{115}In	95.380(4)	1.0(4)	0.026(11)
^{115}In	**96.036(5)**	**11.4(14)**	**0.30(4)**
^{115}In	**96.062(3)**	**24.6(18)**	**0.65(5)**
^{115}In	112.4540(20)	1.38(9)	0.0364(24)
^{115}In	114.997(3)	0.47(3)	0.0124(8)
^{115}In	**126.3720(20)**	**4.0(3)**	**0.106(8)**
^{115}In	***138.326(8)d***	***5.11(18)***	***0.135[30%]***
^{115}In	140.4560(20)	1.58(11)	0.042(3)
^{115}In	141.1700(20)	2.63(18)	0.069(5)
^{115}In	149.6700(20)	0.69(5)	0.0182(13)
^{115}In	155.272(3)	2.48(18)	0.065(5)
^{115}In	159.932(4)	1.07(7)	0.0282(18)
^{115}In	***162.393(3)d***	***15.8(8)***	***0.417[100%]***
^{115}In	163.802(8)	0.67(5)	0.0177(13)
^{115}In	**171.059(5)**	**3.44(25)**	**0.091(7)**
^{115}In	**173.886(6)**	**4.1(3)**	**0.108(8)**
^{115}In	175.066(4)	1.12(7)	0.0296(18)
^{115}In	**186.2100(20)**	**26.6(18)**	**0.70(5)**
^{115}In	196.738(5)	0.89(7)	0.0235(18)
^{115}In	202.602(3)	2.70(20)	0.071(5)
^{115}In	213.625(12)	0.64(5)	0.0169(13)
^{115}In	234.618(11)	0.71(25)	0.019(7)
^{115}In	**235.275(4)**	**4.9(3)**	**0.129(8)**
^{115}In	240.30(3)	0.44(3)	0.0116(8)
^{115}In	267.960(20)	0.52(4)	0.0137(11)
^{115}In	**272.9660(20)**	**33.1(24)**	**0.87(6)**
^{115}In	**284.914(4)**	**4.5(3)**	**0.119(8)**
^{113}In	*287.726(19)*	*0.20(5)*	*0.0053(13)*
^{115}In	290.952(15)	2.55(18)	0.067(5)
^{115}In	293.393(15)	0.40(16)	0.011(4)
^{115}In	293.644(14)	1.38(11)	0.036(3)
^{115}In	295.515(17)	2.86(20)	0.075(5)
^{115}In	**298.664(3)**	**9.4(7)**	**0.248(18)**
^{115}In	300.388(4)	0.45(3)	0.0119(8)
^{115}In	305.108(8)	1.30(9)	0.0343(24)
^{115}In	315.053(12)	0.69(5)	0.0182(13)
^{115}In	318.48(4)	0.60(4)	0.0158(11)
^{115}In	320.895(8)	2.30(16)	0.061(4)
^{115}In	321.653(18)	0.7(3)	0.018(8)
^{115}In	**335.450(10)**	**9.1(7)**	**0.240(18)**
^{115}In	337.687(8)	2.52(18)	0.067(5)
^{115}In	339.15(4)	0.47(11)	0.012(3)
^{115}In	364.995(20)	0.53(4)	0.0140(11)
^{115}In	373.149(24)	0.38(3)	0.0100(8)
^{115}In	375.969(12)	2.66(20)	0.070(5)
^{115}In	384.421(11)	2.9(7)	0.077(18)
^{115}In	**385.111(8)**	**12.1(9)**	**0.319(24)**
^{115}In	387.636(13)	0.344(25)	0.0091(7)
^{115}In	393.09(11)	0.39(3)	0.0103(8)
^{115}In	396.496(12)	0.51(4)	0.0135(11)
^{115}In	410.433(11)	0.69(5)	0.0182(13)
^{115}In	***416.86(3)d***	***43.0(18)***	***1.13[30%]***
^{115}In	422.213(11)	1.70(13)	0.045(3)
^{115}In	**433.723(8)**	**6.0(4)**	**0.158(11)**
^{115}In	443.229(13)	0.58(4)	0.0153(11)
^{115}In	447.531(11)	0.39(3)	0.0103(8)
^{115}In	**471.349(11)**	**4.3(3)**	**0.113(8)**
^{115}In	475.906(10)	1.88(13)	0.050(3)
^{115}In	489.314(10)	0.63(5)	0.0166(13)
^{115}In	490.374(12)	0.80(11)	0.021(3)
^{115}In	**492.532(11)**	**3.31(24)**	**0.087(6)**
^{115}In	497.670(19)	0.67(5)	0.0177(13)
^{115}In	499.875(8)	0.37(3)	0.0098(8)
^{115}In	515.661(8)	0.60(4)	0.0158(11)
^{115}In	517.957(20)	2.8(4)	0.074(11)

	Eγ-keV	σ(Eγ)-barns	k_0
Indium (Z=49), continued			
^{115}In	518.119(12)	3.15(22)	0.083(6)
^{115}In	521.501(9)	1.97(14)	0.052(4)
^{115}In	540.382(8)	0.60(4)	0.0158(11)
^{115}In	548.720(9)	2.01(14)	0.053(4)
^{115}In	555.47(11)	0.7(5)	0.018(13)
^{115}In	556.169(8)	1.6(9)	0.042(24)
^{115}In	**556.845(21)**	**4.7(3)**	**0.124(8)**
^{115}In	560.095(9)	0.85(5)	0.0224(13)
^{115}In	567.596(20)	0.94(7)	0.0248(18)
^{115}In	577.523(18)	1.92(14)	0.051(4)
^{115}In	602.36(4)	2.86(20)	0.075(5)
^{115}In	**608.422(11)**	**3.51(25)**	**0.093(7)**
^{115}In	622.57(11)	0.83(5)	0.0219(13)
^{115}In	633.740(11)	1.54(11)	0.041(3)
^{115}In	634.288(9)	1.68(13)	0.044(3)
^{115}In	647.72(8)	1.18(9)	0.0311(24)
^{115}In	654.95(7)	0.47(3)	0.0124(8)
^{115}In	657.084(11)	1.52(11)	0.040(3)
^{115}In	662.115(10)	0.44(3)	0.0116(8)
^{115}In	693.29(9)	1.83(13)	0.048(3)
^{115}In	706.21(10)	0.40(9)	0.0106(24)
^{115}In	746.978(9)	0.71(5)	0.0187(13)
^{115}In	771.01(8)	1.52(11)	0.040(3)
^{115}In	792.16(6)	1.34(9)	0.0354(24)
^{115}In	807.897(25)	0.44(3)	0.0116(8)
^{115}In	***818.70(20)d***	***17.8(7)***	***0.470[30%]***
^{115}In	819.04(11)	2.59(18)	0.068(5)
^{115}In	847.54(8)	2.15(16)	0.057(4)
^{115}In	992.10(10)	0.91(7)	0.0240(18)
^{115}In	***1097.30(20)d***	***87.3(17)***	***2.30[30%]***
^{115}In	***1293.54(15)d***	***131(3)***	***3.46[30%]***
^{115}In	***1507.40(20)d***	***15.5(5)***	***0.409[30%]***
^{115}In	***1753.8(6)d***	***3.82(12)***	***0.101[30%]***
^{115}In	***2112.1(4)d***	***24.1(7)***	***0.636[30%]***
^{115}In	5333.54(18)	0.89(7)	0.0235(18)
^{115}In	5347.4(6)	0.362(25)	0.0096(7)
^{115}In	5358.9(5)	0.51(4)	0.0135(11)
^{115}In	5410.56(19)	0.53(4)	0.0140(11)
^{115}In	5891.89(17)	2.10(14)	0.055(4)
Tin (Z=50), *At.Wt.=118.710(7)*, σ_γ=*0.54(5)*			
^{120}Sn	60.66(15)	0.0052(7)	$1.33(18)\times10^{-4}$
^{122}Sn	125.80(7)	0.00178(9)	$4.54(23)\times10^{-5}$
^{116}Sn	**158.65(6)**	**0.0145(3)**	**0.000370(8)**
^{124}Sn	187.67(7)	0.00363(12)	$9.3(3)\times10^{-5}$
^{124}Sn	*331.90(20)d*	*0.00830(20)*	*2.12×10^{-4}[77%]*
^{115}Sn	416.99(4)	0.00251(11)	$6.4(3)\times10^{-5}$
^{115}Sn	463.242(17)	0.0128(3)	0.000327(8)
^{117}Sn	528.85(6)	0.00425(14)	$1.08(4)\times10^{-4}$
^{116}Sn	552.90(9)	0.00137(13)	$3.5(3)\times10^{-5}$
^{119}Sn	703.87(7)	0.0078(3)	$1.99(8)\times10^{-4}$
^{115}Sn	733.89(3)	0.00925(21)	$2.36(5)\times10^{-4}$
^{117}Sn	813.26(7)	0.0071(3)	$1.81(8)\times10^{-4}$
^{115}Sn	818.721(14)	0.0128(4)	0.000327(10)
^{117}Sn	827.37(8)	0.00361(23)	$9.2(6)\times10^{-5}$
^{116}Sn	861.39(10)	0.00191(19)	$4.9(5)\times10^{-5}$
^{120}Sn	869.38(8)	0.00320(22)	$8.2(6)\times10^{-5}$
^{118}Sn	897.28(8)	0.00368(21)	$9.4(5)\times10^{-5}$
^{120}Sn	908.89(8)	0.00307(19)	$7.8(5)\times10^{-5}$
^{122}Sn	920.87(7)	0.00404(21)	$1.03(5)\times10^{-4}$
^{118}Sn	920.87(7)	0.00404(21)	$1.03(5)\times10^{-4}$
^{119}Sn	925.90(6)	0.0097(3)	$2.48(8)\times10^{-4}$
^{120}Sn	925.90(6)	0.0097(3)	$2.48(8)\times10^{-4}$
^{115}Sn	931.819(23)	0.0111(3)	0.000283(8)
^{120}Sn	943.20(12)	0.00150(17)	$3.8(4)\times10^{-5}$
^{115}Sn	**972.619(17)**	**0.0158(5)**	**0.000403(13)**
^{119}Sn	988.67(7)	0.00668(22)	$1.71(6)\times10^{-4}$
^{116}Sn	1004.49(8)	0.00388(18)	$9.9(5)\times10^{-5}$
^{120}Sn	1041.60(14)	0.00189(20)	$4.8(5)\times10^{-5}$
^{117}Sn	1050.66(9)	0.00293(22)	$7.5(6)\times10^{-5}$
^{118}Sn	1065.17(13)	0.00214(21)	$5.5(5)\times10^{-5}$
^{117}Sn	1095.18(10)	0.0067(3)	$1.71(8)\times10^{-4}$
^{115}Sn	1097.323(18)	0.0039(5)	$9.96(13)\times10^{-5}$
^{120}Sn	1101.25(16)	0.00322(25)	$8.2(6)\times10^{-5}$
^{115}Sn	1115.15(4)	0.00150(16)	$3.8(4)\times10^{-5}$

Table I. Adopted Prompt and Decay Gamma Rays from Thermal Neutron Capture for all Elements, continued

Eγ-keV	σ(Eγ)-barns	k_0
Tin (Z=50), continued		
^{115}Sn 1118.95(5)	0.00155(22)	$4.0(6)\times10^{-5}$
^{119}Sn **1171.28(6)**	**0.0879(13)**	**0.00224(3)**
^{117}Sn 1173.66(8)	0.0050(3)	$1.28(8)\times10^{-4}$
^{119}Sn 1184.19(8)	0.0051(3)	$1.30(8)\times10^{-4}$
^{115}Sn 1200.56(12)	0.00163(22)	$4.2(6)\times10^{-5}$
^{115}Sn 1202.70(12)	0.0022(3)	$5.6(8)\times10^{-5}$
^{117}Sn **1229.64(6)**	**0.0673(13)**	**0.00172(3)**
^{118}Sn 1249.62(7)	0.0052(3)	$1.33(8)\times10^{-4}$
^{115}Sn 1252.119(23)	0.00348(19)	$8.9(5)\times10^{-5}$
^{115}Sn 1291.99(3)	0.0050(10)	$1.3(3)\times10^{-4}$
^{115}Sn **1293.591(15)**	**0.1340(21)**	**0.00342(5)**
^{115}Sn 1356.846(20)	0.0075(3)	$1.91(8)\times10^{-4}$
^{119}Sn 1415.76(10)	0.00291(19)	$7.4(5)\times10^{-5}$
^{117}Sn 1447.09(14)	0.00212(21)	$5.4(5)\times10^{-5}$
^{117}Sn 1508.43(11)	0.0058(3)	$1.48(8)\times10^{-4}$
^{115}Sn 1546.40(6)	0.00140(15)	$3.6(4)\times10^{-5}$
^{115}Sn 1550.71(18)	0.00170(16)	$4.3(4)\times10^{-5}$
^{115}Sn 1650.72(6)	0.0021(3)	$5.4(8)\times10^{-5}$
^{118}Sn 1695.0(3)	0.00138(22)	$3.5(6)\times10^{-5}$
^{115}Sn 1702.67(3)	0.00169(17)	$4.3(4)\times10^{-5}$
^{115}Sn 1711.17(7)	0.00151(19)	$3.9(5)\times10^{-5}$
^{115}Sn 1886.09(7)	0.0026(3)	$6.6(8)\times10^{-5}$
^{115}Sn 1900.72(5)	0.0025(3)	$6.4(8)\times10^{-5}$
^{115}Sn 1926.02(19)	0.0014(6)	$3.6(15)\times10^{-5}$
^{115}Sn 1934.93(18)	0.0027(4)	$6.9(10)\times10^{-5}$
^{115}Sn 1975.73(18)	0.0016(3)	$4.1(8)\times10^{-5}$
^{117}Sn 2042.74(10)	0.0067(4)	$1.71(10)\times10^{-4}$
^{115}Sn 2050.76(5)	0.0025(4)	$6.4(10)\times10^{-5}$
^{115}Sn 2077.80(8)	0.0016(6)	$4.1(15)\times10^{-5}$
^{119}Sn 2097.01(9)	0.0048(3)	$1.23(8)\times10^{-4}$
^{115}Sn **2112.302(16)**	**0.0152(5)**	**0.000388(13)**
^{115}Sn 2148.03(5)	0.0021(4)	$5.4(10)\times10^{-5}$
^{115}Sn 2211.69(8)	0.0018(6)	$4.6(15)\times10^{-5}$
^{115}Sn 2220.00(23)	0.0019(5)	$4.9(13)\times10^{-5}$
^{115}Sn 2225.40(3)	0.0082(5)	$2.09(13)\times10^{-4}$
^{115}Sn 2244.19(6)	0.0029(10)	$7(3)\times10^{-5}$
^{119}Sn 2355.3	1.8×10^{-3}	4.6×10^{-5}
^{119}Sn 2420.83(15)	0.0029(3)	$7.4(8)\times10^{-5}$
^{115}Sn 2585.57(3)	0.0047(4)	$1.20(10)\times10^{-4}$
^{117}Sn 2677.47(20)	0.0022(3)	$5.6(8)\times10^{-5}$
^{115}Sn 2707.43(6)	0.0024(6)	$6.1(15)\times10^{-5}$
^{117}Sn 2738.1	2.0×10^{-3}	5.1×10^{-5}
^{115}Sn 2843.82(5)	0.0032(4)	$8.2(10)\times10^{-5}$
^{115}Sn 2907.53(18)	0.0027(5)	$6.9(13)\times10^{-5}$
^{115}Sn 2960.03(4)	0.0023(3)	$5.9(8)\times10^{-5}$
^{115}Sn 2985.00(25)	0.0025(8)	$6.4(20)\times10^{-5}$
^{115}Sn 3088.55(5)	0.00184(19)	$4.7(5)\times10^{-5}$
^{115}Sn 3330.6(4)	0.0016(5)	$4.1(13)\times10^{-5}$
^{115}Sn 3333.75(5)	0.0061(5)	$1.56(13)\times10^{-4}$
^{115}Sn 3658.30(17)	0.0022(4)	$5.6(10)\times10^{-5}$
^{115}Sn 4013.00(11)	0.00169(16)	$4.3(4)\times10^{-5}$
^{115}Sn 4392.56(8)	0.00148(16)	$3.8(4)\times10^{-5}$
^{115}Sn 4695.80(8)	0.0031(3)	$7.9(8)\times10^{-5}$
^{115}Sn 4780.1(4)	0.0048(5)	$1.23(13)\times10^{-4}$
^{115}Sn 4809.43(9)	0.00165(16)	$4.2(4)\times10^{-5}$
^{115}Sn 5173.5(7)	0.0016(4)	$4.1(10)\times10^{-5}$
^{115}Sn 5361.91(6)	0.0043(4)	$1.10(10)\times10^{-4}$
^{115}Sn 5423.57(11)	0.00188(21)	$4.8(5)\times10^{-5}$
^{115}Sn 5449.51(5)	0.00191(19)	$4.9(5)\times10^{-5}$
^{115}Sn 5562.35(6)	0.0021(5)	$5.4(13)\times10^{-5}$
^{115}Sn 5904.65(6)	0.00223(17)	$5.7(4)\times10^{-5}$
^{115}Sn 6229.57(6)	0.00159(16)	$4.1(4)\times10^{-5}$
^{115}Sn 6335.30(12)	0.0023(3)	$5.9(8)\times10^{-5}$
^{115}Sn 6335.89(5)	0.0014(3)	$3.6(8)\times10^{-5}$
^{115}Sn 6603.27(4)	0.00168(19)	$4.3(5)\times10^{-5}$
^{115}Sn 7450.97(3)	0.00137(14)	$3.5(4)\times10^{-5}$
^{117}Sn 9327.5(11)	0.00204(20)	$5.2(5)\times10^{-5}$
Antimony (Z=51), *At.Wt.=121.760(1)*, σ_γ*=5.13(12)*		
^{123}Sb 39.96	0.028(6)	0.00070(15)
^{123}Sb **40.8040(10)**	**0.10(3)**	**0.0025(8)**
^{123}Sb 44.0910(10)	0.016(3)	0.00040(8)
^{121}Sb 45.7330(10)	0.027(7)	0.00067(17)
^{121}Sb 45.8480(10)	0.0076(21)	$1.9(5)\times10^{-4}$
^{121}Sb 46.8350(10)	0.0082(25)	$2.0(6)\times10^{-4}$

Eγ-keV	σ(Eγ)-barns	k_0
Antimony (Z=51), continued		
^{121}Sb **61.4130(10)**	**0.75(18)**	**0.019(5)**
^{121}Sb 67.5940(10)	0.0082(22)	$2.0(6)\times10^{-4}$
^{121}Sb **71.4670(10)**	**0.095(22)**	**0.0024(6)**
^{121}Sb 76.0590(10)	0.039(9)	0.00097(22)
^{121}Sb **78.0910(10)**	**0.48(11)**	**0.012(3)**
^{121}Sb 86.7140(10)	0.0080(19)	$2.0(5)\times10^{-4}$
^{123}Sb **87.601**	**0.212(8)**	**0.00528(20)**
^{121}Sb **88.2690(10)**	**0.083(19)**	**0.0021(5)**
^{123}Sb 88.3850(10)	0.0196(11)	0.00049(3)
^{121}Sb 101.5520(10)	0.028(6)	0.00070(15)
^{123}Sb 103.6510(10)	0.063(5)	0.00157(12)
^{121}Sb **105.8160(10)**	**0.21(5)**	**0.0052(12)**
^{121}Sb 113.8870(10)	0.014(3)	0.00035(8)
^{121}Sb **114.8680(10)**	**0.31(7)**	**0.0077(17)**
^{121}Sb 115.4210(10)	0.0110(25)	0.00027(6)
^{121}Sb **121.4970(10)**	**0.40(9)**	**0.0100(22)**
^{121}Sb 124.0290(10)	0.037(9)	0.00092(22)
^{123}Sb 133.8390(10)	0.056(4)	0.00139(10)
^{123}Sb 137.9190(10)	0.0207(10)	0.000515(25)
^{121}Sb 141.4390(10)	0.060(14)	0.0015(4)
^{123}Sb 143.2080(10)	0.028(4)	0.00070(10)
^{121}Sb **148.238**	**0.26(6)**	**0.0065(15)**
^{121}Sb 148.6540(10)	0.016(4)	0.00040(10)
^{121}Sb 149.9720(10)	0.013(3)	0.00032(8)
^{121}Sb 153.3850(10)	0.0085(11)	$2.1(3)\times10^{-4}$
^{123}Sb **155.1780(10)**	**0.081(9)**	**0.00202(22)**
^{121}Sb 166.4510(10)	0.074(4)	0.00184(10)
^{123}Sb 167.6050(10)	0.046(4)	0.00114(10)
^{121}Sb 173.7880(20)	0.0192(11)	0.00048(3)
^{123}Sb 173.7990(10)	0.0171(9)	0.000426(22)
^{121}Sb 177.4070(10)	0.0085(20)	$2.1(5)\times10^{-4}$
^{121}Sb 184.0480(10)	0.031(7)	0.00077(17)
^{123}Sb 185.1190(10)	0.0116(17)	0.00029(4)
^{121}Sb 194.0850(10)	0.0534(18)	0.00133(5)
^{121}Sb **201.5950(10)**	**0.091(3)**	**0.00226(8)**
^{121}Sb 204.5580(10)	0.0354(15)	0.00088(4)
^{121}Sb 217.4170(20)	0.0118(8)	0.000294(20)
^{121}Sb 229.7080(10)	0.021(5)	0.00052(12)
^{121}Sb 232.1880(10)	0.039(3)	0.00097(8)
^{121}Sb **233.1690(10)**	**0.0996(24)**	**0.00248(6)**
^{123}Sb 246.3260(20)	0.0586(21)	0.00146(5)
^{123}Sb 252.841(3)	0.0468(24)	0.00116(6)
^{121}Sb 255.4980(10)	0.030(4)	0.00075(10)
^{121}Sb 256.2270(10)	0.019(6)	0.00047(15)
^{121}Sb 261.6790(10)	0.0087(16)	$2.2(4)\times10^{-4}$
^{123}Sb 265.629(6)	0.024(4)	0.00060(10)
^{123}Sb 269.3960(20)	0.0093(25)	$2.3(6)\times10^{-4}$
^{121}Sb 272.2670(10)	0.019(3)	0.00047(8)
^{121}Sb 274.0010(10)	0.031(6)	0.00077(15)
^{123}Sb 275.2780(20)	0.0135(8)	0.000336(20)
^{121}Sb 275.4400(10)	0.0306(16)	0.00076(4)
^{123}Sb 276.2670(20)	0.0095(5)	$2.36(12)\times10^{-4}$
^{121}Sb **282.6500(10)**	**0.274(7)**	**0.00682(17)**
^{121}Sb 286.5180(20)	0.034(3)	0.00085(8)
^{123}Sb 288.0170(20)	0.018(6)	0.00045(15)
^{123}Sb 313.938(3)	0.015(4)	0.00037(10)
^{123}Sb 313.990(6)	0.0317(24)	0.00079(6)
^{123}Sb 322.1140(20)	0.036(3)	0.00090(8)
^{121}Sb 330.555(3)	0.058(3)	0.00144(8)
^{121}Sb 331.3030(20)	0.011(3)	0.00027(8)
^{123}Sb 331.4600(20)	0.048(3)	0.00119(8)
^{121}Sb **332.2860(10)**	**0.101(3)**	**0.00251(8)**
^{123}Sb 334.980(3)	0.028(3)	0.00070(8)
^{123}Sb 338.2980(20)	0.0142(16)	0.00035(4)
^{123}Sb 351.567(3)	0.0344(20)	0.00086(5)
^{121}Sb 378.1380(20)	0.0500(18)	0.00124(5)
^{123}Sb 384.533(3)	0.069(3)	0.00172(8)
^{123}Sb 390.4960(20)	0.008(3)	$2.0(8)\times10^{-4}$
^{121}Sb 392.3340(20)	0.0121(25)	0.00030(6)
^{123}Sb 410.285(7)	0.0127(20)	0.00032(5)
^{121}Sb 418.8240(20)	0.013(3)	0.00032(8)
^{121}Sb 419.925(5)	0.064(7)	0.00159(17)
^{121}Sb 422.231(3)	0.022(5)	0.00055(12)
^{121}Sb 437.601(18)	0.0175(18)	0.00044(5)
^{123}Sb 441.9270(20)	0.0101(7)	0.000251(17)

Table I. Adopted Prompt and Decay Gamma Rays from Thermal Neutron Capture for all Elements, continued

Eγ-keV	σ(Eγ)-barns	k_0
Antimony (Z=51), continued		
^{121}Sb 453.7470(20)	0.011(3)	0.00027(8)
^{123}Sb 455.240(13)	0.0095(7)	$2.36(17)\times10^{-4}$
^{123}Sb 462.001(4)	0.0097(23)	$2.4(6)\times10^{-4}$
^{123}Sb 466.964(3)	0.0115(23)	0.00029(6)
^{123}Sb 473.1350(20)	0.013(4)	0.00032(10)
^{121}Sb 485.35(4)	0.0212(21)	0.00053(5)
^{121}Sb 491.215(5)	0.0344(16)	0.00086(4)
^{121}Sb 501.034(3)	0.0076(21)	$1.9(5)\times10^{-4}$
^{123}Sb 501.151(4)	0.0129(10)	0.000321(25)
^{121}Sb 513.96(4)	0.0356(21)	0.00089(5)
^{121}Sb 542.304(17)	0.0267(20)	0.00066(5)
^{121}Sb 546.056(10)	0.0313(20)	0.00078(5)
^{123}Sb 555.057(5)	0.021(5)	0.00052(12)
^{121}Sb ***564.24(4)d***	***2.700(5)***	***0.06720[<0.1%]***
^{121}Sb 564.4720(20)	0.0532(25)	0.00132(6)
^{123}Sb 571.051(4)	0.0080(20)	$2.0(5)\times10^{-4}$
^{123}Sb 598.656(3)	0.055(4)	0.00137(10)
^{121}Sb 603.65(4)	0.019(3)	0.00047(8)
^{121}Sb 631.82(3)	0.0586(16)	0.00146(4)
^{123}Sb 634.003(15)	0.0101(14)	0.00025(4)
^{123}Sb 647.012(13)	0.0113(24)	0.00028(6)
^{121}Sb ***692.65(4)d***	***0.146(5)***	***0.00363[<0.1%]***
^{123}Sb 695.372(13)	0.008(3)	$2.0(8)\times10^{-4}$
^{123}Sb 704.145(6)	0.009(3)	$2.2(8)\times10^{-4}$
^{121}Sb 718.52(4)	0.015(6)	0.00037(15)
^{123}Sb 723.49(3)	0.016(3)	0.00040(8)
^{123}Sb 737.717(7)	0.012(3)	0.00030(8)
^{121}Sb 746.861(17)	0.030(3)	0.00075(8)
^{123}Sb 763.44(3)	0.0169(24)	0.00042(6)
^{123}Sb 768.364(6)	0.0114(24)	0.00028(6)
^{123}Sb 775.395(7)	0.015(6)	0.00037(15)
^{121}Sb 796.61(4)	0.015(4)	0.00037(10)
^{121}Sb 824.952(17)	0.040(3)	0.00100(8)
^{121}Sb 842.91(7)	0.017(10)	0.00042(25)
^{123}Sb 862.996(7)	0.009(4)	$2.2(10)\times10^{-4}$
^{121}Sb **921.00(7)**	**0.075(4)**	**0.00187(10)**
^{123}Sb 972.024(17)	0.015(3)	0.00037(8)
^{123}Sb 1020.942(10)	0.015(5)	0.00037(12)
^{123}Sb 5224.99(24)	0.0083(23)	$2.1(6)\times10^{-4}$
^{123}Sb 5338.31(23)	0.0078(25)	$1.9(6)\times10^{-4}$
^{123}Sb 5407.83(6)	0.014(5)	0.00035(12)
^{123}Sb 5446.51(5)	0.008(3)	$2.0(8)\times10^{-4}$
^{121}Sb 5558.3(4)	0.0149(21)	0.00037(5)
^{121}Sb 5563.43(24)	0.0210(25)	0.00052(6)
^{121}Sb 5600.4(3)	0.016(3)	0.00040(8)
^{123}Sb 5604.45(5)	0.012(3)	0.00030(8)
^{121}Sb 5619.2(4)	0.015(3)	0.00037(8)
^{121}Sb 5685.1(3)	0.0141(21)	0.00035(5)
^{121}Sb 5775.50(25)	0.011(7)	0.00027(17)
^{121}Sb 5787.62(25)	0.0093(17)	$2.3(4)\times10^{-4}$
^{121}Sb 5800.65(24)	0.0107(19)	0.00027(5)
^{123}Sb 5868.78(5)	0.034(4)	0.00085(10)
^{121}Sb 5885.19(9)	0.054(4)	0.00134(10)
^{121}Sb 6009.58(8)	0.020(3)	0.00050(8)
^{123}Sb 6048.36(5)	0.018(3)	0.00045(8)
^{123}Sb 6082.89(5)	0.018(3)	0.00045(8)
^{121}Sb 6163.62(7)	0.0121(18)	0.00030(5)
^{123}Sb 6335.72(5)	0.017(3)	0.00042(8)
^{123}Sb 6363.76(5)	0.025(4)	0.00062(10)
^{123}Sb 6379.80(5)	0.044(6)	0.00110(15)
^{123}Sb 6456.54(5)	0.0077(20)	$1.9(5)\times10^{-4}$
^{123}Sb 6467.40(5)	0.021(4)	0.00052(10)
^{121}Sb 6494.91(7)	0.0076(24)	$1.9(6)\times10^{-4}$
^{121}Sb **6523.52(7)**	**0.075(3)**	**0.00187(8)**
^{121}Sb 6728.06(7)	0.044(4)	0.00110(10)
^{121}Sb 6744.74(7)	0.0090(16)	$2.2(4)\times10^{-4}$
^{121}Sb 6806.15(7)	0.0102(11)	0.00025(3)
Tellurium (Z=52), *At.Wt.=127.60(3)*, σ_γ=*4.6(4)*		
^{130}Te *149.716(5)d*	*0.0630(11)*	*0.00150[51%]*
^{130}Te 296.017(16)	0.029(3)	0.00069(7)
^{123}Te 353.820(23)	0.100(8)	0.00237(19)
^{122}Te *440.04(4)*	*0.0100(14)*	*$2.4(3)\times10^{-4}$*
^{124}Te 443.53(4)	0.030(3)	0.00071(7)
^{123}Te 557.46(4)	0.038(4)	0.00090(10)

Eγ-keV	σ(Eγ)-barns	k_0
Tellurium (Z=52), continued		
^{123}Te **602.729(17)**	**2.46(16)**	**0.058(4)**
^{123}Te **645.819(20)**	**0.263(22)**	**0.0062(5)**
^{125}Te 666.3100(20)	0.045(5)	0.00107(12)
^{123}Te 709.18(6)	0.026(3)	0.00062(7)
^{123}Te 713.79(3)	0.058(5)	0.00138(12)
^{123}Te **722.772(25)**	**0.52(4)**	**0.0123(10)**
^{123}Te 790.74(3)	0.025(4)	0.00059(10)
^{123}Te 1054.51(4)	0.063(5)	0.00150(12)
^{123}Te 1325.50(3)	0.074(6)	0.00176(14)
^{123}Te 1355.00(6)	0.025(3)	0.00059(7)
^{123}Te 1376.09(6)	0.039(4)	0.00093(10)
^{123}Te 1436.55(3)	0.098(9)	0.00233(21)
^{123}Te 1461.82(13)	0.028(7)	0.00066(17)
^{123}Te 1488.88(5)	0.120(9)	0.00285(21)
^{123}Te 1579.50(8)	0.072(10)	0.00171(24)
^{123}Te 1691.06(6)	0.073(7)	0.00173(17)
^{123}Te 1720.15(5)	0.083(8)	0.00197(19)
^{124}Te 1851.37(10)	0.030(3)	0.00071(7)
^{123}Te 1918.71(7)	0.047(4)	0.00112(10)
^{123}Te 1998.24(7)	0.035(4)	0.00083(10)
^{123}Te 2038.91(6)	0.064(7)	0.00152(17)
^{123}Te 2078.76(9)	0.031(3)	0.00074(7)
^{123}Te 2091.21(8)	0.031(3)	0.00074(7)
^{123}Te 2144.20(5)	0.034(4)	0.00081(10)
^{123}Te 2214.56(10)	0.027(3)	0.00064(7)
^{123}Te 2385.57(5)	0.034(4)	0.00081(10)
^{123}Te 2609.36(10)	0.039(4)	0.00093(10)
^{123}Te 2746.92(5)	0.138(11)	0.0033(3)
^{123}Te 2783.15(10)	0.035(3)	0.00083(7)
^{123}Te 2974.83(14)	0.025(3)	0.00059(7)
^{123}Te 3152.85(12)	0.026(3)	0.00062(7)
^{130}Te 3347.35(10)	0.027(3)	0.00064(7)
^{123}Te 3543.10(10)	0.039(4)	0.00093(10)
^{128}Te *3721.75(12)*	*0.0209(21)*	*0.00050(5)*
^{123}Te 5668.13(13)	0.037(3)	0.00088(7)
^{123}Te 5880.59(11)	0.034(4)	0.00081(10)
^{123}Te 6211.61(12)	0.0262(25)	0.00062(6)
^{126}Te *6287.6(4)*	*0.0023(7)*	*$5.5(17)\times10^{-5}$*
^{123}Te 6322.95(8)	0.099(8)	0.00235(19)
^{123}Te 7332.04(8)	0.027(4)	0.00064(10)
Iodine (Z=53), *At.Wt.=126.90447(3)*, σ_γ=*6.20(20)*		
^{127}I **27.3620(10)**	**0.43(4)**	**0.0103(10)**
^{127}I 42.767(4)	0.038(5)	0.00091(12)
^{127}I **52.385(3)**	**0.167(19)**	**0.0040(5)**
^{127}I **58.1100(20)**	**0.28(4)**	**0.0067(10)**
^{127}I 58.734(4)	0.028(3)	0.00067(7)
^{127}I 67.120(3)	~0.1	~0.002
^{127}I 68.256(4)	0.023(13)	0.0005(3)
^{127}I 96.637(3)	0.0156(22)	0.00037(5)
^{127}I 102.344(5)	0.0165(21)	0.00039(5)
^{127}I 106.2490(10)	0.066(5)	0.00158(12)
^{127}I **124.2810(20)**	**0.180(13)**	**0.0043(3)**
^{127}I 126.989(3)	0.031(3)	0.00074(7)
^{127}I 131.8640(20)	0.016(3)	0.00038(7)
^{127}I 133.3940(10)	0.049(6)	0.00117(14)
^{127}I **133.6110(10)**	**1.42(10)**	**0.0339(24)**
^{127}I 134.911(3)	0.015(11)	0.0004(3)
^{127}I 142.1370(20)	0.140(14)	0.0033(3)
^{127}I 144.025(3)	0.0157(24)	0.00037(6)
^{127}I 147.105(3)	0.101(8)	0.00241(19)
^{127}I **153.011(3)**	**0.209(14)**	**0.0050(3)**
^{127}I 156.5060(20)	0.116(10)	0.00277(24)
^{127}I **160.7570(10)**	**0.187(16)**	**0.0045(4)**
^{127}I 164.1390(20)	0.040(4)	0.00096(10)
^{127}I 193.5630(20)	0.124(12)	0.0030(3)
^{127}I 205.412(3)	0.0227(20)	0.00054(5)
^{127}I 224.098(3)	0.07(3)	0.0017(7)
^{127}I 231.245(3)	0.017(4)	0.00041(10)
^{127}I 235.900(4)	0.028(3)	0.00067(7)
^{127}I 248.7410(20)	0.11(4)	0.0026(10)
^{127}I 251.534(5)	0.025(3)	0.00060(7)
^{127}I 255.517(5)	0.028(3)	0.00067(7)
^{127}I 259.040(4)	0.0251(24)	0.00060(6)
^{127}I 268.305(3)	0.080(8)	0.00191(19)

Table I. Adopted Prompt and Decay Gamma Rays from Thermal Neutron Capture for all Elements, continued

	Eγ-keV	σ(Eγ)-barns	k_0
Iodine (Z=53), continued			
^{127}I	282.611(12)	0.0193(20)	0.00046(5)
^{127}I	283.968(4)	0.028(3)	0.00067(7)
^{127}I	291.511(7)	0.0172(21)	0.00041(5)
^{127}I	297.393(17)	0.0155(25)	0.00037(6)
^{127}I	**301.906(5)**	**0.17(6)**	**0.0041(14)**
^{127}I	310.419(6)	0.0166(18)	0.00040(4)
^{127}I	314.349(4)	0.060(5)	0.00143(12)
^{127}I	325.35(4)	0.020(3)	0.00048(7)
^{127}I	330.801(5)	0.0146(21)	0.00035(5)
^{127}I	344.758(7)	0.100(9)	0.00239(21)
^{127}I	364.640(3)	0.0211(25)	0.00050(6)
^{127}I	369.358(17)	0.0170(21)	0.00041(5)
^{127}I	374.218(5)	0.041(7)	0.00098(17)
^{127}I	374.456(7)	0.028(6)	0.00067(14)
^{127}I	385.447(5)	0.086(7)	0.00205(17)
^{127}I	388.911(5)	0.022(3)	0.00053(7)
^{127}I	392.002(3)	0.045(14)	0.0011(3)
^{127}I	392.687(6)	0.028(9)	0.00067(21)
^{127}I	398.975(4)	0.018(3)	0.00043(7)
^{127}I	416.579(6)	0.065(5)	0.00155(12)
^{127}I	420.826(7)	0.139(18)	0.0033(4)
^{127}I	***442.901(10)d***	***0.595(4)***	***0.01421[51%]***
^{127}I	458.056(9)	0.0266(23)	0.00064(6)
^{127}I	502.607(18)	0.061(5)	0.00146(12)
^{127}I	528.91(9)	0.054(5)	0.00129(12)
^{127}I	557.43(4)	0.027(3)	0.00064(7)
^{127}I	4950.10(7)	0.037(10)	0.00088(24)
^{127}I	5018.648(17)	0.024(11)	0.0006(3)
^{127}I	5091.988(12)	0.015(7)	0.00036(17)
^{127}I	5096.357(17)	0.024(8)	0.00057(19)
^{127}I	5197.957(12)	0.032(14)	0.0008(3)
^{127}I	5298.245(12)	0.031(7)	0.00074(17)
^{127}I	5463.453(12)	0.018(6)	0.00043(14)
^{127}I	5482.853(12)	0.018(13)	0.0004(3)
^{127}I	5524.28(5)	0.015(5)	0.00036(12)
^{127}I	5559.662(12)	0.044(22)	0.0011(5)
^{127}I	5574.501(12)	0.021(5)	0.00050(12)
^{127}I	5725.929(12)	0.020(13)	0.0005(3)
^{127}I	6307.586(6)	0.024(8)	0.00057(19)
^{127}I	6692.417(5)	0.037(8)	0.00088(19)
Xenon (Z=54), *At.Wt.=131.293(6),* σ_γ*=24(3)*			
^{131}Xe	324.80(16)	0.09(5)	0.0021(12)
^{124}Xe	*335.46(16)*	*0.0054(12)*	*$1.2(3)\times10^{-4}$*
^{128}Xe	*403.1(3)*	*0.0106(23)*	*$2.4(5)\times10^{-4}$*
^{130}Xe	*404.8(3)*	*0.0096(23)*	*$2.2(5)\times10^{-4}$*
^{136}Xe	*455.490(3)d*	*0.00350(6)*	*8.08×10^{-5}[91%]*
^{131}Xe	471.72(12)	0.19(3)	0.0044(7)
^{131}Xe	483.66(10)	0.55(4)	0.0127(9)
^{131}Xe	505.84(8)	0.40(3)	0.0092(7)
^{129}Xe	510.33(8)	0.33(7)	0.0076(16)
^{131}Xe	522.78(7)	0.273(22)	0.0063(5)
^{129}Xe	**536.17(9)**	**1.71(24)**	**0.039(6)**
^{131}Xe	546.95(11)	0.094(16)	0.0022(4)
^{131}Xe	570.13(7)	0.188(15)	0.0043(4)
^{129}Xe	586.17(5)	0.48(7)	0.0111(16)
^{131}Xe	600.19(8)	0.52(4)	0.0120(9)
^{136}Xe	*600.99(8)*	*0.010(3)*	*$2.3(7)\times10^{-4}$*
^{131}Xe	621.13(10)	0.085(8)	0.00196(18)
^{131}Xe	**630.29(4)**	**1.41(11)**	**0.0325(25)**
^{131}Xe	**667.79(6)**	**6.7(5)**	**0.155(12)**
^{129}Xe	668.59(15)	0.17(9)	0.0039(21)
^{131}Xe	670.02(10)	0.22(3)	0.0051(7)
^{131}Xe	**772.72(4)**	**1.78(14)**	**0.041(3)**
^{131}Xe	812.45(10)	0.082(8)	0.00189(18)
^{131}Xe	832.43(12)	0.108(15)	0.0025(4)
^{131}Xe	889.54(8)	0.084(8)	0.00194(18)
^{131}Xe	954.65(12)	0.076(8)	0.00175(18)
^{131}Xe	984.54(9)	0.093(18)	0.0021(4)
^{131}Xe	1028.86(6)	0.40(3)	0.0092(7)
^{129}Xe	1096.49(7)	0.087(12)	0.0020(3)
^{131}Xe	1115.34(9)	0.149(20)	0.0034(5)
^{129}Xe	1122.33(10)	0.119(17)	0.0027(4)
^{131}Xe	1136.13(7)	0.45(4)	0.0104(9)
^{131}Xe	1140.84(11)	0.067(9)	0.00155(21)

	Eγ-keV	σ(Eγ)-barns	k_0
Xenon (Z=54), continued			
^{131}Xe	1171.29(6)	0.217(19)	0.0050(4)
^{131}Xe	1298.09(7)	0.12(3)	0.0028(7)
^{131}Xe	**1317.93(8)**	**0.89(7)**	**0.0205(16)**
^{129}Xe	1482.06(9)	0.112(16)	0.0026(4)
^{131}Xe	1519.83(8)	0.131(25)	0.0030(6)
^{131}Xe	1801.58(6)	0.272(22)	0.0063(5)
^{131}Xe	1888.05(8)	0.225(23)	0.0052(5)
^{131}Xe	1985.71(10)	0.54(5)	0.0125(12)
^{131}Xe	2713.93(10)	0.079(9)	0.00182(21)
^{131}Xe	3699.40(15)	0.082(16)	0.0019(4)
^{131}Xe	4734.85(17)	0.071(10)	0.00164(23)
^{131}Xe	4841.70(14)	0.107(15)	0.0025(4)
^{131}Xe	5078.91(18)	0.106(16)	0.0024(4)
^{129}Xe	5956.18(18)	0.16(3)	0.0037(7)
^{131}Xe	6380.62(13)	0.21(3)	0.0048(7)
^{131}Xe	**6467.09(12)**	**1.33(19)**	**0.031(4)**
Cesium (Z=55), *At.Wt.=132.90545(2),* σ_γ*=30.3(11)*			
^{133}Cs	11.2450(20)	0.142(7)	0.00324(16)
^{133}Cs	17.2130(20)	0.110(18)	0.0025(4)
^{133}Cs	38.6240(20)	0.080(12)	0.0018(3)
^{133}Cs	**48.790(20)**	**0.345(10)**	**0.00787(23)**
^{133}Cs	**60.0300(10)**	**0.443(14)**	**0.0101(3)**
^{133}Cs	67.2540(20)	0.088(5)	0.00201(11)
^{133}Cs	73.5660(20)	0.117(19)	0.0027(4)
^{133}Cs	74.0460(20)	0.14(3)	0.0032(7)
^{133}Cs	87.2520(20)	0.107(4)	0.00244(9)
^{133}Cs	93.1850(20)	0.043(3)	0.00098(7)
^{133}Cs	**113.7650(20)**	**0.777(15)**	**0.0177(3)**
^{133}Cs	114.3270(20)	0.05(3)	0.0011(7)
^{133}Cs	**116.3740(20)**	**1.39(12)**	**0.032(3)**
^{133}Cs	**116.612(4)**	**1.44(12)**	**0.033(3)**
^{133}Cs	117.1730(20)	0.04(3)	0.0009(7)
^{133}Cs	118.3630(20)	0.230(7)	0.00524(16)
^{133}Cs	**120.588(3)**	**0.414(10)**	**0.00944(23)**
^{133}Cs	***127.5000(20)d***	***0.310(11)***	***0.00707[11%]***
^{133}Cs	**130.2320(20)**	**1.410(21)**	**0.0322(5)**
^{133}Cs	131.171(3)	0.054(5)	0.00123(11)
^{133}Cs	133.5860(20)	0.038(3)	0.00087(7)
^{133}Cs	137.7530(20)	0.030(4)	0.00068(9)
^{133}Cs	142.7680(20)	0.073(4)	0.00166(9)
^{133}Cs	**174.3040(20)**	**0.420(11)**	**0.00958(25)**
^{133}Cs	**176.4040(20)**	**2.47(4)**	**0.0563(9)**
^{133}Cs	177.068(3)	0.098(16)	0.0022(4)
^{133}Cs	179.0180(20)	0.15(5)	0.0034(11)
^{133}Cs	180.0770(20)	0.087(7)	0.00198(16)
^{133}Cs	**186.8400(20)**	**0.282(9)**	**0.00643(21)**
^{133}Cs	189.8320(20)	0.093(10)	0.00212(23)
^{133}Cs	193.7250(20)	0.042(9)	0.00096(21)
^{133}Cs	194.724(3)	0.045(9)	0.00103(21)
^{133}Cs	**198.3010(20)**	**1.100(19)**	**0.0251(4)**
^{133}Cs	200.847(4)	0.135(10)	0.00308(23)
^{133}Cs	**205.615(3)**	**1.560(25)**	**0.0356(6)**
^{133}Cs	207.675(4)	0.093(6)	0.00212(14)
^{133}Cs	209.5460(20)	0.073(6)	0.00166(14)
^{133}Cs	211.3190(10)	0.223(10)	0.00508(23)
^{133}Cs	**218.341(3)**	**0.309(9)**	**0.00705(21)**
^{133}Cs	**219.7530(20)**	**0.344(9)**	**0.00784(21)**
^{133}Cs	232.165(3)	0.125(9)	0.00285(21)
^{133}Cs	**234.3340(20)**	**1.070(23)**	**0.0244(5)**
^{133}Cs	**245.8620(20)**	**0.740(15)**	**0.0169(3)**
^{133}Cs	254.740(3)	0.069(7)	0.00157(16)
^{133}Cs	256.6210(20)	0.235(8)	0.00536(18)
^{133}Cs	**261.1640(20)**	**0.401(11)**	**0.00914(25)**
^{133}Cs	263.8260(20)	0.079(7)	0.00180(16)
^{133}Cs	268.987(3)	0.199(6)	0.00454(14)
^{133}Cs	271.3490(20)	0.127(15)	0.0029(3)
^{133}Cs	272.212(4)	0.069(12)	0.0016(3)
^{133}Cs	277.6310(20)	0.066(5)	0.00150(11)
^{133}Cs	279.648(3)	0.065(5)	0.00148(11)
^{133}Cs	284.987(3)	0.044(5)	0.00100(11)
^{133}Cs	293.295(3)	0.185(9)	0.00422(21)
^{133}Cs	295.431(3)	0.231(10)	0.00527(23)
^{133}Cs	302.463(3)	0.13(4)	0.0030(9)
^{133}Cs	303.164(3)	0.055(6)	0.00125(14)

Table I. Adopted Prompt and Decay Gamma Rays from Thermal Neutron Capture for all Elements, continued

Eγ-keV	σ(Eγ)-barns	k_0
Cesium (Z=55), continued		
^{133}Cs 305.058(3)	0.061(7)	0.00139(16)
^{133}Cs **307.015(4)**	**1.45(3)**	**0.0331(7)**
^{133}Cs 309.776(3)	0.237(9)	0.00540(21)
^{133}Cs 317.0720(20)	0.149(10)	0.00340(23)
^{133}Cs 329.060(3)	0.055(6)	0.00125(14)
^{133}Cs 338.027(6)	0.043(6)	0.00098(14)
^{133}Cs 345.358(5)	0.075(7)	0.00171(16)
^{133}Cs 347.148(7)	0.073(6)	0.00166(14)
^{133}Cs 347.152(4)	0.030(4)	0.00068(9)
^{133}Cs 349.846(3)	0.030(6)	0.00068(14)
^{133}Cs **356.157(4)**	**0.445(12)**	**0.0101(3)**
^{133}Cs 356.345(3)	0.14(7)	0.0032(16)
^{133}Cs 365.8570(20)	0.04(3)	0.0009(7)
^{133}Cs 365.859(6)	0.103(6)	0.00235(14)
^{133}Cs 367.870(5)	0.173(8)	0.00394(18)
^{133}Cs 371.7380(20)	0.131(7)	0.00299(16)
^{133}Cs **377.311(5)**	**0.310(9)**	**0.00707(21)**
^{133}Cs 381.628(5)	0.066(7)	0.00150(16)
^{133}Cs 384.290(5)	0.034(7)	0.00078(16)
^{133}Cs 386.855(3)	0.163(9)	0.00372(21)
^{133}Cs 391.3960(20)	0.080(7)	0.00182(16)
^{133}Cs 393.535(5)	0.065(8)	0.00148(18)
^{133}Cs 402.491(4)	0.051(10)	0.00116(23)
^{133}Cs 405.484(4)	0.079(12)	0.0018(3)
^{133}Cs 408.483(7)	0.032(12)	0.0007(3)
^{133}Cs 412.448(5)	0.051(13)	0.0012(3)
^{133}Cs 417.277(4)	0.095(17)	0.0022(4)
^{133}Cs 421.052(5)	0.086(8)	0.00196(18)
^{133}Cs 422.491(6)	0.029(6)	0.00066(14)
^{133}Cs 426.258(4)	0.041(7)	0.00093(16)
^{133}Cs 434.334(3)	0.066(7)	0.00150(16)
^{133}Cs 438.9920(20)	0.140(9)	0.00319(21)
^{133}Cs **442.8430(20)**	**0.316(12)**	**0.0072(3)**
^{133}Cs 444.465(7)	0.114(9)	0.00260(21)
^{133}Cs 450.2370(20)	0.07(3)	0.0016(7)
^{133}Cs **450.345(3)**	**0.99(5)**	**0.0226(11)**
^{133}Cs 451.4250(20)	0.058(10)	0.00132(23)
^{133}Cs 454.0870(20)	0.056(11)	0.00128(25)
^{133}Cs 458.357(6)	0.072(5)	0.00164(11)
^{133}Cs 461.180(5)	0.099(5)	0.00226(11)
^{133}Cs 464.481(4)	0.095(5)	0.00217(11)
^{133}Cs 479.624(6)	0.030(10)	0.00068(23)
^{133}Cs 485.038(3)	0.094(10)	0.00214(23)
^{133}Cs 486.200(5)	0.08(3)	0.0018(7)
^{133}Cs 487.388(4)	0.047(6)	0.00107(14)
^{133}Cs 490.843(4)	0.042(10)	0.00096(23)
^{133}Cs 495.593(3)	0.077(11)	0.00176(25)
^{133}Cs **502.840(3)**	**0.256(13)**	**0.0058(3)**
^{133}Cs 508.077(3)	0.057(10)	0.00130(23)
^{133}Cs 508.380(3)	0.053(10)	0.00121(23)
^{133}Cs **510.795(3)**	**1.54(3)**	**0.0351(7)**
^{133}Cs 517.601(7)	0.028(21)	0.0006(5)
^{133}Cs **519.101(4)**	**0.349(18)**	**0.0080(4)**
^{133}Cs 519.321(3)	0.086(14)	0.0020(3)
^{133}Cs 524.1500(20)	0.151(23)	0.0034(5)
^{133}Cs **525.356(4)**	**0.39(3)**	**0.0089(7)**
^{133}Cs 525.592(3)	0.13(6)	0.0030(14)
^{133}Cs 526.072(4)	0.03(3)	0.0007(7)
^{133}Cs 528.409(6)	0.08(3)	0.0018(7)
^{133}Cs **529.504(6)**	**0.519(23)**	**0.0118(5)**
^{133}Cs 529.891(4)	~0.03	~0.0007
^{133}Cs **539.180(4)**	**0.360(11)**	**0.00821(25)**
^{133}Cs 539.416(4)	0.18(7)	0.0041(16)
^{133}Cs 540.679(9)	0.134(8)	0.00306(18)
^{133}Cs 554.642(5)	0.206(9)	0.00470(21)
^{133}Cs 559.084(3)	0.076(10)	0.00173(23)
^{133}Cs 561.964(5)	0.130(10)	0.00296(23)
^{133}Cs 564.019(4)	0.040(8)	0.00091(18)
^{133}Cs 567.483(4)	0.052(9)	0.00119(21)
^{133}Cs 570.825(3)	0.221(12)	0.0050(3)
^{133}Cs 574.574(4)	0.061(12)	0.0014(3)
^{133}Cs 576.060(4)	0.073(14)	0.0017(3)
^{133}Cs 576.296(3)	0.038(21)	0.0009(5)
^{133}Cs 579.131(4)	0.038(10)	0.00087(23)
^{133}Cs 584.180(3)	0.027(14)	0.0006(3)

Eγ-keV	σ(Eγ)-barns	k_0
Cesium (Z=55), continued		
^{133}Cs 591.680(5)	0.031(8)	0.00071(18)
^{133}Cs 601.381(5)	0.080(9)	0.00182(21)
^{133}Cs 601.775(5)	0.034(11)	0.00078(25)
^{133}Cs 603.457(5)	0.061(8)	0.00139(18)
^{133}Cs 610.896(4)	0.068(6)	0.00155(14)
^{133}Cs 623.831(9)	0.055(8)	0.00125(18)
^{133}Cs 628.595(4)	0.097(7)	0.00221(16)
^{133}Cs 633.809(6)	0.112(7)	0.00255(16)
^{133}Cs **645.453(5)**	**0.248(13)**	**0.0057(3)**
^{133}Cs 646.195(3)	0.064(11)	0.00146(25)
^{133}Cs 648.511(4)	0.233(13)	0.0053(3)
^{133}Cs 663.171(4)	0.155(9)	0.00353(21)
^{133}Cs 663.407(3)	0.07(3)	0.0016(7)
^{133}Cs 666.017(4)	0.089(8)	0.00203(18)
^{133}Cs 678.271(5)	0.078(13)	0.0018(3)
^{133}Cs 681.247(4)	0.110(24)	0.0025(6)
^{133}Cs 682.562(4)	0.12(3)	0.0027(7)
^{133}Cs 688.625(4)	0.058(10)	0.00132(23)
^{133}Cs 691.434(5)	0.030(10)	0.00068(23)
^{133}Cs 692.670(3)	0.037(6)	0.00084(14)
^{133}Cs 695.340(6)	0.039(10)	0.00089(23)
^{133}Cs 701.38(21)	0.036(10)	0.00082(23)
^{133}Cs 703.290(5)	0.043(10)	0.00098(23)
^{133}Cs 708.417(5)	0.220(11)	0.00502(25)
^{133}Cs 708.646(4)	0.105(14)	0.0024(3)
^{133}Cs 712.268(5)	0.113(9)	0.00258(21)
^{133}Cs 722.343(5)	0.116(11)	0.00265(25)
^{133}Cs 730.033(4)	0.045(8)	0.00103(18)
^{133}Cs 741.277(4)	0.071(9)	0.00162(21)
^{133}Cs 770.544(5)	0.104(11)	0.00237(25)
^{133}Cs 799.668(4)	0.075(10)	0.00171(23)
^{133}Cs 799.904(4)	0.029(6)	0.00066(14)
^{133}Cs 814.739(6)	0.056(13)	0.0013(3)
^{133}Cs 820.763(7)	0.059(11)	0.00135(25)
^{133}Cs 852.574(5)	0.034(8)	0.00078(18)
^{133}Cs 861.766(7)	0.070(9)	0.00160(21)
^{133}Cs 868.99(10)	0.140(11)	0.00319(25)
^{133}Cs 869.099(4)	0.140(11)	0.00319(25)
^{133}Cs 880.343(4)	0.114(14)	0.0026(3)
^{133}Cs 894.509(7)	0.103(12)	0.0023(3)
^{133}Cs 894.808(7)	0.052(16)	0.0012(4)
^{133}Cs 901.360(5)	0.053(11)	0.00121(25)
^{133}Cs 904.288(4)	0.040(11)	0.00091(25)
^{133}Cs 911.784(7)	0.177(14)	0.0040(3)
^{133}Cs 912.021(7)	0.057(8)	0.00130(18)
^{133}Cs 930.112(15)	0.126(9)	0.00287(21)
^{133}Cs 931.72(15)	0.073(8)	0.00166(18)
^{133}Cs 935.69(11)	0.130(9)	0.00296(21)
^{133}Cs 966.454(5)	0.168(13)	0.0038(3)
^{133}Cs 985.863(5)	0.078(12)	0.0018(3)
^{133}Cs 986.100(5)	0.027(9)	0.00062(21)
^{133}Cs 998.502(7)	0.103(11)	0.00235(25)
^{133}Cs 1009.2(5)	0.05(3)	0.0011(7)
^{133}Cs 1028.394(7)	0.038(15)	0.0009(3)
^{133}Cs 1034.519(4)	0.028(8)	0.00064(18)
^{133}Cs 1045.251(7)	0.120(11)	0.00274(25)
^{133}Cs 1072.547(6)	0.066(19)	0.0015(4)
^{133}Cs 1077.557(6)	0.209(12)	0.0048(3)
^{133}Cs 1077.794(5)	0.088(12)	0.0020(3)
^{133}Cs 1102.473(5)	0.047(8)	0.00107(18)
^{133}Cs 1114.65(21)	0.049(10)	0.00112(23)
^{133}Cs 1118.04(16)	0.069(9)	0.00157(21)
^{133}Cs 1209.54(11)	0.138(11)	0.00315(25)
^{133}Cs 5493.52(23)	0.230(19)	0.0052(4)
^{133}Cs **5505.46(20)**	**0.333(22)**	**0.0076(5)**
^{133}Cs **5572.00(25)**	**0.249(20)**	**0.0057(5)**
^{133}Cs 5625.091(17)	0.111(13)	0.0025(3)
^{133}Cs **5637.056(17)**	**0.277(21)**	**0.0063(5)**
^{133}Cs 5728.747(17)	0.087(16)	0.0020(4)
^{133}Cs 5748.392(17)	0.146(15)	0.0033(3)
^{133}Cs 5790.920(17)	0.137(13)	0.0031(3)
^{133}Cs 5802.823(18)	0.120(13)	0.0027(3)
^{133}Cs 5899.368(17)	0.116(12)	0.0026(3)
^{133}Cs 5914.935(17)	0.047(8)	0.00107(18)
^{133}Cs 5949.884(22)	0.045(10)	0.00103(23)

Table I. Adopted Prompt and Decay Gamma Rays from Thermal Neutron Capture for all Elements, continued

Eγ-keV	σ(Eγ)-barns	k_0
Cesium (Z=55), continued		
^{133}Cs 5975.068(17)	0.027(10)	0.00062(23)
^{133}Cs 5978.636(17)	0.099(14)	0.0023(3)
^{133}Cs 6051.426(17)	0.240(20)	0.0055(5)
^{133}Cs 6138.534(17)	0.061(8)	0.00139(18)
^{133}Cs 6149.955(17)	0.038(6)	0.00087(14)
^{133}Cs **6175.412(17)**	**0.252(16)**	**0.0057(4)**
^{133}Cs 6189.235(17)	0.191(14)	0.0044(3)
^{133}Cs 6197.392(17)	0.035(8)	0.00080(18)
^{133}Cs 6247.267(17)	0.038(6)	0.00087(14)
^{133}Cs 6307.046(17)	0.044(10)	0.00100(23)
^{133}Cs 6320.400(17)	0.050(8)	0.00114(18)
^{133}Cs 6439.794(16)	0.082(8)	0.00187(18)
^{133}Cs 6514.114(16)	0.044(7)	0.00100(16)
^{133}Cs 6697.590(16)	0.224(17)	0.0051(4)
^{133}Cs 6714.802(16)	0.090(11)	0.00205(25)
^{133}Cs 6831.169(16)	0.035(4)	0.00080(9)
Barium (Z=56), *At.Wt.=137.327(7)*, σ_γ=*1.18(7)*		
^{135}Ba 66.32(16)	0.0067(6)	1.48(13)×10^{-4}
^{135}Ba 87.08(13)	0.0093(6)	2.05(13)×10^{-4}
^{135}Ba 157.3(4)	0.0057(11)	1.26(24)×10^{-4}
^{135}Ba 158.58(12)	0.0077(4)	1.70(9)×10^{-4}
^{138}Ba ***165.8570(10)d***	***0.074(8)***	***0.00163[21%]***
^{137}Ba 191.65(10)	0.0081(3)	1.79(7)×10^{-4}
^{134}Ba 220.969(17)	0.0067(5)	1.48(11)×10^{-4}
^{135}Ba 273.77(11)	0.0079(5)	1.74(11)×10^{-4}
^{136}Ba **283.58(6)**	**0.0404(12)**	**0.00089(3)**
^{137}Ba 325.11(7)	0.00368(19)	8.1(4)×10^{-5}
^{137}Ba 364.32(13)	0.00407(20)	9.0(4)×10^{-5}
^{137}Ba 408.88(7)	0.0096(6)	2.12(13)×10^{-4}
^{138}Ba **454.73(5)**	**0.0853(22)**	**0.00188(5)**
^{137}Ba **462.78(4)**	**0.0660(16)**	**0.00146(4)**
^{136}Ba 480.41(6)	0.00350(16)	7.7(4)×10^{-5}
^{134}Ba 480.543(24)	0.00320(20)	7.1(4)×10^{-5}
^{137}Ba 516.76(8)	0.0083(6)	1.83(13)×10^{-4}
^{137}Ba 546.95(5)	0.00604(23)	1.33(5)×10^{-4}
^{138}Ba **627.29(5)**	**0.294(6)**	**0.00649(13)**
^{138}Ba 665.98(9)	0.0053(3)	1.17(7)×10^{-4}
^{135}Ba 671.60(9)	0.0045(3)	9.9(7)×10^{-5}
^{135}Ba 732.49(7)	0.0238(8)	0.000525(18)
^{135}Ba 746.6(4)	0.0031(3)	6.8(7)×10^{-5}
^{137}Ba 754.03(7)	0.0067(3)	1.48(7)×10^{-4}
^{135}Ba 760.31(11)	0.0073(5)	1.61(11)×10^{-4}
^{135}Ba **818.514(12)**	**0.212(4)**	**0.00468(9)**
^{137}Ba 871.66(6)	0.0124(4)	0.000274(9)
^{135}Ba 880.01(17)	0.0042(5)	9.3(11)×10^{-5}
^{135}Ba 981.61(9)	0.0040(3)	8.8(7)×10^{-5}
^{137}Ba 1009.73(5)	0.0167(5)	0.000369(11)
^{137}Ba 1041.42(8)	0.00422(22)	9.3(5)×10^{-5}
^{138}Ba **1047.73(6)**	**0.0319(10)**	**0.000704(22)**
^{135}Ba 1048.0730(20)	0.025(4)	0.00055(9)
^{138}Ba 1103.43(8)	0.0044(4)	9.7(9)×10^{-5}
^{137}Ba 1147.11(7)	0.0150(5)	0.000331(11)
^{135}Ba 1235.29(12)	0.0148(7)	0.000327(15)
^{135}Ba **1261.52(7)**	**0.095(5)**	**0.00210(11)**
^{137}Ba 1264.54(10)	0.00352(22)	7.8(5)×10^{-5}
^{135}Ba 1310.21(9)	0.0094(7)	2.07(15)×10^{-4}
^{137}Ba 1343.53(8)	0.0087(4)	1.92(9)×10^{-4}
^{135}Ba 1404.08(9)	0.0051(5)	1.13(11)×10^{-4}
^{134}Ba 1415.30(19)	0.0067(5)	1.48(11)×10^{-4}
^{138}Ba 1420.41(9)	0.0090(5)	1.99(11)×10^{-4}
^{137}Ba **1435.77(4)**	**0.308(7)**	**0.00680(15)**
^{137}Ba **1444.91(5)**	**0.0801(20)**	**0.00177(4)**
^{137}Ba 1495.58(9)	0.0104(7)	2.30(15)×10^{-4}
^{135}Ba 1537.0(5)	0.0049(13)	1.1(3)×10^{-4}
^{135}Ba 1551.01(6)	0.0231(9)	0.000510(20)
^{137}Ba 1555.32(11)	0.00433(23)	9.6(5)×10^{-5}
^{138}Ba 1558.16(8)	0.0078(5)	1.72(11)×10^{-4}
^{135}Ba 1572.12(18)	0.0055(10)	1.21(22)×10^{-4}
^{135}Ba 1581.46(6)	0.0096(7)	2.12(15)×10^{-4}
^{137}Ba 1614.18(11)	0.015(7)	0.00033(15)
^{137}Ba 1614.68(10)	0.0147(10)	0.000324(22)
^{137}Ba 1619.88(15)	0.00328(24)	7.2(5)×10^{-5}
^{135}Ba 1666.69(9)	0.0047(5)	1.04(11)×10^{-4}
^{135}Ba 1714.09(9)	0.0076(12)	1.7(3)×10^{-4}

Eγ-keV	σ(Eγ)-barns	k_0
Barium (Z=56), continued		
^{137}Ba 1717.16(20)	0.0071(8)	1.57(18)×10^{-4}
^{137}Ba 1727.32(10)	0.0056(4)	1.24(9)×10^{-4}
^{137}Ba 1745.07(6)	0.0035(4)	7.7(9)×10^{-5}
^{135}Ba 1842.90(11)	0.0054(7)	1.19(15)×10^{-4}
^{138}Ba 1853.30(12)	0.0074(6)	1.63(13)×10^{-4}
^{136}Ba 1898.68(5)	0.0305(10)	0.000673(22)
^{138}Ba 1951.9(5)	0.009(6)	2.0(13)×10^{-4}
^{135}Ba 1955.19(19)	0.0031(9)	6.8(20)×10^{-5}
^{135}Ba 1993.15(16)	0.0044(11)	9.7(24)×10^{-5}
^{137}Ba 2023.55(8)	0.0091(6)	2.01(13)×10^{-4}
^{135}Ba 2080.04(5)	0.0074(5)	1.63(11)×10^{-4}
^{135}Ba 2128.73(9)	0.0114(6)	0.000252(13)
^{137}Ba 2207.85(5)	0.0038(6)	8.4(13)×10^{-5}
^{137}Ba 2210.82(16)	0.0038(8)	8.4(18)×10^{-5}
^{137}Ba **2217.84(8)**	**0.044(5)**	**0.00097(11)**
^{138}Ba 2242.58(13)	0.0116(13)	0.00026(3)
^{137}Ba 2401.96(15)	0.0031(3)	6.8(7)×10^{-5}
^{135}Ba 2485.20(8)	0.00349(24)	7.7(5)×10^{-5}
^{138}Ba 2537.72(10)	0.0102(7)	2.25(15)×10^{-4}
^{138}Ba 2566.0(11)	0.009(5)	2.0(11)×10^{-4}
^{137}Ba 2582.87(8)	0.0033(3)	7.3(7)×10^{-5}
^{138}Ba 2593.42(11)	0.0187(8)	0.000413(18)
^{137}Ba 2639.20(7)	0.0184(16)	0.00041(4)
^{136}Ba 2662.66(5)	0.00401(16)	8.8(4)×10^{-5}
^{137}Ba 2806.29(11)	0.0032(4)	7.1(9)×10^{-5}
^{135}Ba 2976.64(17)	0.0181(7)	0.000399(15)
^{135}Ba 3045.19(23)	0.00336(16)	7.4(4)×10^{-5}
^{137}Ba 3049.93(12)	0.0037(3)	8.2(7)×10^{-5}
^{137}Ba 3099.89(14)	0.0032(5)	7.1(11)×10^{-5}
^{137}Ba 3338.60(10)	0.0090(5)	1.99(11)×10^{-4}
^{135}Ba 3435.5(4)	0.0043(5)	9.5(11)×10^{-5}
^{137}Ba 3503.94(17)	0.0046(4)	1.02(9)×10^{-4}
^{138}Ba **3641.12(9)**	**0.0562(16)**	**0.00124(4)**
^{137}Ba 3643.59(3)	0.0033(17)	7(4)×10^{-5}
^{134}Ba 3676.5(5)	0.0045(3)	9.9(7)×10^{-5}
^{137}Ba 3739.50(12)	0.0042(5)	9.3(11)×10^{-5}
^{137}Ba 3965.98(13)	0.00342(22)	7.5(5)×10^{-5}
^{137}Ba 4025.52(14)	0.0038(4)	8.4(9)×10^{-5}
^{137}Ba 4025.70(14)	0.0038(8)	8.4(18)×10^{-5}
^{137}Ba 4083.64(16)	0.0067(6)	1.48(13)×10^{-4}
^{138}Ba **4095.84(9)**	**0.155(4)**	**0.00342(9)**
^{137}Ba 4103.50(19)	0.0032(5)	7.1(11)×10^{-5}
^{137}Ba 4114.45(19)	0.00329(24)	7.3(5)×10^{-5}
^{137}Ba 4166.05(12)	0.0052(3)	1.15(7)×10^{-4}
^{136}Ba 4242.98(8)	0.0087(10)	1.92(22)×10^{-4}
^{137}Ba 4251.82(13)	0.0057(4)	1.26(9)×10^{-4}
^{137}Ba 4279.55(14)	0.0039(5)	8.6(11)×10^{-5}
^{137}Ba 4280.25(16)	0.0038(3)	8.4(7)×10^{-5}
^{137}Ba 4288.15(14)	0.0059(3)	1.30(7)×10^{-4}
^{137}Ba 4323.34(14)	0.0079(4)	1.74(9)×10^{-4}
^{137}Ba 4331.24(16)	0.0091(12)	2.0(3)×10^{-4}
^{137}Ba 4331.94(14)	0.0090(6)	1.99(13)×10^{-4}
^{137}Ba 4369.47(10)	0.0069(5)	1.52(11)×10^{-4}
^{137}Ba 4445.44(12)	0.0039(3)	8.6(7)×10^{-5}
^{137}Ba 4597.95(22)	0.0044(4)	9.7(9)×10^{-5}
^{137}Ba 4689.43(9)	0.0140(8)	0.000309(18)
^{136}Ba 4723.38(8)	0.0264(8)	0.000583(18)
^{137}Ba 4773.79(15)	0.0063(4)	1.39(9)×10^{-4}
^{137}Ba 4967.90(6)	0.0098(7)	2.16(15)×10^{-4}
^{137}Ba 5107.54(17)	0.0060(4)	1.32(9)×10^{-4}
^{137}Ba 5272.88(10)	0.0088(10)	1.94(22)×10^{-4}
^{135}Ba 5312.42(17)	0.0082(3)	1.81(7)×10^{-4}
^{137}Ba 5448.42(11)	0.0053(6)	1.17(13)×10^{-4}
^{137}Ba **5730.81(6)**	**0.0617(20)**	**0.00136(4)**
^{137}Ba 5972.26(9)	0.0044(3)	9.7(7)×10^{-5}
^{137}Ba 6028.60(8)	0.0093(6)	2.05(13)×10^{-4}
^{135}Ba 6062.37(23)	0.00516(14)	1.14(3)×10^{-4}
^{137}Ba 6421.67(8)	0.00337(19)	7.4(4)×10^{-5}
^{136}Ba 6621.99(8)	0.0034(6)	7.5(13)×10^{-5}
^{135}Ba 8288.93(5)	0.00349(11)	7.70(24)×10^{-5}
^{135}Ba 9107.41(4)	0.00635(23)	1.40(5)×10^{-4}

Table I. Adopted Prompt and Decay Gamma Rays from Thermal Neutron Capture for all Elements, continued

Eγ-keV	σ(Eγ)-barns	k_0
Lanthanum (Z=57), *At.Wt.=138.9055(2),* σ_γ*=9.08(4)*		
^{139}La 14.2380(20)	0.028(6)	0.00061(13)
^{139}La 28.5330(10)	0.0103(11)	2.25(24)×10^{-4}
^{139}La **29.9640(10)**	**0.169(8)**	**0.00369(17)**
^{139}La 34.6460(10)	0.0220(20)	0.00048(4)
^{139}La 45.913(6)	0.0120(7)	0.000262(15)
^{139}La **54.9440(10)**	**0.143(7)**	**0.00312(15)**
^{139}La **63.1790(10)**	**0.208(8)**	**0.00454(17)**
^{139}La 69.1830(20)	0.0137(5)	0.000299(11)
^{139}La 132.695(3)	0.0146(6)	0.000319(13)
^{139}La **155.560(5)**	**0.192(7)**	**0.00419(15)**
^{139}La **162.659(3)**	**0.489(18)**	**0.0107(4)**
^{138}La 166.04(7)	0.0119(12)	0.00026(3)
^{139}La 169.392(10)	0.0382(14)	0.00083(3)
^{139}La 209.127(4)	0.0431(16)	0.00094(4)
^{139}La 215.02(16)	0.025(6)	0.00055(13)
^{139}La **218.225(22)**	**0.78(3)**	**0.0170(7)**
^{139}La **235.771(8)**	**0.111(4)**	**0.00242(9)**
^{139}La **237.660(4)**	**0.320(12)**	**0.0070(3)**
^{139}La 255.040(5)	0.017(4)	0.00037(9)
^{139}La 258.875(22)	0.0233(9)	0.000508(20)
^{139}La **272.306(4)**	**0.502(19)**	**0.0110(4)**
^{139}La 279.979(22)	0.0640(24)	0.00140(5)
^{139}La 283.617(16)	0.0409(15)	0.00089(3)
^{139}La 287.408(22)	0.013(4)	0.00028(9)
^{139}La **288.255(5)**	**0.73(3)**	**0.0159(7)**
^{139}La 290.92(3)	0.0167(6)	0.000364(13)
^{139}La 305.04(8)	0.0147(6)	0.000321(13)
^{139}La 310.14(3)	0.0184(7)	0.000401(15)
^{139}La ***328.762(8)d***	***1.250(18)***	***0.0273[<0.1%]***
^{139}La 329.727(12)	0.0140(5)	0.000305(11)
^{139}La **422.66(4)**	**0.370(14)**	**0.0081(3)**
^{139}La 426.49(3)	0.0435(16)	0.00095(4)
^{139}La ***432.493(12)d***	***0.1780(18)***	***0.00388[<0.1%]***
^{139}La 478.05(5)	0.0407(15)	0.00089(3)
^{139}La ***487.021(12)d***	***2.79(4)***	***0.0609[<0.1%]***
^{139}La **495.620(13)**	**0.081(3)**	**0.00177(7)**
^{139}La 528.34(11)	0.0197(7)	0.000430(15)
^{139}La 538.854(12)	0.0455(17)	0.00099(4)
^{139}La **549.01(3)**	**0.098(4)**	**0.00214(9)**
^{139}La 553.148(12)	0.0602(23)	0.00131(5)
^{139}La **567.386(12)**	**0.335(13)**	**0.0073(3)**
^{139}La 592.05(18)	0.0128(5)	0.000279(11)
^{139}La **595.099(12)**	**0.103(4)**	**0.00225(9)**
^{139}La 602.032(12)	0.0522(20)	0.00114(4)
^{139}La 623.632(12)	0.0517(20)	0.00113(4)
^{139}La 628.314(12)	0.0284(11)	0.000620(24)
^{139}La 640.88(3)	0.0534(20)	0.00117(4)
^{139}La **658.278(12)**	**0.103(4)**	**0.00225(9)**
^{139}La 667.594(14)	0.0580(22)	0.00127(5)
^{139}La **708.244(14)**	**0.134(5)**	**0.00292(11)**
^{139}La 710.07(3)	0.0668(25)	0.00146(6)
^{139}La 711.22(20)	0.0164(6)	0.000358(13)
^{139}La **722.538(14)**	**0.212(8)**	**0.00463(17)**
^{139}La 725.11(20)	0.0125(5)	0.000273(11)
^{139}La 736.777(14)	0.0388(15)	0.00085(3)
^{139}La 744.71(3)	0.010(4)	2.2(9)×10^{-4}
^{139}La ***751.637(18)d***	***0.2650(23)***	***0.00578[<0.1%]***
^{139}La 766.30(5)	0.0127(5)	0.000277(11)
^{139}La 782.733(20)	0.0396(15)	0.00086(3)
^{139}La 787.3(4)	0.008(4)	1.7(9)×10^{-4}
^{138}La ***788.742***	***0.273(5) s^{-1}g^{-1}***	
^{139}La 796.27(5)	0.0162(6)	0.000353(13)
^{139}La ***815.772(19)d***	***1.430(12)***	***0.0312[<0.1%]***
^{139}La 848.99(3)	0.0290(11)	0.000633(24)
^{139}La 863.28(3)	0.0149(6)	0.000325(13)
^{139}La ***867.846(20)d***	***0.337(4)***	***0.00735[<0.1%]***
^{139}La 868.32(5)	0.0558(21)	0.00122(5)
^{139}La 882.21(3)	0.0343(13)	0.00075(3)
^{139}La 887.70(11)	0.0222(8)	0.000484(17)
^{139}La ***919.550(23)d***	***0.1630(18)***	***0.00356[<0.1%]***
^{139}La ***925.189(21)d***	***0.422(4)***	***0.00921[<0.1%]***
^{139}La 941.79(17)	0.0236(9)	0.000515(20)
^{139}La 986.74(3)	0.008(4)	1.7(9)×10^{-4}
^{139}La 991.859(20)	0.0487(18)	0.00106(4)
^{139}La 1006.153(20)	0.0347(13)	0.00076(3)

Eγ-keV	σ(Eγ)-barns	k_0
Lanthanum (Z=57), continued		
^{139}La 1020.392(20)	0.0535(20)	0.00117(4)
^{139}La 1055.038(20)	0.015(5)	0.00033(11)
^{138}La 1215.72(22)	0.019(4)	0.00041(9)
^{138}La 1219.79(17)	0.026(4)	0.00057(9)
^{138}La ***1435.795(10)***	***0.539(7) s^{-1}g^{-1}***	
^{138}La 1537.7(3)	0.009(3)	2.0(7)×10^{-4}
^{139}La ***1596.21(4)d***	***5.84(9)***	***0.1274[<0.1%]***
^{139}La 2345.21(6)	0.0164(6)	0.000358(13)
^{139}La 2512.55(17)	0.0194(7)	0.000423(15)
^{139}La 2517.04(8)	0.0353(13)	0.00077(3)
^{139}La ***2521.40(5)d***	***0.2120(23)***	***0.00463[<0.1%]***
^{139}La 2532.39(4)	0.0188(7)	0.000410(15)
^{139}La 2538.82(7)	0.0119(5)	0.000260(11)
^{139}La 2555.76(4)	0.0231(9)	0.000504(20)
^{139}La 2561.85(3)	0.0259(10)	0.000565(22)
^{139}La 2564.79(3)	0.0373(14)	0.00081(3)
^{139}La 2598.16(4)	0.0231(9)	0.000504(20)
^{139}La 2607.17(3)	0.0344(13)	0.00075(3)
^{139}La 2611.6(3)	0.0086(3)	1.88(7)×10^{-4}
^{139}La 2617.76(4)	0.0149(6)	0.000325(13)
^{139}La 2637.97(6)	0.0084(5)	1.83(11)×10^{-4}
^{139}La 2640.00(3)	0.0160(6)	0.000349(13)
^{139}La 2661.55(4)	0.0263(10)	0.000574(22)
^{139}La 2668.00(4)	0.0247(9)	0.000539(20)
^{139}La 2677.63(12)	0.0100(4)	2.18(9)×10^{-4}
^{139}La 2688.09(3)	0.0254(10)	0.000554(22)
^{139}La 2692.30(6)	0.0115(7)	0.000251(15)
^{139}La 2698.19(4)	0.0185(7)	0.000404(15)
^{139}La 2702.38(6)	0.0109(4)	2.38(9)×10^{-4}
^{139}La 2710.62(4)	0.0117(4)	0.000255(9)
^{139}La 2714.63(3)	0.0141(5)	0.000308(11)
^{139}La 2724.26(4)	0.0151(6)	0.000329(13)
^{139}La 2735.13(4)	0.0188(7)	0.000410(15)
^{139}La 2739.00(4)	0.0200(8)	0.000436(17)
^{139}La 2747.65(4)	0.0198(8)	0.000432(17)
^{139}La 2757.726(24)	0.0515(19)	0.00112(4)
^{139}La 2764.51(4)	0.0289(11)	0.000631(24)
^{139}La 2767.58(4)	0.0287(11)	0.000626(24)
^{139}La 2799.65(6)	0.0109(4)	2.38(9)×10^{-4}
^{139}La 2804.82(4)	0.0203(8)	0.000443(17)
^{139}La 2837.50(4)	0.0195(7)	0.000425(15)
^{139}La 2852.55(4)	0.0139(5)	0.000303(11)
^{139}La 2863.06(3)	0.073(3)	0.00159(7)
^{139}La 2880.60(6)	0.0101(4)	2.20(9)×10^{-4}
^{139}La 2896.63(6)	0.0081(5)	1.77(11)×10^{-4}
^{139}La 2903.65(5)	0.0112(4)	2.44(9)×10^{-4}
^{139}La 2913.16(4)	0.0124(5)	0.000271(11)
^{139}La 2916.89(4)	0.0130(8)	0.000284(17)
^{139}La 2919.73(6)	0.0086(3)	1.88(7)×10^{-4}
^{139}La 2925.00(3)	0.0435(16)	0.00095(4)
^{139}La 2961.34(4)	0.0262(10)	0.000572(22)
^{139}La 2969.27(4)	0.0409(15)	0.00089(3)
^{139}La 2977.35(5)	0.0164(6)	0.000358(13)
^{139}La 2985.02(6)	0.0100(4)	2.18(9)×10^{-4}
^{139}La 2988.53(3)	0.0458(17)	0.00100(4)
^{139}La 2998.36(5)	0.0136(5)	0.000297(11)
^{139}La 3017.070(24)	0.0671(25)	0.00146(6)
^{139}La 3031.27(4)	0.0330(12)	0.00072(3)
^{139}La 3035.56(3)	0.0518(20)	0.00113(4)
^{139}La 3040.94(4)	0.0294(11)	0.000641(24)
^{139}La 3051.49(5)	0.0183(7)	0.000399(15)
^{139}La 3057.66(6)	0.0194(7)	0.000423(15)
^{139}La 3078.80(6)	0.0130(5)	0.000284(11)
^{139}La **3082.979(24)**	**0.140(5)**	**0.00305(11)**
^{139}La 3091.30(6)	0.0114(4)	2.49(9)×10^{-4}
^{139}La 3095.50(4)	0.0191(7)	0.000417(15)
^{139}La 3112.38(3)	0.0320(12)	0.00070(3)
^{139}La 3115.94(3)	0.0176(7)	0.000384(15)
^{139}La 3119.05(4)	0.0118(8)	0.000257(17)
^{139}La 3137.21(4)	0.0239(9)	0.000521(20)
^{139}La 3142.75(3)	0.0320(12)	0.00070(3)
^{139}La 3155.06(6)	0.0090(3)	1.96(7)×10^{-4}
^{139}La 3163.792(24)	0.0324(12)	0.00071(3)
^{139}La 3174.77(4)	0.0135(5)	0.000295(11)
^{139}La 3189.09(3)	0.0538(20)	0.00117(4)

Table I. Adopted Prompt and Decay Gamma Rays from Thermal Neutron Capture for all Elements, continued

Eγ-keV	σ(Eγ)-barns	k_0
Lanthanum (Z=57), continued		
^{139}La 3197.52(6)	0.0213(8)	0.000465(17)
^{139}La 3213.35(4)	0.0144(5)	0.000314(11)
^{139}La 3219.80(3)	0.0300(11)	0.000655(24)
^{139}La 3265.263(24)	0.0532(20)	0.00116(4)
^{139}La 3281.248(24)	0.0506(19)	0.00110(4)
^{139}La 3318.99(4)	0.0319(12)	0.00070(3)
^{139}La 3341.48(4)	0.0090(5)	$1.96(11)\times10^{-4}$
^{139}La 3359.88(3)	0.0120(7)	0.000262(15)
^{139}La 3383.39(3)	0.0242(9)	0.000528(20)
^{139}La 3395.44(4)	0.0161(6)	0.000351(13)
^{139}La 3404.81(4)	0.0171(6)	0.000373(13)
^{139}La 3417.24(4)	0.0181(7)	0.000395(15)
^{139}La 3424.29(3)	0.0232(14)	0.00051(3)
^{139}La 3425.399(24)	0.058(3)	0.00127(7)
^{139}La 3437.83(4)	0.0247(9)	0.000539(20)
^{139}La 3442.20(3)	0.0410(15)	0.00089(3)
^{139}La 3459.91(3)	0.0199(8)	0.000434(17)
^{139}La 3477.14(3)	0.0444(17)	0.00097(4)
^{139}La 3488.77(3)	0.0170(6)	0.000371(13)
^{139}La 3564.87(4)	0.0130(5)	0.000284(11)
^{139}La 3580.90(4)	0.0129(5)	0.000281(11)
^{139}La 3596.45(4)	0.0157(6)	0.000343(13)
^{139}La 3606.467(24)	0.0556(21)	0.00121(5)
^{139}La 3610.026(24)	0.0548(21)	0.00120(5)
^{139}La **3665.631(24)**	**0.135(5)**	**0.00295(11)**
^{139}La **3679.641(24)**	**0.139(5)**	**0.00303(11)**
^{139}La 3683.89(3)	0.0322(21)	0.00070(5)
^{139}La 3691.35(3)	0.0350(13)	0.00076(3)
^{139}La 3718.321(24)	0.0384(15)	0.00084(3)
^{139}La 3727.700(24)	0.073(3)	0.00159(7)
^{139}La 3735.30(4)	0.0170(6)	0.000371(13)
^{139}La 3738.56(4)	0.0352(13)	0.00077(3)
^{139}La 3744.87(4)	0.0234(9)	0.000511(20)
^{139}La 3821.40(4)	0.0131(9)	0.000286(20)
^{139}La 3900.979(24)	0.0531(20)	0.00116(4)
^{139}La 3951.14(3)	0.0198(8)	0.000432(17)
^{139}La 3973.56(4)	0.0120(5)	0.000262(11)
^{139}La 4044.182(21)	0.0297(11)	0.000648(24)
^{139}La 4060.007(20)	0.0297(11)	0.000648(24)
^{139}La 4105.897(20)	0.0238(9)	0.000519(20)
^{139}La 4125.31(3)	0.0183(7)	0.000399(15)
^{139}La **4389.505(14)**	**0.255(10)**	**0.00556(22)**
^{139}La **4416.22(3)**	**0.247(9)**	**0.00539(20)**
^{139}La **4502.647(13)**	**0.164(6)**	**0.00358(13)**
^{139}La 4558.891(13)	0.0488(18)	0.00106(4)
^{139}La **4842.695(7)**	**0.661(25)**	**0.0144(6)**
^{139}La **4888.606(7)**	**0.150(6)**	**0.00327(13)**
^{139}La 4998.250(6)	0.0145(8)	0.000316(17)
^{139}La **5097.726(6)**	**0.68(3)**	**0.0148(7)**
^{139}La **5126.257(6)**	**0.114(4)**	**0.00249(9)**
^{139}La 5130.939(6)	0.0159(9)	0.000347(20)
^{139}La **5160.902(6)**	**0.089(5)**	**0.00194(11)**
Cerium (Z=58), *At.Wt.=140.116(1),* σ_γ*=0.635(18)*		
^{136}Ce *254.29(5)d*	*$2.0(6)\times10^{-4}$*	*4.3×10^{-6}[1.0%]*
^{138}Ce 255.65(6)	0.0082(7)	$1.77(15)\times10^{-4}$
^{140}Ce **475.04(4)**	**0.082(7)**	**0.00177(15)**
^{136}Ce *513.7(4)*	*0.0021(5)*	*$4.5(11)\times10^{-5}$*
^{140}Ce **661.99(5)**	**0.241(15)**	**0.0052(3)**
^{140}Ce 671.64(5)	0.0057(5)	$1.23(11)\times10^{-4}$
^{142}Ce **737.43(7)**	**0.026(3)**	**0.00056(7)**
^{142}Ce 765.97(5)	0.0145(12)	0.00031(3)
^{142}Ce 789.40(8)	0.0050(6)	$1.08(13)\times10^{-4}$
^{142}Ce 808.35(6)	0.0102(9)	$2.21(19)\times10^{-4}$
^{142}Ce 820.07(8)	0.0026(3)	$5.6(7)\times10^{-5}$
^{142}Ce 862.23(7)	0.0044(4)	$9.5(9)\times10^{-5}$
^{142}Ce 915.03(7)	0.0086(11)	$1.86(24)\times10^{-4}$
^{142}Ce 987.69(9)	0.0040(5)	$8.7(11)\times10^{-5}$
^{140}Ce 1052.58(5)	0.0051(5)	$1.10(11)\times10^{-4}$
^{142}Ce **1107.66(5)**	**0.040(3)**	**0.00087(7)**
^{140}Ce 1146.68(4)	0.0096(9)	$2.08(19)\times10^{-4}$
^{142}Ce 1153.97(5)	0.0146(12)	0.00032(3)
^{142}Ce 1165.71(8)	0.0040(4)	$8.7(9)\times10^{-5}$
^{140}Ce 1288.69(5)	0.0076(6)	$1.64(13)\times10^{-4}$
^{140}Ce 1331.63(7)	0.0058(5)	$1.25(11)\times10^{-4}$

Eγ-keV	σ(Eγ)-barns	k_0
Cerium (Z=58), continued		
^{138}Ce 1347.24(13)	0.0028(3)	$6.1(7)\times10^{-5}$
^{140}Ce 1385.74(6)	0.0060(6)	$1.30(13)\times10^{-4}$
^{140}Ce 1497.03(12)	0.0062(9)	$1.34(19)\times10^{-4}$
^{140}Ce 1527.61(6)	0.0027(3)	$5.8(7)\times10^{-5}$
^{142}Ce 1587.90(11)	0.0028(3)	$6.1(7)\times10^{-5}$
^{140}Ce 1673.95(9)	0.0033(4)	$7.1(9)\times10^{-5}$
^{140}Ce 1747.90(7)	0.0078(7)	$1.69(15)\times10^{-4}$
^{140}Ce 1808.67(6)	0.0038(4)	$8.2(9)\times10^{-5}$
^{142}Ce 2203.36(10)	0.0039(5)	$8.4(11)\times10^{-5}$
^{140}Ce 2905.37(7)	0.0058(5)	$1.25(11)\times10^{-4}$
^{142}Ce 2931.94(14)	0.0029(3)	$6.3(7)\times10^{-5}$
^{140}Ce 3002.41(6)	0.0104(8)	$2.25(17)\times10^{-4}$
^{140}Ce 3018.24(7)	0.0114(10)	$2.47(22)\times10^{-4}$
^{140}Ce 3092.19(8)	0.0072(6)	$1.56(13)\times10^{-4}$
^{140}Ce 3238.52(6)	0.0066(6)	$1.43(13)\times10^{-4}$
^{140}Ce 3434.50(8)	0.0039(4)	$8.4(9)\times10^{-5}$
^{140}Ce 3619.46(5)	0.0095(8)	$2.05(17)\times10^{-4}$
^{142}Ce 3990.70(15)	0.0038(4)	$8.2(9)\times10^{-5}$
^{142}Ce 4282.22(12)	0.0037(4)	$8.0(9)\times10^{-5}$
^{140}Ce **4291.08(4)**	**0.053(4)**	**0.00115(9)**
^{142}Ce **4336.46(8)**	**0.0251(20)**	**0.00054(4)**
^{140}Ce **4766.10(5)**	**0.113(8)**	**0.00244(17)**
Praseodymium (Z=59), *At.Wt.=140.90765(2),* σ_γ*=11.5(3)*		
^{141}Pr 32.276(3)	0.055(11)	0.00118(24)
^{141}Pr 54.5530(20)	0.022(4)	0.00047(9)
^{141}Pr 55.957(3)	0.014(3)	0.00030(7)
^{141}Pr **60.0630(20)**	**0.134(14)**	**0.0029(3)**
^{141}Pr **64.5050(20)**	**0.137(6)**	**0.00295(13)**
^{141}Pr **68.6110(20)**	**0.116(6)**	**0.00249(13)**
^{141}Pr **84.998(3)**	**0.207(11)**	**0.00445(24)**
^{141}Pr 86.37(7)	0.085(7)	0.00183(15)
^{141}Pr 104.570(3)	0.0397(13)	0.00085(3)
^{141}Pr 115.528(4)	0.0419(13)	0.00090(3)
^{141}Pr 124.5680(20)	0.0339(18)	0.00073(4)
^{141}Pr **126.8460(20)**	**0.307(15)**	**0.0066(3)**
^{141}Pr **140.9050(20)**	**0.479(10)**	**0.01030(22)**
^{141}Pr 153.28(3)	0.0135(7)	0.000290(15)
^{141}Pr 159.1230(20)	0.0122(7)	0.000262(15)
^{141}Pr **176.8630(20)**	**1.06(4)**	**0.0228(9)**
^{141}Pr **182.786(4)**	**0.377(14)**	**0.0081(3)**
^{141}Pr 185.62(7)	0.017(4)	0.00037(9)
^{141}Pr 187.85(5)	0.048(12)	0.0010(3)
^{141}Pr 200.526(4)	0.0379(12)	0.00082(3)
^{141}Pr 231.18(4)	0.0127(10)	0.000273(22)
^{141}Pr 251.53(4)	0.0172(19)	0.00037(4)
^{141}Pr 268.38(4)	0.0166(8)	0.000357(17)
^{141}Pr 294.87(3)	0.0275(18)	0.00059(4)
^{141}Pr 360.64(3)	0.0342(19)	0.00074(4)
^{141}Pr 403.976(24)	0.0322(14)	0.00069(3)
^{141}Pr 415.17(5)	0.0122(10)	0.000262(22)
^{141}Pr 460.16(4)	0.057(3)	0.00123(7)
^{141}Pr 508.78(4)	0.104(10)	0.00224(22)
^{141}Pr 528.219(23)	0.0579(19)	0.00125(4)
^{141}Pr **546.448(15)**	**0.148(4)**	**0.00318(9)**
^{141}Pr **557.75(3)**	**0.15(4)**	**0.0032(9)**
^{141}Pr **560.495(23)**	**0.150(7)**	**0.00323(15)**
^{141}Pr **570.111(14)**	**0.112(5)**	**0.00241(11)**
^{141}Pr **573.28(4)**	**0.12(3)**	**0.0026(7)**
^{141}Pr **619.29(4)**	**0.152(4)**	**0.00327(9)**
^{141}Pr **630.04(3)**	**0.16(6)**	**0.0034(13)**
^{141}Pr **633.34(4)**	**0.113(4)**	**0.00243(9)**
^{141}Pr **645.720(24)**	**0.311(7)**	**0.00669(15)**
^{141}Pr 684.59(3)	0.098(22)	0.0021(5)
^{141}Pr **698.65(3)**	**0.22(6)**	**0.0047(13)**
^{141}Pr 705.309(24)	0.0399(20)	0.00086(4)
^{141}Pr 718.014(24)	0.0435(21)	0.00094(5)
^{141}Pr 729.233(14)	0.0712(23)	0.00153(5)
^{141}Pr 737.65(7)	0.0396(17)	0.00085(4)
^{141}Pr **746.973(14)**	**0.146(4)**	**0.00314(9)**
^{141}Pr 772.566(24)	0.044(16)	0.0009(3)
^{141}Pr 790.306(24)	0.051(3)	0.00110(7)
^{141}Pr 801.29(4)	0.10(3)	0.0022(7)
^{141}Pr 804.91(7)	0.0455(25)	0.00098(5)
^{141}Pr 822.65(7)	0.0179(15)	0.00038(3)

Table I. Adopted Prompt and Decay Gamma Rays from Thermal Neutron Capture for all Elements, continued

	Eγ-keV	σ(Eγ)-barns	k_0
Praseodymium (Z=59), continued			
^{141}Pr	**864.98(3)**	**0.14(3)**	**0.0030(7)**
^{141}Pr	893.16(4)	0.053(3)	0.00114(7)
^{141}Pr	956.84(3)	0.091(7)	0.00196(15)
^{141}Pr	974.47(4)	0.076(22)	0.0016(5)
^{141}Pr	**992.00(4)**	**0.138(10)**	**0.00297(22)**
^{141}Pr	**1006.361(22)**	**0.153(8)**	**0.00329(17)**
^{141}Pr	1024.10(3)	0.048(3)	0.00103(7)
^{141}Pr	1102.51(4)	0.056(3)	0.00120(7)
^{141}Pr	**1150.946(21)**	**0.141(5)**	**0.00303(11)**
^{141}Pr	***1575.6(5)d***	***0.426(12)***	***0.0092[1.8%]***
^{141}Pr	3532.83(3)	0.026(3)	0.00056(7)
^{141}Pr	3535.33(3)	0.026(3)	0.00056(7)
^{141}Pr	3549.71(3)	0.0288(24)	0.00062(5)
^{141}Pr	3556.85(3)	0.0127(17)	0.00027(4)
^{141}Pr	3563.23(3)	0.0110(23)	$2.4(5)\times10^{-4}$
^{141}Pr	3582.48(3)	0.0236(21)	0.00051(5)
^{141}Pr	3587.84(3)	0.0128(17)	0.00028(4)
^{141}Pr	3591.03(3)	0.0139(19)	0.00030(4)
^{141}Pr	3599.14(3)	0.0234(24)	0.00050(5)
^{141}Pr	3602.51(3)	0.054(3)	0.00116(7)
^{141}Pr	3620.02(3)	0.024(3)	0.00052(7)
^{141}Pr	3629.19(3)	0.020(4)	0.00043(9)
^{141}Pr	3645.82(3)	0.015(3)	0.00032(7)
^{141}Pr	3650.20(3)	0.061(3)	0.00131(7)
^{141}Pr	3651.73(3)	0.0127(8)	0.000273(17)
^{141}Pr	3654.47(3)	0.060(4)	0.00129(9)
^{141}Pr	3664.35(3)	0.0193(25)	0.00042(5)
^{141}Pr	3678.37(3)	0.034(3)	0.00073(7)
^{141}Pr	3690.27(3)	0.0107(19)	$2.3(4)\times10^{-4}$
^{141}Pr	3713.73(3)	0.047(3)	0.00101(7)
^{141}Pr	3742.46(3)	0.0191(24)	0.00041(5)
^{141}Pr	3762.26(3)	0.0177(24)	0.00038(5)
^{141}Pr	3771.88(3)	0.023(3)	0.00049(7)
^{141}Pr	3776.46(3)	0.0117(8)	0.000252(17)
^{141}Pr	**3790.37(3)**	**0.140(6)**	**0.00301(13)**
^{141}Pr	3800.04(3)	0.0144(23)	0.00031(5)
^{141}Pr	3811.64(3)	0.0231(23)	0.00050(5)
^{141}Pr	3862.86(3)	0.0199(25)	0.00043(5)
^{141}Pr	3871.70(3)	0.0164(23)	0.00035(5)
^{141}Pr	3892.63(3)	0.039(3)	0.00084(7)
^{141}Pr	3902.50(3)	0.0117(20)	0.00025(4)
^{141}Pr	3911.07(3)	0.042(3)	0.00090(7)
^{141}Pr	3923.07(3)	0.023(3)	0.00049(7)
^{141}Pr	3941.19(3)	0.0153(25)	0.00033(5)
^{141}Pr	3947.09(3)	0.0169(23)	0.00036(5)
^{141}Pr	4000.97(3)	0.0187(24)	0.00040(5)
^{141}Pr	4012.20(3)	0.027(3)	0.00058(7)
^{141}Pr	4058.05(3)	0.0133(16)	0.00029(3)
^{141}Pr	4090.15(3)	0.0137(16)	0.00029(3)
^{141}Pr	4120.77(3)	0.0130(16)	0.00028(3)
^{141}Pr	4134.04(3)	0.0408(25)	0.00088(5)
^{141}Pr	4163.89(3)	0.035(3)	0.00075(7)
^{141}Pr	4177.00(3)	0.0387(25)	0.00083(5)
^{141}Pr	4252.14(3)	0.032(3)	0.00069(7)
^{141}Pr	4276.54(3)	0.044(4)	0.00095(9)
^{141}Pr	4325.50(3)	0.0124(17)	0.00027(4)
^{141}Pr	4347.62(3)	0.0166(18)	0.00036(4)
^{141}Pr	4372.53(3)	0.0269(22)	0.00058(5)
^{141}Pr	4440.54(3)	0.0252(20)	0.00054(4)
^{141}Pr	4449.26(3)	0.0228(19)	0.00049(4)
^{141}Pr	4496.44(3)	0.098(6)	0.00211(13)
^{141}Pr	4579.64(3)	0.0126(17)	0.00027(4)
^{141}Pr	4592.28(3)	0.0165(19)	0.00035(4)
^{141}Pr	**4692.120(22)**	**0.291(10)**	**0.00626(22)**
^{141}Pr	4722.82(4)	0.083(4)	0.00179(9)
^{141}Pr	4731.284(9)	0.0149(18)	0.00032(4)
^{141}Pr	**4801.22(3)**	**0.140(8)**	**0.00301(17)**
^{141}Pr	4864.91(4)	0.0112(16)	$2.4(3)\times10^{-4}$
^{141}Pr	5020.41(7)	0.0135(17)	0.00029(4)
^{141}Pr	5052.750(24)	0.0329(21)	0.00071(5)
^{141}Pr	**5096.081(15)**	**0.208(8)**	**0.00447(17)**
^{141}Pr	5137.972(24)	0.098(4)	0.00211(9)
^{141}Pr	**5140.72(3)**	**0.269(11)**	**0.00579(24)**
^{141}Pr	5206.03(4)	0.033(3)	0.00071(7)
^{141}Pr	**5666.170(6)**	**0.379(15)**	**0.0082(3)**

	Eγ-keV	σ(Eγ)-barns	k_0
Praseodymium (Z=59), continued			
^{141}Pr	5698.445(6)	0.0117(14)	0.00025(3)
^{141}Pr	5770.736(6)	0.0371(23)	0.00080(5)
^{141}Pr	5825.286(5)	0.040(3)	0.00086(7)
^{141}Pr	**5843.026(5)**	**0.147(6)**	**0.00316(13)**
Neodymium (Z=60), *At.Wt.=144.24(3)*, σ_γ*=49.5(12)*			
^{148}Nd	*165.0870(10)*	*0.032(8)*	*0.00067(17)*
^{150}Nd	*189.0530(10)*	*0.020(7)*	*0.00042(15)*
^{143}Nd	201.86(7)	0.343(23)	0.0072(5)
^{148}Nd	*211.309(7)d*	*0.0370(16)*	*0.00078[18%]*
^{146}Nd	*314.675(4)*	*0.0280(24)*	*0.00059(5)*
^{143}Nd	426.73(5)	0.574(15)	0.0121(3)
^{145}Nd	453.89(5)	3.03(8)	0.0637(17)
^{143}Nd	476.82(5)	1.93(5)	0.0405(11)
^{142}Nd	563.87(3)	0.74(3)	0.0155(6)
^{145}Nd	589.46(6)	0.97(4)	0.0204(8)
^{143}Nd	**618.062(19)**	**13.4(3)**	**0.282(6)**
^{143}Nd	**696.499(10)**	**33.3(23)**	**0.70(5)**
^{145}Nd	735.85(9)	0.479(13)	0.0101(3)
^{142}Nd	**742.106(22)**	**3.8(4)**	**0.080(8)**
^{143}Nd	778.58(4)	0.791(20)	0.0166(4)
^{143}Nd	**814.12(3)**	**4.98(12)**	**0.1046(25)**
^{143}Nd	834.9(5)	0.333(24)	0.0070(5)
^{143}Nd	863.89(8)	1.07(4)	0.0225(8)
^{143}Nd	**864.301(10)**	**4.27(11)**	**0.0897(23)**
^{143}Nd	980.60(4)	1.21(3)	0.0254(6)
^{143}Nd	1136.92(6)	0.669(18)	0.0141(4)
^{143}Nd	1357.04(8)	0.337(9)	0.00708(19)
^{143}Nd	1376.19(7)	0.751(20)	0.0158(4)
^{143}Nd	1413.16(4)	1.90(5)	0.0399(11)
^{143}Nd	1418.07(10)	0.353(11)	0.00742(23)
^{143}Nd	1481.95(8)	0.608(21)	0.0128(4)
^{143}Nd	1515.84(9)	0.455(13)	0.0096(3)
^{143}Nd	1560.796(14)	0.404(11)	0.00849(23)
^{143}Nd	1671.74(10)	0.97(8)	0.0204(17)
^{143}Nd	1895.74(16)	0.387(12)	0.00813(25)
^{144}Nd	*4836.36(25)*	*0.32(3)*	*0.0067(6)*
^{142}Nd	5381.19(7)	0.49(4)	0.0103(8)
^{143}Nd	6255.99(17)	1.50(12)	0.0315(25)
^{143}Nd	6502.22(17)	3.18(17)	0.067(4)
^{145}Nd	7110.98(8)	0.368(11)	0.00773(23)
Samarium (Z=62), *At.Wt.=150.36(3)*, σ_γ*=5621(80)*			
^{154}Sm	*104.320(5)d*	*1.43(4)*	*0.0288[55%]*
^{152}Sm	*127.297(3)*	*4.1(3)*	*0.083(6)*
^{150}Sm	*167.77(5)*	*0.73(13)*	*0.015(3)*
^{149}Sm	**333.97(4)**	**4790(60)**	**96.5(12)**
^{149}Sm	403.02(3)	85.2(16)	1.72(3)
^{149}Sm	**439.40(4)**	**2860(150)**	**58(3)**
^{149}Sm	485.95(7)	72(3)	1.45(6)
^{149}Sm	**505.51(3)**	**528(80)**	**10.6(16)**
^{147}Sm	*550.10(9)*	*9.6(6)*	*0.193(12)*
^{149}Sm	**584.27(3)**	**480(70)**	**9.7(14)**
^{149}Sm	675.83(3)	172(7)	3.47(14)
^{149}Sm	712.20(3)	267(4)	5.38(8)
^{149}Sm	731.20(4)	54(4)	1.09(8)
^{149}Sm	**737.44(4)**	**597(8)**	**12.03(16)**
^{149}Sm	748.13(4)	67.9(20)	1.37(4)
^{154}Sm	*819.880(5)*	*0.153(10)*	*0.00308(20)*
^{149}Sm	831.78(5)	62.7(17)	1.26(3)
^{149}Sm	859.86(4)	88(4)	1.77(8)
^{149}Sm	869.29(3)	119(6)	2.40(12)
^{149}Sm	1165.76(5)	61(3)	1.23(6)
^{149}Sm	1170.59(4)	230(10)	4.64(20)
^{149}Sm	1177.3(4)	57(3)	1.15(6)
^{149}Sm	1193.84(4)	106(3)	2.14(6)
^{149}Sm	1247.04(8)	51(3)	1.03(6)
^{149}Sm	1262.07(10)	62(5)	1.25(10)
^{149}Sm	1321.95(7)	76(9)	1.53(18)
^{149}Sm	1350.39(5)	94(12)	1.89(24)
Europium (Z=63), *At.Wt.=151.964(1)*, σ_γ*=4560(140)*			
^{151}Eu	19.700(10)	59(30)	1.2(6)
^{151}Eu	**48.31(17)**	**181(70)**	**3.6(14)**
^{151}Eu	52.39(9)	55(3)	1.10(6)

Table I. Adopted Prompt and Decay Gamma Rays from Thermal Neutron Capture for all Elements, continued

Eγ-keV	σ(Eγ)-barns	k_0
Europium (Z=63), continued		
^{151}Eu 65.1(3)	16(8)	0.32(16)
^{153}Eu 68.23(9)	69(20)	1.4(4)
^{153}Eu 71.24(12)	45(14)	0.9(3)
^{151}Eu 73.21(9)	106(22)	2.1(4)
^{153}Eu 74.86(12)	43(12)	0.86(24)
^{151}Eu **77.23(4)**	**187(13)**	**3.7(3)**
^{151}Eu 87.13(11)	29(3)	0.58(6)
^{151}Eu 88.31(12)	42(5)	0.84(10)
^{151}Eu **89.847(6)**	**1430(30)**	**28.5(6)**
^{151}Eu 91.20(10)	20(10)	0.40(20)
^{153}Eu 100.86(23)	24(5)	0.48(10)
^{151}Eu 103.34(13)	48(5)	0.96(10)
^{153}Eu 106.57(14)	42(6)	0.84(12)
^{151}Eu 111.0(3)	22(6)	0.44(12)
^{151}Eu 113.1(3)	15(5)	0.30(10)
^{151}Eu 117.54(10)	14.7(22)	0.29(4)
^{151}Eu 121.71(11)	17.7(25)	0.35(5)
^{151}Eu 124.01(16)	25(3)	0.50(6)
^{153}Eu 125.19(16)	25(3)	0.50(6)
^{153}Eu 129.06(12)	14.7(16)	0.29(3)
^{151}Eu 132.71(10)	20.7(13)	0.41(3)
^{151}Eu 135.42(9)	27.8(14)	0.55(3)
^{151}Eu 140.19(9)	21(4)	0.42(8)
^{151}Eu 143.54(8)	43(3)	0.86(6)
^{153}Eu 154.14(9)	22(3)	0.44(6)
^{151}Eu 167.01(13)	18.9(19)	0.38(4)
^{151}Eu 169.28(9)	54.8(22)	1.09(4)
^{151}Eu 171.95(9)	40(3)	0.80(6)
^{153}Eu 179.83(13)	20(3)	0.40(6)
^{151}Eu 182.38(11)	23(3)	0.46(6)
^{153}Eu 187.37(8)	31.2(14)	0.62(3)
^{151}Eu 190.96(11)	19.7(14)	0.39(3)
^{151}Eu 193.11(13)	28.3(20)	0.56(4)
^{151}Eu 199.12(10)	25.5(15)	0.51(3)
^{151}Eu 203.63(10)	18.4(14)	0.37(3)
^{151}Eu 206.53(8)	58.7(20)	1.17(4)
^{151}Eu 208.51(18)	16.1(21)	0.32(4)
^{151}Eu 221.30(8)	73(3)	1.46(6)
^{151}Eu 233.22(14)	15.9(23)	0.32(5)
^{151}Eu 244.88(24)	26.3(22)	0.52(4)
^{151}Eu 246.5(3)	15(3)	0.30(6)
^{151}Eu 260.66(9)	15.9(18)	0.32(4)
^{151}Eu 273.65(8)	17.3(12)	0.345(24)
^{153}Eu 281.78(9)	20.4(8)	0.407(16)
^{151}Eu 285.10(9)	23.2(18)	0.46(4)
^{153}Eu 299.83(8)	24.0(6)	0.479(12)
^{151}Eu ***841.570(5)d***	***223(5)***	***4.45[3.6%]***
^{151}Eu ***963.390(12)d***	***183.0(16)***	***3.65[3.6%]***
Gadolinium (Z=64), *At.Wt.=157.25(3)*, σ_γ*=48770(150)*		
^{157}Gd **79.5100(10)**	**4010(100)**	**77.3(19)**
^{154}Gd *86.5470(10)*	*0.57(9)*	*0.0110(17)*
^{155}Gd **88.9670(10)**	**1380(40)**	**26.6(8)**
^{152}Gd *109.7600(10)*	*0.089(4)*	*0.00172(8)*
^{157}Gd **181.931(4)**	**7200(300)**	**139(6)**
^{155}Gd **199.2130(10)**	**2020(60)**	**38.9(12)**
^{157}Gd 255.654(4)	350(19)	6.7(4)
^{157}Gd 277.544(7)	493(12)	9.50(23)
^{155}Gd 296.526(3)	187(5)	3.60(10)
^{160}Gd *360.940(20)d*	*0.199(5)*	*0.00384[91%]*
^{157}Gd 528.024(8)	97(11)	1.87(21)
^{157}Gd 539.608(5)	144(5)	2.78(10)
^{157}Gd 595.728(7)	75(3)	1.45(6)
^{157}Gd 606.400(8)	271(8)	5.22(15)
^{155}Gd 626.275(8)	73(22)	1.4(4)
^{157}Gd 637.474(12)	114(4)	2.20(8)
^{157}Gd 675.43(3)	76(5)	1.46(10)
^{157}Gd 688.892(11)	122(7)	2.35(13)
^{157}Gd 743.066(21)	177(5)	3.41(10)
^{157}Gd 750.109(10)	118(11)	2.27(21)
^{157}Gd 768.37(3)	221(11)	4.26(21)
^{157}Gd **780.174(10)**	**1010(22)**	**19.5(4)**
^{157}Gd 782.28(3)	134(5)	2.58(10)
^{157}Gd 814.602(10)	89(8)	1.72(15)
^{157}Gd 820.107(24)	118(7)	2.27(13)

Eγ-keV	σ(Eγ)-barns	k_0
Gadolinium (Z=64), continued		
^{157}Gd 824.127(24)	133(8)	2.56(15)
^{155}Gd 841.218(12)	80(24)	1.5(5)
^{157}Gd 852.885(25)	194(5)	3.74(10)
^{157}Gd 852.947(9)	202(30)	3.9(6)
^{157}Gd 867.682(11)	83(4)	1.60(8)
^{157}Gd 870.690(25)	127(19)	2.4(4)
^{157}Gd 870.815(25)	434(11)	8.36(21)
^{157}Gd 870.877(9)	216(40)	4.2(8)
^{157}Gd 874.93(3)	151(5)	2.91(10)
^{157}Gd 879.29(3)	139(5)	2.68(10)
^{157}Gd **897.502(10)**	**1200(50)**	**23.1(10)**
^{157}Gd **897.611(10)**	**1090(50)**	**21.0(10)**
^{157}Gd 915.017(10)	394(10)	7.59(19)
^{157}Gd 917.378(25)	262(16)	5.0(3)
^{157}Gd 917.54(3)	268(7)	5.16(13)
^{157}Gd 922.466(20)	98(8)	1.89(15)
^{157}Gd 942.404(11)	120(11)	2.31(21)
^{157}Gd **944.174(10)**	**3090(70)**	**59.5(13)**
^{157}Gd 953.067(21)	73(6)	1.41(12)
^{157}Gd 954.296(10)	89(15)	1.7(3)
^{155}Gd 959.774(12)	147(50)	2.8(10)
^{157}Gd 960.082(11)	216(17)	4.2(3)
^{155}Gd 960.553(14)	84(40)	1.6(8)
^{157}Gd **962.104(10)**	**2050(130)**	**39.5(25)**
^{155}Gd 969.877(18)	172(50)	3.3(10)
^{157}Gd **977.121(10)**	**1440(21)**	**27.8(4)**
^{155}Gd 987.908(21)	144(40)	2.8(8)
^{157}Gd 998.398(9)	559(40)	10.8(8)
^{157}Gd 1000.859(10)	93(4)	1.79(8)
^{157}Gd 1004.058(9)	404(22)	7.8(4)
^{157}Gd 1007.340(20)	105(4)	2.02(8)
^{157}Gd 1010.19(3)	232(7)	4.47(13)
^{157}Gd 1034.45(4)	142(5)	2.74(10)
^{155}Gd 1040.430(12)	209(60)	4.0(12)
^{155}Gd 1065.136(12)	410(120)	7.9(23)
^{155}Gd 1067.185(12)	160(50)	3.1(10)
^{155}Gd 1079.25(3)	87(30)	1.7(6)
^{157}Gd 1097.002(10)	662(15)	12.8(3)
^{157}Gd **1107.612(9)**	**1830(40)**	**35.3(8)**
^{157}Gd 1116.624(12)	419(9)	8.07(17)
^{157}Gd **1119.163(10)**	**1180(30)**	**22.7(6)**
^{157}Gd 1141.458(10)	530(30)	10.2(6)
^{157}Gd 1145.225(9)	82(9)	1.58(17)
^{155}Gd 1154.102(12)	290(170)	6(3)
^{155}Gd 1158.986(12)	490(150)	9(3)
^{155}Gd 1168.874(13)	140(40)	2.7(8)
^{155}Gd 1174.058(13)	110(30)	2.1(6)
^{157}Gd 1180.328(9)	223(21)	4.3(4)
^{155}Gd 1180.36(4)	189(60)	3.6(12)
^{157}Gd **1183.968(10)**	**958(60)**	**18.5(12)**
^{157}Gd **1185.988(9)**	**1600(90)**	**30.8(17)**
^{155}Gd 1187.120(21)	340(100)	6.6(19)
^{157}Gd **1187.122(9)**	**1420(90)**	**27.4(17)**
^{157}Gd 1219.947(9)	242(12)	4.66(23)
^{155}Gd 1222.349(12)	139(40)	2.7(8)
^{155}Gd 1230.789(23)	390(120)	7.5(23)
^{157}Gd 1237.625(9)	208(9)	4.01(17)
^{155}Gd 1242.481(17)	204(60)	3.9(12)
^{155}Gd 1250.637(21)	113(30)	2.2(6)
^{157}Gd 1255.980(10)	109(4)	2.10(8)
^{157}Gd 1259.837(9)	417(10)	8.04(19)
^{157}Gd 1263.478(10)	641(15)	12.4(3)
^{155}Gd 1277.508(18)	180(50)	3.5(10)
^{157}Gd 1278.932(9)	228(12)	4.39(23)
^{157}Gd 1301.093(9)	213(6)	4.10(12)
^{157}Gd 1323.387(10)	641(16)	12.4(3)
^{157}Gd 1327.154(9)	294(9)	5.67(17)
^{155}Gd 1366.473(18)	97(30)	1.9(6)
^{157}Gd 1372.805(10)	195(15)	3.8(3)
^{157}Gd 1377.86(8)	87(5)	1.68(10)
^{157}Gd 1405.877(10)	101(4)	1.95(8)
^{157}Gd 1437.910(10)	276(10)	5.32(19)
^{155}Gd 1449.849(21)	106(30)	2.0(6)
^{157}Gd 1517.419(10)	219(18)	4.2(4)
^{157}Gd 1530.279(12)	107(8)	2.06(15)

Table I. Adopted Prompt and Decay Gamma Rays from Thermal Neutron Capture for all Elements, continued

Eγ-keV	σ(Eγ)-barns	k_0
Gadolinium (Z=64), continued		
^{157}Gd 1587.806(10)	105(4)	2.02(8)
^{157}Gd 1663.561(11)	105(8)	2.02(15)
^{155}Gd 1682.081(19)	108(30)	2.1(6)
^{157}Gd 1692.30(6)	88(13)	1.70(25)
^{157}Gd 1774.37(12)	122(40)	2.4(8)
^{157}Gd 1781.711(10)	91(22)	1.8(4)
^{157}Gd 1815.045(11)	92(20)	1.8(4)
^{157}Gd 1856.41(3)	147(50)	2.8(10)
^{157}Gd 1944.269(20)	181(24)	3.5(5)
^{157}Gd 1956.29(12)	175(21)	3.4(4)
^{155}Gd 1965.970(25)	80(25)	1.5(5)
^{157}Gd 2023.778(20)	114(30)	2.2(6)
^{157}Gd 2073.593(11)	84(7)	1.62(13)
^{157}Gd 2180.474(22)	159(50)	3.1(10)
^{157}Gd 2196.56(16)	120(12)	2.31(23)
^{157}Gd 2203.51(11)	151(10)	2.91(19)
^{157}Gd 2259.983(23)	92(6)	1.77(12)
^{157}Gd 2314.82(12)	142(6)	2.74(12)
^{157}Gd 2459.07(18)	75(6)	1.45(12)
^{157}Gd 2515.41(20)	88(6)	1.70(12)
^{157}Gd 2577.32(15)	100(6)	1.93(12)
^{157}Gd 2617.93(16)	100(6)	1.93(12)
^{157}Gd 2678.60(16)	101(20)	1.9(4)
^{157}Gd 2702.34(14)	116(5)	2.24(10)
^{157}Gd 2799.39(17)	87(7)	1.68(13)
^{157}Gd 3520.6(3)	83(9)	1.60(17)
^{157}Gd 3700.3(4)	99(17)	1.9(3)
^{157}Gd 3989.3(4)	103(22)	2.0(4)
^{157}Gd 4058.48(18)	74(5)	1.43(10)
^{157}Gd 4310.0(3)	76(5)	1.46(10)
^{157}Gd 4925.25(13)	235(8)	4.53(15)
^{157}Gd 5058.37(17)	105(5)	2.02(10)
^{157}Gd 5179.16(16)	110(6)	2.12(12)
^{157}Gd 5239.83(17)	83(10)	1.60(19)
^{157}Gd 5250.2(4)	103(17)	2.0(3)
^{157}Gd 5403.38(20)	120(5)	2.31(10)
^{157}Gd 5542.93(12)	112(5)	2.16(10)
^{157}Gd 5582.26(15)	155(6)	2.99(12)
^{157}Gd 5592.95(21)	91(4)	1.75(8)
^{157}Gd 5609.80(20)	75(4)	1.45(8)
^{157}Gd 5661.19(16)	124(5)	2.39(10)
^{157}Gd 5677.28(5)	138(15)	2.7(3)
^{157}Gd 5784.15(5)	105(5)	2.02(10)
^{157}Gd 5903.39(6)	457(14)	8.8(3)
^{157}Gd 6419.82(5)	131(6)	2.52(12)
^{157}Gd 6671.73(5)	83(4)	1.60(8)
^{157}Gd **6750.11(5)**	**965(30)**	**18.6(6)**
Terbium (Z=65), *At.Wt.=158.92534(2)*, σ_γ=*23.3(4)*		
^{159}Tb 15.413(6)	0.071(12)	0.00135(23)
^{159}Tb **29.0170(20)**	**0.21(4)**	**0.0040(8)**
^{159}Tb **32.652(3)**	**0.19(3)**	**0.0036(6)**
^{159}Tb **33.1590(10)**	**0.22(4)**	**0.0042(8)**
^{159}Tb **41.8900(10)**	**0.64(10)**	**0.0122(19)**
^{159}Tb **50.8690(10)**	**0.60(15)**	**0.011(3)**
^{159}Tb **54.1290(10)**	**0.60(15)**	**0.011(3)**
^{159}Tb **59.6430(10)**	**0.48(6)**	**0.0092(11)**
^{159}Tb 62.374(6)	0.052(15)	0.0010(3)
^{159}Tb **63.6860(10)**	**1.46(16)**	**0.028(3)**
^{159}Tb **64.1100(20)**	**1.2(3)**	**0.023(6)**
^{159}Tb 64.8240(20)	0.13(4)	0.0025(8)
^{159}Tb 68.413(3)	0.035(14)	0.0007(3)
^{159}Tb **75.0500(10)**	**1.78(18)**	**0.034(3)**
^{159}Tb 75.7880(10)	0.14(4)	0.0027(8)
^{159}Tb 78.137(7)	0.034(18)	0.0006(3)
^{159}Tb **78.8670(10)**	**0.19(4)**	**0.0036(8)**
^{159}Tb **79.099(6)**	**0.43(6)**	**0.0082(11)**
^{159}Tb 83.8940(20)	0.050(10)	0.00095(19)
^{159}Tb 87.7150(10)	0.160(19)	0.0031(4)
^{159}Tb **89.4080(20)**	**0.21(3)**	**0.0040(6)**
^{159}Tb 92.7590(10)	0.052(16)	0.0010(3)
^{159}Tb **93.3060(20)**	**0.218(25)**	**0.0042(5)**
^{159}Tb 94.0440(20)	0.052(14)	0.0010(3)
^{159}Tb 94.829(3)	0.071(11)	0.00135(21)
^{159}Tb 97.194(10)	0.024(8)	0.00046(15)

Eγ-keV	σ(Eγ)-barns	k_0
Terbium (Z=65), continued		
^{159}Tb **97.503(3)**	**0.50(6)**	**0.0095(11)**
^{159}Tb 97.967(3)	0.077(19)	0.0015(4)
^{159}Tb 101.0660(20)	0.023(5)	0.00044(10)
^{159}Tb 104.0670(20)	0.15(3)	0.0029(6)
^{159}Tb 108.943(5)	0.026(5)	0.00050(10)
^{159}Tb 112.3730(20)	0.089(10)	0.00170(19)
^{159}Tb 117.950(4)	0.028(5)	0.00053(10)
^{159}Tb 131.058(5)	0.064(8)	0.00122(15)
^{159}Tb **135.5970(20)**	**0.39(4)**	**0.0074(8)**
^{159}Tb 138.5840(10)	0.052(6)	0.00099(11)
^{159}Tb 140.784(6)	0.107(12)	0.00204(23)
^{159}Tb 150.603(3)	0.144(15)	0.0027(3)
^{159}Tb **153.6870(20)**	**0.44(5)**	**0.0084(10)**
^{159}Tb 158.9430(20)	0.111(12)	0.00212(23)
^{159}Tb 163.2420(20)	0.105(11)	0.00200(21)
^{159}Tb 176.833(3)	0.070(9)	0.00133(17)
^{159}Tb 178.674(5)	0.049(8)	0.00093(15)
^{159}Tb **178.881(3)**	**0.42(8)**	**0.0080(15)**
^{159}Tb 179.832(7)	0.023(4)	0.00044(8)
^{159}Tb 181.864(5)	0.072(13)	0.00137(25)
^{159}Tb 184.456(5)	0.11(3)	0.0021(6)
^{159}Tb 185.187(7)	0.094(17)	0.0018(3)
^{159}Tb **193.431(4)**	**0.37(4)**	**0.0071(8)**
^{159}Tb 209.738(6)	0.055(6)	0.00105(11)
^{159}Tb 215.026(6)	0.036(5)	0.00069(10)
^{159}Tb 221.029(6)	0.022(4)	0.00042(8)
^{159}Tb 228.252(11)	0.032(4)	0.00061(8)
^{159}Tb 234.724(7)	0.026(5)	0.00050(10)
^{159}Tb 236.094(6)	0.032(6)	0.00061(11)
^{159}Tb 238.653(7)	0.023(5)	0.00044(10)
^{159}Tb 241.809(5)	0.035(8)	0.00067(15)
^{159}Tb 242.548(5)	0.018(4)	0.00034(8)
^{159}Tb **242.973(12)**	**0.219(24)**	**0.0042(5)**
^{159}Tb 243.277(6)	0.16(3)	0.0031(6)
^{159}Tb **248.062(5)**	**0.30(3)**	**0.0057(6)**
^{159}Tb 255.038(6)	0.112(16)	0.0021(3)
^{159}Tb 255.927(6)	0.052(9)	0.00099(17)
^{159}Tb 257.541(4)	0.045(7)	0.00086(13)
^{159}Tb 258.565(9)	0.033(6)	0.00063(11)
^{159}Tb 262.964(11)	0.022(6)	0.00042(11)
^{159}Tb 264.989(5)	0.031(7)	0.00059(13)
^{159}Tb 270.762(7)	0.102(12)	0.00194(23)
^{159}Tb 274.385(11)	0.021(4)	0.00040(8)
^{159}Tb 275.707(5)	0.124(14)	0.0024(3)
^{159}Tb 277.818(6)	0.093(11)	0.00177(21)
^{159}Tb 278.152(7)	0.025(6)	0.00048(11)
^{159}Tb 278.803(7)	0.083(11)	0.00158(21)
^{159}Tb 282.698(5)	0.049(8)	0.00093(15)
^{159}Tb 283.289(7)	0.052(9)	0.00099(17)
^{159}Tb 284.148(9)	0.087(11)	0.00166(21)
^{159}Tb 287.738(9)	0.029(5)	0.00055(10)
^{159}Tb 288.212(5)	0.126(14)	0.0024(3)
^{159}Tb 290.625(10)	0.052(7)	0.00099(13)
^{159}Tb 295.757(9)	0.062(8)	0.00118(15)
^{159}Tb 302.735(13)	0.086(10)	0.00164(19)
^{159}Tb 303.114(10)	0.042(8)	0.00080(15)
^{159}Tb 308.102(9)	0.056(8)	0.00107(15)
^{159}Tb 310.470(5)	0.177(21)	0.0034(4)
^{159}Tb 310.804(6)	0.019(5)	0.00036(10)
^{159}Tb 315.857(5)	0.118(14)	0.0023(3)
^{159}Tb 316.564(9)	0.027(5)	0.00051(10)
^{159}Tb 317.597(5)	0.121(15)	0.0023(3)
^{159}Tb 319.862(6)	0.132(15)	0.0025(3)
^{159}Tb 323.809(6)	0.022(4)	0.00042(8)
^{159}Tb **339.487(5)**	**0.35(4)**	**0.0067(8)**
^{159}Tb 339.821(6)	0.040(9)	0.00076(17)
^{159}Tb 340.780(6)	0.069(9)	0.00132(17)
^{159}Tb 341.731(6)	0.089(15)	0.0017(3)
^{159}Tb 345.581(8)	0.041(8)	0.00078(15)
^{159}Tb 347.032(6)	0.020(4)	0.00038(8)
^{159}Tb 348.924(13)	0.053(10)	0.00101(19)
^{159}Tb 351.095(9)	0.176(22)	0.0034(4)
^{159}Tb 352.027(10)	0.020(4)	0.00038(8)
^{159}Tb 352.514(6)	0.160(21)	0.0031(4)
^{159}Tb 356.224(10)	0.117(17)	0.0022(3)

Table I. Adopted Prompt and Decay Gamma Rays from Thermal Neutron Capture for all Elements, continued

Eγ-keV	σ(Eγ)-barns	k_0
Terbium (Z=65), continued		
^{159}Tb **357.748(5)**	**0.26(3)**	**0.0050(6)**
^{159}Tb 359.960(10)	0.048(9)	0.00092(17)
^{159}Tb 361.680(14)	0.095(12)	0.00181(23)
^{159}Tb 363.821(6)	0.120(15)	0.0023(3)
^{159}Tb 370.320(7)	0.057(7)	0.00109(13)
^{159}Tb 372.980(6)	0.070(8)	0.00133(15)
^{159}Tb 373.055(12)	0.074(13)	0.00141(25)
^{159}Tb 374.678(6)	0.099(11)	0.00189(21)
^{159}Tb 376.515(9)	0.039(9)	0.00074(17)
^{159}Tb 378.740(8)	0.024(8)	0.00046(15)
^{159}Tb 398.252(14)	0.024(5)	0.00046(10)
^{159}Tb 399.512(9)	0.074(11)	0.00141(21)
^{159}Tb 403.800(13)	0.028(6)	0.00053(11)
^{159}Tb 406.214(12)	0.027(6)	0.00051(11)
^{159}Tb 413.492(9)	0.066(12)	0.00126(23)
^{159}Tb 414.870(6)	0.132(24)	0.0025(5)
^{159}Tb 420.630(8)	0.092(12)	0.00175(23)
^{159}Tb 427.158(9)	0.147(17)	0.0028(3)
^{159}Tb 430.905(14)	0.023(4)	0.00044(8)
^{159}Tb 432.079(13)	0.021(8)	0.00040(15)
^{159}Tb 437.445(9)	0.077(16)	0.0015(3)
^{159}Tb 442.212(14)	0.077(12)	0.00147(23)
^{159}Tb 447.390(9)	0.10(3)	0.0019(6)
^{159}Tb 448.105(12)	0.054(10)	0.00103(19)
^{159}Tb **451.617(10)**	**0.21(3)**	**0.0040(6)**
^{159}Tb 453.266(10)	0.033(12)	0.00063(23)
^{159}Tb 455.783(10)	0.029(12)	0.00055(23)
^{159}Tb 459.519(10)	0.085(12)	0.00162(23)
^{159}Tb **464.264(17)**	**0.192(21)**	**0.0037(4)**
^{159}Tb 492.460(13)	0.024(6)	0.00046(11)
^{159}Tb 496.916(17)	0.041(9)	0.00078(17)
^{159}Tb 519.790(14)	0.059(13)	0.00113(25)
^{159}Tb 521.308(21)	0.046(12)	0.00088(23)
^{159}Tb 525.194(17)	0.080(17)	0.0015(3)
^{159}Tb **525.933(17)**	**0.22(3)**	**0.0042(6)**
^{159}Tb 529.054(10)	0.022(8)	0.00042(15)
^{159}Tb 530.981(24)	0.037(10)	0.00071(19)
^{159}Tb 532.689(21)	0.129(16)	0.0025(3)
^{159}Tb 532.733(9)	0.15(3)	0.0029(6)
^{159}Tb 542.840(21)	0.034(8)	0.00065(15)
^{159}Tb 544.922(10)	0.064(10)	0.00122(19)
^{159}Tb 545.661(10)	0.056(11)	0.00107(21)
^{159}Tb 554.509(6)	0.021(7)	0.00040(13)
^{159}Tb 585.575(17)	0.054(8)	0.00103(15)
^{159}Tb 598.656(14)	0.020(6)	0.00038(11)
^{159}Tb 600.206(24)	0.155(18)	0.0030(3)
^{159}Tb 611.513(24)	0.034(9)	0.00065(17)
^{159}Tb 625.994(21)	0.027(7)	0.00051(13)
^{159}Tb 634.737(24)	0.037(7)	0.00071(13)
^{159}Tb 5184.2(3)	0.023(9)	0.00044(17)
^{159}Tb 5199.9(3)	0.033(8)	0.00063(15)
^{159}Tb 5204.5(3)	0.040(9)	0.00076(17)
^{159}Tb 5225.0(3)	0.040(13)	0.00076(25)
^{159}Tb 5228.45(25)	0.052(12)	0.00099(23)
^{159}Tb 5238.1(3)	0.026(10)	0.00050(19)
^{159}Tb 5245.6(3)	0.061(13)	0.00116(25)
^{159}Tb 5250.2(3)	0.064(12)	0.00122(23)
^{159}Tb 5259.2(3)	0.022(5)	0.00042(10)
^{159}Tb 5288.99(25)	0.027(7)	0.00051(13)
^{159}Tb 5306.9(3)	0.021(6)	0.00040(11)
^{159}Tb 5373.1(4)	0.024(5)	0.00046(10)
^{159}Tb 5461.09(25)	0.029(7)	0.00055(13)
^{159}Tb 5516.2(5)	0.019(7)	0.00036(13)
^{159}Tb 5524.2(3)	0.051(13)	0.00097(25)
^{159}Tb 5551.8(3)	0.029(5)	0.00055(10)
^{159}Tb 5607.07(7)	0.042(9)	0.00080(17)
^{159}Tb 5611.6(3)	0.025(5)	0.00048(10)
^{159}Tb 5661.8(5)	0.037(7)	0.00071(13)
^{159}Tb 5682.5(3)	0.027(7)	0.00051(13)
^{159}Tb 5696.8(3)	0.034(6)	0.00065(11)
^{159}Tb 5710.36(7)	0.029(5)	0.00055(10)
^{159}Tb 5754.34(21)	0.031(8)	0.00059(15)
^{159}Tb 5776.37(7)	0.120(17)	0.0023(3)
^{159}Tb 5782.28(7)	0.041(9)	0.00078(17)
^{159}Tb 5842.29(7)	0.054(10)	0.00103(19)

Eγ-keV	σ(Eγ)-barns	k_0
Terbium (Z=65), continued		
^{159}Tb 5860.03(23)	0.036(8)	0.00069(15)
^{159}Tb 5890.70(7)	0.137(19)	0.0026(4)
^{159}Tb 5896.46(7)	0.023(7)	0.00044(13)
^{159}Tb 5953.58(7)	0.103(13)	0.00196(25)
^{159}Tb 5993.73(7)	0.114(15)	0.0022(3)
^{159}Tb 6138.03(7)	0.110(15)	0.0021(3)
^{159}Tb **6218.56(7)**	**0.190(22)**	**0.0036(4)**
^{159}Tb 6235.53(7)	0.020(6)	0.00038(11)
^{159}Tb 6241.78(7)	0.072(10)	0.00137(19)
^{159}Tb 6269.43(7)	0.029(6)	0.00055(11)
^{159}Tb 6311.32(7)	0.028(6)	0.00053(11)
Dysprosium (Z=66), *At.Wt.=162.500(1),* σ_γ*=944(21)*		
^{164}Dy **50.4310(20)**	**33.9(15)**	**0.63(3)**
^{164}Dy 72.765(3)	7.1(3)	0.132(6)
^{163}Dy 73.392(8)	1.70(24)	0.032(5)
^{164}Dy 77.520(3)	2.7(5)	0.050(9)
^{161}Dy **80.64(7)**	**16.5(5)**	**0.308(9)**
^{164}Dy 83.395(3)	3.51(20)	0.065(4)
^{164}Dy *108.159(3)d*	*13.6(5)*	*0.254[97%]*
^{164}Dy 116.768(4)	3.28(17)	0.061(3)
^{164}Dy 139.102(4)	6.16(19)	0.115(4)
^{164}Dy 156.245(5)	1.82(10)	0.0339(19)
^{163}Dy 168.838(5)	4.7(6)	0.088(11)
^{164}Dy 178.382(5)	1.8(3)	0.034(6)
^{164}Dy **184.257(4)**	**146(15)**	**2.7(3)**
^{161}Dy **185.19(9)**	**39.1(12)**	**0.729(22)**
^{163}Dy 215.082(21)	3.07(17)	0.057(3)
^{162}Dy 250.8900(20)	5.2(6)	0.097(11)
^{161}Dy 260.11(7)	8.3(3)	0.155(6)
^{164}Dy 271.727(9)	2.90(17)	0.054(3)
^{163}Dy 277.500(16)	1.51(16)	0.028(3)
^{161}Dy 282.89(7)	7.8(3)	0.145(6)
^{163}Dy 294.575(13)	2.78(19)	0.052(4)
^{161}Dy 311.39(15)	2.1(4)	0.039(8)
^{162}Dy 316.3090(10)	3.0(4)	0.056(8)
^{161}Dy 321.84(12)	1.74(25)	0.032(5)
^{164}Dy 331.126(8)	4.5(4)	0.084(8)
^{161}Dy 334.08(8)	4.9(4)	0.091(8)
^{162}Dy 338.5310(20)	1.50(17)	0.028(3)
^{164}Dy 343.312(4)	3.2(4)	0.060(8)
^{164}Dy 345.860(12)	1.8(3)	0.034(6)
^{162}Dy 347.9050(20)	1.84(22)	0.034(4)
^{164}Dy **349.248(10)**	**14.7(6)**	**0.274(11)**
^{162}Dy 351.1490(10)	10.9(9)	0.203(17)
^{164}Dy 352.581(10)	1.7(4)	0.032(8)
^{162}Dy 354.2360(10)	3.5(21)	0.07(4)
^{164}Dy 354.353(8)	3.3(10)	0.062(19)
^{164}Dy 357.686(8)	2.4(4)	0.045(8)
^{161}Dy 361.70(10)	4.1(4)	0.076(8)
^{164}Dy 368.727(8)	1.6(3)	0.030(6)
^{164}Dy 380.020(8)	4.1(4)	0.076(8)
^{164}Dy **385.9840(20)**	**34.8(10)**	**0.649(19)**
^{162}Dy 389.7530(10)	7.7(7)	0.144(13)
^{164}Dy 392.651(7)	11.3(5)	0.211(9)
^{164}Dy 396.208(4)	2.4(9)	0.045(17)
^{164}Dy 399.726(6)	2.0(4)	0.037(8)
^{162}Dy 401.9440(10)	1.62(19)	0.030(4)
^{164}Dy 403.059(6)	3.5(4)	0.065(8)
^{164}Dy **411.651(5)**	**35.1(10)**	**0.655(19)**
^{164}Dy **414.985(7)**	**31(5)**	**0.58(9)**
^{162}Dy 415.0610(20)	1.57(19)	0.029(4)
^{164}Dy 420.833(3)	11.8(11)	0.220(21)
^{162}Dy 421.8440(10)	7.1(9)	0.132(17)
^{164}Dy 425.346(10)	2.4(7)	0.045(13)
^{161}Dy 427.57(13)	1.66(25)	0.031(5)
^{162}Dy 427.6800(10)	1.86(22)	0.035(4)
^{164}Dy 430.451(8)	4.2(3)	0.078(6)
^{164}Dy **447.893(7)**	**17.4(5)**	**0.324(9)**
^{164}Dy **465.416(6)**	**38.0(10)**	**0.709(19)**
^{164}Dy 470.227(7)	9.3(6)	0.173(11)
^{164}Dy 474.22(7)	6.4(4)	0.119(8)
^{164}Dy 474.95(4)	3.3(10)	0.062(19)
^{162}Dy 475.3880(10)	1.71(21)	0.032(4)
^{164}Dy **477.061(6)**	**22(7)**	**0.41(13)**

Table I. Adopted Prompt and Decay Gamma Rays from Thermal Neutron Capture for all Elements, continued

Eγ-keV	σ(Eγ)-barns	k_0
Dysprosium (Z=66), continued		
^{164}Dy **477.08(4)**	**15.8(5)**	**0.295(9)**
^{164}Dy **496.931(5)**	**44.9(11)**	**0.837(21)**
^{164}Dy 499.395(6)	13.0(10)	0.242(19)
^{164}Dy 500.37(8)	10.3(5)	0.192(9)
^{164}Dy 500.587(6)	10(3)	0.19(6)
^{164}Dy 506.47(4)	6.4(4)	0.119(8)
^{164}Dy 508.96(4)	9.5(6)	0.177(11)
^{164}Dy 519.05(7)	1.5(3)	0.028(6)
^{164}Dy 524.41(6)	4.7(5)	0.088(9)
^{164}Dy 529.46(7)	3.0(10)	0.056(19)
^{164}Dy 529.54(8)	2.5(4)	0.047(8)
^{164}Dy **538.609(8)**	**69.2(19)**	**1.29(4)**
^{164}Dy 546.54(4)	3.7(4)	0.069(8)
^{164}Dy 556.932(7)	2.2(4)	0.041(8)
^{164}Dy 565.567(4)	5.1(5)	0.095(9)
^{164}Dy 569.53(7)	8.3(25)	0.15(5)
^{164}Dy 569.79(6)	9.7(5)	0.181(9)
^{161}Dy 572.7(4)	2.2(9)	0.041(17)
^{161}Dy 572.88(7)	1.65(12)	0.0308(22)
^{164}Dy **583.982(5)**	**24(7)**	**0.45(13)**
^{164}Dy 596.71(4)	5.1(3)	0.095(6)
^{164}Dy 613.13(9)	2.5(3)	0.047(6)
^{161}Dy 647.50(12)	3.11(21)	0.058(4)
^{163}Dy 673.71(4)	1.7(4)	0.032(8)
^{163}Dy 688.36(4)	4.7(4)	0.088(8)
^{161}Dy 697.16(9)	3.3(3)	0.062(6)
^{161}Dy 711.41(12)	2.28(22)	0.043(4)
^{163}Dy 754.75(4)	6.4(4)	0.119(8)
^{163}Dy 761.76(4)	4.1(3)	0.076(6)
^{161}Dy 795.27(8)	6.8(4)	0.127(8)
^{161}Dy 807.46(7)	12.1(5)	0.226(9)
^{161}Dy 842.48(22)	1.6(4)	0.030(8)
^{161}Dy 842.5(4)	1.48(25)	0.028(5)
^{161}Dy **882.27(6)**	**18.3(6)**	**0.341(11)**
^{161}Dy 888.13(7)	10.4(5)	0.194(9)
^{161}Dy 917.16(10)	5.4(5)	0.101(9)
^{164}Dy 922.11(7)	1.6(6)	0.030(11)
^{161}Dy 933.70(23)	3.1(7)	0.058(13)
^{164}Dy 933.94(8)	4.6(7)	0.086(13)
^{161}Dy 944.40(7)	7.2(3)	0.134(6)
^{161}Dy 976.83(13)	3.4(3)	0.063(6)
^{161}Dy 979.98(9)	8.5(4)	0.159(8)
^{161}Dy 994.64(7)	9.2(4)	0.172(8)
^{164}Dy 994.87(7)	5.6(17)	0.10(3)
^{161}Dy 1008.42(22)	2.0(3)	0.037(6)
^{164}Dy 1018.35(8)	3.7(12)	0.069(22)
^{161}Dy 1025.5(3)	1.7(4)	0.032(8)
^{161}Dy 1058.41(9)	5.9(4)	0.110(8)
^{164}Dy 1059.63(9)	2.2(7)	0.041(13)
^{164}Dy 1064.18(9)	2.2(6)	0.041(11)
^{164}Dy 1074.59(9)	4.5(14)	0.08(3)
^{161}Dy 1091.99(13)	2.7(4)	0.050(8)
^{161}Dy 1108.53(10)	5.1(4)	0.095(8)
^{164}Dy 1110.06(9)	2.6(7)	0.048(13)
^{161}Dy 1124.81(9)	4.0(3)	0.075(6)
^{161}Dy 1129.40(9)	5.7(4)	0.106(8)
^{161}Dy 1158.2(3)	2.1(4)	0.039(8)
^{161}Dy 1185.0(3)	1.5(4)	0.028(8)
^{161}Dy 1187.7(3)	1.6(4)	0.030(8)
^{161}Dy 1195.37(12)	3.6(4)	0.067(8)
^{161}Dy 1219.6(3)	2.7(10)	0.050(19)
^{164}Dy 1260.19(13)	2.0(6)	0.037(11)
^{161}Dy 1260.66(21)	3.2(5)	0.060(9)
^{161}Dy 1276.3(6)	1.9(4)	0.035(8)
^{161}Dy 1276.78(12)	6.3(6)	0.117(11)
^{161}Dy 1308.5(3)	1.7(4)	0.032(8)
^{161}Dy 1316.7(5)	1.5(4)	0.028(8)
^{161}Dy 1371.4(3)	2.4(4)	0.045(8)
^{164}Dy 1410.99(8)	4.6(5)	0.086(9)
^{164}Dy 1433.33(8)	1.9(4)	0.035(8)
^{164}Dy 1483.76(8)	3.6(4)	0.067(8)
^{161}Dy 1573.95(23)	1.7(3)	0.032(6)
^{164}Dy 1596.37(15)	2.5(4)	0.047(8)
^{164}Dy 1604.4(3)	1.7(4)	0.032(8)
^{164}Dy 1616.1(3)	1.5(4)	0.028(8)

Eγ-keV	σ(Eγ)-barns	k_0
Dysprosium (Z=66), continued		
^{164}Dy 1646.80(15)	2.2(3)	0.041(6)
^{164}Dy 1671.84(13)	3.6(5)	0.067(9)
^{161}Dy 1717.18(13)	3.0(4)	0.056(8)
^{164}Dy 1722.27(13)	3.2(4)	0.060(8)
^{164}Dy 1737.35(15)	3.8(4)	0.071(8)
^{161}Dy 1781.5(3)	3.5(6)	0.065(11)
^{164}Dy 1806.00(25)	2.4(5)	0.045(9)
^{161}Dy 1823.7(7)	1.9(5)	0.035(9)
^{164}Dy 1835.40(18)	3.2(6)	0.060(11)
^{164}Dy 1866.28(13)	2.6(4)	0.048(8)
^{164}Dy 2019.4(3)	2.5(5)	0.047(9)
^{164}Dy 2091.58(11)	2.6(5)	0.048(9)
^{161}Dy 2110.01(16)	3.6(4)	0.067(8)
^{164}Dy 2113.91(11)	4.0(4)	0.075(8)
^{164}Dy 2164.34(11)	3.1(4)	0.058(8)
^{164}Dy 2226.92(19)	2.7(5)	0.050(9)
^{164}Dy 2242.3(3)	3.3(5)	0.062(9)
^{164}Dy 2259.3(3)	2.8(5)	0.052(9)
^{164}Dy 2272.0(6)	3.6(7)	0.067(13)
^{164}Dy 2305.5(3)	2.2(5)	0.041(9)
^{164}Dy 2313.8(4)	7.2(6)	0.134(11)
^{164}Dy 2369.89(24)	4.2(6)	0.078(11)
^{164}Dy 2412.2(4)	2.6(6)	0.048(11)
^{164}Dy 2552.64(19)	5.3(6)	0.099(11)
^{164}Dy 2593.02(19)	3.0(5)	0.056(9)
^{164}Dy 2606.94(19)	4.1(5)	0.076(9)
^{164}Dy 2635.0(3)	3.0(5)	0.056(9)
^{162}Dy 2660.1(4)	6.6(11)	0.123(21)
^{164}Dy 2683.54(24)	2.4(5)	0.045(9)
^{164}Dy 2702.83(21)	6.9(22)	0.13(4)
^{164}Dy 2823.8(4)	1.7(5)	0.032(9)
^{164}Dy 2832.15(21)	1.9(5)	0.035(9)
^{164}Dy 2840.1(3)	3.8(5)	0.071(9)
^{164}Dy 2854.48(21)	4.0(5)	0.075(9)
^{164}Dy 2863.5(4)	5.1(5)	0.095(9)
^{164}Dy 2872.20(21)	4.5(5)	0.084(9)
^{164}Dy 2931.8(3)	2.7(5)	0.050(9)
^{164}Dy 2950.37(19)	4.5(5)	0.084(9)
^{164}Dy 2999.9(4)	1.7(4)	0.032(8)
^{164}Dy 3012.42(17)	7.8(5)	0.145(9)
^{164}Dy 3035.55(15)	10.9(6)	0.203(11)
^{164}Dy 3071.02(24)	3.8(5)	0.071(9)
^{164}Dy 3098.52(24)	2.1(4)	0.039(8)
^{164}Dy 3105.83(21)	5.8(5)	0.108(9)
^{164}Dy 3114.06(19)	7.4(6)	0.138(11)
^{164}Dy 3169.10(24)	3.3(4)	0.062(8)
^{164}Dy 3198.3(3)	1.6(3)	0.030(6)
^{164}Dy 3238.1(3)	4.7(5)	0.088(9)
^{164}Dy 3276.05(13)	6.1(5)	0.114(9)
^{164}Dy 3315.0(3)	3.0(4)	0.056(8)
^{164}Dy 3443.39(11)	10.6(16)	0.20(3)
^{164}Dy 3537.9(3)	3.2(5)	0.060(9)
^{164}Dy 3555.71(20)	4.7(5)	0.088(9)
^{164}Dy 3608.5(4)	3.1(4)	0.058(8)
^{164}Dy 3628.2(3)	1.9(4)	0.035(8)
^{164}Dy 3772.33(18)	3.1(4)	0.058(8)
^{164}Dy 3819.95(15)	2.7(5)	0.050(9)
^{164}Dy 3840.49(24)	4.9(6)	0.091(11)
^{164}Dy 3885.46(13)	5.2(4)	0.097(8)
^{164}Dy 3944.8(3)	2.2(3)	0.041(6)
^{164}Dy 3960.93(15)	4.7(4)	0.088(8)
^{164}Dy 4067.73(9)	2.5(4)	0.047(8)
^{164}Dy 4083.81(14)	4.3(4)	0.080(8)
^{164}Dy 4123.97(8)	13.1(9)	0.244(17)
^{164}Dy 4155.82(8)	2.1(3)	0.039(6)
^{164}Dy 4459.45(8)	1.6(3)	0.030(6)
^{164}Dy 4607.48(6)	1.9(4)	0.035(8)
^{164}Dy 4612.84(7)	5.7(5)	0.106(9)
^{164}Dy 4635.84(5)	2.6(4)	0.048(8)
^{164}Dy 5110.77(3)	6.1(9)	0.114(17)
^{164}Dy **5142.29(3)**	**15.7(10)**	**0.293(19)**
^{164}Dy 5145.62(3)	8.4(24)	0.16(5)
^{164}Dy 5177.25(3)	6.6(5)	0.123(9)
^{161}Dy 5450.27(25)	2.1(4)	0.039(8)
^{164}Dy **5557.26(3)**	**28.7(14)**	**0.54(3)**

Table I. Adopted Prompt and Decay Gamma Rays from Thermal Neutron Capture for all Elements, continued

Eγ-keV	σ(Eγ)-barns	k_0
Dysprosium (Z=66), continued		
^{164}Dy **5607.69(3)**	**35.9(16)**	**0.67(3)**
^{160}Dy *6087.25(13)*	*0.85(5)*	*0.0159(9)*
Holmium (Z=67), *At.Wt.=164.93032(2)*, σ_γ*=64.7(12)*		
^{165}Ho 19.8290(20)	0.57(8)	0.0105(15)
^{165}Ho 38.494(5)	0.179(20)	0.0033(4)
^{165}Ho 54.2400(10)	1.41(4)	0.0259(7)
^{165}Ho 57.521(6)	0.17(3)	0.0031(6)
^{165}Ho 69.7610(10)	1.09(6)	0.0200(11)
^{165}Ho 72.8870(10)	0.17(3)	0.0031(6)
^{165}Ho 76.4670(10)	0.179(20)	0.0033(4)
^{165}Ho 76.7270(10)	0.33(3)	0.0061(6)
^{165}Ho ***80.574(8)d***	***3.87(5)***	***0.0711[1.3%]***
^{165}Ho 82.4710(20)	0.42(3)	0.0077(6)
^{165}Ho 87.5950(20)	0.71(4)	0.0130(7)
^{165}Ho 94.628(6)	0.156(23)	0.0029(4)
^{165}Ho 98.8590(10)	0.270(17)	0.0050(3)
^{165}Ho 105.516(3)	0.234(16)	0.0043(3)
^{165}Ho 108.2000(20)	0.40(3)	0.0073(6)
^{165}Ho 111.3260(20)	0.294(20)	0.0054(4)
^{165}Ho **116.8360(10)**	**8.1(4)**	**0.149(7)**
^{165}Ho 126.230(3)	0.55(4)	0.0101(7)
^{165}Ho **136.6650(20)**	**14.5(7)**	**0.266(13)**
^{165}Ho 140.122(5)	0.27(3)	0.0050(6)
^{165}Ho **149.309(3)**	**2.25(12)**	**0.0413(22)**
^{165}Ho 163.353(7)	0.223(15)	0.0041(3)
^{165}Ho 167.453(5)	0.55(3)	0.0101(6)
^{165}Ho 169.715(5)	0.150(14)	0.0028(3)
^{165}Ho 179.036(5)	0.220(16)	0.0040(3)
^{165}Ho 181.0870(20)	0.94(5)	0.0173(9)
^{165}Ho 186.579(4)	0.197(22)	0.0036(4)
^{165}Ho 197.342(3)	0.34(3)	0.0062(6)
^{165}Ho 199.700(5)	0.48(3)	0.0088(6)
^{165}Ho 210.309(4)	0.180(15)	0.0033(3)
^{165}Ho **221.186(4)**	**2.05(11)**	**0.0377(20)**
^{165}Ho 231.960(7)	0.23(5)	0.0042(9)
^{165}Ho 233.116(8)	0.38(4)	0.0070(7)
^{165}Ho **239.132(4)**	**2.25(12)**	**0.0413(22)**
^{165}Ho 245.010(5)	0.47(5)	0.0086(9)
^{165}Ho 257.806(11)	0.18(4)	0.0033(7)
^{165}Ho 265.983(10)	0.170(14)	0.0031(3)
^{165}Ho 267.241(6)	0.199(15)	0.0037(3)
^{165}Ho 289.124(14)	1.16(6)	0.0213(11)
^{165}Ho 290.617(7)	0.96(5)	0.0176(9)
^{165}Ho 297.905(4)	0.188(14)	0.0035(3)
^{165}Ho 304.617(6)	1.34(7)	0.0246(13)
^{165}Ho 328.239(10)	0.391(23)	0.0072(4)
^{165}Ho 333.614(5)	1.04(6)	0.0191(11)
^{165}Ho 335.585(6)	0.33(7)	0.0061(13)
^{165}Ho 343.540(6)	0.203(13)	0.00373(24)
^{165}Ho 357.056(5)	0.162(12)	0.00298(22)
^{165}Ho **371.772(5)**	**1.56(8)**	**0.0287(15)**
^{165}Ho 391.819(7)	0.51(5)	0.0094(9)
^{165}Ho 401.595(8)	1.07(9)	0.0197(17)
^{165}Ho 410.265(6)	1.23(7)	0.0226(13)
^{165}Ho 411.087(12)	0.40(12)	0.0073(22)
^{165}Ho 412.030(8)	0.32(7)	0.0059(13)
^{165}Ho 416.550(5)	0.42(4)	0.0077(7)
^{165}Ho 425.300(21)	0.69(17)	0.013(3)
^{165}Ho **426.012(5)**	**2.88(15)**	**0.053(3)**
^{165}Ho 427.196(6)	0.21(5)	0.0039(9)
^{165}Ho 442.231(21)	0.22(3)	0.0040(6)
^{165}Ho 443.148(8)	0.164(12)	0.00301(22)
^{165}Ho 455.567(11)	0.78(4)	0.0143(7)
^{165}Ho 457.349(11)	0.213(17)	0.0039(3)
^{165}Ho 463.927(6)	0.245(18)	0.0045(3)
^{165}Ho 467.227(5)	0.162(17)	0.0030(3)
^{165}Ho 481.354(18)	0.45(7)	0.0083(13)
^{165}Ho 487.538(6)	0.394(24)	0.0072(4)
^{165}Ho 489.436(4)	1.15(6)	0.0211(11)
^{165}Ho 496.932(6)	0.16(3)	0.0029(6)
^{165}Ho 509.094(24)	0.332(22)	0.0061(4)
^{165}Ho 512.770(6)	0.323(22)	0.0059(4)
^{165}Ho 524.250(22)	0.260(17)	0.0048(3)
^{165}Ho 533.644(21)	0.303(20)	0.0056(4)
Holmium (Z=67), continued		
^{165}Ho 534.572(11)	0.16(3)	0.0029(6)
^{165}Ho 538.259(8)	0.152(21)	0.0028(4)
^{165}Ho **542.780(4)**	**1.94(13)**	**0.0356(24)**
^{165}Ho 543.676(5)	1.00(5)	0.0184(9)
^{165}Ho 554.400(11)	0.32(7)	0.0059(13)
^{165}Ho 576.902(16)	0.203(17)	0.0037(3)
^{165}Ho 577.141(11)	0.37(6)	0.0068(11)
^{165}Ho 613.768(6)	0.332(22)	0.0061(4)
^{165}Ho 624.234(8)	0.212(16)	0.0039(3)
^{165}Ho 633.641(8)	0.36(3)	0.0066(6)
^{165}Ho 689.72(3)	0.44(3)	0.0081(6)
^{165}Ho 734.258(16)	0.253(18)	0.0046(3)
^{165}Ho 4855.89(3)	0.146(18)	0.0027(3)
^{165}Ho 4945.18(5)	0.214(19)	0.0039(4)
^{165}Ho 5108.66(7)	0.33(3)	0.0061(6)
^{165}Ho 5128.946(13)	0.171(17)	0.0031(3)
^{165}Ho 5181.841(20)	0.253(20)	0.0046(4)
^{165}Ho 5213.240(21)	0.260(24)	0.0048(4)
^{165}Ho 5428.441(9)	0.223(23)	0.0041(4)
^{165}Ho 5524.219(11)	0.192(20)	0.0035(4)
^{165}Ho 5813.531(7)	0.54(4)	0.0099(7)
^{165}Ho 5870.477(9)	0.224(20)	0.0041(4)
^{165}Ho 5871.573(6)	0.196(18)	0.0036(3)
^{165}Ho 6052.654(6)	0.188(19)	0.0035(4)
Erbium (Z=68), *At.Wt.=167.259(3)*, σ_γ*=156.8(19)*		
^{162}Er *69.4(6)*	*0.35(14)*	*0.0063(25)*
^{167}Er **79.8040(10)**	**18.2(8)**	**0.330(14)**
^{167}Er 98.9850(10)	3.73(14)	0.0676(25)
^{167}Er 99.2910(10)	2.2(3)	0.040(5)
^{167}Er **184.2850(10)**	**56(5)**	**1.01(9)**
^{170}Er *198.0(6)*	*0.36(9)*	*0.0065(16)*
^{167}Er **198.2440(10)**	**29.9(16)**	**0.54(3)**
^{166}Er *207.801(3)d*	*2.15(8)*	*0.0390[100%]*
^{167}Er 217.4220(10)	2.66(10)	0.0482(18)
^{167}Er 255.9310(10)	0.76(3)	0.0138(5)
^{167}Er **284.6560(20)**	**13.7(12)**	**0.248(22)**
^{166}Er 346.553(10)	0.83(4)	0.0150(7)
^{167}Er 396.5320(10)	0.69(4)	0.0125(7)
^{167}Er 422.3180(10)	1.56(6)	0.0283(11)
^{167}Er 447.5170(20)	3.07(11)	0.0556(20)
^{167}Er 457.6660(20)	0.80(4)	0.0145(7)
^{167}Er 527.8840(10)	0.88(5)	0.0159(9)
^{166}Er 531.46(3)	0.92(7)	0.0167(13)
^{167}Er 543.6620(20)	2.01(9)	0.0364(16)
^{167}Er 546.9600(20)	1.02(5)	0.0185(9)
^{167}Er 559.5080(20)	2.36(10)	0.0428(18)
^{167}Er 568.8260(20)	1.20(6)	0.0217(11)
^{167}Er 601.6060(20)	0.70(4)	0.0127(7)
^{167}Er **631.7050(20)**	**7.9(3)**	**0.143(5)**
^{167}Er 638.711(3)	1.04(6)	0.0188(11)
^{167}Er 645.7600(20)	0.96(5)	0.0174(9)
^{167}Er 673.655(3)	0.56(3)	0.0101(5)
^{167}Er 713.2440(10)	0.69(5)	0.0125(9)
^{167}Er 715.1610(20)	1.92(8)	0.0348(14)
^{167}Er 719.5460(20)	1.09(20)	0.020(4)
^{167}Er 720.3850(20)	1.54(16)	0.028(3)
^{167}Er **730.6580(10)**	**11.6(4)**	**0.210(7)**
^{167}Er 737.664(3)	1.20(6)	0.0217(11)
^{167}Er **741.3650(20)**	**6.72(24)**	**0.122(4)**
^{167}Er 748.280(3)	1.35(7)	0.0245(13)
^{167}Er 790.0140(20)	0.68(4)	0.0123(7)
^{167}Er 798.8940(20)	2.18(9)	0.0395(16)
^{167}Er 808.927(3)	0.81(10)	0.0147(18)
^{167}Er 811.0500(20)	1.72(22)	0.031(4)
^{167}Er 812.289(3)	1.4(3)	0.025(5)
^{167}Er **815.9890(20)**	**42.5(15)**	**0.77(3)**
^{167}Er **821.1680(20)**	**6.2(3)**	**0.112(5)**
^{167}Er 823.3810(20)	1.34(10)	0.0243(18)
^{167}Er 825.727(3)	0.89(9)	0.0161(16)
^{167}Er 829.9480(10)	4.12(19)	0.075(3)
^{167}Er **853.4810(10)**	**7.5(3)**	**0.136(5)**
^{167}Er 862.3500(20)	1.16(6)	0.0210(11)
^{167}Er **914.9420(10)**	**6.99(24)**	**0.127(4)**
^{167}Er 928.9330(20)	1.55(8)	0.0281(14)

Table I. Adopted Prompt and Decay Gamma Rays from Thermal Neutron Capture for all Elements, continued

Eγ-keV	σ(Eγ)-barns	k_0
Erbium (Z=68), continued		
^{167}Er 932.2660(20)	0.83(5)	0.0150(9)
^{167}Er 965.9330(20)	0.83(5)	0.0150(9)
^{167}Er 999.8150(20)	0.99(6)	0.0179(11)
^{167}Er 1012.1810(20)	1.42(7)	0.0257(13)
^{167}Er 1025.368(4)	0.97(6)	0.0176(11)
^{167}Er 1144.133(3)	0.58(5)	0.0105(9)
^{167}Er 1147.0040(20)	0.92(6)	0.0167(11)
^{167}Er 1167.373(4)	1.98(8)	0.0359(14)
^{167}Er 1173.577(4)	0.71(5)	0.0129(9)
^{167}Er 1196.4640(20)	0.82(5)	0.0149(9)
^{167}Er 1229.045(4)	0.63(5)	0.0114(9)
^{167}Er 1274.530(6)	0.69(10)	0.0125(18)
^{167}Er 1276.2680(20)	0.73(11)	0.0132(20)
^{167}Er 1277.6150(20)	2.82(16)	0.051(3)
^{167}Er 1279.088(6)	0.97(13)	0.0176(24)
^{167}Er 1310.022(3)	1.65(8)	0.0299(14)
^{167}Er 1323.9270(20)	1.69(8)	0.0306(14)
^{167}Er 1331.2870(20)	1.36(7)	0.0246(13)
^{167}Er 1351.656(4)	1.94(9)	0.0351(16)
^{167}Er 1353.805(6)	0.56(5)	0.0101(9)
^{167}Er 1355.1(3)	0.94(12)	0.0170(22)
^{167}Er 1392.181(4)	1.27(6)	0.0230(11)
^{167}Er 1515.93(4)	0.57(5)	0.0103(9)
^{167}Er 1515.948(20)	0.72(12)	0.0130(22)
^{167}Er 1581.18(6)	0.57(6)	0.0103(11)
^{167}Er 1649.803(7)	0.58(6)	0.0105(11)
^{167}Er 1767.00(3)	0.91(7)	0.0165(13)
^{167}Er 1834.085(7)	1.45(9)	0.0263(16)
^{167}Er 1835.690(4)	0.65(6)	0.0118(11)
^{167}Er 1942.513(6)	0.88(7)	0.0159(13)
^{167}Er 2046.97(3)	0.56(6)	0.0101(11)
^{167}Er 2522.76(6)	0.59(9)	0.0107(16)
^{167}Er 4628.7(3)	1.02(21)	0.018(4)
^{167}Er 4643.4(3)	1.7(4)	0.031(7)
^{167}Er 4647.4(3)	0.87(18)	0.016(3)
^{167}Er 4653.2(3)	1.18(24)	0.021(4)
^{167}Er 4671.4(3)	0.95(20)	0.017(4)
^{167}Er 4715.4(3)	0.98(20)	0.018(4)
^{167}Er 4745.4(3)	1.3(3)	0.024(5)
^{167}Er 4752.2(3)	0.58(12)	0.0105(22)
^{167}Er 4759.5(3)	0.74(15)	0.013(3)
^{167}Er 4800.76(7)	1.4(4)	0.025(7)
^{168}Er *4908.73(17)*	*0.41(14)*	*0.0074(25)*
^{167}Er 4921.42(22)	0.61(6)	0.0111(11)
^{167}Er 5001.79(6)	0.88(25)	0.016(5)
^{167}Er 5031.73(19)	0.84(24)	0.015(4)
^{167}Er 5114.2(3)	1.02(24)	0.018(4)
^{167}Er 5169.82(18)	0.56(5)	0.0101(9)
^{167}Er 5200.0(3)	0.67(16)	0.012(3)
^{167}Er 5213.15(15)	1.4(3)	0.025(5)
^{167}Er 5292.80(6)	0.63(7)	0.0114(13)
^{167}Er 5297.19(3)	0.6(3)	0.011(5)
^{167}Er 5359.62(5)	0.62(7)	0.0112(13)
^{167}Er 5372.79(6)	0.9(4)	0.016(7)
^{167}Er 5378.65(17)	0.8(4)	0.014(7)
^{167}Er 5406.02(9)	0.8(4)	0.014(7)
^{167}Er 5468.71(3)	0.73(15)	0.013(3)
^{167}Er 5508.66(3)	0.66(14)	0.0120(25)
^{167}Er 5866.25(3)	0.77(16)	0.014(3)
^{167}Er 5878.24(3)	0.78(7)	0.0141(13)
^{167}Er 5943.28(3)	0.95(20)	0.017(4)
^{167}Er 5950.86(3)	0.87(18)	0.016(3)
^{167}Er 6137.87(3)	0.57(6)	0.0103(11)
^{167}Er 6155.99(3)	1.5(3)	0.027(5)
^{167}Er 6201.88(3)	0.73(15)	0.013(3)
^{166}Er 6228.54(18)	1.41(15)	0.026(3)
^{167}Er 6229.62(3)	1.54(9)	0.0279(16)
^{167}Er 6360.23(3)	1.3(3)	0.024(5)
^{167}Er 6677.27(3)	1.02(6)	0.0185(11)
Thulium (Z=69), *At.Wt.=168.93421(2),* σ_γ*=105.0(20)*		
^{169}Tm 38.713	0.279(6)	0.00500(11)
^{169}Tm 63.9550(20)	0.17(8)	0.0030(14)
^{169}Tm 66.098	0.51(10)	0.0091(18)
^{169}Tm **68.649**	**1.75(23)**	**0.031(4)**

Eγ-keV	σ(Eγ)-barns	k_0
Thulium (Z=69), continued		
^{169}Tm 69.9880(10)	0.19(7)	0.0034(13)
^{169}Tm **75.83**	**0.94(8)**	**0.0169(14)**
^{169}Tm **87.5210(10)**	**1.29(3)**	**0.0231(5)**
^{169}Tm 87.5700(10)	0.29(6)	0.0052(11)
^{169}Tm 89.905	0.116(21)	0.0021(4)
^{169}Tm 105.162	0.780(23)	0.0140(4)
^{169}Tm 107.9560(10)	0.110(13)	0.00197(23)
^{169}Tm 111.0050(10)	0.327(16)	0.0059(3)
^{169}Tm **114.544**	**3.19(6)**	**0.0572(11)**
^{169}Tm **130.027**	**0.940(25)**	**0.0169(5)**
^{169}Tm **144.4790(10)**	**1.2(4)**	**0.022(7)**
^{169}Tm **144.48**	**5.96(11)**	**0.1069(20)**
^{169}Tm **149.7180(10)**	**7.11(12)**	**0.1275(22)**
^{169}Tm 153.6680(10)	0.098(15)	0.0018(3)
^{169}Tm 156.0030(10)	0.119(17)	0.0021(3)
^{169}Tm 161.7200(10)	0.270(17)	0.0048(3)
^{169}Tm **165.735**	**3.29(6)**	**0.0590(11)**
^{169}Tm 171.8550(10)	0.391(18)	0.0070(3)
^{169}Tm 176.5240(10)	0.34(3)	0.0061(5)
^{169}Tm **180.993**	**3.85(14)**	**0.0691(25)**
^{169}Tm 198.2340(10)	0.094(21)	0.0017(4)
^{169}Tm **198.5260(10)**	**0.96(3)**	**0.0172(5)**
^{169}Tm **204.448**	**8.72(19)**	**0.156(3)**
^{169}Tm 204.7820(10)	0.25(7)	0.0045(13)
^{169}Tm **219.706**	**3.64(6)**	**0.0653(11)**
^{169}Tm 231.8330(10)	0.60(3)	0.0108(5)
^{169}Tm **235.1890(10)**	**1.18(4)**	**0.0212(7)**
^{169}Tm **237.2390(10)**	**5.52(10)**	**0.0990(18)**
^{169}Tm **242.6220(10)**	**1.28(4)**	**0.0230(7)**
^{169}Tm 256.4550(10)	0.096(15)	0.0017(3)
^{169}Tm 260.3410(10)	0.103(14)	0.00185(25)
^{169}Tm 266.8830(10)	0.134(15)	0.0024(3)
^{169}Tm 268.5510(10)	0.210(17)	0.0038(3)
^{169}Tm 288.1840(20)	0.172(10)	0.00309(18)
^{169}Tm 303.6180(20)	0.137(13)	0.00246(23)
^{169}Tm **311.0190(10)**	**2.50(5)**	**0.0448(9)**
^{169}Tm 342.7130(10)	0.14(3)	0.0025(5)
^{169}Tm 343.5520(10)	0.360(16)	0.0065(3)
^{169}Tm 352.9890(20)	0.547(23)	0.0098(4)
^{169}Tm 359.3570(20)	0.14(3)	0.0025(5)
^{169}Tm 360.8270(20)	0.089(24)	0.0016(4)
^{169}Tm 367.5560(20)	0.185(18)	0.0033(3)
^{169}Tm 370.5220(20)	0.16(3)	0.0029(5)
^{169}Tm 371.1720(20)	0.153(22)	0.0027(4)
^{169}Tm **384.0790(20)**	**1.95(5)**	**0.0350(9)**
^{169}Tm 384.2850(20)	0.19(4)	0.0034(7)
^{169}Tm 388.1810(20)	0.099(16)	0.0018(3)
^{169}Tm 396.758(4)	0.099(10)	0.00178(18)
^{169}Tm 400.1150(20)	0.717(19)	0.0129(3)
^{169}Tm 400.6640(20)	0.20(5)	0.0036(9)
^{169}Tm 408.3570(10)	0.239(13)	0.00429(23)
^{169}Tm **411.5060(20)**	**2.37(5)**	**0.0425(9)**
^{169}Tm 413.1330(10)	0.162(17)	0.0029(3)
^{169}Tm 424.6940(20)	0.556(25)	0.0100(5)
^{169}Tm 426.783(3)	0.186(18)	0.0033(3)
^{169}Tm 429.0390(20)	0.308(24)	0.0055(4)
^{169}Tm 440.5100(20)	0.13(3)	0.0023(5)
^{169}Tm 442.1490(10)	0.51(4)	0.0091(7)
^{169}Tm **446.328(3)**	**1.62(4)**	**0.0291(7)**
^{169}Tm 454.2720(20)	0.295(20)	0.0053(4)
^{169}Tm **456.0460(10)**	**1.16(4)**	**0.0208(7)**
^{169}Tm 457.4070(10)	0.48(12)	0.0086(22)
^{169}Tm 457.4100(20)	0.557(25)	0.0100(5)
^{169}Tm 468.4740(20)	0.45(4)	0.0081(7)
^{169}Tm 468.7760(20)	0.41(8)	0.0074(14)
^{169}Tm 472.6610(10)	0.60(5)	0.0108(9)
^{169}Tm 473.5790(10)	0.15(4)	0.0027(7)
^{169}Tm 477.027(4)	0.240(25)	0.0043(5)
^{169}Tm 481.3490(20)	0.109(22)	0.0020(4)
^{169}Tm 485.210(4)	0.140(22)	0.0025(4)
^{169}Tm 496.5720(20)	0.80(3)	0.0144(5)
^{169}Tm 499.0260(20)	0.40(8)	0.0072(14)
^{169}Tm **499.5560(20)**	**0.88(3)**	**0.0158(5)**
^{169}Tm **505.018(7)**	**0.90(3)**	**0.0161(5)**
^{169}Tm 505.341(9)	0.84(3)	0.0151(5)

Table I. Adopted Prompt and Decay Gamma Rays from Thermal Neutron Capture for all Elements, continued

Eγ-keV	σ(Eγ)-barns	k_0
Thulium (Z=69), continued		
^{169}Tm **512.1370(20)**	**1.96(5)**	**0.0352(9)**
^{169}Tm 512.6080(20)	0.108(22)	0.0019(4)
^{169}Tm 517.053(4)	0.15(3)	0.0027(5)
^{169}Tm 523.3590(20)	0.48(3)	0.0086(5)
^{169}Tm 532.4280(20)	0.59(3)	0.0106(5)
^{169}Tm 532.858(3)	0.12(3)	0.0022(5)
^{169}Tm **535.8280(10)**	**1.18(4)**	**0.0212(7)**
^{169}Tm **537.9910(20)**	**1.00(4)**	**0.0179(7)**
^{169}Tm **551.5140(20)**	**1.29(25)**	**0.023(5)**
^{169}Tm 562.4440(20)	0.85(3)	0.0152(5)
^{169}Tm **565.2770(20)**	**1.58(4)**	**0.0283(7)**
^{169}Tm **569.1730(20)**	**1.02(3)**	**0.0183(5)**
^{169}Tm 569.5440(20)	0.44(9)	0.0079(16)
^{169}Tm 573.017(4)	0.30(9)	0.0054(16)
^{169}Tm 581.2690(20)	0.32(7)	0.0057(13)
^{169}Tm 585.1540(10)	0.60(4)	0.0108(7)
^{169}Tm 589.0850(10)	0.58(10)	0.0104(18)
^{169}Tm **590.2270(20)**	**1.27(10)**	**0.0228(18)**
^{169}Tm 599.1890(20)	0.155(25)	0.0028(5)
^{169}Tm 601.9780(20)	0.13(3)	0.0023(5)
^{169}Tm **603.9900(20)**	**1.40(5)**	**0.0251(9)**
^{169}Tm 610.0310(20)	0.18(4)	0.0032(7)
^{169}Tm 611.6590(10)	0.83(4)	0.0149(7)
^{169}Tm 619.423(3)	0.23(4)	0.0041(7)
^{169}Tm 621.812(3)	0.12(3)	0.0022(5)
^{169}Tm 623.1420(10)	0.27(4)	0.0048(7)
^{169}Tm 632.4310(20)	0.74(3)	0.0133(5)
^{169}Tm **637.900(3)**	**1.25(4)**	**0.0224(7)**
^{169}Tm **637.9020(20)**	**1.8(3)**	**0.032(5)**
^{169}Tm 640.7790(20)	0.70(3)	0.0126(5)
^{169}Tm 648.7440(20)	0.24(4)	0.0043(7)
^{169}Tm **650.3720(10)**	**1.45(5)**	**0.0260(9)**
^{169}Tm **658.913(5)**	**1.56(5)**	**0.0280(9)**
^{169}Tm 664.9160(10)	0.30(4)	0.0054(7)
^{169}Tm 669.656(4)	0.31(4)	0.0056(7)
^{169}Tm 670.753(7)	0.12(4)	0.0022(7)
^{169}Tm 679.5820(20)	0.15(3)	0.0027(5)
^{169}Tm 680.5480(20)	0.41(3)	0.0074(5)
^{169}Tm 693.2840(10)	0.30(3)	0.0054(5)
^{169}Tm 694.085(13)	~0.1	~0.002
^{169}Tm **703.6280(10)**	**1.32(4)**	**0.0237(7)**
^{169}Tm 707.8490(10)	0.50(10)	0.0090(18)
^{169}Tm 709.381(3)	0.107(21)	0.0019(4)
^{169}Tm 710.7670(20)	0.60(3)	0.0108(5)
^{169}Tm 711.1330(20)	0.33(7)	0.0059(13)
^{169}Tm 714.433(5)	0.089(20)	0.0016(4)
^{169}Tm **719.2610(20)**	**1.01(3)**	**0.0181(5)**
^{169}Tm 720.8210(20)	0.57(3)	0.0102(5)
^{169}Tm 724.585(3)	0.68(3)	0.0122(5)
^{169}Tm 739.794(4)	0.108(18)	0.0019(3)
^{169}Tm 744.765(7)	0.124(19)	0.0022(3)
^{169}Tm 748.2310(20)	0.102(20)	0.0018(4)
^{169}Tm 781.278(7)	0.20(4)	0.0036(7)
^{169}Tm 781.279(7)	0.19(4)	0.0034(7)
^{169}Tm 781.832(4)	0.090(20)	0.0016(4)
^{169}Tm 784.900(4)	0.18(4)	0.0032(7)
^{169}Tm 790.216(4)	0.17(3)	0.0030(5)
^{169}Tm 800.424(6)	0.122(23)	0.0022(4)
^{169}Tm 810.7260(20)	0.157(21)	0.0028(4)
^{169}Tm 815.624(4)	0.76(3)	0.0136(5)
^{169}Tm 818.5070(20)	0.233(20)	0.0042(4)
^{169}Tm 824.0610(20)	0.318(22)	0.0057(4)
^{169}Tm 844.677(9)	0.147(18)	0.0026(3)
^{169}Tm **854.337(4)**	**1.41(4)**	**0.0253(7)**
^{169}Tm 866.522(6)	0.353(24)	0.0063(4)
^{169}Tm 869.401(4)	0.235(23)	0.0042(4)
^{169}Tm 886.5560(20)	0.230(24)	0.0041(4)
^{169}Tm 890.047(3)	0.17(4)	0.0030(7)
^{169}Tm 920.507(9)	0.113(24)	0.0020(4)
^{169}Tm 928.265(4)	0.37(3)	0.0066(5)
^{169}Tm 943.522(4)	0.24(3)	0.0043(5)
^{169}Tm 956.145(3)	0.33(6)	0.0059(11)
^{169}Tm 959.201(4)	0.28(3)	0.0050(5)
^{169}Tm 959.220(9)	0.45(9)	0.0081(16)
^{169}Tm 973.121(12)	0.10(4)	0.0018(7)

Eγ-keV	σ(Eγ)-barns	k_0
Thulium (Z=69), continued		
^{169}Tm 987.453(3)	0.30(3)	0.0054(5)
^{169}Tm 995.714(4)	0.106(23)	0.0019(4)
^{169}Tm 998.253(4)	0.200(25)	0.0036(5)
^{169}Tm 1000.898(10)	0.23(4)	0.0041(7)
^{169}Tm 1018.431(10)	0.28(6)	0.0050(11)
^{169}Tm 1027.820(12)	0.26(4)	0.0047(7)
^{169}Tm 1040.1330(10)	0.25(7)	0.0045(13)
^{169}Tm 1043.108(12)	0.19(4)	0.0034(7)
^{169}Tm 1045.353(12)	0.18(4)	0.0032(7)
^{169}Tm 1061.868(14)	0.49(10)	0.0088(18)
^{169}Tm 1070.969(6)	0.30(6)	0.0054(11)
^{169}Tm 1101.996(3)	0.10(3)	0.0018(5)
^{169}Tm 1140.192(4)	0.62(12)	0.0111(22)
^{169}Tm 1154.112(12)	0.18(4)	0.0032(7)
^{169}Tm 1171.966(11)	0.14(3)	0.0025(5)
^{169}Tm 1178.905(4)	0.56(4)	0.0100(7)
^{169}Tm 1184.563(14)	0.20(3)	0.0036(5)
^{169}Tm 1210.678(11)	0.36(7)	0.0065(13)
^{169}Tm 1226.345(12)	0.120(22)	0.0022(4)
^{169}Tm 1238.136(10)	0.107(21)	0.0019(4)
^{169}Tm 1265.057(12)	0.210(24)	0.0038(4)
^{169}Tm 1354.71(7)	0.128(23)	0.0023(4)
^{169}Tm 4641.4(4)	0.32(3)	0.0057(5)
^{169}Tm 4732.6(4)	0.58(5)	0.0104(9)
^{169}Tm 4773.8(8)	0.16(3)	0.0029(5)
^{169}Tm 4922.1(5)	0.26(3)	0.0047(5)
^{169}Tm 4987.0(6)	0.16(3)	0.0029(5)
^{169}Tm 5061.6(8)	0.103(21)	0.0018(4)
^{169}Tm 5075.3(5)	0.39(4)	0.0070(7)
^{169}Tm 5124.1(5)	0.28(4)	0.0050(7)
^{169}Tm 5149.1(6)	0.31(4)	0.0056(7)
^{169}Tm 5158.2(6)	0.47(5)	0.0084(9)
^{169}Tm 5216.5(9)	0.092(25)	0.0017(5)
^{169}Tm 5326.80(11)	0.18(3)	0.0032(5)
^{169}Tm 5353.72(11)	0.19(3)	0.0034(5)
^{169}Tm 5381.18(11)	0.18(3)	0.0032(5)
^{169}Tm 5399.03(11)	0.143(25)	0.0026(5)
^{169}Tm 5412.95(11)	0.39(5)	0.0070(9)
^{169}Tm 5423.08(11)	0.24(3)	0.0043(5)
^{169}Tm 5431.26(11)	0.23(3)	0.0041(5)
^{169}Tm 5443.88(11)	0.150(25)	0.0027(5)
^{169}Tm 5451.91(11)	0.148(25)	0.0027(5)
^{169}Tm 5513.01(11)	0.16(5)	0.0029(9)
^{169}Tm 5683.40(11)	0.104(21)	0.0019(4)
^{169}Tm 5728.48(11)	0.26(3)	0.0047(5)
^{169}Tm **5731.36(11)**	**1.17(22)**	**0.021(4)**
^{169}Tm **5737.51(11)**	**1.42(7)**	**0.0255(13)**
^{169}Tm 5809.69(11)	0.147(20)	0.0026(4)
^{169}Tm 5858.03(11)	0.41(4)	0.0074(7)
^{169}Tm 5898.56(11)	0.35(4)	0.0063(7)
^{169}Tm 5908.27(11)	0.49(4)	0.0088(7)
^{169}Tm **5941.47(11)**	**1.51(7)**	**0.0271(13)**
^{169}Tm **5943.09(11)**	**1.03(20)**	**0.018(4)**
^{169}Tm **6001.61(11)**	**0.99(10)**	**0.0178(18)**
^{169}Tm 6354.59(11)	0.42(4)	0.0075(7)
^{169}Tm **6387.37(11)**	**1.48(7)**	**0.0265(13)**
^{169}Tm 6442.10(11)	0.47(3)	0.0084(5)
^{169}Tm 6553.10(11)	0.65(13)	0.0117(23)
Ytterbium (Z=70), *At.Wt.=173.04(3),* σ_γ*=34.9(8)*		
^{170}Yb 19.3940(20)	0.021(5)	0.00037(9)
^{174}Yb **41.2180(20)**	**1.1(3)**	**0.019(5)**
^{174}Yb **46.7510(20)**	**0.25(8)**	**0.0044(14)**
^{168}Yb 62.7190(10)	0.064(12)	0.00112(21)
^{170}Yb 66.720(10)	0.024(6)	0.00042(11)
^{168}Yb 75.0400(10)	0.015(3)	0.00026(5)
^{173}Yb **76.99(6)**	**0.40(4)**	**0.0070(7)**
^{171}Yb **78.7430(10)**	**0.67(10)**	**0.0117(18)**
^{173}Yb **86.11(7)**	**0.164(18)**	**0.0029(3)**
^{168}Yb 87.3840(10)	0.016(3)	0.00028(5)
^{174}Yb **87.9690(20)**	**0.26(6)**	**0.0046(11)**
^{173}Yb 88.26(11)	0.044(8)	0.00077(14)
^{174}Yb 89.9570(20)	0.066(16)	0.0012(3)
^{174}Yb **95.2730(20)**	**0.20(5)**	**0.0035(9)**
^{174}Yb 100.759(4)	0.019(7)	0.00033(12)

Table I. Adopted Prompt and Decay Gamma Rays from Thermal Neutron Capture for all Elements, continued

Eγ-keV	σ(Eγ)-barns	k_0
Ytterbium (Z=70), continued		
^{173}Yb **102.60(5)**	**0.44(5)**	**0.0077(9)**
^{174}Yb **104.5260(20)**	**0.43(11)**	**0.0075(19)**
^{174}Yb ***113.805(4)d***	***0.417(14)***	***0.00730[<0.1%]***
^{176}Yb *125.23(18)*	*0.007(3)*	*1.2(5)×10^{-4}*
^{173}Yb 138.27(6)	0.058(7)	0.00102(12)
^{174}Yb 142.0240(20)	0.032(8)	0.00056(14)
^{174}Yb 142.478(3)	0.021(5)	0.00037(9)
^{168}Yb 144.5760(10)	0.016(3)	0.00028(5)
^{173}Yb 148.72(9)	0.031(5)	0.00054(9)
^{168}Yb 156.8980(10)	0.038(7)	0.00067(12)
^{174}Yb 163.012(5)	0.132(25)	0.0023(4)
^{174}Yb 172.167(4)	0.118(22)	0.0021(4)
^{173}Yb **175.30(5)**	**0.58(6)**	**0.0102(11)**
^{171}Yb **181.529(3)**	**0.53(6)**	**0.0093(11)**
^{168}Yb **191.2140(10)**	**0.22(4)**	**0.0039(7)**
^{173}Yb 198.29(12)	0.023(4)	0.00040(7)
^{173}Yb 223.00(8)	0.029(4)	0.00051(7)
^{174}Yb 231.502(6)	0.060(8)	0.00105(14)
^{174}Yb 232.435(3)	0.025(4)	0.00044(7)
^{173}Yb 243.68(19)	0.018(4)	0.00032(7)
^{174}Yb 246.778(14)	0.024(7)	0.00042(12)
^{174}Yb 255.338(5)	0.033(10)	0.00058(18)
^{174}Yb 267.538(5)	0.073(10)	0.00128(18)
^{173}Yb 274.90(7)	0.044(6)	0.00077(11)
^{174}Yb ***282.522(14)d***	***0.666(22)***	***0.0117[<0.1%]***
^{171}Yb 287.138(3)	0.062(11)	0.00109(19)
^{174}Yb 288.626(17)	0.016(3)	0.00028(5)
^{174}Yb **311.276(5)**	**0.26(4)**	**0.0046(7)**
^{173}Yb 341.27(16)	0.026(5)	0.00046(9)
^{174}Yb **363.938(6)**	**0.80(12)**	**0.0140(21)**
^{168}Yb 378.616(3)	0.033(6)	0.00058(11)
^{174}Yb 389.422(5)	0.032(5)	0.00056(9)
^{174}Yb 392.114(11)	0.097(12)	0.00170(21)
^{174}Yb ***396.329(20)d***	***1.42(5)***	***0.0249[<0.1%]***
^{172}Yb 399.17(4)	0.111(12)	0.00194(21)
^{174}Yb 400.996(15)	0.015(4)	0.00026(7)
^{174}Yb 405.156(6)	0.040(6)	0.00070(11)
^{174}Yb 406.05(14)	0.111(14)	0.00194(25)
^{174}Yb 406.548(5)	0.118(18)	0.0021(3)
^{173}Yb 411.48(11)	0.021(4)	0.00037(7)
^{174}Yb 423.219(11)	0.045(7)	0.00079(12)
^{174}Yb **428.613(12)**	**0.61(7)**	**0.0107(12)**
^{174}Yb **436.173(5)**	**0.52(6)**	**0.0091(11)**
^{174}Yb 436.472(16)	0.037(8)	0.00065(14)
^{174}Yb 452.80(14)	0.019(3)	0.00033(5)
^{174}Yb 453.299(6)	0.031(6)	0.00054(11)
^{174}Yb 465.033(11)	0.06(4)	0.0011(7)
^{174}Yb 468.079(19)	0.022(4)	0.00039(7)
^{174}Yb 476.606(11)	0.015(4)	0.00026(7)
^{174}Yb 476.643(8)	0.015(4)	0.00026(7)
^{174}Yb **477.391(5)**	**0.75(8)**	**0.0131(14)**
^{174}Yb **482.071(11)**	**0.23(3)**	**0.0040(5)**
^{171}Yb 490.444(8)	0.0172(24)	0.00030(4)
^{174}Yb 496.414(11)	0.023(7)	0.00040(12)
^{174}Yb 497.717(10)	0.022(5)	0.00039(9)
^{174}Yb 498.315(9)	0.076(11)	0.00133(19)
^{174}Yb 505.05(5)	0.030(8)	0.00053(14)
^{174}Yb **511.784(11)**	**0.34(5)**	**0.0060(9)**
^{174}Yb ***514.868(7)d***	***9.0(9)***	***0.158[100%]***
^{174}Yb 518.491(11)	0.037(9)	0.00065(16)
^{171}Yb 528.289(7)	0.024(3)	0.00042(5)
^{174}Yb **534.735(9)**	**0.50(6)**	**0.0088(11)**
^{174}Yb 548.841(12)	0.020(7)	0.00035(12)
^{174}Yb 553.002(11)	0.091(13)	0.00159(23)
^{174}Yb 556.090(8)	0.066(11)	0.00116(19)
^{171}Yb 558.935(8)	0.020(3)	0.00035(5)
^{174}Yb 565.242(11)	0.039(8)	0.00068(14)
^{173}Yb 570.30(19)	0.028(6)	0.00049(11)
^{174}Yb 571.915(8)	0.047(7)	0.00082(12)
^{168}Yb 572.700(7)	0.049(8)	0.00086(14)
^{168}Yb 576.398(10)	0.024(4)	0.00042(7)
^{171}Yb 576.4(3)	0.020(3)	0.00035(5)
^{174}Yb 577.28(5)	0.046(8)	0.00081(14)
^{168}Yb 590.695(10)	0.090(15)	0.0016(3)
^{171}Yb 602.469(5)	0.030(4)	0.00053(7)

Eγ-keV	σ(Eγ)-barns	k_0
Ytterbium (Z=70), continued		
^{174}Yb 602.841(8)	0.072(10)	0.00126(18)
^{174}Yb 618.09(4)	0.020(4)	0.00035(7)
^{168}Yb 622.127(11)	0.034(6)	0.00060(11)
^{168}Yb 623.026(7)	0.035(6)	0.00061(11)
^{174}Yb 624.692(9)	0.026(4)	0.00046(7)
^{174}Yb 635.22(4)	0.078(13)	0.00137(23)
^{168}Yb 635.348(7)	0.103(17)	0.0018(3)
^{168}Yb 635.418(7)	0.103(17)	0.0018(3)
^{174}Yb **639.261(9)**	**1.43(17)**	**0.025(3)**
^{174}Yb 657.441(11)	0.031(8)	0.00054(14)
^{168}Yb 660.180(11)	0.016(3)	0.00028(5)
^{173}Yb 661.5(3)	0.024(6)	0.00042(11)
^{170}Yb 669.95(7)	0.120(15)	0.0021(3)
^{174}Yb 680.17(4)	0.034(6)	0.00060(11)
^{174}Yb 680.67(14)	0.031(7)	0.00054(12)
^{173}Yb 684.74(10)	0.052(8)	0.00091(14)
^{173}Yb 689.8(4)	0.015(5)	0.00026(9)
^{168}Yb 690.968(10)	0.037(6)	0.00065(11)
^{174}Yb 697.29(4)	0.034(8)	0.00060(14)
^{170}Yb 698.36(11)	0.052(7)	0.00091(12)
^{174}Yb 707.45(4)	0.121(19)	0.0021(3)
^{168}Yb 719.969(22)	0.141(15)	0.0025(3)
^{174}Yb 725.975(21)	0.015(5)	0.00026(9)
^{168}Yb 726.422(11)	0.049(6)	0.00086(11)
^{174}Yb 729.218(9)	0.128(16)	0.0022(3)
^{174}Yb 740.17(5)	0.038(11)	0.00067(19)
^{174}Yb 742.0(4)	0.076(12)	0.00133(21)
^{168}Yb 761.850(10)	0.039(7)	0.00068(12)
^{173}Yb 762.65(8)	0.069(9)	0.00121(16)
^{174}Yb **767.169(9)**	**0.151(25)**	**0.0026(4)**
^{170}Yb 774.42(9)	0.042(6)	0.00074(11)
^{174}Yb 800.409(16)	0.111(16)	0.0019(3)
^{174}Yb **811.427(9)**	**0.92(16)**	**0.016(3)**
^{174}Yb 812.019(11)	0.10(3)	0.0018(5)
^{174}Yb 816.14(4)	0.132(21)	0.0023(4)
^{174}Yb **825.22(7)**	**0.154(24)**	**0.0027(4)**
^{168}Yb 827.193(11)	0.023(4)	0.00040(7)
^{174}Yb 841.627(16)	0.138(17)	0.0024(3)
^{174}Yb 852.951(20)	0.049(13)	0.00086(23)
^{171}Yb 854.504(22)	0.020(4)	0.00035(7)
^{171}Yb **857.621(7)**	**0.208(25)**	**0.0036(4)**
^{174}Yb 858.05(5)	0.045(10)	0.00079(18)
^{174}Yb 866.027(11)	0.017(7)	0.00030(12)
^{174}Yb 869.60(4)	0.100(18)	0.0018(3)
^{170}Yb 869.7(15)	0.026(6)	0.00046(11)
^{174}Yb **871.695(9)**	**0.24(4)**	**0.0042(7)**
^{174}Yb 894.47(5)	0.066(13)	0.00116(23)
^{174}Yb 905.0(4)	0.045(12)	0.00079(21)
^{170}Yb 906.15(14)	0.040(7)	0.00070(12)
^{171}Yb 912.145(9)	0.049(8)	0.00086(14)
^{170}Yb 923.4(3)	0.019(6)	0.00033(11)
^{174}Yb 941.22(5)	0.082(15)	0.0014(3)
^{174}Yb 945.21(4)	0.069(15)	0.0012(3)
^{174}Yb 947.01(23)	0.076(12)	0.00133(21)
^{174}Yb 953.996(11)	0.095(24)	0.0017(4)
^{174}Yb 957.477(20)	0.017(7)	0.00030(12)
^{174}Yb 960.34(4)	0.015(7)	0.00026(12)
^{171}Yb 961.489(8)	0.120(17)	0.0021(3)
^{170}Yb 963.15(9)	0.117(14)	0.00205(25)
^{171}Yb **964.197(10)**	**0.229(25)**	**0.0040(4)**
^{174}Yb 982.44(5)	0.129(23)	0.0023(4)
^{174}Yb 988.22(4)	0.088(19)	0.0015(3)
^{170}Yb 990.18(15)	0.051(11)	0.00089(19)
^{171}Yb 995.79(4)	0.020(3)	0.00035(5)
^{174}Yb 1005.49(23)	0.033(10)	0.00058(18)
^{174}Yb 1006.00(25)	0.054(17)	0.0009(3)
^{174}Yb 1009.5(4)	0.082(17)	0.0014(3)
^{171}Yb 1021.4(3)	0.0182(25)	0.00032(4)
^{174}Yb 1022.62(23)	0.035(13)	0.00061(23)
^{171}Yb 1026.315(17)	0.0151(19)	0.00026(3)
^{171}Yb **1039.150(7)**	**0.22(3)**	**0.0039(5)**
^{173}Yb 1055.83(18)	0.037(7)	0.00065(12)
^{171}Yb 1070.475(15)	0.025(3)	0.00044(5)
^{171}Yb **1076.246(6)**	**0.52(6)**	**0.0091(11)**
^{171}Yb **1093.674(9)**	**0.24(3)**	**0.0042(5)**

Table I. Adopted Prompt and Decay Gamma Rays from Thermal Neutron Capture for all Elements, continued

Eγ-keV	σ(Eγ)-barns	k_0
Ytterbium (Z=70), continued		
^{170}Yb 1099.82(19)	0.040(7)	0.00070(12)
^{174}Yb 1115.5(3)	0.11(3)	0.0019(5)
^{171}Yb 1117.892(7)	0.086(14)	0.00151(25)
^{171}Yb **1119.780(8)**	**0.46(6)**	**0.0081(11)**
^{174}Yb 1122.3(10)	0.09(3)	0.0016(5)
^{173}Yb 1129.81(17)	0.128(17)	0.0022(3)
^{170}Yb 1138.9(3)	0.042(13)	0.00074(23)
^{171}Yb 1143.017(8)	0.106(13)	0.00186(23)
^{171}Yb 1152.16(5)	0.021(3)	0.00037(5)
^{171}Yb 1154.989(6)	0.099(13)	0.00173(23)
^{174}Yb 1187.7(3)	0.054(17)	0.0009(3)
^{168}Yb 1207.44(7)	0.018(4)	0.00032(7)
^{168}Yb 1221.20(3)	0.015(3)	0.00026(5)
^{168}Yb 1232.902(13)	0.018(3)	0.00032(5)
^{168}Yb 1263.261(19)	0.024(5)	0.00042(9)
^{170}Yb 1265.10(22)	0.081(12)	0.00142(21)
^{171}Yb 1288.873(12)	0.019(3)	0.00033(5)
^{173}Yb 1292.2(4)	0.036(9)	0.00063(16)
^{168}Yb 1295.620(13)	0.017(3)	0.00030(5)
^{174}Yb 1296.3(3)	0.046(17)	0.0008(3)
^{173}Yb **1308.53(11)**	**0.168(19)**	**0.0029(3)**
^{171}Yb 1326.286(7)	0.055(7)	0.00096(12)
^{173}Yb 1353.21(22)	0.041(9)	0.00072(16)
^{170}Yb 1371.3(4)	0.023(8)	0.00040(14)
^{168}Yb 1374.45(7)	0.021(4)	0.00037(7)
^{174}Yb **1378.22(7)**	**0.42(12)**	**0.0074(21)**
^{174}Yb 1378.7(10)	0.046(17)	0.0008(3)
^{173}Yb 1381.48(14)	0.129(16)	0.0023(3)
^{171}Yb 1387.243(7)	0.142(18)	0.0025(3)
^{171}Yb 1398.07(4)	0.134(16)	0.0023(3)
^{168}Yb 1410.40(14)	0.015(8)	0.00026(14)
^{168}Yb 1432.33(7)	0.016(4)	0.00028(7)
^{171}Yb 1450.264(20)	0.032(5)	0.00056(9)
^{173}Yb 1456.65(23)	0.083(15)	0.0015(3)
^{171}Yb 1465.985(7)	0.095(11)	0.00166(19)
^{170}Yb 1469.79(17)	0.096(16)	0.0017(3)
^{171}Yb 1470.401(12)	0.058(7)	0.00102(12)
^{171}Yb 1476.81(4)	0.048(6)	0.00084(11)
^{173}Yb 1480.63(24)	0.050(12)	0.00088(21)
^{170}Yb 1493.3(4)	0.027(10)	0.00047(18)
^{168}Yb 1505.32(6)	0.018(4)	0.00032(7)
^{171}Yb **1521.197(16)**	**0.193(24)**	**0.0034(4)**
^{173}Yb 1529.19(15)	0.070(10)	0.00123(18)
^{171}Yb 1529.779(9)	0.095(12)	0.00166(21)
^{173}Yb 1533.99(14)	0.103(13)	0.00180(23)
^{173}Yb 1552.0(3)	0.032(9)	0.00056(16)
^{171}Yb 1553.54(25)	0.026(5)	0.00046(9)
^{171}Yb 1584.114(12)	0.037(6)	0.00065(11)
^{171}Yb 1589.06(4)	0.037(5)	0.00065(9)
^{171}Yb 1599.939(16)	0.125(16)	0.0022(3)
^{171}Yb 1608.522(9)	0.081(11)	0.00142(19)
^{171}Yb 1621.960(12)	0.030(4)	0.00053(7)
^{171}Yb 1631.792(20)	0.054(7)	0.00095(12)
^{173}Yb **1638.36(17)**	**0.22(3)**	**0.0039(5)**
^{173}Yb **1679.70(14)**	**0.161(19)**	**0.0028(3)**
^{171}Yb 1696.12(3)	0.029(4)	0.00051(7)
^{171}Yb 1715.35(4)	0.090(11)	0.00158(19)
^{173}Yb 1730.9(3)	0.030(8)	0.00053(14)
^{171}Yb 1742.889(10)	0.024(5)	0.00042(9)
^{171}Yb 1770.58(4)	0.073(22)	0.0013(4)
^{173}Yb 1775.1(3)	0.052(11)	0.00091(19)
^{171}Yb 1786.76(3)	0.027(4)	0.00047(7)
^{171}Yb 1815.84(3)	0.073(10)	0.00128(18)
^{171}Yb 1849.32(4)	0.046(6)	0.00081(11)
^{171}Yb 1877.64(3)	0.035(5)	0.00061(9)
^{173}Yb 1920.6(3)	0.040(10)	0.00070(18)
^{171}Yb 1930.76(5)	0.070(9)	0.00123(16)
^{171}Yb 1956.39(3)	0.028(4)	0.00049(7)
^{171}Yb 1968.29(3)	0.061(14)	0.00107(25)
^{171}Yb 1997.515(21)	0.044(7)	0.00077(12)
^{173}Yb 2003.14(25)	0.045(10)	0.00079(18)
^{171}Yb 2009.50(5)	0.074(12)	0.00130(21)
^{171}Yb 2024.16(3)	0.081(12)	0.00142(21)
^{173}Yb 2093.9(3)	0.026(8)	0.00046(14)
^{171}Yb 2102.90(3)	0.040(5)	0.00070(9)

Eγ-keV	σ(Eγ)-barns	k_0
Ytterbium (Z=70), continued		
^{171}Yb 2115.56(4)	0.039(7)	0.00068(12)
^{171}Yb 2133.85(7)	0.043(6)	0.00075(11)
^{173}Yb 2171.4(3)	0.059(12)	0.00103(21)
^{171}Yb 2195.09(5)	0.066(11)	0.00116(19)
^{171}Yb 2234.17(10)	0.042(11)	0.00074(19)
^{171}Yb 2238.19(3)	0.052(12)	0.00091(21)
^{171}Yb 2263.11(3)	0.042(11)	0.00074(19)
^{171}Yb 2296.47(4)	0.035(7)	0.00061(12)
^{171}Yb 2327.57(8)	0.094(19)	0.0016(3)
^{173}Yb 2388.7(4)	0.036(10)	0.00063(18)
^{171}Yb **2401.37(3)**	**0.20(3)**	**0.0035(5)**
^{174}Yb **3632.3(10)**	**0.40(10)**	**0.0070(18)**
^{174}Yb 3661.2(14)	0.043(10)	0.00075(18)
^{174}Yb **3714.7(5)**	**0.23(6)**	**0.0040(11)**
^{174}Yb 3740.8(14)	0.043(10)	0.00075(18)
^{174}Yb 3776.2(23)	0.040(10)	0.00070(18)
^{174}Yb 3782.9(19)	0.057(14)	0.00100(25)
^{174}Yb 3823.8(14)	0.026(6)	0.00046(11)
^{174}Yb 3842.1(14)	0.074(18)	0.0013(3)
^{174}Yb 3854.4(11)	0.085(16)	0.0015(3)
^{173}Yb 3868.0(4)	0.103(14)	0.00180(25)
^{174}Yb **3885.0(4)**	**0.72(17)**	**0.013(3)**
^{174}Yb **3929.3(4)**	**0.38(9)**	**0.0067(16)**
^{174}Yb 3978.2(19)	0.020(5)	0.00035(9)
^{174}Yb 4129.6(19)	0.026(6)	0.00046(11)
^{174}Yb 4138.6(19)	0.023(6)	0.00040(11)
^{174}Yb 4174.9(13)	0.088(21)	0.0015(4)
^{174}Yb 4195.0(4)	0.058(14)	0.00102(25)
^{174}Yb 4454.3(4)	0.026(6)	0.00046(11)
^{174}Yb 4465.9(4)	0.040(10)	0.00070(18)
^{173}Yb 4716.5(7)	0.027(8)	0.00047(14)
^{174}Yb **4830.2(4)**	**0.25(6)**	**0.0044(11)**
^{174}Yb **5011.0(4)**	**0.18(4)**	**0.0032(7)**
^{174}Yb **5266.3(4)**	**1.4(6)**	**0.025(11)**
^{174}Yb 5307.5(4)	0.020(5)	0.00035(9)
^{171}Yb 5539.05(5)	0.083(11)	0.00145(19)
^{171}Yb 5691.58(9)	0.020(3)	0.00035(5)
^{170}Yb 5712.5(6)	0.056(9)	0.00098(16)
^{171}Yb 5824.85(6)	0.0172(23)	0.00030(4)
^{171}Yb 6009.65(6)	0.0148(19)	0.00026(3)
^{168}Yb 6779.90(11)	0.058(7)	0.00102(12)
Lutetium (Z=71), ***At.Wt.=174.967(1),*** σ_γ***=76.6(23)***		
^{175}Lu 38.7460(10)	0.38(12)	0.0066(21)
^{175}Lu 46.4590(10)	0.26(7)	0.0045(12)
^{175}Lu 66.2400(10)	0.28(4)	0.0048(7)
^{175}Lu **71.5170(10)**	**3.96(22)**	**0.069(4)**
^{175}Lu 73.1430(10)	0.160(20)	0.0028(4)
^{176}Lu ***88.36(4)***	***7.1(4) $s^{-1}g^{-1}$***	
^{176}Lu 94.129(8)	0.72(4)	0.0125(7)
^{176}Lu 111.705(12)	1.03(5)	0.0178(9)
^{175}Lu 112.9220(10)	1.15(7)	0.0199(12)
^{176}Lu ***112.9500(10)d***	***3.47(16)***	***0.060[<0.1%]***
^{176}Lu 115.651(8)	0.144(22)	0.0025(4)
^{176}Lu 119.836(3)	1.32(22)	0.023(4)
^{176}Lu **121.620(3)**	**5.24(17)**	**0.091(3)**
^{175}Lu 129.7730(10)	0.18(3)	0.0031(5)
^{176}Lu 135.802(19)	0.37(3)	0.0064(5)
^{176}Lu **138.607(5)**	**6.79(24)**	**0.118(4)**
^{175}Lu 139.3830(10)	0.25(4)	0.0043(7)
^{176}Lu 144.745(5)	1.33(8)	0.0230(14)
^{176}Lu **145.870(4)**	**1.52(9)**	**0.0263(16)**
^{176}Lu **147.165(5)**	**4.96(19)**	**0.086(3)**
^{176}Lu **147.167(5)**	**3.7(7)**	**0.064(12)**
^{176}Lu **150.392(3)**	**13.8(4)**	**0.239(7)**
^{175}Lu 153.4670(10)	0.55(5)	0.0095(9)
^{176}Lu **162.492(4)**	**5.32(17)**	**0.092(3)**
^{176}Lu 168.605(6)	0.97(5)	0.0168(9)
^{176}Lu **171.869(7)**	**1.74(6)**	**0.0301(10)**
^{175}Lu 182.4220(10)	0.46(10)	0.0080(17)
^{176}Lu **185.593(8)**	**3.42(12)**	**0.0592(21)**
^{176}Lu **187.970(23)**	**1.39(6)**	**0.0241(10)**
^{175}Lu 188.2870(10)	0.29(4)	0.0050(7)
^{176}Lu 191.492(9)	0.62(12)	0.0107(21)
^{175}Lu 192.2120(10)	1.08(14)	0.0187(24)

Table I. Adopted Prompt and Decay Gamma Rays from Thermal Neutron Capture for all Elements, continued

	Eγ-keV	σ(Eγ)-barns	k_0
Lutetium (Z=71), continued			
^{176}Lu	195.565(8)	0.63(5)	0.0109(9)
^{175}Lu	197.550(14)	0.30(14)	0.0052(24)
^{175}Lu	201.5680(10)	0.78(12)	0.0135(21)
^{176}Lu	***201.83(4)***	***37.9(22) $s^{-1}g^{-1}$***	
^{176}Lu	207.797(8)	1.00(5)	0.0173(9)
^{176}Lu	***208.3660(10)d***	***6.0(3)***	***0.104[<0.1%]***
^{176}Lu	209.492(24)	0.298(25)	0.0052(4)
^{176}Lu	212.841(15)	0.16(3)	0.0028(5)
^{176}Lu	213.965(8)	0.34(6)	0.0059(10)
^{175}Lu	217.0030(10)	0.35(10)	0.0061(17)
^{175}Lu	219.2830(20)	0.20(8)	0.0035(14)
^{175}Lu	**225.4030(10)**	**1.73(8)**	**0.0300(14)**
^{175}Lu	227.9970(10)	0.57(7)	0.0099(12)
^{176}Lu	228.708(10)	0.178(21)	0.0031(4)
^{175}Lu	233.7410(20)	0.41(10)	0.0071(17)
^{176}Lu	235.892(15)	0.81(4)	0.0140(7)
^{175}Lu	238.6710(10)	0.20(6)	0.0035(10)
^{176}Lu	244.310(12)	0.45(8)	0.0078(14)
^{176}Lu	247.255(15)	0.247(23)	0.0043(4)
^{175}Lu	251.1990(20)	0.16(3)	0.0028(5)
^{176}Lu	**259.401(16)**	**1.89(8)**	**0.0327(14)**
^{175}Lu	263.7290(10)	0.59(10)	0.0102(17)
^{176}Lu	264.581(6)	0.76(11)	0.0132(19)
^{176}Lu	**268.788(5)**	**3.64(13)**	**0.0630(23)**
^{175}Lu	277.6830(10)	0.20(6)	0.0035(10)
^{175}Lu	284.6410(10)	0.75(6)	0.0130(10)
^{176}Lu	301.098(6)	0.73(4)	0.0126(7)
^{176}Lu	***306.84(4)***	***45.2(24) $s^{-1}g^{-1}$***	
^{175}Lu	**310.1870(10)**	**1.49(8)**	**0.0258(14)**
^{176}Lu	313.350(8)	0.40(3)	0.0069(5)
^{176}Lu	**319.036(8)**	**3.83(13)**	**0.0663(23)**
^{176}Lu	322.865(19)	0.31(3)	0.0054(5)
^{176}Lu	329.59(3)	0.181(21)	0.0031(4)
^{175}Lu	335.8480(20)	1.32(8)	0.0229(14)
^{176}Lu	336.323(15)	0.19(3)	0.0033(5)
^{176}Lu	346.37(3)	0.35(6)	0.0061(10)
^{176}Lu	348.084(9)	0.84(4)	0.0145(7)
^{176}Lu	360.096(10)	0.29(9)	0.0050(16)
^{176}Lu	364.58(4)	0.62(3)	0.0107(5)
^{176}Lu	**367.433(11)**	**2.23(8)**	**0.0386(14)**
^{176}Lu	393.389(11)	0.54(3)	0.0094(5)
^{176}Lu	413.665(13)	0.93(4)	0.0161(7)
^{176}Lu	430.452(15)	0.147(21)	0.0025(4)
^{176}Lu	436.505(13)	0.145(20)	0.0025(4)
^{176}Lu	**457.944(15)**	**8.3(3)**	**0.144(5)**
^{176}Lu	475.46(3)	0.287(16)	0.0050(3)
^{175}Lu	520.5500(20)	0.20(4)	0.0035(7)
^{175}Lu	527.5090(20)	0.32(5)	0.0055(9)
^{176}Lu	544.602(18)	0.210(13)	0.00364(23)
^{176}Lu	547.866(16)	0.306(17)	0.0053(3)
^{176}Lu	550.288(15)	0.490(21)	0.0085(4)
^{176}Lu	552.073(15)	0.67(3)	0.0116(5)
^{175}Lu	563.9420(20)	0.51(4)	0.0088(7)
^{175}Lu	578.198(3)	0.20(8)	0.0035(14)
^{176}Lu	606.65(7)	0.182(15)	0.0032(3)
^{176}Lu	671.908(15)	0.259(21)	0.0045(4)
^{176}Lu	689.77(6)	0.31(5)	0.0054(9)
^{176}Lu	695.033(16)	0.296(25)	0.0051(4)
^{175}Lu	709.553(4)	0.21(7)	0.0036(12)
^{176}Lu	716.470(17)	0.189(16)	0.0033(3)
^{176}Lu	**761.564(20)**	**2.60(9)**	**0.0450(16)**
^{175}Lu	834.810(3)	0.20(11)	0.0035(19)
^{175}Lu	838.643(3)	0.89(10)	0.0154(17)
^{176}Lu	864.52(8)	0.191(16)	0.0033(3)
^{176}Lu	899.12(6)	0.423(25)	0.0073(4)
^{176}Lu	907.86(6)	0.42(3)	0.0073(5)
^{176}Lu	907.961(18)	0.35(5)	0.0061(9)
^{176}Lu	916.24(4)	0.439(25)	0.0076(4)
^{175}Lu	1000.846(18)	0.15(10)	0.0026(17)
^{176}Lu	1036.39(8)	0.169(16)	0.0029(3)
^{176}Lu	1061.97(6)	0.45(4)	0.0078(7)
^{176}Lu	1080.24(6)	0.68(4)	0.0118(7)
^{176}Lu	1088.11(4)	0.83(4)	0.0144(7)
^{176}Lu	1215.36(13)	0.139(14)	0.00241(24)
^{176}Lu	1233.84(6)	0.187(19)	0.0032(3)

	Eγ-keV	σ(Eγ)-barns	k_0
Lutetium (Z=71), continued			
^{176}Lu	1305.18(8)	0.36(3)	0.0062(5)
^{176}Lu	1381.01(6)	0.30(3)	0.0052(5)
^{176}Lu	4866.8(5)	0.25(5)	0.0043(9)
^{176}Lu	5016.6(5)	0.215(18)	0.0037(3)
^{176}Lu	5023.6(3)	0.176(24)	0.0030(4)
^{176}Lu	5319.45(24)	0.167(19)	0.0029(3)
^{176}Lu	5323.12(13)	0.145(15)	0.0025(3)
^{175}Lu	5331.80(20)	0.16(4)	0.0028(7)
^{175}Lu	5331.94(20)	0.19(4)	0.0033(7)
^{176}Lu	5343.91(25)	0.26(3)	0.0045(5)
^{176}Lu	5465.7(3)	0.218(16)	0.0038(3)
^{176}Lu	5570.12(10)	0.385(24)	0.0067(4)
^{176}Lu	5601.87(25)	0.327(25)	0.0057(4)
^{176}Lu	5728.00(10)	0.23(3)	0.0040(5)
^{176}Lu	5769.72(10)	0.184(18)	0.0032(3)
^{176}Lu	6803.92(9)	0.38(8)	0.0066(14)
Hafnium (Z=72), *At.Wt.=178.49(2)*, σ_γ*=119(3)*			
^{178}Hf	45.8570(10)	1.21(7)	0.0205(12)
^{177}Hf	**62.820(21)**	**5.26(16)**	**0.089(3)**
^{177}Hf	**93.182(6)**	**13.3(9)**	**0.226(15)**
^{179}Hf	93.3240(20)	0.80(5)	0.0136(9)
^{178}Hf	105.8940(20)	0.335(10)	0.00569(17)
^{177}Hf	122.8970(10)	0.432(16)	0.0073(3)
^{174}Hf	*125.7(10)*	*0.2000(20)*	*0.00340(3)*
^{177}Hf	144.530(3)	0.384(13)	0.00652(22)
^{178}Hf	161.1890(20)	0.57(10)	0.0097(17)
^{178}Hf	193.3100(10)	1.1(3)	0.019(5)
^{178}Hf	202.2840(20)	0.65(13)	0.0110(22)
^{177}Hf	**213.439(7)**	**29.3(7)**	**0.497(12)**
^{178}Hf	**214.3410(20)**	**5.7(6)**	**0.097(10)**
^{178}Hf	***214.3410(20)d***	***16.3(3)***	***0.277[99%]***
^{179}Hf	215.426(8)	2.77(17)	0.047(3)
^{179}Hf	235.020(7)	0.38(9)	0.0065(15)
^{178}Hf	239.1660(10)	0.293(24)	0.0050(4)
^{177}Hf	244.3130(20)	0.58(4)	0.0098(7)
^{177}Hf	244.544(13)	0.97(14)	0.0165(24)
^{177}Hf	245.2950(20)	0.58(4)	0.0098(7)
^{177}Hf	256.6010(20)	0.426(20)	0.0072(3)
^{178}Hf	258.6230(20)	0.44(10)	0.0075(17)
^{177}Hf	273.166(3)	0.305(16)	0.0052(3)
^{177}Hf	277.2080(20)	0.47(3)	0.0080(5)
^{177}Hf	289.5570(20)	0.67(4)	0.0114(7)
^{178}Hf	**303.9880(20)**	**3.38(9)**	**0.0574(15)**
^{177}Hf	**325.559(4)**	**6.69(17)**	**0.114(3)**
^{179}Hf	332.275(11)	0.73(17)	0.012(3)
^{177}Hf	339.1990(20)	1.28(6)	0.0217(10)
^{177}Hf	348.369(4)	0.60(8)	0.0102(14)
^{177}Hf	426.380(5)	0.35(3)	0.0059(5)
^{177}Hf	497.893(3)	1.11(11)	0.0188(19)
^{176}Hf	508.29(9)	1.05(6)	0.0178(10)
^{177}Hf	547.374(5)	0.40(4)	0.0068(7)
^{177}Hf	596.894(4)	0.34(13)	0.0058(22)
^{178}Hf	729.515(4)	0.53(5)	0.0090(9)
^{177}Hf	921.822(5)	0.84(5)	0.0143(9)
^{177}Hf	961.919(5)	0.76(7)	0.0129(12)
^{177}Hf	970.066(7)	0.32(8)	0.0054(14)
^{178}Hf	1003.650(4)	0.89(5)	0.0151(9)
^{177}Hf	1016.663(6)	0.30(13)	0.0051(22)
^{179}Hf	1059.66(4)	0.32(3)	0.0054(5)
^{179}Hf	1065.45(3)	1.94(5)	0.0329(9)
^{177}Hf	1077.844(5)	2.40(6)	0.0407(10)
^{177}Hf	1081.454(6)	2.82(7)	0.0479(12)
^{177}Hf	**1102.824(5)**	**2.96(8)**	**0.0503(14)**
^{177}Hf	1143.737(7)	1.84(6)	0.0312(10)
^{177}Hf	**1167.072(6)**	**3.95(10)**	**0.0671(17)**
^{177}Hf	**1174.635(5)**	**4.8(7)**	**0.081(12)**
^{177}Hf	1175.357(7)	2.6(5)	0.044(9)
^{177}Hf	1183.504(8)	1.42(5)	0.0241(9)
^{179}Hf	1197.92(8)	0.44(6)	0.0075(10)
^{177}Hf	1205.975(5)	1.26(23)	0.021(4)
^{177}Hf	**1207.213(5)**	**3.9(3)**	**0.066(5)**
^{177}Hf	1226.532(6)	1.30(5)	0.0221(9)
^{177}Hf	**1229.287(8)**	**4.26(11)**	**0.0723(19)**
^{177}Hf	1232.172(5)	1.35(6)	0.0229(10)

Table I. Adopted Prompt and Decay Gamma Rays from Thermal Neutron Capture for all Elements, continued

	Eγ-keV	σ(Eγ)-barns	k_0
Hafnium (Z=72), continued			
^{177}Hf	1247.379(5)	0.49(4)	0.0083(7)
^{177}Hf	1254.913(7)	0.40(4)	0.0068(7)
^{177}Hf	1269.372(6)	2.26(7)	0.0384(12)
^{177}Hf	1291.282(6)	0.99(5)	0.0168(9)
^{177}Hf	1310.071(5)	1.45(5)	0.0246(9)
^{177}Hf	1330.109(5)	2.08(8)	0.0353(14)
^{177}Hf	1333.832(5)	1.71(9)	0.0290(15)
^{177}Hf	1340.447(6)	2.38(10)	0.0404(17)
^{177}Hf	1344.841(5)	0.59(5)	0.0100(9)
^{177}Hf	1403.267(20)	0.51(4)	0.0087(7)
^{177}Hf	1420.651(6)	1.81(8)	0.0307(14)
^{177}Hf	1496.448(21)	0.44(3)	0.0075(5)
^{177}Hf	1542.416(7)	0.55(8)	0.0093(14)
^{177}Hf	1649.794(6)	0.367(22)	0.0062(4)
^{178}Hf	1649.81(10)	0.46(4)	0.0078(7)
^{177}Hf	1725.094(10)	0.46(5)	0.0078(9)
^{177}Hf	1848.821(8)	0.46(5)	0.0078(9)
^{180}Hf	1895.38(16)	0.54(5)	0.0092(9)
^{177}Hf	1904.272(10)	0.71(6)	0.0121(10)
^{177}Hf	1927.998(7)	0.30(5)	0.0051(9)
^{177}Hf	1957.294(12)	0.31(4)	0.0053(7)
^{178}Hf	3497.81(25)	0.31(5)	0.0053(9)
^{178}Hf	4336.18(4)	0.35(4)	0.0059(7)
^{178}Hf	4343.69(4)	0.44(5)	0.0075(9)
^{179}Hf	4915.2(6)	0.35(5)	0.0059(9)
^{177}Hf	5068.3(5)	0.32(5)	0.0054(9)
^{177}Hf	5260.9(5)	0.36(6)	0.0061(10)
^{177}Hf	5294.9(5)	0.34(5)	0.0058(9)
^{177}Hf	5575.22(16)	0.41(4)	0.0070(7)
^{179}Hf	5647.71(11)	0.38(4)	0.0065(7)
^{180}Hf	5649.60(21)	0.33(18)	0.006(3)
^{180}Hf	5695.48(17)	1.09(9)	0.0185(15)
^{178}Hf	5723.809(22)	1.97(10)	0.0334(17)
^{177}Hf	5807.42(16)	0.35(5)	0.0059(9)
^{177}Hf	6111.85(16)	0.92(6)	0.0156(10)
^{177}Hf	6357.14(16)	0.32(5)	0.0054(9)
Tantalum (Z=73), *At.Wt.=180.9479(1)*, σ_γ=*20.6(5)*			
^{181}Ta	47.8120(20)	0.13(3)	0.0022(5)
^{181}Ta	54.4710(20)	0.052(13)	0.00087(22)
^{181}Ta	59.693(3)	0.042(13)	0.00070(22)
^{181}Ta	71.900(4)	0.060(15)	0.00100(25)
^{181}Ta	72.932(4)	0.054(15)	0.00090(25)
^{181}Ta	73.519(4)	0.06(3)	0.0010(5)
^{181}Ta	74.2680(20)	0.077(22)	0.0013(4)
^{181}Ta	76.549(6)	0.029(13)	0.00049(22)
^{181}Ta	82.876(4)	0.029(13)	0.00049(22)
^{181}Ta	92.480(3)	0.065(9)	0.00109(15)
^{181}Ta	94.1680(20)	0.051(7)	0.00085(12)
^{181}Ta	95.156(3)	0.081(9)	0.00136(15)
^{181}Ta	97.467(3)	0.065(9)	0.00109(15)
^{181}Ta	97.8320(20)	0.139(7)	0.00233(12)
^{181}Ta	99.8310(20)	0.127(7)	0.00213(12)
^{181}Ta	100.5540(20)	0.060(11)	0.00100(18)
^{181}Ta	104.1130(20)	0.037(6)	0.00062(10)
^{181}Ta	107.863(3)	0.131(14)	0.00219(23)
^{181}Ta	**114.3150(10)**	**0.280(9)**	**0.00469(15)**
^{181}Ta	114.3760(20)	0.110(20)	0.0018(3)
^{181}Ta	114.674(3)	0.193(20)	0.0032(3)
^{181}Ta	118.8950(20)	0.108(8)	0.00181(13)
^{181}Ta	119.516(3)	0.039(6)	0.00065(10)
^{181}Ta	119.6980(20)	0.038(6)	0.00064(10)
^{181}Ta	121.5340(20)	0.031(3)	0.00052(5)
^{181}Ta	122.613(3)	0.037(6)	0.00062(10)
^{181}Ta	122.675(3)	0.092(4)	0.00154(7)
^{181}Ta	122.9730(20)	0.075(9)	0.00126(15)
^{181}Ta	125.126(3)	0.030(4)	0.00050(7)
^{181}Ta	**133.8770(20)**	**0.63(7)**	**0.0106(12)**
^{181}Ta	139.4560(20)	0.094(10)	0.00157(17)
^{181}Ta	139.6610(20)	0.029(3)	0.00049(5)
^{181}Ta	141.2450(20)	0.062(9)	0.00104(15)
^{181}Ta	142.261(5)	0.042(13)	0.00070(22)
^{181}Ta	143.156(7)	0.061(9)	0.00102(15)
^{181}Ta	146.7740(20)	0.141(4)	0.00236(7)
^{181}Ta	154.0850(20)	0.082(3)	0.00137(5)
^{181}Ta	156.0880(20)	0.233(6)	0.00390(10)
^{181}Ta	156.2300(20)	0.046(3)	0.00077(5)
^{181}Ta	159.048(3)	0.0449(23)	0.00075(4)
^{181}Ta	167.413(3)	0.031(3)	0.00052(5)
^{181}Ta	168.130(4)	0.033(9)	0.00055(15)
^{181}Ta	*171.580(3)d*	*0.005400(11)*	*9.044×10^{-5}[65%]*
^{181}Ta	171.580(3)	0.029(4)	0.00049(7)
^{181}Ta	**173.2050(20)**	**1.210(25)**	**0.0203(4)**
^{181}Ta	178.6250(20)	0.072(6)	0.00121(10)
^{181}Ta	190.334(3)	0.183(7)	0.00306(12)
^{181}Ta	195.1080(20)	0.075(4)	0.00126(7)
^{181}Ta	210.5460(20)	0.064(4)	0.00107(7)
^{181}Ta	214.2070(20)	0.0481(23)	0.00081(4)
^{181}Ta	233.7080(20)	0.065(3)	0.00109(5)
^{181}Ta	237.2880(20)	0.050(6)	0.00084(10)
^{181}Ta	244.809(4)	0.032(3)	0.00054(5)
^{181}Ta	252.7710(20)	0.034(8)	0.00057(13)
^{181}Ta	260.094(4)	0.052(17)	0.0009(3)
^{181}Ta	267.907(3)	0.027(4)	0.00045(7)
^{181}Ta	**270.4030(20)**	**2.60(6)**	**0.0435(10)**
^{181}Ta	287.131(3)	0.054(6)	0.00090(10)
^{181}Ta	290.362(3)	0.027(7)	0.00045(12)
^{181}Ta	297.125(3)	0.17(3)	0.0028(5)
^{181}Ta	322.554(4)	0.048(3)	0.00080(5)
^{181}Ta	346.465(5)	0.110(6)	0.00184(10)
^{181}Ta	360.518(3)	0.177(7)	0.00296(12)
^{181}Ta	373.881(6)	0.052(3)	0.00087(5)
^{181}Ta	377.2460(20)	0.127(4)	0.00213(7)
^{181}Ta	382.203(3)	0.074(3)	0.00124(5)
^{181}Ta	401.238(3)	0.044(3)	0.00074(5)
^{181}Ta	**402.623(3)**	**1.180(23)**	**0.0198(4)**
^{181}Ta	443.6080(20)	0.036(3)	0.00060(5)
^{181}Ta	473.803(6)	0.032(3)	0.00054(5)
^{181}Ta	478.685(5)	0.054(3)	0.00090(5)
^{181}Ta	480.034(3)	0.091(4)	0.00152(7)
^{181}Ta	489.590(4)	0.027(4)	0.00045(7)
^{181}Ta	499.118(6)	0.050(4)	0.00084(7)
^{181}Ta	501.068(3)	0.029(3)	0.00049(5)
^{181}Ta	509.967(5)	0.054(13)	0.00090(22)
^{181}Ta	512.355(4)	0.165(9)	0.00276(15)
^{181}Ta	514.110(4)	0.033(4)	0.00055(7)
^{181}Ta	530.593(4)	0.0266(23)	0.00045(4)
^{181}Ta	603.15(3)	0.035(3)	0.00059(5)
^{181}Ta	3982.2(3)	0.032(7)	0.00054(12)
^{181}Ta	4045.81(23)	0.030(3)	0.00050(5)
^{181}Ta	4053.82(22)	0.034(3)	0.00057(5)
^{181}Ta	4219.98(25)	0.037(4)	0.00062(7)
^{181}Ta	4315.43(19)	0.084(7)	0.00141(12)
^{181}Ta	4443.9(3)	0.031(4)	0.00052(7)
^{181}Ta	4482.95(25)	0.042(6)	0.00070(10)
^{181}Ta	4536.05(25)	0.032(4)	0.00054(7)
^{181}Ta	4566.6(3)	0.032(4)	0.00054(7)
^{181}Ta	4579.5(3)	0.035(4)	0.00059(7)
^{181}Ta	4618.08(22)	0.044(4)	0.00074(7)
^{181}Ta	4691.73(25)	0.040(4)	0.00067(7)
^{181}Ta	4781.95(18)	0.105(7)	0.00176(12)
^{181}Ta	4792.76(25)	0.048(4)	0.00080(7)
^{181}Ta	4802.55(25)	0.037(4)	0.00062(7)
^{181}Ta	4832.97(25)	0.030(3)	0.00050(5)
^{181}Ta	4980.12(22)	0.033(3)	0.00055(5)
^{181}Ta	5005.52(21)	0.042(3)	0.00070(5)
^{181}Ta	5245.79(6)	0.051(4)	0.00085(7)
^{181}Ta	5343.26(6)	0.048(4)	0.00080(7)
^{181}Ta	5792.39(6)	0.034(3)	0.00057(5)
^{181}Ta	5964.95(6)	0.138(8)	0.00231(13)
^{181}Ta	6062.78(6)	0.087(4)	0.00146(7)
Tungsten (Z=74), *At.Wt.=183.84(1)*, σ_γ=*18.39(16)*			
^{182}W	**46.4840(10)**	**0.192(10)**	**0.00316(16)**
^{182}W	**52.5290(10)**	**0.128(11)**	**0.00211(18)**
^{186}W	**59.03(4)**	**0.208(7)**	**0.00343(12)**
^{186}W	***72.002(4)d***	***1.32(3)***	***0.0218[1.4%]***
^{186}W	**77.39(3)**	**0.134(5)**	**0.00221(8)**
^{182}W	84.7130(10)	0.0261(16)	0.00043(3)
^{182}W	**99.0790(10)**	**0.155(13)**	**0.00256(21)**

Table I. Adopted Prompt and Decay Gamma Rays from Thermal Neutron Capture for all Elements, continued

	Eγ-keV	σ(Eγ)-barns	k_0
Tungsten (Z=74), continued			
^{186}W	101.80(5)	0.0129(22)	2.1(4)×10^{-4}
^{182}W	**107.9320(10)**	**0.144(12)**	**0.00237(20)**
^{182}W	109.738(7)	0.0201(16)	0.00033(3)
^{183}W	**111.216(9)**	**0.195(6)**	**0.00321(10)**
^{186}W	124.05(5)	0.051(11)	0.00084(18)
^{186}W	**127.43(4)**	**0.129(5)**	**0.00213(8)**
^{186}W	128.92(6)	0.0207(24)	0.00034(4)
^{186}W	***134.247(7)d***	***1.050(20)***	***0.0173[1.4%]***
^{186}W	142.90(8)	0.0206(18)	0.00034(3)
^{186}W	**145.79(3)**	**0.970(21)**	**0.0160(4)**
^{186}W	149.05(7)	0.0393(22)	0.00065(4)
^{186}W	157.46(4)	0.0319(14)	0.000526(23)
^{182}W	160.5280(10)	0.0183(12)	0.000302(20)
^{182}W	**162.315(8)**	**0.187(5)**	**0.00308(8)**
^{186}W	171.69(7)	0.0097(10)	1.60(16)×10^{-4}
^{184}W	173.680(20)	0.0155(16)	0.00026(3)
^{186}W	197.56(16)	0.027(5)	0.00045(8)
^{186}W	**201.44(5)**	**0.319(8)**	**0.00526(13)**
^{186}W	**204.83(4)**	**0.148(4)**	**0.00244(7)**
^{182}W	208.817(7)	0.0231(25)	0.00038(4)
^{182}W	209.876(9)	0.014(3)	2.3(5)×10^{-4}
^{183}W	215.340(13)	0.0107(10)	1.76(16)×10^{-4}
^{186}W	**225.86(4)**	**0.113(17)**	**0.0019(3)**
^{183}W	226.743(10)	0.067(16)	0.0011(3)
^{186}W	227.34(7)	0.024(4)	0.00040(7)
^{182}W	246.0600(10)	0.0280(12)	0.000462(20)
^{183}W	**252.854(11)**	**0.101(3)**	**0.00166(5)**
^{186}W	**273.10(5)**	**0.272(7)**	**0.00448(12)**
^{186}W	289.94(5)	0.0603(22)	0.00099(4)
^{182}W	291.724(7)	0.0453(19)	0.00075(3)
^{186}W	294.73(8)	0.0097(16)	1.6(3)×10^{-4}
^{183}W	294.958(14)	0.0106(11)	1.75(18)×10^{-4}
^{186}W	303.25(4)	0.044(3)	0.00073(5)
^{182}W	313.0160(10)	0.054(4)	0.00089(7)
^{183}W	318.015(12)	0.021(3)	0.00035(5)
^{186}W	354.78(6)	0.0452(24)	0.00075(4)
^{180}W	365.44(11)	0.0155(15)	0.000256(25)
^{186}W	376.70(5)	0.0453(18)	0.00075(3)
^{186}W	390.59(11)	0.0126(12)	2.08(20)×10^{-4}
^{186}W	423.75(7)	0.0497(22)	0.00082(4)
^{186}W	473.88(7)	0.055(5)	0.00091(8)
^{186}W	***479.550(22)d***	***2.59(5)***	***0.0427[1.4%]***
^{186}W	494.64(7)	0.0123(16)	2.0(3)×10^{-4}
^{186}W	500.08(6)	0.0491(23)	0.00081(4)
^{186}W	531.17(7)	0.052(3)	0.00086(5)
^{186}W	541.09(7)	0.0190(23)	0.00031(4)
^{186}W	547.81(17)	0.022(4)	0.00036(7)
^{186}W	***551.52(4)d***	***0.603(14)***	***0.00994[1.4%]***
^{186}W	**557.16(5)**	**0.125(5)**	**0.00206(8)**
^{184}W	569.65(22)	0.0166(17)	0.00027(3)
^{186}W	**577.30(5)**	**0.191(5)**	**0.00315(8)**
^{184}W	579.8(3)	0.021(10)	0.00035(16)
^{184}W	580.49(23)	0.021(10)	0.00035(16)
^{186}W	588.34(7)	0.0216(19)	0.00036(3)
^{183}W	607.60(5)	0.0112(16)	1.8(3)×10^{-4}
^{186}W	611.30(5)	0.066(3)	0.00109(5)
^{186}W	616.20(6)	0.059(3)	0.00097(5)
^{186}W	***618.26(4)d***	***0.746(17)***	***0.0123[1.4%]***
^{186}W	***625.519(10)d***	***0.129(3)***	***0.00213[1.4%]***
^{186}W	629.19(17)	0.022(3)	0.00036(5)
^{186}W	635.35(5)	0.036(4)	0.00059(7)
^{184}W	636.4(4)	0.044(20)	0.0007(3)
^{184}W	640.02(24)	0.055(25)	0.0009(4)
^{186}W	640.43(7)	0.032(3)	0.00053(5)
^{186}W	657.54(7)	0.083(5)	0.00137(8)
^{186}W	661.36(8)	0.032(4)	0.00053(7)
^{184}W	663.49(21)	0.029(3)	0.00048(5)
^{186}W	670.34(5)	0.0452(25)	0.00075(4)
^{184}W	674.5(3)	0.019(9)	0.00031(15)
^{186}W	***685.73(4)d***	***3.24(7)***	***0.0534[1.4%]***
^{186}W	694.38(5)	0.073(3)	0.00120(5)
^{182}W	694.64(4)	0.0230(19)	0.00038(3)
^{182}W	696.77(5)	0.022(6)	0.00036(10)
^{183}W	710.28(5)	0.0118(17)	1.9(3)×10^{-4}
^{183}W	711.59(6)	0.0108(15)	1.78(25)×10^{-4}

	Eγ-keV	σ(Eγ)-barns	k_0
Tungsten (Z=74), continued			
^{183}W	724.39(3)	0.0179(23)	0.00030(4)
^{186}W	725.94(6)	0.023(4)	0.00038(7)
^{186}W	738.73(5)	0.040(3)	0.00066(5)
^{184}W	744.86(24)	0.030(14)	0.00049(23)
^{186}W	745.80(6)	0.053(3)	0.00087(5)
^{184}W	757.2(3)	0.048(22)	0.0008(4)
^{183}W	757.324(23)	0.028(3)	0.00046(5)
^{186}W	762.78(5)	0.047(4)	0.00077(7)
^{184}W	768.33(22)	0.015(7)	2.5(12)×10^{-4}
^{186}W	***772.89(5)d***	***0.490(10)***	***0.00808[1.4%]***
^{186}W	**782.12(6)**	**0.22(3)**	**0.0036(5)**
^{186}W	788.79(7)	0.070(5)	0.00115(8)
^{183}W	**792.059(16)**	**0.119(6)**	**0.00196(10)**
^{186}W	803.33(6)	0.034(3)	0.00056(5)
^{186}W	814.20(6)	0.0436(25)	0.00072(4)
^{186}W	**816.13(5)**	**0.104(4)**	**0.00171(7)**
^{182}W	817.557(17)	0.0157(13)	0.000259(21)
^{184}W	822.76(20)	0.0176(24)	0.00029(4)
^{186}W	831.65(10)	0.092(16)	0.0015(3)
^{184}W	838.5(4)	0.014(6)	2.3(10)×10^{-4}
^{186}W	**840.18(5)**	**0.143(5)**	**0.00236(8)**
^{182}W	846.33(6)	0.0221(22)	0.00036(4)
^{186}W	866.18(7)	0.068(3)	0.00112(5)
^{186}W	872.64(8)	0.040(3)	0.00066(5)
^{186}W	877.51(8)	0.030(3)	0.00049(5)
^{186}W	880.89(9)	0.045(3)	0.00074(5)
^{182}W	888.08(3)	0.076(13)	0.00125(21)
^{184}W	888.9(3)	0.026(12)	0.00043(20)
^{183}W	891.27(4)	0.063(4)	0.00104(7)
^{186}W	**891.59(6)**	**0.136(5)**	**0.00224(8)**
^{183}W	894.735(16)	0.075(4)	0.00124(7)
^{183}W	**903.274(17)**	**0.115(5)**	**0.00190(8)**
^{186}W	909.04(10)	0.092(4)	0.00152(7)
^{184}W	912.1(3)	0.028(3)	0.00046(5)
^{186}W	913.63(6)	0.030(3)	0.00049(5)
^{182}W	927.294(18)	0.0235(18)	0.00039(3)
^{186}W	930.08(8)	0.018(4)	0.00030(7)
^{186}W	933.46(7)	0.0133(11)	2.19(18)×10^{-4}
^{186}W	936.54(8)	0.0130(11)	2.14(18)×10^{-4}
^{182}W	941.02(5)	0.0117(11)	1.93(18)×10^{-4}
^{186}W	941.04(8)	0.0276(13)	0.000455(21)
^{182}W	960.29(17)	0.0101(21)	1.7(4)×10^{-4}
^{184}W	976.2(3)	0.016(7)	0.00026(12)
^{186}W	979.68(16)	0.016(16)	0.0003(3)
^{182}W	**979.871(18)**	**0.102(10)**	**0.00168(16)**
^{186}W	989.11(7)	0.036(4)	0.00059(7)
^{186}W	1004.94(8)	0.015(6)	2.5(10)×10^{-4}
^{184}W	1005.9(4)	0.022(10)	0.00036(16)
^{183}W	1010.177(23)	0.036(3)	0.00059(5)
^{186}W	1012.05(6)	0.041(5)	0.00068(8)
^{186}W	1018.43(8)	0.036(4)	0.00059(7)
^{186}W	1025.94(12)	0.033(8)	0.00054(13)
^{182}W	**1026.373(17)**	**0.161(15)**	**0.00265(25)**
^{184}W	1031.3(3)	0.031(14)	0.00051(23)
^{186}W	1057.51(7)	0.029(3)	0.00048(5)
^{186}W	1071.09(5)	0.053(3)	0.00087(5)
^{186}W	1082.34(8)	0.061(4)	0.00101(7)
^{186}W	1084.97(12)	0.022(3)	0.00036(5)
^{182}W	1100.73(13)	0.024(5)	0.00040(8)
^{186}W	1103.58(21)	0.050(13)	0.00082(21)
^{186}W	1106.96(20)	0.027(3)	0.00045(5)
^{183}W	1121.392(24)	0.0144(15)	2.37(25)×10^{-4}
^{184}W	1125.3(3)	0.046(21)	0.0008(4)
^{186}W	1134.90(7)	0.027(3)	0.00045(5)
^{186}W	1139.48(5)	0.031(3)	0.00051(5)
^{186}W	1153.37(12)	0.014(8)	2.3(13)×10^{-4}
^{184}W	1153.5(3)	0.011(5)	1.8(8)×10^{-4}
^{184}W	1180.8(3)	0.08(4)	0.0013(7)
^{184}W	1195.63(23)	0.031(14)	0.00051(23)
^{182}W	1262.10(5)	0.0179(24)	0.00030(4)
^{186}W	1269.91(9)	0.031(8)	0.00051(13)
^{183}W	1275.01(3)	0.032(6)	0.00053(10)
^{183}W	1319.77(5)	0.0134(18)	2.2(3)×10^{-4}
^{184}W	1328.3(4)	0.015(3)	2.5(5)×10^{-4}
^{182}W	1347.37(13)	0.019(11)	0.00031(18)

Table I. Adopted Prompt and Decay Gamma Rays from Thermal Neutron Capture for all Elements, continued

	Eγ-keV	σ(Eγ)-barns	k_0
Tungsten (Z=74), continued			
^{184}W	1347.6(8)	0.020(9)	0.00033(15)
^{183}W	1386.22(3)	0.025(3)	0.00041(5)
^{184}W	1408.1(3)	0.0170(22)	0.00028(4)
^{183}W	1412.03(16)	0.017(5)	0.00028(8)
^{182}W	1424.42(5)	0.030(8)	0.00049(13)
^{183}W	1430.98(5)	0.0106(15)	$1.75(25)\times10^{-4}$
^{182}W	1470.92(5)	0.010(4)	$1.6(7)\times10^{-4}$
^{182}W	1504.07(9)	0.0100(11)	$1.65(18)\times10^{-4}$
^{182}W	1509.68(13)	0.022(3)	0.00036(5)
^{182}W	1556.18(13)	0.014(3)	$2.3(5)\times10^{-4}$
^{183}W	1569.9(3)	0.013(3)	$2.1(5)\times10^{-4}$
^{183}W	1765.47(9)	0.0105(22)	$1.7(4)\times10^{-4}$
^{183}W	1919.4(4)	0.019(4)	0.00031(7)
^{183}W	1945.14(15)	0.020(3)	0.00033(5)
^{183}W	1949.69(7)	0.0097(21)	$1.6(4)\times10^{-4}$
^{183}W	1995.48(21)	0.0103(20)	$1.7(3)\times10^{-4}$
^{183}W	2014.85(5)	0.0104(15)	$1.71(25)\times10^{-4}$
^{183}W	2035.64(17)	0.025(3)	0.00041(5)
^{183}W	2135.08(21)	0.013(3)	$2.1(5)\times10^{-4}$
^{183}W	2183.29(8)	0.022(3)	0.00036(5)
^{183}W	2284.32(19)	0.018(4)	0.00030(7)
^{186}W	2293.1(7)	0.011(3)	$1.8(5)\times10^{-4}$
^{186}W	2367.1(4)	0.030(16)	0.0005(3)
^{183}W	2369.9(3)	0.018(4)	0.00030(7)
^{186}W	2481.30(25)	0.031(4)	0.00051(7)
^{186}W	2556.0(3)	0.021(4)	0.00035(7)
^{186}W	2584.20(18)	0.031(4)	0.00051(7)
^{186}W	2689.5(3)	0.024(4)	0.00040(7)
^{186}W	2708.4(3)	0.026(4)	0.00043(7)
^{186}W	2727.5(4)	0.021(11)	0.00035(18)
^{186}W	2738.4(3)	0.032(4)	0.00053(7)
^{186}W	2760.3(3)	0.033(4)	0.00054(7)
^{186}W	2831.98(20)	0.023(4)	0.00038(7)
^{186}W	2849.3(3)	0.033(4)	0.00054(7)
^{186}W	2939.4(4)	0.014(4)	$2.3(7)\times10^{-4}$
^{186}W	3055.01(20)	0.0290(25)	0.00048(4)
^{186}W	3097.3(4)	0.015(3)	$2.5(5)\times10^{-4}$
^{186}W	3114.78(20)	0.025(3)	0.00041(5)
^{186}W	3148.2(5)	0.086(19)	0.0014(3)
^{186}W	3153.9(10)	0.061(20)	0.0010(3)
^{186}W	3191.92(25)	0.037(3)	0.00061(5)
^{186}W	3207.0(3)	0.030(4)	0.00049(7)
^{186}W	3225.15(17)	0.042(6)	0.00069(10)
^{186}W	3267.1(5)	0.0101(24)	$1.7(4)\times10^{-4}$
^{186}W	3314.4(4)	0.015(3)	$2.5(5)\times10^{-4}$
^{186}W	3376.15(18)	0.041(4)	0.00068(7)
^{186}W	3423.0(4)	0.030(3)	0.00049(5)
^{186}W	3443.2(4)	0.039(12)	0.00064(20)
^{186}W	3452.8(9)	0.055(10)	0.00091(16)
^{186}W	**3469.40(14)**	**0.103(6)**	**0.00170(10)**
^{186}W	3492.67(17)	0.051(4)	0.00084(7)
^{186}W	3510.72(19)	0.033(4)	0.00054(7)
^{186}W	3529.69(18)	0.040(4)	0.00066(7)
^{186}W	3534.56(17)	0.063(5)	0.00104(8)
^{186}W	3561.14(14)	0.060(4)	0.00099(7)
^{186}W	3577.2(4)	0.016(4)	0.00026(7)
^{183}W	3696.2(4)	0.011(3)	$1.8(5)\times10^{-4}$
^{186}W	3710.1(4)	0.034(8)	0.00056(13)
^{186}W	3739.05(17)	0.069(4)	0.00114(7)
^{186}W	3760.9(3)	0.026(3)	0.00043(5)
^{186}W	3774.59(21)	0.026(3)	0.00043(5)
^{186}W	3804.7(4)	0.020(3)	0.00033(5)
^{186}W	3847.8(4)	0.051(4)	0.00084(7)
^{183}W	3864.4(4)	0.011(3)	$1.8(5)\times10^{-4}$
^{186}W	3886.4(3)	0.014(3)	$2.3(5)\times10^{-4}$
^{186}W	3901.8(3)	0.024(3)	0.00040(5)
^{186}W	3920.2(4)	0.017(3)	0.00028(5)
^{186}W	3964.87(18)	0.034(9)	0.00056(15)
^{182}W	4014.17(5)	0.050(10)	0.00082(16)
^{186}W	4018.1(5)	0.029(6)	0.00048(10)
^{182}W	4026.21(10)	0.019(3)	0.00031(5)
^{182}W	4064.48(9)	0.018(3)	0.00030(5)
^{186}W	4082.8(5)	0.051(11)	0.00084(18)
^{186}W	4119.24(10)	0.059(4)	0.00097(7)
^{186}W	4136.61(17)	0.034(5)	0.00056(8)
^{186}W	4158.13(21)	0.043(5)	0.00071(8)
^{182}W	4162.33(17)	0.0122(15)	$2.01(25)\times10^{-4}$
^{184}W	4219.2(8)	0.034(16)	0.0006(3)
^{182}W	4246.61(4)	0.043(4)	0.00071(7)
^{186}W	**4249.66(7)**	**0.115(6)**	**0.00190(10)**
^{182}W	4304.65(6)	0.020(3)	0.00033(5)
^{186}W	4331.63(8)	0.040(4)	0.00066(7)
^{182}W	4367.18(4)	0.026(3)	0.00043(5)
^{182}W	4379.77(5)	0.017(3)	0.00028(5)
^{186}W	4384.20(9)	0.057(5)	0.00094(8)
^{186}W	4448.10(9)	0.048(3)	0.00079(5)
^{182}W	4460.59(9)	0.0124(23)	$2.0(4)\times10^{-4}$
^{184}W	4469.1(6)	0.022(10)	0.00036(16)
^{186}W	4491.51(10)	0.036(10)	0.00059(16)
^{182}W	4518.11(5)	0.039(5)	0.00064(8)
^{184}W	4535.5(3)	0.08(4)	0.0013(7)
^{186}W	4557.49(11)	0.025(5)	0.00041(8)
^{182}W	4562.86(14)	0.026(3)	0.00043(5)
^{184}W	**4573.7(3)**	**0.104(9)**	**0.00171(15)**
^{186}W	**4574.94(8)**	**0.152(10)**	**0.00251(16)**
^{186}W	**4626.35(7)**	**0.124(7)**	**0.00204(12)**
^{182}W	4634.64(13)	0.015(4)	$2.5(7)\times10^{-4}$
^{186}W	4650.40(7)	0.052(5)	0.00086(8)
^{186}W	**4684.40(8)**	**0.150(7)**	**0.00247(12)**
^{182}W	4719.90(5)	0.0189(25)	0.00031(4)
^{184}W	4748.7(4)	0.06(3)	0.0010(5)
^{184}W	4931.79(25)	0.0119(23)	$2.0(4)\times10^{-4}$
^{184}W	4980.5(9)	0.017(8)	0.00028(13)
^{184}W	4986.2(3)	0.019(9)	0.00031(15)
^{183}W	5015.52(20)	0.0162(20)	0.00027(3)
^{184}W	5091.05(25)	0.07(3)	0.0012(5)
^{183}W	5116.55(10)	0.0114(16)	$1.9(3)\times10^{-4}$
^{182}W	**5164.43(3)**	**0.19(3)**	**0.0031(5)**
^{182}W	5256.22(4)	0.0122(12)	$2.01(20)\times10^{-4}$
^{186}W	**5261.68(6)**	**0.86(4)**	**0.0142(7)**
^{183}W	5285.00(8)	0.0115(14)	$1.90(23)\times10^{-4}$
^{186}W	**5320.72(6)**	**0.605(21)**	**0.0100(4)**
^{186}W	5466.50(6)	0.023(4)	0.00038(7)
^{183}W	5534.37(11)	0.011(4)	$1.8(7)\times10^{-4}$
^{184}W	5754.53(21)	0.0112(18)	$1.8(3)\times10^{-4}$
^{183}W	5796.19(9)	0.023(9)	0.00038(15)
^{183}W	5797.50(9)	0.0161(23)	0.00027(4)
^{183}W	6024.82(7)	0.036(3)	0.00059(5)
^{182}W	**6144.28(3)**	**0.174(11)**	**0.00287(18)**
^{183}W	6189.75(7)	0.0264(24)	0.00044(4)
^{182}W	**6190.78(3)**	**0.45(4)**	**0.0074(7)**
^{183}W	6289.64(7)	0.0235(19)	0.00039(3)
^{183}W	6408.54(8)	0.043(4)	0.00071(7)
^{183}W	6507.75(7)	0.0098(9)	$1.62(15)\times10^{-4}$
^{183}W	7299.78(7)	0.0159(17)	0.00026(3)
^{183}W	7410.99(7)	0.071(4)	0.00117(7)
Rhenium (Z=75), *At.Wt.=186.207(1)*, σ_γ*=91.5(10)*			
^{185}Re	40.3510(20)	0.61(11)	0.0099(18)
^{185}Re	56.408(3)	0.106(20)	0.0017(3)
^{185}Re	**59.0100(20)**	**5.5(8)**	**0.090(13)**
^{185}Re	61.927(4)	0.51(7)	0.0083(11)
^{187}Re	**63.5820(20)**	**8.0(14)**	**0.130(23)**
^{187}Re	72.047(9)	0.41(5)	0.0067(8)
^{185}Re	74.5690(20)	0.64(9)	0.0104(15)
^{187}Re	**74.8630(20)**	**1.29(8)**	**0.0210(13)**
^{187}Re	85.323(7)	0.109(21)	0.0018(3)
^{185}Re	86.83(3)	0.102(24)	0.0017(4)
^{185}Re	**87.264(3)**	**0.84(4)**	**0.0137(7)**
^{187}Re	87.4800(20)	0.113(19)	0.0018(3)
^{187}Re	92.356(3)	0.25(4)	0.0041(7)
^{187}Re	**92.4640(20)**	**1.07(6)**	**0.0174(10)**
^{185}Re	99.3610(20)	0.230(24)	0.0037(4)
^{185}Re	99.698(3)	0.115(24)	0.0019(4)
^{185}Re	103.310(4)	0.43(3)	0.0070(5)
^{187}Re	**105.8620(20)**	**1.77(8)**	**0.0288(13)**
^{185}Re	106.550(4)	0.27(4)	0.0044(7)
^{187}Re	107.425(3)	0.352(25)	0.0057(4)
^{185}Re	108.336(5)	0.085(19)	0.0014(3)
^{185}Re	110.240(4)	0.089(16)	0.0014(3)

Table I. Adopted Prompt and Decay Gamma Rays from Thermal Neutron Capture for all Elements, continued

Eγ-keV	σ(Eγ)-barns	k_0
Rhenium (Z=75), continued		
^{185}Re 111.337(4)	0.58(9)	0.0094(15)
^{187}Re 111.590(3)	0.45(5)	0.0073(8)
^{185}Re 111.679(5)	0.68(12)	0.0111(20)
^{185}Re 111.814(4)	0.37(7)	0.0060(11)
^{187}Re 115.155(3)	0.43(5)	0.0070(8)
^{187}Re 115.155(3)	0.28(3)	0.0046(5)
^{185}Re 117.94(10)	0.22(4)	0.0036(7)
^{185}Re 118.196(4)	0.106(20)	0.0017(3)
^{185}Re 122.521(4)	0.74(4)	0.0120(7)
^{185}Re 123.507(6)	0.16(3)	0.0026(5)
^{185}Re 127.354(3)	0.43(4)	0.0070(7)
^{187}Re 128.553(4)	0.105(12)	0.00171(20)
^{187}Re 129.973(4)	0.090(15)	0.00146(24)
^{187}Re 131.080(4)	0.42(5)	0.0068(8)
^{185}Re ***137.157(8)d***	***5.29(3)***	***0.0861[<0.1%]***
^{187}Re 138.725(5)	0.19(3)	0.0031(5)
^{185}Re 139.417(6)	0.136(19)	0.0022(3)
^{185}Re 140.095(5)	0.27(5)	0.0044(8)
^{185}Re 141.257(5)	0.19(3)	0.0031(5)
^{187}Re **141.760(4)**	**1.46(8)**	**0.0238(13)**
^{187}Re 143.124(4)	0.090(15)	0.00146(24)
^{185}Re 143.917(4)	0.55(8)	0.0090(13)
^{185}Re **144.152(5)**	**1.8(3)**	**0.029(5)**
^{185}Re 144.157(4)	0.15(15)	0.0024(24)
^{187}Re 145.155(5)	0.44(5)	0.0072(8)
^{187}Re 145.155(5)	0.28(3)	0.0046(5)
^{185}Re 147.415(5)	0.60(9)	0.0098(15)
^{185}Re 147.417(6)	0.47(5)	0.0076(8)
^{185}Re 148.989(4)	0.29(7)	0.0047(11)
^{185}Re 149.520(5)	0.44(5)	0.0072(8)
^{187}Re 150.970(4)	0.24(3)	0.0039(5)
^{185}Re **151.688(3)**	**1.15(7)**	**0.0187(11)**
^{187}Re ***155.041(4)d***	***7.16(25)***	***0.117[2.0%]***
^{187}Re 156.424(4)	0.73(8)	0.0119(13)
^{187}Re 158.730(20)	0.15(4)	0.0024(7)
^{185}Re 164.466(8)	0.085(21)	0.0014(3)
^{187}Re **167.327(3)**	**1.46(6)**	**0.0238(10)**
^{185}Re 167.735(4)	0.20(4)	0.0033(7)
^{185}Re 169.434(4)	0.108(23)	0.0018(4)
^{185}Re 174.267(3)	0.382(24)	0.0062(4)
^{185}Re 176.103(5)	0.18(3)	0.0029(5)
^{185}Re 176.552(8)	0.31(3)	0.0050(5)
^{187}Re 178.138(5)	0.26(3)	0.0042(5)
^{187}Re 178.839(6)	0.20(3)	0.0033(5)
^{185}Re 179.448(6)	0.115(21)	0.0019(3)
^{187}Re 181.942(5)	0.388(25)	0.0063(4)
^{187}Re **188.813(6)**	**0.98(10)**	**0.0159(16)**
^{187}Re 189.33(11)	0.284(24)	0.0046(4)
^{185}Re 189.346(8)	0.33(5)	0.0054(8)
^{187}Re 193.342(3)	0.43(3)	0.0070(5)
^{185}Re **199.337(16)**	**0.91(4)**	**0.0148(7)**
^{187}Re **199.513(5)**	**1.02(10)**	**0.0166(16)**
^{185}Re 200.997(7)	0.098(16)	0.0016(3)
^{187}Re 205.342(4)	0.37(8)	0.0060(13)
^{187}Re **207.853(4)**	**4.44(21)**	**0.072(3)**
^{187}Re **208.843(7)**	**0.98(10)**	**0.0159(16)**
^{185}Re 209.785(4)	0.14(3)	0.0023(5)
^{185}Re **210.698(4)**	**1.50(10)**	**0.0244(16)**
^{187}Re 211.53(3)	0.27(5)	0.0044(8)
^{185}Re **214.647(4)**	**2.53(14)**	**0.0412(23)**
^{187}Re 216.033(4)	0.30(7)	0.0049(11)
^{187}Re 219.445(7)	0.67(9)	0.0109(15)
^{185}Re 219.74(5)	0.081(15)	0.00132(24)
^{185}Re 223.016(5)	0.24(6)	0.0039(10)
^{187}Re 223.544(5)	0.083(9)	0.00135(15)
^{187}Re **227.083(6)**	**1.78(12)**	**0.0290(20)**
^{185}Re 232.100(16)	0.36(7)	0.0059(11)
^{185}Re 232.111(9)	0.24(4)	0.0039(7)
^{187}Re **236.627(4)**	**1.45(10)**	**0.0236(16)**
^{187}Re 238.450(5)	0.147(24)	0.0024(4)
^{187}Re 246.33(3)	0.091(14)	0.00148(23)
^{187}Re **251.243(5)**	**1.80(23)**	**0.029(4)**
^{185}Re 251.842(15)	0.58(16)	0.009(3)
^{185}Re **254.998(4)**	**1.15(5)**	**0.0187(8)**
^{187}Re 256.924(3)	0.66(23)	0.011(4)

Eγ-keV	σ(Eγ)-barns	k_0
Rhenium (Z=75), continued		
^{185}Re **257.447(9)**	**0.87(23)**	**0.014(4)**
^{185}Re 260.67(7)	0.13(3)	0.0021(5)
^{185}Re 261.264(15)	0.67(3)	0.0109(5)
^{185}Re 263.367(5)	0.106(24)	0.0017(4)
^{187}Re 266.155(20)	0.125(15)	0.00203(24)
^{187}Re **274.298(5)**	**0.80(6)**	**0.0130(10)**
^{187}Re 275.510(9)	0.51(4)	0.0083(7)
^{187}Re 284.590(17)	0.27(5)	0.0044(8)
^{185}Re 285.095(23)	0.41(4)	0.0067(7)
^{185}Re 287.0(3)	0.12(3)	0.0020(5)
^{187}Re **290.665(6)**	**3.5(4)**	**0.057(7)**
^{187}Re **291.492(8)**	**0.94(7)**	**0.0153(11)**
^{187}Re 299.130(9)	0.151(14)	0.00246(23)
^{187}Re 300.210(4)	0.70(5)	0.0114(8)
^{185}Re 307.673(16)	0.34(3)	0.0055(5)
^{185}Re **316.457(9)**	**2.21(10)**	**0.0360(16)**
^{187}Re 317.38(5)	0.083(17)	0.0014(3)
^{187}Re 318.37(3)	0.25(3)	0.0041(5)
^{185}Re 319.374(9)	0.18(3)	0.0029(5)
^{187}Re 352.11(3)	0.116(16)	0.0019(3)
^{185}Re 355.646(17)	0.115(16)	0.0019(3)
^{185}Re 358.11(10)	0.236(19)	0.0038(3)
^{185}Re 360.36(7)	0.449(25)	0.0073(4)
^{187}Re 362.712(9)	0.46(3)	0.0075(5)
^{185}Re 363.612(8)	0.16(4)	0.0026(7)
^{187}Re 376.816(10)	0.083(16)	0.0014(3)
^{185}Re 378.384(9)	0.54(3)	0.0088(5)
^{185}Re **390.854(23)**	**1.15(5)**	**0.0187(8)**
^{187}Re 406.555(9)	0.18(4)	0.0029(7)
^{185}Re 407.05(16)	0.102(24)	0.0017(4)
^{185}Re 410.74(15)	0.10(3)	0.0016(5)
^{185}Re 411.496(10)	0.14(3)	0.0023(5)
^{185}Re 413.19(5)	0.16(4)	0.0026(7)
^{187}Re 423.525(21)	0.12(3)	0.0020(5)
^{187}Re 426.112(9)	0.13(3)	0.0021(5)
^{185}Re 439.09(23)	0.14(5)	0.0023(8)
^{185}Re 469.79(10)	0.09(3)	0.0015(5)
^{185}Re 479.6(3)	0.30(13)	0.0049(21)
^{187}Re 493.23(6)	0.10(3)	0.0016(5)
^{185}Re 496.57(14)	0.15(4)	0.0024(7)
^{187}Re 518.575(9)	0.24(6)	0.0039(10)
^{185}Re 550.77(23)	0.15(4)	0.0024(7)
^{187}Re 556.81(6)	0.13(4)	0.0021(7)
^{185}Re 585.4(3)	0.18(3)	0.0029(5)
^{185}Re 608.25(14)	0.25(3)	0.0041(5)
^{187}Re 609.04(3)	0.25(3)	0.0041(5)
^{185}Re 645.02(14)	0.18(3)	0.0029(5)
^{185}Re 680.49(10)	0.34(3)	0.0055(5)
^{185}Re 759.94(14)	0.17(5)	0.0028(8)
^{185}Re 761.47(23)	0.17(5)	0.0028(8)
^{185}Re 796.1(3)	0.31(3)	0.0050(5)
^{185}Re 3933.7(8)	0.09(4)	0.0015(7)
^{185}Re 4079.0(8)	0.14(3)	0.0023(5)
^{185}Re 4099.8(10)	0.13(3)	0.0021(5)
^{185}Re 4129.4(8)	0.100(24)	0.0016(4)
^{185}Re 4178.1(5)	0.088(22)	0.0014(4)
^{185}Re 4455.7(23)	0.11(3)	0.0018(5)
^{185}Re 4611.3(5)	0.081(20)	0.0013(3)
^{185}Re 4631.7(23)	0.085(23)	0.0014(4)
^{185}Re 4663.7(4)	0.24(3)	0.0039(5)
^{185}Re 4743.5(8)	0.113(21)	0.0018(3)
^{185}Re 4773.7(5)	0.18(3)	0.0029(5)
^{185}Re 4860.7(5)	0.37(4)	0.0060(7)
^{185}Re 4871.7(8)	0.11(3)	0.0018(5)
^{187}Re 4888.6(3)	0.141(25)	0.0023(4)
^{187}Re 4893.4(3)	0.081(17)	0.0013(3)
^{187}Re 4916.3(3)	0.102(21)	0.0017(3)
^{187}Re 4958.7(5)	0.14(3)	0.0023(5)
^{187}Re 4973.1(5)	0.15(3)	0.0024(5)
^{187}Re 4987.9(4)	0.17(4)	0.0028(7)
^{187}Re 5000.8(4)	0.17(4)	0.0028(7)
^{185}Re 5007.0(5)	0.27(4)	0.0044(7)
^{187}Re 5012.60(25)	0.18(3)	0.0029(5)
^{187}Re 5020.6(4)	0.098(23)	0.0016(4)
^{185}Re 5027.9(4)	0.29(5)	0.0047(8)

Table I. Adopted Prompt and Decay Gamma Rays from Thermal Neutron Capture for all Elements, continued

Eγ-keV	σ(Eγ)-barns	k_0
Rhenium (Z=75), continued		
^{185}Re 5048.8(6)	0.096(23)	0.0016(4)
^{187}Re 5049.3(3)	0.16(3)	0.0026(5)
^{187}Re 5073.28(23)	0.43(5)	0.0070(8)
^{187}Re 5080.3(4)	0.098(23)	0.0016(4)
^{185}Re 5080.7(8)	0.094(23)	0.0015(4)
^{187}Re 5134.8(3)	0.25(6)	0.0041(10)
^{185}Re 5137.6(6)	0.39(4)	0.0063(7)
^{187}Re 5167.6(3)	0.14(3)	0.0023(5)
^{185}Re 5176.3(5)	0.18(3)	0.0029(5)
^{187}Re 5224.37(7)	0.081(20)	0.0013(3)
^{185}Re 5276.7(5)	0.14(3)	0.0023(5)
^{187}Re 5314.86(9)	0.083(20)	0.0014(3)
^{187}Re 5348.62(6)	0.20(3)	0.0033(5)
^{185}Re 5353.10(13)	0.13(3)	0.0021(5)
^{187}Re 5371.95(6)	0.090(19)	0.0015(3)
^{185}Re 5493.19(13)	0.114(18)	0.0019(3)
^{185}Re 5601.53(13)	0.109(18)	0.0018(3)
^{187}Re 5614.74(6)	0.092(17)	0.0015(3)
^{185}Re 5644.95(15)	0.088(16)	0.0014(3)
^{187}Re 5688.91(6)	0.120(17)	0.0020(3)
^{187}Re 5702.21(6)	0.100(16)	0.0016(3)
^{185}Re 5708.74(13)	0.115(17)	0.0019(3)
^{185}Re 5709.49(20)	0.098(24)	0.0016(4)
^{187}Re 5715.61(6)	0.086(16)	0.0014(3)
^{185}Re 5856.86(13)	0.140(15)	0.00228(24)
^{187}Re 5871.65(6)	0.299(23)	0.0049(4)
^{185}Re 5910.44(13)	0.60(4)	0.0098(7)
^{185}Re 6005.30(13)	0.081(11)	0.00132(18)
^{185}Re 6032.96(13)	0.090(12)	0.00146(20)
^{185}Re 6079.87(13)	0.155(13)	0.00252(21)
^{185}Re 6120.22(13)	0.182(16)	0.0030(3)
Osmium (Z=76), *At.Wt.=190.23(3)*, σ_γ*=16.0(11)*		
^{184}Os 37.18(13)	0.034(6)	0.00054(10)
^{190}Os 57.480(10)	0.10(3)	0.0016(5)
^{190}Os 57.74(6)	0.081(6)	0.00129(10)
^{188}Os 59.079(16)	0.046(5)	0.00073(8)
^{190}Os 67.24(20)	0.021(4)	0.00033(6)
^{192}Os 73.43(4)	0.174(8)	0.00277(13)
^{184}Os 90.95(15)	0.030(15)	0.00048(24)
^{192}Os 131.26(5)	0.0291(17)	0.00046(3)
^{190}Os 138.070(10)	0.0239(16)	0.000381(25)
^{192}Os *138.92(3)d*	*0.0467(22)*	*0.00074[1.1%]*
^{187}Os **155.10(4)**	**1.19(3)**	**0.0190(5)**
^{184}Os 158.40(10)	0.025(7)	0.00040(11)
^{190}Os 172.50(10)	0.025(4)	0.00040(6)
^{190}Os 175.80(4)	0.189(8)	0.00301(13)
^{186}Os 177.42(20)	0.021(4)	0.00033(6)
^{189}Os 182.02(10)	0.027(7)	0.00043(11)
^{190}Os 182.30(10)	0.043(5)	0.00069(8)
^{189}Os **186.7180(20)**	**2.08(5)**	**0.0331(8)**
^{190}Os 194.25(8)	0.028(3)	0.00045(5)
^{189}Os 198.084(21)	0.056(7)	0.00089(11)
^{192}Os 204.42(4)	0.081(4)	0.00129(6)
^{184}Os 222.38(14)	0.021(7)	0.00033(11)
^{189}Os 223.810(7)	0.052(4)	0.00083(6)
^{190}Os 229.93(4)	0.072(4)	0.00115(6)
^{190}Os 235.24(3)	0.184(6)	0.00293(10)
^{190}Os 239.890(10)	0.080(4)	0.00127(6)
^{192}Os 242.41(4)	0.069(4)	0.00110(6)
^{192}Os 254.39(5)	0.0368(22)	0.00059(4)
^{192}Os 265.71(3)	0.101(3)	0.00161(5)
^{188}Os **272.82(4)**	**0.242(6)**	**0.00386(10)**
^{190}Os 275.34(3)	0.173(5)	0.00276(8)
^{190}Os 291.650(10)	0.047(3)	0.00075(5)
^{190}Os 295.030(10)	0.030(5)	0.00048(8)
^{192}Os 295.41(5)	0.055(4)	0.00088(6)
^{190}Os 304.71(6)	0.073(4)	0.00116(6)
^{190}Os 305.020(10)	0.022(4)	0.00035(6)
^{192}Os 307.080(10)	0.026(3)	0.00041(5)
^{190}Os 307.21(10)	0.026(3)	0.00041(5)
^{190}Os 314.72(10)	0.039(3)	0.00062(5)
^{190}Os 316.45(11)	0.030(4)	0.00048(6)
^{187}Os **322.98(6)**	**0.242(9)**	**0.00386(14)**
^{190}Os 332.690(10)	0.055(5)	0.00088(8)
Osmium (Z=76), continued		
^{190}Os 339.61(5)	0.055(3)	0.00088(5)
^{188}Os 343.473(20)	0.051(16)	0.00081(25)
^{190}Os 343.61(6)	0.046(3)	0.00073(5)
^{190}Os 345.92(10)	0.034(4)	0.00054(6)
^{188}Os 346.871(25)	0.025(8)	0.00040(13)
^{187}Os 347.24(17)	0.023(4)	0.00037(6)
^{190}Os 349.25(6)	0.051(4)	0.00081(6)
^{190}Os 352.56(9)	0.041(5)	0.00065(8)
^{189}Os 353.85(5)	0.0213(24)	0.00034(4)
^{190}Os 355.80(10)	0.025(4)	0.00040(6)
^{189}Os 358.71(5)	0.033(4)	0.00053(6)
^{190}Os 359.01(7)	0.047(4)	0.00075(6)
^{189}Os **361.137(6)**	**0.466(15)**	**0.00742(24)**
^{190}Os 362.36(15)	0.040(9)	0.00064(14)
^{190}Os 365.04(12)	0.035(5)	0.00056(8)
^{190}Os 366.33(5)	0.097(6)	0.00155(10)
^{189}Os **371.261(5)**	**0.574(14)**	**0.00914(22)**
^{190}Os 397.270(10)	0.038(6)	0.00061(10)
^{189}Os 397.394(14)	0.115(5)	0.00183(8)
^{186}Os 400.84(22)	0.022(6)	0.00035(10)
^{190}Os 403.25(5)	0.065(4)	0.00104(6)
^{189}Os 407.175(22)	0.060(7)	0.00096(11)
^{189}Os 407.517(15)	0.134(5)	0.00213(8)
^{188}Os 410.602(21)	0.028(9)	0.00045(14)
^{190}Os 413.23(4)	0.103(5)	0.00164(8)
^{190}Os 423.76(7)	0.044(4)	0.00070(6)
^{186}Os 427.07(17)	0.022(4)	0.00035(6)
^{184}Os 431.45(20)	0.09(3)	0.0014(5)
^{189}Os 431.68(3)	0.036(4)	0.00057(6)
^{190}Os 434.16(12)	0.032(4)	0.00051(6)
^{190}Os 442.18(12)	0.022(4)	0.00035(6)
^{189}Os 447.79(7)	0.0213(19)	0.00034(3)
^{190}Os 453.69(24)	0.022(5)	0.00035(8)
^{188}Os 454.794(21)	0.028(9)	0.00045(14)
^{192}Os 455.47(24)	0.025(5)	0.00040(8)
^{188}Os 469.682(21)	0.040(5)	0.00064(8)
^{192}Os 471.60(25)	0.021(5)	0.00033(8)
^{190}Os 475.33(16)	0.032(6)	0.00051(10)
^{187}Os **478.04(4)**	**0.523(14)**	**0.00833(22)**
^{190}Os 480.85(12)	0.043(7)	0.00069(11)
^{190}Os 485.87(20)	0.027(7)	0.00043(11)
^{187}Os 487.62(12)	0.044(7)	0.00070(11)
^{190}Os 495.68(9)	0.035(7)	0.00056(11)
^{190}Os 499.77(8)	0.054(5)	0.00086(8)
^{188}Os 505.861(20)	0.021(4)	0.00033(6)
^{184}Os 512.84(5)	0.084(8)	0.00134(13)
^{187}Os 514.76(9)	0.038(4)	0.00061(6)
^{184}Os 521.9(3)	0.024(5)	0.00038(8)
^{190}Os **527.60(3)**	**0.300(10)**	**0.00478(16)**
^{190}Os 537.75(4)	0.121(6)	0.00193(10)
^{184}Os 538.8(4)	0.023(7)	0.00037(11)
^{184}Os 539.40(24)	0.022(4)	0.00035(6)
^{190}Os 545.29(13)	0.031(4)	0.00049(6)
^{188}Os 550.17(5)	0.021(4)	0.00033(6)
^{189}Os **557.978(5)**	**0.84(3)**	**0.0134(5)**
^{189}Os **569.344(20)**	**0.694(25)**	**0.0111(4)**
^{184}Os 589.87(19)	0.034(5)	0.00054(8)
^{189}Os 605.26(3)	0.113(4)	0.00180(6)
^{187}Os 623.92(11)	0.036(4)	0.00057(6)
^{189}Os 630.985(23)	0.023(4)	0.00037(6)
^{187}Os **633.14(4)**	**0.585(16)**	**0.00932(25)**
^{187}Os **635.02(5)**	**0.405(12)**	**0.00645(19)**
^{190}Os 636.7(3)	0.028(6)	0.00045(10)
^{192}Os 655.61(13)	0.025(3)	0.00040(5)
^{190}Os 664.18(9)	0.036(4)	0.00057(6)
^{187}Os 672.64(11)	0.045(4)	0.00072(6)
^{189}Os 725.11(5)	0.081(5)	0.00129(8)
^{189}Os 768.653(15)	0.037(3)	0.00059(5)
^{190}Os 768.67(10)	0.046(5)	0.00073(8)
^{192}Os 786.64(15)	0.033(4)	0.00053(6)
^{187}Os 810.60(11)	0.035(3)	0.00056(5)
^{187}Os 824.43(11)	0.052(4)	0.00083(6)
^{187}Os 826.79(10)	0.029(3)	0.00046(5)
^{189}Os 829.07(3)	0.056(6)	0.00089(10)
^{187}Os 829.62(12)	0.109(16)	0.00174(25)

Table I. Adopted Prompt and Decay Gamma Rays from Thermal Neutron Capture for all Elements, continued

Eγ-keV	σ(Eγ)-barns	k_0
Osmium (Z=76), continued		
^{187}Os 844.68(14)	0.024(4)	0.00038(6)
^{189}Os 928.06(5)	0.085(5)	0.00135(8)
^{187}Os 931.31(8)	0.073(5)	0.00116(8)
^{192}Os 951.14(5)	0.089(4)	0.00142(6)
^{187}Os 987.33(13)	0.031(4)	0.00049(6)
^{189}Os 987.41(7)	0.071(6)	0.00113(10)
^{189}Os 1011.09(10)	0.031(4)	0.00049(6)
^{187}Os 1017.84(20)	0.043(4)	0.00069(6)
^{189}Os 1103.08(8)	0.047(5)	0.00075(8)
^{189}Os 1114.77(5)	0.060(5)	0.00096(8)
^{189}Os 1117.79(8)	0.033(5)	0.00053(8)
^{187}Os 1149.77(8)	0.079(6)	0.00126(10)
^{189}Os 1154.47(16)	0.029(9)	0.00046(14)
^{190}Os 1155.76(15)	0.042(5)	0.00067(8)
^{187}Os 1174.82(20)	0.038(7)	0.00061(11)
^{189}Os 1174.95(9)	0.080(6)	0.00127(10)
^{187}Os 1191.92(17)	0.034(5)	0.00054(8)
^{189}Os 1195.95(11)	0.077(6)	0.00123(10)
^{187}Os 1209.62(13)	0.063(6)	0.00100(10)
^{189}Os 1213.91(13)	0.031(6)	0.00049(10)
^{189}Os 1249.14(6)	0.035(5)	0.00056(8)
^{189}Os 1254.76(20)	0.041(5)	0.00065(8)
^{189}Os 1265.85(12)	0.029(5)	0.00046(8)
^{189}Os 1301.17(8)	0.035(5)	0.00056(8)
^{187}Os 1307.9(3)	0.025(3)	0.00040(5)
^{189}Os 1311.29(8)	0.031(3)	0.00049(5)
^{187}Os 1322.72(14)	0.037(4)	0.00059(6)
^{187}Os 1332.35(20)	0.05(3)	0.0008(5)
^{187}Os 1332.53(25)	0.040(4)	0.00064(6)
^{189}Os 1382.66(11)	0.026(3)	0.00041(5)
^{189}Os 1383.59(23)	0.026(4)	0.00041(6)
^{189}Os 1384.7(4)	0.023(5)	0.00037(8)
^{189}Os 1412.00(13)	0.0272(22)	0.00043(4)
^{189}Os 1429.31(11)	0.028(5)	0.00045(8)
^{187}Os 1435.74(14)	0.055(10)	0.00088(16)
^{189}Os 1436.94(14)	0.045(6)	0.00072(10)
^{187}Os 1452.88(19)	0.024(4)	0.00038(6)
^{187}Os 1457.56(11)	0.059(5)	0.00094(8)
^{187}Os 1465.36(13)	0.048(5)	0.00076(8)
^{189}Os 1489.05(8)	0.031(6)	0.00049(10)
^{189}Os 1512.11(19)	0.039(7)	0.00062(11)
^{189}Os 1546.20(9)	0.049(7)	0.00078(11)
^{187}Os 1574.48(14)	0.031(6)	0.00049(10)
^{189}Os 1616.03(11)	0.033(6)	0.00053(10)
^{189}Os 1672.42(8)	0.035(6)	0.00056(10)
^{189}Os 1680.73(16)	0.053(6)	0.00084(10)
^{189}Os 1732.0(3)	0.024(5)	0.00038(8)
^{189}Os 1770.5(5)	0.026(3)	0.00041(5)
^{187}Os 1802.35(13)	0.035(5)	0.00056(8)
^{189}Os 1883.37(19)	0.027(9)	0.00043(14)
^{187}Os 1957.46(13)	0.027(6)	0.00043(10)
^{187}Os 2011.29(20)	0.021(5)	0.00033(8)
^{187}Os 2022.95(14)	0.053(6)	0.00084(10)
^{187}Os 2098.77(22)	0.0208(24)	0.00033(4)
^{187}Os 2131.44(14)	0.052(6)	0.00083(10)
^{187}Os 2193.17(24)	0.031(6)	0.00049(10)
^{187}Os 2214.6(3)	0.039(7)	0.00062(11)
^{187}Os 2261.21(14)	0.077(7)	0.00123(11)
^{187}Os 2286.54(14)	0.052(8)	0.00083(13)
^{187}Os 2306.04(21)	0.0215(18)	0.00034(3)
^{187}Os 2505.13(24)	0.040(5)	0.00064(8)
^{187}Os 2606.38(21)	0.023(5)	0.00037(8)
^{187}Os 2623.10(21)	0.023(5)	0.00037(8)
^{187}Os 2817.11(25)	0.026(5)	0.00041(8)
^{187}Os 3021.7(3)	0.026(3)	0.00041(5)
^{187}Os 3069.9(3)	0.028(5)	0.00045(8)
^{187}Os 3110.00(18)	0.0273(19)	0.00043(3)
^{187}Os 3176.9(3)	0.025(5)	0.00040(8)
^{192}Os 3980.58(25)	0.035(4)	0.00056(6)
^{188}Os 4222.8(5)	0.052(6)	0.00083(10)
^{192}Os 4530.27(22)	0.090(8)	0.00143(13)
^{190}Os 4556.2(3)	0.035(7)	0.00056(11)
^{190}Os 4666.6(3)	0.024(6)	0.00038(10)
^{192}Os 4694.4(3)	0.025(5)	0.00040(8)
^{187}Os 4749.98(22)	0.042(6)	0.00067(10)
^{187}Os 4812.6(3)	0.049(7)	0.00078(11)
^{187}Os 4919.6(3)	0.037(3)	0.00059(5)
^{187}Os 4959.35(25)	0.021(5)	0.00033(8)
^{190}Os 5010.7(3)	0.029(6)	0.00046(10)
^{190}Os 5036.9(3)	0.041(6)	0.00065(10)
^{187}Os 5096.77(22)	0.037(7)	0.00059(11)
^{190}Os **5146.63(14)**	**0.409(20)**	**0.0065(3)**
^{187}Os 5172.38(25)	0.031(6)	0.00049(10)
^{187}Os 5223.66(21)	0.0215(21)	0.00034(3)
^{187}Os 5250.4(7)	0.029(6)	0.00046(10)
^{192}Os 5277.11(22)	0.116(15)	0.00185(24)
^{189}Os 5315.8(3)	0.024(7)	0.00038(11)
^{190}Os 5341.4(3)	0.074(12)	0.00118(19)
^{188}Os 5364.5(4)	0.028(7)	0.00045(11)
^{187}Os 5366.38(21)	0.028(7)	0.00045(11)
^{188}Os 5371.8(4)	0.023(7)	0.00037(11)
^{188}Os 5416.0(4)	0.053(20)	0.0008(3)
^{188}Os 5483.1(4)	0.049(8)	0.00078(13)
^{187}Os 5484.35(24)	0.049(8)	0.00078(13)
^{189}Os 5502.8(6)	0.021(6)	0.00033(10)
^{187}Os 5528.34(22)	0.038(7)	0.00061(11)
^{189}Os 5529.1(7)	0.045(8)	0.00072(13)
^{187}Os 5573.17(15)	0.052(6)	0.00083(10)
^{192}Os 5583.70(20)	0.076(7)	0.00121(11)
^{189}Os 5599.6(7)	0.024(5)	0.00038(8)
^{187}Os 5641.20(23)	0.023(4)	0.00037(6)
^{190}Os 5674.5(4)	0.038(7)	0.00061(11)
^{189}Os 5680.3(3)	0.045(9)	0.00072(14)
^{190}Os 5683.87(21)	0.167(13)	0.00266(21)
^{187}Os 5702.93(15)	0.050(8)	0.00080(13)
^{186}Os 5703.4(7)	0.050(8)	0.00080(13)
^{189}Os 5749.8(10)	0.026(6)	0.00041(10)
^{189}Os 5782.7(3)	0.024(6)	0.00038(10)
^{189}Os 5873.5(3)	0.030(6)	0.00048(10)
^{189}Os 5881.67(19)	0.035(6)	0.00056(10)
^{188}Os 5885.7(4)	0.041(7)	0.00065(11)
^{187}Os 5920.60(14)	0.044(6)	0.00070(10)
^{189}Os 5933.06(13)	0.096(8)	0.00153(13)
^{184}Os 6155.8(3)	0.044(6)	0.00070(10)
^{189}Os 6246.81(12)	0.026(3)	0.00041(5)
^{189}Os 6409.53(14)	0.026(3)	0.00041(5)
^{184}Os 6587.21(25)	0.093(13)	0.00148(21)
^{189}Os 7234.19(11)	0.044(4)	0.00070(6)
^{189}Os 7792.14(11)	0.034(3)	0.00054(5)
^{187}Os 7834.30(8)	0.0247(23)	0.00039(4)
^{187}Os 7989.40(7)	0.0208(14)	0.000331(22)
Iridium (Z=77), *At.Wt.=192.217(3),* σ_γ*=425(5)*		
^{191}Ir 23.9670(20)	0.170(14)	0.00268(22)
^{191}Ir 26.2260(20)	0.132(9)	0.00208(14)
^{193}Ir 39.2160(10)	0.17(11)	0.0027(17)
^{193}Ir 43.1190(10)	0.9(3)	0.014(5)
^{191}Ir **48.0570(10)**	**5.7(4)**	**0.090(6)**
^{191}Ir 49.379(4)	0.122(10)	0.00192(16)
^{191}Ir 49.9560(20)	0.115(9)	0.00181(14)
^{191}Ir 50.782(8)	0.132(11)	0.00208(17)
^{191}Ir 54.3210(20)	0.54(20)	0.009(3)
^{193}Ir 54.4030(10)	0.12(8)	0.0019(13)
^{191}Ir **58.8440(10)**	**5.3(3)**	**0.084(5)**
^{191}Ir **66.822(8)**	**1.31(13)**	**0.0207(20)**
^{191}Ir 69.252(3)	0.25(7)	0.0039(11)
^{193}Ir 69.4740(20)	0.19(14)	0.0030(22)
^{191}Ir 72.0240(20)	0.6(3)	0.009(5)
^{191}Ir 72.328(4)	0.28(9)	0.0044(14)
^{191}Ir 77.369(3)	0.38(11)	0.0060(17)
^{191}Ir **77.9470(10)**	**4.8(4)**	**0.076(6)**
^{193}Ir 82.3350(10)	0.5(3)	0.008(5)
^{191}Ir 83.965(8)	0.18(9)	0.0028(14)
^{191}Ir **84.2740(20)**	**7.7(4)**	**0.121(6)**
^{193}Ir 84.2840(10)	1.0(6)	0.016(10)
^{191}Ir 86.8340(20)	0.65(13)	0.0102(20)
^{191}Ir **88.7340(10)**	**3.67(24)**	**0.058(4)**
^{191}Ir **90.7030(20)**	**1.25(15)**	**0.0197(24)**
^{191}Ir 90.857(3)	0.20(4)	0.0032(6)
^{193}Ir 93.1630(10)	0.3(3)	0.005(5)

Table I. Adopted Prompt and Decay Gamma Rays from Thermal Neutron Capture for all Elements, continued

	Eγ-keV	σ(Eγ)-barns	k_0
Iridium (Z=77), continued			
^{191}Ir	95.056(6)	0.24(5)	0.0038(8)
^{191}Ir	95.470(4)	0.9(3)	0.014(5)
^{193}Ir	95.5690(10)	0.8(5)	0.013(8)
^{191}Ir	97.347(3)	0.25(5)	0.0039(8)
^{191}Ir	97.348(4)	0.36(14)	0.0057(22)
^{191}Ir	98.524(4)	0.32(5)	0.0050(8)
^{191}Ir	99.603(6)	0.24(13)	0.0038(20)
^{193}Ir	100.4030(20)	0.13(8)	0.0020(13)
^{191}Ir	104.043(9)	0.13(4)	0.0020(6)
^{191}Ir	105.159(3)	0.14(6)	0.0022(10)
^{191}Ir	107.015(3)	0.20(7)	0.0032(11)
^{191}Ir	107.132(4)	0.23(6)	0.0036(10)
^{191}Ir	**108.0300(20)**	**2.62(12)**	**0.0413(19)**
^{191}Ir	108.658(4)	0.11(3)	0.0017(5)
^{191}Ir	110.352(3)	0.53(7)	0.0084(11)
^{191}Ir	111.025(3)	0.99(11)	0.0156(17)
^{193}Ir	**112.2310(10)**	**1.7(4)**	**0.027(6)**
^{193}Ir	115.4730(10)	0.5(3)	0.008(5)
^{193}Ir	117.8790(10)	0.4(3)	0.006(5)
^{191}Ir	118.268(3)	0.15(3)	0.0024(5)
^{191}Ir	118.7820(10)	0.56(7)	0.0088(11)
^{191}Ir	121.139(3)	0.17(7)	0.0027(11)
^{191}Ir	122.596(3)	0.41(7)	0.0065(11)
^{193}Ir	123.8450(10)	1.0(6)	0.016(10)
^{191}Ir	**126.958(3)**	**1.86(10)**	**0.0293(16)**
^{193}Ir	132.8790(20)	0.18(10)	0.0028(16)
^{191}Ir	133.925(6)	0.19(5)	0.0030(8)
^{193}Ir	136.1000(20)	0.17(11)	0.0027(17)
^{191}Ir	**136.1250(10)**	**6.5(9)**	**0.102(14)**
^{191}Ir	**136.213(3)**	**4.0(5)**	**0.063(8)**
^{191}Ir	**136.7910(10)**	**2.20(21)**	**0.035(3)**
^{191}Ir	138.2480(20)	0.53(7)	0.0084(11)
^{193}Ir	138.6880(10)	0.8(5)	0.013(8)
^{191}Ir	139.736(5)	0.27(4)	0.0043(6)
^{191}Ir	140.257(6)	0.32(5)	0.0050(8)
^{191}Ir	140.814(6)	0.16(5)	0.0025(8)
^{193}Ir	143.5940(10)	0.6(3)	0.009(5)
^{191}Ir	144.849(4)	0.57(9)	0.0090(14)
^{191}Ir	**144.903(5)**	**3.1(4)**	**0.049(6)**
^{193}Ir	145.2220(10)	0.11(7)	0.0017(11)
^{191}Ir	148.821(3)	1.08(12)	0.0170(19)
^{191}Ir	148.822(3)	1.08(12)	0.0170(19)
^{193}Ir	**148.9340(10)**	**1.4(9)**	**0.022(14)**
^{191}Ir	151.450(5)	0.26(5)	0.0041(8)
^{191}Ir	**151.5640(20)**	**2.89(20)**	**0.046(3)**
^{193}Ir	152.4080(10)	0.37(23)	0.006(4)
^{193}Ir	152.942(11)	0.55(13)	0.0087(20)
^{193}Ir	153.0550(10)	0.5(3)	0.008(5)
^{191}Ir	156.0870(20)	1.02(12)	0.0161(19)
^{191}Ir	**156.654(3)**	**2.76(12)**	**0.0435(19)**
^{191}Ir	158.180(4)	0.15(4)	0.0024(6)
^{193}Ir	160.8250(20)	0.34(11)	0.0054(17)
^{193}Ir	160.9980(10)	0.4(3)	0.006(5)
^{193}Ir	162.7740(20)	0.24(15)	0.0038(24)
^{191}Ir	162.850(6)	0.14(3)	0.0022(5)
^{193}Ir	165.3800(20)	0.27(23)	0.004(4)
^{193}Ir	165.4500(20)	0.35(22)	0.006(4)
^{191}Ir	166.089(5)	0.89(10)	0.0140(16)
^{191}Ir	166.435(4)	0.24(4)	0.0038(6)
^{191}Ir	**169.196(3)**	**3.05(13)**	**0.0481(20)**
^{191}Ir	169.542(5)	0.52(7)	0.0082(11)
^{191}Ir	169.542(4)	0.52(7)	0.0082(11)
^{193}Ir	169.5660(10)	0.24(15)	0.0038(24)
^{193}Ir	169.8760(10)	0.15(9)	0.0024(14)
^{191}Ir	172.839(3)	0.53(24)	0.008(4)
^{191}Ir	174.139(8)	0.21(4)	0.0033(6)
^{193}Ir	176.6510(20)	0.15(10)	0.0024(16)
^{191}Ir	176.812(3)	0.6(4)	0.009(6)
^{191}Ir	177.919(7)	0.28(6)	0.0044(10)
^{191}Ir	**179.0380(20)**	**2.1(5)**	**0.033(8)**
^{191}Ir	183.626(3)	1.0(4)	0.016(6)
^{193}Ir	184.6870(20)	0.92(22)	0.015(4)
^{191}Ir	187.521(3)	0.43(5)	0.0068(8)
^{191}Ir	188.204(3)	0.52(23)	0.008(4)
^{191}Ir	189.100(7)	0.47(18)	0.007(3)

	Eγ-keV	σ(Eγ)-barns	k_0
Iridium (Z=77), continued			
^{191}Ir	193.718(3)	0.83(11)	0.0131(17)
^{193}Ir	193.9300(20)	0.21(13)	0.0033(20)
^{191}Ir	195.433(4)	0.27(7)	0.0043(11)
^{193}Ir	195.5270(10)	0.21(13)	0.0033(20)
^{191}Ir	197.061(7)	0.73(19)	0.012(3)
^{193}Ir	198.8370(20)	0.15(9)	0.0024(14)
^{191}Ir	199.174(7)	1.07(18)	0.017(3)
^{191}Ir	199.418(5)	0.14(4)	0.0022(6)
^{191}Ir	201.111(5)	0.21(6)	0.0033(10)
^{191}Ir	203.015(3)	0.27(4)	0.0043(6)
^{191}Ir	**206.220(4)**	**3.70(18)**	**0.058(3)**
^{191}Ir	207.301(5)	0.50(6)	0.0079(10)
^{191}Ir	208.440(6)	0.70(9)	0.0110(14)
^{191}Ir	210.352(5)	0.75(8)	0.0118(13)
^{191}Ir	210.354(5)	0.75(8)	0.0118(13)
^{191}Ir	**210.354(5)**	**2.1(4)**	**0.033(6)**
^{193}Ir	212.3460(20)	0.15(10)	0.0024(16)
^{191}Ir	215.117(5)	0.23(4)	0.0036(6)
^{191}Ir	215.5110(20)	0.24(4)	0.0038(6)
^{191}Ir	216.1940(20)	0.65(9)	0.0102(14)
^{191}Ir	**216.905(4)**	**5.57(24)**	**0.088(4)**
^{191}Ir	221.90(10)	0.83(16)	0.0131(25)
^{191}Ir	223.176(6)	0.18(3)	0.0028(5)
^{193}Ir	224.0830(20)	0.18(11)	0.0028(17)
^{193}Ir	225.4180(20)	0.12(7)	0.0019(11)
^{191}Ir	**226.2980(20)**	**4.0(4)**	**0.063(6)**
^{193}Ir	226.6390(10)	0.20(12)	0.0032(19)
^{191}Ir	226.722(5)	0.19(4)	0.0030(6)
^{193}Ir	228.0650(20)	0.12(8)	0.0019(13)
^{191}Ir	229.771(11)	0.48(11)	0.0076(17)
^{191}Ir	231.683(3)	0.95(13)	0.0150(20)
^{191}Ir	232.907(4)	0.20(4)	0.0032(6)
^{193}Ir	234.8190(20)	0.44(13)	0.0069(20)
^{191}Ir	241.867(7)	0.65(13)	0.0102(20)
^{193}Ir	245.1090(20)	0.14(9)	0.0022(14)
^{193}Ir	245.4920(20)	0.33(22)	0.005(4)
^{191}Ir	246.169(3)	0.15(4)	0.0024(6)
^{191}Ir	246.800(4)	0.32(9)	0.0050(14)
^{193}Ir	248.6000(20)	0.24(15)	0.0038(24)
^{193}Ir	252.2750(10)	0.11(7)	0.0017(11)
^{191}Ir	252.499(12)	0.5(3)	0.008(5)
^{191}Ir	254.277(4)	1.08(11)	0.0170(17)
^{193}Ir	255.3130(20)	0.36(13)	0.0057(20)
^{191}Ir	258.320(5)	0.24(5)	0.0038(8)
^{191}Ir	**261.953(6)**	**2.02(23)**	**0.032(4)**
^{191}Ir	**262.03(10)**	**3.05(18)**	**0.048(3)**
^{193}Ir	262.7290(10)	0.14(8)	0.0022(13)
^{191}Ir	263.573(6)	0.86(10)	0.0136(16)
^{191}Ir	264.008(7)	0.57(7)	0.0090(11)
^{193}Ir	264.7680(20)	0.8(5)	0.013(8)
^{191}Ir	267.415(4)	0.93(21)	0.015(3)
^{193}Ir	271.6810(20)	0.6(4)	0.009(6)
^{191}Ir	273.235(8)	0.49(8)	0.0077(13)
^{191}Ir	273.236(7)	0.72(17)	0.011(3)
^{191}Ir	273.568(5)	0.18(6)	0.0028(10)
^{191}Ir	275.0380(20)	0.74(16)	0.0117(25)
^{193}Ir	275.2990(10)	0.6(4)	0.009(6)
^{191}Ir	276.787(4)	0.55(12)	0.0087(19)
^{191}Ir	278.193(8)	0.42(5)	0.0066(8)
^{193}Ir	**278.5040(10)**	**1.8(11)**	**0.028(17)**
^{191}Ir	**284.074(6)**	**1.95(15)**	**0.0307(24)**
^{191}Ir	284.947(3)	0.52(7)	0.0082(11)
^{193}Ir	288.4310(20)	0.12(7)	0.0019(11)
^{191}Ir	292.374(4)	0.42(12)	0.0066(19)
^{193}Ir	***293.541(14)d***	***1.76(6)***	***0.0277[1.8%]***
^{193}Ir	294.5300(20)	0.41(25)	0.006(4)
^{191}Ir	296.257(8)	0.65(17)	0.010(3)
^{191}Ir	299.476(8)	0.13(4)	0.0020(6)
^{191}Ir	**302.905(8)**	**1.20(11)**	**0.0189(17)**
^{191}Ir	305.448(4)	0.45(10)	0.0071(16)
^{193}Ir	308.9740(10)	0.6(4)	0.009(6)
^{191}Ir	310.010(6)	0.26(8)	0.0041(13)
^{191}Ir	310.08(10)	0.61(10)	0.0096(16)
^{193}Ir	311.4960(10)	0.16(10)	0.0025(16)
^{191}Ir	311.630(6)	0.23(6)	0.0036(10)

Table I. Adopted Prompt and Decay Gamma Rays from Thermal Neutron Capture for all Elements, continued

	Eγ-keV	σ(Eγ)-barns	k_0
Iridium (Z=77), continued			
^{193}Ir	314.0520(10)	0.26(17)	0.004(3)
^{191}Ir	**316.061(7)**	**2.4(4)**	**0.038(6)**
^{191}Ir	322.510(5)	0.51(11)	0.0080(17)
^{193}Ir	***328.448(14)d***	***9.1(3)***	***0.143[1.8%]***
^{191}Ir	**333.864(6)**	**1.53(10)**	**0.0241(16)**
^{193}Ir	337.5240(20)	0.62(21)	0.010(3)
^{193}Ir	340.8130(20)	0.8(5)	0.013(8)
^{191}Ir	**351.689(4)**	**10.9(4)**	**0.172(6)**
^{193}Ir	353.9610(10)	0.5(3)	0.008(5)
^{191}Ir	358.320(8)	0.34(9)	0.0054(14)
^{191}Ir	**365.440(7)**	**1.15(10)**	**0.0181(16)**
^{193}Ir	**371.5020(20)**	**2.11(12)**	**0.0333(19)**
^{191}Ir	384.659(6)	0.50(12)	0.0079(19)
^{193}Ir	390.9620(10)	0.6(4)	0.009(6)
^{193}Ir	405.3660(20)	0.11(7)	0.0017(11)
^{193}Ir	407.3150(20)	0.13(8)	0.0020(13)
^{193}Ir	411.988(10)	0.12(8)	0.0019(13)
^{191}Ir	**418.138(6)**	**3.45(15)**	**0.0544(24)**
^{191}Ir	**432.716(6)**	**1.85(7)**	**0.0292(11)**
^{193}Ir	458.3070(20)	0.41(25)	0.006(4)
^{193}Ir	460.2560(20)	0.8(5)	0.013(8)
^{193}Ir	4365.1(3)	0.22(3)	0.0035(5)
^{193}Ir	4368.5(4)	0.14(3)	0.0022(5)
^{193}Ir	4383.5(4)	0.11(3)	0.0017(5)
^{193}Ir	4395.64(18)	0.39(3)	0.0061(5)
^{193}Ir	4401.28(18)	0.35(3)	0.0055(5)
^{193}Ir	4426.1(3)	0.23(3)	0.0036(5)
^{193}Ir	4442.1(8)	0.14(3)	0.0022(5)
^{193}Ir	4455.3(4)	0.13(3)	0.0020(5)
^{193}Ir	4460.5(4)	0.18(3)	0.0028(5)
^{191}Ir	4495.88(21)	0.44(4)	0.0069(6)
^{191}Ir	4505.9(4)	0.20(3)	0.0032(5)
^{191}Ir	4521.3(4)	0.12(4)	0.0019(6)
^{191}Ir	4531.28(19)	0.61(5)	0.0096(8)
^{191}Ir	4556.8(8)	0.18(7)	0.0028(11)
^{191}Ir	4563.5(9)	0.14(11)	0.0022(17)
^{191}Ir	4571.8(5)	0.23(4)	0.0036(6)
^{193}Ir	4577.9(4)	0.16(3)	0.0025(5)
^{193}Ir	4584.4(3)	0.21(4)	0.0033(6)
^{191}Ir	4591.30(17)	0.57(4)	0.0090(6)
^{191}Ir	4601.64(24)	0.22(4)	0.0035(6)
^{191}Ir	4611.6(6)	0.11(7)	0.0017(11)
^{193}Ir	4612.5(3)	0.19(3)	0.0030(5)
^{193}Ir	4618.0(4)	0.13(3)	0.0020(5)
^{191}Ir	4640.0(6)	0.15(6)	0.0024(10)
^{193}Ir	4643.2(3)	0.33(5)	0.0052(8)
^{191}Ir	4646.47(13)	0.26(5)	0.0041(8)
^{191}Ir	4663.36(21)	0.18(3)	0.0028(5)
^{191}Ir	4668.09(17)	0.36(3)	0.0057(5)
^{193}Ir	4678.7(3)	0.18(3)	0.0028(5)
^{191}Ir	4711.6(4)	0.17(3)	0.0027(5)
^{193}Ir	4712.8(3)	0.28(3)	0.0044(5)
^{191}Ir	4729.1(3)	0.167(25)	0.0026(4)
^{191}Ir	4734.2(3)	0.45(9)	0.0071(14)
^{193}Ir	4734.52(23)	0.46(3)	0.0073(5)
^{191}Ir	4750.18(15)	0.38(3)	0.0060(5)
^{191}Ir	4755.28(20)	0.39(3)	0.0061(5)
^{191}Ir	4765.66(17)	0.245(24)	0.0039(4)
^{191}Ir	4779.82(15)	0.32(3)	0.0050(5)
^{191}Ir	4801.4(3)	0.12(3)	0.0019(5)
^{191}Ir	4809.72(23)	0.44(4)	0.0069(6)
^{191}Ir	4817.3(3)	0.28(4)	0.0044(6)
^{191}Ir	4826.1(4)	0.11(3)	0.0017(5)
^{193}Ir	4826.9(4)	0.20(4)	0.0032(6)
^{191}Ir	4838.3(4)	0.15(4)	0.0024(6)
^{193}Ir	4839.34(20)	0.41(4)	0.0065(6)
^{191}Ir	4849.6(3)	0.15(3)	0.0024(5)
^{191}Ir	4854.8(5)	0.28(5)	0.0044(8)
^{193}Ir	4855.5(3)	0.48(4)	0.0076(6)
^{191}Ir	4859.30(23)	0.45(4)	0.0071(6)
^{191}Ir	4866.97(12)	0.68(4)	0.0107(6)
^{191}Ir	4875.03(18)	0.33(4)	0.0052(6)
^{191}Ir	4893.82(23)	0.35(3)	0.0055(5)
^{191}Ir	4898.53(19)	0.41(4)	0.0065(6)
^{191}Ir	4916.5(3)	0.29(5)	0.0046(8)

	Eγ-keV	σ(Eγ)-barns	k_0
Iridium (Z=77), continued			
^{193}Ir	4921.1(4)	0.18(4)	0.0028(6)
^{191}Ir	4932.9(3)	0.11(4)	0.0017(6)
^{191}Ir	4938.9(3)	0.25(9)	0.0039(14)
^{191}Ir	4942.92(18)	0.52(4)	0.0082(6)
^{191}Ir	4949.40(24)	0.31(4)	0.0049(6)
^{191}Ir	4955.2(3)	0.15(7)	0.0024(11)
^{191}Ir	4966.5(3)	0.20(3)	0.0032(5)
^{191}Ir	4972.12(17)	0.35(3)	0.0055(5)
^{191}Ir	4980.57(15)	0.82(4)	0.0129(6)
^{191}Ir	4985.93(14)	0.58(3)	0.0091(5)
^{191}Ir	4993.32(15)	0.40(4)	0.0063(6)
^{191}Ir	5003.4(3)	0.35(4)	0.0055(6)
^{193}Ir	5013.8(5)	0.21(4)	0.0033(6)
^{191}Ir	5020.51(15)	0.66(6)	0.0104(10)
^{191}Ir	5028.52(15)	0.67(6)	0.0106(10)
^{191}Ir	5037.5(3)	0.22(4)	0.0035(6)
^{191}Ir	5042.35(23)	0.57(6)	0.0090(10)
^{191}Ir	5046.4(6)	0.12(3)	0.0019(5)
^{191}Ir	5053.15(23)	0.26(3)	0.0041(5)
^{193}Ir	5058.0(3)	0.20(3)	0.0032(5)
^{191}Ir	5066.5(3)	0.15(3)	0.0024(5)
^{193}Ir	5071.99(21)	0.28(3)	0.0044(5)
^{191}Ir	5085.45(20)	0.266(25)	0.0042(4)
^{191}Ir	5091.10(18)	0.37(5)	0.0058(8)
^{193}Ir	5091.19(17)	0.52(3)	0.0082(5)
^{191}Ir	5104.6(4)	0.14(3)	0.0022(5)
^{193}Ir	5109.0(3)	0.19(3)	0.0030(5)
^{191}Ir	5109.6(6)	0.11(7)	0.0017(11)
^{193}Ir	5117.9(4)	0.12(3)	0.0019(5)
^{191}Ir	5123.3(3)	0.20(3)	0.0032(5)
^{191}Ir	5129.21(12)	0.90(5)	0.0142(8)
^{191}Ir	5138.06(14)	0.39(4)	0.0061(6)
^{191}Ir	**5147.51(12)**	**1.29(6)**	**0.0203(10)**
^{191}Ir	5153.1(3)	0.26(3)	0.0041(5)
^{193}Ir	5158.23(22)	0.36(3)	0.0057(5)
^{191}Ir	5166.92(13)	0.96(6)	0.0151(10)
^{193}Ir	5178.4(3)	0.34(4)	0.0054(6)
^{191}Ir	5184.38(25)	0.20(6)	0.0032(10)
^{193}Ir	5185.2(4)	0.34(4)	0.0054(6)
^{191}Ir	5194.52(24)	0.34(5)	0.0054(8)
^{191}Ir	5198.64(21)	0.38(4)	0.0060(6)
^{191}Ir	5219.92(17)	0.72(5)	0.0114(8)
^{191}Ir	5248.02(23)	0.20(3)	0.0032(5)
^{191}Ir	5261.14(17)	0.51(4)	0.0080(6)
^{191}Ir	5283.60(13)	0.85(6)	0.0134(10)
^{191}Ir	5304.44(13)	0.73(5)	0.0115(8)
^{191}Ir	5313.6(3)	0.15(4)	0.0024(6)
^{193}Ir	5316.6(3)	0.20(4)	0.0032(6)
^{191}Ir	5327.53(19)	0.71(5)	0.0112(8)
^{191}Ir	5332.49(20)	0.54(5)	0.0085(8)
^{191}Ir	5347.1(3)	0.18(3)	0.0028(5)
^{191}Ir	5357.09(16)	1.03(6)	0.0162(10)
^{191}Ir	5376.11(14)	0.288(24)	0.0045(4)
^{191}Ir	5384.82(20)	0.224(22)	0.0035(4)
^{191}Ir	5400.78(16)	0.40(3)	0.0063(5)
^{191}Ir	5420.57(23)	0.201(22)	0.0032(4)
^{191}Ir	5431.34(12)	0.78(4)	0.0123(6)
^{191}Ir	5448.60(17)	0.51(4)	0.0080(6)
^{191}Ir	5458.91(18)	0.60(5)	0.0095(8)
^{191}Ir	5463.9(4)	0.31(7)	0.0049(11)
^{193}Ir	5467.0(3)	0.59(7)	0.0093(11)
^{191}Ir	5483.9(4)	0.17(6)	0.0027(10)
^{193}Ir	5487.40(21)	0.58(4)	0.0091(6)
^{191}Ir	5490.1(5)	0.19(3)	0.0030(5)
^{191}Ir	5495.27(23)	0.22(3)	0.0035(5)
^{191}Ir	5517.04(17)	0.76(4)	0.0120(6)
^{191}Ir	**5534.73(12)**	**1.39(6)**	**0.0219(10)**
^{191}Ir	5552.18(21)	0.163(22)	0.0026(4)
^{191}Ir	**5564.54(14)**	**1.71(8)**	**0.0270(13)**
^{191}Ir	5569.4(3)	0.67(4)	0.0106(6)
^{193}Ir	5576.98(7)	0.121(24)	0.0019(4)
^{191}Ir	5595.63(13)	0.72(4)	0.0114(6)
^{191}Ir	5612.55(12)	1.06(5)	0.0167(8)
^{193}Ir	5630.33(7)	0.315(24)	0.0050(4)
^{193}Ir	5642.90(7)	0.293(25)	0.0046(4)

Table I. Adopted Prompt and Decay Gamma Rays from Thermal Neutron Capture for all Elements, continued

	Eγ-keV	σ(Eγ)-barns	k_0
Iridium (Z=77), continued			
^{191}Ir	5654.27(14)	0.39(3)	0.0061(5)
^{191}Ir	5661.00(20)	0.38(3)	0.0060(5)
^{191}Ir	**5667.81(3)**	**2.68(10)**	**0.0423(16)**
^{191}Ir	5681.1(3)	0.165(19)	0.0026(3)
^{191}Ir	**5689.06(3)**	**1.73(7)**	**0.0273(11)**
^{191}Ir	5708.62(3)	0.122(17)	0.0019(3)
^{191}Ir	5727.2(3)	0.27(4)	0.0043(6)
^{193}Ir	**5728.97(7)**	**1.15(5)**	**0.0181(8)**
^{191}Ir	5746.80(3)	0.190(18)	0.0030(3)
^{191}Ir	5757.18(3)	0.49(6)	0.0077(10)
^{193}Ir	5757.65(7)	0.42(4)	0.0066(6)
^{191}Ir	**5783.01(3)**	**1.34(6)**	**0.0211(10)**
^{193}Ir	5788.12(7)	0.43(4)	0.0068(6)
^{191}Ir	5808.33(3)	0.48(3)	0.0076(5)
^{191}Ir	5817.7(4)	0.113(25)	0.0018(4)
^{193}Ir	5821.51(7)	0.48(3)	0.0076(5)
^{191}Ir	5829.70(3)	0.16(5)	0.0025(8)
^{191}Ir	5866.29(3)	0.73(6)	0.0115(10)
^{191}Ir	5866.97(3)	0.79(5)	0.0125(8)
^{191}Ir	5905.67(3)	0.45(4)	0.0071(6)
^{191}Ir	5909.64(3)	0.23(3)	0.0036(5)
^{193}Ir	5917.68(7)	0.34(3)	0.0054(5)
^{193}Ir	5927.93(7)	0.33(3)	0.0052(5)
^{193}Ir	5954.39(7)	0.74(4)	0.0117(6)
^{191}Ir	**5958.28(3)**	**1.79(8)**	**0.0282(13)**
^{191}Ir	5962.29(3)	0.75(4)	0.0118(6)
^{191}Ir	5972.13(3)	0.254(21)	0.0040(3)
^{193}Ir	5984.28(7)	0.212(21)	0.0033(3)
^{191}Ir	6004.53(3)	0.257(21)	0.0041(3)
^{193}Ir	6023.50(7)	0.171(17)	0.0027(3)
^{191}Ir	6079.26(3)	0.29(9)	0.0046(14)
^{191}Ir	**6082.48(3)**	**2.62(11)**	**0.0413(17)**
^{191}Ir	6093.26(3)	0.56(4)	0.0088(6)
Platinum (Z=78), *At.Wt.=195.078(2),* σ_γ*=10.3(4)*			
^{194}Pt	*211.4060(20)*	*0.0293(10)*	*0.000455(16)*
^{195}Pt	326.353(3)	0.511(10)	0.00794(16)
^{195}Pt	**332.985(4)**	**2.580(25)**	**0.0401(4)**
^{195}Pt	**355.6840(20)**	**6.17(6)**	**0.0958(9)**
^{195}Pt	393.346(5)	0.066(4)	0.00103(6)
^{195}Pt	446.624(4)	0.0963(21)	0.00150(3)
^{195}Pt	521.161(5)	0.338(10)	0.00525(16)
^{198}Pt	*542.98(4)d*	*0.0390(3)*	*0.000606[45%]*
^{195}Pt	672.894(3)	0.179(4)	0.00278(6)
^{195}Pt	779.608(5)	0.227(3)	0.00353(5)
^{195}Pt	1005.878(5)	0.139(3)	0.00216(5)
^{195}Pt	1047.007(11)	0.181(4)	0.00281(6)
^{195}Pt	1091.334(6)	0.181(4)	0.00281(6)
^{195}Pt	1248.774(10)	0.099(3)	0.00154(5)
^{195}Pt	1305.57(3)	0.062(3)	0.00096(5)
^{195}Pt	1321.541(15)	0.081(3)	0.00126(5)
^{195}Pt	1358.31(6)	0.076(4)	0.00118(6)
^{195}Pt	1439.35(5)	0.067(3)	0.00104(5)
^{195}Pt	1491.625(16)	0.135(4)	0.00210(6)
^{195}Pt	1497.950(11)	0.084(3)	0.00130(5)
^{195}Pt	1510.75(5)	0.083(3)	0.00129(5)
^{195}Pt	1531.84(3)	0.122(4)	0.00190(6)
^{195}Pt	1532.435(12)	0.066(18)	0.0010(3)
^{195}Pt	1562.76(4)	0.083(3)	0.00129(5)
^{195}Pt	1677.223(15)	0.087(4)	0.00135(6)
^{195}Pt	1713.67(10)	0.090(4)	0.00140(6)
^{195}Pt	1737.278(16)	0.087(4)	0.00135(6)
^{195}Pt	1802.269(10)	0.146(4)	0.00227(6)
^{195}Pt	1825.685(8)	0.091(4)	0.00141(6)
^{195}Pt	1888.116(12)	0.080(4)	0.00124(6)
^{195}Pt	1968.858(13)	0.103(4)	0.00160(6)
^{195}Pt	1978.46(3)	0.163(5)	0.00253(8)
^{195}Pt	2309.20(9)	0.066(14)	0.00103(22)
^{195}Pt	2311.44(3)	0.134(4)	0.00208(6)
^{195}Pt	2527.81(3)	0.07(3)	0.0011(5)
^{195}Pt	4949.0(4)	0.069(20)	0.0011(3)
^{196}Pt	5098.1(7)	0.093(6)	0.00144(9)
^{195}Pt	5098.5(7)	0.10(3)	0.0016(5)
^{195}Pt	5173.4(3)	0.136(6)	0.00211(9)
^{195}Pt	5185.3(3)	0.085(5)	0.00132(8)

	Eγ-keV	σ(Eγ)-barns	k_0
Platinum (Z=78), continued			
^{195}Pt	5254.70(8)	0.41(3)	0.0064(5)
^{195}Pt	5261.0(6)	0.097(14)	0.00151(22)
^{195}Pt	5306.9(3)	0.118(14)	0.00183(22)
^{195}Pt	5393.05(16)	0.113(10)	0.00176(16)
^{195}Pt	5451.93(14)	0.078(7)	0.00121(11)
^{195}Pt	5612.62(11)	0.14(3)	0.0022(5)
^{195}Pt	5722.40(9)	0.071(5)	0.00110(8)
^{195}Pt	5759.22(10)	0.084(12)	0.00130(19)
^{195}Pt	5952.95(7)	0.086(16)	0.00134(25)
^{195}Pt	6003.37(8)	0.073(4)	0.00113(6)
^{195}Pt	6033.69(7)	0.109(6)	0.00169(9)
Gold (Z=79), *At.Wt.=196.96655(2),* σ_γ*=98.65(9)*			
^{197}Au	35.8240(10)	0.41(5)	0.0063(8)
^{197}Au	**55.1810(10)**	**2.90(12)**	**0.0446(18)**
^{197}Au	66.3950(10)	0.42(12)	0.0065(18)
^{197}Au	75.171(6)	0.390(23)	0.0060(4)
^{197}Au	**82.3560(10)**	**2.3(4)**	**0.035(6)**
^{197}Au	**82.5240(10)**	**1.4(3)**	**0.022(5)**
^{197}Au	83.144(6)	0.17(7)	0.0026(11)
^{197}Au	91.0050(10)	0.294(15)	0.00452(23)
^{197}Au	**97.2500(20)**	**2.1(5)**	**0.032(8)**
^{197}Au	**101.9390(10)**	**0.953(17)**	**0.0147(3)**
^{197}Au	103.5610(10)	0.338(15)	0.00520(23)
^{197}Au	108.9120(20)	0.270(14)	0.00415(22)
^{197}Au	122.6520(10)	0.81(13)	0.0125(20)
^{197}Au	123.7860(10)	0.83(13)	0.0128(20)
^{197}Au	131.9340(20)	0.17(6)	0.0026(9)
^{197}Au	132.850(4)	0.104(24)	0.0016(4)
^{197}Au	135.612(6)	0.10(3)	0.0015(5)
^{197}Au	137.448(6)	0.13(5)	0.0020(8)
^{197}Au	137.7630(10)	0.347(24)	0.0053(4)
^{197}Au	137.999(5)	0.17(5)	0.0026(8)
^{197}Au	142.9270(20)	0.161(16)	0.00248(25)
^{197}Au	144.6050(10)	0.18(4)	0.0028(6)
^{197}Au	145.1540(10)	0.46(13)	0.0071(20)
^{197}Au	146.3460(20)	0.43(4)	0.0066(6)
^{197}Au	146.6700(10)	0.28(5)	0.0043(8)
^{197}Au	154.7940(20)	0.38(6)	0.0058(9)
^{197}Au	154.797(5)	0.239(10)	0.00368(15)
^{197}Au	**158.4360(10)**	**1.250(18)**	**0.0192(3)**
^{197}Au	158.479(11)	0.67(9)	0.0103(14)
^{197}Au	164.7130(10)	0.21(3)	0.0032(5)
^{197}Au	166.2280(10)	0.279(11)	0.00429(17)
^{197}Au	**168.3340(10)**	**3.60(22)**	**0.055(3)**
^{197}Au	169.9550(10)	0.126(25)	0.0019(4)
^{197}Au	**170.1030(10)**	**1.66(22)**	**0.026(3)**
^{197}Au	170.3990(20)	0.38(5)	0.0058(8)
^{197}Au	175.3070(20)	0.10(8)	0.0015(12)
^{197}Au	180.8640(10)	0.63(11)	0.0097(17)
^{197}Au	188.1670(20)	0.63(15)	0.0097(23)
^{197}Au	191.1870(20)	0.18(3)	0.0028(5)
^{197}Au	**192.3920(10)**	**3.9(18)**	**0.06(3)**
^{197}Au	**192.9440(10)**	**1.70(22)**	**0.026(3)**
^{197}Au	202.9920(20)	0.229(6)	0.00352(9)
^{197}Au	204.1580(10)	0.513(10)	0.00789(15)
^{197}Au	204.1620(10)	0.59(10)	0.0091(15)
^{197}Au	206.2230(10)	0.199(6)	0.00306(9)
^{197}Au	213.0650(10)	0.094(13)	0.00145(20)
^{197}Au	214.858(3)	0.19(5)	0.0029(8)
^{197}Au	**214.9710(10)**	**9.0(12)**	**0.138(18)**
^{197}Au	215.2950(20)	0.19(3)	0.0029(5)
^{197}Au	218.8300(10)	0.141(22)	0.0022(3)
^{197}Au	219.4190(20)	0.42(4)	0.0065(6)
^{197}Au	234.6000(20)	0.091(12)	0.00140(18)
^{197}Au	**236.0450(10)**	**4.1(5)**	**0.063(8)**
^{197}Au	236.1710(20)	0.26(6)	0.0040(9)
^{197}Au	245.314(6)	0.111(18)	0.0017(3)
^{197}Au	**247.5730(10)**	**5.56(8)**	**0.0855(12)**
^{197}Au	248.739(3)	0.111(16)	0.00171(25)
^{197}Au	260.8820(10)	0.83(13)	0.0128(20)
^{197}Au	**261.4040(10)**	**5.3(20)**	**0.08(3)**
^{197}Au	266.6470(10)	0.26(3)	0.0040(5)
^{197}Au	269.0730(20)	0.155(24)	0.0024(4)
^{197}Au	271.1380(20)	0.104(16)	0.00160(25)

Table I. Adopted Prompt and Decay Gamma Rays from Thermal Neutron Capture for all Elements, continued

Eγ-keV	σ(Eγ)-barns	k_0
Gold (Z=79), continued		
^{197}Au 271.2280(20)	0.170(24)	0.0026(4)
^{197}Au 271.8940(10)	0.40(13)	0.0062(20)
^{197}Au 276.072(3)	0.226(5)	0.00348(8)
^{197}Au 277.2460(20)	0.277(6)	0.00426(9)
^{197}Au 284.1090(20)	0.16(3)	0.0025(5)
^{197}Au **291.7240(20)**	**1.05(17)**	**0.016(3)**
^{197}Au 293.1210(20)	0.101(16)	0.00155(25)
^{197}Au 307.7180(10)	0.44(6)	0.0068(9)
^{197}Au 311.9040(20)	0.47(6)	0.0072(9)
^{197}Au 314.913(3)	0.27(4)	0.0042(6)
^{197}Au 324.900(5)	0.104(14)	0.00160(22)
^{197}Au **328.4840(20)**	**1.48(19)**	**0.023(3)**
^{197}Au 328.740(10)	0.111(14)	0.00171(22)
^{197}Au 333.8380(20)	0.111(14)	0.00171(22)
^{197}Au 337.5330(10)	0.178(23)	0.0027(4)
^{197}Au 339.2910(20)	0.090(25)	0.0014(4)
^{197}Au 346.9050(20)	0.44(11)	0.0068(17)
^{197}Au 347.8800(20)	0.111(14)	0.00171(22)
^{197}Au **350.8280(10)**	**1.0(5)**	**0.015(8)**
^{197}Au 355.5300(20)	0.31(4)	0.0048(6)
^{197}Au 364.0240(20)	0.11(3)	0.0017(5)
^{197}Au 364.030(6)	0.104(14)	0.00160(22)
^{197}Au 368.2510(20)	0.133(21)	0.0020(3)
^{197}Au 371.0790(20)	0.44(6)	0.0068(9)
^{197}Au 373.1450(20)	0.130(19)	0.0020(3)
^{197}Au 378.2990(20)	0.178(23)	0.0027(4)
^{197}Au **381.1990(10)**	**3.0(4)**	**0.046(6)**
^{197}Au 383.284(4)	0.24(3)	0.0037(5)
^{197}Au 393.884(5)	0.22(3)	0.0034(5)
^{197}Au 396.104(4)	0.100(8)	0.00154(12)
^{197}Au 398.295(6)	0.096(13)	0.00148(20)
^{197}Au ***411.802d***	***94.30(19)***	***1.451[<0.1%]***
^{197}Au 418.8400(20)	0.70(9)	0.0108(14)
^{197}Au 440.3290(20)	0.9(4)	0.014(6)
^{197}Au 441.070(5)	0.7(5)	0.011(8)
^{197}Au 444.3910(20)	0.56(7)	0.0086(11)
^{197}Au 447.527(3)	0.10(4)	0.0015(6)
^{197}Au 448.562(7)	0.118(15)	0.00182(23)
^{197}Au 449.5700(20)	0.50(6)	0.0077(9)
^{197}Au 456.1570(20)	0.141(22)	0.0022(3)
^{197}Au 456.287(4)	0.47(6)	0.0072(9)
^{197}Au 458.0540(20)	0.29(4)	0.0045(6)
^{197}Au 458.370(4)	0.16(3)	0.0025(5)
^{197}Au 464.7620(20)	0.17(6)	0.0026(9)
^{197}Au 485.638(5)	0.16(3)	0.0025(5)
^{197}Au 502.407(8)	0.16(4)	0.0025(6)
^{197}Au 509.175(4)	0.37(9)	0.0057(14)
^{197}Au 510.427(6)	0.19(7)	0.0029(11)
^{197}Au 511.067(6)	0.111(22)	0.0017(3)
^{197}Au 511.5170(20)	0.68(11)	0.0105(17)
^{197}Au 512.5790(20)	0.16(6)	0.0025(9)
^{197}Au 515.132(6)	0.104(14)	0.00160(22)
^{197}Au 516.0620(10)	0.35(5)	0.0054(8)
^{197}Au 520.746(6)	0.19(8)	0.0029(12)
^{197}Au 522.351(4)	0.096(12)	0.00148(18)
^{197}Au 524.752(3)	0.27(8)	0.0042(12)
^{197}Au 525.1340(20)	0.35(4)	0.0054(6)
^{197}Au **529.1650(20)**	**1.9(10)**	**0.029(15)**
^{197}Au 529.954(4)	0.39(5)	0.0060(8)
^{197}Au 540.3010(20)	0.49(23)	0.008(4)
^{197}Au 542.3670(20)	0.104(14)	0.00160(22)
^{197}Au 544.008(5)	0.52(5)	0.0080(8)
^{197}Au 548.9350(20)	0.67(9)	0.0103(14)
^{197}Au 552.467(3)	0.104(14)	0.00160(22)
^{197}Au 555.6890(20)	0.126(17)	0.0019(3)
^{197}Au 565.784(5)	0.38(5)	0.0058(8)
^{197}Au 565.810(3)	0.43(6)	0.0066(9)
^{197}Au 571.683(3)	0.50(7)	0.0077(11)
^{197}Au 573.388(13)	0.126(17)	0.0019(3)
^{197}Au 573.746(6)	0.096(14)	0.00148(22)
^{197}Au 573.960(4)	0.33(4)	0.0051(6)
^{197}Au 574.370(5)	0.148(20)	0.0023(3)
^{197}Au 574.381(3)	0.36(5)	0.0055(8)
^{197}Au 574.733(10)	0.104(14)	0.00160(22)
^{197}Au 577.3020(20)	0.27(3)	0.0042(5)

Eγ-keV	σ(Eγ)-barns	k_0
Gold (Z=79), continued		
^{197}Au 579.297(3)	0.53(8)	0.0082(12)
^{197}Au 584.800(10)	0.121(15)	0.00186(23)
^{197}Au 593.184(8)	0.148(21)	0.0023(3)
^{197}Au 609.432(4)	0.111(9)	0.00171(14)
^{197}Au 612.7240(20)	0.104(14)	0.00160(22)
^{197}Au 612.799(6)	0.096(22)	0.0015(3)
^{197}Au 625.4280(20)	0.44(4)	0.0068(6)
^{197}Au 631.660(9)	0.144(19)	0.0022(3)
^{197}Au 632.275(3)	0.170(23)	0.0026(4)
^{197}Au 635.166(3)	0.24(3)	0.0037(5)
^{197}Au 640.669(3)	0.59(5)	0.0091(8)
^{197}Au 647.293(5)	0.126(17)	0.0019(3)
^{197}Au 655.528(4)	0.21(3)	0.0032(5)
^{197}Au 655.569(3)	0.24(5)	0.0037(8)
^{197}Au 659.2490(20)	0.25(6)	0.0038(9)
^{197}Au 661.451(10)	0.093(19)	0.0014(3)
^{197}Au 668.561(7)	0.163(22)	0.0025(3)
^{197}Au 672.6550(10)	0.55(7)	0.0085(11)
^{197}Au 673.503(8)	0.126(18)	0.0019(3)
^{197}Au 678.208(10)	0.41(12)	0.0063(18)
^{197}Au 680.391(6)	0.10(3)	0.0015(5)
^{197}Au 682.804(5)	0.111(15)	0.00171(23)
^{197}Au 686.865(5)	0.218(18)	0.0034(3)
^{197}Au 688.968(10)	0.155(24)	0.0024(4)
^{197}Au 690.046(6)	0.388(20)	0.0060(3)
^{197}Au 692.972(6)	0.094(18)	0.0014(3)
^{197}Au 698.287(4)	0.15(5)	0.0023(8)
^{197}Au 702.474(5)	0.51(7)	0.0078(11)
^{197}Au 724.623(6)	0.115(18)	0.0018(3)
^{197}Au 728.239(6)	0.161(19)	0.0025(3)
^{197}Au 728.997(6)	0.111(20)	0.0017(3)
^{197}Au 732.221(10)	0.104(14)	0.00160(22)
^{197}Au 740.0000(20)	0.310(21)	0.0048(3)
^{197}Au 744.8580(20)	0.104(15)	0.00160(23)
^{197}Au 745.220(4)	0.33(6)	0.0051(9)
^{197}Au 746.073(5)	0.133(18)	0.0020(3)
^{197}Au 764.011(3)	0.3(3)	0.005(5)
^{197}Au 765.131(6)	0.163(22)	0.0025(3)
^{197}Au 767.886(5)	0.096(14)	0.00148(22)
^{197}Au 767.960(6)	0.096(14)	0.00148(22)
^{197}Au 770.858(5)	0.206(17)	0.0032(3)
^{197}Au 776.632(6)	0.118(19)	0.0018(3)
^{197}Au 783.230(5)	0.111(23)	0.0017(4)
^{197}Au 786.793(10)	0.261(15)	0.00402(23)
^{197}Au 788.131(13)	0.104(19)	0.0016(3)
^{197}Au 794.158(7)	0.178(24)	0.0027(4)
^{197}Au 796.217(5)	0.148(22)	0.0023(3)
^{197}Au 801.7050(20)	0.19(4)	0.0029(6)
^{197}Au 806.248(8)	0.13(3)	0.0020(5)
^{197}Au 810.100(7)	0.26(3)	0.0040(5)
^{197}Au 815.954(7)	0.104(20)	0.0016(3)
^{197}Au 822.572(5)	0.104(17)	0.0016(3)
^{197}Au 825.483(4)	0.31(5)	0.0048(8)
^{197}Au 831.470(5)	0.153(19)	0.0024(3)
^{197}Au 833.906(6)	0.104(16)	0.00160(25)
^{197}Au 836.432(3)	0.76(3)	0.0117(5)
^{197}Au 838.156(5)	0.13(3)	0.0020(5)
^{197}Au 839.516(5)	0.73(20)	0.011(3)
^{197}Au 846.216(7)	0.104(24)	0.0016(4)
^{197}Au 854.178(6)	0.093(18)	0.0014(3)
^{197}Au 854.650(4)	0.148(25)	0.0023(4)
^{197}Au 863.082(6)	0.148(25)	0.0023(4)
^{197}Au 868.771(4)	0.364(15)	0.00560(23)
^{197}Au 872.827(4)	0.096(18)	0.0015(3)
^{197}Au 877.308(4)	0.21(5)	0.0032(8)
^{197}Au 885.638(6)	0.17(3)	0.0026(5)
^{197}Au 891.613(3)	0.096(23)	0.0015(4)
^{197}Au 898.612(4)	0.15(3)	0.0023(5)
^{197}Au 902.478(6)	0.38(6)	0.0058(9)
^{197}Au 913.776(4)	0.30(6)	0.0046(9)
^{197}Au 916.435(6)	0.25(4)	0.0038(6)
^{197}Au 927.421(4)	0.31(12)	0.0048(18)
^{197}Au 928.995(6)	0.126(22)	0.0019(3)
^{197}Au 933.928(6)	0.47(14)	0.0072(22)
^{197}Au 946.453(5)	0.096(13)	0.00148(20)

Table I. Adopted Prompt and Decay Gamma Rays from Thermal Neutron Capture for all Elements, continued

Eγ-keV	σ(Eγ)-barns	k_0
Gold (Z=79), continued		
^{197}Au 947.971(6)	0.32(4)	0.0049(6)
^{197}Au 952.503(7)	0.19(3)	0.0029(5)
^{197}Au 971.8180(20)	0.13(4)	0.0020(6)
^{197}Au 978.936(8)	0.141(20)	0.0022(3)
^{197}Au 983.082(7)	0.096(14)	0.00148(22)
^{197}Au 985.002(6)	0.104(25)	0.0016(4)
^{197}Au 993.654(6)	0.21(5)	0.0032(8)
^{197}Au 999.682(4)	0.23(3)	0.0035(5)
^{197}Au 1000.447(4)	0.104(22)	0.0016(3)
^{197}Au 1005.487(6)	0.133(24)	0.0020(4)
^{197}Au 1006.100(3)	0.096(15)	0.00148(23)
^{197}Au 1018.136(6)	0.11(3)	0.0017(5)
^{197}Au 1018.426(4)	0.18(3)	0.0028(5)
^{197}Au 1028.199(5)	0.10(3)	0.0015(5)
^{197}Au 1028.564(6)	0.46(7)	0.0071(11)
^{197}Au 1038.274(3)	0.184(14)	0.00283(22)
^{197}Au 1046.323(7)	0.111(16)	0.00171(25)
^{197}Au 1047.121(6)	0.155(20)	0.0024(3)
^{197}Au 1047.847(5)	0.096(14)	0.00148(22)
^{197}Au 1049.231(6)	0.104(17)	0.0016(3)
^{197}Au 1050.701(5)	0.28(5)	0.0043(8)
^{197}Au 1054.055(5)	0.16(3)	0.0025(5)
^{197}Au 1060.888(7)	0.19(3)	0.0029(5)
^{197}Au 1064.436(8)	0.096(13)	0.00148(20)
^{197}Au 1064.998(7)	0.15(4)	0.0023(6)
^{197}Au 1076.761(5)	0.111(21)	0.0017(3)
^{197}Au 1079.197(5)	0.24(4)	0.0037(6)
^{197}Au 1081.54(4)	0.096(25)	0.0015(4)
^{197}Au 1085.605(5)	0.19(3)	0.0029(5)
^{197}Au 1101.942(4)	0.170(23)	0.0026(4)
^{197}Au 1106.951(5)	0.19(4)	0.0029(6)
^{197}Au 1107.562(9)	0.52(10)	0.0080(15)
^{197}Au 1109.196(4)	0.49(10)	0.0075(15)
^{197}Au 1111.461(7)	0.37(6)	0.0057(9)
^{197}Au 1114.585(6)	0.178(24)	0.0027(4)
^{197}Au 1128.417(6)	0.141(19)	0.0022(3)
^{197}Au 1132.895(8)	0.25(5)	0.0038(8)
^{197}Au 1148.562(6)	0.27(4)	0.0042(6)
^{197}Au 1150.671(9)	0.25(4)	0.0038(6)
^{197}Au 1157.2330(20)	0.13(4)	0.0020(6)
^{197}Au 1179.882(7)	0.12(5)	0.0018(8)
^{197}Au 1183.796(6)	0.32(5)	0.0049(8)
^{197}Au 1187.936(4)	0.15(4)	0.0023(6)
^{197}Au 1189.904(10)	0.10(3)	0.0015(5)
^{197}Au 1195.597(6)	0.148(22)	0.0023(3)
^{197}Au 1200.827(8)	0.104(16)	0.00160(25)
^{197}Au 1210.691(4)	0.20(3)	0.0031(5)
^{197}Au 1216.453(5)	0.21(3)	0.0032(5)
^{197}Au 1225.938(6)	0.27(4)	0.0042(6)
^{197}Au 1239.572(5)	0.49(8)	0.0075(12)
^{197}Au 1252.166(9)	0.126(23)	0.0019(4)
^{197}Au 1272.140(5)	0.096(16)	0.00148(25)
^{197}Au 1274.975(5)	0.26(4)	0.0040(6)
^{197}Au 1281.377(7)	0.49(12)	0.0075(18)
^{197}Au 1283.442(7)	0.35(11)	0.0054(17)
^{197}Au 1297.124(6)	0.43(10)	0.0066(15)
^{197}Au 1301.041(6)	0.15(6)	0.0023(9)
^{197}Au 1304.825(5)	0.25(5)	0.0038(8)
^{197}Au 1306.851(5)	0.70(9)	0.0108(14)
^{197}Au 1308.164(4)	0.118(25)	0.0018(4)
^{197}Au 1316.318(5)	0.21(4)	0.0032(6)
^{197}Au 1324.356(14)	0.19(3)	0.0029(5)
^{197}Au 1335.515(12)	0.16(4)	0.0025(6)
^{197}Au 1338.164(5)	0.118(22)	0.0018(3)
^{197}Au 1344.153(6)	0.16(3)	0.0025(5)
^{197}Au 1361.477(5)	0.27(4)	0.0042(6)
^{197}Au 1363.345(4)	0.26(4)	0.0040(6)
^{197}Au 1379.390(6)	0.141(22)	0.0022(3)
^{197}Au 1396.133(6)	0.141(22)	0.0022(3)
^{197}Au 1431.641(6)	0.15(4)	0.0023(6)
^{197}Au 1431.949(4)	0.23(4)	0.0035(6)
^{197}Au 1445.373(5)	0.14(3)	0.0022(5)
^{197}Au 1487.130(4)	0.20(4)	0.0031(6)
^{197}Au 1487.599(7)	0.20(4)	0.0031(6)
^{197}Au 1530.698(6)	0.30(5)	0.0046(8)

Eγ-keV	σ(Eγ)-barns	k_0
Gold (Z=79), continued		
^{197}Au 1554.420(5)	0.25(9)	0.0038(14)
^{197}Au 4951.85(10)	0.156(16)	0.00240(25)
^{197}Au 4957.83(10)	0.63(11)	0.0097(17)
^{197}Au 4975.87(10)	0.161(16)	0.00248(25)
^{197}Au 4981.55(10)	0.09(3)	0.0014(5)
^{197}Au 4998.68(10)	0.31(4)	0.0048(6)
^{197}Au 5007.08(10)	0.113(15)	0.00174(23)
^{197}Au 5025.11(10)	0.113(16)	0.00174(25)
^{197}Au 5036.63(10)	0.18(7)	0.0028(11)
^{197}Au 5040.15(10)	0.18(7)	0.0028(11)
^{197}Au 5080.60(10)	0.152(15)	0.00234(23)
^{197}Au 5088.46(10)	0.50(8)	0.0077(12)
^{197}Au 5102.85(10)	0.87(13)	0.0134(20)
^{197}Au 5110.17(10)	0.156(11)	0.00240(17)
^{197}Au 5116.11(10)	0.161(13)	0.00248(20)
^{197}Au 5140.74(10)	0.395(18)	0.0061(3)
^{197}Au 5148.90(10)	0.46(8)	0.0071(12)
^{197}Au 5153.21(10)	0.119(14)	0.00183(22)
^{197}Au 5174.08(10)	0.334(16)	0.00514(25)
^{197}Au 5205.39(10)	0.16(6)	0.0025(9)
^{197}Au 5218.35(10)	0.272(20)	0.0042(3)
^{197}Au 5225.49(10)	0.42(9)	0.0065(14)
^{197}Au 5246.72(10)	0.51(20)	0.008(3)
^{197}Au 5271.86(10)	0.38(20)	0.006(3)
^{197}Au 5279.44(10)	0.524(20)	0.0081(3)
^{197}Au 5302.86(10)	0.19(10)	0.0029(15)
^{197}Au 5355.00(10)	0.401(16)	0.00617(25)
^{197}Au 5473.96(10)	0.21(6)	0.0032(9)
^{197}Au 5493.81(10)	0.42(10)	0.0065(15)
^{197}Au 5524.66(10)	0.80(14)	0.0123(22)
^{197}Au 5540.41(10)	0.17(6)	0.0026(9)
^{197}Au 5620.62(10)	0.34(9)	0.0052(14)
^{197}Au **5710.52(10)**	**1.27(17)**	**0.020(3)**
^{197}Au 5722.94(10)	0.55(16)	0.0085(25)
^{197}Au 5767.01(10)	0.09(3)	0.0014(5)
^{197}Au 5808.50(10)	0.24(9)	0.0037(14)
^{197}Au 5839.57(10)	0.16(8)	0.0025(12)
^{197}Au 5879.74(10)	0.30(8)	0.0046(12)
Mercury (Z=80), *At.Wt.=200.59(2)*, σ_γ*=384(8)*		
^{196}Hg *133.98(5)d*	*0.0155(4)*	*2.34×10^{-4}[1.4%]*
^{196}Hg *308.07(11)*	*0.79(7)*	*0.0119(11)*
^{199}Hg **367.947(9)**	**251(5)**	**3.79(8)**
^{201}Hg *439.50(8)*	*0.52(7)*	*0.0079(11)*
^{199}Hg 540.927(7)	2.75(9)	0.0415(14)
^{199}Hg 579.295(11)	7.64(23)	0.115(4)
^{199}Hg 661.403(11)	22.3(5)	0.337(8)
^{199}Hg 688.953(7)	2.83(11)	0.0428(17)
^{199}Hg 851.30(5)	2.69(9)	0.0406(14)
^{199}Hg 886.153(10)	13.5(11)	0.204(17)
^{199}Hg 1147.222(11)	7.79(23)	0.118(4)
^{199}Hg 1202.328(10)	12.0(3)	0.181(5)
^{199}Hg 1205.717(11)	13.5(5)	0.204(8)
^{199}Hg 1225.476(11)	12.3(3)	0.186(5)
^{199}Hg 1254.099(12)	7.56(23)	0.114(4)
^{199}Hg 1262.941(11)	21.5(5)	0.325(8)
^{199}Hg 1273.497(10)	10.6(3)	0.160(5)
^{199}Hg 1350.354(10)	4.10(16)	0.0619(24)
^{199}Hg 1362.971(10)	5.93(19)	0.090(3)
^{199}Hg 1407.942(20)	9.53(23)	0.144(4)
^{199}Hg 1467.92(5)	3.31(13)	0.0500(20)
^{199}Hg 1488.825(11)	2.92(14)	0.0441(21)
^{199}Hg 1514.903(10)	2.68(13)	0.0405(20)
^{199}Hg 1557.65(9)	2.6(8)	0.039(12)
^{199}Hg 1557.94(4)	2.87(14)	0.0434(21)
^{199}Hg **1570.273(12)**	**29.6(7)**	**0.447(11)**
^{199}Hg 1604.322(11)	4.07(17)	0.061(3)
^{199}Hg **1693.296(11)**	**56.2(16)**	**0.849(24)**
^{199}Hg 1718.299(12)	8.47(23)	0.128(4)
^{199}Hg 1758.97(6)	3.33(14)	0.0503(21)
^{199}Hg 2002.083(13)	24.3(9)	0.367(14)
^{199}Hg 2271.90(3)	6.05(23)	0.091(4)
^{199}Hg 2296.310(23)	2.89(17)	0.044(3)
^{199}Hg 2639.85(3)	11.6(3)	0.175(5)
^{199}Hg 2818.26(5)	3.42(16)	0.0517(24)

Table I. Adopted Prompt and Decay Gamma Rays from Thermal Neutron Capture for all Elements, continued

	Eγ-keV	σ(Eγ)-barns	k_0
Mercury (Z=80), continued			
^{199}Hg	2901.25(5)	4.63(19)	0.070(3)
^{199}Hg	2920.90(4)	4.99(23)	0.075(4)
^{199}Hg	3186.21(5)	11.3(4)	0.171(6)
^{199}Hg	3216.63(9)	2.93(17)	0.044(3)
^{199}Hg	3269.19(5)	3.96(18)	0.060(3)
^{199}Hg	3288.85(4)	13.3(4)	0.201(6)
^{199}Hg	4373.37(8)	3.70(23)	0.056(4)
^{199}Hg	4575.36(6)	4.23(23)	0.064(4)
^{199}Hg	4675.44(9)	13.0(4)	0.196(6)
^{199}Hg	**4739.43(5)**	**30.1(8)**	**0.455(12)**
^{199}Hg	4759.09(6)	12.4(4)	0.187(6)
^{199}Hg	4811.64(9)	3.70(23)	0.056(4)
^{199}Hg	4842.07(6)	20.0(6)	0.302(9)
^{199}Hg	4954.47(5)	4.01(23)	0.061(4)
^{199}Hg	4974.98(7)	5.22(23)	0.079(4)
^{199}Hg	5050.07(5)	20.0(6)	0.302(9)
^{199}Hg	5388.43(5)	17.5(5)	0.264(8)
^{199}Hg	**5658.24(4)**	**27.5(7)**	**0.415(11)**
^{199}Hg	**5967.02(4)**	**62.5(15)**	**0.944(23)**
^{199}Hg	6309.96(4)	4.0(3)	0.060(5)
^{199}Hg	6397.37(4)	3.7(3)	0.056(5)
^{199}Hg	6457.98(4)	23.1(8)	0.349(12)
Thallium (Z=81), *At.Wt.=204.3833(2)*, σ_γ=*3.44(6)*			
^{203}Tl	77.07(22)	0.011(5)	$1.6(7)\times10^{-4}$
^{203}Tl	132.11(14)	0.0062(10)	$9.2(15)\times10^{-5}$
^{203}Tl	**139.94(9)**	**0.400(7)**	**0.00593(10)**
^{203}Tl	145.88(10)	0.0054(5)	$8.0(7)\times10^{-5}$
^{203}Tl	152.93(11)	0.0144(6)	$2.14(9)\times10^{-4}$
^{203}Tl	**154.01(9)**	**0.0926(17)**	**0.001373(25)**
^{203}Tl	157.32(10)	0.0061(5)	$9.0(7)\times10^{-5}$
^{203}Tl	171.88(9)	0.0109(5)	$1.62(7)\times10^{-4}$
^{203}Tl	178.78(11)	0.0050(5)	$7.4(7)\times10^{-5}$
^{203}Tl	**198.33(8)**	**0.0408(10)**	**0.000605(15)**
^{205}Tl	265.86(9)	0.0210(7)	0.000311(10)
^{203}Tl	284.81(12)	0.0052(5)	$7.7(7)\times10^{-5}$
^{203}Tl	286.88(11)	0.0058(5)	$8.6(7)\times10^{-5}$
^{203}Tl	**292.26(8)**	**0.0983(20)**	**0.00146(3)**
^{205}Tl	304.86(9)	0.0225(12)	0.000334(18)
^{203}Tl	310.31(9)	0.0245(12)	0.000363(18)
^{203}Tl	**318.88(8)**	**0.325(6)**	**0.00482(9)**
^{203}Tl	325.85(8)	0.0301(10)	0.000446(15)
^{203}Tl	330.09(9)	0.0267(10)	0.000396(15)
^{205}Tl	330.09(9)	0.0267(10)	0.000396(15)
^{203}Tl	331.76(9)	0.0371(10)	0.000550(15)
^{203}Tl	336.96(10)	0.0080(6)	$1.19(9)\times10^{-4}$
^{203}Tl	**347.96(8)**	**0.361(10)**	**0.00535(15)**
^{205}Tl	369.18(7)	0.016(3)	$2.4(4)\times10^{-4}$
^{203}Tl	369.65(24)	0.0047(12)	$7.0(18)\times10^{-5}$
^{203}Tl	383.99(8)	0.0341(12)	0.000506(18)
^{203}Tl	389.48(11)	0.0079(7)	$1.17(10)\times10^{-4}$
^{203}Tl	**395.62(8)**	**0.0862(20)**	**0.00128(3)**
^{203}Tl	416.91(17)	0.0069(12)	$1.02(18)\times10^{-4}$
^{203}Tl	418.27(11)	0.0141(12)	$2.09(18)\times10^{-4}$
^{203}Tl	**424.81(8)**	**0.1200(25)**	**0.00178(4)**
^{203}Tl	**471.90(8)**	**0.116(3)**	**0.00172(4)**
^{203}Tl	483.29(12)	0.0082(10)	$1.22(15)\times10^{-4}$
^{203}Tl	**488.11(8)**	**0.096(4)**	**0.00142(6)**
^{203}Tl	489.26(24)	0.008(3)	$1.2(4)\times10^{-4}$
^{203}Tl	563.21(8)	0.0356(15)	0.000528(22)
^{203}Tl	587.01(10)	0.0109(10)	$1.62(15)\times10^{-4}$
^{203}Tl	591.13(9)	0.0225(10)	0.000334(15)
^{203}Tl	**624.46(8)**	**0.0413(10)**	**0.000612(15)**
^{203}Tl	626.54(8)	0.0388(10)	0.000575(15)
^{203}Tl	629.12(8)	0.0388(10)	0.000575(15)
^{205}Tl	649.30(15)	0.0106(10)	$1.57(15)\times10^{-4}$
^{203}Tl	678.01(8)	0.0361(15)	0.000535(22)
^{203}Tl	714.86(24)	0.0074(12)	$1.10(18)\times10^{-4}$
^{203}Tl	**732.09(9)**	**0.064(3)**	**0.00095(4)**
^{203}Tl	**737.12(8)**	**0.118(5)**	**0.00175(7)**
^{203}Tl	764.13(9)	0.0316(12)	0.000469(18)
^{205}Tl	*803.30(20)d*	*$3.5(6)\times10^{-6}$*	*5.2×10^{-8}[90%]*
^{203}Tl	818.14(8)	0.0279(10)	0.000414(15)
^{203}Tl	**873.16(8)**	**0.168(4)**	**0.00249(6)**
^{203}Tl	931.39(8)	0.0257(12)	0.000381(18)

	Eγ-keV	σ(Eγ)-barns	k_0
Thallium (Z=81), continued			
^{203}Tl	**949.88(8)**	**0.0479(15)**	**0.000710(22)**
^{203}Tl	1013.27(9)	0.0217(12)	0.000322(18)
^{203}Tl	1063.00(9)	0.0185(10)	0.000274(15)
^{203}Tl	1093.02(8)	0.0353(12)	0.000523(18)
^{203}Tl	**1110.37(8)**	**0.0413(12)**	**0.000612(18)**
^{203}Tl	**1121.29(7)**	**0.0600(17)**	**0.000890(25)**
^{203}Tl	1134.01(9)	0.0133(7)	$1.97(10)\times10^{-4}$
^{203}Tl	**1155.43(7)**	**0.0605(17)**	**0.000897(25)**
^{203}Tl	**1234.69(7)**	**0.0746(25)**	**0.00111(4)**
^{203}Tl	1706.20(16)	0.0091(15)	$1.35(22)\times10^{-4}$
^{203}Tl	**1741.01(8)**	**0.0548(25)**	**0.00081(4)**
^{203}Tl	1756.27(12)	0.027(3)	0.00040(4)
^{203}Tl	4076.7(6)	0.0072(15)	$1.07(22)\times10^{-4}$
^{203}Tl	4101.4(4)	0.0086(25)	$1.3(4)\times10^{-4}$
^{203}Tl	4115.08(17)	0.0222(17)	0.000329(25)
^{203}Tl	4195.98(14)	0.0373(22)	0.00055(3)
^{203}Tl	**4225.47(17)**	**0.045(3)**	**0.00067(4)**
^{203}Tl	4286.3(8)	0.0057(15)	$8.5(22)\times10^{-5}$
^{203}Tl	4309.00(24)	0.0210(22)	0.00031(3)
^{203}Tl	4343.56(12)	0.034(3)	0.00050(4)
^{203}Tl	4402.60(15)	0.0208(15)	0.000308(22)
^{203}Tl	4439.3(3)	0.0094(15)	$1.39(22)\times10^{-4}$
^{203}Tl	**4495.74(13)**	**0.043(4)**	**0.00064(6)**
^{203}Tl	**4540.62(15)**	**0.0413(25)**	**0.00061(4)**
^{203}Tl	4570.0(3)	0.0180(20)	0.00027(3)
^{203}Tl	4600.95(16)	0.0292(22)	0.00043(3)
^{203}Tl	**4687.58(12)**	**0.098(4)**	**0.00145(6)**
^{203}Tl	**4705.83(14)**	**0.058(3)**	**0.00086(4)**
^{203}Tl	4715.3(4)	0.0131(20)	$1.9(3)\times10^{-4}$
^{203}Tl	**4752.24(11)**	**0.148(5)**	**0.00219(7)**
^{203}Tl	4804.4(4)	0.0138(20)	$2.0(3)\times10^{-4}$
^{203}Tl	**4841.40(15)**	**0.090(4)**	**0.00133(6)**
^{203}Tl	4867.5(6)	0.0074(20)	$1.1(3)\times10^{-4}$
^{203}Tl	**4913.57(11)**	**0.164(5)**	**0.00243(7)**
^{203}Tl	4980.97(20)	0.036(3)	0.00053(4)
^{203}Tl	**5014.61(15)**	**0.058(3)**	**0.00086(4)**
^{203}Tl	**5130.50(23)**	**0.058(4)**	**0.00086(6)**
^{203}Tl	**5180.38(12)**	**0.141(5)**	**0.00209(7)**
^{203}Tl	5238.4(3)	0.0156(20)	$2.3(3)\times10^{-4}$
^{203}Tl	**5261.48(13)**	**0.084(4)**	**0.00125(6)**
^{203}Tl	**5279.86(12)**	**0.207(6)**	**0.00307(9)**
^{203}Tl	**5404.41(12)**	**0.147(5)**	**0.00218(7)**
^{203}Tl	**5451.07(14)**	**0.079(3)**	**0.00117(4)**
^{203}Tl	5520.3(4)	0.0183(25)	0.00027(4)
^{203}Tl	**5533.35(13)**	**0.131(5)**	**0.00194(7)**
^{203}Tl	**5603.28(13)**	**0.282(10)**	**0.00418(15)**
^{203}Tl	**5641.57(12)**	**0.316(7)**	**0.00469(10)**
^{205}Tl	5852.5(5)	0.0072(15)	$1.07(22)\times10^{-4}$
^{205}Tl	5867.8(4)	0.0091(17)	$1.35(25)\times10^{-4}$
^{203}Tl	5890.2(4)	0.0067(17)	$9.9(25)\times10^{-5}$
^{203}Tl	**5917.48(16)**	**0.084(4)**	**0.00125(6)**
^{203}Tl	6025.21(24)	0.0222(25)	0.00033(4)
^{203}Tl	6118.79(23)	0.0232(20)	0.00034(3)
^{203}Tl	**6166.61(14)**	**0.166(6)**	**0.00246(9)**
^{203}Tl	**6183.05(15)**	**0.081(4)**	**0.00120(6)**
^{205}Tl	6197.8(4)	0.0109(17)	$1.62(25)\times10^{-4}$
^{203}Tl	**6222.57(16)**	**0.065(4)**	**0.00096(6)**
^{203}Tl	6336.11(22)	0.0245(22)	0.00036(3)
^{205}Tl	6504.3(6)	0.0040(10)	$5.9(15)\times10^{-5}$
^{203}Tl	**6514.57(15)**	**0.129(5)**	**0.00191(7)**
^{203}Tl	6654.71(25)	0.0104(12)	$1.54(18)\times10^{-4}$
Lead (Z=82), *At.Wt.=207.2(1)*, σ_γ=*0.154(7)*			
^{206}Pb	*569.702d*	*0.0014(3)*	*2.0×10^{-5}[100%]*
^{204}Pb	6729.38(9)	0.00320(10)	$4.68(15)\times10^{-5}$
^{206}Pb	6737.62(10)	0.00691(19)	$1.01(3)\times10^{-4}$
^{207}Pb	**7367.78(7)**	**0.137(3)**	**0.00200(4)**
Bismuth (Z=83), *At.Wt.=208.98038(2)*, σ_γ=*0.0338(7)*			
^{209}Bi	46.58(12)	0.00043(9)	$6.2(13)\times10^{-6}$
^{209}Bi	63.59(5)	$1.8(4)\times10^{-4}$	$2.6(6)\times10^{-6}$
^{209}Bi	64.94(6)	$2.1(13)\times10^{-4}$	$3.0(19)\times10^{-6}$
^{209}Bi	65.24(20)	$1.8(4)\times10^{-4}$	$2.6(6)\times10^{-6}$
^{209}Bi	91.29(5)	0.0005(3)	$7(4)\times10^{-6}$
^{209}Bi	92.48(13)	$2.5(4)\times10^{-4}$	$3.6(6)\times10^{-6}$

Table I. Adopted Prompt and Decay Gamma Rays from Thermal Neutron Capture for all Elements, continued

	Eγ-keV	σ(Eγ)-barns	k_0
Bismuth (Z=83), continued			
^{209}Bi	116.49(9)	0.00054(21)	8(3)×10^{-6}
^{209}Bi	154.86(6)	2.5(4)×10^{-4}	3.6(6)×10^{-6}
^{209}Bi	154.89(5)	0.0013(5)	1.9(7)×10^{-5}
^{209}Bi	**162.19(11)**	**0.008(3)**	**1.2(4)×10^{-4}**
^{209}Bi	162.27(6)	0.00162(21)	2.3(3)×10^{-5}
^{209}Bi	183.04(6)	1.8(8)×10^{-4}	2.6(12)×10^{-6}
^{209}Bi	311.23(11)	2.0(4)×10^{-4}	2.9(6)×10^{-6}
^{209}Bi	**319.78(4)**	**0.0115(14)**	**1.67(20)×10^{-4}**
^{209}Bi	347.92(9)	2.1(4)×10^{-4}	3.0(6)×10^{-6}
^{209}Bi	347.93(5)	1.8(8)×10^{-4}	2.6(12)×10^{-6}
^{209}Bi	392.82(9)	2.4(4)×10^{-4}	3.5(6)×10^{-6}
^{209}Bi	408.77(7)	0.00043(7)	6.2(10)×10^{-6}
^{209}Bi	563.06(7)	2.1(8)×10^{-4}	3.0(12)×10^{-6}
^{209}Bi	563.14(7)	0.00051(7)	7.4(10)×10^{-6}
^{209}Bi	610.92(11)	1.8(4)×10^{-4}	2.6(6)×10^{-6}
^{209}Bi	644.36(8)	2.5(4)×10^{-4}	3.6(6)×10^{-6}
^{209}Bi	645.82(6)	0.00047(7)	6.8(10)×10^{-6}
^{209}Bi	**673.97(5)**	**0.0026(4)**	**3.8(6)×10^{-5}**
^{209}Bi	769.21(6)	0.00078(10)	1.13(15)×10^{-5}
^{209}Bi	774.91(10)	0.00054(21)	8(3)×10^{-6}
^{209}Bi	774.92(7)	0.00141(20)	2.0(3)×10^{-5}
^{209}Bi	808.77(7)	0.00042(16)	6.1(23)×10^{-6}
^{209}Bi	808.79(7)	0.00119(16)	1.73(23)×10^{-5}
^{209}Bi	826.98(13)	2.0(3)×10^{-4}	2.9(4)×10^{-6}
^{209}Bi	855.45(14)	1.8(4)×10^{-4}	2.6(6)×10^{-6}
^{209}Bi	900.07(7)	0.00035(13)	5.1(19)×10^{-6}
^{209}Bi	900.22(9)	0.00102(14)	1.48(20)×10^{-5}
^{209}Bi	912.77(10)	0.00034(5)	4.9(7)×10^{-6}
^{209}Bi	971.82(7)	0.00026(9)	3.8(13)×10^{-6}
^{209}Bi	971.83(9)	0.00072(9)	1.04(13)×10^{-5}
^{209}Bi	1012.53(7)	0.00064(9)	9.3(13)×10^{-6}
^{209}Bi	1013.03(13)	2.1(8)×10^{-4}	3.0(12)×10^{-6}
^{209}Bi	1118.21(19)	2.1(4)×10^{-4}	3.0(6)×10^{-6}
^{209}Bi	1156.34(14)	2.0(4)×10^{-4}	2.9(6)×10^{-6}
^{209}Bi	1175.48(12)	0.00048(7)	7.0(10)×10^{-6}
^{209}Bi	1203.52(11)	0.00077(12)	1.12(17)×10^{-5}
^{209}Bi	1203.61(8)	2.1(8)×10^{-4}	3.0(12)×10^{-6}
^{209}Bi	1203.61(10)	2.1(8)×10^{-4}	3.0(12)×10^{-6}
^{209}Bi	1211.11(15)	0.00031(5)	4.5(7)×10^{-6}
^{209}Bi	1226.30(6)	0.00042(7)	6.1(10)×10^{-6}
^{209}Bi	1337.09(6)	0.00156(21)	2.3(3)×10^{-5}
^{209}Bi	1360.16(15)	2.0(4)×10^{-4}	2.9(6)×10^{-6}
^{209}Bi	1397.83(11)	0.00033(5)	4.8(7)×10^{-6}
^{209}Bi	1430.29(14)	0.00027(4)	3.9(6)×10^{-6}
^{209}Bi	1465.52(14)	0.00026(4)	3.8(6)×10^{-6}
^{209}Bi	1484.30(8)	0.00034(5)	4.9(7)×10^{-6}
^{209}Bi	1596.43(7)	0.00073(10)	1.06(15)×10^{-5}
^{209}Bi	1625.78(17)	2.1(4)×10^{-4}	3.0(6)×10^{-6}
^{209}Bi	1658.34(7)	0.00035(5)	5.1(7)×10^{-6}
^{209}Bi	1708.84(9)	0.00071(10)	1.03(15)×10^{-5}
^{209}Bi	1708.92(10)	2.2(8)×10^{-4}	3.2(12)×10^{-6}
^{209}Bi	1756.35(14)	2.4(4)×10^{-4}	3.5(6)×10^{-6}
^{209}Bi	1824.97(15)	0.00054(8)	7.8(12)×10^{-6}
^{209}Bi	1839.74(13)	0.00046(7)	6.7(10)×10^{-6}
^{209}Bi	2026.66(15)	0.00037(7)	5.4(10)×10^{-6}
^{209}Bi	2496.69(16)	0.00034(7)	4.9(10)×10^{-6}
^{209}Bi	**2505.35(7)**	**0.0021(3)**	**3.0(4)×10^{-5}**
^{209}Bi	2570.29(7)	0.00031(5)	4.5(7)×10^{-6}
^{209}Bi	2598.33(8)	0.00166(24)	2.4(4)×10^{-5}
^{209}Bi	2614.55(12)	0.00027(5)	3.9(7)×10^{-6}
^{209}Bi	2624.34(7)	0.00154(21)	2.2(3)×10^{-5}
^{209}Bi	**2828.29(7)**	**0.00179(24)**	**2.6(4)×10^{-5}**
^{209}Bi	2898.17(8)	0.00080(12)	1.16(17)×10^{-5}
^{209}Bi	3081.27(10)	0.00145(20)	2.1(3)×10^{-5}
^{209}Bi	3141.75(8)	0.00041(7)	5.9(10)×10^{-6}
^{209}Bi	3214.64(8)	0.00061(9)	8.8(13)×10^{-6}
^{209}Bi	3230.66(10)	2.1(4)×10^{-4}	3.0(6)×10^{-6}
^{209}Bi	3268.99(9)	2.2(5)×10^{-4}	3.2(7)×10^{-6}
^{209}Bi	3356.60(8)	0.00167(24)	2.4(4)×10^{-5}
^{209}Bi	3396.16(7)	0.00170(24)	2.5(4)×10^{-5}
^{209}Bi	3407.4(3)	2.5(5)×10^{-4}	3.6(7)×10^{-6}
^{209}Bi	3610.84(6)	2.1(5)×10^{-4}	3.0(7)×10^{-6}
^{209}Bi	3632.77(7)	0.00136(20)	2.0(3)×10^{-5}
^{209}Bi	**4054.57(6)**	**0.0137(18)**	**2.0(3)×10^{-4}**
^{209}Bi	**4101.76(6)**	**0.0089(12)**	**1.29(17)×10^{-4}**
^{209}Bi	**4165.36(5)**	**0.00173(24)**	**2.5(4)×10^{-5}**
^{209}Bi	**4171.05(9)**	**0.0171(22)**	**2.5(3)×10^{-4}**
^{209}Bi	**4256.65(5)**	**0.0024(3)**	**3.5(4)×10^{-5}**
^{209}Bi	4284.80(6)	0.00042(7)	6.1(10)×10^{-6}
Thorium (Z=90), *At.Wt.=232.0381(1)*, σ_γ=*7.35(3)*			
^{232}Th	39.92(13)	0.0029(4)	3.8(5)×10^{-5}
^{232}Th	44.36(14)	0.0031(4)	4.0(5)×10^{-5}
^{232}Th	53.71(12)	0.0139(10)	1.82(13)×10^{-4}
^{232}Th	57.41(15)	0.0068(9)	8.9(12)×10^{-5}
^{232}Th	***63.810(10)***	***10.7(5) s^{-1}g^{-1}***	
^{232}Th	**77.09(15)**	**0.09(3)**	**0.0012(4)**
^{232}Th	***140.880(10)***	***0.85(18) s^{-1}g^{-1}***	
^{232}Th	201.75(12)	0.0079(8)	1.03(10)×10^{-4}
^{232}Th	211.86(11)	0.0191(17)	2.49(22)×10^{-4}
^{232}Th	229.08(11)	0.0163(13)	2.13(17)×10^{-4}
^{232}Th	**256.25(11)**	**0.093(17)**	**0.00121(22)**
^{232}Th	263.06(14)	0.0073(17)	9.5(22)×10^{-5}
^{232}Th	**277.48(11)**	**0.0312(25)**	**0.00041(3)**
^{232}Th	281.40(11)	0.0170(14)	2.22(18)×10^{-4}
^{232}Th	286.16(25)	0.0028(7)	3.7(9)×10^{-5}
^{232}Th	311.91(10)	0.0187(10)	2.44(13)×10^{-4}
^{232}Th	**316.64(10)**	**0.0397(18)**	**0.000518(24)**
^{232}Th	**319.08(10)**	**0.082(3)**	**0.00107(4)**
^{232}Th	320.98(13)	0.0072(8)	9.4(10)×10^{-5}
^{232}Th	327.80(10)	0.0269(16)	0.000351(21)
^{232}Th	329.88(11)	0.0221(17)	0.000289(22)
^{232}Th	**331.37(11)**	**0.0291(19)**	**0.000380(25)**
^{232}Th	**335.92(10)**	**0.089(4)**	**0.00116(5)**
^{232}Th	**354.27(10)**	**0.0408(20)**	**0.00053(3)**
^{232}Th	365.28(16)	0.0060(9)	7.8(12)×10^{-5}
^{232}Th	366.79(16)	0.0061(9)	8.0(12)×10^{-5}
^{232}Th	370.35(15)	0.0044(8)	5.7(10)×10^{-5}
^{232}Th	384.7(3)	0.0030(8)	3.9(10)×10^{-5}
^{232}Th	427.24(17)	0.0040(7)	5.2(9)×10^{-5}
^{232}Th	432.15(13)	0.0076(8)	9.9(10)×10^{-5}
^{232}Th	**472.30(10)**	**0.165(8)**	**0.00215(10)**
^{232}Th	506.22(13)	0.0075(11)	9.8(14)×10^{-5}
^{232}Th	**522.73(10)**	**0.102(5)**	**0.00133(7)**
^{232}Th	**531.58(10)**	**0.0404(23)**	**0.00053(3)**
^{232}Th	535.08(17)	0.0062(11)	8.1(14)×10^{-5}
^{232}Th	**539.66(10)**	**0.061(3)**	**0.00080(4)**
^{232}Th	**548.23(11)**	**0.042(10)**	**0.00055(13)**
^{232}Th	553.36(13)	0.011(3)	1.4(4)×10^{-4}
^{232}Th	**556.93(11)**	**0.040(10)**	**0.00052(13)**
^{232}Th	**561.25(11)**	**0.033(8)**	**0.00043(10)**
^{232}Th	**566.63(10)**	**0.19(5)**	**0.0025(7)**
^{232}Th	569.15(16)	0.008(3)	1.0(4)×10^{-4}
^{232}Th	**578.02(9)**	**0.105(5)**	**0.00137(7)**
^{232}Th	580.16(19)	0.0125(21)	1.6(3)×10^{-4}
^{232}Th	**583.27(9)**	**0.279(11)**	**0.00364(14)**
^{232}Th	**586.02(10)**	**0.045(3)**	**0.00059(4)**
^{232}Th	**593.23(10)**	**0.043(3)**	**0.00056(4)**
^{232}Th	**605.41(10)**	**0.054(4)**	**0.00071(5)**
^{232}Th	612.45(9)	0.018(3)	2.4(4)×10^{-4}
^{232}Th	622.95(11)	0.0125(15)	1.63(20)×10^{-4}
^{232}Th	632.09(12)	0.0105(9)	1.37(12)×10^{-4}
^{232}Th	659.56(16)	0.0173(20)	2.3(3)×10^{-4}
^{232}Th	662.0(3)	0.0101(18)	1.32(24)×10^{-4}
^{232}Th	**665.11(10)**	**0.084(4)**	**0.00110(5)**
^{232}Th	**681.81(9)**	**0.079(4)**	**0.00103(5)**
^{232}Th	684.96(13)	0.0117(16)	1.53(21)×10^{-4}
^{232}Th	696.57(14)	0.0139(17)	1.82(22)×10^{-4}
^{232}Th	703.1(5)	0.0073(18)	9.5(24)×10^{-5}
^{232}Th	**705.17(11)**	**0.050(4)**	**0.00065(5)**
^{232}Th	**714.23(10)**	**0.052(3)**	**0.00068(4)**
^{232}Th	721.60(22)	0.0073(15)	9.5(20)×10^{-5}
^{232}Th	735.25(14)	0.0123(16)	1.61(21)×10^{-4}
^{232}Th	741.02(15)	0.0122(16)	1.59(21)×10^{-4}
^{232}Th	752.05(16)	0.0142(19)	1.85(25)×10^{-4}
^{232}Th	768.58(23)	0.0091(15)	1.19(20)×10^{-4}
^{232}Th	777.8(4)	0.0034(14)	4.4(18)×10^{-5}
^{232}Th	780.8(3)	0.0052(15)	6.8(20)×10^{-5}
^{232}Th	785.86(22)	0.0097(18)	1.27(24)×10^{-4}
^{232}Th	**797.79(9)**	**0.0416(20)**	**0.00054(3)**

Table I. Adopted Prompt and Decay Gamma Rays from Thermal Neutron Capture for all Elements, continued

Eγ-keV	σ(Eγ)-barns	k_0
Thorium (Z=90), continued		
^{232}Th 808.53(11)	0.0212(14)	0.000277(18)
^{232}Th 814.75(10)	0.0196(13)	0.000256(17)
^{232}Th **834.83(14)**	**0.059(5)**	**0.00077(7)**
^{232}Th 846.0(5)	0.013(3)	$1.7(4)\times10^{-4}$
^{232}Th 849.4(7)	0.005(3)	$7(4)\times10^{-5}$
^{232}Th **860.61(13)**	**0.047(5)**	**0.00061(7)**
^{232}Th 869.69(14)	0.0138(11)	$1.80(14)\times10^{-4}$
^{232}Th 872.13(11)	0.0268(15)	0.000350(20)
^{232}Th 907.44(14)	0.0081(10)	$1.06(13)\times10^{-4}$
^{232}Th 913.74(17)	0.0063(10)	$8.2(13)\times10^{-5}$
^{232}Th 918.70(13)	0.0096(10)	$1.25(13)\times10^{-4}$
^{232}Th 941.79(13)	0.0103(11)	$1.35(14)\times10^{-4}$
^{232}Th **968.78(9)**	**0.132(6)**	**0.00172(8)**
^{232}Th 996.7(3)	0.0067(16)	$8.8(21)\times10^{-5}$
^{232}Th **1013.84(11)**	**0.037(3)**	**0.00048(4)**
^{232}Th 1031.1(3)	0.0040(10)	$5.2(13)\times10^{-5}$
^{232}Th 1034.27(11)	0.0165(14)	$2.15(18)\times10^{-4}$
^{232}Th 1044.58(14)	0.0112(12)	$1.46(16)\times10^{-4}$
^{232}Th 1055.60(14)	0.0105(12)	$1.37(16)\times10^{-4}$
^{232}Th 1096.9(4)	0.0050(13)	$6.5(17)\times10^{-5}$
^{232}Th 1100.98(11)	0.0211(16)	0.000276(21)
^{232}Th 1116.9(3)	0.0060(12)	$7.8(16)\times10^{-5}$
^{232}Th 1125.46(19)	0.0079(13)	$1.03(17)\times10^{-4}$
^{232}Th 1145.37(17)	0.0123(15)	$1.61(20)\times10^{-4}$
^{232}Th 1152.1(4)	0.0052(15)	$6.8(20)\times10^{-5}$
^{232}Th 1154.5(4)	0.0056(15)	$7.3(20)\times10^{-5}$
^{232}Th 1164.6(4)	0.0047(13)	$6.1(17)\times10^{-5}$
^{232}Th 1184.9(6)	0.0036(13)	$4.7(17)\times10^{-5}$
^{232}Th 2485.2(3)	0.0090(17)	$1.18(22)\times10^{-4}$
^{232}Th 2503.5(3)	0.0107(18)	$1.40(24)\times10^{-4}$
^{232}Th 2524.7(4)	0.0087(16)	$1.14(21)\times10^{-4}$
^{232}Th 2543.3(5)	0.013(3)	$1.7(4)\times10^{-4}$
^{232}Th 2546.8(8)	0.0076(23)	$1.0(3)\times10^{-4}$
^{232}Th 2551.9(4)	0.010(4)	$1.3(5)\times10^{-4}$
^{232}Th 2557.8(5)	0.0069(17)	$9.0(22)\times10^{-5}$
^{232}Th 2590.0(10)	0.0069(20)	$9(3)\times10^{-5}$
^{232}Th 2596.76(23)	0.0118(18)	$1.54(24)\times10^{-4}$
^{232}Th 2630.1(3)	0.0071(19)	$9.3(25)\times10^{-5}$
^{232}Th 2640.8(4)	0.0110(18)	$1.44(24)\times10^{-4}$
^{232}Th 2653.2(3)	0.010(4)	$1.3(5)\times10^{-4}$
^{232}Th 2659.39(21)	0.013(4)	$1.7(5)\times10^{-4}$
^{232}Th 2671.7(6)	0.0085(18)	$1.11(24)\times10^{-4}$
^{232}Th 2689.4(8)	0.008(3)	$1.0(4)\times10^{-4}$
^{232}Th 2703.55(24)	0.014(5)	$1.8(7)\times10^{-4}$
^{232}Th 2712.56(22)	0.013(4)	$1.7(5)\times10^{-4}$
^{232}Th 2719.67(18)	0.016(3)	$2.1(4)\times10^{-4}$
^{232}Th 2732.7(5)	0.008(3)	$1.0(4)\times10^{-4}$
^{232}Th 2739.8(3)	0.0072(14)	$9.4(18)\times10^{-5}$
^{232}Th 2744.7(3)	0.0081(15)	$1.06(20)\times10^{-4}$
^{232}Th 2758.3(4)	0.0063(14)	$8.2(18)\times10^{-5}$
^{232}Th 2771.3(4)	0.0030(12)	$3.9(16)\times10^{-5}$
^{232}Th 2784.5(3)	0.0075(15)	$9.8(20)\times10^{-5}$
^{232}Th 2807.08(18)	0.0110(17)	$1.44(22)\times10^{-4}$
^{232}Th 2821.9(3)	0.0110(20)	$1.4(3)\times10^{-4}$
^{232}Th 2824.9(3)	0.0144(22)	$1.9(3)\times10^{-4}$
^{232}Th 2838.0(3)	0.0059(15)	$7.7(20)\times10^{-5}$
^{232}Th 2851.0(3)	0.0077(15)	$1.01(20)\times10^{-4}$
^{232}Th 2880.86(17)	0.0093(14)	$1.21(18)\times10^{-4}$
^{232}Th 2924.3(3)	0.0082(11)	$1.07(14)\times10^{-4}$
^{232}Th 2945.0(4)	0.0033(9)	$4.3(12)\times10^{-5}$
^{232}Th 2970.49(21)	0.0064(10)	$8.4(13)\times10^{-5}$
^{232}Th 2980.69(18)	0.0084(11)	$1.10(14)\times10^{-4}$
^{232}Th 2989.93(25)	0.0066(10)	$8.6(13)\times10^{-5}$
^{232}Th 3009.9(3)	0.0051(10)	$6.7(13)\times10^{-5}$
^{232}Th 3044.7(4)	0.0031(12)	$4.0(16)\times10^{-5}$
^{232}Th 3056.43(23)	0.0084(12)	$1.10(16)\times10^{-4}$
^{232}Th 3070.6(4)	0.0039(12)	$5.1(16)\times10^{-5}$
^{232}Th 3087.34(17)	0.0086(24)	$1.1(3)\times10^{-4}$
^{232}Th 3118.4(9)	0.0040(10)	$5.2(13)\times10^{-5}$
^{232}Th 3127.73(25)	0.0058(11)	$7.6(14)\times10^{-5}$
^{232}Th 3132.80(17)	0.0087(10)	$1.14(13)\times10^{-4}$
^{232}Th 3148.23(10)	0.0208(14)	0.000272(18)
^{232}Th 3173.87(19)	0.0089(10)	$1.16(13)\times10^{-4}$
^{232}Th 3184.94(17)	0.0079(10)	$1.03(13)\times10^{-4}$
^{232}Th 3196.66(12)	0.0171(13)	$2.23(17)\times10^{-4}$

Eγ-keV	σ(Eγ)-barns	k_0
Thorium (Z=90), continued		
^{232}Th 3230.47(23)	0.0123(12)	$1.61(16)\times10^{-4}$
^{232}Th 3245.2(5)	0.0030(8)	$3.9(10)\times10^{-5}$
^{232}Th 3260.9(3)	0.0056(9)	$7.3(12)\times10^{-5}$
^{232}Th 3276.3(4)	0.0063(10)	$8.2(13)\times10^{-5}$
^{232}Th 3287.94(14)	0.0165(14)	$2.15(18)\times10^{-4}$
^{232}Th 3294.9(3)	0.0051(9)	$6.7(12)\times10^{-5}$
^{232}Th 3326.21(17)	0.0102(10)	$1.33(13)\times10^{-4}$
^{232}Th 3341.90(13)	0.0168(13)	$2.19(17)\times10^{-4}$
^{232}Th 3363.3(3)	0.0051(8)	$6.7(10)\times10^{-5}$
^{232}Th 3377.84(13)	0.0135(12)	$1.76(16)\times10^{-4}$
^{232}Th 3391.3(3)	0.0044(8)	$5.7(10)\times10^{-5}$
^{232}Th 3398.09(13)	0.0191(14)	$2.49(18)\times10^{-4}$
^{232}Th 3436.17(12)	0.0211(15)	0.000276(20)
^{232}Th 3448.42(10)	0.0233(16)	0.000304(21)
^{232}Th 3461.45(24)	0.0069(10)	$9.0(13)\times10^{-5}$
^{232}Th **3473.00(8)**	**0.057(3)**	**0.00074(4)**
^{232}Th 3502.4(3)	0.0049(9)	$6.4(12)\times10^{-5}$
^{232}Th 3509.43(14)	0.0170(14)	$2.22(18)\times10^{-4}$
^{232}Th 3524.9(5)	0.0120(12)	$1.57(16)\times10^{-4}$
^{232}Th **3530.96(13)**	**0.0397(24)**	**0.00052(3)**
^{232}Th 3548.5(3)	0.0038(8)	$5.0(10)\times10^{-5}$
^{232}Th 3602.66(19)	0.0119(10)	$1.55(13)\times10^{-4}$
^{232}Th 3614.88(23)	0.0057(7)	$7.4(9)\times10^{-5}$
^{232}Th 3635.17(20)	0.0073(8)	$9.5(10)\times10^{-5}$
^{232}Th 3653.0(4)	0.0034(6)	$4.4(8)\times10^{-5}$
^{232}Th 3712.29(24)	0.0049(6)	$6.4(8)\times10^{-5}$
^{232}Th 3724.86(16)	0.0086(8)	$1.12(10)\times10^{-4}$
^{232}Th 3735.59(12)	0.0115(9)	$1.50(12)\times10^{-4}$
^{232}Th 3746.40(16)	0.0072(7)	$9.4(9)\times10^{-5}$
^{232}Th 3755.05(13)	0.0098(9)	$1.28(12)\times10^{-4}$
^{232}Th 3802.96(17)	0.0071(7)	$9.3(9)\times10^{-5}$
^{232}Th 3861.50(22)	0.0057(7)	$7.4(9)\times10^{-5}$
^{232}Th 3946.42(10)	0.0268(15)	0.000350(20)
^{232}Th 3971.83(22)	0.0041(5)	$5.4(7)\times10^{-5}$
^{232}Th 4016.6(3)	0.0037(6)	$4.8(8)\times10^{-5}$
^{232}Th 4045.00(13)	0.0118(9)	$1.54(12)\times10^{-4}$
^{232}Th 4073.33(19)	0.0060(7)	$7.8(9)\times10^{-5}$
^{232}Th 4201.85(16)	0.0110(9)	$1.44(12)\times10^{-4}$
^{232}Th 4215.0(4)	0.0033(5)	$4.3(7)\times10^{-5}$
^{232}Th 4246.78(15)	0.0093(7)	$1.21(9)\times10^{-4}$
^{232}Th 4450.54(21)	0.0043(5)	$5.6(7)\times10^{-5}$
^{232}Th 4769.66(25)	0.0047(7)	$6.1(9)\times10^{-5}$
^{232}Th 4787.0(6)	0.0037(7)	$4.8(9)\times10^{-5}$
Uranium (Z=92), *At.Wt.=238.02891(3)*, σ_γ*=3.374(20)*		
^{139}Ba ***29.9660(10)d***	***0.0381(11)***	***0.000485[<0.1%]***
^{235}U ***31.60(5)***	***0.10(3) $s^{-1}g^{-1}$***	
^{235}U ***34.70(10)***	***0.2100(15) $s^{-1}g^{-1}$***	
^{235}U ***41.4(3)***	***0.17(12) $s^{-1}g^{-1}$***	
^{235}U ***41.96(15)***	***0.35(6) $s^{-1}g^{-1}$***	
^{238}U ***43.5330(10)d***	***0.110(3)***	***0.00140[53%]***
^{235}U ***51.22(10)***	***0.20(4) $s^{-1}g^{-1}$***	
^{235}U ***54.25(5)***	***0.1700(12) $s^{-1}g^{-1}$***	
^{235}U ***72.70(20)***	***0.630(5) $s^{-1}g^{-1}$***	
^{238}U ***74.6640(10)d***	***1.300(3)***	***0.01655[53%]***
^{235}U ***75.02(5)***	***0.35(6) $s^{-1}g^{-1}$***	
^{235}U ***76.198(4)***	***0.046(6) $s^{-1}g^{-1}$***	
^{235}U ***96.090(20)***	***0.52(7) $s^{-1}g^{-1}$***	
^{238}Np ***106.1230(20)d***	***0.723(11)***	***0.00920[<0.1%]***
^{235}U ***109.160(20)***	***8.9(3) $s^{-1}g^{-1}$***	
^{235}U ***115.45(5)***	***0.17(6) $s^{-1}g^{-1}$***	
^{235}U ***120.35(5)***	***0.1500(11) $s^{-1}g^{-1}$***	
^{238}U 127.301(5)	0.0099(20)	$1.26(25)\times10^{-4}$
^{238}U **133.7990(10)**	**0.38(8)**	**0.0048(10)**
^{235}U ***136.55(5)***	***0.0690(5) $s^{-1}g^{-1}$***	
^{235}U ***140.76(4)***	***1.27(12) $s^{-1}g^{-1}$***	
^{235}U ***143.760(20)***	***63.0(7) $s^{-1}g^{-1}$***	
^{235}U ***150.930(20)***	***0.46(6) $s^{-1}g^{-1}$***	
^{235}U ***163.330(20)***	***29.2(3) $s^{-1}g^{-1}$***	
^{238}U 169.089(10)	0.012(4)	$1.5(5)\times10^{-4}$
^{235}U ***182.61(5)***	***1.96(12) $s^{-1}g^{-1}$***	
^{235}U ***185.715(5)***	***329(4) $s^{-1}g^{-1}$***	
^{238}U 193.956(15)	0.0039(20)	$5.0(25)\times10^{-5}$
^{235}U ***194.940(10)***	***3.62(7) $s^{-1}g^{-1}$***	
^{235}U ***198.900(20)***	***0.24(4) $s^{-1}g^{-1}$***	

Table I. Adopted Prompt and Decay Gamma Rays from Thermal Neutron Capture for all Elements, continued

	Eγ-keV	σ(Eγ)-barns	k_0
Uranium (Z=92), continued			
^{235}U	***202.110(20)***	***6.21(13) s^{-1}g^{-1}***	
^{235}U	***205.311(10)***	***28.8(4) s^{-1}g^{-1}***	
^{238}Np	***209.7530(20)d***	***0.0909(13)***	***0.001157[<0.1%]***
^{235}U	***215.28(3)***	***0.167(17) s^{-1}g^{-1}***	
^{235}U	***221.380(20)***	***0.69(6) s^{-1}g^{-1}***	
^{238}Np	***228.1830(10)d***	***0.286(5)***	***0.00364[<0.1%]***
^{235}U	***228.78(5)***	***0.0400(3) s^{-1}g^{-1}***	
^{235}U	***233.50(3)***	***0.17(3) s^{-1}g^{-1}***	
^{235}U	***240.87(3)***	***0.43(4) s^{-1}g^{-1}***	
^{235}U	243.60(20)	0.023(3)	0.00029(4)
^{235}U	***246.84(4)***	***0.305(17) s^{-1}g^{-1}***	
^{238}U	250.062(7)	0.034(12)	0.00043(15)
^{235}U	***275.129***	***0.30(3) s^{-1}g^{-1}***	
^{235}U	***275.43(10)***	***0.040(12) s^{-1}g^{-1}***	
^{238}Np	***277.5990(10)d***	***0.382(6)***	***0.00486[<0.1%]***
^{235}U	***289.56(4)***	***0.0400(3) s^{-1}g^{-1}***	
^{235}U	***291.65(3)***	***0.23(3) s^{-1}g^{-1}***	
^{238}U	292.5870(20)	0.016(6)	2.0(8)×10^{-4}
^{235}U	**297.00(10)[f]**	**0.220(20)**	**0.00280(25)**
^{235}U	300.00(10)	0.016(3)	2.0(4)×10^{-4}
^{238}Np	***315.880(3)d***	***0.0425(8)***	***0.000541[<0.1%]***
^{238}Np	***334.3100(20)d***	***0.0550(8)***	***0.000700[<0.1%]***
^{235}U	***345.90(3)***	***0.23(3) s^{-1}g^{-1}***	
^{235}U	***387.82(3)***	***0.23(3) s^{-1}g^{-1}***	
^{238}U	451.213(23)	0.010(4)	1.3(5)×10^{-4}
^{238}U	478.79(8)	0.012(4)	1.5(5)×10^{-4}
^{238}U	496.753(11)	0.034(8)	0.00043(10)
^{238}U	**521.849(7)**	**0.073(3)**	**0.00093(4)**
^{238}U	535.45(5)	0.028(6)	0.00036(8)
^{238}U	537.26(3)	0.0079(20)	1.01(25)×10^{-4}
^{139}Ba	***537.261(9)d***	***0.066(3)***	***0.00084[<0.1%]***
^{238}U	**539.278(12)**	**0.099(20)**	**0.00126(25)**
^{238}U	542.085(12)	0.024(6)	0.00031(8)
^{238}U	**552.069(5)**	**0.207(5)**	**0.00264(6)**
^{238}U	**554.054(8)**	**0.085(20)**	**0.00108(25)**
^{238}U	554.10(8)	0.028(6)	0.00036(8)
^{238}U	562.027(22)	0.032(10)	0.00041(13)
^{238}U	563.17(3)	0.014(4)	1.8(5)×10^{-4}
^{238}U	**580.340(13)**	**0.043(10)**	**0.00055(13)**
^{238}U	582.034(9)	0.016(4)	2.0(5)×10^{-4}
^{238}U	588.88(3)	0.024(6)	0.00031(8)
^{238}U	590.39(3)	0.034(12)	0.00043(15)
^{238}U	**592.309(13)**	**0.045(12)**	**0.00057(15)**
^{238}U	**593.612(5)**	**0.108(24)**	**0.0014(3)**
^{238}U	600.284(10)	0.030(8)	0.00038(10)
^{238}U	**605.581(9)**	**0.053(12)**	**0.00067(15)**
^{238}U	611.38(3)	0.014(4)	1.8(5)×10^{-4}
^{238}U	**612.253(5)**	**0.23(5)**	**0.0029(6)**
^{238}U	**629.722(9)**	**0.073(20)**	**0.00093(25)**
^{238}U	**638.505(12)**	**0.041(12)**	**0.00052(15)**
^{238}U	669.385(13)	0.0039(20)	5.0(25)×10^{-5}
^{238}U	673.307(12)	0.010(4)	1.3(5)×10^{-4}
^{238}U	681.355(9)	0.012(4)	1.5(5)×10^{-4}
^{238}U	687.853(8)	0.028(8)	0.00036(10)
^{238}U	**689.907(11)**	**0.043(10)**	**0.00055(13)**
^{238}U	715.832(9)	0.022(6)	0.00028(8)
^{238}U	767.86(21)	0.020(6)	0.00025(8)
^{238}U	787.15(7)	0.020(6)	0.00025(8)
^{238}U	794.21(8)	0.020(6)	0.00025(8)
^{238}U	799.12(7)	0.0079(20)	1.01(25)×10^{-4}
^{238}U	819.868(21)	0.010(4)	1.3(5)×10^{-4}
^{238}U	828.04(21)	0.024(6)	0.00031(8)
^{238}U	**831.837(19)**	**0.053(12)**	**0.00067(15)**
^{238}U	842.42(8)	0.024(6)	0.00031(8)
^{238}U	**853.23(4)**	**0.055(12)**	**0.00070(15)**
^{238}U	893.30(10)	0.016(4)	2.0(5)×10^{-4}
^{235}U	909.06(6)	0.026(4)	0.00033(5)
^{235}U	**943.14(7)**	**0.082(10)**	**0.00104(13)**
^{238}U	961.06(4)	0.0039(20)	5.0(25)×10^{-5}
^{238}U	990.49(3)	0.010(4)	1.3(5)×10^{-4}
^{238}U	1007.03(6)	0.0079(20)	1.01(25)×10^{-4}
^{238}U	1007.03(6)	0.0079(20)	1.01(25)×10^{-4}
^{235}U	1014.1(10)	0.026(4)	0.00033(5)
^{238}U	1021.25(4)	0.0079(20)	1.01(25)×10^{-4}
^{238}U	1021.25(4)	0.0079(20)	1.01(25)×10^{-4}

	Eγ-keV	σ(Eγ)-barns	k_0
Uranium (Z=92), continued			
^{238}U	1029.32(5)	0.037(8)	0.00047(10)
^{238}U	1048.85(8)	0.012(4)	1.5(5)×10^{-4}
^{238}U	1060.82(8)	0.016(4)	2.0(5)×10^{-4}
^{238}U	1062.48(6)	0.0079(20)	1.01(25)×10^{-4}
^{238}U	1066.82(12)	0.030(6)	0.00038(8)
^{238}U	1089.50(5)	0.014(4)	1.8(5)×10^{-4}
^{238}U	1110.27(6)	0.010(4)	1.3(5)×10^{-4}
^{238}U	1149.8(3)	0.010(4)	1.3(5)×10^{-4}
^{238}U	1152.80(6)	0.010(4)	1.3(5)×10^{-4}
^{238}U	1155.05(4)	0.010(4)	1.3(5)×10^{-4}
^{238}U	1167.01(4)	0.020(6)	0.00025(8)
^{235}U	**1279.01(10)[f]**	**0.200(10)**	**0.00255(13)**
^{238}U	2998.5(5)	0.012(4)	1.5(5)×10^{-4}
^{238}U	3089.4(5)	0.0071(24)	9(3)×10^{-5}
^{238}U	3114.2(5)	0.007(3)	9(4)×10^{-5}
^{238}U	3121.7(5)	0.008(3)	1.0(4)×10^{-4}
^{238}U	3175.2(5)	0.0067(22)	9(3)×10^{-5}
^{238}U	3191.7(5)	0.0047(16)	6.0(20)×10^{-5}
^{238}U	3197.2(5)	0.016(6)	2.0(8)×10^{-4}
^{238}U	3220.1(5)	0.012(4)	1.5(5)×10^{-4}
^{238}U	3233.2(5)	0.010(3)	1.3(4)×10^{-4}
^{238}U	3286.12(20)	0.0040(3)	5.1(4)×10^{-5}
^{238}U	3296.5(3)	0.0070(5)	8.9(6)×10^{-5}
^{238}U	3312.8(5)	0.0040(10)	5.1(13)×10^{-5}
^{238}U	3445.44(6)	0.0045(3)	5.7(4)×10^{-5}
^{238}U	3564.45(9)	0.0042(4)	5.3(5)×10^{-5}
^{238}U	**3583.10(7)**	**0.042(3)**	**0.00053(4)**
^{238}U	3611.78(9)	0.0146(10)	1.86(13)×10^{-4}
^{238}U	3639.39(6)	0.0122(8)	1.55(10)×10^{-4}
^{238}U	3651.36(6)	0.0069(5)	8.8(6)×10^{-5}
^{238}U	3739.59(13)	0.0038(3)	4.8(4)×10^{-5}
^{238}U	3844.56(21)	0.0068(5)	8.7(6)×10^{-5}
^{238}U	3982.69(5)	0.0259(14)	0.000330(18)
^{238}U	3991.25(5)	0.0241(12)	0.000307(15)
^{238}U	**4060.35(5)**	**0.186(3)**	**0.00237(4)**
^{238}U	4067.02(5)	0.0073(4)	9.3(5)×10^{-5}

[f] spontaneous fission to ^{134}Te