

Date: Jan - March 2015

Available Experimental (recommended) and Evaluated Maxwellian Averaged Cross Sections (MACS)
at kT = 30 keV sorted by Z

N N	Reaction Name		E(50%) MeV	Exp mb	Uncertainty		IRDF b	Uncertainty		C/E	Uncertainty		
	Z	full			short	%		mb	%		mb	%	abs
1	11	Na-23(n, γ)Na-24	na23g	0.0349	2.1	9.52	0.2	1.88E-03	9.99	1.88E-04	0.897	13.8	0.124
2	21	Sc-45(n, γ)Sc-46	sc45g	0.0326	69.0	7.25	5.0	0.068905	6.89	4.75E-03	0.999	10.0	0.100
3	25	Mn-55(n, γ)Mn-56	mn55g	0.0258	39.6	7.58	3.0	0.033277	6.10	2.03E-03	0.840	9.7	0.082
4	26	Fe-58(n, γ)Fe-59	fe58g	0.0374	13.5	5.19	0.7	1.52E-02	16.17	2.46E-03	1.125	17.0	0.191
5	27	Co-59(n, γ)Co-60	co59g	0.0271	39.6	6.82	2.7	3.48E-02	2.54	8.84E-04	0.880	7.3	0.064
6	29	Cu-63(n, γ)Cu-64	cu63g	0.0258	55.6	3.96	2.2	7.22E-02	9.59	6.93E-03	1.299	10.4	0.135
7	41	Nb-93(n, γ)Nb-94	n93g	0.0309	266.0	0.19	0.5	2.68E-01	9.40	2.52E-02	1.008	9.4	0.095
8	47	Ag-109(n, γ)Ag-110m	ag109g	0.0423	NOT measured yet			5.80E-02	6.75	3.91E-03			
9	49	In-115(n, γ)In-116m	in115g	0.0351	706.0	9.92	70.0	6.12E-01	7.46	4.57E-02	0.867	12.4	0.108
10	57	La-139(n, γ)	la139g	0.0295	32.4	9.57	3.1	4.18E-02	10.72	4.48E-03	1.290	14.4	0.185
11	73	Ta-181(n, γ)Ta-182	ta181g	0.0317	766.0	1.96	15.0	7.53E-01	3.85	2.90E-02	0.983	4.3	0.043
12	74	W-186(n, γ)	w186g	0.0375	235.0	3.83	9.0	1.93E-01	1.92	3.70E-03	0.819	4.3	0.035
13	79	Au-197(n, γ)Au-198	au197g	0.0328	582.0	1.55	9.0	6.19E-01	1.53	9.44E-03	1.063	2.2	0.023
14	90	Th-232(n, γ)Th-233	th232g	0.0348	NOT measured yet			4.88E-01	1.56	7.63E-03			
15	92	U-235(n, γ)U-236	u235g	0.0386	NOT measured yet			6.94E-01	32.26	2.24E-01			
16	92	U-238(n, γ)U-239	u238g	0.0340	NOT measured yet			3.96E-01	1.34	5.30E-03			
Covers (only for infomation: calculated SPA values from IRDF)													
1	48	Cd-000(n, γ)		0.03542				3.39E-01	0.00	0.00E+00			
2	64	Gd-000(n, γ)		0.03336				8.67E-01	0.00	0.00E+00			

References

Experiment: KADoNIS I. Dillmann et al. KADoNIS v0.3

<http://www.kadonis.org/>

Calculation: RR_UNC A.Trkov

<https://www-nds.iaea.org/IRDF/data/IRDF-v1-02-9903.pdf>

New Au(n,g) (626 \pm 25) mb by P. Jimenez-Bonilla et al.

http://pos.sissa.it/archive/conferences/204/102/NIC%20XIII_102.pdf

