

1 Half-life, Q-value and Decay mode

$T_{1/2}$:	55.8	(3)	s
Q_α	:	6404.67	(10)	keV
α	:	100		%

2 α Emissions

	Energy keV	Probability $\times 100$
$\alpha_{0,1}$	5748.46 (11)	0.118 (15)
$\alpha_{0,0}$	6288.22 (10)	99.882 (15)

3 Electron Emissions

		Energy keV	Electrons per 100 disint.
e _{AL}	(Po)	5.434 - 10.934	0.00140 (11)
e _{AK}	(Po)		0.000074 (13)
	KLL	58.978 - 65.205	}
	KLX	71.902 - 79.289	}
	KXY	84.8 - 93.1	}

4 Photon Emissions

4.1 X-Ray Emissions

		Energy keV	Photons per 100 disint.	
XL	(Po)	9.658 — 16.213	0.00094 (8)	
XK α_2	(Po)	76.864	0.00059 (8)	} K α
XK α_1	(Po)	79.293	0.00099 (13)	}
XK β_3	(Po)	89.256	}	
XK β_1	(Po)	89.807	}	0.00034 (5) K β'_1
XK β'_5	(Po)	90.363	}	
XK β_2	(Po)	92.263	}	
XK β_4	(Po)	92.618	}	0.000106 (15) K β'_2
XK $O_{2,3}$	(Po)	92.983	}	

4.2 Gamma Transitions and Emissions

	Energy keV	$P_{\gamma+ce}$ $\times 100$	Multipolarity	α_T	P_{γ} $\times 100$
$\gamma_{1,0}(\text{Po})$	549.76 (4)	0.118 (15)	E2	0.0257 (4)	0.115 (15)

5 References

- H.SCHMIED, R.W.FINK, B.L.ROBINSON, *J. Inorg. Nucl. Chem.* 1 (1955) 342
(Half-life)
- L.MADANSKY, F.RASETTI, *Phys. Rev.* 102 (1956) 464
(Gamma-ray emission probabilities)
- H.RODENBUSCH, G.HERRMANN, *Z. Naturforsch.* 16a (1961) 577
(Half-life)
- R.J.WALEN, *Compt. Rend. Acad. Sci. (Paris)* 255 (1962) 1604
(Alpha emission energies, Alpha emission probabilities)
- J.E.GINDLER, D.W.ENGELKEMEIR, *Radiochim. Acta* 2 (1963) 58
(Half-life)
- J.B.HURSH, *J. Inorg. Nucl. Chem.* 28 (1966) 2771
(Half-life)
- J.DALMASSO, Thesis, Report FRNC-TH-441, Univ. Nice (1972)
(Gamma-ray emission probabilities)
- J.DALMASSO, H.MARIA, C.YTHIER, *Compt. Rend. Acad. Sci. (Paris) Ser. B* 277 (1973) 467
(Gamma-ray emission probabilities)
- F.P.LARKINS, *At. Data Nucl. Data Tables* 20 (1977) 311
(Auger electron energies)
- W.KURCEWICZ, N.KAFFRELL, N.TRAUTMANN, A.PLOCHOCKI, J.ZYLICZ, A.MATUL, K.STRYCZNIEWICZ, *Nucl. Phys.* A289 (1977) 1
(Gamma-ray emission probabilities)
- R.J.GEHRKE, V.J.NOVIK, J.D.BAKER, *Int. J. Appl. Radiat. Isotop.* 35 (1984) 581
(Gamma-ray emission probabilities)
- E.SCHÖNFELD, H.JANSEN, *Nucl. Instrum. Methods Phys. Res.* A369 (1996) 527
(K-x ray, L-x ray, Auger electrons)
- A.ARTNA-COHEN, *Nucl. Data Sheets* 80 (1997) 157
(Nuclear structure, energies)
- E.SCHÖNFELD, G.RODLOFF, Report PTB-6.11-98-1, Braunschweig (1998)
(Auger electrons)
- E.SCHÖNFELD, G.RODLOFF, Report PTB-6.11-1999-1, Braunschweig (1999)
(KX-ray)
- I.M.BAND, M.B.TRZHASKOVSKAYA, C.W.NESTOR JR., P.O.TIKKANEN, S.RAMAN, *At. Data Nucl. Data Tables* 81 (2002) 1
(Theoretical ICC)
- S.RAMAN, C.W.NESTOR JR., A.ICHIHARA, M.B.TRZHASKOVSKAYA, *Phys. Rev.* C66 (2002) 044312
(Theoretical ICC)
- G.AUDI, A.H.WAPSTRA, C.THIBAUT, *Nucl. Phys.* A729 (2003) 337
(Q)
- N.J.STONE, J.R.STONE, M.LINDROOS, P.RICHARDS, M.VESKOVIC, D.A.WILLIAMS, *Nucl. Phys.* A793 (2007) 1
(Half-life)
- S.-C.WU, *Nucl. Data Sheets* 108 (2007) 1057
(Nuclear structure, energies)
- T.KIBÉDI, T.W.BURROWS, M.B.TRZHASKOVSKAYA, P.M.DAVIDSON, C.W.NESTOR JR., *Nucl. Instrum. Methods Phys. Res.* A589 (2008) 202
(Theoretical ICC)