^{114}I β^+ decay (2.1 s+6.2 s) 1995ZiZZ

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	Jean Blachot	NDS 113, 515 (2012)	1-Jan-2012

Parent: ^{114}I: E=0.0; J^π=1$^+$; $T_{1/2}$=2.1 s *2*; Q(β^+)=9.1×10^3 *3*; %β^+ decay=100.0
Parent: ^{114}I: E=265.9; J^π=(7); $T_{1/2}$=6.2 s *5*; Q(β^+)=9.1×10^3 *3*; %β^+ decay=100.0
Activity: ^{92}Mo(^{32}S,xpyn) E=220 MeV ms UNISOR (1992ZiZW,1995ZiZZ).
Activity: ^{63}Cu(^{58}Ni,xpyn) E=290 MeV (1977Ki11).
Measured: γ, x-ray, semi, ce, mini orange spectrometer.
Some of the unplaced γ could belong to the 6.2 s decay.
The decay scheme is from 1992ZiZW, no beta feeding derived.

^{114}Te Levels

E(level)	J^π†	$T_{1/2}$†	E(level)	J^π†	E(level)
0	0$^+$	15.2 min *7*	1483.6 *4*	4$^+$	2296.2 *3*
708.75 *19*	2$^+$		1794.3 *3*	(2$^+$)	2482.3 *4*
1348.1 *3*	(0$^+$)		1860.0 *3*	(0$^+$)	3008.2 *3*
1391.2 *3*	2$^+$		1949.6 *4*	(3$^+$)	3550.3 *4*

† From Adopted Levels.

γ(^{114}Te)

E_i(level)	J_i^π	E_γ†	I_γ†‡	E_f	J_f^π	E_i(level)	J_i^π	E_γ†	I_γ†‡	E_f	J_f^π
708.75	2$^+$	708.8 *2*	100 *3*	0	0$^+$	1794.3	(2$^+$)	1793.4 *9*	0.4 *2*	0	0$^+$
1348.1	(0$^+$)	639.4 *2*	1.4 *3*	708.75	2$^+$	1860.0	(0$^+$)	1151.2 *2*	1.6 *3*	708.75	2$^+$
1391.2	2$^+$	682.5 *3*	17 *8*	708.75	2$^+$	1949.6	(3$^+$)	558.4 *2*	1.0 *2*	1391.2	2$^+$
		1391.0 *8*	0.2 *1*	0	0$^+$	2296.2		1587.4 *2*	1.7 *4*	708.75	2$^+$
1483.6	4$^+$	774.9 *3*	0.4 *2*	708.75	2$^+$	2482.3		1091.1 *2*	3.7 *5*	1391.2	2$^+$
1794.3	(2$^+$)	310.7 *4*	0.6 *2*	1483.6	4$^+$	3008.2		2299.4 *2*	3.0 *6*	708.75	2$^+$
		403.3 *4*	0.4 *2*	1391.2	2$^+$	3550.3		2159.1 *2*	1.5 *4*	1391.2	2$^+$
		1085.6 *4*	3.8 *5*	708.75	2$^+$						

† From 1995ZiZZ. Iγ have to be considered as tentative due to the difficulty to discriminate the two half-lives.
‡ For absolute intensity per 100 decays, multiply by 0.468.
^{x} γ ray not placed in level scheme.

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Decay Scheme

Intensities: Relative photon branching from each level