^{114}I β^+ decay (6.2 s) 1992ZiZW

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

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=91 *2*
Activity: ^{63}Cu(^{58}Ni,xpyn) E=290 MeV, UNISOR on-line separator.
Measured: γ, x-ray, semi.
Some of the unplaced γ could belong to the 2.1 s decay.
The level scheme is incomplete, no beta feedings can be given.

^{114}Te Levels

E(level)	J^π†	$T_{1/2}$†	E(level)	J^π†	E(level)
0	0^+	15.2 min *7*	1949.6 *4*	(3^+)	2695.0 *3*
708.74 *19*	2^+		2026.8 *3*	4^+	3143.5 *3*
1391.2 *3*	2^+		2217.5 *4*	6^+	3301.7 *5*
1483.8 *3*	4^+		2241.9 *4*		3346.2 *3*
1794.4 *4*	(2^+)		2275.9 *4*		

† From Adopted Levels.

γ(^{114}Te)

E_γ	I_γ†	E_i(level)	J_i^π	E_f	J_f^π	E_γ	I_γ†	E_i(level)	J_i^π	E_f	J_f^π
310.7 *4*	0.6 *1*	1794.4	(2^+)	1483.8	4^+	x1353.7 *6*	0.3 *2*				
403.3 *4*	0.4 *1*	1794.4	(2^+)	1391.2	2^+	1391.0 *8*	0.2 *1*	1391.2	2^+	0	0^+
543.0 *2*	4 *1*	2026.8	4^+	1483.8	4^+	x1446.1 *4*	0.8 *2*				
558.4 *2*	1.0 *2*	1949.6	(3^+)	1391.2	2^+	x1559.7 *5*	0.7 *2*				
635.6 *2*	8 *2*	2026.8	4^+	1391.2	2^+	x1568.2 *2*	1.7 *4*				
682.5 *3*	34 *10*	1391.2	2^+	708.74	2^+	x1606.6 *4*	1.4 *3*				
708.8 *2*	100 *3*	708.74	2^+	0	0^+	1659.6 *2*	2.0 *4*	3143.5		1483.8	4^+
733.7 *3*	0.8 *2*	2217.5	6^+	1483.8	4^+	x1680.5 *7*	0.4 *2*				
758.2 *3*	0.8 *2*	2241.9		1483.8	4^+	x1698.4 *5*	0.6 *2*				
774.9 *3*	16.0 *9*	1483.8	4^+	708.74	2^+	x1753.6 *3*	1.0 *3*				
792.1 *2*	1.1 *2*	2275.9		1483.8	4^+	x1767.5 *8*	0.4 *2*				
850.4 *7*	2.8 *4*	2241.9		1391.2	2^+	1793.4 *9*	0.4 *2*	1794.4	(2^+)	0	0^+
x860.4 *6*	0.3 *1*					1817.9 *4*	0.9 *3*	3301.7		1483.8	4^+
x939.0 *5*	0.4 *2*					1862.4 *2*	2.6 *5*	3346.2		1483.8	4^+
1085.6 *9*	3.8 *5*	1794.4	(2^+)	708.74	2^+	1986.3 *6*	0.5 *2*	2695.0		708.74	2^+
1194.3 *7*	0.4 *2*	3143.5		1949.6	(3^+)	2435.1 *4*	1.0 *4*	3143.5		708.74	2^+
1211.0 *9*	0.3 *1*	2695.0		1483.8	4^+	x2762.8 *5*	0.4 *2*				
x1219.6 *2*	1.5 *3*					x3321.1 *9*	0.2 *2*				
x1248.8 *12*	0.2 *1*					x3851.8 *4*	0.1 *1*				
1303.8 *2*	4.2 *5*	2695.0		1391.2	2^+	x3912.7 *1*	0.1 *1*				

† For absolute intensity per 100 decays, multiply by 0.91 *2*.
x γ ray not placed in level scheme.

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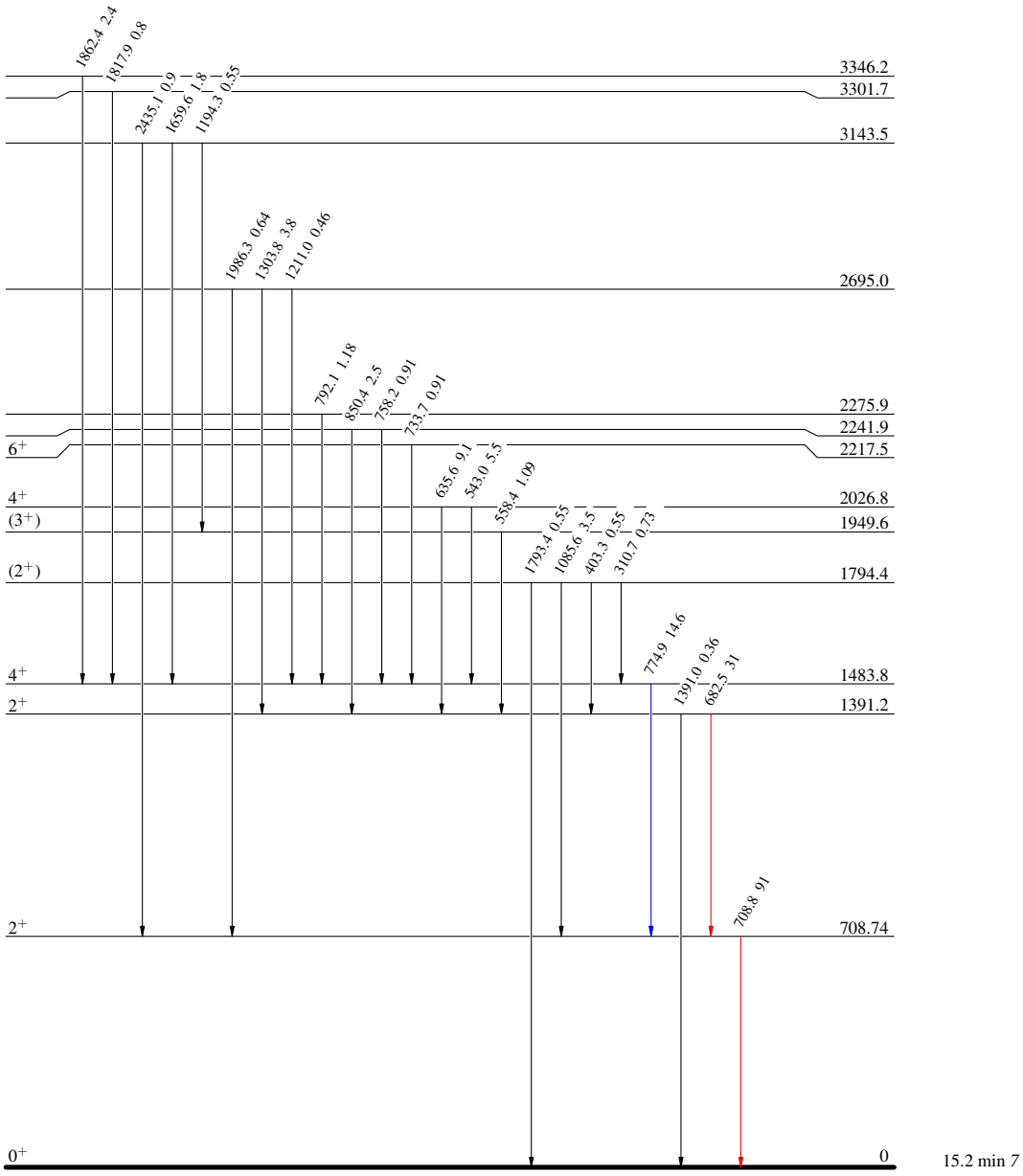
Decay Scheme

Intensities: $I_{(\gamma+ce)}$ per 100 parent decays

Legend

$I_\gamma < 2\% \times I_\gamma^{max}$
$I_\gamma < 10\% \times I_\gamma^{max}$
$I_\gamma > 10\% \times I_\gamma^{max}$

(7) 265.9 6.2 s 5
%ε + %β⁺=92
Qε=9.1×10³ 3
$^{114}_{53}I_{61}$



15.2 min 7

$^{114}_{52}Te_{62}$