^{130}Te(^{64}Ni,Xγ) 1998Zh09

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	Balraj Singh	NDS 93, 33 (2001)	11-May-2001

E=275 MeV. Measured Eγ, Iγ, γγ(θ), γγ(t) using GASP array of 40 Ge detectors.

^{130}Te Levels

E(level)	Jπ†	$T_{1/2}$	Comments
0.0	0^+		
839.5 *1*	2^+		
1588.5 *2*	2^+		
1633.0 *2*	4^+		
1815.7 *2*	6^+		
1885.4 *4*	2^+		
1964.8 *4*	0^+		
1981.6 *2*	4^+		
2101.3 *2*	5^-		
2138.8 *2*	3^+		
2146.8 *2*	7^-	115 ns	$T_{1/2}$: from Adopted Levels.
2331.2 *4*	4^+		
2405.1 *3*	6^-		
2432.3 *2*	7^-		
2435.8 *4*	4^-		
2648.9 *3*	8^+		
2649+x	(10^+)	4.2 μs *9*	$T_{1/2}$: from observation of delayed 6^+ to 4^+ to 2^+ cascade between beam bursts (1998Zh09). This value is in disagreement with 1.90 μs *8* from 2001Ge07. E(level): x<90 keV. Other: x<25 keV (2001Ge07).
2878.8 *4*			
3081.8 *4*			

† As given by 1998Zh09, see also Adopted Levels.

γ(^{130}Te)

E_γ	I_γ	E_i(level)	J_i^π	E_f	J_f^π	$I_{(\gamma+ce)}$	Comments
46		2146.8	7^-	2101.3	5^-	≈0.05	E_γ: existence required by γγ coin data. $I_{(\gamma+ce)}$: branching(46γ)≈4% (1998Zh09).
182.7 *1*	10.7 *11*	1815.7	6^+	1633.0	4^+		
258.4 *3*	1.1 *1*	2405.1	6^-	2146.8	7^-		
285.5 *3*	1.7 *2*	2432.3	7^-	2146.8	7^-		
303.7 *3*	1.0 *1*	2405.1	6^-	2101.3	5^-		
330.9 *3*	1.2 *1*	2146.8	7^-	1815.7	6^+		
331.0 *1*	4.8 *5*	2432.3	7^-	2101.3	5^-		
334.5 *3*	2.5 *3*	2435.8	4^-	2101.3	5^-		
348.6 *1*	4.6 *5*	1981.6	4^+	1633.0	4^+		
x458.3† *3*	0.3						
468.3 *1*	13.7 *14*	2101.3	5^-	1633.0	4^+		
502.0 *3*	0.9 *1*	2648.9	8^+	2146.8	7^-		
505.8 *3*	0.5 *1*	2138.8	3^+	1633.0	4^+		
550.8 *3*	1.4 *2*	2138.8	3^+	1588.5	2^+		
x601.6† *3*	0.3						
698.2 *3*	0.5 *1*	2331.2	4^+	1633.0	4^+		
732.1 *3*	0.8 *1*	2878.8		2146.8	7^-		
749.0 *1*	17.3 *17*	1588.5	2^+	839.5	2^+		

Continued on next page (footnotes at end of table)

^{130}Te(^{64}Ni,Xγ) 1998Zh09 (continued)

$\gamma(^{130}Te)$ (continued)

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
793.5 *1*	100 *10*	1633.0	4^+	839.5	2^+	1045.9 *3*	1.6 *2*	1885.4	2^+	839.5	2^+
833.4 *3*	1.2 *1*	2648.9	8^+	1815.7	6^+	1125.3 *3*	1.0 *1*	1964.8	0^+	839.5	2^+
839.5 *1*	531 *53*	839.5	2^+	0.0	0^+	1142.0 *3*	2.8 *3*	1981.6	4^+	839.5	2^+
935.0 *3*	0.8 *1*	3081.8		2146.8	7^-	1298.9 *3*	2.8 *3*	2138.8	3^+	839.5	2^+

† Above 7^- isomer.
^{x} γ ray not placed in level scheme.

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Level Scheme

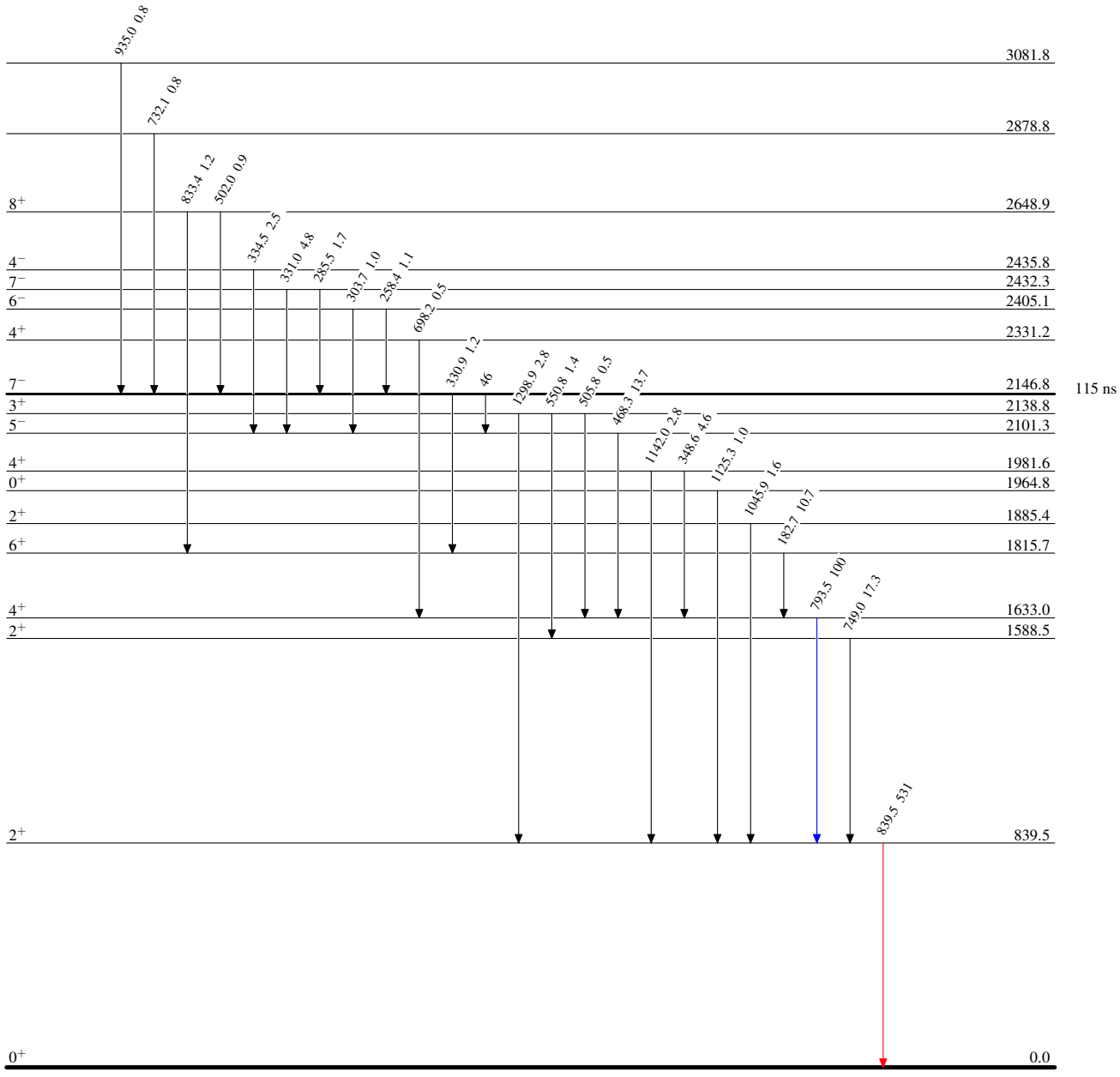
Intensities: Relative I_γ

Legend

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

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

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



$^{130}_{52}Te_{78}$