

Coulomb excitation 1973Re08

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	Janos Timar and Zoltan Elekes, Balraj Singh		NDS 121, 143 (2014)	31-May-2014

1973Re08: $^{129}\text{I}(\alpha, \alpha' \gamma)$ E=6.0-11.0 MeV. Measured E_γ , I_γ , $\gamma\gamma$, $\gamma(\theta)$.

 ^{129}I Levels

E(level)	J^π [†]	Comments
0.0	7/2 ⁺	
27.8 5	5/2 ⁺	
278.4 5	(3/2) ⁺	B(E2) \uparrow =0.035 4
487.8 5	(5/2) ⁺	B(E2) \uparrow =0.016 3
696.2 5	11/2 ⁺	B(E2) \uparrow =0.122 13
729.8 5	(9/2) ⁺	B(E2) \uparrow =0.078 8
769.4 5	(7/2) ⁺	B(E2) \uparrow =0.011 4
830 1	3/2 ⁺ , 5/2 ⁺	B(E2) \uparrow =0.004 2
845 1	7/2 ⁺ , 9/2 ⁺	B(E2) \uparrow =0.015 3
1050 1	(7/2) ⁺	B(E2) \uparrow =0.008 3

[†] From Adopted Levels.

 $\gamma(^{129}\text{I})$

$E_i(\text{level})$	J_i^π	E_γ	I_γ	E_f	J_f^π	Mult.	δ [†]	Comments
278.4	(3/2) ⁺	250.6 5	41 1	27.8	5/2 ⁺	(M1+E2)	+1.2 +38-8	$A_2=-0.15$ 7
		278.4 5	59 1	0.0	7/2 ⁺			$A_2=+0.01$ 8
487.8	(5/2) ⁺	459.7 5	82 1	27.8	5/2 ⁺	(M1+E2)	-0.30 4	$A_2=-0.031$ 30
		487.8 5	18 1	0.0	7/2 ⁺			
696.2	11/2 ⁺	696.2 5	100	0.0	7/2 ⁺			$A_2=+0.189$ 32
729.8	(9/2) ⁺	729.8 5	100	0.0	7/2 ⁺			$A_2=-0.058$ 35
769.4	(7/2) ⁺	741.1 5		27.8	5/2 ⁺			
830	3/2 ⁺ , 5/2 ⁺	802 1		27.8	5/2 ⁺			
845	7/2 ⁺ , 9/2 ⁺	817 1		27.8	5/2 ⁺			
1050	(7/2) ⁺	1022 1	52 12	27.8	5/2 ⁺			
		1050 1	48 12	0.0	7/2 ⁺			

[†] Deduced by 1977Kr13 from $\gamma(\theta)$ data of 1973Re08.

Coulomb excitation 1973Re08Level Scheme

Intensities: % photon branching from each level

