

$^{159}\text{Tb}(^6\text{Li},\alpha 3n\gamma)$ 2011Pr06

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	N. Nica	NDS 141, 1 (2017)	1-Feb-2017

$J^\pi(^{159}\text{Tb})=3/2^+$ (2012Re02).

2011Pr06: E=23-39 MeV. Measured E_γ , I_γ , on-line and off-line spectra. deduced ratios of cross sections for different reactions channels. coupled-channel calculations using computer code CCFULL.

2011Pr06 identify four γ transitions of ^{158}Dy g.s. band shown in fig. 1.

 ^{158}Dy Levels

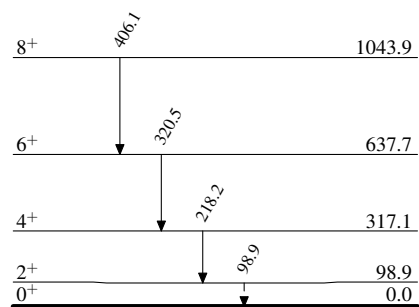
E(level)	J^π
0.0	0^+
98.9	2^+
317.1	4^+
637.7	6^+
1043.9	8^+

 $\gamma(^{158}\text{Dy})$

E_γ	$E_i(\text{level})$	J_i^π	E_f	J_f^π	Comments
(98.9)	98.9	2^+	0.0	0^+	E_γ : 2011Pr06 associate in fig. 1 only the 99.5 γ of ^{159}Dy with a peak that also fits the 98.9 γ of ^{158}Dy .
218.2	317.1	4^+	98.9	2^+	
320.5	637.7	6^+	317.1	4^+	
406.1	1043.9	8^+	637.7	6^+	

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Legend

Level Scheme-----► γ Decay (Uncertain) $^{158}_{66}\text{Dy}_{92}$