

$^{151}\text{Eu}(\gamma, \gamma')$ 2003No02

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	Balraj Singh	NDS 110, 1 (2009)	20-Nov-2008

E=4 MeV. Measured E_γ , $\gamma\gamma$, peak widths using three high-resolution Ge spectrometers.

 ^{151}Eu Levels

E(level)	J^π	$T_{1/2}^{\dagger\ddagger}$	$S^\#$	Comments
0	$5/2^+$			
889 <i>I</i>		0.78×10^{-3} eV <i>I</i> 3	3.8 6	B(M1) $\uparrow$ =0.096 <i>I</i> 6
1421 <i>I</i>		1.24×10^{-3} eV 22	2.4 4	B(M1) $\uparrow$ =0.037 7
1803 <i>I</i>		1.09×10^{-3} eV 22	1.29 26	B(M1) $\uparrow$ =0.016 3
2327 <i>I</i>		1.7×10^{-3} eV 3	1.17 20	B(M1) $\uparrow$ =0.011 2
2535 <i>I</i>		1.5×10^{-3} eV 3	0.91 18	B(M1) $\uparrow$ =0.008 2
2647 <i>I</i>		1.5×10^{-3} eV 3	0.79 17	B(M1) $\uparrow$ =0.007 2
2659 <i>I</i>		1.6×10^{-3} eV 3	0.89 17	B(M1) $\uparrow$ =0.008 <i>I</i>
2694 <i>I</i>		2.0×10^{-3} eV 3	1.07 17	B(M1) $\uparrow$ =0.009 <i>I</i>
2834 <i>I</i>		2.4×10^{-3} eV 3	1.17 16	B(M1) $\uparrow$ =0.009 <i>I</i>
3838 <i>I</i>		3.4×10^{-3} eV 9	0.89 23	B(M1) $\uparrow$ =0.005 <i>I</i>
3918 <i>I</i>		4.7×10^{-3} eV 12	1.18 29	B(M1) $\uparrow$ =0.007 2

† Label= $((2J_f+1)/6)\Gamma_0$.

‡ J_f =spin of the excited state.

$^\#$ Label=Scattering cross section (eV.b).

 $\gamma(^{151}\text{Eu})$

$E_\gamma^\dagger$	$E_i(\text{level})$	E_f	J_f^π	$E_\gamma^\dagger$	$E_i(\text{level})$	E_f	J_f^π	$E_\gamma^\dagger$	$E_i(\text{level})$	E_f	J_f^π
889 <i>I</i>	889	0	$5/2^+$	2535 <i>I</i>	2535	0	$5/2^+$	2834 <i>I</i>	2834	0	$5/2^+$
1421 <i>I</i>	1421	0	$5/2^+$	2647 <i>I</i>	2647	0	$5/2^+$	3838 <i>I</i>	3838	0	$5/2^+$
1803 <i>I</i>	1803	0	$5/2^+$	2659 <i>I</i>	2659	0	$5/2^+$	3918 <i>I</i>	3918	0	$5/2^+$
2327 <i>I</i>	2327	0	$5/2^+$	2694 <i>I</i>	2694	0	$5/2^+$				

† $\Delta(E_\gamma)$ = 1 keV assigned based on a general comment by 2003No02.

$^{151}\text{Eu}(\gamma, \gamma')$ 2003No02Level Scheme