$^{152}\text{Eu(p,p}')$ **1978La10**

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	M. J. Martin	NDS 114, 1497 (2013)	31-Aug-2013

$J^\pi(^{152}\text{Eu})=3^-$.

E=12 MeV, FWHM≈7 keV.

$\underline{^{152}\text{Eu Levels}}$

The authors DWBA analysis gives $\beta_2=0.28$ and $\beta_4=0.06$.

The authors suggest that the 286 level and the possible 406 level May be the 4^- and 5^- members of a $\pi3/2[411]\nu11/2[505]$ $K^\pi=4^-$ band proposed by 1978Vo05.

E(level)	$J^{\pi\dagger}$	$S^\ddagger$	Comments
$0.0^\#$	3^-	68.6 *44*	J^π: from Adopted Levels.
$89.7^\#$ *5*	4^-	1.44 *14*	
$200.9^\#$ *10*	5^-	0.51 *5*	
281 *3*			
286 *3*			
$333.0^\#$ *15*	6^-	0.04 *1*	
406? *4*			
472? *4*			
$490^\#$ *2*	7^-	0.010 *3*	

† Based on the assumption that (p,p') excites strongly the g.s. band.

‡ Label=$\sigma(90°)$ in mb/sr.

$^\#$ Band(A): $\pi5/2[413]\nu11/2[505]$ $K^\pi=3^-$.

^{152}Eu(p,p′)   1978La10

Band(A): π5/2[413]ν11/2[505] K$^{\pi}$=3^{-}

7^{-}   **490**

6^{-}   **333.0**

5^{-}   **200.9**

4^{-}   **89.7**

3^{-}   **0.0**

$^{152}_{63}$Eu$_{89}$