238 U(64 Ni,X γ) **2006Ma11**

History

Type Author Citation Literature Cutoff Date
Full Evaluation Caroline D. Nesaraja, Scott D. Geraedts and Balraj Singh NDS 111, 897 (2010) 12-Jan-2010

2006Ma11 (also 2005Ga56,2005Ga44): E=400 MeV. Projectile-like nuclei following multi-nucleon transfers were detected with PRISMA magnetic spectrometer. The gamma rays were measured using CLARA array of 25 EUROBALL Clover Ge detectors. Coincidences were measured between gamma rays and Cr fragments.

Additional information 1.

⁵⁸Cr Levels

A 4588 keV level proposed by 2006Ma11 has been omitted here as the 1371γ has been reassigned according to 2006Zh42.

E(level)	$J^{\pi \ddagger}$	Comments					
0#	0+						
880.1 [#] 6	2+						
	4+	J^{π} : not 0^{+} from observed anisotropy of 1056.9 γ .					
3216.7 [#] <i>12</i>	(6^{+})						
3308 [†] 1							
3712 [†] <i>1</i>							
3977 [†] 1							

[†] Level population proposed by the evaluators from 'Adopted Levels, gammas' based on work of 2006Zh42.

γ (58Cr)

E_{γ}	$E_i(level)$	\mathbf{J}_i^{π}	\mathbf{E}_f	J_f^{π} Mult.	Comments
404 [‡] 1	3712		3308		
760 [‡] 1	3977		3216.7 (6 ⁺)	
880.1 <i>6</i>	880.1	2+	0 0) ⁺ Q	R(anisotropy)=1.28 17.
1056.9 7	1937.0	4+	880.1 2	2+ Q	R(anisotropy)=1.18 17.
1279.7 8	3216.7	(6^{+})	1937.0 4	ļ+	
1371 <i>I</i>	3308		1937.0 4	ļ ⁺	E_{γ} : placement by the evaluators based on work by 2006Zh42. 2006Ma11 placed this γ from a 4588, (8 ⁺) level, but the yrast 8 ⁺ member is most likely at 4680 keV as in 2006Zh42.

[†] R(anisotropy) suggests $\Delta J=2$, stretched quadrupole.

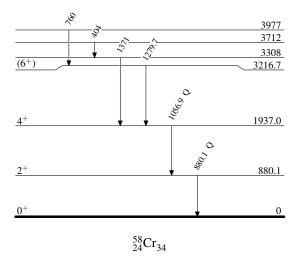
[‡] As proposed by 2006Ma11 based on yrast band assignment. These are consistent with those in 'Adopted Levels', except for the 4587.7 level which is not given in the 'Adopted Levels'.

[#] Band(A): g.s. band.

 $^{^{\}ddagger}$ Placement by evaluators from 'Adopted Levels, gammas', based on the work of 2006Zh42. This γ was unplaced in 2006Ma11.

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Level Scheme



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Band(A): g.s. band

