

$^{173}\text{Yb}(^{24}\text{Mg},\text{Fxn}\gamma)$ 2000Fo13

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	Coral M. Baglin	NDS 114, 1293 (2013)	1-Sep-2013

2000Fo13: $^{173}\text{Yb}(^{24}\text{Mg},\text{Ruxn}\gamma)$, $E(^{24}\text{Mg})=134.5$ MeV; GAMMASPHERE detector array; measured $E\gamma$, $I\gamma$, $\gamma\gamma$ coin, $\gamma(^{92}\text{Sr})$ - $\gamma(\text{Ru})$ coin following fission of the ^{197}Pb compound nucleus.

 ^{91}Sr Levels

$E(\text{level})^\dagger$	J^π^\ddagger	Comments
0.0	$5/2^+$	J^π : from Adopted Levels.
993.5	$(9/2^+)$	J^π : excitation energy is consistent with shell-model predictions (1978Ba70).
2077.5	$(13/2^+)$	J^π : not adopted; $J^\pi=(11/2^-)$ In Adopted Levels.
3116.3	$(15/2^-)$	
3304.4		
3576.0		
3946.3		
4278.1		
4625.8		
4830.6		$E(\text{level})$: erroneously given As 4871 In 2000Fo13.
5003.3		

† From least-squares fit to $E\gamma$, allowing equal weight for all data.

‡ Authors values, based on J^π systematics.

 $\gamma(^{91}\text{Sr})$

E_γ^\dagger	I_γ^\dagger	$E_i(\text{level})$	E_f	J_f^π	E_γ^\dagger	I_γ^\dagger	$E_i(\text{level})$	J_i^π	E_f	J_f^π
172.9	<35	5003.3	4830.6		993.5	1000	993.5	$(9/2^+)$	0.0	$5/2^+$
271.6	53 10	3576.0	3304.4		1038.8	354 30	3116.3	$(15/2^-)$	2077.5	$(13/2^+)$
331.8	64 10	4278.1	3946.3		1084.0	431 35	2077.5	$(13/2^+)$	993.5	$(9/2^+)$
370.1	73 10	3946.3	3576.0		1226.8	30 5	3304.4		2077.5	$(13/2^+)$
377.4	17 5	5003.3	4625.8		1509.4	17 5	4625.8		3116.3	$(15/2^-)$
459.6	130 15	3576.0	3116.3	$(15/2^-)$	1714.4	17 5	4830.6		3116.3	$(15/2^-)$
830.2	55 10	3946.3	3116.3	$(15/2^-)$						

† From 2000Fo13; authors do not state uncertainties.

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Level Scheme

Intensities: Relative I_γ

Legend

- \blacktriangleright $I_\gamma < 2\% \times I_\gamma^{\max}$
- $\color{blue}\blacktriangleright$ $I_\gamma < 10\% \times I_\gamma^{\max}$
- $\color{red}\blacktriangleright$ $I_\gamma > 10\% \times I_\gamma^{\max}$

