

${}^{48}\text{Ca}({}^{15}\text{N},2\text{np}\gamma),({}^{18}\text{O},2\text{n}\alpha\gamma)$ 1977Wa10

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	E. Browne, J. K. Tuli		NDS 114, 1849 (2013)	31-Dec-2012

E=25-55 MeV. Measured E(p), E γ , I γ , $\gamma\gamma$, DSA, recoil distance. $\gamma(\theta)$. Ge(Li). Enriched target (1977Wa10).

 ${}^{60}\text{Fe}$ Levels

E(level)	J $^{\pi}$ [†]	T _{1/2} [#]	Comments
0.0	0 ⁺		
823.64 15	2 ⁺	8.0 ps 15	
2114.53 24	4 ⁺	0.83 ps 21	
3516.1 3	(5) [‡]	49 ps 21	T _{1/2} : May belong to higher energy level.
3954.4 4	(6) [‡]	>0.4 ps	
4293.0 4	7 ⁽⁻⁾	>0.4 ps	
4359.1 6	5 ⁻		
5003.0 4	8 ⁽⁻⁾	0.8 ps +13-4	

[†] From Adopted Levels, except as noted.

[‡] Assigned by 1977Wa10 from $\gamma(\theta)$ and direct feeding intensities.

[#] From recoil-distance method below 3.6 MeV and DSA method above this energy.

 $\gamma({}^{60}\text{Fe})$

E γ	I γ	E _i (level)	J $^{\pi}$ _i	E _f	J $^{\pi}$ _f
338.61 12	10.1	4293.0	7 ⁽⁻⁾	3954.4	(6)
438.28 13	20.4	3954.4	(6)	3516.1	(5)
823.63 15	100	823.64	2 ⁺	0.0	0 ⁺
843.32 17	<23	4359.1	5 ⁻	3516.1	(5)
1048.57 12	10.4	5003.0	8 ⁽⁻⁾	3954.4	(6)
1290.88 18	89.2	2114.53	4 ⁺	823.64	2 ⁺
1401.56 19	33.7	3516.1	(5)	2114.53	4 ⁺

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Level Scheme

Intensities: Relative I_γ

Legend

- $I_\gamma < 2\% \times I_\gamma^{\text{max}}$
- $I_\gamma < 10\% \times I_\gamma^{\text{max}}$
- $I_\gamma > 10\% \times I_\gamma^{\text{max}}$

