

$^{46}\text{Ca}(n,\gamma)$ E=thermal 1970Cr04

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	T. W. Burrows	NDS 108, 923 (2007)	20-Feb-2007

Measured γ 's; Ge(Li) and annular NaI (0.1 MeV \leq E γ \leq 3 MeV), Ge(Li) with NaI, pair-spectrometer and singles mode (1 MeV \leq E γ \leq 8 MeV). Others: see [1995Bu05](#).

 ^{47}Ca Levels

E(level)	J $^{\pi}$ [†]
0.0	7/2 ⁻
2013.74 15	3/2 ⁻
2875.42 19	(1/2 ⁻ , 3/2 ⁻)
4058.05 20	(1/2 ⁻ , 3/2 ⁻)
4809.19 18	1/2 ⁻ , 3/2 ⁻
5503.5? 3	1/2, 3/2, 5/2 ⁺
(7276.36 [‡] 27)	1/2 ⁺ [‡]

[†] From the Adopted Levels, except for the capture state.

[‡] E(level) from [2003Au03](#) (held fixed in least-squares adjustment). Spin and parity from thermal capture on an even-even target.

 $\gamma(^{47}\text{Ca})$

E $_{\gamma}$	I $_{\gamma}$ [†]	E $_i$ (level)	J $_i^{\pi}$	E $_f$	J $_f^{\pi}$
861.65 15	12.1 12	2875.42	(1/2 ⁻ , 3/2 ⁻)	2013.74	3/2 ⁻
1772.67 [‡] 10	4.4 5	(7276.36)	1/2 ⁺	5503.5?	1/2, 3/2, 5/2 ⁺
2013.57 20	98 10	2013.74	3/2 ⁻	0.0	7/2 ⁻
2044.22 20	10.0 10	4058.05	(1/2 ⁻ , 3/2 ⁻)	2013.74	3/2 ⁻
2466.84 20	1.7 2	(7276.36)	1/2 ⁺	4809.19	1/2 ⁻ , 3/2 ⁻
2795.5 3	2.1 2	4809.19	1/2 ⁻ , 3/2 ⁻	2013.74	3/2 ⁻
3218.1 3	9.5 10	(7276.36)	1/2 ⁺	4058.05	(1/2 ⁻ , 3/2 ⁻)
3489.6 [‡] 5	0.8 1	5503.5?	1/2, 3/2, 5/2 ⁺	2013.74	3/2 ⁻
4400.6 4	10.4 11	(7276.36)	1/2 ⁺	2875.42	(1/2 ⁻ , 3/2 ⁻)
5262.1 6	74 8	(7276.36)	1/2 ⁺	2013.74	3/2 ⁻

[†] Photon intensity relative to 100 n captures in ^{40}Ca .

[‡] Placement of transition in the level scheme is uncertain.

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Legend

Level Scheme

Intensities: Photon intensity relative to 100 N captures in ^{40}Ca

- ▶ $I_\gamma < 2\% \times I_\gamma^{max}$
- ▶ $I_\gamma < 10\% \times I_\gamma^{max}$
- ▶ $I_\gamma > 10\% \times I_\gamma^{max}$
- - - -▶ γ Decay (Uncertain)

