

⁴⁸Ca(n,γ) E=thermal **1970Cr04,1969ArZT,2003ChZS**

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	T. W. Burrows ^a	NDS 109, 1879 (2008)	14-Jul-2008

1969ArZT: measured γ's; Ge(Li) with NaI, pair-spectrometer and singles.

1970Cr04: measured γ's; Ge(Li) with NaI, pair-spectrometer and singles.

2003ChZS: measured γ's; HPGe; natural target. Obtained Prompt Gamma-Ray Activation datasets for Ca using their data, ENSDF (1995Bu23), and 1981Lo16.

Others: 2002Re13. See also 1995Bu23.

⁴⁹Ca Levels

E(level) [†]	J ^π [‡]
0.0	3/2 ⁻
2023.2 3	1/2 ⁻
(5146.45 [#] 18)	1/2 ⁺ @

[†] Calculated by the evaluator using least-squares adjustment procedures.

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

[#] From 2003Au03. Held fixed in least-squares fit.

@ Thermal capture on an even-even target (evaluator).

γ(⁴⁹Ca)

E _γ	I _γ ^{†‡}	E _i (level)	J _i ^π	E _f	J _f ^π	Comments
2023.16 30	25	2023.2	1/2 ⁻	0.0	3/2 ⁻	E _γ : calculated by the evaluator from recoil-corrected values of 1969ArZT.
3123.37 29	25	(5146.45)	1/2 ⁺	2023.2	1/2 ⁻	E _γ : weighted av (int) of 3123.0 10 (calculated by evaluator from recoil-corrected values given by 1969ArZT) and 3123.4 3 (2003ChZS).
5146.15 24	75	(5146.45)	1/2 ⁺	0.0	3/2 ⁻	E _γ : weighted av (int) of 5146.6 4 (1970Cr04) and 5145.9 3 (2003ChZS).

[†] From 1969ArZT.

[‡] Intensity per 100 neutron captures.

$^{48}\text{Ca}(n,\gamma) \text{ E=thermal}$ 1970Cr04,1969ArZT,2003ChZS