

⁴⁸Ca(e,e'n) 2000St24

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	S. Ota and E. A. Mccutchan	NDS 203,1 (2025)	1-Apr-2025

2000St24: E=67.7 MeV ($\theta(e)=40.0^\circ$), 87.7 MeV ($\theta(e)=52.1^\circ$), 88.0 MeV ($\theta(e)=40.0^\circ$), and 103.4 MeV ($\theta(e)=52.1^\circ$). Measured $\sigma(\theta(e'))$ using large solid-angle magnetic spectrometer, $\sigma(n)$ (six NE213 liquid scintillators). $E_x \leq 25$ MeV; FWHM ≈ 70 keV. See also 1999St12, 2000Ri02, and 2001Vo09.

⁴⁷Ca Levels

Branching ratios are very similar for (e,e'n) and (p,p'n) with the exception of the decay to ⁴⁷Ca g.s. which is stronger in (p,p'n) (2000Ri09).

E(level) [†]	J π [†]	Comments
0	7/2 ⁻	
2014	3/2 ⁻	
2850	(1/2 ⁻ , 3/2 ⁻)	
2875	(1/2 ⁻ , 3/2 ⁻)	
12737	1/2 ⁺	T=9/2 Populated in the decay of the ⁴⁸ Ca 24.2 MeV IAR.

[†] From the Adopted Levels. Nominal energies are given.