

$^{48}\text{Ca}(^{12}\text{C}, ^{13}\text{C}), (^{16}\text{O}, ^{17}\text{O})$ [1983Pe08](#), [1982Hu10](#), [1978Ko01](#)

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

[1978Ko01](#): $E(^{16}\text{O})=56$ MeV. Measured $\sigma(\theta(\text{C.M.})=10^\circ-80^\circ)$; ΔE -E tof telescope. Timing res \approx 75-95 ps; FWHM \approx 200-300 keV. DWBA.

[1982Hu10](#): $E(^{16}\text{O})=158.2$ MeV. Measured $\sigma(\theta=3^\circ-18^\circ)$; ΔE -E telescopes. FWHM \approx 500 keV. DWBA.

[1983Pe08](#): $E(^{12}\text{C})=45$ MeV. Measured $\sigma(\theta=4^\circ-60^\circ)$; magnetic spectrometer, focal-plane ionization chamber. Effective Q value model analysis.

The same states were observed by the three groups, except As noted. Others: see [1995Bu05](#).

 ^{47}Ca Levels

E(level)	$\sigma(\text{exp})/\sigma(\text{theory})^\dagger$	Comments
0.		Data also obtained on states in ^{17}O and ^{13}C .
2.01×10^3	6.47	Not observed by 1982Hu10 .
2.60×10^3	0.84	$\sigma(\text{exp})/\sigma(\text{theory})$: other: 0.50 5 (1982Hu10). Doublet.

† From [1978Ko01](#). $\sigma(\text{theory})$ =predicted strength for single-hole states.