

$^{46}\text{Ca}(\text{t,p})$  1967Bj06

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	Jun Chen	NDS 179, 1 (2022)	30-Nov-2021

1967Bj06: E=12 MeV triton beam was produced from the Aldermaston Tandem generator. Target was  $100 \mu\text{g}/\text{cm}^2$  >99.5% enriched  $\text{CaCO}_3$  on a  $\approx 50 \mu\text{g}/\text{cm}^2$  carbon foil. Reaction products were momentum-analyzed with a multi-angle broad-range spectrograph (FWHM=15 keV) and detected in photographic emulsion plates. Measured  $\sigma(\theta_{\text{cm}}=0^\circ$  to  $180^\circ)$ . Deduced levels, J,  $\pi$ , L-transfers.

 $^{48}\text{Ca}$  Levels

E(level)	J $\pi^\dagger$	L $^\ddagger$	E(level)	J $\pi^\dagger$	L $^\ddagger$	E(level)	E(level)
0.0	0 <sup>+</sup>	0	6329 15	2 <sup>+</sup>	2	8237 20	8604 20
3827 10	2 <sup>+</sup>	2	6645 15			8268 20	8697 20
4281 10	0 <sup>+</sup>	0	6793 15	2 <sup>+</sup>	2	8473 20	8782 20
4496 10			7650 20			8513 20	
5459 10	0 <sup>+</sup>	0	8018 20			8538 20	

$^\dagger$  Based on the selection rules J=L and  $\pi=(-1)^L$  for (t,p) reactions on even-even targets.

$^\ddagger$  From an empirical analysis of systematic trends of angular distributions.