^{48}Ca(^{6}Li,^{6}Li′) 2010Kr06

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

2010Kr06: E=240 MeV ^{6}Li beam from the Texas A&M K500 superconducting cyclotron. Target was a 4.4 mg/cm^2 95% enriched self-supporting ^{48}Ca foil. Scattered particles were momentum-analyzed with a multipole-dipole-multipole magnetic spectrometer and detected with the focal-plane detector consisting of four 60cm resistive wire proportional counters, an ionization chamber and a scintillator. Measured $\sigma(\theta_{c.m.}=4^\circ$ to $40^\circ)$. Deduced transition strengths from DWBA analysis with Double-folding model.

^{48}Ca Levels

E(level)	J$^\pi$	Comments
0	0^+	
3832	2^+	B(E2)↑=0.0116 *12*, 0.0126 *13*, 0.0140 *14*, 0.0155 *16*; with different optical model parameter sets. Weighted average of those values gives 0.0131 *12*.
4507	3^-	B(E3)↑=0.0075 *8*, 0.0083 *8*, 0.0085 *9*, 0.0094 *9*, 0.0105 *11*; with different optical model parameter sets. Weighted average of those values gives 0.0087 *8*.