
 $^{40}\text{Ca}(\text{p},\text{p}\alpha),(\text{p},2\text{p}):\text{resonances}$ 2001Sc25

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	Jun Chen	NDS 140, 1 (2017)	30-Sep-2015

2001Sc25: E=100 MeV. Measured $\sigma(\theta)$, DWBA analysis.

1994Vo05: ($\text{p},\text{p}'\alpha$) E=99.1 MeV, deduced electric giant resonances.

1981Na03: ($\text{p},\text{p}\alpha$) E=101.3 MeV. Measured $\sigma(\theta)$. DWIA analysis.

1981Ca02: ($\text{p},\text{p}\alpha$) E=101.5 MeV. Measured $\sigma(\theta)$. DWIA analysis.

1976Ba38: ($\text{p},\text{p}\alpha$) E=157 MeV. Measured $\sigma(\theta)$.

1969Ja12: ($\text{p},2\text{p}$) E=385 MeV.

1964Ru05: ($\text{p},2\text{p}$) E=150 MeV.

 ^{40}Ca Levels

E(level)	Comments
11700	E(level): resonance in ($\text{p},\text{p}'\text{p}$) to ^{39}K g.s. from a broad peak at 10.9-12.5 MeV, FWHM=800 (2001Sc25).
12300	E(level): resonance in ($\text{p},\text{p}'\alpha$) to ^{36}Ar g.s. from a broad peak at 12.0-12.6 MeV, FWHM=300 (2001Sc25).