
 $^{46}\text{Ti}(\text{p},\gamma),(\text{p},\text{p}),(\text{p},\text{p}'),(\text{p},\text{p}'\gamma)$

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

[1961Du03](#): E=800-1400 keV. Measured excitation functions; NaI. Observed 30 resonances with an average level spacing of ≈ 13 keV and notes that the natural half-widths of all resonances observed was less than 0.5 keV.

[1969Ky01](#): E=2.5-2.9 MeV; overall energy resolution ≈ 1700 eV. Measured $\gamma(\theta)(889\gamma)$ and γ -ray excitation function for the first-excited, 2^+ , state; NaI. Observed 45 resonances; deduced J^π and resonance parameters.

[1971Ka23](#): E=1350-2280 keV. Measured excitation functions; NaI. Observed 126 resonances in the excitation energy range of 6.5 to 7.4 MeV with an average level spacing of ≈ 6 keV. Compared to resonances in $^{48}\text{Ti}(\text{p},\gamma)$. Identified eight prominent resonances as isobaric analogs of states in ^{47}Ti .

[1973Pr02](#): E=1.5-3.1 MeV; overall resolution ≈ 300 eV. Measured $\sigma(\theta)$ at four angles. Observed 144 resonances; deduced J^π , resonance parameters, and exit-channel L.

[1979Ch20](#): E=2.25-3.10 MeV; overall resolution=350 eV. Measured $\sigma(\theta)$, $\gamma(\theta)$; surface barrier, NaI. Studied $(\text{p},\text{p}'\gamma)$ to the first-excited, 2^+ , state for 47 L=1 and five L=3 resonances between 2.25 and 3.10 MeV. Deduced J^π and resonance parameters.

See [1977Ha45](#) for a compilation and comparison of the resonances observed by [1973Pr02](#), [1971Ka23](#), [1969Ky01](#), and [1961Du03](#).

See also $^{46}\text{Ti}(\text{p},\gamma)$ E=0.72-4 MeV and E=0.4-1.8 MeV.