^{98}Mo(p,n) 1976Fi04

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	Jun Chen, Balraj Singh	NDS 164, 1 (2020)	15-Feb-2020

Includes ^{98}Mo(p,n) GDR studies.

1976FI04: E=4.0-4.4 MeV proton beams were produced from the Ohio University Tandem Van de Graaff. Targets were enriched ^{98}Mo (98.27%) with thicknesses of 0.25 mg/cm^2. Neutrons were detected with two liquid scintillators. Measured neutron spectra by TOF method at 27.7° and 51.7° with FWHM=1.3 ns, flight-path=15.12 and 12.98 meters. Energy resolution (FWHM) appears to be ≈10 keV. 1976Fi04 report data primarily on ^{98}Mo(p,nγ).

Others:

1974Co27: E=4.0-5.0 MeV. Measured Q value=−2458 *10*.

Giant-dipole resonance studies:

1995Wa07: E=26 MeV. Analysis of $\sigma(\theta)$ data.

1995Ma47: E=25.6 MeV. Theoretical calculations of $\sigma(\theta)$.

1995Ka51: E=26 MeV. Analysis of σ data.

1987Ku13: E=25 MeV. Analysis of $\sigma(\theta)$ data.

1986Mo10: E=25.6 MeV. Measured $\sigma(\theta)$.

1985Ra11: E=120 MeV. Deduced strength.

1980St26: E=45 MeV.

1976Ma07, 1975Gr01, 1974Po11: E=16-26 MeV. Measured $\sigma(\theta)$.

1969Hi02: E=11-14 MeV.

Cross section measurements:

1985Fl01, 1979Fl07: E=1.7-7 MeV.

1982Tr03: E=6-9 MeV. Measured $\sigma(\theta)$, time-of-flight method.

1976HaZB: measured total cross section.

1957La06: E(p)(threshold)=3.25 MeV.

1955Bo97: E=22 MeV.

All data are from 1976Fi04.

^{98}Tc Levels

E(level)	E(level)	E(level)	E(level)
0[†]	191	332	485
69	208?	351	544
91	270	395	
104	311	424	
139	322	458	

[†] Very weak and uncertain peak.