

$^{100}\text{Mo}(\text{n},\text{n}')$ 1975Sm04

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	Balraj Singh and Jun Chen		NDS 172,1 (2021)	31-Jan-2021

1975Sm04: E=1.6-5.5 MeV at ANL. Measured $\sigma(\theta)$. FWHM $\approx$ 10 keV.

Others dealing mainly with the optical-model parameters deduced from $\sigma(\theta)$ data for g.s. and first 2^+ state using coupled-channel calculations:

2000Sm10: E=4.5-10 MeV. Measured $\sigma(\theta)$, deduced optical-model parameters.

1987Ko06: (n,n) E=0.00057-1.26 eV, measured scattering lengths.

1987Ko05: (n,n) E=143 keV, measured scattering lengths.

1983Bh01: (n,n) E=11 MeV, optical-model parameters.

1982SmZU: (n,n'), (n,n) E=1.5-4 MeV, $\sigma(\theta)$.

1981Ko15, 1980Ef01: (n,n'), (n,n) E=525-1000 keV and 300 keV, optical optical-model parameters.

1979Ra02: (n,n) E=7, 9, 11, 20, 26 MeV, optical-model parameters.

1977Fe01, 1976FeZI: (n,n) E=11 MeV.

1974Mc13: (n,n') E=1.5 MeV.

1974Mc02: (n,n') E=1.4-3.5 MeV.

1973La06: (n,n') E=0.1-1.5 MeV, 4 levels given.

Additional information 1.

All data are from 1975Sm04, unless otherwise noted.

 ^{100}Mo Levels

E(level)	J^π	Comments
0	0^+	
520 10	2^+	
690 10	0^+	J^π : also from $\sigma(\theta)$ (1974Mc02).
1060 15	2^+	
1140 15	4^+	
1460 20	2^+	
1770 [†] 20		
1910 30	3^-	
2100 [#] 30	$(2^+)^\#$	
2330 [#] 30	$(2^+)^\#$	
2.50×10^3 [†] 10		
2.80×10^3 [†] 10		

[†] Composite structure.

[‡] From comparison of measured and calculated cross sections using statistical-model calculations. See also Adopted Levels.

[#] No 2^+ level in the Adopted Levels near this energy.