

$^{98}\text{Mo}(\text{p,p}),(\text{p,p}') \text{ IAR } 1970\text{Ke03}$

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	E. Browne, J. K. Tuli		NDS 145, 25 (2017)	1-Jul-2017

E=6 MeV to 8 MeV. Enriched target. Si(Li) detector, FWHM=25 keV. $\theta=115^\circ$ to 165° . Observed transitions to ^{98}Mo g.s., 736 0+, and 787 2+.

Other IAR measurements: (p,p) [1966Mo06](#), ($^3\text{He,d}$) [1970Mc19](#).

 ^{99}Tc Levels

L,J for the outgoing proton quoted under comments was deduced from theoretical expressions.

If the S(p)+6081 resonance is the analog to ^{99}Mo g.s., the higher IAR's are ≈ 75 keV too high. The same shift appears in the data of [1966Mo06](#). No explanation could be given for this effect.

E(level) [†]	J ^π	T _{1/2} [‡]	Comments
(0.0)	9/2 ⁺		
S(p)+6081		66 keV 6	s1/2.
S(p)+6263		36 keV 3	d5/2.
S(p)+6517		41 keV 4	d3/2.
S(p)+6696		45 keV 3	d3/2.
			Probably L=0+2 doublet (1966Mo06).
S(p)+7078		53 keV 4	s1/2.

[†] E(res) in c.m. system.

[‡] Total Γ (average of transitions to 736 and 787 final states if both are available). See [1970Ke03](#) for $\Gamma(\text{p})$.