

$^{100}\text{Mo}(^{18}\text{O}, ^{16}\text{O}\gamma)$ 1975Bo39, 1981Ko30

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	D. De Frenne		NDS 110, 1745 (2009)	31-Dec-2008

E=20-61 MeV ([1975Bo39](#)); E=84 MeV ([1981Ko30](#)); measured: E γ , I γ , particle- γ coin, T_{1/2}. Magnetic spectrograph. Deduced:

^{102}Mo levels.

For $\sigma(E)$, see [1975Bo39](#).

 ^{102}Mo Levels

E(level) [#]	J $^\pi$ [†]	T _{1/2} [‡]
0	0 ⁺	
296.15 5	2 ⁺	114 ps 13
697.0 3	0 ⁺	28 ps 11
743.35 12	4 ⁺	12.5 ps 25
847.80 19	2 ⁺	
1327.55 23	6 ⁺	

[†] From Adopted Levels.

[‡] Determined by the recoil-distance Doppler-shift method ([1975Bo39](#)).

[#] Calculated using a least-squares fit to the measured gammas.

 $\gamma(^{102}\text{Mo})$

E γ [†]	I γ [‡]	E _i (level)	J $^\pi_i$	E _f	J $^\pi_f$
296.15 5	100	296.15	2 ⁺	0	0 ⁺
400.9 3	67 [#] 18	697.0	0 ⁺	296.15	2 ⁺
447.2 1	53 6	743.35	4 ⁺	296.15	2 ⁺
551.7 2	12 3	847.80	2 ⁺	296.15	2 ⁺
584.2 2	19 4	1327.55	6 ⁺	743.35	4 ⁺
847.6 4	8 3	847.80	2 ⁺	0	0 ⁺

[†] Unless noted otherwise, from [1981Ko30](#).

[‡] Relative intensity for the ^{102}Mo excitation energy range from 6.5 to 9.6 MeV, unless noted otherwise ([1981Ko30](#)).

[#] Relative to I γ =100 (296 γ) for the ^{102}Mo excitation energy range from 1.4 to 3.7 MeV ([1981Ko30](#)).

