

⁹⁴Mo(n,γ) E=24.3 keV **1977Ri04**

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	S. K. Basu, G. Mukherjee, A. A. Sonzogni		NDS 111,2555 (2010)	30-Jun-2009

FWHM=2 keV for beam. Measured γ's at 90° and 135°; intrinsic Ge (0.1% resolution at 7.5 MeV).

⁹⁵Mo Levels

E(level) [†]	J ^π [‡]	E(level) [†]	J ^π [‡]	E(level) [†]	J ^π [‡]	E(level) [†]	J ^π [‡]
0.0	5/2 ⁺ #	821	3/2	1302	1/2 ⁺ #	1622	3/2 ⁺ #
204	3/2	1040	1/2	1370	(3/2) [#]	7391	1/2 ⁻ ,3/2 ⁻ @
787	1/2	1057	5/2	1428	(5/2) ⁺ #		

[†] S(n)=7369.10 *l*0 from [2003Au03](#).

[‡] From comparison of the measured I_γ(135°)/I_γ(90°) (normalized to I_γ(135°)/I_γ(90°)=0.93 for the g.s. transition) to calculations, except as noted.

From the Adopted Levels.

@ From p-wave capture on an even-even target.

γ(⁹⁵Mo)

E _γ [†]	I _γ [‡]	E _i (level)	J _i ^π	E _f	J _f ^π	Comments
5769	1.8 5	7391	1/2 ⁻ ,3/2 ⁻	1622	3/2 ⁺	
5963	2.0 3	7391	1/2 ⁻ ,3/2 ⁻	1428	(5/2) ⁺	
6021	1.0 2	7391	1/2 ⁻ ,3/2 ⁻	1370	(3/2)	
6089	0.1 2	7391	1/2 ⁻ ,3/2 ⁻	1302	1/2 ⁺	
6333.6	4.0 6	7391	1/2 ⁻ ,3/2 ⁻	1057	5/2	I _γ (135°)/I _γ (90°)=0.87 7.
6350.6	4.5 6	7391	1/2 ⁻ ,3/2 ⁻	1040	1/2	I _γ (135°)/I _γ (90°)=0.81 6.
6569.6	4.0 5	7391	1/2 ⁻ ,3/2 ⁻	821	3/2	I _γ (135°)/I _γ (90°)=1.07 11.
6603.6	4.8 6	7391	1/2 ⁻ ,3/2 ⁻	787	1/2	I _γ (135°)/I _γ (90°)=0.82 7.
7186.8	9.1 11	7391	1/2 ⁻ ,3/2 ⁻	204	3/2	I _γ (135°)/I _γ (90°)=1.03 5.
7390.6	10.9 10	7391	1/2 ⁻ ,3/2 ⁻	0.0	5/2 ⁺	I _γ (135°)/I _γ (90°)=0.93 4.

[†] ≈1 keV systematic uncertainty should be added when comparing to thermal-capture γ energies.




[‡] σ(mb).

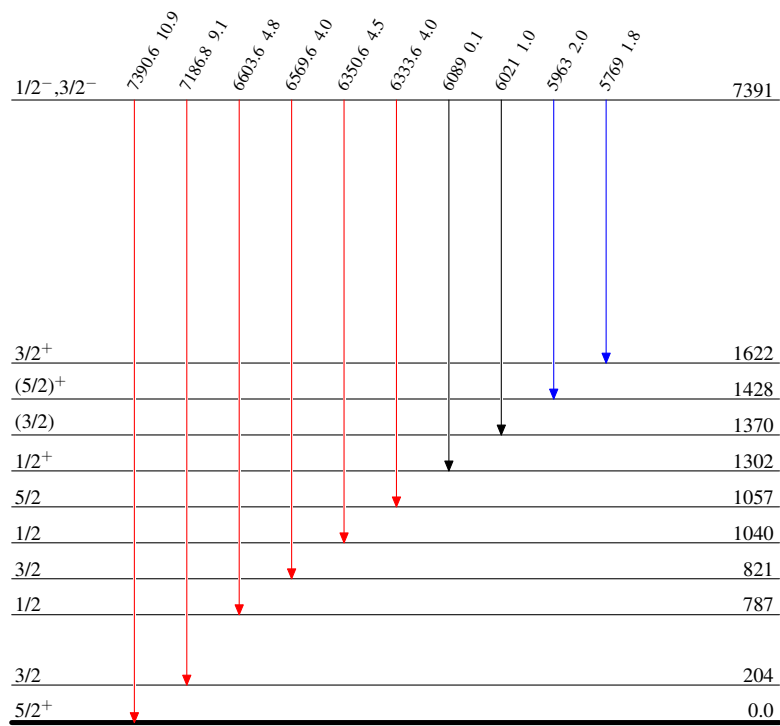
$^{94}\text{Mo}(n,\gamma) E=24.3 \text{ keV}$ 1977Ri04

Level Scheme

Intensities: Type not specified

Legend

-  $I_\gamma < 2\% \times I_\gamma^{\text{max}}$
-  $I_\gamma < 10\% \times I_\gamma^{\text{max}}$
-  $I_\gamma > 10\% \times I_\gamma^{\text{max}}$

 $^{95}_{42}\text{Mo}_{53}$