^{94}Mo(n,γ) E=24.3 keV 1977Ri04

History

Type	Author	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).

^{95}Mo Levels

E(level)†	J$^\pi$‡	E(level)†	J$^\pi$‡	E(level)†	J$^\pi$‡	E(level)†	J$^\pi$‡
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 *10* from 2003Au03.
‡ From comparison of the measured Iγ(135°)/Iγ(90°) (normalized to Iγ(135°)/Iγ(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(^{95}Mo)

E$_\gamma$†	Iγ(mb)	E$_i$(level)	J$_i^\pi$	E$_f$	J$_f^\pi$	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	Iγ(135°)/Iγ(90°)=0.87 *7*.
6350.6	4.5 *6*	7391	1/2$^-$,3/2$^-$	1040	1/2	Iγ(135°)/Iγ(90°)=0.81 *6*.
6569.6	4.0 *5*	7391	1/2$^-$,3/2$^-$	821	3/2	Iγ(135°)/Iγ(90°)=1.07 *11*.
6603.6	4.8 *6*	7391	1/2$^-$,3/2$^-$	787	1/2	Iγ(135°)/Iγ(90°)=0.82 *7*.
7186.8	9.1 *11*	7391	1/2$^-$,3/2$^-$	204	3/2	Iγ(135°)/Iγ(90°)=1.03 *5*.
7390.6	10.9 *10*	7391	1/2$^-$,3/2$^-$	0.0	5/2$^+$	Iγ(135°)/Iγ(90°)=0.93 *4*.

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

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Level Scheme

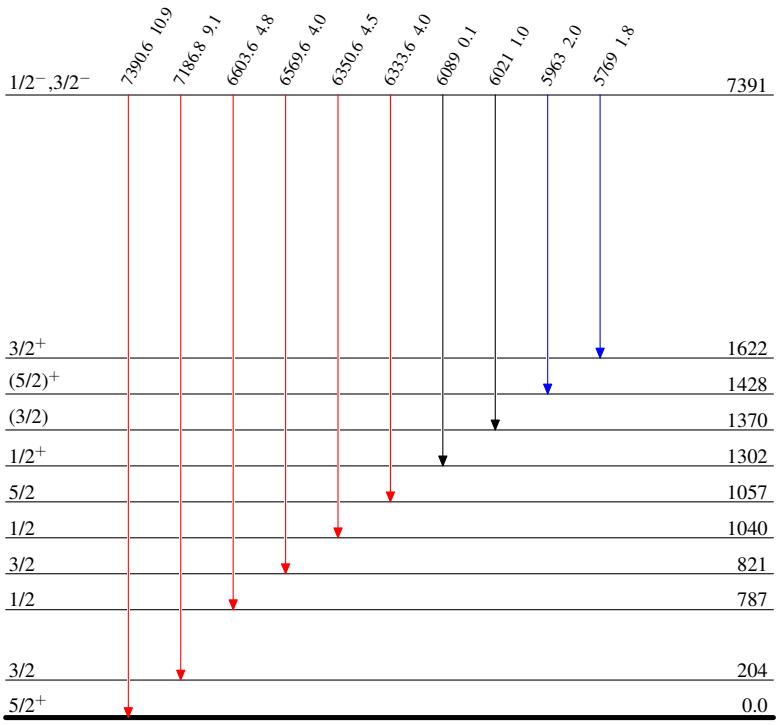
Intensities: Type not specified

Legend

$I_\gamma < 2\% \times I_\gamma^{max}$

$I_\gamma < 10\% \times I_\gamma^{max}$

$I_\gamma > 10\% \times I_\gamma^{max}$



$^{95}_{42}Mo_{53}$