

$^{92}\text{Mo}(n,\gamma)$ E=thermal 1991Is05,2007ChZX

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	Coral M. Baglin	NDS 112, 1163 (2011)	15-Dec-2010

$\sigma_n=0.08$ 2 (2006MuZX); %Abundance(^{92}Mo)=14.5246 15 (2007Wi07).

1991Is05: Natural Mo target, pair spectrometer; measured E_γ , absolute I_γ for three primary γ rays; determined S(n).

2007ChZX: includes measurements of E_γ and absolute I_γ (designated As 'Budapest data' here) for 2 secondary and one primary transition.

 ^{93}Mo Levels

E(level) [†]	J ^π [‡]	Comments
0	5/2 ⁺	
943.83 12	1/2 ⁺	
1491.87 19	3/2 ⁺	
(8069.59 13)	1/2 ⁺	J ^π : s-wave N-capture state(S).

[†] From least-squares fit to E_γ .

[‡] From Adopted Levels, except As noted.

 $\gamma(^{93}\text{Mo})$

E_γ	I_γ ^{†‡}	$E_i(\text{level})$	J_i^π	E_f	J_f^π	Comments
943.81 12	65 8	943.83	1/2 ⁺	0	5/2 ⁺	E_γ, I_γ : from 2007ChZX.
1492.3 3	37 9	1491.87	3/2 ⁺	0	5/2 ⁺	E_γ, I_γ : from 2007ChZX.
6577.67 20	14.8 15	(8069.59)	1/2 ⁺	1491.87	3/2 ⁺	E_γ, I_γ : from 1991Is05.
7125.2 6	48 3	(8069.59)	1/2 ⁺	943.83	1/2 ⁺	E_γ : from 2007ChZX. other E_γ : 7126.18 7 (1991Is05) does not fit placement well.
8069.13 14	6.6 9	(8069.59)	1/2 ⁺	0	5/2 ⁺	I_γ : from 1991Is05. other: $I_\gamma=28$ 5 (2007ChZX). E_γ, I_γ : from 1991Is05.

[†] Uncertainty does not include the 25% uncertainty in σ_γ for ^{92}Mo .

[‡] Intensity per 100 neutron captures.

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Level Scheme

Intensities: I_γ per 100 neutron captures

Legend

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

