

Coulomb excitation [2001Ma17,1971WaZP,1964St04](#)

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	Coral M. Baglin	NDS 113, 2187 (2012)	15-Sep-2012

Additional information 1.

Other: [1962Af02](#). $^{92}\text{Mo}(x,x'\gamma)$: $B(E2)\uparrow$ for first 2^+ level at 1509 keV.

*data from [1971WaZP](#) for 5 Mo isotopes are consistently high cf. the most precise data from other authors; consequently, in the evaluation by [1987Ra01](#), data from [1971WaZP](#) were renormalized so $B(E2)$ for ^{100}Mo equaled the value adopted in [1987Ra01](#) (with data of [1971WaZP](#) excluded). The renormalized ^{92}Mo datum from [1971WaZP](#) is then $B(E2)=0.107\ 6$ ([1987Ra01](#)).

$^{92}\text{Mo}(^{32}\text{S},^{32}\text{S}'\gamma)$: $E(^{32}\text{S}^{8+})=100$ MeV; $^{\text{nat}}\text{Mo}$ target sandwiched between Fe and Cu foils; 4 HPGe detectors ($\pm 65^\circ$, $\pm 115^\circ$); annular Si detector for ^{32}S detection; Fe foil polarized by 0.08 Tesla external field; measured particle- γ angular correlation; deduced $g(1509\ \text{level})$. shell-model calculations of g -factor.

x	E(x)	B(E2)	
^4He	8 MeV	0.113*	6 1971WaZP
0	38-40 MeV	0.093 14	1964St04
^{14}N	40 MeV	0.19 8	1962Af02 scin $E_\gamma=1520\ 30$

^{92}Mo Levels

E(level)	J^π	$T_{1/2}$	Comments
0	0^+		
1520 30	2^+	0.344 ps 20	$B(E2)\uparrow=0.105\ 6$ $B(E2)$ is weighted average of data from 1971WaZP (after revision by 1987Ra01) and 1964St04 . $E(\text{level})$: from E_γ . $T_{1/2}$: from $B(E2)=0.105\ 6$ and adopted E_γ . g -factor= $+1.3\ 5$ (2001Ma17).

 $\gamma(^{92}\text{Mo})$

E_γ	$E_i(\text{level})$	J_i^π	E_f	J_f^π	Comments
1520 30	1520	2^+	0	0^+	E_γ : from 1962Af02 .

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Level Scheme

