^{55}Mn(γ,γ') 1974Te01,1968Al13

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	Huo Junde	NDS 109, 787 (2008)	30-Apr-2007

1968Al13: bremsstrahlung source, E=0.8-3.0 MeV; Ge(Li) and NaI; measured nuclear resonance fluorescences.
1974Te01: Co(n,γ) E=th source; studied decay of 7491 level; Ge(Li), NaI.
1971JuZR, 1974JuZV: bremsstrahlung source, E≈5 keV; Ge(Li); measured nuclear resonance fluorescences.
Others: 1962Se12 and 1964Bo22.

^{55}Mn Levels

E(level)[†]	J$^\pi$[@]	$T_{1/2}$[&]	Comments
0.0	5/2$^-$		
125.95 *1*	7/2$^-$	1.1×10^{-6} eV *3*	E(level),$T_{1/2}$: from 1962Se12.
985?			
1527[‡]	3/2$^-$		W(θ)g$\Gamma^2_{\gamma 0}/\Gamma$=0.0052 eV *13* (1968Al13); g$\Gamma_{\gamma 0}$=0.0053 eV *21*.
1884[‡]			W(θ)g$\Gamma^2_{\gamma 0}/\Gamma$=0.041 eV *10* (1968Al13); g$\Gamma_{\gamma 0}$=0.055 eV *6*.
2197[‡]			W(θ)g$\Gamma^2_{\gamma 0}/\Gamma$=0.017 eV *4* (1968Al13); g$\Gamma_{\gamma 0}$=0.017 eV *3*.
2249			W(θ)g$\Gamma^2_{\gamma 0}/\Gamma$=0.017 eV *4* (1968Al13); g$\Gamma_{\gamma 0}$=0.013 eV *3*.
2265			
2362			W(θ)g$\Gamma^2_{\gamma 0}/\Gamma$=0.0035 eV *13* (1968Al13).
2561			W(θ)g$\Gamma^2_{\gamma 0}/\Gamma$=0.050 eV *13* (1968Al13); g$\Gamma_{\gamma 0}$=0.061 eV *12*.
2723			
2750			W(θ)g$\Gamma^2_{\gamma 0}/\Gamma$=0.0067 eV *28* (1968Al13).
2873			
3004?[#]			W(θ)g$\Gamma^2_{\gamma 0}/\Gamma$=0.020 eV *4* (1971JuZR).
3045			
3263			
4003?[#]			W(θ)g$\Gamma^2_{\gamma 0}/\Gamma$=0.055 eV *10* (1971JuZR).
5120?[#]			
5233?[#]			
5254?[#]			
5304?[#]			
5365?[#]			
5463?[#]			
5520?[#]			W(θ)g$\Gamma^2_{\gamma 0}/\Gamma$=0.142 eV *40* (1971JuZR).
7491	3/2	0.45 eV *25*	J$^\pi$: from $\gamma(\theta)$ of g.s. transition (1974Te01).

[†] From 1974Te01, except as noted.
[‡] From 1968Al13.
[#] From 1971JuZR.
[@] From Adopted Levels, except as noted.
[&] Γ(tot).

^{55}Mn(γ,γ') 1974Te01,1968Al13 (continued)

$\gamma(^{55}Mn)$

E_γ	I_γ[†]	E_i(level)	J_i^π	E_f	J_f^π	Comments
125.95 *1*		125.95	7/2$^-$	0.0	5/2$^-$	
1212	36[‡] *11*	2197		985?		
1527		1527	3/2$^-$	0.0	5/2$^-$	
1884		1884		0.0	5/2$^-$	
2071	3[‡] *2*	2197		125.95	7/2$^-$	
2197	61[‡] *8*	2197		0.0	5/2$^-$	
2238	69[‡] *5*	2362		125.95	7/2$^-$	
2249		2249		0.0	5/2$^-$	
2362	31[‡] *3*	2362		0.0	5/2$^-$	
2561		2561		0.0	5/2$^-$	
2723		2723		0.0	5/2$^-$	
2750		2750		0.0	5/2$^-$	
3004[#]		3004?		0.0	5/2$^-$	
4003[#]		4003?		0.0	5/2$^-$	
4228	14	7491	3/2	3263		
4446	9	7491	3/2	3045		
4618	5	7491	3/2	2873		
4741	18	7491	3/2	2750		
4768	14	7491	3/2	2723		
4930	55	7491	3/2	2561		
5120[#]		5120?		0.0	5/2$^-$	
5129	23	7491	3/2	2362		
5178[#]		5304?		125.95	7/2$^-$	
5226	14	7491	3/2	2265		
5233[#]		5233?		0.0	5/2$^-$	
5242	73	7491	3/2	2249		
5254[#]		5254?		0.0	5/2$^-$	
5304[#]		5304?		0.0	5/2$^-$	
5365[#]		5365?		0.0	5/2$^-$	
5463[#]		5463?		0.0	5/2$^-$	
5520		5520?		0.0	5/2$^-$	
5964	91	7491	3/2	1527	3/2$^-$	
7491	100	7491	3/2	0.0	5/2$^-$	Additional information 1.

[†] From 1974Te01.
[‡] Branching ratio from each level, from 1974JuZV.
[#] Placement of transition in the level scheme is uncertain.

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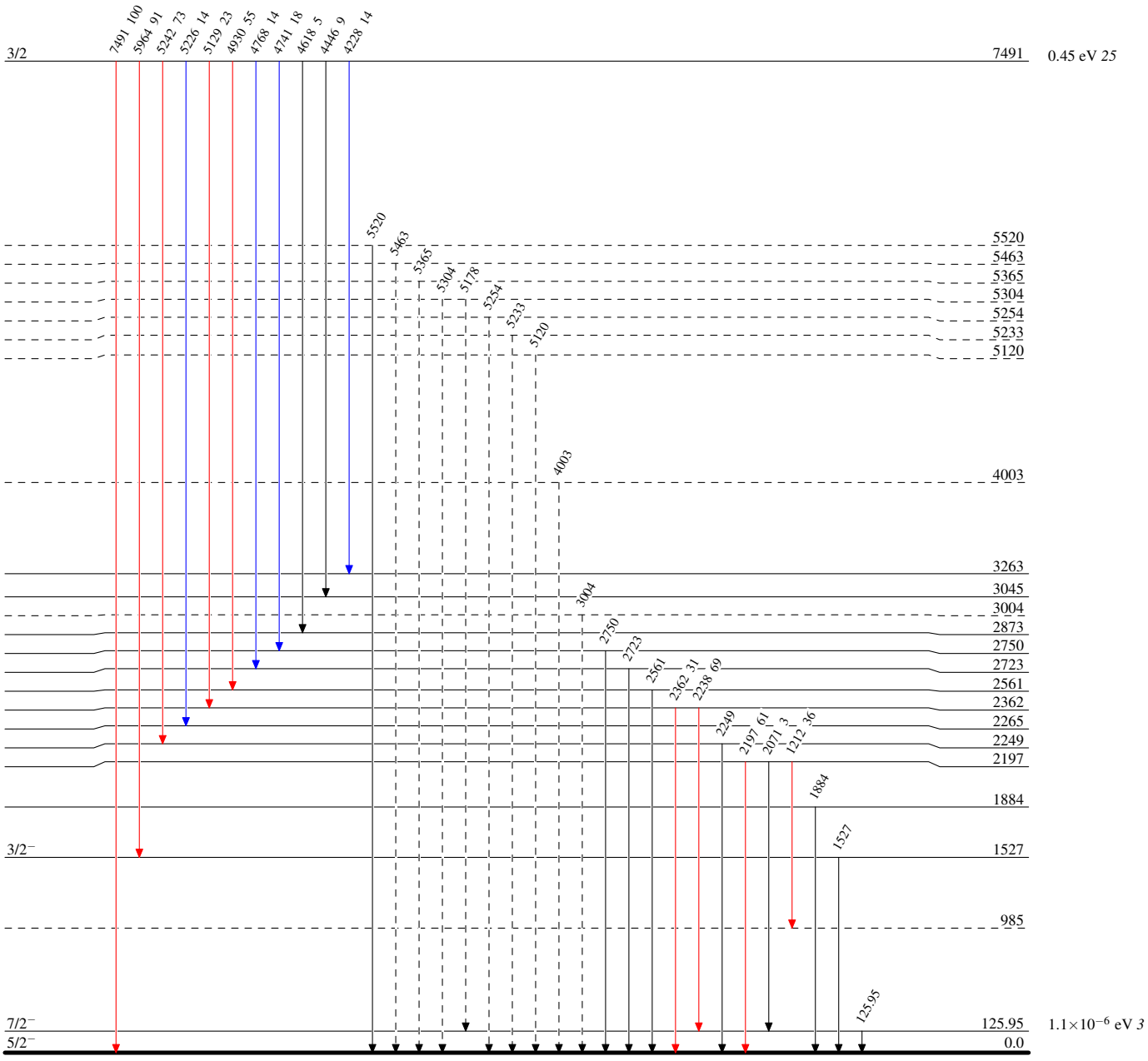
Level Scheme

Intensities: Relative I_γ

Legend

- $I_\gamma < 2\% \times I_\gamma^{max}$
- $I_\gamma < 10\% \times I_\gamma^{max}$
- $I_\gamma > 10\% \times I_\gamma^{max}$
- γ Decay (Uncertain)



$^{55}_{25}Mn_{30}$