^{92}Mo(^{32}S,2npγ) 1991Ce03

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	S. Ohya	NDS 111, 1619 (2010)	20-Jan-2009

1991Ce03: E=145 MeV measured γ, γγ-coin using 15 Compton suppressed Ge array oriented at 79°, 101°, 143° to beam. The Ge was provided with an n/γ multiplicity filter and a Si detector ball to select the (^{32}S,p2n) reaction.

^{121}La Levels

E(level)	J^π	Comments
x[†]	$(11/2^-)$[#]	
251+x[†]	$(15/2^-)$[#]	
668+x[†]	$(19/2^-)$[#]	
1229+x[†]	$(23/2^-)$[#]	
1912+x[†]	$(27/2^-)$[#]	
2695+x[†]	$(31/2^-)$[#]	
3562+x[†]	$(35/2^-)$[#]	
4504+x[†]	$(39/2^-)$[#]	
5515+x[†]	$(43/2^-)$[#]	
6588+x?[†]	$(47/2^-)$[#]	
7718+x?[†]	$(51/2^-)$[#]	
y[‡]	$(9/2^+)$[@]	
204+y[‡]	$(11/2^+)$[@]	
438+y[‡]	$(13/2^+)$[@]	
701+y[‡]	$(15/2^+)$[@]	
990+y[‡]	$(17/2^+)$[@]	
1304+y[‡]	$(19/2^+)$[@]	
1640+y[‡]	$(21/2^+)$[@]	
1996+y[‡]	$(23/2^+)$[@]	
2371+y[‡]	$(25/2^+)$[@]	J^π: authors assignment of $21/2^+$ is probably a misprint.
2757+y[‡]	$(27/2^+)$[@]	

[†] Band(A): decoupled rotational band $1/2^-[550]$.
[‡] Band(B): decoupled rotational band $9/2^+[404]$.
[#] Monotonically increasing J sequence is suggested by cascade of coincident E2 forming decoupled band based on $1/2^-[550]$ Nilsson state starting from $J^\pi=11/2^-$.
[@] Monotonically increasing J sequence is suggested by cascade of coincident γ's forming rotational band based on $9/2^+[404]$.

γ(^{121}La)

E_γ[†]	E_i(level)	J_i^π	E_f	J_f^π	E_γ[†]	E_i(level)	J_i^π	E_f	J_f^π
204	204+y	$(11/2^+)$	y	$(9/2^+)$	375	2371+y	$(25/2^+)$	1996+y	$(23/2^+)$
234	438+y	$(13/2^+)$	204+y	$(11/2^+)$	386	2757+y	$(27/2^+)$	2371+y	$(25/2^+)$
251	251+x	$(15/2^-)$	x	$(11/2^-)$	417	668+x	$(19/2^-)$	251+x	$(15/2^-)$
263	701+y	$(15/2^+)$	438+y	$(13/2^+)$	438	438+y	$(13/2^+)$	y	$(9/2^+)$
289	990+y	$(17/2^+)$	701+y	$(15/2^+)$	497	701+y	$(15/2^+)$	204+y	$(11/2^+)$
314	1304+y	$(19/2^+)$	990+y	$(17/2^+)$	552	990+y	$(17/2^+)$	438+y	$(13/2^+)$
336	1640+y	$(21/2^+)$	1304+y	$(19/2^+)$	561	1229+x	$(23/2^-)$	668+x	$(19/2^-)$
356	1996+y	$(23/2^+)$	1640+y	$(21/2^+)$	603	1304+y	$(19/2^+)$	701+y	$(15/2^+)$

Continued on next page (footnotes at end of table)

^{92}Mo(^{32}S,2npγ) 1991Ce03 (continued)

γ(^{121}La) (continued)

E_γ[†]	E_i(level)	J_i^π	E_f	J_f^π	E_γ[†]	E_i(level)	J_i^π	E_f	J_f^π
650	1640+y	$(21/2^+)$	990+y	$(17/2^+)$	867	3562+x	$(35/2^-)$	2695+x	$(31/2^-)$
683	1912+x	$(27/2^-)$	1229+x	$(23/2^-)$	942	4504+x	$(39/2^-)$	3562+x	$(35/2^-)$
692	1996+y	$(23/2^+)$	1304+y	$(19/2^+)$	1011	5515+x	$(43/2^-)$	4504+x	$(39/2^-)$
731	2371+y	$(25/2^+)$	1640+y	$(21/2^+)$	1073[‡]	6588+x?	$(47/2^-)$	5515+x	$(43/2^-)$
761	2757+y	$(27/2^+)$	1996+y	$(23/2^+)$	1130[‡]	7718+x?	$(51/2^-)$	6588+x?	$(47/2^-)$
783	2695+x	$(31/2^-)$	1912+x	$(27/2^-)$					

[†] From p-gated coin spectrum taken at E(^{32}S)=145 MeV; no Iγ data given in 1991Ce03.
[‡] Placement of transition in the level scheme is uncertain.

Legend

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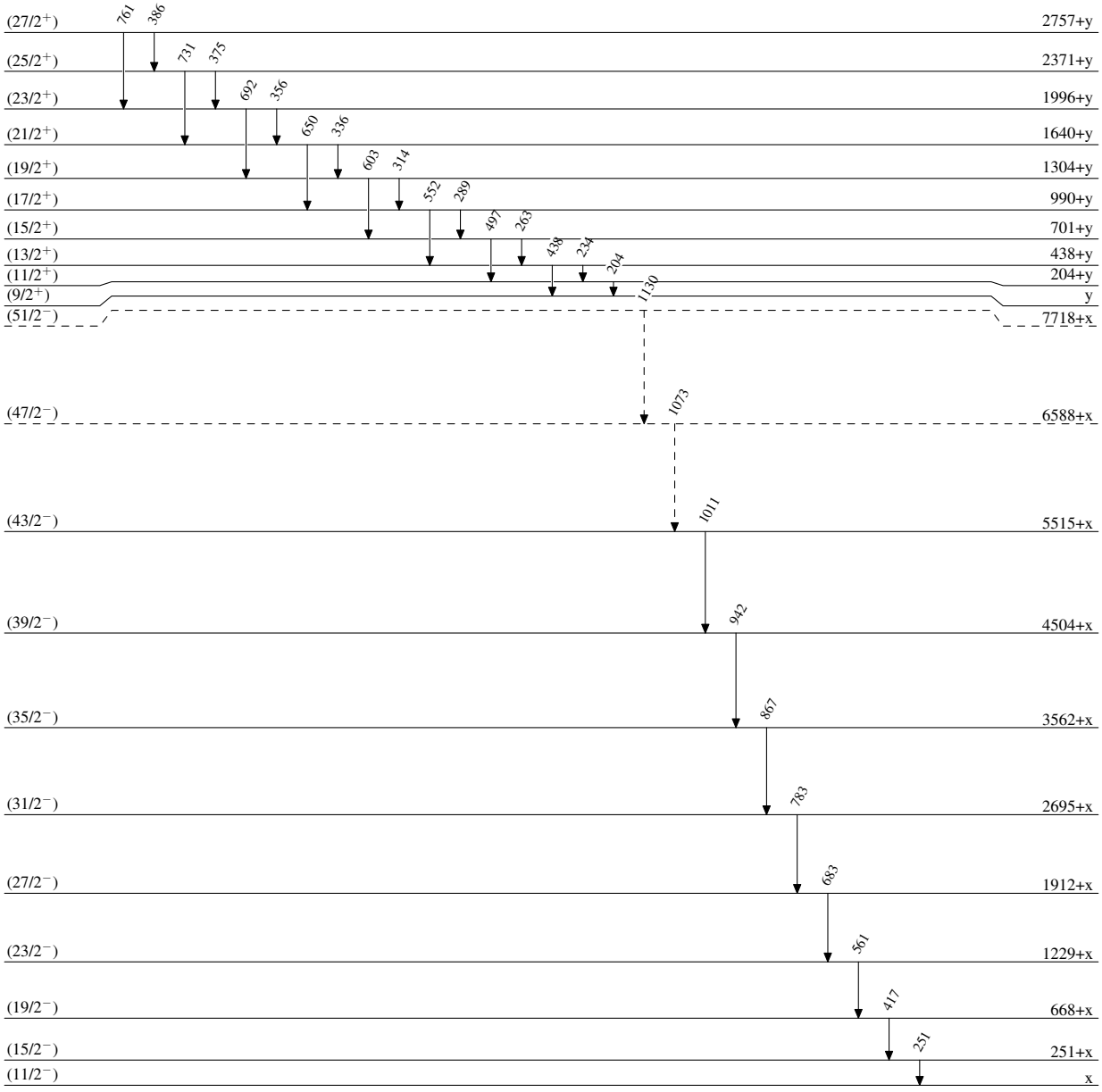
Level Scheme

γ Decay (Uncertain)



$^{121}_{57}La_{64}$

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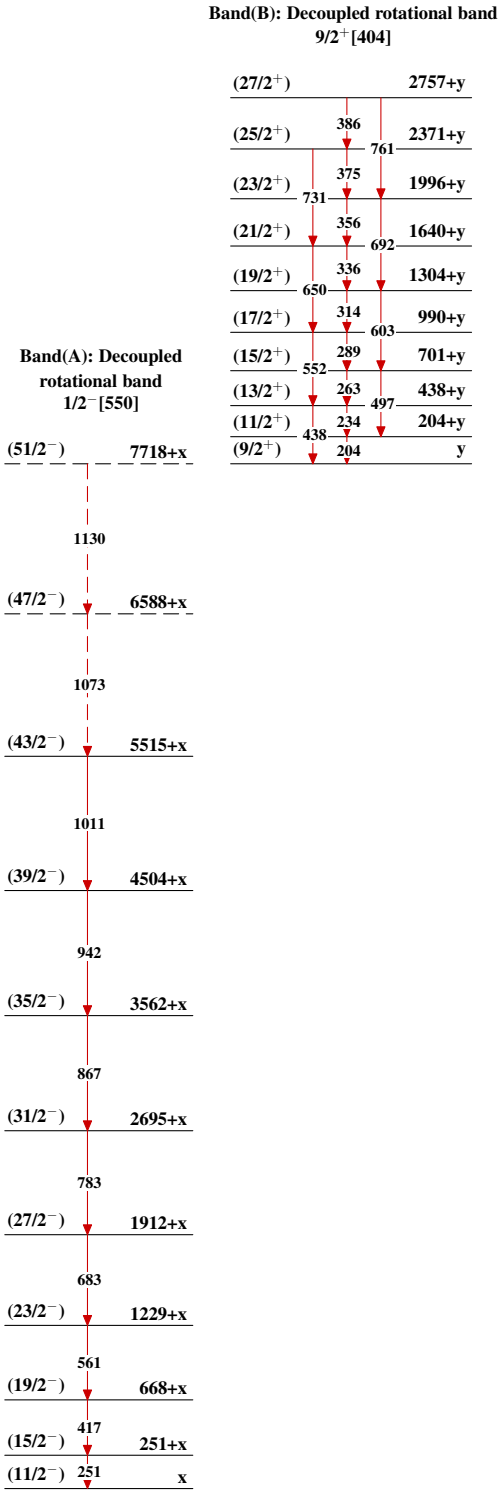

$^{121}_{57}La_{64}$