

$^{92}\text{Mo}(^{40}\text{Ca},2p\gamma), ^{96}\text{Ru}(^{40}\text{Ca},2p\alpha\gamma)$ 1989Mo10

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	Balraj Singh	NDS 93, 33 (2001)	11-May-2001

1989Mo10 (also 1989Wa21,1985Li13): E=147-200 MeV. Measured γ , $\gamma\gamma$, lifetimes, $\gamma(\theta)$, excitation functions.

1988Ja05: $^{58}\text{Ni}(^{76}\text{Se},X)$ E=300 MeV. Measured $\gamma(\text{recoil})$ coin.

Additional information 1.

 ^{130}Nd Levels

E(level)	J^π	$T_{1/2}^\dagger$	Comments
0.0@	0 ⁺		
159.05@ 14	2 ⁺	0.60 ns 25	
485.50@ 16	4 ⁺	<28 ps	
939.94@ 17	(6 ⁺)		
1487.10@ 19	(8 ⁺)		
2100.41@ 21	(10 ⁺)		
2764.4@ 3	(12 ⁺)		E(level): level introduced based on results from 2001Ha03.
3468.42@ 25	(14 ⁺)#		
4211.8@ 3	(16 ⁺)#		
5011.2@ 10	(18 ⁺)#		

[†] From recoil-distance method (1989Mo10).

[‡] From Adopted Levels.

Assignment based on results from 2001Ha03. 1989Mo10 assigned 2 units less.

@ Band(A): yrast band.

 $\gamma(^{130}\text{Nd})$

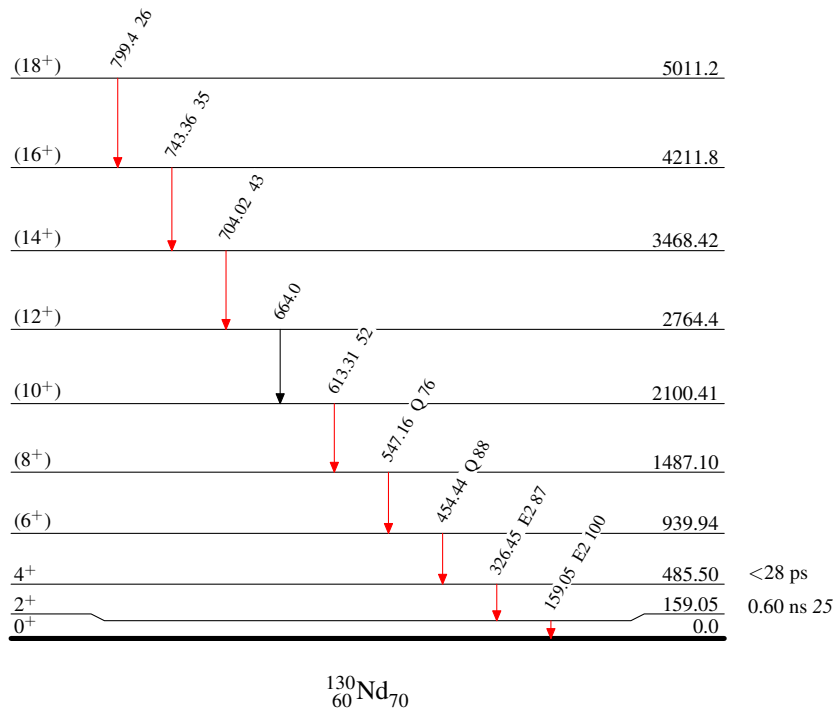
E_γ	I_γ	$E_i(\text{level})$	J_i^π	E_f	J_f^π	Mult. [†]	Comments
159.05 14	100 6	159.05	2 ⁺	0.0	0 ⁺	E2	$A_2=+0.35$ 15, $A_4=-0.10$ 17.
326.45 8	87 4	485.50	4 ⁺	159.05	2 ⁺	E2	$A_2=+0.17$ 3, $A_4=-0.07$ 3.
454.44 6	88 5	939.94	(6 ⁺)	485.50	4 ⁺	Q	$A_2=+0.46$ 13, $A_4=-0.34$ 15.
547.16 8	76 14	1487.10	(8 ⁺)	939.94	(6 ⁺)	Q	$A_2=+0.41$ 6, $A_4=-0.25$ 6.
613.31 9	52 3	2100.41	(10 ⁺)	1487.10	(8 ⁺)		
664.0 2		2764.4	(12 ⁺)	2100.41	(10 ⁺)		E_γ : from 2001Ha03.
704.02 13	43 5	3468.42	(14 ⁺)	2764.4	(12 ⁺)		
743.36 18	35 5	4211.8	(16 ⁺)	3468.42	(14 ⁺)		
799.4 10	26 8	5011.2	(18 ⁺)	4211.8	(16 ⁺)		E_γ : 809.3 5 (2001Ha03).

[†] From $\gamma(\theta)$ and RUL.

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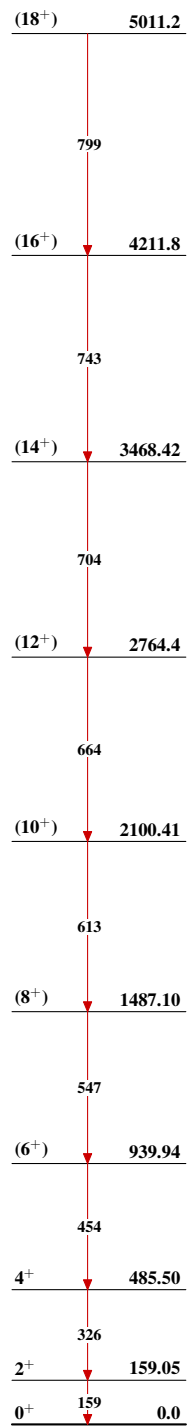
Legend

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



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Band(A): Yrast band



$^{130}_{60}\text{Nd}_{70}$