

$^{96}\text{Ru}(^{40}\text{Ca},4p\gamma)$ 1989Mo10

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	Yu. Khazov, A. A. Rodionov and S. Sakharov, Balraj Singh		NDS 104, 497 (2005)	10-Feb-2005

1989Mo10: E=180 MeV. Measured E_γ , I_γ , $\gamma\gamma$, lifetimes by recoil-distance method.

 ^{132}Nd Levels

E(level)	J^π ‡	$T_{1/2}$ †	Comments
0.0#	0 ⁺		
213.16# 12	(2 ⁺)	186 ps 13	
610.94# 14	(4 ⁺)	<28 ps	
1132.88# 15	(6 ⁺)		
1598.55 18			E(level): corresponding level is at 2692 in Adopted Levels. The 565-466-522 cascade is reordered as 565-466-1092-522 in Adopted Levels, gammas; based on results from 1988Wa01 and 1997Pe27.
1712.29# 16	(8 ⁺)		
2163.4 5			E(level): corresponding level is at 3257 in Adopted Levels. The 565-466-522 cascade is reordered as 565-466-1092-522 in Adopted Levels, gammas; based on results from 1988Wa01 and 1997Pe27.
2311.67# 17	(10 ⁺)		
2947.98# 19	(12 ⁺)		
3633.79# 21	(14 ⁺)		
4373.2# 4	(16 ⁺)		
5177.9?# 5	(18 ⁺)		

† Recoil-distance method (1989Mo10).

‡ As suggested by 1989Mo10.

Band(A): Yrast band.

 $\gamma(^{132}\text{Nd})$

E_γ	I_γ	$E_i(\text{level})$	J_i^π	E_f	J_f^π	Comments
213.16 12	100 5	213.16	(2 ⁺)	0.0	0 ⁺	
397.78 6	58 3	610.94	(4 ⁺)	213.16	(2 ⁺)	
465.67† 11	8 2	1598.55		1132.88	(6 ⁺)	
521.94 5	51 3	1132.88	(6 ⁺)	610.94	(4 ⁺)	
564.9† 4	10 2	2163.4		1598.55		
579.41 6	33 6	1712.29	(8 ⁺)	1132.88	(6 ⁺)	
599.38 7	29 2	2311.67	(10 ⁺)	1712.29	(8 ⁺)	
636.31 8	20 2	2947.98	(12 ⁺)	2311.67	(10 ⁺)	
685.81 9	13 2	3633.79	(14 ⁺)	2947.98	(12 ⁺)	
739.4 3	13 3	4373.2	(16 ⁺)	3633.79	(14 ⁺)	
804.72‡ 25	7 2	5177.9?	(18 ⁺)	4373.2	(16 ⁺)	E_γ : corresponds to 812 γ in $^{104}\text{Pd}(^{32}\text{S},2p2n\gamma)$.

† The 565-466-522 cascade is reordered as 565-466-1092-522 in Adopted Levels, gammas; based on results from 1988Wa01 and 1997Pe27.

‡ Placement of transition in the level scheme is uncertain.

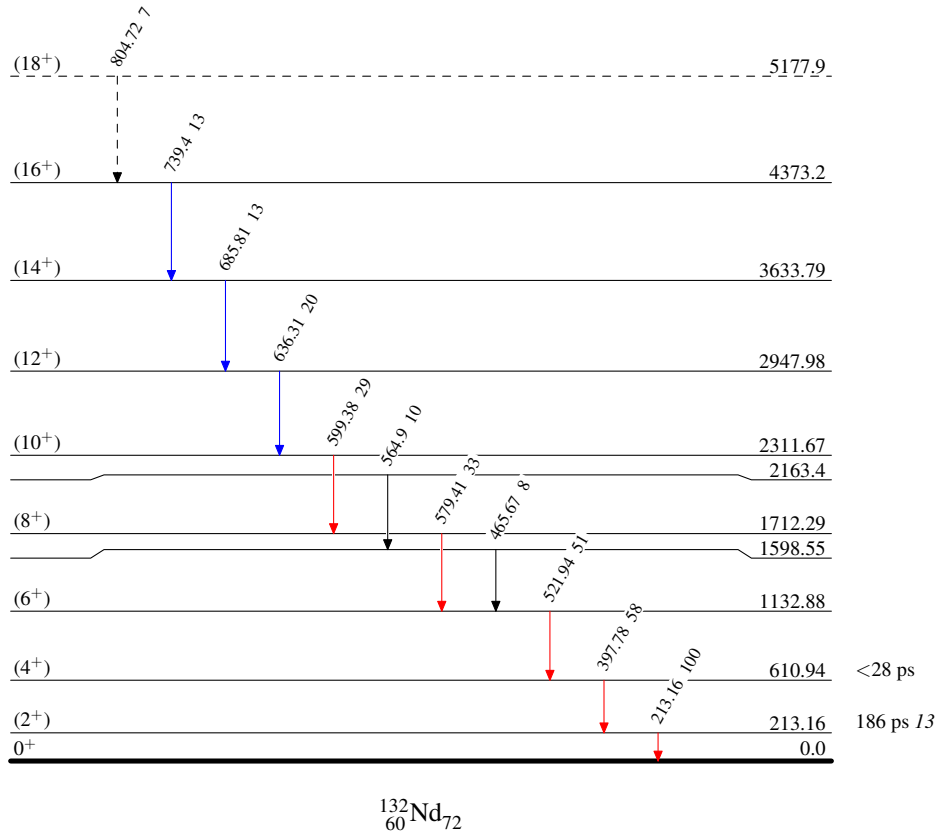
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Legend

Level Scheme

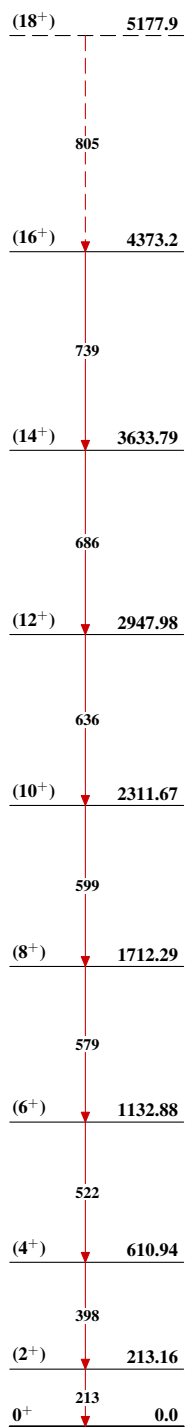
Intensities: Relative I_γ

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



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Band(A): Yrast band

 $^{132}_{60}\text{Nd}_{72}$