

$^{96}\text{Ru}(^{40}\text{Ca}, 2\text{p}2\text{n}\gamma)$ 1989Wa21

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	Yu. Khazov, A. A. Rodionov and S. Sakharov, Balraj Singh		NDS 104, 497 (2005)	1-Jul-2022

1989Wa21: E=195 MeV. Measured: (recoil) γ , $n\gamma$, $nn\gamma$, $\gamma\gamma$ coincidences using recoil separator, ten Compton-suppressed Ge detectors and five NE213 liquid scintillators.

Other: 1988IsZU: $^{106}\text{Cd}(^{32}\text{S}, 2n\alpha\gamma)$.

 ^{132}Sm Levels

E(level) [†]	$J\pi^{\ddagger}$
0 [#]	0 ⁺
131 [#] 1	(2 ⁺)
417 [#] 2	(4 ⁺)
833 [#] 2	(6 ⁺)
1354 [#] 2	(8 ⁺)
1962 [#] 2	(10 ⁺)
2647 [#] 3	(12 ⁺)
3408 [#] 3	(14 ⁺)
4245 [#] 3	(16 ⁺)

[†] $\Delta(E\gamma)$ assumed as 1 keV (evaluators).

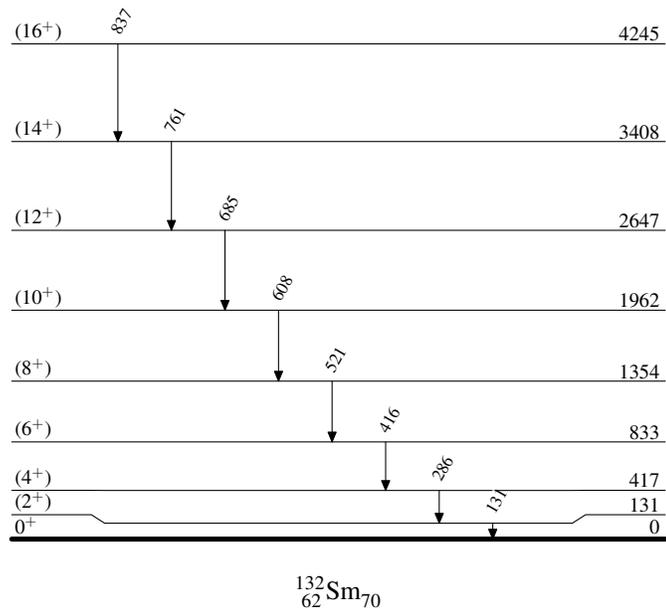
[‡] From expected band structure.

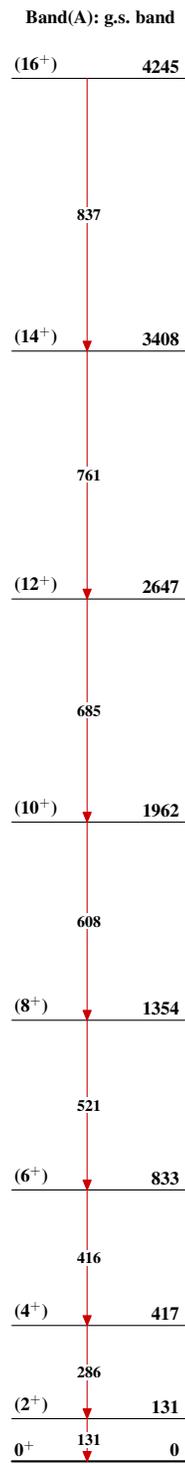
[#] Band(A): g.s. band.

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

All γ 's are in coincidence with the 286 γ .

E_γ	$E_i(\text{level})$	J_i^π	E_f	J_f^π
131	131	(2 ⁺)	0	0 ⁺
286	417	(4 ⁺)	131	(2 ⁺)
416	833	(6 ⁺)	417	(4 ⁺)
521	1354	(8 ⁺)	833	(6 ⁺)
608	1962	(10 ⁺)	1354	(8 ⁺)
685	2647	(12 ⁺)	1962	(10 ⁺)
761	3408	(14 ⁺)	2647	(12 ⁺)
837	4245	(16 ⁺)	3408	(14 ⁺)

$^{96}\text{Ru}(^{40}\text{Ca},2\text{p}2\text{n}\gamma)$ 1989Wa21Level Scheme

$^{96}\text{Ru}(^{40}\text{Ca}, 2\text{p}2\text{n}\gamma)$ 1989Wa21 $^{132}_{62}\text{Sm}_{70}$