Ni(^{86}Kr,Xγ),^{9}Be(^{76}Ge,Xγ) 1998Gr14,2003Ma50

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	G. Gürdal, E. A. Mccutchan	NDS 136, 1 (2016)	1-Jul-2016

1999Le68,1998Gr14,1997Pf03: ^{nat}Ni(^{86}Kr,Xγ), E(^{86}Kr)=60.3 MeV/nucleon. Recoil products separated with the Alpha and LISE spectrometers and identified with TOF and ΔE-E technique. Measured Eγ, Iγ, γ(t), $\gamma\gamma$, fragment-γ coincidences using six planar silicon detectors surrounded by five HPGe detectors and a LEPS detector.

2003Ma50: ^{9}Be(^{76}Ge,Xγ), E(^{76}Ge)=60 MeV/nucleon. Recoil products separated with the LISE spectrometer and identified by TOF and ΔE-E technique. Measured Eγ, $\gamma\gamma$(t) using four BaF_2 detectors and an HPGe detector.

^{70}Ni Levels

E(level)[†]	J$^\pi$[‡]	$T_{1/2}$	Comments
0.0[#]	0$^+$	6.0[‡] s *3*	
1259[#] *1*	2$^+$		
2229[#] *1*	4$^+$		
2677[#] *2*	6$^+$	1.049 ns *26*	$T_{1/2}$: from $\gamma\gamma$(t) in 2003Ma50.
2860[#] *2*	8$^+$	0.232 μs *1*	$T_{1/2}$: from γ(t) using sum of 183γ, 448γ, 970γ and 1259γ (1999Le68). Others: 0.21 μs *5* (1998Gr14), 0.200 μs (1997Pf03). J$^\pi$: configuration=$(\nu g_{9/2})^{+2}$ (1998Gr14).

[†] From Eγ.
[‡] From the Adopted Levels.
[#] Band(A): ΔJ=2 cascade.

γ(^{70}Ni)

E$_\gamma$[†]	E$_i$(level)	J$_i^\pi$	E$_f$	J$_f^\pi$
183 *1*	2860	8$^+$	2677	6$^+$
448 *1*	2677	6$^+$	2229	4$^+$
970 *1*	2229	4$^+$	1259	2$^+$
1259 *1*	1259	2$^+$	0.0	0$^+$

[†] From 1998Gr14.

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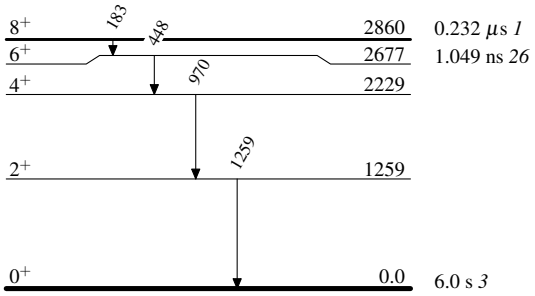
Level Scheme



$^{70}_{28}Ni_{42}$

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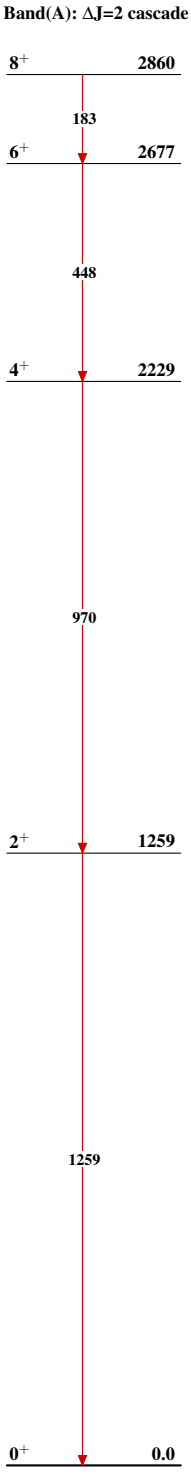

$^{70}_{28}Ni_{42}$