^{86}Kr(α,2nγ) 1975Ar06

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	E. A. Mccutchan and A. A. Sonzogni	NDS 115, 135 (2014)	1-Nov-2013

E=29 MeV to 40 MeV. Measured Eγ, Iγ, $\gamma\gamma$, excitation functions, $\gamma(\theta)$ using two Ge(Li) detectors; $T_{1/2}$ with Doppler-shift attenuation method.

^{88}Sr Levels

E(level)[†]	J$^\pi$[‡]	$T_{1/2}$[#]
0	0^+	
1836.05 *7*	2^+	<10 ps
2734.09 *7*	3^-	<10 ps
3584.6 *3*	5^-	0.14 ns *4*
4019.6 *4*	$(6)^-$	<20 ps
4368.2 *5*	(7^-)	<10 ps
4680.0?[@] *5*		
5170.2?[@] *6*		
5437.4 *6*		
5655.6 *6*	8^+	<10 ps

[†] From a least-squares fit to Eγ by evaluators.
[‡] From the Adopted Levels.
[#] From Doppler-shift attenuation method.
[@] Order of 312γ-490γ-267γ is uncertain, making the existence of the 4680 and 5170 levels tentative.

$\gamma(^{88}$Sr)

E$_\gamma$	I$_\gamma$[†]	E$_i$(level)	J$_i^\pi$	E$_f$	J$_f^\pi$	Mult.	δ	Comments
267.2[@] *2*	10	5437.4		5170.2?				A_2=−0.37 *5*.
311.8[@] *2*	12	4680.0?		4368.2	(7^-)			A_2=−0.20 *9*.
348.6 *2*	38	4368.2	(7^-)	4019.6	$(6)^-$			A_2=−0.37 *5*.
435.0 *3*	51	4019.6	$(6)^-$	3584.6	5^-	D+Q	≈0.25	A_2=+0.15 *3*.
490.2[@] *3*	11	5170.2?		4680.0?				A_2=−0.70 *10*.
[x]605.4 *4*	8							
850.5 *3*	71	3584.6	5^-	2734.09	3^-	Q		A_2=+0.28 *4*, A_4=−0.16 *9*.
898.042[‡] *3*	79	2734.09	3^-	1836.05	2^+			A_2=−0.28 *4*.
[x]1083.5 *4*	11							
1287.4 *4*	21[#]	5655.6	8^+	4368.2	(7^-)			A_2=−0.03 *20*.
1836.063[‡] *12*	100	1836.05	2^+	0	0^+	Q		A_2=+0.19 *8*, A_4=−0.03 *9*.

[†] Relative intensities at 29 MeV corrected for angular distribution, except as noted.
[‡] From the Adopted Gammas.
[#] Intensity at θ=55°.
[@] Placement of transition in the level scheme is uncertain.
[x] γ ray not placed in level scheme.

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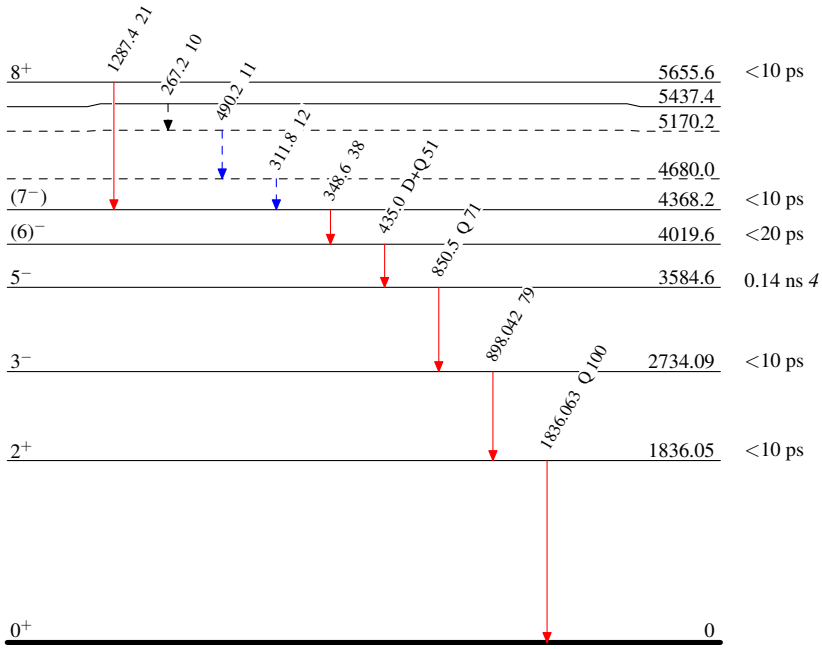
Level Scheme

Intensities: Type not specified

Legend

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



$^{88}_{38}Sr_{50}$