^{76}Ge(^{11}B,p3nγ) 2011Ga44

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	E. A. Mccutchan	NDS 125, 201 (2015)	31-Dec-2014

E(^{11}B)=50 MeV. Measured Eγ, Iγ, $\gamma\gamma$, $\gamma\gamma(\theta)$ using 12 Compton-suppressed HPGe detectors and a 14-element BGO multiplicity filter; deduced $T_{1/2}$ using Doppler Shift Attenuation method (DSAM). Authors provide only a partial level scheme for states at E=2470.4 keV and higher in excitation energy.

^{83}Kr Levels

E(level)[†]	J$^\pi$[‡]	$T_{1/2}$[#]
2470.4	(17/2$^-$)	
2510.0	(13/2$^-$)	
2550.9	17/2$^+$	
2640.5	(15/2$^-$)	
2841.2	(17/2$^-$)	1.73 ps *35*
3157.3	(19/2$^-$)	1.11 ps *7*
3602.3	(21/2$^-$)	0.69 ps *14*
4217.4	(23/2$^-$)	0.42 ps *9*
4868.4	(25/2$^-$)	<0.7 ps
5639.4	(27/2$^-$)	

[†] From 2011Ga44.
[‡] From the Adopted Levels. These are similar to those proposed by 2011Ga44, with the exception that some parentheses have been added by the evaluator.
[#] From Doppler Shift Attenuation Method (DSAM) measurements.

γ(^{83}Kr)

Eγ	Iγ[†]	E_i(level)	J_i^π	E_f	J_f^π	Mult.[‡]	δ[‡]	Comments
130.5		2640.5	(15/2$^-$)	2510.0	(13/2$^-$)			Eγ: only shown in authors Figure 1.
200.7	100 *6*	2841.2	(17/2$^-$)	2640.5	(15/2$^-$)	(D+Q)	+0.035 *10*	Mult.: R_{DCO}=0.49 *6* gated on 316γ.
316.1	96.0 *53*	3157.3	(19/2$^-$)	2841.2	(17/2$^-$)	(D+Q)	+0.008 *30*	Mult.: R_{DCO}=0.93 *7* gated on 201γ.
370.7	18.1 *33*	2841.2	(17/2$^-$)	2470.4	(17/2$^-$)			
445.0	74.6 *52*	3602.3	(21/2$^-$)	3157.3	(19/2$^-$)	(D+Q)	−0.042 *2*	Mult.: R_{DCO}=0.94 *7* gated on 316γ.
606.6	2 *1*	3157.3	(19/2$^-$)	2550.9	17/2$^+$			
615.1	42.9 *75*	4217.4	(23/2$^-$)	3602.3	(21/2$^-$)	(D+Q)	−0.21 *19*	Mult.: R_{DCO}=1.19 *14* gated on 316γ.
651.0	23.2 *51*	4868.4	(25/2$^-$)	4217.4	(23/2$^-$)	(D+Q)		Mult.: R_{DCO}=1.2 *6* gated on 316γ.
687.2	8.3 *24*	3157.3	(19/2$^-$)	2470.4	(17/2$^-$)			
761.1	13.7 *36*	3602.3	(21/2$^-$)	2841.2	(17/2$^-$)			
771.0	13.8 *37*	5639.4	(27/2$^-$)	4868.4	(25/2$^-$)			
1060.1	11.6 *44*	4217.4	(23/2$^-$)	3157.3	(19/2$^-$)			
1266.1	35.8 *71*	4868.4	(25/2$^-$)	3602.3	(21/2$^-$)			

[†] Relative intensity normalized to Iγ(201γ)=100.
[‡] From R_{DCO} measurements defined as R_{DCO}=Iγ(144°) gated by γ at 98° / Iγ(98°) gated by γ at 144°.

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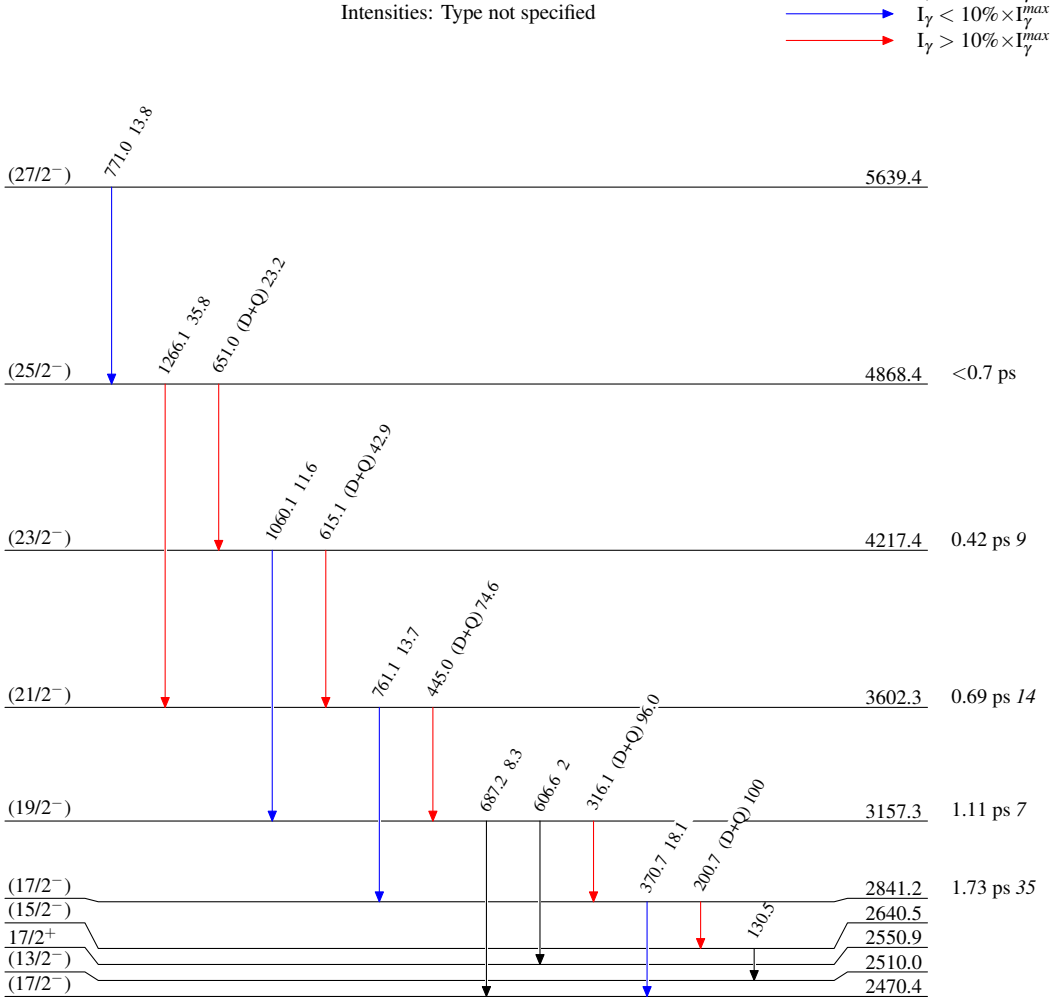
Level Scheme

Intensities: Type not specified



$^{83}_{36}Kr_{47}$