

⁸²Se(¹¹B,5n γ) 2012Xu07

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

E(¹¹B)=48 and 52 MeV. Measured E γ , I γ , $\gamma(\theta)$ and $\gamma\gamma$ coincidences using 12 Compton-suppressed HPGe detectors and two planar-type HPGe detectors.

⁸⁸Y Levels

E(level) [†]	J π [‡]	E(level) [†]	J π [‡]	E(level) [†]	J π [‡]	E(level) [†]	J π [‡]
0.0	4 ⁻	3283.9	11 ⁺	4877.9	(14 ⁻)	7846.6	(18 ⁻)
232.1	5 ⁻	3651.9	(11 ⁻)	4967.9	(12 ⁺)	7902.5	(18 ⁺)
674.5	8 ⁺	3726.8	(11 ⁺)	5264.3	(13 ⁺)	8336.7	(19 ⁺)
1461.6	(6 ⁻)	3917.4		5558.0	(16 ⁻)	8627.8	(19 ⁻)
1476.6	9 ⁺	3963.9	(12 ⁻)	6264.4	(15 ⁻)	8879.7	(20 ⁺)
2312.2	(9 ⁺)	4177.7	(14 ⁻)	6815.6	(16 ⁻)	9454.2	(21 ⁺)
2443.9	10 ⁺	4431.1	(14 ⁻)	7142.1	(17 ⁻)		
3036.3		4621.3	(12 ⁺)	7166.2	(16 ⁺)		
3256.2	(10 ⁻)	4823.7	(15 ⁻)	7596.9	(17 ⁺)		

[†] From a least-squares fit to E γ , by the evaluators.

[‡] As proposed by 2012Xu07; some assignments differ from those given in ⁷⁴Ge(¹⁸O,p3n γ), ⁷⁶Ge(¹⁸O,p5n γ), see Adopted Levels.

γ (⁸⁸Y)

ADO ratios of 28 γ rays are displayed in figure 1 of 2012Xu07. With a geometry of 45° and 90°, expected ADO ratios are: \approx 1.3 for stretched quadrupole and Δ J=0, dipole transitions, and \approx 0.7 for Δ J=1, dipole transitions. Three γ rays clearly show ADO ratios consistent with stretched Q character, 214 γ , 1769 γ , and 1807 γ . The remainder of the γ -rays have ADO ratios less than 1.

E γ	E _i (level)	J π _i	E _f	J π _f	Mult.	E γ	E _i (level)	J π _i	E _f	J π _f	Mult.
131.7	2443.9	10 ⁺	2312.2	(9 ⁺)		781.2	8627.8	(19 ⁻)	7846.6	(18 ⁻)	
213.8	4177.7	(14 ⁻)	3963.9	(12 ⁻)	Q	802.1	1476.6	9 ⁺	674.5	8 ⁺	
219.9	3256.2	(10 ⁻)	3036.3			812.3	3256.2	(10 ⁻)	2443.9	10 ⁺	
232.1	232.1	5 ⁻	0.0	4 ⁻		840.0	3283.9	11 ⁺	2443.9	10 ⁺	
253.4	4431.1	(14 ⁻)	4177.7	(14 ⁻)		894.5	4621.3	(12 ⁺)	3726.8	(11 ⁺)	
296.4	5264.3	(13 ⁺)	4967.9	(12 ⁺)		914.0	4877.9	(14 ⁻)	3963.9	(12 ⁻)	
305.6	7902.5	(18 ⁺)	7596.9	(17 ⁺)		944.0	3256.2	(10 ⁻)	2312.2	(9 ⁺)	
312.0	3963.9	(12 ⁻)	3651.9	(11 ⁻)		967.3	2443.9	10 ⁺	1476.6	9 ⁺	
326.5	7142.1	(17 ⁻)	6815.6	(16 ⁻)		1208.0	3651.9	(11 ⁻)	2443.9	10 ⁺	
395.7	3651.9	(11 ⁻)	3256.2	(10 ⁻)		1229.5	1461.6	(6 ⁻)	232.1	5 ⁻	
430.7	7596.9	(17 ⁺)	7166.2	(16 ⁺)		1241.1	4967.9	(12 ⁺)	3726.8	(11 ⁺)	
434.2	8336.7	(19 ⁺)	7902.5	(18 ⁺)		1282.9	3726.8	(11 ⁺)	2443.9	10 ⁺	
442.4	674.5	8 ⁺	232.1	5 ⁻		1559.7	3036.3		1476.6	9 ⁺	
467.2	4431.1	(14 ⁻)	3963.9	(12 ⁻)		1584.0	7142.1	(17 ⁻)	5558.0	(16 ⁻)	
543.0	8879.7	(20 ⁺)	8336.7	(19 ⁺)		1608.1	7166.2	(16 ⁺)	5558.0	(16 ⁻)	
551.2	6815.6	(16 ⁻)	6264.4	(15 ⁻)		1637.7	2312.2	(9 ⁺)	674.5	8 ⁺	
574.5	9454.2	(21 ⁺)	8879.7	(20 ⁺)		1769.4	2443.9	10 ⁺	674.5	8 ⁺	Q
643.0	5264.3	(13 ⁺)	4621.3	(12 ⁺)		1779.6	3256.2	(10 ⁻)	1476.6	9 ⁺	
646.0	4823.7	(15 ⁻)	4177.7	(14 ⁻)		1807.3	3283.9	11 ⁺	1476.6	9 ⁺	Q
661.2	3917.4		3256.2	(10 ⁻)		1991.8	6815.6	(16 ⁻)	4823.7	(15 ⁻)	
680.0	3963.9	(12 ⁻)	3283.9	11 ⁺		2038.8 [†]	7596.9	(17 ⁺)	5558.0	(16 ⁻)	
704.5	7846.6	(18 ⁻)	7142.1	(17 ⁻)		2086.6 [†]	6264.4	(15 ⁻)	4177.7	(14 ⁻)	
734.3	5558.0	(16 ⁻)	4823.7	(15 ⁻)							

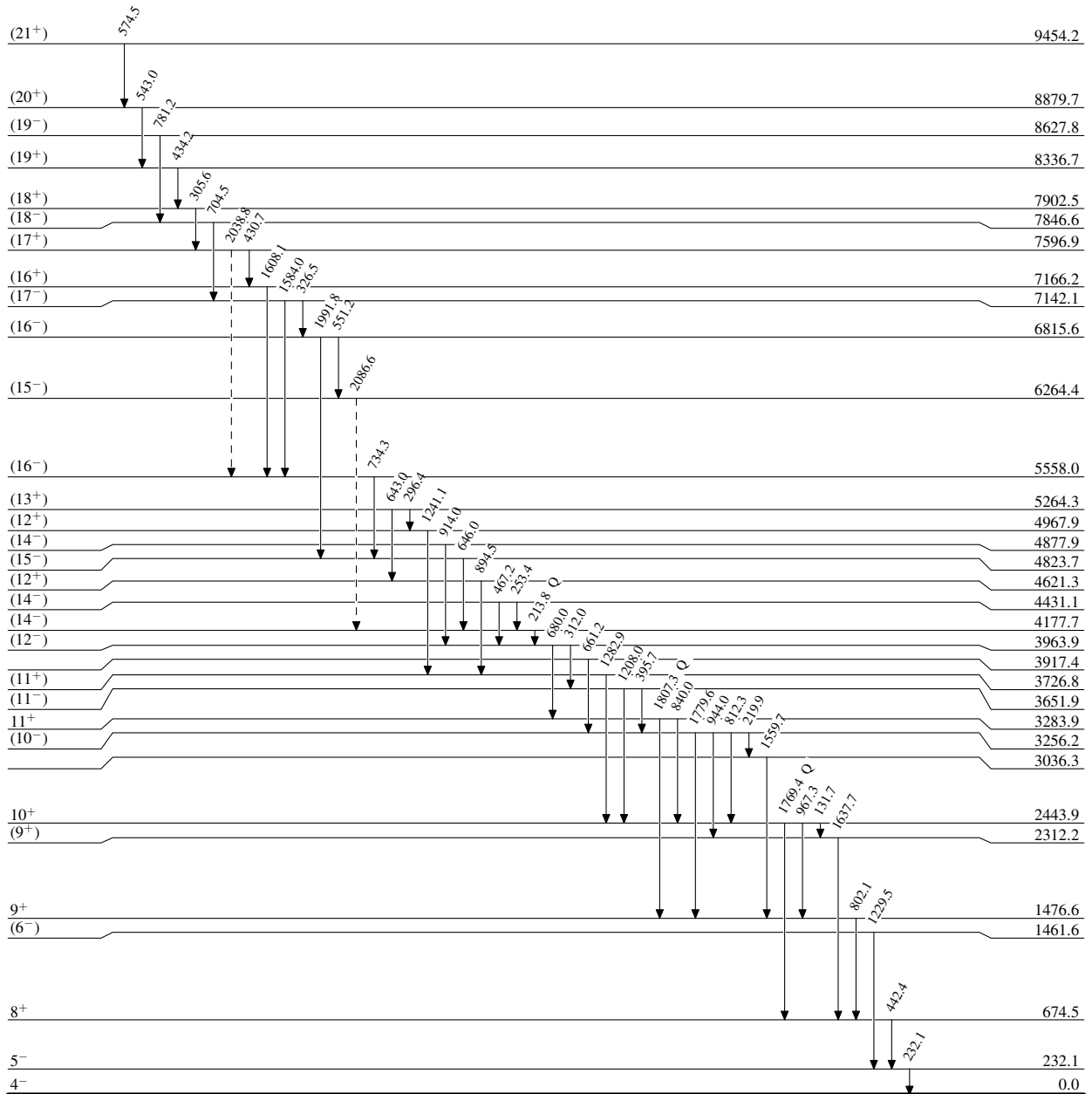
[†] Placement of transition in the level scheme is uncertain.

$^{82}\text{Se}(^{11}\text{B},5\text{n}\gamma)$ 2012Xu07

Legend

Level Scheme

-----> γ Decay (Uncertain)



$^{88}_{39}\text{Y}_{49}$