^{80}Se(^{30}Si,p4nγ) 2006De15

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	S. Lalkovski, J. Timar and Z. Elekes	NDS 161, 1 (2019)	1-Apr-2019

Facility: New Delhi's 15-UD National Science Centre pelletron; Beam: Beam: E(^{30}Si)=120 MeV; Target: 1 mg/cm^2 thick enriched to 99.7% in ^{80}Se, and evaporated on 10 mg/cm^2 Au backing; Detectors: 12 Compton suppressed Clover HPGe detectors; Measured Eγ, Iγ, γ-γ coinc., γ-γ(t); Deduced: τ from DSAM.

^{105}Ag Levels

E(level)†	Jπ‡	E(level)†	Jπ‡	$T_{1/2}$#	E(level)†	Jπ‡	$T_{1/2}$#
0	1/2−	3125.2& *18*	21/2+		5225.4&	31/2+	0.333 ps *78*
25.480 *20*	7/2+	3176.2[a] *20*	23/2−		5444.8[a] *22*	33/2−	0.194 ps *43*
53.150 *23*	9/2+	3510.8[a] *21*	25/2−	0.354 ps *74*	5698.6&	33/2+	0.194 ps *36*
917.2 *10*	13/2+	3927.9[a] *21*	27/2−	0.340 ps *79*	6112.8[a] *23*	35/2−	
1681.2 *15*	15/2+	4158.1@	25/2+		6160.5&	35/2+	0.492 ps *81*
1978.2 *15*	17/2+	4361.7[a] *22*	29/2−	0.319 ps *76*	6689.5&	37/2+	
2596.2[a] *18*	17/2−	4461.1&	27/2+		7218.5&	39/2+	
2751.4[a] *19*	19/2−	4839.1&	29/2+	0.347 ps *73*			
2935.9[a] *19*	21/2−	4931.7[a] *22*	31/2−	0.263 ps *46*			

† From a least-squares fit to Eγ assuming Δ Eγ=1.0 keV.
‡ From the Adopted Levels.
# From DSAM in 2006De15.
@ Level energy underestimated by 1033 keV in 2006De15. Here corrected by the evaluators.
& Band(A): Magnetic dipole rotational band based on 21/2+. configuration=$\pi g_{9/2}\otimes\nu h^2_{11/2}$.
[a] Band(B): Magnetic dipole rotational band based on 17/2−. configuration=$\pi g_{9/2}\otimes\nu h_{11/2}\otimes\nu(g_{7/2}/d_{5/2})$.

γ(^{105}Ag)

Eγ†	E$_i$(level)	J$^\pi_i$	E$_f$	J$^\pi_f$	Eγ†	E$_i$(level)	J$^\pi_i$	E$_f$	J$^\pi_f$
25.48‡ *2*	25.480	7/2+	0	1/2−	575.0	3510.8	25/2−	2935.9	21/2−
27.67‡ *1*	53.150	9/2+	25.480	7/2+	668	6112.8	35/2−	5444.8	33/2−
155	2751.4	19/2−	2596.2	17/2−	681.0	4839.1	29/2+	4158.1	25/2+
184	2935.9	21/2−	2751.4	19/2−	752.0	3927.9	27/2−	3176.2	23/2−
240	3176.2	23/2−	2935.9	21/2−	764	1681.2	15/2+	917.2	13/2+
303	4461.1	27/2+	4158.1	25/2+	764.0	5225.4	31/2+	4461.1	27/2+
334.1	3510.8	25/2−	3176.2	23/2−	851.0	4361.7	29/2−	3510.8	25/2−
340	2935.9	21/2−	2596.2	17/2−	859.0	5698.6	33/2+	4839.1	29/2+
377.8	4839.1	29/2+	4461.1	27/2+	864	917.2	13/2+	53.150	9/2+
385.7	5225.4	31/2+	4839.1	29/2+	915	2596.2	17/2−	1681.2	15/2+
416.8	3927.9	27/2−	3510.8	25/2−	935.0	6160.5	35/2+	5225.4	31/2+
425	3176.2	23/2−	2751.4	19/2−	991	6689.5	37/2+	5698.6	33/2+
433.5	4361.7	29/2−	3927.9	27/2−	1004.0	4931.7	31/2−	3927.9	27/2−
461.5	6160.5	35/2+	5698.6	33/2+	1058	7218.5	39/2+	6160.5	35/2+
473.2	5698.6	33/2+	5225.4	31/2+	1061	1978.2	17/2+	917.2	13/2+
513.3	5444.8	33/2−	4931.7	31/2−	1083.0	5444.8	33/2−	4361.7	29/2−
529#	6689.5	37/2+	6160.5	35/2+	1147	3125.2	21/2+	1978.2	17/2+
529#	7218.5	39/2+	6689.5	37/2+	1181	6112.8	35/2−	4931.7	31/2−
569.8	4931.7	31/2−	4361.7	29/2−					

Continued on next page (footnotes at end of table)

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$\gamma(^{105}Ag)$ (continued)

† From 2006De15, unless otherwise noted.
‡ From the adopted gammas.
# Multiply placed.

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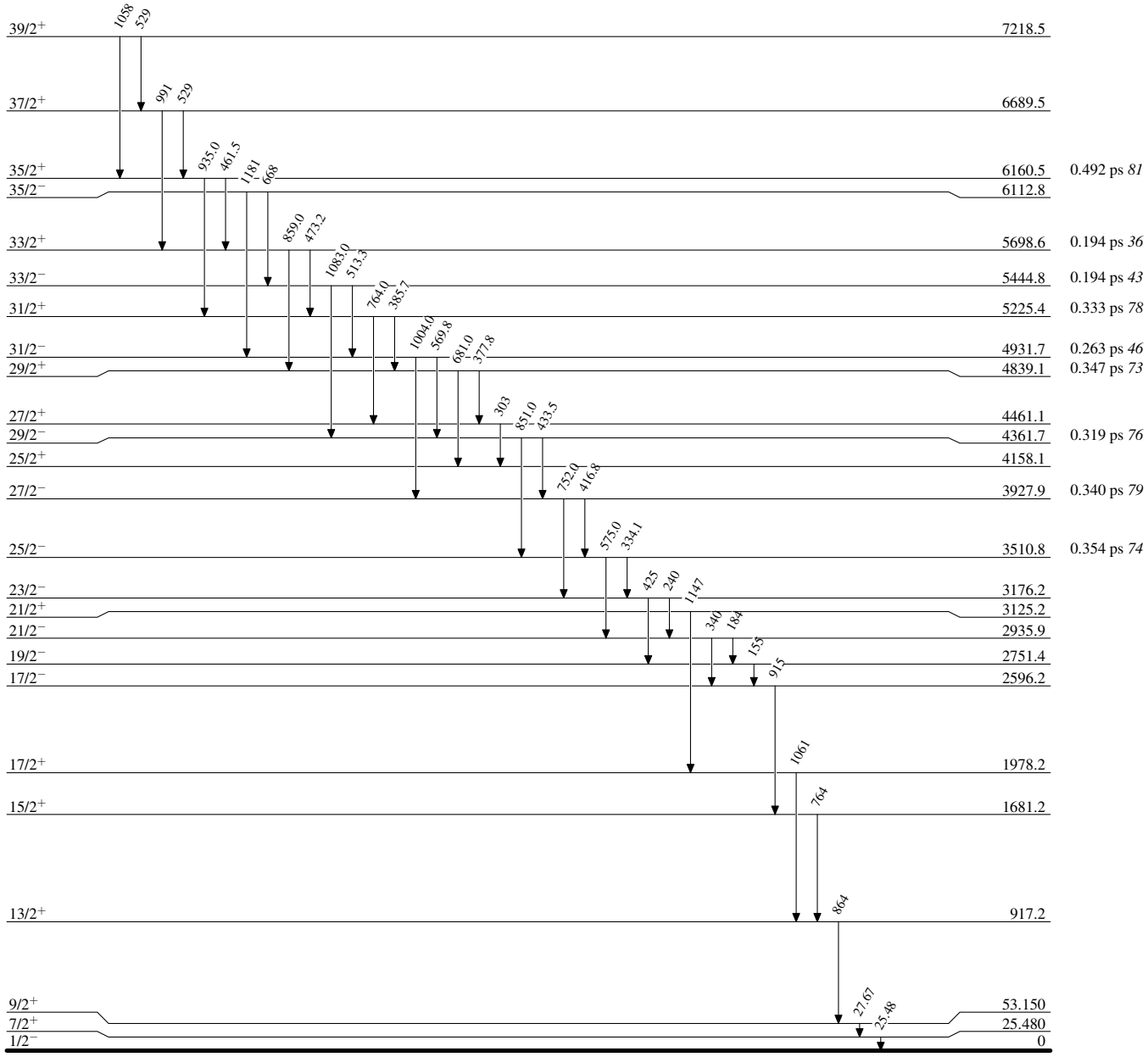
Level Scheme



$^{105}_{47}Ag_{58}$

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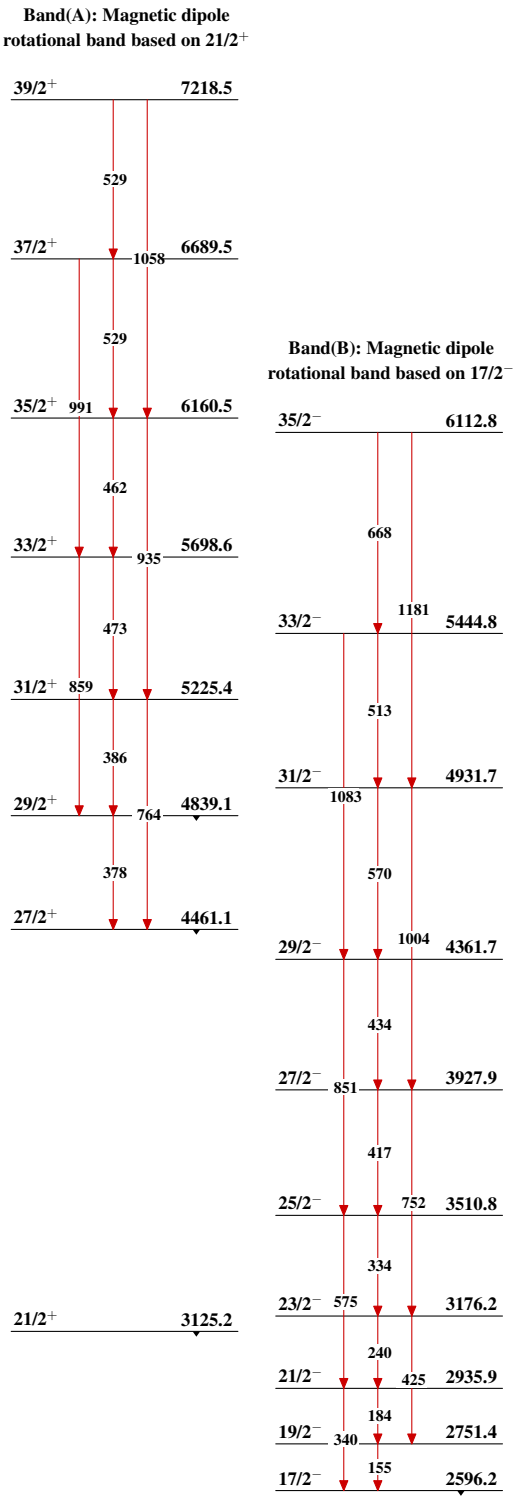

$^{105}_{47}Ag_{58}$