

⁸²Se(16O,6nγ) 2005Fu01

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	Coral M. Baglin	NDS 113, 2187 (2012)	15-Sep-2012

E=100 MeV; pulsed beam (<2 ns pulse width, 83 ns repetition rate); 90% isotopically-enriched ⁸²Se target; two BGO Compton-suppressed and one unsuppressed clover-type Ge detectors, two co-axial Ge and one LEPS Ge detectors; two clover-type Ge detectors at 90° with respect to beam axis served as a polarimeter for linear polarization measurement; measured E_γ, I_γ, γγ coin (200 ns prompt gate width), γ(t), γγ(t), γ(θ), linear polarization, delayed γγ coin to search for relatively long-lived isomers, lifetime from centroid shift. ⁹²Mo data obtained As a by-product of authors' study of ⁹³Mo; it includes only E_γ, I_γ, γγ coin and one lifetime datum.

⁹²Mo Levels

E(level) [†]	Jπ [‡]	T _{1/2}	Comments
0.0 [#]	0 ⁺		
1509.8 [#]	2 ⁺		
2282.6 [#]	4 ⁺		
2526.9 [@]	5 ⁻		
2611.7 [#]	6 ⁺		
2758.9 [#]	8 ⁺		
3624.0 [@]	7 ⁻		
4250.4 [@]	9 ⁻		
4484.9 [@]	11 ⁻	8.2 ns 8	T _{1/2} : from centroid shift (2005Fu01).
5120.0	10 ⁺		
5859.6	12 ⁺		
6549.5 ^{&}	12 ⁻		
6659.8 ^{&}	13 ⁻		
7309.5 ^{&}	14 ⁻		
8384 ^{&}	15 ⁻		π=(+) In Adopted Levels.
8920 ^{&}	16 ⁻		π=(+) In Adopted Levels.
9478 ^{&}	17 ⁻		π=(+) In Adopted Levels.

[†] From least-squares fit to E_γ assuming equal weight for each datum.

[‡] Authors' suggested values; compatible with adopted values, except As noted. however, note that adopted J is tentative for levels with E>5 MeV.

[#] Band(A): π=+ sequence based on g.s..

[@] Band(B): sequence based on 5⁻.

[&] Band(C): sequence based on 12⁻.

γ(⁹²Mo)

E _γ	I _γ	E _i (level)	J _i ^π	E _f	J _f ^π	E _γ	I _γ	E _i (level)	J _i ^π	E _f	J _f ^π
84.6		2611.7	6 ⁺	2526.9	5 ⁻	626.5	31 5	4250.4	9 ⁻	3624.0	7 ⁻
110.4	11 3	6659.8	13 ⁻	6549.5	12 ⁻	649.7	37 5	7309.5	14 ⁻	6659.8	13 ⁻
147.1	45 6	2758.9	8 ⁺	2611.7	6 ⁺	739.4	14 3	5859.6	12 ⁺	5120.0	10 ⁺
234.7	26 5	4484.9	11 ⁻	4250.4	9 ⁻	772.8	96 5	2282.6	4 ⁺	1509.8	2 ⁺
244.2	57 6	2526.9	5 ⁻	2282.6	4 ⁺	800.1	13 3	6659.8	13 ⁻	5859.6	12 ⁺
329.1	55 5	2611.7	6 ⁺	2282.6	4 ⁺	1074.5	18 3	8384	15 ⁻	7309.5	14 ⁻
536.4	10 3	8920	16 ⁻	8384	15 ⁻	1097.3	33 6	3624.0	7 ⁻	2526.9	5 ⁻
557.1	13 3	9478	17 ⁻	8920	16 ⁻	1374.7	5 2	5859.6	12 ⁺	4484.9	11 ⁻

Continued on next page (footnotes at end of table)

 ${}^{82}\text{Se}({}^{16}\text{O},6n\gamma)$ **2005Fu01** (continued) $\gamma({}^{92}\text{Mo})$ (continued)




E_γ	I_γ	$E_i(\text{level})$	J_i^π	E_f	J_f^π
1509.8	100 5	1509.8	2^+	0.0	0^+
2064.7	37 5	6549.5	12^-	4484.9	11^-
2360.9	16 3	5120.0	10^+	2758.9	8^+

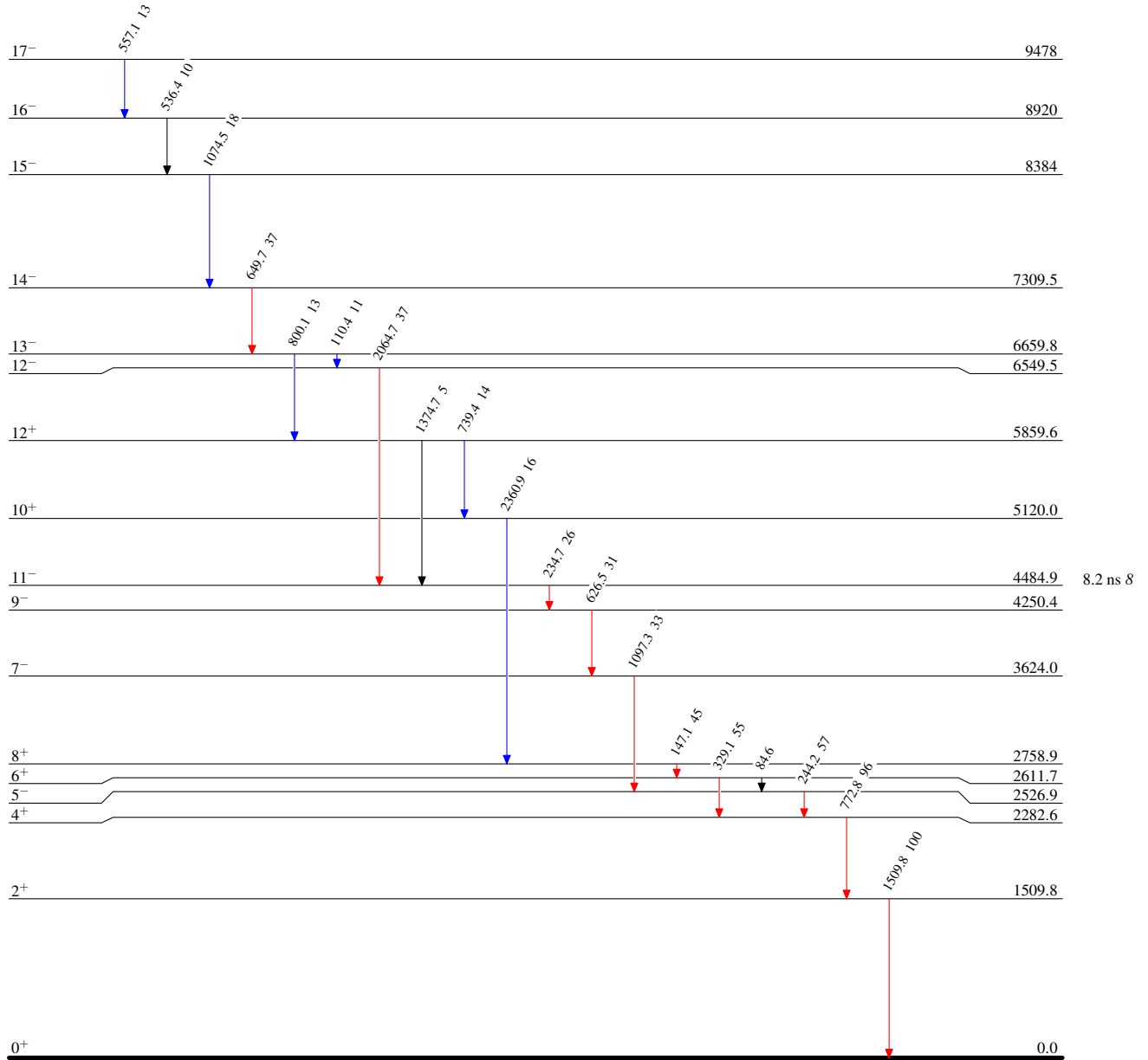
$^{82}\text{Se}(^{16}\text{O},6n\gamma)$ 2005Fu01

Level Scheme

Intensities: Relative I_γ

Legend

-  $I_\gamma < 2\% \times I_\gamma^{max}$
-  $I_\gamma < 10\% \times I_\gamma^{max}$
-  $I_\gamma > 10\% \times I_\gamma^{max}$

 $^{92}_{42}\text{Mo}_{50}$

$^{82}\text{Se}(^{16}\text{O},6n\gamma)$ 2005Fu01