

$^{73}\text{Ge}(n,\gamma)$ E=332-367 eV 1974Ch18

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	Balraj Singh, Ameenah R. Farhan		NDS 107, 1923 (2006)	30-Apr-2006

See $^{73}\text{Ge}(n,\gamma)$ E=102 also.

 ^{74}Ge Levels

E(level) [†]	J ^π	Comments
0.0		
1464.3 5		
1696.7 4		
2165.8 5		
2537.8 6		
2830.7 5		
2936.2 5		
2974.7 [‡] 5		
3084.1 6		
3105.6 4		
3272.5 [‡] 5		
3358.8 [‡] 11		
3481.2 [‡] 6		
3501.7 [‡] 10		
3654.4 [‡] 11		
3699.0 6		
3774.8 [‡] 10		
3836.7 [‡] 5		
3957.5 [‡] 7		
4030.2 [‡] 10		
4206.1 [‡] 8		
4236.1 [‡] 10		
(S(n)+332-367)	(4 ⁺)	E(level): S(n)=10196.22 6 (2003Au03), E(n)=332-367 eV (1974Ch18). J ^π : from 1974Ch18.

[†] Based on S(n)=10196.31 7 from (n,γ) E=thermal and E_γ's of 1974Ch18. Values are systematically lower by ≈2 keV compared to values from (n,γ) E=thermal (1985HoZQ,1991Is01).

[‡] Level included by evaluators on the basis of (n,γ) E=thermal.

γ(^{74}Ge)

E _γ [†]	I _γ [#]	E _i (level)	J _i ^π	E _f	E _γ [†]	I _γ [#]	E _i (level)	J _i ^π	E _f
^x 5158.7 3	0.7 3				^x 6040.7 [‡] 6	0.43 23			
^x 5580.2 6	0.47 21				^x 6156.3 [‡] 10	0.23 27			
^x 5594.2 [‡] 3	0.90 12				6166.2 [‡] 9	0.9 4	(S(n)+332-367)	(4 ⁺)	4030.2
^x 5673.0 7	0.35 6				6238.8 [‡] 6	0.8 4	(S(n)+332-367)	(4 ⁺)	3957.5
^x 5692.8 5	0.3 3				^x 6268.9 [‡] 6	0.7 4			
^x 5780.7 5	0.43 35				6359.6 [‡] 4	0.9 4	(S(n)+332-367)	(4 ⁺)	3836.7
^x 5852.6 [‡] 3	1.0 2				6421.6 [‡] 10	0.3 3	(S(n)+332-367)	(4 ⁺)	3774.8
^x 5899.0 4	0.6 4				6497.4 5	0.4 3	(S(n)+332-367)	(4 ⁺)	3699.0
5960.3 [‡] 9	0.23 20	(S(n)+332-367)	(4 ⁺)	4236.1	6542.0 [‡] 9	0.7 4	(S(n)+332-367)	(4 ⁺)	3654.4
5990.3 [‡] 7	0.47 45	(S(n)+332-367)	(4 ⁺)	4206.1	6694.7 [‡] 10	0.7 5	(S(n)+332-367)	(4 ⁺)	3501.7

Continued on next page (footnotes at end of table)

$^{73}\text{Ge}(n,\gamma)$ E=332-367 eV **1974Ch18** (continued) $\gamma(^{74}\text{Ge})$ (continued)

E_γ [†]	I_γ [#]	$E_i(\text{level})$	J_i^π	E_f	E_γ [†]	I_γ [#]	$E_i(\text{level})$	J_i^π	E_f		
6715.2 [‡]	5	0.5 5	(S(n)+332-367)	(4 ⁺)	3481.2	7260.2 [‡]	3	2.1 7	(S(n)+332-367)	(4 ⁺)	2936.2
6837.6 [‡]	12	0.4 3	(S(n)+332-367)	(4 ⁺)	3358.8	7365.7 [‡]	3	2.5 8	(S(n)+332-367)	(4 ⁺)	2830.7
6923.9 [‡]	4	0.6 3	(S(n)+332-367)	(4 ⁺)	3272.5	7658.6 [‡]	4	0.4 2	(S(n)+332-367)	(4 ⁺)	2537.8
7090.8 [‡]	2	0.7 6	(S(n)+332-367)	(4 ⁺)	3105.6	8030.6 [‡]	3	0.7 6	(S(n)+332-367)	(4 ⁺)	2165.8
7112.3 [‡]	5	1.0 4	(S(n)+332-367)	(4 ⁺)	3084.1	8499.7 [‡]	2	0.35 18	(S(n)+332-367)	(4 ⁺)	1696.7
7221.7 [‡]	3	2.0 7	(S(n)+332-367)	(4 ⁺)	2974.7	8732.1 [‡]	3	1.6 3	(S(n)+332-367)	(4 ⁺)	1464.3

[†] Energies are systematically higher by 2 to 3 keV compared to values from (n, γ) E=thermal (**1985HoZQ**).

[‡] γ seen in (n, γ) E=thermal also.

[#] Intensity per 100 neutron captures.

^x γ ray not placed in level scheme.

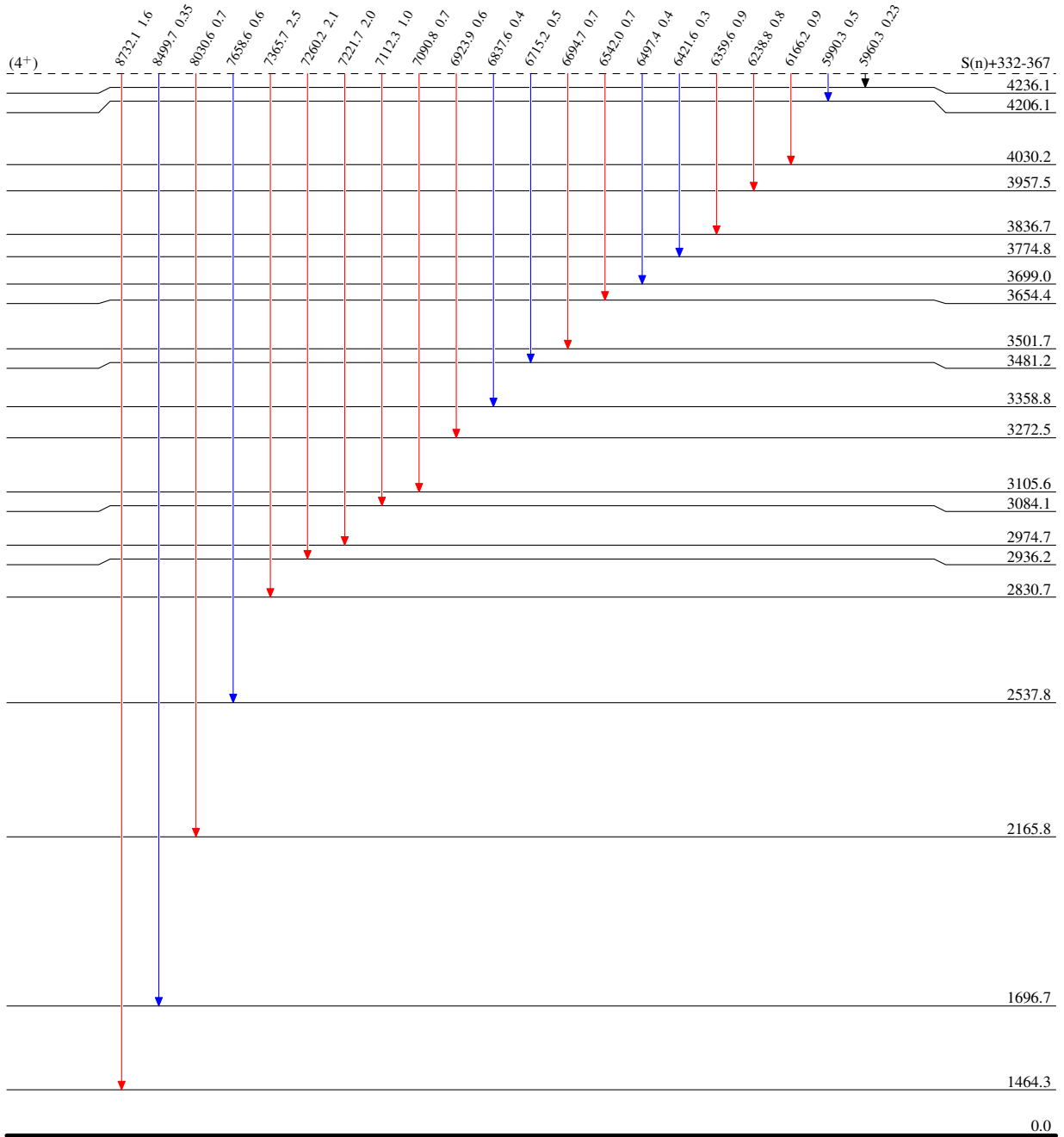
$^{73}\text{Ge}(n,\gamma) E=332-367 \text{ eV}$ 1974Ch18

Level Scheme

Intensities: Per 100 N-captures

Legend

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

 $^{74}_{32}\text{Ge}_{42}$