

$^{73}\text{Ge}(n,\gamma)$ E=290-318 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 eV, also.

^{74}Ge Levels

E(level) [†]	J ^π	Comments
0.0		
1202.7 9		
1464.3 7		
2537.8 6		
2694.9 6		
2935.2 5		
2974.7 [‡] 5		
3035.8 [‡] 8		
3060.2 9		
3084.1 6		
3143.2 [‡] 7		
3272.5 [‡] 5		
3392.6 [‡] 9		
3515.7 [‡] 9		
3699.0 6		
3836.7 [‡] 5		
4206.1 [‡] 8		
(S(n)+290-318)	(4 ⁺)	E(level): S(n)=10196.22 6 (2003Au03), E(n)=290-318 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 about 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 4772.9 [‡] 16	0.50 43				6680.7 [‡] 9	0.8 7	(S(n)+290-318)	(4 ⁺)	3515.7
^x 4790.7 [‡] 7	0.83 43				6803.8 [‡] 9	0.5 5	(S(n)+290-318)	(4 ⁺)	3392.6
^x 4829.0 [‡] 5	0.63 27				6923.9 [‡] 4	1.9 8	(S(n)+290-318)	(4 ⁺)	3272.5
^x 4893.1 5	0.50 18				7053.2 6	1.1 4	(S(n)+290-318)	(4 ⁺)	3143.2
^x 4902.7 6	0.41 18				7136.2 9	0.7 4	(S(n)+290-318)	(4 ⁺)	3060.2
^x 5114.5 7	0.59 36				7146.1 [‡] 9	0.45 36	(S(n)+290-318)	(4 ⁺)	
^x 5158.7 3	0.68 50				7221.7 [‡] 3	2.5 7	(S(n)+290-318)	(4 ⁺)	2974.7
^x 5663.8 3	0.77 74				7260.2 [‡] 3	1.5 7	(S(n)+290-318)	(4 ⁺)	2935.2
5990.3 [‡] 7	0.63 41	(S(n)+290-318)	(4 ⁺)	4206.1	7365.7 [‡] 3	1.0 9	(S(n)+290-318)	(4 ⁺)	
^x 6046.7 [‡] 6	0.63 63				7523.8 [‡] 10	1.0 8	(S(n)+290-318)	(4 ⁺)	
^x 6268.9 [‡] 6	0.83 81				7658.6 [‡] 4	2.3 9	(S(n)+290-318)	(4 ⁺)	2537.8
6359.6 [‡] 4	0.7 3	(S(n)+290-318)	(4 ⁺)	3836.7	8732.1 [‡] 3	0.70 36	(S(n)+290-318)	(4 ⁺)	1464.3
6479.4 5	3.3 18	(S(n)+290-318)	(4 ⁺)		8993.7 [‡] 8	0.36 18	(S(n)+290-318)	(4 ⁺)	1202.7

Continued on next page (footnotes at end of table)

$^{73}\text{Ge}(n,\gamma)$ E=290-318 eV 1974Ch18 (continued) $\gamma(^{74}\text{Ge})$ (continued)

† 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.

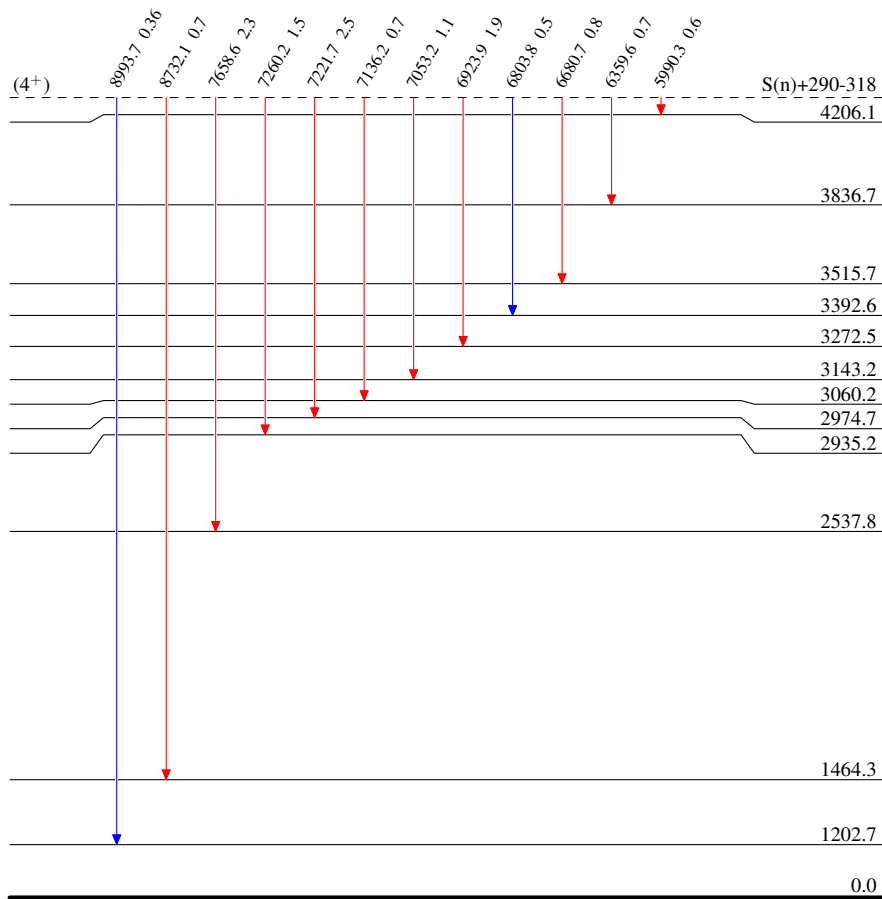
^x γ ray not placed in level scheme.

 $^{73}\text{Ge}(n,\gamma)$ E=290-318 eV 1974Ch18Level Scheme

Intensities: Per 100 N-captures

Legend

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

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