

⁷³Ge(n,γ) E=380-426 eV 1974Ch18

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

See ⁷³Ge(n,γ) E=102 eV, also.

⁷⁴Ge Levels

E(level) [†]	J ^π	Comments
0.0		
592.9 6		
1464.0 3		
2165.5 3		
2537.5 4		
2830.4 3		
2935.9 3		
3035.5 [‡] 7		
3059.9 9		
3083.8 5		
3105.3 2		
3372.4 13		
3392.3 [‡] 9		
3423.8 [‡] 6		
3501.4 [‡] 10		
(S(n)+380-426)	(4 ⁺)	E(level): S(n)=10196.22 6 (2003Au03), E(n)=380-426 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 those in (n,γ) E=thermal (1985HoZQ,1991Is01).

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

γ(⁷⁴Ge)

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	0.9 6				6772.3 [‡] 6	0.4 2	(S(n)+380-426)	(4 ⁺)	3423.8
^x 4807.8 8	0.9 5				6803.8 [‡] 9	0.9 4	(S(n)+380-426)	(4 ⁺)	3392.3
^x 5158.7 3	1.1 4				6823.7 [‡] 13	0.6 5	(S(n)+380-426)	(4 ⁺)	3372.4
^x 5437.7 6	1.4 6				7090.8 [‡] 2	0.9 3	(S(n)+380-426)	(4 ⁺)	3105.3
^x 5560.9 [‡] 4	0.9 6				7112.3 [‡] 5	0.8 6	(S(n)+380-426)	(4 ⁺)	3083.8
^x 5580.2 6	0.8 6				7136.2 9	0.3 3	(S(n)+380-426)	(4 ⁺)	3059.9
^x 5594.2 [‡] 3	0.5 5				7160.6 [‡] 7	0.5 4	(S(n)+380-426)	(4 ⁺)	3035.5
^x 5635.6 [‡] 3	0.4 3				7260.2 [‡] 3	1.3 4	(S(n)+380-426)	(4 ⁺)	2935.9
^x 5746.2 [‡] 8	0.4 2				7365.7 [‡] 3	3.3 14	(S(n)+380-426)	(4 ⁺)	2830.4
^x 5830.2 [‡] 6	0.8 4				7658.6 [‡] 4	2.9 11	(S(n)+380-426)	(4 ⁺)	2537.5
^x 5852.6 [‡] 3	0.6 3				^x 7811.6 7	0.34 28			
^x 5878.4 [‡] 8	0.4 3				^x 8011.4 7	0.6 4			
^x 6026.5 [‡] 5	0.6 2				8030.6 [‡] 3	0.8 4	(S(n)+380-426)	(4 ⁺)	2165.5
^x 6111.9 3	1.0 9				^x 8144.9 7	0.4 3			
^x 6129.5 7	0.9 8				8732.1 [‡] 3	0.5 5	(S(n)+380-426)	(4 ⁺)	1464.0
^x 6469.3 [‡] 9	0.9 9				9603.2 6	0.6 4	(S(n)+380-426)	(4 ⁺)	592.9
6694.7 [‡] 10	0.4 4	(S(n)+380-426)	(4 ⁺)	3501.4					

Continued on next page (footnotes at end of table)

$^{73}\text{Ge}(n,\gamma)$ E=380-426 eV **1974Ch18** (continued)

$\gamma(^{74}\text{Ge})$ (continued)

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

‡ γ seen in (n, γ) E=thermal also.

Intensity per 100 neutron captures.

^x γ ray not placed in level scheme.

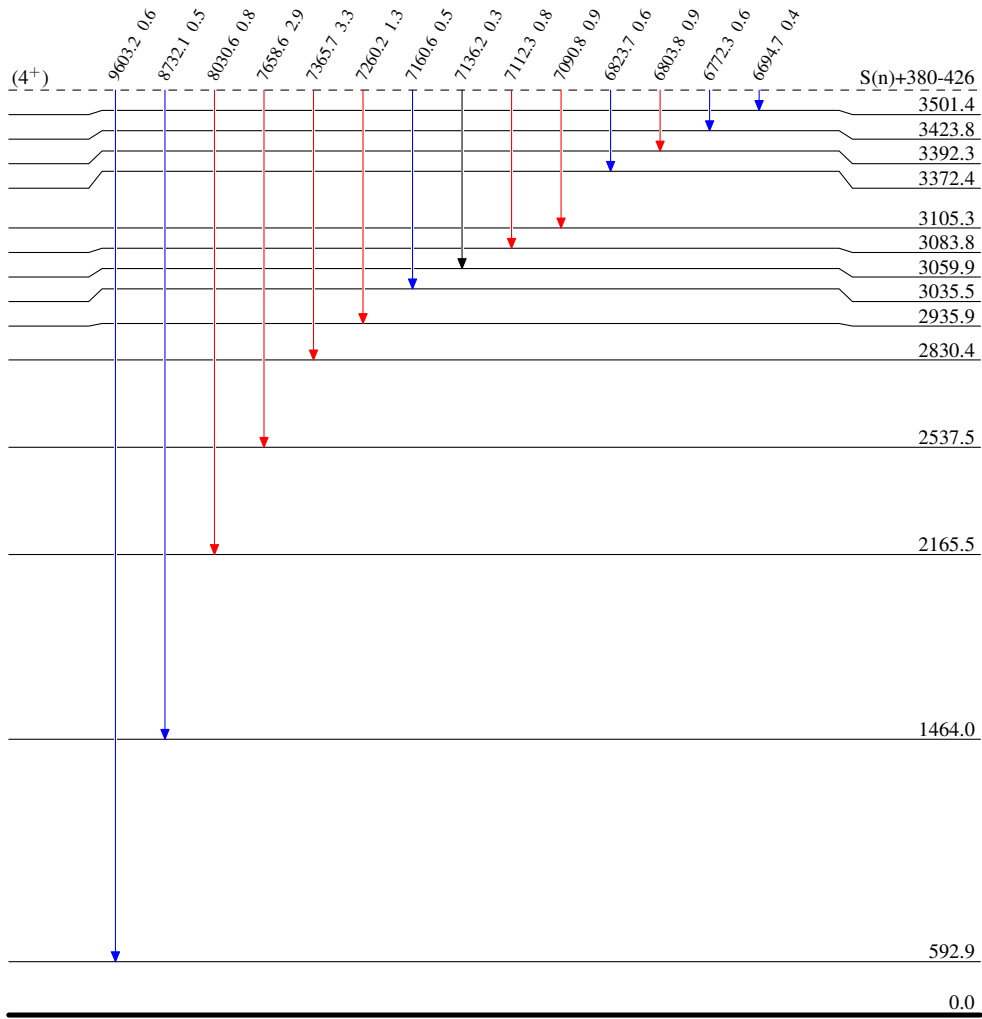
$^{73}\text{Ge}(n,\gamma) E=380-426 \text{ eV}$ 1974Ch18

Level Scheme

Intensities: Per 100 N-captures

Legend

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

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