

$^{73}\text{Ge}(\text{n},\gamma)$ E=224 eV [1974Ch18](#)

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

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

 ^{74}Ge Levels

E(level) [†]	J ^π	Comments
0.0		
593.2 7		
1464.3 5		
1696.7 4		
2165.8 5		
2199.7 13		
2569.6 6		
2672.6 [‡] 11		
2694.9 6		
2830.7 5		
2936.2 5		
3035.8 [‡] 8		
3084.1 6		
3105.8 4		
3143.2 [‡] 7		
3272.5 [‡] 5		
3372.7 13		
3412.2 [‡] 6		
3424.1 [‡] 7		
3481.2 [‡] 6		
3515.8 [‡] 9		
3708.9 5		
3793.6 [‡] 15		
3836.7 [‡] 5		
3957.5 [‡] 7		
3996.9 [‡] 5		
(S(n)+224)	4 ⁺	E(level): S(n)=10196.22 6 (2003Au03), E(n)=224 eV (1968Ma27). 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 from (n,γ) E=thermal ([1985HoZQ,1991Is01](#)).

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

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

E _γ [†]	I _γ [#]	E _i (level)	E _γ [†]	I _γ [#]	E _i (level)
^x 5474.6 [‡] 6	0.20 23		^x 5780.7 5	0.25 15	
^x 5580.2 6	0.26 23		^x 5834.2 [‡] 6	0.33 28	
^x 5594.2 [‡] 3	0.43 23		^x 5852.6 [‡] 3	0.18 15	
^x 5635.6 [‡] 3	0.59 36		^x 5878.4 [‡] 8	0.46 31	
^x 5663.8 3	0.40 21		^x 5899.0 4	0.61 31	
^x 5692.8 5	0.25 26		^x 6026.5 5	0.28 28	

Continued on next page (footnotes at end of table)

$^{73}\text{Ge}(n,\gamma) E=224 \text{ eV}$ **1974Ch18 (continued)** $\gamma(^{74}\text{Ge})$ (continued)

$E_\gamma^\dagger$	$I_\gamma^\#$	$E_i(\text{level})$	J_i^π	E_f	$E_\gamma^\dagger$	$I_\gamma^\#$	$E_i(\text{level})$	J_i^π
$^x6111.9 \ 3$	0.58 20				7090.8 ‡ 2	0.53 50	(S(n)+224)	4 ⁺
$^x6180.3 \ 13$	0.18 15				7112.3 ‡ 5	0.6 5	(S(n)+224)	4 ⁺
6199.4 ‡ 4	0.51 17	(S(n)+224)	4 ⁺		7160.6 ‡ 7	1.4 5	(S(n)+224)	4 ⁺
6238.8 ‡ 6	0.35 33	(S(n)+224)	4 ⁺		7260.2 ‡ 3	1.3 3	(S(n)+224)	4 ⁺
$^x6342.0 \ 11$	0.56 33				7365.7 ‡ 3	0.43 26	(S(n)+224)	4 ⁺
6359.6 ‡ 4	0.73 30	(S(n)+224)	4 ⁺		7501.5 ‡ 4	0.68 38	(S(n)+224)	4 ⁺
6402.8 15	0.51 30	(S(n)+224)	4 ⁺		7523.8 ‡ 10	0.07 8	(S(n)+224)	4 ⁺
6487.5 ‡ 3	0.46 31	(S(n)+224)	4 ⁺		7626.8 ‡ 4	0.59 30	(S(n)+224)	4 ⁺
$^x6516.3 \ 10$	0.45 35				$^x7811.6 \ 7$	0.35 20		
$^x6611.2 \ 3$	0.41 21				$^x7844.6 \ 7$	0.17 17		
6680.7 ‡ 9	1.7 10	(S(n)+224)	4 ⁺		7996.7 ‡ 12	0.21 13	(S(n)+224)	4 ⁺
6715.2 ‡ 5	0.53 33	(S(n)+224)	4 ⁺	3708.9	$^x8011.4 \ 7$	0.18 12		
6772.3 ‡ 6	0.46 23	(S(n)+224)	4 ⁺		8030.6 ‡ 3	0.23 13	(S(n)+224)	4 ⁺
6784.2 ‡ 5	0.48 33	(S(n)+224)	4 ⁺		8499.7 ‡ 2	0.41 25	(S(n)+224)	4 ⁺
6823.7 ‡ 13	0.33 26	(S(n)+224)	4 ⁺		8732.1 ‡ 3	0.31 13	(S(n)+224)	4 ⁺
6923.9 ‡ 4	0.58 17	(S(n)+224)	4 ⁺		9603.2 ‡ 6	0.15 15	(S(n)+224)	4 ⁺
7053.2 6	0.43 23	(S(n)+224)	4 ⁺	3372.7				

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

[‡] γ seen in (n, γ) thermal also.

[#] Intensity per 100 neutron captures.

^x γ ray not placed in level scheme.

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Level Scheme

Intensities: Per 100 N-captures

Legend

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

