

${}^6\text{Li}(n,\gamma)$ E=thermal 1985Ko47

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	Hu, Tilley, Kelley, Godwin et al.	NP A708,3 (2002)	23-Aug-2001

Target $J^\pi=1^+$.

1968Sp01: ${}^6\text{Li}(n,\gamma)$ E=thermal, measured E_γ , I_γ . Deduced Q. ${}^7\text{Li}$ deduced levels, branchings.

1970Sp02: ${}^6\text{Li}(n,\gamma)$ E=thermal, measured E_γ , I_γ . Deduced Q.

1972Op01: ${}^6\text{Li}(n,\gamma)$ E=thermal, measured E_γ , I_γ .

1978GI01: ${}^6\text{Li}(\text{pol. } n,\gamma)$ E=slow, measured spin-dependent σ .

1997No04: ${}^6\text{Li}(n,\gamma)$ E \leq 2 MeV, analyzed reaction rates.

Threshold Q = 7251.02 9 keV (1985Ko47).

1985Ko47: measured E_γ , I_γ ; deduced Q.

Evaluated S(n)=7249.96 keV 9 (1995Au04).

 ${}^7\text{Li}$ Levels

E(level) [†]	J^π	$T_{1/2}$ [‡]	Comments
0.0	$3/2^-$ [‡]	stable	
477.612 3 (7249.96 9)	$1/2^-$ [‡] $1/2^+, 3/2^+$	73 fs 2	J^π : from s-wave neutron capture.

[†] From E_γ using least-squares fit to E_γ 's.

[‡] From 1996FiZY.

 $\gamma({}^7\text{Li})$

E_γ	I_γ # [@]	$E_i(\text{level})$	J_i^π	E_f	J_f^π	Mult. [†]
477.595 [†] 3	38 2	477.612	$1/2^-$	0.0	$3/2^-$	M1(+E2)
6768.81 [‡] 5	38 2	(7249.96)	$1/2^+, 3/2^+$	477.612	$1/2^-$	
7245.91 [‡] 5	62 2	(7249.96)	$1/2^+, 3/2^+$	0.0	$3/2^-$	

[†] From 1996FiZY.

[‡] From level-energy differences.

Intensities per 100 neutron captures from 1985Ko47.

@ Intensity per 100 neutron captures.

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Level Scheme

Intensities: I_γ per 100 neutron captures

Legend

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

