^{7}Li(n,γ) E=thermal 1991Ly01

History

Type	Author	Citation	Literature Cutoff Date
Update	J. H. Kelley, J. L. Godwin, C. G. Sheu	ENSDF	31-Mar-2004

Target $J^{\pi}=3/2^{-}$.
1991Ly01: measured Eγ, Iγ; deduced S(n).
1967Ra24: ^{7}Li(N,γ) E=thermal, measured E_{γ}. Deduced Q.
1999ZhZM: ^{7}Li(N,γ) E=thermal, compiled, evaluated prompt γ-ray data.
2002Re13: ^{7}Li(n,γ) E=thermal, compiled, analyzed prompt E_{γ}, I_{γ}.
σ=45.4 mb *30* (1991Ly01), other values σ=41 mb *12* (1961Ja19), σ=40 mb *8* (1959Im04), σ=44 mb *10* (Koltypin et AL., Sov. Phys. (DOKL.) 1956), σ=33 mb *5* (1947Hu06).
Evaluated S(n)=2032.62 keV 12 (2003AU02).

^{8}Li Levels

E(γ) not corrected for recoil.
E(level) from E(γ).

E(level)†	J$^{\pi}$	$T_{1/2}$‡	Comments
0.0	2^{+}‡	839.9 ms *9*	
980.8 *1*	1^{+}	8.2 fs *23*	
(2032.8 *2*)	1^{-},2^{-}		J$^{\pi}$: from s-wave neutron capture.

† From Eγ's using least-squares fit to data.
‡ From Adopted Levels.

γ(^{8}Li)

E_{γ}‡	I_{γ}#@	E_i(level)	J_i^{π}	E_f	J_f^{π}	Mult.†	Comments
980.7† *2*	10.6 *10*	980.8	1^{+}	0.0	2^{+}	M1	σ(n,γ)=4.82 mb 50 (1991LY01).
1052.0 *2*	10.6 *10*	(2032.8)	1^{-},2^{-}	980.8	1^{+}		σ(n,γ)=4.80 mb 50 (1991LY01).
2032.5 *3*	89.4 *10*	(2032.8)	1^{-},2^{-}	0.0	2^{+}		σ(n,γ)=40.56 mb 10 (1991LY01).

† From 1996FiZY.
‡ From 1991Ly01.
# Intensities per 100 neutron captures from 1991Ly01.
@ Intensity per 100 neutron captures.

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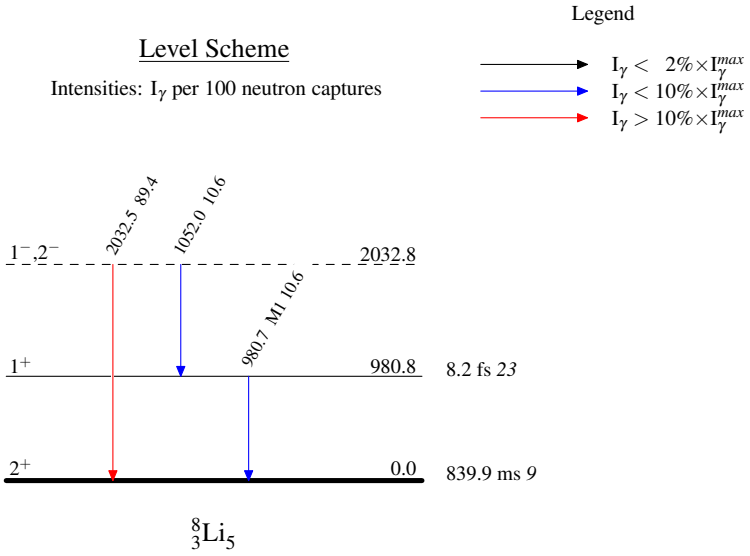
Level Scheme

Intensities: I_γ per 100 neutron captures



$^{8}_{3}Li_{5}$