^{13}C(n,γ) E=thermal 1982Mu14

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	Zhou Chunmei	ENSDF	22-Nov-1999

Target $J^{\pi}=1/2^{-}$.
1982Mu14: measured Eγ and Iγ, deduced S(n).
Evaluated S(n)=8176.44 keV *1* (1995Au04).

^{14}C Levels

E(level)†	Jπ‡	$T_{1/2}$‡	Comments
0.0	0^{+}	5730 y *40*	%β^{-}=100
6093.82 *20*	1^{-}	<7 fs	
6589.5 *3*	0^{+}	3.0 fs *4*	
6902.7 *3*	0^{-}	25 fs *3*	
(8176.44 *1*)	$0^{-},1^{-}$		Jπ: from s-wave neutron capture.

† From Eγ using least-squares fit to data.
‡ From 1996FiZY, except as noted.

γ(^{14}C)

Eγ†	Iγ#@	E_i(level)	J_i^{π}	E_f	J_f^{π}	Comments
495.4 *3*	8.0 *3*	6589.5	0^{+}	6093.82	1^{-}	
808.9 *2*	3.6 *3*	6902.7	0^{-}	6093.82	1^{-}	
1273.81‡ *17*	4.9 *10*	(8176.44)	$0^{-},1^{-}$	6902.7	0^{-}	Eγ=1273.9 *2* (1982Mu14).
1586.92‡ *18*	8.5 *5*	(8176.44)	$0^{-},1^{-}$	6589.5	0^{+}	Eγ=1586.8 *2* (1982Mu14).
2082.53‡ *18*	2.5 *5*	(8176.44)	$0^{-},1^{-}$	6093.82	1^{-}	Eγ=2082.6 *3* (1982Mu14).
6092.4 *2*	16.3 *8*	6093.82	1^{-}	0.0	0^{+}	
8174.0‡ *3*	84.0 *23*	(8176.44)	$0^{-},1^{-}$	0.0	0^{+}	Eγ=8173.92 (1982Mu14).

† From 1996FiZY, except as noted.
‡ From level energy differences.
# Intensities per 100 neutron captures from 1982Mu14.
@ Intensity per 100 neutron captures.

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Level Scheme

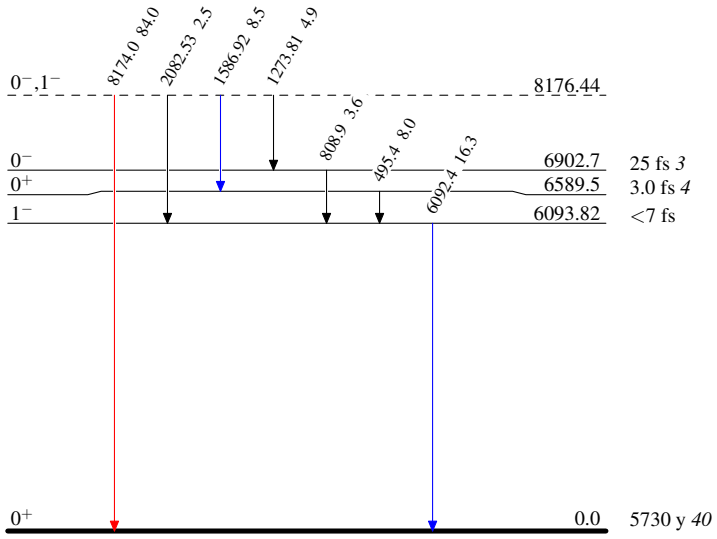
Intensities: I_γ per 100 neutron captures

Legend

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

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

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



$^{14}_{6}C_{8}$