Adopted Levels, Gammas

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	R. B. Firestone	NDS 127, 1 (2015)	15-Jan-2015

Q(β^-)=8110 *12*; S(n)=3806 *12*; S(p)=20990 *60*; Q(α)=−15394 *21* 2012Wa38
Populated by ^{22}N β-n decay (2003Yo02), $T_{1/2}$=16.5 ms *+85−48*.

^{21}O Levels

Cross Reference (XREF) Flags

A ^{21}N β^- decay:83 ms
B ^{22}N β^-n decay:20 ms
C ^{18}O(^{18}O,^{15}O)
D ^{9}Be(^{36}S,X)
E ^{2}H(^{20}O,P),(^{20}O,pγ)

E(level)	J^π †	$T_{1/2}$	XREF	Comments
0.0	(5/2$^+$)	3.42 s *10*	ABCDE	%β^-=100 $T_{1/2}$: From 1981Al07. J^π: From single-particle removal cross section compared to extended Glauber model calculations, weighted by shell model spectroscopic factors (2000Sa47,1989Ca25).
1220 *3*	(1/2$^+$)		ABCDE	
2133 *5*			CDE	
3026 *6*	(7/2$^+$)		CD	
3073 *10*	(7/2$^+$)		CD	
4.77×10^3 *10*	3/2$^+$		E	
4927 *12*	(9/2$^+$)		BCD	
6.14×10^3 *8*	(1/2$^-$,3/2$^-$)		A E	
6.80×10^3 *10*	(1/2$^-$,3/2$^-$)		A	
6.91×10^3 *7*	(1/2$^-$,3/2$^-$)		A	
9.02×10^3 *12*	(1/2$^-$,3/2$^-$)		A	
9.04×10^3 *22*	(1/2$^-$,3/2$^-$)		A	

† For lower levels from shell model calculations (2004St08), although systematics of T=3/2 levels suggests that the 1218 and 2133 levels should have negative parity. For higher level assuming allowed β decay from J^π=1/2$^-$.

γ(^{21}O)

E_i(level)	J_i^π	E_γ	I_γ	E_f	J_f^π
1220	(1/2$^+$)	1220 *3*	100	0.0	(5/2$^+$)
2133		2133 *5*	100	0.0	(5/2$^+$)
3026	(7/2$^+$)	883 *4*	59 *8*	2133	
		3026 *8*	100 *8*	0.0	(5/2$^+$)
3073	(7/2$^+$)	3073 *10*	100	0.0	(5/2$^+$)

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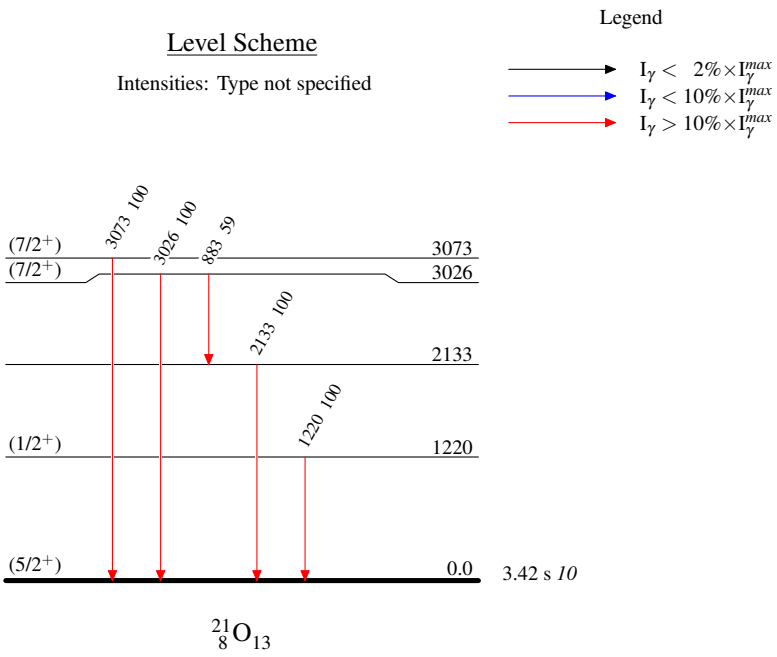
Level Scheme

Intensities: Type not specified



$^{21}_{8}O_{13}$