

$^{12}\text{C}(^{12}\text{C},\alpha)$ **1998Ti06**

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	D. R. Tilley, C. Cheves, J. Kelley, S. Raman, H. Weller		NP A636, 249 (1998)	21-Apr-1997

For more detailed information see [1998Ti06](#). For complete references see table 20.21 in [1978Aj03](#).

 ^{20}Ne Levels

E(level)	J^π	$T_{1/2}$	θ_α^2	Comments
1632.9 10	2 ⁺			
4245.6 25	4 ⁺			
4966.3 25	2 ⁻			
5618. 4	3 ⁻			
5774. 6	1 ⁻			
6725. 6	0 ⁺			
7004. 4	4 ⁻			
7169. 6	3 ⁻			
7196. 6	0 ⁺		0.026	
7435. 6	2 ⁺			
7835. 6	2 ⁺		0.015	
8449. 6	5 ⁻		1.6×10^{-3} 5	
8694. 6	1 ⁻		0.0027	
8779. 6	6 ⁺			
8.85×10 ³	1 ⁻		0.0179	
9033. 6	4 ⁺		0.033	
9110. 6				
9318. 6	2 ⁻			$\Gamma_\gamma/\Gamma < 0.90$
9533. 6				
9872. 6	1 ⁺ , 2 ⁻ , 3 ⁺			$\Gamma_\gamma/\Gamma < 0.8$
9948. 5	1 ⁺ , 2 ⁻ , 3 ⁺			$\Gamma_\gamma/\Gamma < 0.7$
10024. 6				
10264. 6	5 ⁻			
10407. 6	(3 ⁻)		0.078	
10545. 6				
10609. 5	6 ⁻			$\Gamma_\gamma/\Gamma = 1$
10693. 5	4 ⁻ , 3 ⁺			$\Gamma_\gamma/\Gamma < 0.95$
10840. 6	(3 ⁻)		0.0099	
10917. 6	3 ⁺			T=0 $\Gamma_\gamma/\Gamma < 0.7$
11013. 6				
11528. 5	(3 ⁺ , 4 ⁻)			$\Gamma_\gamma/\Gamma < 0.90$
11568. 10	(3 ⁺)			$\Gamma_\gamma/\Gamma = 0.75$ 10 T=(0)
11653. 5	(3 ⁺)			$\Gamma_\gamma/\Gamma < 0.90$
11892. 8				$\Gamma_\gamma/\Gamma = 0.16$ 2
11949. 6	8 ⁺		7.6×10^{-3} 22	
12014. 10				$\Gamma_\gamma/\Gamma < 0.10$
12097. 8				$\Gamma_\gamma/\Gamma < 0.20$
12135. 5	6 ⁺		4.9×10^{-4} 26	
12172. 8				$\Gamma_\gamma/\Gamma < 0.45$
12219. 10	2 ⁺			T=1 $\Gamma_\gamma/\Gamma < 0.45$
12379. 8				$\Gamma_\gamma/\Gamma = 0.005$ 1
12436. 5	0 ⁺	24 keV 1		
12596. 5	6 ⁺	50 keV 10	0.090 2	
12730. 6	(5 ⁻)		0.129	
12919. 6				

Continued on next page (footnotes at end of table)

$^{12}\text{C}(^{12}\text{C},\alpha)$ **1998Ti06 (continued)** ^{20}Ne Levels (continued)

E(level)	J^π	$T_{1/2}$	θ_α^2
13010. 6			
13049. 6			
13190. 6			
13277. 6			
13335. 6	7 ⁻		2.4×10 ⁻⁴ 10
13441. 6	(5 ⁻)		≤0.023
13569. 15			
13631. 15			
13679. 15			
13845. 15			
13886. 15			
13927. 5	6 ⁺	113 keV 7	0.10 1
14144. 15			
14308. 10	6 ⁺	<50 keV	<0.45
14.60×10 ³			
14812. 15			
15034. 15			
15159. 5	6 ⁺	60 keV 15	<8×10 ⁻⁴
15364. 14	7 ⁻	4.1×10 ² keV 13	
15438. 10		100 keV 20	
15691. 15			
15874. 8	8 ⁺	100 keV 15	0.047 13
16139. 15			
16600. 15	7 ⁻	160 keV 30	0.10 2
16717. 10		37 keV 10	
17259. 11	7 ⁻ ,(9 ⁻)	162 keV 20	0.019 4
18153. 10	7 ⁻		
18538. 7	8 ⁺	138 keV 33	3.2×10 ⁻⁵ 15
20478. 11	(8 ⁺)	250 keV 30	0.11 4
20704. 11	(9 ⁻)	≈120 keV	
20.89×10 ³ 3			
21.05×10 ³ 2		140 keV 50	
21.65×10 ³ 10	(7 ⁻ , 9 ⁻)	240 keV 50	
22.03×10 ³ 7	(8 ⁺)	630 keV 80	
22.70×10 ³ 7		4.9×10 ² keV 11	
23.2×10 ³ 1		3.0×10 ² keV 10	
23.74×10 ³ 10		2.3×10 ² keV 10	
24374. 30	7 ⁻ ,(5 ⁻)	210 keV 50	