

$^{12}\text{C}(^{15}\text{N},\alpha)$ 1978Th01

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	M. S. Basunia [#] , A. Chakraborty ^{##}		NDS 171,1 (2021)	1-Jun-2020

Other references: [1990Ti02](#), [1976Gu05](#).

[1978Th01](#), [1976Gu05](#): $^{12}\text{C}(^{15}\text{N},\alpha)$ E=36.0-39.2 MeV. Measured $\sigma(E,E\alpha,\theta)$, FWHM 60 keV, shell model calculation.

[1990Ti02](#): $^{12}\text{C}(^{15}\text{N},\alpha)$ E=15-27 MeV. Measured DSA, (n, γ) coincidence.

 ^{23}Na Levels

E(level) [†]	T _{1/2}	Comments
0		
440	1.24 ps 8	T _{1/2} : From 1990Ti02 .
2076		
2391		
2641		
2704		
2982		
3678		
3848		
3915		
4430		
4775		
5379		
5534		
5741		
5766		
5776		
5926		E(level): 5931 in 1978Th01 .
5966		
6042		
6115		
6195		E(level): 6191 in 1978Th01 .
6235		
6354		E(level): 6350 in 1978Th01 .
6578		
7100		E(level): Multiplet – not referenced in the adopted level.
7268		
7385		
7412		
7452		E(level): 7446 in 1978Th01 .
7687		E(level): 7680 in 1978Th01 .
7840		E(level): 1978Th01 list as a multiplet.
7964		
7974		E(level): 7983 in 1978Th01 .
8061		
8320		
8480		E(level): 1978Th01 list as a multiplet.
8640		E(level): Multiplet.
8799		
8821		
9040		E(level): 9038 in 1978Th01 .
9180		E(level): Multiplet – as listed in 1978Th01 .
9810 [‡]		
10010 [‡]		E(level): Multiplet.
10220 [‡]		
10350 [‡]		

Continued on next page (footnotes at end of table)

 $^{12}\text{C}(^{15}\text{N},\alpha)$ **1978Th01 (continued)**

 ^{23}Na Levels (continued)

<u>E(level)[†]</u>	<u>E(level)[†]</u>	<u>E(level)[†]</u>	<u>E(level)[†]</u>
10600 [‡]	12330 [‡]	13720 [‡]	15900 [‡]
10980 [‡]	12540 [‡]	14080 [‡]	15980 [‡]
11290 [‡]	12820 [‡]	14380 [‡]	16320 [‡]
11550 [‡]	12920 [‡]	14440 [‡]	16600
11670 [‡]	13050 [‡]	14980 [‡]	
12050 [‡]	13210 [‡]	15450 [‡]	

[†] From Adopted Levels (rounded value to nearest keV), except otherwise note. [1978Th01](#) quote excited levels below 9810 keV from literature and list a level at 6263 keV, not found in earlier evaluations. Evaluators omit the 6263 keV level.

[‡] From [1978Th01](#).