

<sup>20</sup>Ne(t,p) 1994Ma37,1974FI07,1961Si03

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	M. Shamsuzzoha Basunia		NDS 127, 69(2015)	1-Apr-2015

J<sup>π</sup>(<sup>20</sup>Ne)=0<sup>+</sup>.

1994Ma37: <sup>20</sup>Ne(t,p), E=15 MeV. Measured σ(Ep,θ) DWBA analysis.

1974FI07: <sup>20</sup>Ne(t,p), E=15,20 MeV. Measured σ(Ep,θ).

1961Si03: <sup>20</sup>Ne(t,p), E<2.6 MeV. Magnetic spectrometer.

<sup>22</sup>Ne Levels

E(level) <sup>†</sup>	L <sup>†</sup>	Comments
0.0	0	
1277 5	2	E(level): Unweighted average of 1279 5 (1994Ma37) and 1275 5 (1974FI07).
3359 5	4	E(level): Same value both in 1994Ma37 and 1974FI07. Other value: 3343 15 (1961Si03).
4457 5	2	E(level): Unweighted average of 4460 5 (1994Ma37) and 4453 5 (1974FI07). Other value: 4473 15 (1961Si03).
5148 5	1,3	E(level): Other value: 5139 15 (1961Si03).
5367 5	2	E(level): Other value: 5360 10 (1974FI07).
5524 5	4	E(level): Other values: 5524 10 (1974FI07), 5520 15 (1961Si03).
5641 5	2,4	E(level): Other values: 5643 10 (1974FI07), 5633 15 (1961Si03).
5911 5	3	E(level): Other values: 5911 10 (1974FI07), 5917 15 (1961Si03).
6115 5	2	E(level): Other values: 6115 10 (1974FI07), 6117 15 (1961Si03).
6236 5	0	E(level): Other values: 6238 10 (1974FI07), 6242 15 (1961Si03).
6345 10	4	E(level): 6330 10 from 1994Ma37 may include contribution from 6311 level. Other value: 6349 15 (1961Si03).
6636 5	2	E(level): Other values: 6642 10 (1974FI07), 6647 15 (1961Si03).
6686 10	1	E(level): Unweighted average of 6682 10 (1994Ma37) and 6691 10 (1974FI07). Other value: 6696 15 (1961Si03).
6822 10	2	E(level): Unweighted average of 6820 10 (1994Ma37) and 6825 10 (1974FI07). Other value: 6823 15 (1961Si03).
6856 10	0,2	E(level): Other value: 6860 25 (1961Si03).
6905 10	0	E(level): Unweighted average of 6903 10 (1994Ma37) and 6908 10 (1974FI07).
7050 10	1	E(level): Other value: 7047 15 (1961Si03).
7343 10	0	E(level): From 1974FI07. Other value: 7343 10 (1994Ma37) may include contribution from 7341 level.
7405 10		E(level): From 1974FI07. Other value: 7402 15 (1961Si03).
7414 15		E(level): From 1994Ma37, doublet 7406+7423.
7491 10	(1)	E(level): From 1974FI07. Other values: 7486 10 (1994Ma37) doublet 7470?+7489, 7484 15 (1961Si03).
7641 10	2	E(level): Unweighted average of 7639 10 (1994Ma37) and 7643 10 (1974FI07). Other value: 7633 15 (1961Si03).
7663 20		E(level): From 1961Si03.
7723 10	2	E(level): Unweighted average of 7720 10 (1994Ma37) and 7726 10 (1974FI07). Other value: 7720 15 (1961Si03).
7925 10	2	E(level): Unweighted average of 7925 10 (1994Ma37) and 7924 10 (1974FI07). Other value: 7913 15 (1961Si03).
8083 10	(4)	E(level): Unweighted average of 8081 10 (1994Ma37) and 8085 10 (1974FI07). Other value: 8071 15 (1961Si03).
8127 10	2	E(level): Unweighted average of 8129 10 (1994Ma37) and 8125 10 (1974FI07). Other value: 8122 15 (1961Si03).
8164 10	2,3,4	E(level): Unweighted average of 8164 10 (1994Ma37) and 8163 10 (1974FI07).
8387 10	3	E(level): Unweighted average of 8387 10 (1994Ma37) and 8386 10 (1974FI07). Other value: 8368 15 (1961Si03).
8500 10	2	E(level): Other values: 8504 15 (1974FI07), 8488 15 (1961Si03).
8545 15	2	
8591 10	(2)	E(level): Unweighted average of 8590 10 (1994Ma37) and 8593 10 (1974FI07). Other value: 8575 15 (1961Si03).
8741 10	3	E(level): Unweighted average of 8743 10 (1994Ma37) and 8738 10 (1974FI07). Other value: 8724 15 (1961Si03).
8866 10		E(level): Unweighted average of 8865 10 (1994Ma37) and 8867 10 (1974FI07). Other value: 8890 15 (1961Si03).

Continued on next page (footnotes at end of table)

$^{20}\text{Ne}(t,p)$  **1994Ma37,1974FI07,1961Si03** (continued) $^{22}\text{Ne}$  Levels (continued)

<u>E(level)<sup>†</sup></u>	<u>L<sup>†</sup></u>	<u>Comments</u>
8980 10	2,4	E(level): Unweighted average of 8980 10 (1994Ma37) and 8981 10 (1974FI07). Other value: 8970 15 (1961Si03).
9050 15	4,5	E(level): Other value: 9034 20 (1961Si03).
9094 10	(1)	E(level): Unweighted average of 9096 10 (1994Ma37) and 9092 10 (1974FI07). Other value: 9069 15 (1961Si03).
9180 10	4	E(level): Unweighted average of 9181 10 (1994Ma37) and 9179 10 (1974FI07). Other value: 9174 20 (1961Si03).
9227 10	2	E(level): Unweighted average of 9229 10 (1994Ma37) and 9225 10 (1974FI07). Other value: 9215 20 (1961Si03).
9333 10		E(level): Unweighted average of 9337 10 (1994Ma37) and 9329 10 (1974FI07). Other value: 9316 15 (1961Si03).
9508 10	(3)	E(level): Unweighted average of 9510 10 (1994Ma37) and 9505 10 (1974FI07).
9541 10	2	E(level): Other value: 9540 15 (1974FI07).
9654 10	4,6	E(level): Other value: 9648 15 (1974FI07).
9734 10		
9841 10		
10072 10		
10142 10	2	E(level): Other value: 10132 15 (1974FI07).
10230 15		
10309 15	2,3	E(level): Unweighted average of 10316 15 (1994Ma37) and 10302 15 (1974FI07).
10384 15		
10466 10	3	E(level): Other value: 10474 15 (1974FI07).
10504 10	2	
10551 15	2	
10635 14	(4)+5	E(level): Doublet 10654+10618.
10720 10		E(level): Other value: 10711 15 (1974FI07).
10820 15		
10870 10	3	
10933 10	1	
11064 10	2	E(level): Other value: 11063 15 (1974FI07).
11173 10	3	E(level): Other value: 11161 15 (1974FI07).
11284 15	3	E(level): Unweighted average of 11291 15 (1994Ma37) and 11276 15 (1974FI07).
11451 15	(3)+1	E(level): Doublet 11433+11466.
11533 10	(7)	E(level): Other value: 11520 15 (1974FI07).
11594 15		
11656 10	≥6	
11708 15	2	
11772 10	3	E(level): Other value: 11760 15 (1974FI07).
11907 10	0,1,2	E(level): Other value: 11895 15 (1974FI07).
12071 15		
12218 15		
12390 10	3	E(level): Other value: 12384 15 (1974FI07).
12450 20	0,1	
12643 15	0,1,2	
12862 15	(3)	
12910 15	2,3	
13078 20		
13274 20		
13384 15		

<sup>†</sup> From 1994Ma37, except as noted.