Energy levels and branching ratios [98Ti06]. $^{20}_{10}$**Ne**

E^* [keV]	J^π	T	C^2S (τ,d)	C^2S (τ,d)	C^2S (τ,d)	C^2S (d,n)	C^2S (α,t)	S_α (^{6}Li,d)	σ (^{6}Li,d) μb/sr	L (^{6}Li,d)	L (d,t)	C^2S (d,t)	$T_{1/2}$ or Γ_{cm}	Ref.
0.0	0^+		0.54	0.27	0.30	0.62	0.08	0.14	150	0			Stable	94Ve04
1633.674(15)	2^+		0.48	0.43	0.42	0.70	0.16	0.094	230	2			0.73(4) ps	94Ve04
4248(1)**	4^+				0.0		0.0	0.038	170	4			64(6) fs	74Ob02
4966.51(20)	2^-			0.014*	0.008			0	15	1,3			3.3(4) ps	73Ob04
5621.4(17)	3^-			0.065	0.017			0.0083	50	3	1	0.02	139(35) fs	74Mi13
5787.7(26)	1^-			0.080	0.044			0.26	310	1	1	0.03	28(3) eV	96Ma07
6706(47)														
6725(5)	0^+			0.37	0.25	0.38							19.0(9) keV	64Si09
7004.0(36)	4^-			0.16	0.009								305(62) fs	73Ob04
7156.3(5)	3^-			0.43									8.2(3) keV	76Se10
7191(3)	0^+												3.4(2) keV	
7421.9(12)	2^+			0.61	0.12						0+2	0.05+0.07	15.1(7) keV	74Mi13
7833.4(15)	2^+			0.081	0.012						0+2	0.005+0.02	2 keV	74Mi13
8453(4)	5^-												13(4) eV	
≈8700	0^+												>800 keV	
8708(7)	1^-												2.1(8) keV	
8777.6(22)	6^+												0.11(2) keV	
8820	⟨5^-⟩												<1 keV	
8854(5)	1^-			0.014							1	0.33	19 keV	76Se10
9000(180)	2^+												≈800 keV	
9031(7)	4^+			0.033							2	≤0.12	3 keV	76Se10
9116(3)	3^-												3.2 keV	
9196(30)	2^+													
9318(2)	⟨2^-⟩										1	≤0.1		74Mi13
9487(5)	2^+			0.03									29(15) keV	76Se10
9873(4)	3^+			1.62										76Se10
9935(12)	⟨1^+⟩										2	<0.16	<24.3 fs	74Mi13
9990(8)	4^+												155(30) keV	
10262(5)	5^-			0.11									145(40) keV	76Se10
10273.2(19)	2^+	1									0+2	0.08+0.25	≤0.3 keV	74Mi13
10406(5)	3^-										1	0.08	80 keV	74Mi13
10553(5)	4^+												16 keV	
10584(5)	2^+			0.081									24 keV	76Se10
10609(6)	6^-												16(5) fs	
10694(6)	4^-,3^+													
10800(75)	4^+												350 keV	
10840(6)	3^-										1	0.13	45 keV	74Mi13
10843(4)	2^+			0.05									13 keV	76Se10
10884(3)	3^+	1		1.73							2	0.42	<21 fs	74Mi13
10917(6)	3^+													
10940(9)	2^+													
10970(120)	0^+												580 keV	
11020(8)	4^+												24 keV	
11090(3)	4^+	1									2	0.18	≤0.5 keV	74Mi13
11116(9)	2^+													

(continued) $^{20}_{10}$Ne

E^* [keV]	J^π	T	C^2S (τ,d)	C^2S (τ,d)	C^2S (τ,d)	C^2S (d,n)	C^2S (α,t)	S_α (^{6}Li,d)	L (d,t)	C^2S (d,t)	$E^{cm}_\circ$ [keV]	E^* [keV]	$T_{1/2}$ or Γ_{cm}	Ref.
11240(23)	1^-												175 keV	
11262.3(19)	1^+	1							0+2	0.03+0.18				74Mi13
11270(5)	1^-	1							1	0.52			≤0.3 keV	74Mi13
11320(9)	2^+												40(10) keV	
11528(6)	3^+,4^-												≤21 fs	
11555(6)	⟨3^+⟩													
11558(4)	0^+												1.1(4) keV	
11601(10)	2^-	1							1	0.50				74Mi13
11653(5)	⟨3^+⟩													
11885(7)	2^+												46 keV	
11928(4)	4^+												0.44(15) keV	
11951(4)	8^+												35(10) eV	
11985(16)	1^-												30(5) keV	
12098(6)	2^-	1							1	0.43				74Mi13
12137(5)	6^+													
12221(4)	2^+												<1 keV	
12253(10)	4^+												155(15) keV	
12256(3)	3^-												<1 keV	
12327(10)	2^+												390(50) keV	
12401(5)	3^-												37.3(9) keV	
12436(4)	0^+												24.4(5) keV	
12472(10)	⟨2^+⟩												124(6) keV	
12585(5)	6^+												72(9) keV	
12592(15)	⟨2^+⟩												145(25) keV	
12713(5)	5^-												84(8) keV	
12743(10)	⟨2^+⟩												61(12) keV	
12836(5)	1^-												30(5) keV	
12957(5)	2^+												38(4) keV	
13048(5)	4^+												18(3) keV	
13060.7(21)	2^-												1.0 keV	
13095(6)	2^+												162(13) keV	
13105(5)	6^+												102(5) keV	
13137(5)	3^-												48(4) keV	
13171.3(21)	1^+										323.52	13167.9	2.3(2) keV	93Da23
13222(10)	0^+												40(13) keV	
13224(15)	1^-												80 keV	
13226(5)	3^-												53(4) keV	
											454.68	13299.1		93Da23
13307.5(21)	1^+										454.68	13304.6	0.9(1) keV	93Da23
13338(5)	7^-												0.08(3) keV	
13341(5)	4^+												26(3) keV	
											562.3	13406.8		93Da23
13414(2)	3^-										567.8	13412.3	24(3) keV	93Da23
13426(5)	⟨5^-⟩										571	13415	49(7) keV	93Da23
13461(10)	1^-												195(25) keV	

(continued) $^{20}_{10}$Ne

E^*	J^π	T	C^2S	C^2S	C^2S	C^2S	C^2S	S_α	σ (^{6}Li,d)	C^2S	$E_\circ^{cm}$	E^*	$T_{1/2}$ or	Ref.
[keV]			(τ,d)	(τ,d)	(τ,d)	(d,n)	(α,t)	(^{6}Li,d)	μb/sr	(d,t)	[keV]	[keV]	Γ_{cm}	
											635.96	13480.4		93Da23
13484(2)	1^+										641.49	13485.9	6.4(3) keV	93Da23
13507(5)	1^-												24(8) keV	
13529(5)	2^+												61(8) keV	
13530(15)	$\langle 0^+ \rangle$												76(32) keV	
13573(5)	2^+												12(5) keV	
13586(3)	2^+												9(1) keV	
13642(3)	0^+										791.3	13635.7	17(1) keV	93Da23
13676.0(23)	$\langle 2^- \rangle$										828.7	13673.2	4.5(2) keV	93Da23
13677(5)	5^-												11(2) keV	
13692(10)	7^-										856.33	13700.8	310(30) keV	93Da23
13736.0(25)	1^+										889.02	13733.4	7.7(5) keV	93Da23
13744(20)	0^+												≈80 keV	
13827(10)	3^-												136(15) keV	
13866(30)	1^-												≈175 keV	
13881.0(23)	2^+										1036.2	13880.7	0.14(5) keV	93Da23
13908(5)	2^+												74(10) keV	
13926.0(23)	$\langle 0^+ \rangle$										1081.7	13926.1	3.5(4) keV	93Da23
13928(5)	6^+												65(3) keV	
13948(10)	0^+												79(15) keV	
13965(5)	4^+												8.1(10) keV	
14020	1^-												≈70 keV	
14063.0(23)	2^+										1214.2	14058.7	≈140 keV	93Da23
14115(5)	2^+												42(6) keV	
14128(2)	2^-										1277.7	14122.2	4.7(7) keV	93Da23
14150.0(23)	2^-										1302.1	14146.6	11.8(10) keV	93Da23
14200	1^+												14(1) keV	
14270(10)	4^+												92(9) keV	
14304(10)	$\langle 6^+ \rangle$												60(13) keV	
14311(5)	6^+												117(8) keV	
14313(15)	$\langle 3^- \rangle$												≈45 keV	
14370(3)											1524.7	14369.2	≈5 keV	93Da23
14454(5)	5^-												≈15 keV	
14455(3)	0^+,2^+										1606.8	14451.3	33(3) keV	93Da23
14475(6)	0^+												68(2) keV	
14593(10)	4^+												260(25) keV	
14597(7)	1^-												116(5) keV	
14653(10)	$\langle 0^+ \rangle$												25 keV	
14699.0(33)	$\langle 1^+ \rangle$										1842.1	14686.5	36(10) keV	93Da23
											1873	14718.4		93Da23
14731(10)	$\langle 4^+ \rangle$												60(25) keV	
14761(5)	6^+												7.3(48) keV	
14776(4)	$\langle 1^- \rangle$										1929	14773.5	110(20) keV	93Da23
14807(5)	6^+												86(7) keV	
14816(5)	5^-												117(13) keV	

(continued) $^{20}_{10}$Ne

E^* [keV]	J^π	T	C^2S (τ,d)	C^2S (τ,d)	C^2S (τ,d)	C^2S (d,n)	C^2S (α,t)	S_α (^{6}Li,d)	σ (^{6}Li,d) μb/sr	C^2S (d,t)	$E_\circ^{cm}$ [keV]	E^* [keV]	$T_{1/2}$ or Γ_{cm}	Ref.
14839(10)	⟨4$^+$⟩												79(15) keV	
14888(10)	2$^+$												100(30) keV	
15047(10)	2$^+$										2206	15051	66(20) keV	93Da23
15073(10)	5$^-$												160(25) keV	
15142(15)	⟨2$^+$⟩												≈60 keV	
15159(5)	6$^+$												60(15) keV	
15174(10)	5$^-$												230(25) keV	
15230											2394	15239.1	28 keV	93Da23
15270	⟨1$^-$⟩												285 keV	
15330(5)	4$^+$												34(10) keV	
15346(15)	6$^+$										2494	15338.9		93Da23
15366(5)	7$^-$												110(10) keV	
15436(15)	⟨3$^-$⟩												90(20) keV	
											2618	15462.4		93Da23
15500											2694	15538.5	55 keV	93Da23
15700(15)	⟨8$^-$⟩										2831	15676.3		93Da23
15874(9)	8$^+$												100(15) keV	
15970	⟨6$^+$⟩													
16010(25)	⟨2$^+$⟩												100 keV	
16139(15)													38 keV	
16250														
16329(11)	4$^+$												45 keV	
16437(11)	⟨0–4⟩$^+$												35 keV	
16505(15)	6$^+$												24(4) keV	
16559(15)	5$^-$												90(30) keV	
16581(15)	7$^-$												92(8) keV	
16628(20)	3$^-$												80(25) keV	
16630(20)	⟨7$^-$⟩													
16667(15)	4$^+$												100(25) keV	
16717(15)	5$^-$												≈25 keV	
16732.9(27)	0$^+$												2.0(5) keV	
16746(25)	8$^+$												160(50) keV	
16847(15)	5$^-$												16(8) keV	
16871(20)	6$^+$												350(50) keV	
17072(20)	4$^+$												180(30) keV	
17155(15)	5$^-$												26(5) keV	
17213(15)	4$^+$												225(30) keV	
17284(15)	3$^-$												86(25) keV	
17295(15)	8$^+$												200(25) keV	
17390(15)													<10 keV	
17430(15)	9$^-$												220(25) keV	
17541(15)	6$^+$												86(9) keV	
17550(10)	⟨2$^+$⟩												19 keV	
17606(15)	5$^-$												140(20) keV	
17769(20)	4$^+$												≈125 keV	

(continued) $^{20}_{10}$Ne

E^* [keV]	J^π	T	C^2S (τ,d)	C^2S (τ,d)	C^2S (τ,d)	C^2S (d,n)	C^2S (α,t)	S_α (^{6}Li,d)	σ (^{6}Li,d) μb/sr	L (^{6}Li,d)	L (d,t)	C^2S (d,t)	$E_\circ^{cm}$ [keV]	$T_{1/2}$ or $\Gamma_{\rm cm}$	Ref.
17851(15)	5^-													200(30) keV	
17910(20)	$\langle 0^+ \rangle$														
18005(15)	7^-													<10 keV	
18024(5)	5^-													34(7) keV	
18083(25)	4^+													140(60) keV	
18125(5)	7^-													29(6) keV	
18286(10)	6^+													190(30) keV	
18430(7)	2^+													9.5(30) keV	
18430(20)	7^-													185(40) keV	
18494(20)	5^-													130(30) keV	
18538(7)	8^+													138(33) keV	
18621(20)	8^+													185(30) keV	
18745(25)	6^+													140(50) keV	
18768(20)	7^-													140(35) keV	
18960(25)	8^+													200(60) keV	
19051(15)	5^-													≈90 keV	
19150(20)	6^+													200(50) keV	
19284(15)	6^+													140(25) keV	
19298(25)	7^-													430(60) keV	
19443(10)	6^+													130(15) keV	
19536(25)	6^+													250(60) keV	
19655(20)	6^+													140(35) keV	
19731(20)	8^+													330(60) keV	
19845(40)	6^+													360(120) keV	
19859(10)	5^-													170(25) keV	
19884(40)	7^-													≈120 keV	
19991(30)	4^+													130(100) keV	
20027(15)	6^+													80(35) keV	
20106(25)	7^-													190(35) keV	
20150(150)															
20168(35)	6^+													290(100) keV	
20296(15)	7^-													255(40) keV	
20341(20)	5^-													190(40) keV	
20344(15)	7^-													135(35) keV	
20419(30)	6^+													215(90) keV	
20445(25)	6^+													370(55) keV	
20468(30)	5^-													280(70) keV	
20686(6)	9^-													78(11) keV	
20760(30)	7^-													240(50) keV	
20800(25)	5^-													170(60) keV	
20950(40)	7^-													300(50) keV	
21062(6)	9^-													60(6) keV	
21300(10)	7^-													300 keV	
21800(10)	7^-													300 keV	
22300(10)	7^-													500 keV	

(continued) $^{20}_{10}$Ne

E^* [keV]	J^π	C^2S (τ,d)	C^2S (τ,d)	C^2S (τ,d)	C^2S (d,n)	C^2S (α,t)	S_α (^{6}Li,d)	σ (^{6}Li,d) μb/sr	C^2S (d,t)	$E_\circ^{cm}$ [keV]	E^* [keV]	$T_{1/2}$ or Γ_{cm}	Ref.
22600(30)													
22800(60)	9^-											500 keV	
22870(40)	9^-											225(40) keV	
23400(20)	8^+											500 keV	
23700(30)	$\langle 9^- \rangle$											≤200 keV	
24210(25)	8^+											350 keV	
24900(50)													
25100(50)	8^+											≈200 keV	
25670(50)												≈400 keV	
27100(10)	$\langle 9^- \rangle$											700 keV	
27500	10^+												
28000	8^+											1600 keV	
28200(30)												700 keV	
		94Ve04		73Ob04		74Ob02		96Ma07	74Mi13	93Da23	93Da23		Ref.
			76Se10		64Si09		96Ma07						Ref.

Additional data on this isotope can be found in [03Fo01, 99Ar15, 96Ma07, 93Da23, 84Um04, 79Fo20, 70Gu08].
Abundance: 90.48(3) %.
* This value and other values at higher energies are $(2J+1)C^2S$ [76Se10] instead of C^2S.
** New result from the measurement of $g(I) = \mu_\circ(I)/I$ factor [03Le01] $g(4_1^+)$=+0.38(8) is close to the theoretical expectation (≈0.5).
Three C^2S from proton transfer reaction (τ,d) [94Ve04, 76Se10, 73Ob04] are given for comparison.
Values C^2S from proton transfer reactions (d,n) and (α,t) are from [64Si09, 74Ob02].
T values are given according to [74Mi13], it was found there that spectroscopic factors of T=1 states in ^{20}F and ^{20}Ne are consistent to within 20% for states excited by a single l-transfer; C^2S from this work for neutron pickup reaction (d,t) are given in the last column.
Data for this isotope are considered in vol. LB I/18A.

Energy levels and branching ratios [98Ti06]. Part 2 $^{20}_{10}$Ne

J^π	E^* [keV]		Branching ratios in percentage									
		E_f^*:	0.0	1634	4248	4967	5621	5788	7004	7422	7833	8453
		J_f^π:	0^+	2^+	4^+	2^-	3^-	1^-	4^-	2^+	2^+	5^-
2^+			100									
4^+				100								
2^-			0.6(2)	99.4(2)								
3^-			7.6(10)	87.6(10)		4.8(16)						
1^-			18(5)	82(5)								
0^+			x	100								
4^-				0.5(2)	63.5	11	25					
3^-					60(5)			40(5)				
0^+			x	100								

(continued) $^{20}_{10}$**Ne**

J^π	E^* [keV]		Branching ratios in percentage									
		E^*_f:	0.0	1634	4248	4967	5621	5788	7004	7422	7833	8453
		J^π_f:	0^+	2^+	4^+	2^-	3^-	1^-	4^-	2^+	2^+	5^-
2^+			≤12.1	[100]	≤8.5							
2^+			83(1)	17(1)	<2							
5^-							100					
1^-			87(8)	13(8)								
6^+					100							
4^+				100	<2							
3^-				50(5)		33(5)	17(4)					
⟨2^-⟩				100								
2^+			x	100								
3^+			<0.5	78	12(3)	≤5	≈7			≈3		
⟨1^+⟩				78(5)		22(5)						
4^+			x	100								
2^+			0.65(14)	88.8(5)		1.3(1)	2.1(2)			6.9(4)	0.22(6)	
6^-									95.5(12)			4.5(12)
4^-,3^+					25(4)	75(4)						
3^+				77(5)	23(5)							
4^+				0.50(25)	99.50(25)							
1^+			84(5)	16(5)								
1^-			55(2)	2.5(10)		6.5(10)						
3^+,4^-					30(3)	70(3)			x			
⟨3^+⟩				x					x			
0^+				100	<8							
⟨3^+⟩				14(3)	86(3)							
4^+				21(11)	79(11)							
2^+				100								
3^-				63.0(15)			37.0(15)					
3^-			≈1	≈29	≈70							
0^+				100								
1^+	13485.9			95		5						
2^+	13880.7			20		80						
0^+				x				x				

Energy levels and branching ratios [98Ti06]. Part 3 $^{20}_{10}$**Ne**

J^π	E^* [keV]		Branching ratios in percentage				
		E^*_f:	8778	8854	9318	11262	12221
		J^π_f:	6^+	1^-	⟨2^-⟩	1^+	2^+
1^-				27.0(15)	9(1)		
8^+			100				
0^+						100	
2^+							100

Energy levels and branching ratios [90En08, 98En04]. $^{21}_{10}\mathbf{Ne}$

E^* [keV]	$2J^\pi$	$2T$	L	S' (d,p)	L	S_n^- (p,d)	L	S_n^- (d,t)	L	S_n^- (τ,α)	S_n^+ eval	S_n^- eval	$T_{1/2}$ or Γ_{cm}	Ref.
0.0	3^+		2	<0.1	2	0.25	2	0.18	2	0.29	<0.03	0.19(6)	Stable	69Ho26
350.727(8)	5^+		2	3.7	2	2.5	2	2.16	2	2.5	0.71(11)	2.2(3)	7.2(1) ps	81Ma24
1745.91(2)	7^+							0.65		0.14			53(3) fs	79Fo07
2788.23(9)	1^-				1	0.7	1	0.78	1	0.78	<0.05	0.7(2)	81(5) ps	69Ho26
2794.16(4)	1^+		0	1.6	0	<0.11			0	0.41	0.78(13)	<0.11	5.2(6) fs	70Ho22
2866.8(2)	9^+									0.05			40(3) fs	79Fo07
3662.64(20)	3^-		1		1	0.19	1	0.26	1	0.27	small	0.19(5)	65(6) fs	69Ho26
3735.59(14)	5^+		2	0.20	2				2	0.02	0.04(2)	small	<10 fs	70Ho22
3883.96(21)	5^-									0.02			27(3) fs	79Fo07
4431.8(5)	11^+												23(3) fs	
4525.86(16)	5^+		2	0.78	2		2	0.09	2	0.13			<7 fs	81Ma24
4684.56(15)	3^+						2	0.23	2	0.33			11(3) fs	81Ma24
4725.34(5)	3^-		1	2.3					1	<0.2			7(3) fs	70Ho22
5335.2(4)	7^-		[2]	0.5						0.03			<7 fs	70Ho22
5431.8(5)	$\langle 5^+,7\rangle$									0.02			<8 fs	79Fo07
5549.8(8)	3^+		2	0.62					2	0.015			28(9) fs	70Ho22
5630.8(5)	7^+												<7 fs	
5689.77(5)	1^-		1	0.48					1	0.08			6(2) fs	70Ho22
5773.7(14)	$\langle 3,5\rangle$												<12 fs	
5818.7(8)	7^-									0.02			<42 fs	79Fo07
5820.9(2)	3^+		2	0.28									<24 fs	70Ho22
5992.61(12)	3^-						1	0.10	1	0.12			<13 fs	81Ma24
6033.3(3)	9^-												19(2) fs	
6175.2(10)	$\langle 5,7\rangle^+$												10(4) fs	
6260.3(7)	$\langle 7^+\rangle$												<14 fs	
6266.7(8)	9^+												24(12) fs	
6411.9(10)														
6448.3(9)	$\langle 9,13^+\rangle$												<14 fs	
6543.8(10)	$\langle 9\rangle$													
6554.2(7)	9												<14 fs	
6607.7(13)	$\langle 3,5\rangle^+$		2	0.95									<9 fs	70Ho22
6639.8(10)	$9^{\langle -\rangle}$												15(3) fs	
6749.3(17)													10(3) fs	
6857(20)														
6900.5(14)	$\langle 1,3\rangle^-$						1	0.13	1	0.16				81Ma24
7006.7(5)	7^+												<12 fs	
7022.6(10)	$\langle 7^+\rangle$												13(3) fs	
7042.3(15)	$\langle 9\rangle^+$													
7109(4)														
7154(5)														
7211(3)	1^+						0	0.09					107(6) keV	81Ma24
7226(5)														
7294(20)														
7320(5)														
7356.9(14)	$\langle 7,9^+\rangle$												<8 fs	

(continued) **$^{21}_{10}$Ne**

E^* [keV]	$2J^\pi$	$2T$	L	S' (d,p)	L	S_n^- (p,d)	L	S_n^- (d,t)	L	S_n^- (τ,α)	S_n^+ eval	S_n^- eval	$T_{1/2}$ or Γ_{cm}	Ref.
7422.8(7)	⟨9,11$^-$⟩													
7465(10)	⟨1,3⟩$^-$						1	0.09						81Ma24
7547(10)														
7600(5)														
7627(10)	3$^-$						1	0.15					14(4) keV	81Ma24
7649.1(10)	⟨7$^+$,5$^+$⟩												<10 fs	
7740(10)														
7810(10)														
7960.3(10)	11$^-$													
7979(10)	3$^-$												6(2) keV	
7982.1(6)	⟨7,11⟩$^+$													
8008(10)	1$^-$												32(6) keV	
8062(10)	3$^+$												8(3) keV	
8154.9(6)	9$^{⟨+⟩}$												<21 fs	
8222.2(11)														
8241.2(8)	⟨11⟩$^+$												<10 fs	
8287(10)														
8303(10)	3$^-$						1	0.07					27(5) keV	81Ma24
8360(10)	3$^+$												10(3) keV	
8402(20)														
8430(10)														
8465(10)														
8522(3)													6 keV	
8591(7)	3$^+$												38(7) keV	
8664.5(10)														
8680(7)	3$^-$												54(6) keV	
8782(4)	3$^-$												50(6) keV	
8801(3)													<5 keV	
8849(5)													10 keV	
8859.2(14)	⟨3,5⟩$^+$	3					2	2.5	2	3.7			2.5(4) keV	79Fo07
8930(3)													5 keV	
8991(53)													2.5 keV	
9077(10)														
9148.9(10)	1$^+$	3					0	0.88	0	1.0			8(1) keV	79Fo07
9188(15)														
9251(15)														
9282(15)														
9367(15)														
9402.0(7)	⟨13$^-$⟩													
9475(15)														
9637(15)														
9700(15)														
9859.1(9)														
9943.6(14)														
9963(6)	⟨1,3⟩$^-$	3					1	3.3	1	3.4				79Fo07

(continued) $^{21}_{10}$Ne

E^* [keV]	$2J^\pi$	$2T$	L	S' (d,p)	L	S_n^- (p,d)	L	S_n^- (d,t)	L	S_n^- (τ,α)	S_n^+ eval	S_n^- eval	$T_{1/2}$ or Γ_{cm}	Ref.
10043(20)														
10180(20)														
10353(20)														
10447(20)														
10542(20)														
10631(2)	$\langle 3^+,5^+\rangle$	3					2	≈0.4					1.0(6) keV	81Ma24
10656(2)		3											0.6(6) keV	
10743(20)														
10826(20)														
10913(1)	$\langle 1^-,3\rangle$	3					1	0.96					9.8(5) keV	81Ma24
11095(20)														
11280(2)		3											19(1) keV	
11380(20)														
11453(20)														
11591(20)														
11642(20)														
11709(20)														
11874(20)														
11989(1)	15^-													
12204(20)														
12315(2)		3											7(4) keV	
12451(2)		3											8(3) keV	
12563(20)														
12946(5)		3											33(10) keV	
13801(3)	$\langle 1^-,3^-\rangle$	3					1	0.76					24(5) keV	81Ma24
16058(8)	$\langle 1^-,3^-\rangle$	3					1	1.04					55(16) keV	81Ma24
16356(5)		3											44(10) keV	
				70Ho22		69Ho26		81Ma24		79Fo07	77En02	77En02		Ref.
				90En08		90En08		90En08		90En08				Ref.

Additional data on this isotope can be found in [03Th04, 03Th01, 80St12, 71He09, 69Ho26].
Abundance: 0.27(1) %.
$(2J+1)C^2S$ from [70Ho22] are given for the (d,p) reaction.
For states with $E^*\leq 3.73$ MeV values S_n^+ and S_n^- were estimated in [77En02].
Data for this isotope are considered in vol. LB I/18A.

Energy levels and branching ratios [90En08, 98En04]. Part 2 $^{21}_{10}$Ne

E^* [keV]	$2J^\pi$	E_f^*: / $2J_f^\pi$:	0.0 / 3^+	351 / 5^+	1746 / 7^+	2789 / 1^-	2794 / 1^+	2867 / 9^+	3664 / 3^-	3735 / 5^+	3884 / 5^-
		Branching ratios in percentage									
350.727(8)	5^+		100								
1745.91(2)	7^+		5(1)	95(1)							

(continued) $^{21}_{10}$Ne

E^* [keV]	$2J^\pi$	Branching ratios in percentage (E^*_f: 0.0; $2J^\pi_f$: 3^+)	351 (5^+)	1746 (7^+)	2789 (1^-)	2794 (1^+)	2867 (9^+)	3664 (3^-)	3735 (5^+)	3884 (5^-)
2788.23(9)	1^-	17(1)	83(2)							
2794.16(4)	1^+	100	<3							
2866.8(2)	9^+		38(2)	62(2)						
3662.64(20)	3^-	<2	57(3)	<2	37(2)	6(2)	<2			
3735.59(14)	5^+	81(2)	12(2)	7(1)	<2	<2	<2			
3883.96(21)	5^-	28(3)	67(3)	<2	0.4(2)	<2	<2	4(1)		
4431.8(5)	11^+	<2	<2	23(5)			77(5)			
4525.86(16)	5^+	22(2)	74(2)	4(1)	<2	<2	<2			
4684.56(15)	3^+	36(2)	61(2)	<1	<1	2.4(8)	<5			
4725.34(5)	3^-	<1	83(2)	<1	<1	17(2)	<1			
5335.2(4)	7^-	<2	86(3)	<5	<2	<2	10(3)			4(1)
5431.8(5)	$\langle 5^+,7\rangle$	<5	72(4)	19(4)	<2	<2	9(2)			
5549.8(8)	3^+	29(4)	9(4)		12(4)	14(4)			23(4)	
5630.8(5)	7^+	6(4)	70(6)	14(6)			<4		10(4)	<5
5689.77(5)	1^-	41(3)	<2		<2	53(3)	<2			
5773.7(14)	$\langle 3,5\rangle$	85(10)	15(10)	<1.9	<2	<2	<2		<2	
5818.7(8)	7^-	<4	17(2)	5(2)	<2		24(2)	4(2)	12(3)	32(4)
5820.9(2)	3^+	<5	52(5)	<2	<2	48(5)	<2			
5992.61(12)	3^-	65(3)	35(3)	<2	<2	<2	<3		<3	<2
6033.3(3)	9^-	<3	<3	46(2)	<2	<2	38(2)		<2	14(5)
6175.2(10)	$\langle 5,7\rangle^+$	5(3)	35(5)	44(5)	<5				16(5)	<2
6266.7(8)	9^+	<5	15(5)	5(3)	<2	<2	76(6)		<3	<2
6448.3(9)	$\langle 9,13^+\rangle$						20(6)			
6554.2(7)	9	<9	<3	65(5)	<3	<4	24(15)		<4	<4
6607.7(13)	$\langle 3,5\rangle^+$	5(5)	95(5)	<3	<2	<2	<5		<2	<2
6639.8(10)	$9^{\langle -\rangle}$			29(2)			45(2)			
6749.3(17)		24(4)	64(4)						12(3)	
7006.7(5)	7^+	7(2)	31(4)	53(4)			6(3)		3(1)	
7042.3(15)	$\langle 9\rangle^+$		5(3)	64(3)			24(2)			
7356.9(14)	$\langle 7,9^+\rangle$			75(6)			25(6)			
7422.8(7)	$\langle 9,11^-\rangle$						96(4)			
7649.1(10)	$\langle 7^+,5^+\rangle$	21(6)	26(7)	44(6)			9(5)			
7982.1(6)	$\langle 7,11\rangle^+$			9(2)			66(2)			
8154.9(6)	$9^{\langle +\rangle}$			66(6)			26(6)			
8241.2(8)	$\langle 11\rangle^+$						52(4)			

Energy levels and branching ratios [90En08, 98En04]. Part 3 **$^{21}_{10}$Ne**

E^* [keV]	$2J^\pi$	E_f^*: / $2J_f^\pi$:	Branching ratios in percentage: 4434 / 11^+	4525 / 5^+	4725 / 3^-	5336 / 7^-	5431 / $\langle 5^+,7\rangle$	5629 / 7^+	6033 / 9^-	6448 / $\langle 9,13^+\rangle$	7422
5549.8(8)	3^+			12(2)							
5689.77(5)	1^-				6(2)						
5818.7(8)	7^-			5(2)							
6033.3(3)	9^-					1.8(4)					
6266.7(8)	9^+		4(2)								
6448.3(9)	$\langle 9,13^+\rangle$		80(6)								
6554.2(7)	9		11(3)								
6639.8(10)	$9^{\langle -\rangle}$		15.0(10)					11.0(10)			
7042.3(15)	$\langle 9\rangle^+$						6.9(10)				
7422.8(7)	$\langle 9,11^-\rangle$					4(4)					
7982.1(6)	$\langle 7,11\rangle^+$		25(3)								
8154.9(6)	$9^{\langle +\rangle}$								8(4)		
8241.2(8)	$\langle 11\rangle^+$								48(4)		
8664.5(10)									100		
9402.0(7)	$\langle 13^-\rangle$		11(3)						65(5)		24(3)
9859.1(9)			56(4)							44(4)	
9943.6(14)										100	

Energy levels and branching ratios [94Ma37, 90En08, 98En04]. **$^{22}_{10}$Ne**

E^* [keV]	J^π	T	σ (t,p) μb/sr	L	ℓ	S_n^+ eval	S' (d,p)	S_p^- eval	Ref.	E_f^*: / J_f^π:	Branching ratios in percentage: 0.0 / 0^+	1274 / 2^+	3358 / 4^+	4456 / 2^+	5146 / 2^-
0.0	0^+		1600	0		0.19(6)	≤0.20	0.12(2)	77En02						
1274.54(1)	2^+		220	2	0	<0.02		<0.02	77En02		100				
					2	0.92(24)	3.25	1.7(4)	77En02						
3358.2(5)	4^+		130	4	2	0.05(2)	0.44	0.62(16)	77En02			100			
4456.3(8)	2^+		160	2	0	0.06(2)	0.27	0.16(4)	77En02		3.0(20)	97.0(20)			
					2	0.18(3)	0.72	0.34(9)	77En02						
5146.3(8)	2^-		70	$\langle 1,3\rangle$		small		2.6(9)	77En02			53(3)		47(3)	
5329(4)	1^+				0	0.05(2)	0.15		77En02		67(5)	33(5)			
					2	0.47(12)	1.40		77En02						
5363.4(11)	2^+		1400	2	0		1.56		77En02		<11	[100]			
					2	0.52(13)									
5523.7(6)*	4^+		220	4	2	0.30(4)	2.26		77En02			1.6(3)	98.4(3)		
5641.4(6)	3^+		70	$\langle 2,4\rangle$	2	0.11(2)	0.49		77En02			71(4)	29(4)		
5909.9(18)	3^-		130	3					94Ma37			84(3)	6(3)	10(3)	
6119.9(16)	2^+		1200	2					94Ma37		14(2)	78(3)		8.0(10)	
6235(2)	0^+		1600	0					94Ma37						
6311(1)*	6^+												100		
6345.2(9)	4^+		280	4					94Ma37				100		
6635.8(7)	$\langle 2,3\rangle^+$		170	2			0.72		94Ma37			43(3)	57(3)		

(continued) $^{22}_{10}$Ne

E^* [keV]	J^π	T	σ (t,p) μb/sr	L	ℓ	S_n^+ eval	S' (d,p)	S_p^- eval	Ref.	Branching ratios in percentage					
										E_f^*:	0.0	1274	3358	4456	5146
										J_f^π:	0^+	2^+	4^+	2^+	2^-
6691(4)	1^-		100	1					94Ma37		88(4)	12(4)			
6819.4(16)	2^+		100	2			0.92		94Ma37			61(4)		39(4)	
6853.5(12)	1^+		50	0,2	0		1.65		94Ma37		72(7)	28(7)			
6900(2)	0^+		90	0					94Ma37			100			
7051(3)	1^-		200	1			0.054		94Ma37		9(1)	91(1)			
7341.1(11)	0^+		1200	0			0.35		94Ma37				77(10)		
7344(2)*	⟨3,4⟩$^+$													17(3)	
7405.9(7)	3^-		≤210		1		0.67		94Ma37			57(6)			43(6)
7423.0(6)	⟨3,5⟩$^+$		≤210						94Ma37						
7469(2)	1^-–5^-		≤250	⟨5–⟩					94Ma37						
7489(4)	1^-		250	1	1		0.66		94Ma37		57(4)	22(4)			
7643.1(13)	2^+		300	2	0		0.12		94Ma37						
					+2		+0.41								
7664(8)	2^-				1		0.71				13(5)	73(7)		14(4)	
7722.0(11)	3^-		1500	J=2+	1		0.83		94Ma37			15(3)	23(2)	52(3)	
7921(2)	2^+		110	2	0		0.63		94Ma37			100			
					2		0.72								
8076.9(14)	4^+		50	⟨4⟩	2		0.53		94Ma37			59	41		
8134.3(4)	2^+		90	2	2		0.59		94Ma37			100			
8162.2(13)	3		130	⟨J=3⟩					94Ma37			90(2)	10(2)		
8376(2)*	3^-		120	3					94Ma37			10(2)	90(2)		
8489.6(12)	2^+		110	J=2+	0		0.24		94Ma37				40(3)		
8561.4(19)	⟨1,2⟩$^+$		110	J=2+	2		0.84		94Ma37		100				
8596.0(9)	2^+		600	⟨2⟩	0		0.16		94Ma37						
					2		0.51								
8741.0(14)	3^-		500	J=3–	1		0.43		94Ma37				53(3)	47(3)	
8855.3(15)	4^+		100		2		1.44								
8900.3(16)					1		0.095								
8976(3)	⟨0–3^-⟩		210	⟨J=3+⟩					94Ma37						
9045(3)	⟨2^+,3^-⟩		140	4+,5–	1		0.31		94Ma37						
9097(3)	⟨1–3⟩$^-$		530	⟨J=1–⟩					94Ma37					100	
9178(3)	1^+		340						94Ma37		100				
9178(1)*	⟨3,4⟩$^+$		incl	⟨4+⟩					94Ma37						
9229(3)	⟨1,2⟩$^+$		1200	⟨J=2+⟩					94Ma37						
9250(3)	⟨1–4⟩														
9324(2)	⟨1^-–5^-⟩		300						94Ma37						
9508(7)			810	⟨J=3–⟩					94Ma37						
9541(8)	⟨1–3⟩$^-$		1500	⟨J=2+⟩					94Ma37						
9652(8)	5		240	⟨J=5+⟩					94Ma37						
9725(7)			140												
9842(8)			170												
10066(8)			160												
10137(7)	2^+		2000	2					94Ma37						
10208.9(13)	1^-		110												
10280.8(13)	0^+–2^+														

(continued) $^{22}_{10}$Ne

E^* [keV]	J^π	T	σ (t,p) μb/sr	L	ℓ	S_n^+ eval	S' (d,p)	S_p^- eval	Ref.	Branching ratios in percentage E_f^*: 0.0 J_f^π: 0^+	1274 2^+	3358 4^+	4456 2^+	5146 2^-
10295.3(13)	⟨0^+–2^+⟩		320	2+,3–					94Ma37					
10384(15)			180											
10423(9)	⟨6,8⟩													
10469(8)	⟨2–4⟩$^-$		640	⟨J=3–⟩					94Ma37					
10493.3(19)	⟨1–3⟩$^+$		1000	⟨2+⟩					94Ma37					
10551(15)			690	⟨J=2+⟩					94Ma37					
10618(3)			⟨150⟩	⟨4+⟩					94Ma37					
10654	5		incl	⟨5–⟩					94Ma37					
10696(4)														
10706(4)			310											
10751(3)	5^-													
10820(15)			190						94Ma37					
10858(3)			260	⟨J=3–⟩					94Ma37					
10922(3)	1^-		860	1					94Ma37					
11032(6)	8^+								04Nu0A					
11063(15)**			1500	J=2+					94Ma37					
11130(5)														
11195(3)			530	⟨J=3–⟩					94Ma37					
11271(4)			520	⟨J=3–⟩					94Ma37					
11433(6)			580	⟨3⟩										
11466(3)	1^-		incl	1										
11520(15)	7^-		500	⟨7⟩										
11578(5)			140						94Ma37					
11656(10)			180	⟨≥6⟩					94Ma37					
11686(5)	2^+		160	⟨J=2+⟩					94Ma37					
11772(10)			1300	⟨J=3–⟩					94Ma37					
11886(10)	1^-		1300	1–,2+					94Ma37					
12056(10)			290						94Ma37					
12380(10)	2^+		1200	⟨J=3–⟩					94Ma37					
12450(20)			270	0+,1–					94Ma37					
12610(10)	⟨1^-,2^+⟩		580	≤2					94Ma37					
12862(15)			170	⟨J=3–⟩					94Ma37					
12910(15)			260	2+,3–					94Ma37					
13078(20)			500						94Ma37					
13274(20)			260						94Ma37					
13384(15)			190						94Ma37					
14070(40)		⟨2⟩							90En08					
14470									02Cu04					
15400(50)		⟨2⟩							90En08					
15610(60)		⟨2⟩							90En08					
16060(60)		⟨2⟩							90En08					
17800									02Cu04					
20000									02Cu04					
20900									02Cu04					

(continued) $^{22}_{10}$Ne

E^* [keV]	J^π	T	σ (t,p) μb/sr	L	ℓ	S_n^+ eval	S' (d,p)	S_p^- eval	Ref.	Branching ratios in percentage E_f^*: J_f^π:	0.0 0^+	1274 2^+	3358 4^+	4456 2^+	5146 2^-
23300									02Cu04						
			94Ma37			77En02	72Ne11	77En02	Ref.						

Additional data on this isotope can be found in [03Du15, 03Da19, 01Ro29, 94Ma37, 75Ch26].
Abundance: 9.25(3) %.
* This state is clearly seen in (α,^{2}He) reaction [78Ja10].
** From [74Fl07], discussed in [94Ma37].
Excitation energies were taken mainly from [90En08] due to a smaller uncertainties.
Experimental $d\sigma/d\Omega$ from the (t,p) reaction and angular distributions were used [94Ma37] for a study of nucleon configuration; values S' from the (d,p) reaction [72Ne11] should be considered as preliminary.
Comparison of data for excited states in ^{22}Ne and ^{22}Mg with shell-model calculations as well as their implication for the $^{21}Na(p,\gamma)^{22}$Mg stellar reaction rate see in [01Ba17].
Doubling of α-cluster states at 12580-12840 keV (J^π=1^-), 13190-13410 keV (J^π=3^-), 19280-19560 keV (J^π=7^-) and 20850-21840 keV (J^π=9^-) was discussed in [01Ro29].
Data for this isotope are considered in vol. LB I/18A.

Energy levels and branching ratios [94Ma37, 90En08, 98En04]. Part 2 $^{22}_{10}$Ne

E^* [keV]	J^π	$T_{1/2}$ or Γ_{cm}	Ref.	Branching ratios in percentage E_f^*: J_f^π:	5329 1^+	5363 2^+	5524 4^+	5910 3^-	6120 2^+	6311 6^+	6345 4^+
0.0	0^+	Stable	77En02								
1274.54(1)	2^+	3.63(5) ps	77En02								
			77En02								
3358.2(5)	4^+	225(4) fs	77En02								
4456.3(8)	2^+	37(6) fs	77En02								
			77En02								
5146.3(8)	2^-	0.8(2) ps	77En02								
5329(4)	1^+	1.1(2) fs	77En02								
			77En02								
5363.4(11)	2^+	69(12) fs	77En02								
5523.7(6)*	4^+	21(2) fs	77En02								
5641.4(6)	3^+	<7 fs	77En02								
5909.9(18)	3^-	32(9) fs	94Ma37								
6119.9(16)	2^+	16(5) fs	94Ma37								
6235(2)	0^+	235(83) fs	94Ma37								
6311(1)*	6^+	50(3) fs									
6345.2(9)	4^+	13(3) fs	94Ma37								
6635.8(7)	$\langle 2,3\rangle^+$	50(21) fs	94Ma37								
6691(4)	1^-	240(130) fs	94Ma37								
6819.4(16)	2^+	<7 fs	94Ma37								

(continued) $^{22}_{10}$Ne

E^* [keV]	J^π	$T_{1/2}$ or Γ_{cm}	Ref.	Branching ratios in percentage							
				E^*_f:	5329	5363	5524	5910	6120	6311	6345
				J^π_f:	1^+	2^+	4^+	3^-	2^+	6^+	4^+
6853.5(12)	1^+	236(42) as	94Ma37								
6900(2)	0^+	76(8) fs	94Ma37								
7051(3)	1^-	104(22) fs	94Ma37								
7341.1(11)	0^+	<7 fs	94Ma37				<5.0	23(10)			
7344(2)*	$\langle 3,4\rangle^+$	35(20) fs			83(3)						
7405.9(7)	3^-	32(10) fs	94Ma37								
7423.0(6)	$\langle 3,5\rangle^+$	47(15) fs	94Ma37				100				
7469(2)	1^-–5^-	55(20) fs	94Ma37								
7489(4)	1^-		94Ma37			21(3)					
7643.1(13)	2^+	0.8(3) fs	94Ma37								
7664(8)	2^-										
7722.0(11)	3^-		94Ma37						10(2)		
7921(2)	2^+		94Ma37								
8076.9(14)	4^+		94Ma37								
8134.3(4)	2^+		94Ma37								
8162.2(13)	3		94Ma37								
8376(2)*	3^-		94Ma37								
8489.6(12)	2^+		94Ma37								60(3)
8561.4(19)	$\langle 1,2\rangle^+$		94Ma37								
8596.0(9)	2^+		94Ma37								
8741.0(14)	3^-		94Ma37								
8855.3(15)	4^+									100	
8900.3(16)											
8976(3)	$\langle 0$–$3^-\rangle$		94Ma37								
9045(3)	$\langle 2^+,3^-\rangle$		94Ma37								
9097(3)	$\langle 1$–$3\rangle^-$		94Ma37								
9178(3)	1^+	83(7) as	94Ma37								
9178(1)*	$\langle 3,4\rangle^+$		94Ma37								
9229(3)	$\langle 1,2\rangle^+$		94Ma37								
9250(3)	$\langle 1$–$4\rangle$								100		
9324(2)	$\langle 1^-$–$5^-\rangle$		94Ma37								
9508(7)			94Ma37								
9541(8)	$\langle 1$–$3\rangle^-$		94Ma37								
9652(8)	5		94Ma37								
9725(7)											
9842(8)											
10066(8)											
10137(7)	2^+		94Ma37								
10208.9(13)	1^-	40(20) as									
10280.8(13)	0^+–2^+	<1.4 keV									
10295.3(13)	$\langle 0^+$–$2^+\rangle$	<1 keV	94Ma37								
10384(15)											

(continued) $^{22}_{10}$Ne

E^* [keV]	J^{π}	$T_{1/2}$ or Γ_{cm}	Ref.	Branching ratios in percentage E^*_f: 5329 J^{π}_f: 1^+	5363 2^+	5524 4^+	5910 3^-	6120 2^+	6311 6^+	6345 4^+
10423(9)	$\langle 6,8 \rangle$									
10469(8)	$\langle 2\text{–}4 \rangle^-$		94Ma37							
10493.3(19)	$\langle 1\text{–}3 \rangle^+$		94Ma37							
10551(15)			94Ma37							
10618(3)		<5 keV	94Ma37							
10654	5		94Ma37							
10696(4)		<4 keV								
10706(4)		<10 keV								
10751(3)	5^-	<5 keV								
10820(15)			94Ma37							
10858(3)		<7 keV	94Ma37							
10922(3)	1^-	25(5) keV	94Ma37							
11032(6)	8^+		04Nu0A							
11063(15)**		<10 keV	94Ma37							
11130(5)		<5 keV								
11195(3)		<5 keV	94Ma37							
11271(4)		<5 keV	94Ma37							
11433(6)		48 keV								
11466(3)	1^-	<3 keV								
11520(15)	7^-									
11578(5)			94Ma37							
11656(10)			94Ma37							
11686(5)	2^+		94Ma37							
11772(10)			94Ma37							
11886(10)	1^-		94Ma37							
12056(10)			94Ma37							
12380(10)	2^+		94Ma37							
12450(20)			94Ma37							
12610(10)	$\langle 1^-,2^+ \rangle$		94Ma37							
12862(15)			94Ma37							
12910(15)			94Ma37							
13078(20)			94Ma37							
13274(20)			94Ma37							
13384(15)			94Ma37							
14070(40)			90En08							
14470			02Cu04							
15400(50)			90En08							
15610(60)			90En08							
16060(60)			90En08							
17800			02Cu04							
20000			02Cu04							
20900			02Cu04							
23300			02Cu04							
			Ref.							

Energy levels and branching ratios [90En08, 98En04, 75De33]. **$^{23}_{10}$Ne**

E^* [keV]	$2J^\pi$	S_n^+ eval	S' (d,p)	C^2S (d,p)	$E_\circ^{cm}$ [keV]	$T_{1/2}$ or Γ_{cm}	Ref.	Branching ratios in percentage E_f^*: 0, $2J_f^\pi$: 5^+	1017 1^+	1702 7	1822 3^+	2315 5^+
0	5^+	0.24(3)	1.3			37.2(1) s	77En02					
1017.0(2)	1^+	0.7(1)	1.4			178(10) ps	77En02	100				
1701.5(2)	7					<70 fs		100	<2			
1822.5(2)	3^+		≤0.1			<70 fs	70Ho22	100	<2			
2315.1(4)	5^+		0.31			<70 fs	70Ho22	47(2)	8(2)	3(1)	42(2)	
2517.0(4)	⟨5,7⟩$^+$		0.29			<70 fs	70Ho22	20(3)		80(3)		
3220.7(2)	3^-		1.2			<70 fs	70Ho22	19(2)	78(2)		3(1)	
3431.8(3)	3^+		1.3			<70 fs	70Ho22	59(4)	29(4)		8(2)	4(1)
3458.2(6)	1–5^+					<70 fs			45(5)		55(5)	
3830.9(4)	3^+–7^+					<70 fs		9(2)	<4.0	91(2)		
3836.4(3)	1^-		0.21			<70 fs	70Ho22		56(4)		44(4)	
3843(1)			0.23			<70 fs	70Ho22					
3988.2(7)	3^+		1.1			<70 fs	70Ho22	58(3)				42(3)
4010(3)			0.95			<70 fs	70Ho22	100				
4270(15)												
4436.0(4)	3^+–7^+									38(4)		
4764(5)												
4867(15)												
4940(5)												
4995(15)												
5029(5)												
5185(6)			0.23				70Ho22					
5220(5)	⟨5,7⟩$^-$			0.04	20(6)		90Ch41					
5265												
5340												
5454	⟨1,3⟩$^-$				262		90Ch41					
5491(3)						50 keV						
5522(10)												
5560(15)												
5606(10)												
5646(10)												
5726(10)												
5740(40)	3^+											
5785(10)												
5840(15)												
			70Ho22	90Ch41	90Ch41		Ref.					

C^2S from the (d,p) reaction measurement [90Ch41] is given for the state seen as the first neutron resonance with the energy $E_\circ^{cm}$; these data have an application in astrophysics.

Energy levels and branching ratios [90En08, 98En04, 75De33]. Part 2

$^{23}_{10}$Ne

E^* [keV]	$2J^\pi$	Branching ratios in percentage E^*_f: 2517, $2J^\pi_f$: $\langle 5,7\rangle^+$
3843(1)		100
4436.0(4)	3^+–7^+	62(4)

Energy levels and branching ratios [90En08, 98En04].

$^{24}_{10}$Ne

E^* [keV]	J^π	$T_{1/2}$ or Γ_{cm}	Branching ratios in percentage E^*_f: 0, J^π_f: 0^+	E^*_f: 1981.6, J^π_f: 2^+
0	0^+	3.38(2) m		
1981.6(4)	2^+	660(150) fs	100	
3867(4)	2^+	<70 fs	10.0(20)	90.0(20)
3962(18)	4	<20 ns	<2	100
4764(18)	0^+	1.6(9) ps	<3	100
4886(18)				100
5576(18)	2	<20 ns	<5	100
5641(25)				
6030(18)				
6360*				
8150*				
9880*				
11350*		broad		

Additional data on this isotope can be found in [02Ta10].
* This state is clearly seen in (α,^{2}He) reaction [78Ja10].

Energy levels and branching ratios [90En08, 98En04, 04Te03].

$^{25}_{10}$Ne

E^* [keV]	$2J^\pi$	S_n^-	σ mb	S_n^- theor	$T_{1/2}$ or Γ_{cm}	Ref.	Branching ratios in percentage E^*_f: 0.0, $2J^\pi_f$: $\langle 3\rangle^+$	E^*_f: 1702.8	E^*_f: 3316.4
0.0	1^+	1.2(1)	51(5)	1.35	602(8) ms	04Te03			
1702.8(7)	$\langle 5^+\rangle$	1.2(2)	25(4)	2.35		04Te03	100		
2030(50)									
3316.4(11)	$\langle 5^+\rangle$	1.1(2)	21(3)	1.84		04Te03		100	
3891.2(12)								43(16)	57(5)
4092.7(11)									100
4700(100)									

(continued) $^{25}_{10}\mathbf{Ne}$

E^* [keV]	$2J^\pi$	S_n^-	σ mb	S_n^- theor	$T_{1/2}$ orRef. Γ_{cm}	Branching ratios in percentage E_f^*: $2J_f^\pi$:	0.0 $\langle 3\rangle^+$	1702.8	3316.4
6280(50)									
		04Te03	04Te03	04Te03					

Direct neutron removal reaction at 83 MeV/u with inclusive cross section 97(5) mb [04Te03].