

$^{48}\text{Sc}$        $Z = 21$        $N = 27$       adopted link      ENSDF link

Based on ENSDF from Oct 2022, and mass evaluation from 2020

BE = 415.498 ( 0.005) MeV

Qbeta- = 3.989 ( 0.005) MeV

	Energy T	J+	J-	J-other	T1/2
48SC 1	0.000	6+			1 43.71 H 9
48SC 2	0.131	5+			2
48SC 3	0.252	4+			3
48SC 4				0.388	4
48SC 5	0.623	3+			5
48SC 6	1.096	7+			6
48SC 7	1.143	2+			7
48SC 8			1.402 2-		8
48SC 9				1.432	9
48SC 10				1.592	10
48SC 11			1.891 3-		11
48SC 12	2.064	5+			12
48SC 13			2.103 4-		13
48SC 14				2.165 4-,5-	14
48SC 15	2.190	3+			15
48SC 16				2.196 (5+)	16
48SC 17	2.200	1+			17
48SC 18	2.276	2+			18
48SC 19				2.310	19
48SC 20	2.386	2+			20
48SC 21				2.391 3,4	21
48SC 22	2.517	1+			22
48SC 23				2.560 (3)-	23
48SC 24				2.619 (4,5)	24
48SC 25				2.626	25
48SC 26				2.640 1,2-	26
48SC 27				2.670 1-,2-	27
48SC 28				2.729 (4+,5+)	28
48SC 29			2.739 2-		29
48SC 30	2.783	2+			30
48SC 31				2.811 1,2,3	31
48SC 32			2.891 2-		32
48SC 33				2.924 (3)	33
48SC 34				2.960	34
48SC 35				2.978 (5+)	35
48SC 36	2.981	1+			36
48SC 37				3.026 (2,3)	37

48SC 38		3.057	1+					38
48SC 39		3.150	1+					39
48SC 40						3.170	(3)+	40
-----								
48SC 41						3.216	(0,1,2,3+)	41
48SC 42						3.230	(4+)	42
48SC 43						3.258		43
48SC 44						3.281		44
48SC 45						3.296	(0+:4+)	45
48SC 46						3.302	(0:3+)	46
48SC 47						3.328	(4-)	47
48SC 48						3.353		48
48SC 49						3.372		49
48SC 50						3.387	0-,1-,2-	50
-----								
48SC 51						3.438		51
48SC 52						3.485	3,4+	52
48SC 53						3.496	2-,1-	53
48SC 54						3.519	(2,3)+	54
48SC 55						3.568		55
48SC 56						3.619		56
48SC 57						3.655		57
48SC 58						3.671		58
48SC 59						3.690		59
48SC 60		3.712	1+					60
-----								
48SC 61						3.743		61
48SC 62						3.776		62
48SC 63						3.806		63
48SC 64						3.832		64
48SC 65						3.870		65
48SC 66						3.919		66
48SC 67						3.957		67
48SC 68						3.974		68
48SC 69						3.985		69
48SC 70						4.024		70
-----								
48SC 71						4.065		71
48SC 72						4.093		72
48SC 73		4.141	1+					73
48SC 74						4.168		74
48SC 75						4.190	(1+)	75
48SC 76						4.256	(1+)	76
48SC 77		4.289	1+					77
48SC 78						4.328	1+,0+	78
48SC 79						4.396		79
48SC 80						4.437		80
-----								
48SC 81						4.560		81
48SC 82						4.670	5+,6+,7+	82

48SC 83		4.677	1+				83	
48SC 84						4.735	84	
48SC 85		4.786	1+				85	
48SC 86						4.862	(2,3)+	86
48SC 87						5.012	(2,3)+	87
48SC 88						5.050		88
48SC 89						5.111		89
48SC 90						5.202	(2,3)+	90
-----								
48SC 91						5.230	(1+)	91
48SC 92						5.296		92
48SC 93						5.354	(2,3)+	93
48SC 94		5.438	1+					94
48SC 95						5.513	(2,3)+	95
48SC 96						5.595	(2,3)+	96
48SC 97		5.754	1+					97
48SC 98						5.880	3+,4+,5+	98
48SC 99						5.900		99
48SC 100						5.962	0+,1+	100
-----								
48SC 101						6.020	(2-,3-,4-)	101
48SC 102						6.187	(0+,1+,2+,3+)	102
48SC 103						6.242	(2,3)+	103
48SC 104						6.250	(1+)	104
48SC 105						6.400		105
48SC 106						6.460		106
48SC 107						6.620		107
48SC 108		6.678	4 0+					108
48SC 109						6.832	1+,2+,3+	109
48SC 110						6.952	1+,2+,3+	110
-----								
48SC 111						7.500	(1+)	111
48SC 112						7.780		112

S-p = 9.448 ( 0.005)-----  
S-n = 8.239 ( 0.005)-----  
S-2p = 23.668 ( 0.005)-----  
S-2n = 18.885 ( 0.005)-----  
S-alpha= 11.148 ( 0.005)-----

S+p = -11.349 ( 0.005)  
S+n = -10.130 ( 0.005)  
S+2p = -19.297 ( 0.005)  
S+2n = -16.176 ( 0.006)  
S+alpha = -9.364 ( 0.005)

gap p = -1.900 ( 0.007)  
gap n = -1.891 ( 0.008)  
gap 2p = 4.371 ( 0.007)

gap 2n = 2.709 ( 0.007)  
gap alpha = 1.784 ( 0.007)