

^{49}Ti $Z = 22$ $N = 27$ [link to full NNDC output](#)

Based on ENSDF from Dec 2018, and mass evaluation from 2016

BE = 426.847 (0.000) MeV

	Energy T	J+	J-	J-other	T1/2	
49TI 1	|	|	0.000	7/2-|	1	STABLE
49TI 2	|	|	1.382	3/2-|	2	3.4 PS 4
49TI 3	|	|	1.542	11/2-	3	1.00 PS 10
49TI 4	|	|	1.586	5/2 3/2-|	4	
49TI 5	|	|	|	1.610 (9/2-)	5	
49TI 6	|	|	|	1.623 (5/2)-	6	37 FS 4
49TI 7	|	|	1.723	5/2 1/2-|	7	
49TI 8	|	|	1.762	5/2-|	8	21.0 FS 19
49TI 9	|	|	|	2.261 (5/2)-	9	59 FS 17
49TI 10	|	|	|	2.471 (5/2)-	10	52 FS 17
49TI 11	| 2.504 (5/ 1/2+	|	|	|	11	
49TI 12	|	|	2.506	15/2-	12	
49TI 13	|	|	|	2.513 5/2,7/2,9/2	13	
49TI 14	|	|	|	2.516 5/2,7/2	14	
49TI 15	|	|	|	2.664 (5/ (3/2)+	15	
49TI 16	|	|	|	2.721 (11/2+,13/2,15/2	16-	57 FS 27
49TI 17	|	|	|	2.721	17	
49TI 18	|	|	|	2.980 (7/2-,9/2-)	18	0.13 PS 8
49TI 19	|	|	|	3.039 (LE 5/2-)	19	
49TI 20	|	|	|	3.043 7/2-,9/2,11/2-	20	24 FS 15
49TI 21	|	|	3.175	(5/ 1/2-|	21	54.8 FS 18
49TI 22	|	|	3.261	5/2 3/2-|	22	11.2 FS 5
49TI 23	|	|	|	3.290 (17/2)-	23	0.07 PS LT
49TI 24	|	|	3.428	3/2-|	24	
49TI 25	|	|	|	3.451 (7/2-,9/2-)	25	
49TI 26	|	|	3.469	1/2-|	26	
49TI 27	|	|	3.511	5/2-|	27	
49TI 28	|	|	|	3.606 (5/2)+	28	
49TI 29	|	|	3.618	5/2-|	29	
49TI 30	|	|	|	3.639	30	
49TI 31	|	|	|	3.701 (5/2,7/2,9/2)	31	
49TI 32	|	|	|	3.746 5/2-,7/2-	32	
49TI 33	|	|	|	3.747 +	33	
49TI 34	|	|	|	3.785 5/2-,7/2-	34	
49TI 35	|	|	3.788	3/2-|	35	16 FS LT
49TI 36	|	|	|	3.818	36	
49TI 37	|	|	3.855	5/2-|	37	
49TI 38	|	|	|	3.916	38	

49TI	39					3.941	(5/2,7/2,9/2)	39		
49TI	40					3.967	-	40		

49TI	41					3.990		41		
49TI	42					4.074	5/2-,7/2-	42		
49TI	43					4.142	(5/2-)	43		
49TI	44					4.195	5/2-,7/2-	44		
49TI	45			4.222	1/2-			45	22 FS	LT
49TI	46			4.242	7/2-			46		
49TI	47					4.300	-	47		
49TI	48					4.340	-	48		
49TI	49					4.382	(19/2)-	49	0.12 PS	LT
49TI	50			4.433	3/2-			50		

49TI	51	4.456	1/2+					51		
49TI	52					4.489	-	52		
49TI	53	4.507	5/2+					53		
49TI	54	4.561	1/2+					54		
49TI	55					4.584	+	55		
49TI	56			4.588	3/2-			56		
49TI	57					4.621		57		
49TI	58			4.667	1/2-			58		
49TI	59					4.725		59		
49TI	60					4.770	3/2+,5/2+	60		

49TI	61					4.811		61		
49TI	62					4.836		62		
49TI	63					4.897	3/2+,5/2+	63		
49TI	64			4.911	1/2-			64		
49TI	65					5.063	(5/2-)	65		
49TI	66			5.116	1/2-			66	10 FS	LT
49TI	67					5.121	11/2+,13/2+	67		
49TI	68					5.151	(3/2)	68		
49TI	69					5.173	5/2-,7/2-	69		
49TI	70					5.200	+	70		

49TI	71					5.232	3/2-,1/2-	71		
49TI	72	5.254	1/2+					72		
49TI	73					5.326	5/2+,3/2+	73		
49TI	74					5.347	(5/2-)	74		
49TI	75					5.375		75		
49TI	76	5.412	1/2+					76	19 FS	+12-10
49TI	77					5.437	3/2-,1/2-	77		
49TI	78					5.579		78		
49TI	79					5.606		79		
49TI	80					5.655	(3/2,1/2)-	80		

49TI	81					5.693	5/2+,3/2+	81		
49TI	82					5.738	3/2-,1/2-	82		
49TI	83	5.774	1/2+					83		

49TI 84	|		|		|	5.796	(3/2-, 1/2-)	84
49TI 85	|		|	5.861	|	5/2-		85
49TI 86	|		|		|	5.910	-	86
49TI 87	|	5.931	|	1/2+	|			87
49TI 88	|		|		|	5.965	(5/2)-	88
49TI 89	|		|	6.010	|	5/2-		89
49TI 90	|		|		|	6.012	3/2+, 5/2+	90

49TI 91	|	6.078	|	1/2+	|			91
49TI 92	|		|		|	6.091		92
49TI 93	|		|		|	6.125		93
49TI 94	|		|		|	6.145		94
49TI 95	|		|		|	6.168		95
49TI 96	|		|		|	6.231		96
49TI 97	|		|		|	6.269		97
49TI 98	|		|		|	6.279	(5/2-)	98
49TI 99	|		|		|	6.513		99
49TI 100	|		|		|	7.329	3/2+, 5/2+	100

49TI 101	|		|		|	7.626	3/2+, 5/2+	101
49TI 102	|	8.133	|	1/2+	|			102
S-n	=	8.142	(	0.000)	-----			
49TI 103	|		|		|	8.154	1/2-, 3/2-	103
49TI 104	|		|		|	8.156	1/2-, 3/2-	104
49TI 105	|	8.160	|	1/2+	|			105
49TI 106	|		|		|	8.164	1/2-, 3/2-	106
49TI 107	|	8.178	|	1/2+	|			107
49TI 108	|	8.193	|	1/2+	|			108
49TI 109	|		|		|	8.724	5/2-, 7/2-	109
49TI 110	|	8.882	|	7/2+	|			110 2.29 EV 43

49TI 111	|		|		|	8.890	3/2+, 5/2+	111
49TI 112	|		|		|	9.720		112
S-alpha=		10.177	(	0.000)	-----			
49TI 113	|		|		|	10.972	(1/2+)	113
49TI 114	|		|		|	11.110	(3/2+, 5/2+)	114
S-p	=	11.349	(	0.005)	-----			
49TI 115	|		|		|	11.700	(1/2-, 3/2-)	115

S-p	=	11.349	(	0.005)	-----			
S-n	=	8.142	(	0.000)	-----			
S-2p	=	20.797	(	0.002)	-----			
S-2n	=	19.769	(	0.000)	-----			
S-alpha=		10.177	(	0.000)	-----			
S+p	=	-7.949	(	0.000)				
S+n	=	-10.939	(	0.000)				
S+2p	=	-17.466	(	0.000)				
S+2n	=	-17.312	(	0.001)				

S+alpha = -9.148 (0.000)

gap p = 3.400 (0.005)

gap n = -2.797 (0.000)

gap 2p = 3.332 (0.002)

gap 2n = 2.457 (0.001)

gap alpha = 1.028 (0.001)