

^{42}Ti $Z = 22$ $N = 20$ [link to full NNDC output](#)

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

BE = 346.888 (0.000) MeV

Qbeta+ = 7.016 (0.000) MeV

	Energy T	J+	J-	J-other	T1/2

42TI 1	0.000	0+			1 208.65 MS 80
42TI 2	1.555	2+			2 0.44 PS 11
42TI 3	1.854	0+			3 0.14 PS GT
42TI 4				2.396 (2+)	4 0.22 PS 13
42TI 5	2.677	4+			5 1.4 PS GT
42TI 6				2.730	6
42TI 7				2.945	7
42TI 8	3.043	6+			8 3.12 NS 21
42TI 9				3.130	9
42TI 10				3.280	10

42TI 11				3.335	11
42TI 12			3.440 1-		12
42TI 13				3.540	13
42TI 14				3.660	14
42TI 15	3.744	2+			15 0.17 PS LT
S-p =	3.751 (0.000)				

42TI 16				3.850	16
42TI 17				3.990	17
42TI 18				4.130	18
42TI 19	4.245	0+			19
42TI 20			4.375 3-		20

42TI 21				4.400	21
42TI 22	4.440	2+			22
42TI 23	4.665	2+			23
42TI 24				4.730	24
S-2p =	4.836 (0.000)				

42TI 25				4.890	25
42TI 26	4.950	4+			26
42TI 27				5.160	27
42TI 28	5.220	4+			28
S-alpha=	5.471 (0.000)				

42TI 29	5.555	0+			29
42TI 30				6.370 (0+)	30

42TI 31				6.445	31
42TI 32				7.500	32

S-p = 3.751 (0.000)-----
S-n = 17.478 (0.028)-----
S-2p = 4.836 (0.000)-----
S-2n = 32.397 (0.160)-----
S-alpha= 5.471 (0.000)-----

S+p = -0.101 (0.043)
S+n = -12.288 (0.007)
S+2p = 0.000 (0.000)
S+2n = -28.587 (0.001)
S+alpha = -6.792 (0.011)

gap p = 3.651 (0.043)
gap n = 5.191 (0.029)
gap 2p = 0.000 (0.000)
gap 2n = 3.810 (0.160)
gap alpha = -1.321 (0.011)