

$^{51}\text{Ti}$        $Z = 22$        $N = 29$       adopted link      ENSDF link

Based on ensdf\_240402 (Apr 2024), and mass evaluation from 2020

BE = 444.159 ( 0.000) MeV

Qbeta- = 2.470 ( 0.000) MeV

Energy T		J+	J-	J-other	T1/2
-----					
51TI	1		0.000	3/2-	1 5.76 M 1
51TI	2		1.167	1/2-	2 34 FS 4
51TI	3		1.437	7/2-	3 0.42 PS +37-15
51TI	4		1.567	5/2-	4 86 FS +26-21
51TI	5		2.144	5/2-	5 0.11 PS 2
51TI	6		2.198	3/2-	6 10 FS 3
51TI	7		2.345	(11/2)-	7 9.6 PS 16
51TI	8		2.691	7/2-	8
51TI	9				2.731 (7/2,9/2) 9
51TI	10		2.754	(15/2-)	10 0.8 NS 3
-----					
51TI	11		2.906	1/2-	11 7.6 FS 2
51TI	12				2.919 (5/2,7/2) 12 14 FS LT
51TI	13				3.062 (7/2,9/2) 13
51TI	14		3.174	3/2-	14 11.8 FS 21
51TI	15				3.237 (5/2,7/2, 15
51TI	16		3.618	(5/2 T0 9/2)-	16
51TI	17		3.644	(13/2-)	17
51TI	18	3.771 9/2+			18 116 FS +21-17
51TI	19				4.022 (5/2-,7/2 19
51TI	20				4.095 (7/2,9/2) 20
-----					
51TI	21				4.172 (3/2+,5/2 21
51TI	22				4.187 (5/2,7/2, 22
51TI	23		4.407	(15/2-)	23
51TI	24				4.470 24
51TI	25				4.569 1/2-,3/2- 25
51TI	26				4.602 (3/2+,5/2 26
51TI	27				4.757 27
51TI	28	4.820 1/2+			28
51TI	29	4.882 1/2+			29
51TI	30				4.882 (5/2,7/2, 30
-----					
51TI	31				4.998 31
51TI	32				5.013 32
51TI	33				5.102 33
51TI	34				5.149 5/2-,7/2- 34
51TI	35				5.224 35
51TI	36		5.245	(17/2-)	36

51TI	37			5.420	37
51TI	38			5.540	38
51TI	39			5.780	39
51TI	40			5.950	40
-----					
51TI	41			6.140	41
51TI	42			6.250	42

S-p = 12.485 ( 0.003) -----  
 S-n = 6.372 ( 0.000) -----  
 S-2p = 23.011 ( 0.001) -----  
 S-2n = 17.312 ( 0.000) -----  
 S-alpha= 9.813 ( 0.002) -----

S+p = -8.999 ( 0.001)  
 S+n = -7.816 ( 0.003)  
 S+2p = -20.133 ( 0.000)  
 S+2n = -13.291 ( 0.003)  
 S+alpha = -7.802 ( 0.001)

gap p = 3.486 ( 0.003)  
 gap n = -1.444 ( 0.003)  
 gap 2p = 2.878 ( 0.001)  
 gap 2n = 4.021 ( 0.003)  
 gap alpha = 2.011 ( 0.002)