

$^{46}\text{Ti}$        $Z = 22$        $N = 24$       adopted link      ENSDF link

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

BE = 398.197 ( 0.000) MeV

	Energy T	J+	J-	J-other	T1/2
46TI 1	0.000	0+			1 STABLE
46TI 2	0.889	2+			2 5.32 PS 15
46TI 3	2.010	4+			3 1.62 PS 10
46TI 4	2.611	0+			4 76 FS 21
46TI 5	2.962	2+			5 166 FS 7
46TI 6			3.058 3-		6 7 PS 2
46TI 7			3.168 1-		7 176 FS 24
46TI 8				3.213	8
46TI 9				3.217	9
46TI 10	3.236	2+			10 29 FS 6
46TI 11	3.299	6+			11 0.99 PS 9
46TI 12				3.338	12
46TI 13			3.441 4-		13 66 PS 4
46TI 14				3.553	14
46TI 15			3.569 3-		15 50 FS +19-16
46TI 16	3.572	0+			16 192 FS +16-13
46TI 17				3.580	17 70 FS 30
46TI 18				3.610	18
46TI 19			3.677 2-		19
46TI 20	3.696	2+			20
46TI 21				3.724 (2)+	21 57 FS 4
46TI 22	3.731	1+			22
46TI 23				3.738 (1,2+)	23
46TI 24				3.772 +	24
46TI 25			3.826 5-		25 3.7 PS 21
46TI 26	3.845	2+			26 8.9 FS 21
46TI 27				3.848 (4+)	27
46TI 28			3.852 5-		28 4.8 PS 8
46TI 29				3.856	29
46TI 30	3.872	1+			30
46TI 31	3.889	2+			31 0.38 PS 7
46TI 32				3.906 (1,2+)	32 22 FS 4
46TI 33				3.926 (2+)	33
46TI 34	3.942	4+			34 0.02 PS LT
46TI 35				4.003	35
46TI 36	4.025	2+			36
46TI 37				4.039	37
46TI 38	4.130	2+			38

46TI 39				4.179	3-					39
46TI 40				4.192	3-					40
-----										
46TI 41		4.316	1+							41 2.7 FS 4
46TI 42							4.323			42
46TI 43					4.372	3-				43
46TI 44							4.398	(5-,6+)		44
46TI 45					4.417	6-				45 0.45 PS 17
46TI 46							4.437			46
46TI 47							4.500			47
46TI 48		4.523	4+							48 0.07 PS 3
46TI 49							4.527	(6+)		49
46TI 50							4.573			50
-----										
46TI 51							4.617			51
46TI 52					4.662	6-				52 1.4 PS 4
46TI 53		4.675	0+							53
46TI 54							4.697	(2+)		54
46TI 55							4.726	(5-,6+)		55
46TI 56							4.791	(3-)		56
46TI 57					4.827	3-				57
46TI 58							4.845	+		58
46TI 59		4.897	8+							59 0.49 PS 6
46TI 60		4.950	2+							60
-----										
46TI 61							5.000			61
46TI 62					5.024	3-				62
46TI 63							5.079	(4+)		63
46TI 64							5.094	+		64
46TI 65							5.117			65
46TI 66							5.154			66
46TI 67							5.180	+		67
46TI 68					5.198	7-				68 0.83 PS 3
46TI 69					5.206	3-				69
46TI 70		5.230	2+							70
-----										
46TI 71		5.280	6+							71
46TI 72		5.321	2+							72
46TI 73							5.361	(5-,6+)		73
46TI 74		5.363	2+							74
46TI 75					5.409	3-				75
46TI 76		5.515	2+							76
46TI 77					5.530	3-				77
46TI 78							5.604	(2+)		78
46TI 79		5.610	0+							79
46TI 80							5.700	(2+)		80
-----										
46TI 81		5.794	4+							81
46TI 82							5.811	+		82
46TI 83					5.828	3-				83

46TI 84					5.840	+		84
46TI 85					5.872	(2+)		85
46TI 86					5.903	+		86
46TI 87			5.950	3-				87
46TI 88					5.965	(6+)		88
46TI 89					5.992	(4+)		89
46TI 90					6.021	+		90
-----								
46TI 91					6.025			91
46TI 92					6.094	3-,4-		92
46TI 93	6.118	2+						93
46TI 94	6.134	2+						94
46TI 95			6.150	8-				95 0.31 PS 3
46TI 96	6.200	8+						96 0.19 PS LT
46TI 97			6.217	3-				97
46TI 98	6.242	10+						98 0.84 PS 4
46TI 99					6.251			99
46TI 100					6.266			100
-----								
46TI 101					6.305			101
46TI 102	6.338	4+						102
46TI 103	6.360	1+						103
46TI 104	6.395	4+						104
46TI 105	6.398	1+						105
46TI 106					6.424	+		106
46TI 107			6.458	3-				107
46TI 108					6.513			108
46TI 109					6.550	+		109
46TI 110					6.574			110
-----								
46TI 111					6.616	+		111
46TI 112	6.685	4+						112
46TI 113					6.739	(4)+		113
46TI 114					6.794			114
46TI 115			6.830	9-				115 0.52 PS 6
46TI 116					6.851	+		116
46TI 117	6.890	4+						117
46TI 118					6.958	(3-)		118
46TI 119					6.974	+		119
46TI 120					7.019	(3-,4+)		120
-----								
46TI 121					7.041	+		121
46TI 122					7.101	+		122
46TI 123					7.120	(3-)		123
46TI 124					7.147	+		124
46TI 125					7.172			125
46TI 126	7.180	1+						126
46TI 127					7.201	+		127
46TI 128					7.238			128
46TI 129					7.288	+		129

46TI 130			7.312	3-					130
-----									
46TI 131						7.350	+		131
46TI 132						7.392	(3-)		132
46TI 133	7.410	1+							133
46TI 134						7.429	+		134
46TI 135						7.472			135
46TI 136						7.534	(3-)		136
46TI 137						7.558	+		137
46TI 138						7.584	+		138
46TI 139						7.608	+		139
46TI 140	7.630	1+							140
-----									
46TI 141						7.660			141
46TI 142						7.710	+		142
46TI 143	7.730	1+							143
46TI 144						7.735			144
46TI 145						7.788	+		145
46TI 146						7.849	+		146
46TI 147						7.874			147
46TI 148						7.917	+		148
46TI 149						7.937			149
46TI 150	7.942	11+							150 0.31 PS 8
-----									
46TI 151			7.961	10-					151 0.30 PS LT
46TI 152						7.979	+		152
-----									
S-alpha=	8.006 ( 0.000)-----								
46TI 153						8.013			153
46TI 154						8.020	(0+)		154
46TI 155						8.040			155
46TI 156						8.088	+		156
46TI 157						8.134			157
46TI 158						8.182	+		158
46TI 159	8.217	12+							159 0.51 PS 5
46TI 160						8.230	+		160
-----									
46TI 161						8.284	10,11,12+		161 0.17 PS LT
46TI 162						8.293	+		162
46TI 163						8.346	+		163
46TI 164						8.384	+		164
46TI 165	8.460	1+							165
46TI 166						8.467	+		166
46TI 167						8.530	+		167
46TI 168						8.574	+		168
46TI 169						8.621	+		169
46TI 170						8.662	+		170
-----									
46TI 171						8.701	+		171
46TI 172			8.716	11-					172 0.29 PS LT
46TI 173						8.761	+		173

46TI 174				8.808	+	174
46TI 175				8.860	+	175
46TI 176				8.940	+	176
46TI 177				8.984	+	177
46TI 178		9.000	1+			178
46TI 179				9.070	+	179
46TI 180				9.111	+	180
-----						
46TI 181				9.141		181
46TI 182		9.168	4+			182
46TI 183		9.170	1+			183
46TI 184		9.205	6+			184
46TI 185				9.253	+	185
46TI 186				9.304	+	186
46TI 187				9.345	+	187
46TI 188				9.399	+	188
46TI 189		9.420	1+			189
46TI 190				9.426	+	190
-----						
46TI 191				9.474	+	191
46TI 192				9.519	-	192
46TI 193		9.550	1+			193
46TI 194				9.572	+	194
46TI 195		9.615	2+			195
46TI 196				9.649	+	196
46TI 197		9.670	1+			197
46TI 198				9.682		198
46TI 199				9.718	-	199
46TI 200				9.761		200
-----						
46TI 201		9.770	1+			201
46TI 202				9.790		202
46TI 203				9.852		203
46TI 204				9.864		204
46TI 205		9.870	1+			205
46TI 206				9.973	+	206
46TI 207		10.000	1+			207

S-p = 10.345 ( 0.001)-----  
S-n = 13.189 ( 0.001)-----  
S-2p = 17.237 ( 0.000)-----  
S-2n = 22.722 ( 0.001)-----  
S-alpha= 8.006 ( 0.000)-----

S+p = -5.168 ( 0.000)  
S+n = -8.881 ( 0.000)  
S+2p = -13.271 ( 0.007)  
S+2n = -20.507 ( 0.000)  
S+alpha = -8.558 ( 0.000)

gap p = 5.177 ( 0.001)  
gap n = 4.309 ( 0.001)  
gap 2p = 3.966 ( 0.007)  
gap 2n = 2.215 ( 0.001)  
gap alpha = -0.552 ( 0.000)