

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

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

BE      =      398.197 ( 0.000) MeV

	Energy T	J+		J-		J-other		T1/2
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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
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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	
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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	
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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		
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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		
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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		
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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		
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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		
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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
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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
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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
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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
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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		
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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		
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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
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46TI 151			7.961 10-		151	0.30 PS	LT
46TI 152				7.979 +	152		
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S-alpha=	8.006 ( 0.000)						
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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		
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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		
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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
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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
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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
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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
46TI 208				10.038	208
46TI 209				10.042 12+,14+	209 0.6 PS 2
46TI 210	10.180	1+			210
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46TI 211				10.212	211
46TI 212				10.256	212
46TI 213				10.321	213
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S-p	= 10.345 ( 0.001)				
46TI 214				10.347	214
46TI 215	10.350	1+			215
46TI 216				10.374	216
46TI 217				10.380	217

46TI 218				10.441	218
46TI 219				10.523 +	219
46TI 220				10.602	220
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46TI 221				10.661	221
46TI 222				10.730	222
46TI 223				10.782 +	223
46TI 224				10.866	224
46TI 225				10.938 +	225
46TI 226				10.980	226
46TI 227		11.050		1+	227
46TI 228				11.051	228
46TI 229				11.110	229
46TI 230				11.167	230
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46TI 231				11.299	231
46TI 232				11.354 3	232
46TI 233				11.374	233
46TI 234				11.426	234
46TI 235		11.450		1+	235
46TI 236		11.570		1+	236
46TI 237				11.698 (2,3)	237
46TI 238		11.840		1+	238
46TI 239		12.200		1+	239
46TI 240		12.460		0+	240
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46TI 241		12.650		1+	241
46TI 242				12.974	242
46TI 243		13.070		1+	243
46TI 244				13.169	244
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S-n	=	13.189	(	0.001)	
46TI 245		13.310		1+	245
46TI 246		14.153		0+	246
46TI 247		14.300		(0+)	247
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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)	
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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)	
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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)