

^{54}Fe $Z = 26$ $N = 28$ adopted link ENSDF link

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

BE = 471.765 (0.000) MeV

	Energy T	J+	J-	J-other	T1/2
54FE 1	0.000	0+			1 STABLE
54FE 2	1.408	2+			2 0.76 PS 2
54FE 3	2.538	4+			3 4.0 PS 8
54FE 4	2.561	0+			4 1.4 PS GE
54FE 5	2.900	2+			5
54FE 6	2.949	6+			6 1.22 NS 2
54FE 7	2.959	2+			7 0.052 PS 7
54FE 8	3.166	2+			8 0.15 PS +4-3
54FE 9	3.295	4+			9 2.1 PS GE
54FE 10	3.345	3+			10
54FE 11	3.437	4+ to 6+			11
54FE 12				3.794	12
54FE 13	3.833	4+			13 0.062 PS 12
54FE 14				3.841	14
54FE 15	4.031	5+			15 0.7 PS GE
54FE 16	4.048	4+			16 0.30 PS +23-10
54FE 17	4.072	3+			17 0.058 PS 17
54FE 18	4.100	4+			18
54FE 19				4.103	19
54FE 20	4.268	4+			20 0.082 PS +23-17
54FE 21	4.291	0+			21 0.055 PS +17-14
54FE 22	4.578	2+			22 0.007 PSLE
54FE 23				4.655	23
54FE 24				4.696	24
54FE 25				4.700	25
54FE 26			4.782 3-		26 0.033 PS 11
54FE 27			4.850 3-		27
54FE 28				4.949 4(+)	28 0.029 PS 10
54FE 29				5.045 5-,6+	29
54FE 30				5.080 (1,2+)	30
54FE 31	5.145	2+			31
54FE 32	5.233	0+			32
54FE 33				5.248	33
54FE 34				5.279	34
54FE 35				5.313	35
54FE 36				5.325	36
54FE 37	5.392	2+			37
54FE 38				5.404	38

54FE 39						5.431			39
54FE 40						5.453	(1,2+)		40

54FE 41						5.461			41
54FE 42						5.482	3+,4+		42
54FE 43						5.506	(2+)		43
54FE 44						5.523			44
54FE 45				5.539	3-				45
54FE 46						5.592			46
54FE 47						5.621	(3-)		47
54FE 48		5.657	4+						48
54FE 49						5.666			49
54FE 50		5.703	4+						50

54FE 51						5.787			51
54FE 52		5.809	2+						52
54FE 53						5.828			53
54FE 54						5.875			54
54FE 55				5.907	3-				55
54FE 56						5.919			56
54FE 57		5.927	7+						57
54FE 58		5.955	2+						58
54FE 59						6.023			59
54FE 60						6.038	(1,2+)		60

54FE 61						6.057			61
54FE 62						6.100			62
54FE 63						6.129	1		63
54FE 64						6.156			64
54FE 65		6.192	2+						65
54FE 66						6.212			66
54FE 67						6.238			67
54FE 68						6.259			68
54FE 69		6.297	7+						69
54FE 70				6.341	3-				70

54FE 71		6.381	8+						71 114 FS +28-21
54FE 72		6.400	0+						72
54FE 73				6.401	3-				73
54FE 74		6.429	2+						74
54FE 75						6.442			75
54FE 76		6.484	4+						76
54FE 77						6.510			77
54FE 78		6.527	10+						78 364 NS 7
54FE 79						6.551			79
54FE 80						6.563	(1-)		80

54FE 81						6.594			81
54FE 82		6.607	4+						82
54FE 83						6.648			83

54FE 84						6.663		84	
54FE 85		6.670	4+					85	
54FE 86					6.710	3-		86	
54FE 87		6.724	9+					87 41 PS AP	
54FE 88					6.749	3-		88	
54FE 89					6.774	1-		89	
54FE 90							6.804	90	

54FE 91							6.821	5-,6+	91
54FE 92							6.836		92
54FE 93		6.864	8+						93
54FE 94		6.881	4+						94
54FE 95							6.910		95
54FE 96							6.951		96
54FE 97					7.011	3-			97
54FE 98							7.040		98
54FE 99							7.075		99
54FE 100							7.110	(2+,3-)	100

54FE 101		7.128	6+						101
54FE 102							7.155		102
54FE 103							7.180	(1)	103
54FE 104		7.200	4+						104
54FE 105					7.260	3-			105
54FE 106							7.310	(2+,3-)	106
54FE 107							7.352	(9+)	107
54FE 108		7.377	2+						108
54FE 109							7.442		109
54FE 110					7.486	3-			110

54FE 111		7.505	10+						111
54FE 112							7.550	(2+)	112
54FE 113		7.560	0+						113
54FE 114							7.566		114
54FE 115		7.580	2+						115
54FE 116					7.603	3-			116
54FE 117					7.644	3-			117
54FE 118							7.674	+	118
54FE 119							7.760	(2+)	119
54FE 120							7.791		120

54FE 121							7.859		121
54FE 122							7.905		122
54FE 123							7.938	+	123
54FE 124					7.940	3-			124
54FE 125					8.005	3-			125
54FE 126							8.021	(11)+	126
54FE 127		8.114	1+						127
54FE 128					8.179	1-			128
54FE 129							8.225		129

54FE 130				8.298	(2+)	130

54FE 131			8.319	8-		131
54FE 132	8.334	1+				132
54FE 133					8.374	(10+)
54FE 134					8.410	
S-alpha=	8.418	(0.000)	-----			
54FE 135					8.440	135
54FE 136	8.450	1+				136
54FE 137			8.465	3-		137
54FE 138					8.521	5-,6+
54FE 139					8.560	(1,2-)
54FE 140					8.578	(10+)

54FE 141					8.610	(2-)
54FE 142			8.633	1-		142
54FE 143					8.666	143
54FE 144					8.680	(2)
54FE 145					8.740	145
54FE 146					8.808	(11+)
54FE 147	8.850	1+				147
S-p =	8.853	(0.000)	-----			
54FE 148			8.886	3-		148
54FE 149			8.930	2-		149
54FE 150			8.949	8-		150

54FE 151			8.952	3-		151
54FE 152	8.981	1+				152
54FE 153	9.062	1+				153
54FE 154					9.110	154
54FE 155					9.124	155
54FE 156	9.140	1+				156
54FE 157			9.150	3-		157
54FE 158					9.243	158
54FE 159	9.290	1+				159
54FE 160					9.300	160

54FE 161			9.353	3-		161
54FE 162			9.402	3-		162
54FE 163	9.410	1+				163
54FE 164					9.450	1
54FE 165			9.506	3-		165
54FE 166	9.530	1+				166
54FE 167					9.568	167
54FE 168					9.610	168
54FE 169					9.640	169
54FE 170			9.671	3-		170

54FE 171					9.716	171
54FE 172			9.747	3-		172

54FE 173						9.789		173
54FE 174						9.810		174
54FE 175						9.845	(12+)	175
54FE 176						9.860		176
54FE 177						9.910		177
54FE 178		9.940		1+				178
54FE 179				9.974		8-		179
54FE 180						9.984		180

54FE 181						9.995		181

S-p = 8.853 (0.000)-----
 S-n = 13.378 (0.002)-----
 S-2p = 15.413 (0.000)-----
 S-2n = 24.065 (0.000)-----
 S-alpha= 8.418 (0.000)-----

S+p = -5.064 (0.001)
 S+n = -9.298 (0.000)
 S+2p = -12.231 (0.001)
 S+2n = -20.495 (0.000)
 S+alpha = -6.399 (0.000)

gap p = 3.789 (0.001)
 gap n = 4.080 (0.002)
 gap 2p = 3.182 (0.001)
 gap 2n = 3.570 (0.001)
 gap alpha = 2.019 (0.001)