

$^{55}\text{Fe}$        $Z = 26$        $N = 29$       adopted link      ENSDF link

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

BE = 481.063 ( 0.000) MeV

Qbeta+ = 0.231 ( 0.000) MeV

	Energy T	J+	J-	J-other	T1/2
55FE 1			0.000	3/2-	1 2.744 Y 9
55FE 2			0.411	1/2-	2 6 PS +6-3
55FE 3			0.931	5/2-	3 8 PS 3
55FE 4			1.317	7/2-	4 2.1 PS +14-7
55FE 5			1.408	7/2-	5 37.9 PS 17
55FE 6			1.918	1/2-	6 12 FS 4
55FE 7				2.015 1/2-,3/2-	7
55FE 8			2.052	3/2-	8 7.6 FS 21
55FE 9			2.144	5/2-	9 38 FS +11-8
55FE 10			2.212	9/2-	10 0.76 PS 21
55FE 11				2.256	11
55FE 12				2.301 (9/2)	12 0.6 PS +5-2
55FE 13		2.470	3/2-		13 15 FS 3
55FE 14				2.490 5/2-,7/2-	14
55FE 15		2.539	11/2-		15 9.3 PS 13
55FE 16		2.578	5/2-		16 46 FS 6
55FE 17				2.600 (7/2+,9/2+)	17
55FE 18		2.814	13/2-		18 10.0 PS 21
55FE 19				2.872 5/2-,7/2-	19 19 FS 6
55FE 20		2.939	7/2-		20 29 FS +9-8
55FE 21				2.982 11/2(-)	21
55FE 22		2.984	9/2-		22
55FE 23		3.029	3/2-		23 15 FS 8
55FE 24		3.072	11/2-		24 0.7 PS GT
55FE 25				3.076 11/2,(9/2)	25 0.44 PS +21-11
55FE 26				3.109 5/2-,7/2-	26
55FE 27				3.285	27 8 FS 7
55FE 28				3.311 5/2-,7/2-	28
55FE 29				3.362	29
55FE 30		3.419	15/2-		30 0.07 PS 2
55FE 31		3.457	13/2-		31 0.6 PS GT
55FE 32		3.552	3/2-		32 3.5 FS LT
55FE 33		3.599	1/2-		33
55FE 34				3.661	34
55FE 35				3.709 1/2-,3/2-	35
55FE 36				3.722	36
55FE 37		3.790	1/2-		37 11 FS LT

55FE 38				3.801	3/2-			38
55FE 39						3.814	7/2+,9/2+	39
55FE 40						3.815	5/2-,7/2-	40
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55FE 41						3.860	7/2+,9/2+	41
55FE 42						3.901	(13/2-)	42
55FE 43				3.907	3/2-			43 3.5 FS LT
55FE 44						3.960		44
55FE 45						4.028		45
55FE 46						4.057	5/2-,7/2-	46
55FE 47						4.110		47
55FE 48						4.123		48
55FE 49		4.273	1/2+					49
55FE 50						4.372		50
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55FE 51						4.387		51
55FE 52		4.450	1/2+					52
55FE 53		4.463	5/2+					53
55FE 54				4.495	1/2-			54 3.5 FS 21
55FE 55						4.538	(1/2-,3/2-)	55
55FE 56						4.636		56
55FE 57						4.658	5/2-,7/2-	57
55FE 58						4.673		58
55FE 59		4.708	5/2+					59 4.2 FS 28
55FE 60						4.751		60
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55FE 61						4.790		61
55FE 62		4.824	3/2+					62
55FE 63						4.849		63
55FE 64						4.867		64
55FE 65						4.877	3/2+,5/2+	65
55FE 66						4.948		66
55FE 67						4.990		67
55FE 68						4.999		68
55FE 69						5.041		69
55FE 70						5.078		70
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55FE 71						5.100	(19/2-)	71 22.4 PS 8
55FE 72						5.118	1/2-,3/2-	72 6 FS 4
55FE 73						5.185		73
55FE 74						5.208	5/2-,7/2-	74
55FE 75						5.237		75
55FE 76						5.286	5/2-,7/2-	76
55FE 77						5.306		77
55FE 78						5.326		78
55FE 79						5.363		79
55FE 80						5.370		80
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55FE 81						5.394	3/2+,5/2+	81
55FE 82						5.396	5/2-,7/2-	82

55FE 83				5.435		83
55FE 84				5.445	5/2-, 7/2-	84
55FE 85				5.477		85 0.7 PS GT
55FE 86				5.497		86
55FE 87				5.542		87
55FE 88				5.556		88
55FE 89				5.564	3/2+, 5/2+	89
55FE 90				5.599		90
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55FE 91				5.634		91
55FE 92				5.668	5/2-, 7/2-	92
55FE 93	5.687	1/2+				93
55FE 94				5.745		94
55FE 95			5.775	1/2-		95
55FE 96				5.817		96
55FE 97				5.839		97
55FE 98				5.872		98
55FE 99				5.900	3/2+, 5/2+	99
55FE 100				5.933		100
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55FE 101				5.947		101
55FE 102				5.955	(1/2+)	102
55FE 103				5.989		103
55FE 104				6.053	5/2-, 7/2-	104
55FE 105				6.059	3/2+, 5/2+	105
55FE 106				6.090		106
55FE 107				6.159	5/2-, 7/2-	107
55FE 108				6.167	3/2+, 5/2+	108
55FE 109				6.229		109
55FE 110				6.237		110
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55FE 111	6.282	1/2+				111
55FE 112				6.319	5/2-, 7/2-	112
55FE 113				6.348		113
55FE 114				6.374		114
55FE 115				6.387		115
55FE 116				6.410		116
55FE 117				6.425		117
55FE 118				6.456		118
55FE 119				6.495	3/2+, 5/2+	119
55FE 120				6.529	(21/2-)	120 0.7 PS LT
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55FE 121				6.579		121
55FE 122				6.596		122
55FE 123				6.610		123
55FE 124				6.628	3/2+, 5/2+	124
55FE 125				6.654		125
55FE 126				6.670		126
55FE 127				6.745		127
55FE 128				6.776	3/2+, 5/2+	128

55FE 129				6.826		129
55FE 130				6.846		130
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55FE 131				6.857		131
55FE 132				6.874		132
55FE 133				6.916	3/2+, 5/2+	133
55FE 134	6.962	1/2+				134
55FE 135				6.980		135
55FE 136				7.008		136
55FE 137				7.030		137
55FE 138				7.054		138
55FE 139				7.070		139
55FE 140				7.092		140
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55FE 141				7.105		141
55FE 142				7.126		142
55FE 143				7.149		143
55FE 144				7.178		144
55FE 145				7.215		145
55FE 146				7.235		146
55FE 147				7.252	3/2+, 5/2+	147
55FE 148				7.270		148
55FE 149				7.310		149
55FE 150				7.360		150
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55FE 151				7.369	3/2+, 5/2+	151
55FE 152				7.382		152
55FE 153				7.419	+	153
55FE 154				7.450		154
55FE 155				7.480	5/2-, 7/2-	155
55FE 156				7.510	(-)	156
55FE 157				7.606	(23/2)	157
55FE 158				7.610	(5/2-)	158
55FE 159				7.614	3/2+, 5/2+	159
55FE 160				7.625	5/2-, 7/2-	160
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55FE 161				7.730	(7/2)-	161
55FE 162		7.780	7/2-			162
55FE 163				7.808	+	163
55FE 164				7.853	3/2+, 5/2+	164
55FE 165				7.919	23/2	165
55FE 166				7.938		166
55FE 167				8.028	3/2+, 5/2+	167
55FE 168				8.130	(3/2+, 5/2+)	168
55FE 169				8.180	(3/2+, 5/2+)	169
55FE 170				8.264	3/2+, 5/2+	170
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55FE 171				8.420		171
S-alpha=	8.456	( 0.000)	-----	-----	-----	-----
55FE 172				8.527	3/2+, 5/2+	172

55FE 173				8.560	(1/2+)	173
55FE 174				8.796	3/2+,5/2+	174
55FE 175		8.843	1/2+			175
55FE 176				8.892	3/2+,5/2+	176
55FE 177		8.910	1/2+			177
55FE 178				8.988	25/2	178
55FE 179				9.007	3/2+,5/2+	179
55FE 180				9.115	1/2-,3/2-	180

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S-p = 9.212 ( 0.001)-----

S-n = 9.298 ( 0.000)-----

55FE 181				9.305	25/2	181
55FE 182				9.908	27/2	182

S-p = 9.212 ( 0.001)-----

S-n = 9.298 ( 0.000)-----

S-2p = 16.772 ( 0.000)-----

S-2n = 22.677 ( 0.002)-----

S-alpha= 8.456 ( 0.000)-----

S+p = -5.848 ( 0.001)

S+n = -11.197 ( 0.000)

S+2p = -13.181 ( 0.001)

S+2n = -18.843 ( 0.000)

S+alpha = -6.100 ( 0.000)

gap p = 3.364 ( 0.001)

gap n = -1.899 ( 0.001)

gap 2p = 3.591 ( 0.001)

gap 2n = 3.833 ( 0.002)

gap alpha = 2.355 ( 0.001)