

$^{57}\text{Fe}$        $Z = 26$        $N = 31$       [link to full NNDC output](#)

Based on ENSDF from Dec 2018, and mass evaluation from 2016

BE = 499.906 ( 0.000) MeV

	Energy T	J+	J-	J-other	T1/2
57FE 1			0.000 5/2	1/2-	1 STABLE
57FE 2			0.014	3/2-	2 98.3 NS 3
57FE 3			0.136	5/2-	3 8.7 NS 3
57FE 4			0.367	3/2-	4 10.5 PS 14
57FE 5			0.706	5/2-	5 4.1 PS 11
57FE 6			1.007	7/2-	6 0.13 PS 7
57FE 7				1.140	7
57FE 8			1.198	9/2-	8 2.9 PS 4
57FE 9			1.266	1/2-	9 82 FS 19
57FE 10			1.357	7/2-	10 0.18 PS 7
57FE 11			1.627	3/2-	11 56 FS 8
57FE 12			1.725	3/2-	12 31 FS 4
57FE 13				1.977 (1/2-,3/2,5/2-)	13
57FE 14			1.990	9/2-	14 0.18 PS +17-6
57FE 15				1.991 1/2-,3/2-	15
57FE 16				2.113 (1/2,3/2,5/2-)	16
57FE 17			2.119	5/2-	17 46 FS 12
57FE 18			2.207	5/2-	18 10 FS 3
57FE 19				2.218 (5/2+)	19
57FE 20				2.220 (7/2-)	20 0.3 PS GT
57FE 21				2.330 (1/2,3/2,5/2+)	21
57FE 22				2.356 (11/2)-	22 0.06 PS 2
57FE 23				2.358 1/2-,3/2-	23
57FE 24	2.456	9/2+			24 1.4 PS GT
57FE 25				2.456 1/2+,7/2+,9/2+	25
57FE 26	2.505	5/2+			26 78 FS 18
57FE 27			2.564	3/2-	27
57FE 28				2.575 (1/2,3/2,5/2-)	28 18 FS 4
57FE 29				2.594 (3/2-,5/2-)	29 37 FS 10
57FE 30				2.599 (1/2,3/2,5/2+)	30
57FE 31			2.697	1/2-	31 6 FS 2
57FE 32				2.758	32
57FE 33				2.821 (1/2,3/2,5/2+)	33 60 FS +20-10
57FE 34				2.836 3/2,5/2	34
57FE 35				2.855	35
57FE 36				2.879 (13/2)-	36 0.14 PS LT
57FE 37				2.904	37
57FE 38				2.921 1/2-,3/2-	38 33 FS 6

57FE 39						2.971	(1/2,3/2,5/2+)	39		
57FE 40						2.988	(1/2,3/2,5/2+)	40		
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57FE 41		3.059		1/2+				41		
57FE 42						3.099		42		
57FE 43						3.110		43		
57FE 44						3.123		44		
57FE 45						3.135	(15/2)-	45	160 PS	7
57FE 46						3.183	1/2-,3/2-	46		
57FE 47						3.206	5/2-,7/2-	47		
57FE 48		3.240		1/2+				48		
57FE 49						3.269	(13/2)+	49	0.37 PS	+21-11
57FE 50						3.284		50		
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57FE 51						3.302	(5/2-,7/2-)	51		
57FE 52						3.322	1/2-,3/2-	52		
57FE 53						3.337		53		
57FE 54						3.340		54		
57FE 55						3.345	7/2+,9/2+	55		
57FE 56						3.371	3/2-	56		
57FE 57						3.428	3/2-	57	3.0 FS	+6-29
57FE 58						3.452		58		
57FE 59						3.473	5/2-,7/2-	59		
57FE 60						3.514	(17/2)	60	0.14 PS	LT
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57FE 61						3.535	7/2+,9/2+	61		
57FE 62						3.536		62		
57FE 63						3.548	7/2+,9/2+	63		
57FE 64						3.561		64		
57FE 65						3.608	7/2+,9/2+	65		
57FE 66						3.609		66		
57FE 67						3.661		67		
57FE 68						3.752	7/2+,9/2+	68		
57FE 69						3.784	7/2+,9/2+	69		
57FE 70		3.792		3/2+				70		
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57FE 71						3.827	5/2-,7/2-	71		
57FE 72						3.862		72		
57FE 73						3.881		73		
57FE 74						3.902	5/2-,7/2-	74		
57FE 75						3.926	(1/2,3/2,5/2-)	75		
57FE 76						3.936	5/2-,7/2-	76		
57FE 77						3.981	3/2-	77	7 FS	12
57FE 78						4.043	5/2-,7/2-	78		
57FE 79						4.081		79		
57FE 80						4.093		80		
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57FE 81						4.137	(1/2,3/2,5/2+)	81		
57FE 82		4.139		5/2+				82	15 FS	8
57FE 83						4.144	(1/2,3/2,5/2+)	83		

57FE 84				4.210	(3/2)-	84		
57FE 85				4.239	3/2+,5/2+	85		
57FE 86				4.316	7/2+,9/2+	86		
57FE 87				4.363	5/2-,7/2-	87		
57FE 88				4.379	(1/2,3/2,5/2-)	88		
57FE 89				4.379	(1/2,3/2,5/2-)	89	3 FS	4
57FE 90				4.432		90	0.14 PS	LT
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57FE 91				4.460	5/2-,7/2-	91		
57FE 92		4.492	5/2+			92		
57FE 93				4.525	7/2+,9/2+	93		
57FE 94				4.526	(17/2+)	94	0.29 PS	9
57FE 95		4.544	1/2+			95		
57FE 96		4.573	1/2+			96		
57FE 97		4.597	5/2+			97	5 FS	8
57FE 98				4.652	5/2-,7/2-	98		
57FE 99				4.680		99		
57FE 100				4.692	(5/2+)	100		
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57FE 101				4.719		101		
57FE 102				4.753	5/2-,7/2-	102		
57FE 103				4.771	3/2+,5/2+	103		
57FE 104				4.824		104	10 FS	LT
57FE 105				4.902		105		
57FE 106		4.923	5/2+			106	7 FS	10
57FE 107				4.970	(5/2-,7/2-)	107		
57FE 108				4.976	3/2+,5/2+	108		
57FE 109				5.019	5/2-,7/2-	109		
57FE 110				5.064	(1/2+)&(7/2-)	110		
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57FE 111				5.085		111		
57FE 112				5.099		112		
57FE 113		5.115	1/2+			113		
57FE 114				5.140	(1/2,3/2,5/2+)	114		
57FE 115		5.178	1/2+			115		
57FE 116				5.195		116		
57FE 117				5.222	(1/2-,3/2,5/2+)	117		
57FE 118				5.239	(1/2,3/2,5/2+)	118		
57FE 119		5.250	1/2+			119		
57FE 120		5.271	1/2+			120		
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57FE 121		5.289	5/2+			121		
57FE 122				5.334	7/2+,9/2+	122		
57FE 123		5.362	5/2+			123	6 FS	+15-6
57FE 124				5.404		124		
57FE 125				5.422	3/2+,5/2+	125		
57FE 126				5.445	7/2+,9/2+	126		
57FE 127				5.472	3/2+,5/2+	127		
57FE 128		5.500	1/2+			128		
57FE 129				5.512		129		

57FE 130	5.525	1/2+				130
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57FE 131				5.545		131
57FE 132				5.564	3/2+,5/2+	132
57FE 133				5.590		133
57FE 134				5.623		134
57FE 135				5.641		135
57FE 136				5.675		136
57FE 137				5.688		137
57FE 138				5.721	1/2+&(7/2+,9/2+)	138
57FE 139	5.737	1/2+				139
57FE 140				5.769		140
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57FE 141				5.802	3/2+,5/2+	141
57FE 142				5.825	3/2+,5/2+	142
57FE 143	5.844	1/2+				143
57FE 144				5.864	3/2+,5/2+	144
57FE 145				5.900		145
57FE 146				5.918		146
57FE 147				5.936		147
57FE 148				5.956	3/2+,5/2+	148
57FE 149				5.983	3/2+ T0 (9/2+)	149
57FE 150				6.025	3/2+,5/2+	150
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57FE 151				6.044	3/2+,5/2+	151
57FE 152				6.083		152
57FE 153				6.103	7/2+,9/2+	153
57FE 154	6.130	1/2+				154
57FE 155				6.148		155
57FE 156				6.171	3/2+,5/2+	156
57FE 157				6.187	(21/2+)	157 0.11 PS 4
57FE 158				6.194	7/2+,9/2+	158
57FE 159	6.212	1/2+				159
57FE 160				6.230	3/2+,5/2+	160
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57FE 161				6.252	7/2+,9/2+	161
57FE 162				6.270	7/2+,9/2+	162
57FE 163				6.305		163
57FE 164				6.323		164
57FE 165				6.340		165
57FE 166				6.370	3/2+,5/2+	166
57FE 167				6.408	3/2+,5/2+	167
57FE 168				6.427	3/2+,5/2+	168
57FE 169				6.496		169
57FE 170				6.512	3/2+,5/2+	170
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57FE 171	6.542	1/2+				171
57FE 172				6.571	3/2+,5/2+	172
57FE 173				6.589	3/2+,5/2+	173
57FE 174				6.640	3/2+,5/2+	174

57FE 175				6.672	3/2+,5/2+	175		
57FE 176				6.703	3/2+,5/2+	176		
57FE 177				6.725		177		
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S-alpha=	7.320	( 0.000)	-----					
S-n	=	7.646	( 0.000)	-----				
57FE 178			7.647	1/2-		178		
57FE 179				8.323	(25/2+)	179	0.14	PS LT
57FE 180				10.450	(7/2-)	180		
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S-p = 10.559 ( 0.000)-----  
 S-n = 7.646 ( 0.000)-----  
 S-2p = 19.650 ( 0.000)-----  
 S-2n = 18.843 ( 0.000)-----  
 S-alpha= 7.320 ( 0.000)-----

S+p = -6.954 ( 0.001)  
 S+n = -10.045 ( 0.000)  
 S+2p = -15.553 ( 0.000)  
 S+2n = -16.626 ( 0.000)  
 S+alpha = -6.465 ( 0.000)

gap p = 3.605 ( 0.001)  
 gap n = -2.398 ( 0.001)  
 gap 2p = 4.097 ( 0.001)  
 gap 2n = 2.218 ( 0.001)  
 gap alpha = 0.855 ( 0.001)