

^{57}Fe $Z = 26$ $N = 31$ adopted link ENSDF link

Based on ensdf_240402 (Apr 2024), and mass evaluation from 2020

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	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,	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,	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+	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,	28	18 FS 4
57FE	29				2.594 (3/2-,5/2	29	37 FS 10
57FE	30				2.599 (1/2,3/2,	30	

57FE	31			2.697 1/2-		31	6 FS 2
57FE	32				2.758	32	
57FE	33				2.821 (1/2,3/2,	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,	39		
57FE 40						2.988 (1/2,3/2,	40		

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		

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

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		

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,	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		

57FE 81						4.137 (1/2,3/2,	81		
57FE 82		4.139	5/2+				82	15 FS	8

57FE 83						4.144 (1/2,3/2,	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,	88		
57FE 89						4.379 (1/2,3/2,	89	3 FS	4
57FE 90						4.432	90	0.14 PS	LT

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		

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+)&(7/10)	110		

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,	114		
57FE 115		5.178		1/2+			115		
57FE 116						5.195	116		
57FE 117						5.222 (1/2-,3/2)	117		
57FE 118						5.239 (1/2,3/2,	118		
57FE 119		5.250		1/2+			119		
57FE 120		5.271		1/2+			120		

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	

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)138	
57FE 139	5.737	1/2+			139	
57FE 140				5.769	140	

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+ TO	(9/2+)		149	
57FE 150				6.025	3/2+,5/2+150	

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	

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	

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
S-alpha=		7.319	(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

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=		7.319	(0.000)	-----	

S+p	=	-6.954	(0.001)
S+n	=	-10.044	(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	=	0.854	(0.001)