

^{52}Fe $Z = 26$ $N = 26$ [link to full NNDC output](#)

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

BE = 447.698 (0.005) MeV

Qbeta+ = 2.377 (0.005) MeV

	Energy T	J+	J-	J-other	T1/2
52FE 1	0.000	0+			1 8.275 H 8
52FE 2	0.849	2+			2 7.8 PS 10
52FE 3	2.385	4+			3 0.22 PS 5
52FE 4	2.759	2+			4 0.14 PS +9-5
52FE 5	3.585	4+			5 0.28 PS +21-7
52FE 6	4.146	0+			6
52FE 7	4.326	6+			7 0.17 PS 5
52FE 8			4.396 3-		8
52FE 9	4.456	2+			9
52FE 10				4.851 (5-,6+)	10 0.5 PS +23-2
52FE 11	4.872	6+			11 0.21 PS 8
52FE 12				4.896	12
52FE 13			5.137 5-		13
52FE 14			5.140 5-		14
52FE 15	5.328	4+			15
52FE 16	5.363	0+			16
52FE 17				5.439	17
52FE 18	5.483	4+			18
52FE 19	5.529	4+			19
52FE 20				5.563 (3-)	20
52FE 21	5.655	6+			21
52FE 22	5.718	0+			22
52FE 23				5.792	23
52FE 24	5.829	2+			24
52FE 25	5.965	4+			25
52FE 26	6.034	2+			26
52FE 27	6.044	2+			27
52FE 28				6.174 (6+)	28
52FE 29				6.231	29
52FE 30	6.361	8+			30 0.15 PS 5
52FE 31	6.416	4+			31
52FE 32				6.454	32
52FE 33	6.483	2+			33
52FE 34	6.493	8+			34 0.18 PS 4
52FE 35			6.531 3-		35
52FE 36				6.564	36
52FE 37				6.634 (0+)	37

52FE 38		6.714	2+						38	
52FE 39							6.744		39	
52FE 40							6.772	(2+)	40	

52FE 41					6.882		1-		41	
52FE 42		6.927	0+						42	
52FE 43		6.958	12+						43 45.9 S 6	
52FE 44					7.013		3-		44	
52FE 45							7.124	(4+)	45	
52FE 46							7.261	(6+)	46	
52FE 47							7.289		47	
52FE 48							7.338		48	
S-p =		7.375	(0.005)	-----						
52FE 49							7.382	(10+)	49	
52FE 50		7.463	2+						50	

52FE 51							7.510		51	
52FE 52		7.611	6+						52	
52FE 53		7.636	1 4+						53	
52FE 54							7.787		54	
52FE 55							7.817		55	
S-alpha=		7.933	(0.009)	-----						
52FE 56		7.935	2+						56	
52FE 57		8.037	0+						57	
52FE 58							8.067		58	
52FE 59							8.097		59	
52FE 60							8.122		60	

52FE 61					8.146		3-		61	
52FE 62							8.184		62	
52FE 63							8.207	(3-)	63	
52FE 64							8.240		64	
52FE 65							8.327	(3-)	65	
52FE 66		8.354	2+						66	
52FE 67		8.401	2+						67	
52FE 68							8.425		68	
52FE 69							8.461		69	
52FE 70		8.511	4+						70	

52FE 71		8.535	4+						71	
52FE 72		8.561	0+						72	
52FE 73							8.618		73	
52FE 74							8.661	(4+)	74	
52FE 75							8.677		75	
52FE 76							8.727		76	
52FE 77		8.748	4+						77	
52FE 78							8.770	(3-)	78	
52FE 79							8.832		79	
52FE 80							8.872		80	

52FE 81				8.900	(2+)	81
52FE 82				8.936		82
52FE 83				8.962	(6+)	83
52FE 84				8.985		84
52FE 85				9.044		85
52FE 86				9.059		86
52FE 87				9.130		87
52FE 88				9.213		88
52FE 89		9.279	4+			89
52FE 90				9.311		90

52FE 91				9.338		91
52FE 92				9.357		92
52FE 93				9.458		93
52FE 94				9.497		94
52FE 95				9.770		95
52FE 96				10.006	(2+)	96
52FE 97				10.049		97
52FE 98		10.332	0+			98
52FE 99				10.810		99
52FE 100		10.990	0+			100

52FE 101				11.440		101
52FE 102				11.640		102
52FE 103		11.780	2+			103

S-p = 7.375 (0.005)-----
S-n = 16.199 (0.010)-----
S-2p = 12.646 (0.005)-----
S-2n = 29.997 (0.010)-----
S-alpha= 7.933 (0.009)-----

S+p = -1.618 (0.005)
S+n = -10.688 (0.005)
S+2p = -5.526 (0.007)
S+2n = -24.067 (0.005)
S+alpha = -8.002 (0.005)

gap p = 5.757 (0.007)
gap n = 5.511 (0.012)
gap 2p = 7.120 (0.009)
gap 2n = 5.930 (0.011)
gap alpha = -0.069 (0.010)