

^{181}Ir $Z = 77$ $N = 104$ adopted link ENSDF link

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

BE = 1440.131 (0.005) MeV

Qbeta+ = 4.087 (0.026) MeV

	Energy T	J+		J-		J-other		T1/2

S-alpha=	-4.381	(0.028)	-----					
181IR 1				0.000	5/2-			1 4.90 M 15
181IR 2				0.025	9/2-			2
181IR 3						0.112	(1/2)-	3
181IR 4				0.213	13/2-			4 148 PS 8
181IR 5						0.243	(3/2,5/2)-	5
181IR 6		0.289		5/2+				6 298 NS
181IR 7						0.299	(3/2)+	7
181IR 8				0.310	7/2-			8
181IR 9						0.342	(1/2+,3/2+)	9
181IR 10				0.366	9/2-			10 126 NS 6

181IR 11		0.393		7/2+				11
181IR 12						0.441	(3/2+,5/2+)	12
181IR 13						0.448	(3/2)-	13
181IR 14				0.484	11/2-			14
181IR 15						0.492	(5/2-,7/2,9/2-)	15
181IR 16						0.499	(11/2-)	16
181IR 17		0.522		9/2+				17
181IR 18				0.549	17/2-			18 10.2 PS 8
181IR 19						0.569		19
181IR 20						0.591	(1/2,3/2,5/2)-	20

181IR 21						0.646	(1/2-,3/2-,5/2-	21)
181IR 22				0.655	13/2-			22
181IR 23		0.673		11/2+				23
181IR 24						0.698		24
181IR 25				0.816	15/2-			25
181IR 26						0.826	(1/2,3/2)-	26
181IR 27						0.830		27
181IR 28						0.832		28
181IR 29				0.838	15/2-			29
181IR 30		0.845		13/2+				30

181IR 31						0.881		31
181IR 32						0.980		32
181IR 33				1.005	21/2-			33 2.16 PS 20
181IR 34						1.016	15/2(-)	34
181IR 35						1.016		35
181IR 36		1.035		15/2+				36

181IR 37				1.041	17/2-			37
181IR 38						1.228	(15/2+)	38
181IR 39		1.239	17/2+					39
181IR 40				1.245	19/2-			40

181IR 41				1.257	19/2-			41
181IR 42						1.258		42
181IR 43		1.382	17/2+					43 14 PS 10
181IR 44		1.459	19/2+					44
181IR 45				1.487	21/2-			45
181IR 46				1.551	25/2-			46 0.90 PS 14
181IR 47						1.552	1/2-, 3/2-	47
181IR 48						1.555		48
181IR 49						1.576	(17/2-)	49
181IR 50						1.621	(19/2+)	50

181IR 51						1.668	1/2-, 3/2-	51
181IR 52		1.677	21/2+					52 8.0 PS 6
181IR 53						1.681	1/2-, 3/2-	53
181IR 54		1.687	21/2+					54
181IR 55						1.699	1/2-, 3/2-	55
181IR 56				1.727	23/2-			56
181IR 57						1.750	1/2-, 3/2-	57
181IR 58						1.763	(23/2-)	58
181IR 59						1.774		59
181IR 60		1.807	19/2+					60

181IR 61		1.838	21/2+					61
181IR 62		1.883	21/2+					62
181IR 63						1.907	(21/2)	63
181IR 64		1.928	23/2+					64
181IR 65						1.956	(17/2+)	65
181IR 66				1.962	19/2-			66
181IR 67				1.979	25/2-			67
181IR 68				1.979	21/2-			68
181IR 69		1.990	23/2+					69
181IR 70		2.034	23/2+					70 22 NS 4

181IR 71		2.062	25/2+					71 2.36 PS 21
181IR 72						2.086	(23/2+)	72
181IR 73		2.124	25/2+					73
181IR 74		2.130	25/2+					74
181IR 75				2.157	29/2-			75 0.55 PS 7
181IR 76				2.175	23/2-			76
181IR 77		2.177	25/2+					77
181IR 78		2.192	25/2+					78
181IR 79				2.240	27/2-			79
181IR 80		2.299	27/2+					80

181IR 81						2.311		81

181IR 82						2.337	(27/2-)	82
181IR 83		2.382	27/2+					83
181IR 84				2.382	25/2-			84
S-p = 2.396 (0.017)-----								
181IR 85						2.421	(25/2)	85
181IR 86		2.441	27/2+					86
181IR 87		2.495	29/2+					87
181IR 88		2.499	29/2+					88
181IR 89				2.513	29/2-			89
181IR 90		2.529	29/2+					90 3.1 PS 4

181IR 91						2.556	(-)	91
181IR 92		2.597	29/2+					92
181IR 93				2.602	27/2-			93
181IR 94						2.626	(27/2+)	94
181IR 95		2.713	29/2+					95
181IR 96		2.721	31/2+					96
181IR 97				2.778	33/2-			97 1.80 PS 21
181IR 98				2.796	31/2-			98
181IR 99		2.833	31/2+					99
181IR 100				2.837	29/2-			100

181IR 101						2.913	(31/2-)	101
181IR 102						2.967	(29/2)	102
181IR 103		2.970	33/2+					103
181IR 104		2.982	33/2+					104
181IR 105		3.002	31/2+					105
181IR 106		3.025	33/2+					106
181IR 107				3.084	31/2-			107
181IR 108		3.088	33/2+					108
181IR 109				3.092	33/2-			109
181IR 110						3.217	(31/2+)	110

181IR 111		3.240	35/2+					111
181IR 112		3.278	33/2+					112
181IR 113						3.341	(33/2-)	113
181IR 114				3.349	37/2-			114
181IR 115		3.357	35/2+					115
181IR 116				3.400	35/2-			116
181IR 117						3.499	(35/2-)	117
181IR 118		3.529	37/2+					118
181IR 119		3.535	37/2+					119
181IR 120						3.568	(33/2)	120

181IR 121		3.569	37/2+					121
181IR 122						3.601	(35/2-)	122
181IR 123		3.614	35/2+					123
181IR 124		3.641	37/2+					124
181IR 125				3.718	37/2-			125
181IR 126		3.838	39/2+					126

181IR 127						3.857	(35/2+)	127
181IR 128						3.860		128
181IR 129		3.877	37/2+					129
181IR 130						3.878	(37/2-)	130

181IR 131		3.936	39/2+					131
181IR 132				3.950	41/2-			132
181IR 133						4.040		133
181IR 134				4.045	39/2-			134
181IR 135						4.120	(39/2-)	135
181IR 136		4.134	41/2+					136
181IR 137		4.153	41/2+					137
181IR 138		4.163	41/2+					138
181IR 139						4.174	(39/2-)	139
181IR 140		4.244	41/2+					140

181IR 141		4.253	39/2+					141
181IR 142						4.277	(37/2)	142
181IR 143				4.385	41/2-			143
181IR 144						4.444	(41/2-)	144
181IR 145		4.495	43/2+					145
181IR 146		4.496	41/2+					146
181IR 147						4.536	(39/2+)	147
181IR 148		4.563	43/2+					148
181IR 149				4.632	45/2-			149
181IR 150				4.727	43/2-			150

181IR 151		4.778	45/2+					151
181IR 152		4.789	45/2+					152
181IR 153						4.802	(43/2-)	153
181IR 154		4.841	45/2+					154
181IR 155		4.897	45/2+					155
181IR 156		4.913	43/2+					156
181IR 157						5.037	(41/2)	157
181IR 158				5.085	45/2-			158
181IR 159						5.129	(45/2+)	159
181IR 160						5.205	(47/2+)	160

181IR 161		5.244	47/2+					161
181IR 162						5.255	(43/2+)	162
181IR 163				5.389	49/2-			163
181IR 164				5.446	47/2-			164
181IR 165		5.470	49/2+					165
181IR 166		5.475	49/2+					166
181IR 167						5.536	(47/2-)	167
181IR 168						5.565	(49/2+)	168
181IR 169						5.597	(47/2+)	169
181IR 170		5.603	49/2+					170

181IR 171				5.822	49/2-			171

181IR 172				5.976	(51/2+)	172
181IR 173		6.201	53/2+			173
181IR 174			6.202	53/2-		174
181IR 175				6.204	(51/2-)	175
181IR 176				6.234	(53/2+)	176
181IR 177				6.333	(53/2+)	177
181IR 178				6.361	(53/2+)	178
181IR 179				6.607	(53/2-)	179
181IR 180				6.982	(57/2+)	180
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181IR 181				7.052	(57/2-)	181

S-p = 2.396 (0.017)-----
S-n = 9.557 (0.022)-----
S-2p = 7.457 (0.025)-----
S-2n = 17.524 (0.011)-----
S-alpha= -4.381 (0.028)-----

S+p = -3.994 (0.014)
S+n = -7.660 (0.022)
S+2p = -5.306 (0.011)
S+2n = -16.882 (0.025)
S+alpha = 5.180 (0.006)

gap p = -1.599 (0.022)
gap n = 1.897 (0.031)
gap 2p = 2.150 (0.027)
gap 2n = 0.642 (0.028)
gap alpha = 0.799 (0.029)