

^{171}Re $Z = 75$ $N = 96$ adopted link ENSDF link

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

BE = 1362.770 (0.028) MeV

Qbeta+ = 5.836 (0.040) MeV

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

S-alpha=	-4.676 (0.040)				
171RE 1				0.000 (9/2-)	1 15.2 S 4
171RE 2				0.157 (11/2-)	2
171RE 3				0.190 (5/2-)	3
171RE 4				0.193	4
171RE 5				0.232 (5/2+)	5
171RE 6				0.259 (3/2+)	6
171RE 7				0.285 (9/2-)	7
171RE 8				0.301 (3/2-)	8
171RE 9				0.381 (13/2-)	9
171RE 10				0.382 (7/2+)	10

171RE 11				0.448 (7/2-)	11
171RE 12				0.514 (13/2-)	12
171RE 13				0.516 (3/2-)	13
171RE 14				0.532 (7/2+)	14
171RE 15				0.554 (9/2+)	15
171RE 16				0.576 (3/2+)	16
171RE 17				0.614 (15/2-)	17
171RE 18				0.701 (11/2-)	18
171RE 19				0.759 (11/2+)	19
171RE 20				0.850 (7/2+)	20

171RE 21				0.869 (17/2-)	21
171RE 22				0.894 (17/2-)	22
171RE 23				0.895 (7/2-)	23
171RE 24				0.910 (11/2+)	24
171RE 25				0.961 (13/2+)	25
171RE 26				1.065 (15/2-)	26
171RE 27				1.162 (19/2-)	27
171RE 28				1.186 (15/2+)	28
171RE 29				1.228 (11/2+)	29

S-p	= 1.248 (0.031)				
171RE 30				1.306 (15/2+)	30

171RE 31				1.327 (21/2-)	31
171RE 32				1.394 (17/2+)	32
171RE 33				1.424 (17/2+)	33
171RE 34				1.474 (21/2-)	34
171RE 35				1.522 (19/2-)	35

171RE 36				1.624		36
171RE 37				1.632	(19/2+)	37
171RE 38				1.705	(19/2+)	38
171RE 39				1.734	(21/2+)	39
171RE 40				1.758	(23/2-)	40

171RE 41				1.862	(25/2-)	41
171RE 42				1.865	(21/2+)	42
171RE 43				2.023		43
171RE 44				2.044	(23/2-)	44
171RE 45				2.072	(25/2-)	45
171RE 46				2.105	(23/2+)	46
171RE 47				2.106	(23/2+)	47
171RE 48				2.130	(23/2+)	48
171RE 49				2.139	(25/2+)	49
171RE 50				2.229	(25/2+)	50

171RE 51				2.313		51
171RE 52				2.343	(27/2-)	52
171RE 53				2.393	(27/2+)	53
171RE 54				2.423		54
171RE 55				2.445	(29/2-)	55
171RE 56				2.481	(25/2+)	56
171RE 57				2.546	(29/2-)	57
171RE 58				2.572	(27/2+)	58
171RE 59				2.579	(27/2-)	59
171RE 60				2.593	(29/2+)	60

171RE 61				2.612	(29/2+)	61
171RE 62				2.705	(31/2-)	62
171RE 63				2.709	(27/2+)	63
171RE 64				2.742		64
171RE 65				2.831	(31/2+)	65
171RE 66				2.849		66
171RE 67				2.881	(29/2+)	67
171RE 68				2.889	(33/2-)	68
171RE 69				3.008	(33/2-)	69
171RE 70				3.008	(31/2-)	70

171RE 71				3.030		71
171RE 72				3.059	(31/2+)	72
171RE 73				3.063		73
171RE 74				3.098	(33/2+)	74
171RE 75				3.106	(35/2-)	75
171RE 76				3.112	(31/2+)	76
171RE 77				3.141	(33/2+)	77
171RE 78				3.243		78
171RE 79				3.262	(33/2-)	79
171RE 80				3.291		80

171RE 81			3.317	(33/2+)	81
171RE 82			3.327	(33/2+)	82
171RE 83			3.355	(37/2-)	83
171RE 84			3.388	(35/2+)	84
171RE 85			3.458	(35/2-)	85
171RE 86			3.519	(37/2-)	86
171RE 87			3.589	(35/2+)	87
171RE 88			3.598	(35/2+)	88
171RE 89			3.636	(39/2-)	89
171RE 90			3.700	(37/2+)	90

171RE 91			3.724	(37/2+)	91
171RE 92			3.829		92
171RE 93			3.847	(37/2+)	93
171RE 94			3.892	(37/2-)	94
171RE 95			3.937	(41/2-)	95
171RE 96			3.959	(39/2-)	96
171RE 97			4.018	(39/2+)	97
171RE 98			4.069	(41/2-)	98
171RE 99			4.135	(39/2+)	99
171RE 100			4.186	(39/2+)	100

171RE 101			4.222	(39/2+)	101
171RE 102			4.266	(43/2-)	102
171RE 103			4.342	(41/2+)	103
171RE 104			4.352	(41/2+)	104
171RE 105			4.391		105
171RE 106			4.434	(41/2+)	106
171RE 107			4.489		107
171RE 108			4.543	(43/2-)	108
171RE 109			4.586	(41/2-)	109
171RE 110			4.606	(45/2-)	110

171RE 111			4.632	(43/2+)	111
171RE 112			4.686	(45/2-)	112
171RE 113			4.729	(43/2+)	113
171RE 114			4.804	(43/2+)	114
171RE 115			4.812	(43/2+)	115
171RE 116			4.820	(43/2+)	116
171RE 117			4.898	(45/2+)	117
171RE 118			4.965	(45/2+)	118
171RE 119			4.968	(47/2-)	119
171RE 120			5.060	(45/2+)	120

171RE 121			5.084	(45/2+)	121
171RE 122			5.085	(45/2+)	122
171RE 123			5.174	(47/2+)	123
171RE 124			5.204	(47/2-)	124
171RE 125			5.211		125
171RE 126			5.270	(45/2-)	126

171RE 127			5.330	(49/2-)	127
171RE 128			5.362	(47/2+)	128
171RE 129			5.368	(49/2-)	129
171RE 130			5.380	(47/2+)	130

171RE 131			5.474	(47/2+)	131
171RE 132			5.475	(49/2+)	132
171RE 133			5.480	(47/2+)	133
S-2p	=	5.538 (0.040)	-----		
171RE 134			5.571	(49/2+)	134
171RE 135			5.703	(49/2+)	135
171RE 136			5.716	(51/2-)	136
171RE 137			5.741	(49/2+)	137
171RE 138			5.795	(49/2+)	138
171RE 139			5.804	(51/2+)	139
171RE 140			5.925	(51/2-)	140

171RE 141			5.975	(49/2-)	141
171RE 142			5.986		142
171RE 143			6.028	(51/2+)	143
171RE 144			6.042	(51/2+)	144
171RE 145			6.092	(53/2-)	145
171RE 146			6.114	(53/2-)	146
171RE 147			6.162	(53/2+)	147
171RE 148			6.164	(51/2+)	148
171RE 149			6.225	(51/2+)	149
171RE 150			6.237	(53/2+)	150

171RE 151			6.404	(53/2+)	151
171RE 152			6.452	(53/2+)	152
171RE 153			6.507	(55/2-)	153
171RE 154			6.550	(55/2+)	154
171RE 155			6.551	(53/2+)	155
171RE 156			6.698	(55/2-)	156
171RE 157			6.734	(55/2+)	157
171RE 158			6.743	(53/2-)	158
171RE 159			6.775	(55/2+)	159
171RE 160			6.889	(57/2-)	160

171RE 161			6.904	(55/2+)	161
171RE 162			6.921	(57/2-)	162
171RE 163			6.953	(57/2+)	163
171RE 164			6.969	(57/2+)	164
171RE 165			7.050	(55/2+)	165
171RE 166			7.164	(57/2+)	166
171RE 167			7.205	(57/2+)	167
171RE 168			7.340	(57/2+)	168
171RE 169			7.351	(59/2-)	169
171RE 170			7.378	(58/2+)	170

171RE 171			7.402	(59/2+)	171
171RE 172			7.492	(59/2+)	172
171RE 173			7.525	(59/2-)	173
171RE 174			7.562	(59/2+)	174
171RE 175			7.701	(59/2+)	175
171RE 176			7.725	(61/2-)	176
171RE 177			7.734	(61/2+)	177
171RE 178			7.797	(61/2-)	178
171RE 179			7.853	(61/2+)	179
171RE 180			7.926	(59/2+)	180

171RE 181			7.975	(61/2+)	181
171RE 182			8.012	(61/2+)	182
171RE 183			8.174	(61/2+)	183
171RE 184			8.262	(63/2-)	184
171RE 185			8.312	(63/2+)	185
171RE 186			8.331	(63/2+)	186
171RE 187			8.399	(63/2+)	187
171RE 188			8.409	(63/2-)	188
171RE 189			8.550	(63/2+)	189
171RE 190			8.560	(65/2+)	190

171RE 191			8.611	(65/2-)	191
171RE 192			8.748	(65/2-)	192
171RE 193			8.796	(65/2+)	193
171RE 194			8.845	(65/2+)	194
171RE 195			8.880	(65/2+)	195
171RE 196			9.048	(65/2+)	196
171RE 197			9.196	(67/2+)	197
171RE 198			9.238	(67/2-)	198
171RE 199			9.302	(67/2+)	199
171RE 200			9.371	(67/2-)	200

171RE 201			9.450	(69/2+)	201
171RE 202			9.453	(67/2+)	202
171RE 203			9.555	(69/2-)	203
171RE 204			9.755	(69/2-)	204
171RE 205			9.806	(69/2+)	205

S-p = 1.248 (0.031)-----
S-n = 10.417 (0.030)-----
S-2p = 5.538 (0.040)-----
S-2n = 18.984 (0.030)-----
S-alpha= -4.676 (0.040)-----

S+p = -3.282 (0.031)
S+n = -8.388 (0.045)
S+2p = -3.596 (0.030)
S+2n = -18.446 (0.040)

S+alpha = 5.431 (0.031)

gap p = -2.034 (0.044)

gap n = 2.030 (0.054)

gap 2p = 1.942 (0.050)

gap 2n = 0.537 (0.050)

gap alpha = 0.755 (0.050)