

^{171}Lu $Z = 71$ $N = 100$ adopted link ENSDF link

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

BE = 1382.477 (0.002) MeV

Qbeta+ = 1.478 (0.002) MeV

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

S-alpha=	-2.290	(0.002)	-----		
171LU 1	0.000	7/2+			1 8.247 D 23
171LU 2			0.071	1/2-	2 79 S 2
171LU 3			0.073	5/2-	3
171LU 4	0.122	9/2+			4
171LU 5			0.159	9/2-	5
171LU 6				0.206 (3/2)-	6
171LU 7				0.208 (1/2)+	7 29.7 NS 11
171LU 8				0.221 (3/2)+	8
171LU 9	0.269	11/2+			9
171LU 10	0.296	5/2+			10 826 PS 30

171LU 11				0.334 (5/2)+	11
171LU 12			0.337	13/2-	12
171LU 13				0.365 (7/2)+	13
171LU 14			0.379	7/2-	14
171LU 15	0.395	7/2+			15
171LU 16	0.440	13/2+			16
171LU 17			0.469	9/2-	17 0.2 NS LE
171LU 18	0.519	9/2+			18
171LU 19				0.559 (9/2)+	19
171LU 20			0.594	11/2-	20

171LU 21				0.607 (17/2-)	21
171LU 22				0.612 (11/2)+	22
171LU 23			0.620	11/2-	23
171LU 24	0.634	15/2+			24
171LU 25				0.662 (7/2)-	25
171LU 26	0.671	11/2+			26
171LU 27			0.743	13/2-	27
171LU 28				0.789 (9/2)-	28
171LU 29				0.801 (3/2+,5/2+)	29
171LU 30				0.842 (13/2+)	30

171LU 31	0.850	17/2+			31
171LU 32				0.875 (13/2+)	32
171LU 33				0.910 (5/2)+	33
171LU 34				0.915 (15/2-)	34
171LU 35				0.934 (15/2-)	35
171LU 36				0.943 (7/2)+	36

171LU 37					0.952	(15/2+)	37
171LU 38					0.968	(5/2-)	38
171LU 39					0.969	(21/2-)	39
171LU 40					1.043	(15/2+)	40

171LU 41					1.047	(3/2+)	41
171LU 42		1.086	19/2+				42
171LU 43					1.089	(5/2-, 7/2-)	43
171LU 44					1.111	(3/2-)	44
171LU 45					1.111	(17/2-)	45
171LU 46					1.139	(1/2+)	46
171LU 47					1.156	(1/2+)	47
171LU 48		1.162	9/2+				48
171LU 49					1.182	(9/2-)	49
171LU 50					1.194	7/2+, 9/2+	50

171LU 51					1.204	(11/2+)	51
171LU 52					1.221	(7/2-)	52
171LU 53					1.242	(15/2-)	53
171LU 54					1.248	(17/2+)	54
171LU 55					1.256		55
171LU 56					1.270	(13/2+)	56
171LU 57					1.276	(17/2+)	57
171LU 58					1.321	(19/2-)	58
171LU 59					1.322	(11/2)+	59
171LU 60					1.329	(19/2-)	60

171LU 61		1.341	21/2+				61
171LU 62					1.354	(15/2+)	62
171LU 63					1.368	(19/2+)	63
171LU 64					1.382	(5/2, 7/2)+	64
171LU 65					1.382	(17/2-)	65
171LU 66					1.418	(25/2-)	66
171LU 67					1.456	(17/2+)	67
171LU 68					1.500	(19/2+)	68
171LU 69					1.506	(7/2+, 9/2, 11/2+)	69
171LU 70					1.534	(7/2)+	70

171LU 71					1.543	(19/2-)	71
171LU 72					1.546		72
171LU 73					1.558		73
171LU 74					1.566	(21/2-)	74
171LU 75					1.569	(13/2+)	75
171LU 76					1.578	(19/2+)	76
171LU 77					1.589		77
171LU 78					1.600	(5/2+, 7/2, 9/2+)	78
171LU 79					1.606		79
171LU 80		1.614	23/2+				80

171LU 81					1.621	(7/2, 9/2)+	81

171LU 82				1.702	(21/2+)	82
171LU 83				1.719	(21/2+)	83
171LU 84				1.722	(21/2-)	84
171LU 85				1.762	(21/2+)	85
171LU 86				1.763	(7/2-,9/2,11/2+)	86
171LU 87				1.771	(9/2,11/2,13/2-	87)
171LU 88				1.788	(23/2-)	88
171LU 89				1.819	(23/2-)	89
171LU 90				1.839	(23/2+)	90

171LU 91				1.841	(9/2+,11/2+)	91
171LU 92				1.845	(21/2-)	92
171LU 93				1.876	(23/2+)	93
171LU 94	1.903	25/2+				94
171LU 95				1.920	(23/2-)	95
171LU 96				1.949	(29/2-)	96
171LU 97				2.018	(9/2,11/2+)	97
171LU 98				2.023	(7/2+,9/2,11/2+	98)
171LU 99				2.029		99
171LU 100				2.045	(25/2+)	100

171LU 101				2.048	(23/2-)	101
171LU 102				2.093	(25/2-)	102
171LU 103				2.136	(25/2-)	103
171LU 104				2.153		104
171LU 105				2.204	(25/2+)	105
171LU 106				2.205	(27/2+)	106
171LU 107				2.249	(27/2+)	107
171LU 108				2.269	(25/2-)	108
171LU 109				2.323	(27/2-)	109
171LU 110				2.347	(27/2+)	110

171LU 111				2.370	(27/2-)	111
171LU 112				2.375	(27/2-)	112
171LU 113				2.449	(29/2+)	113
171LU 114				2.510	(27/2-)	114
171LU 115				2.516	(29/2+)	115
171LU 116				2.551	(33/2-)	116
171LU 117				2.622	(29/2-)	117
171LU 118				2.626	(27/2+)	118
171LU 119				2.646		119
171LU 120				2.676	(29/2-)	120

171LU 121				2.697	(31/2+)	121
171LU 122				2.725		122
171LU 123				2.733	(29/2+)	123
171LU 124				2.768	(29/2-)	124
171LU 125				2.831	(31/2+)	125
171LU 126				2.854		126
171LU 127				2.887	(31/2+)	127

171LU 128			2.892	(31/2-)	128
171LU 129			2.914	(31/2-)	129
171LU 130			2.927	(33/2+)	130

171LU 131			2.974	(31/2-)	131
171LU 132			3.029	(33/2-)	132
171LU 133			3.043	(31/2-)	133
171LU 134			3.099	(31/2+)	134
171LU 135			3.138	(33/2+)	135
171LU 136			3.178	(33/2-)	136
171LU 137			3.208	(37/2-)	137
171LU 138			3.219	(35/2+)	138
171LU 139			3.287	(33/2-)	139
171LU 140			3.302	(33/2+)	140

171LU 141			3.329	(33/2-)	141
171LU 142			3.390		142
171LU 143			3.441	(35/2+)	143
171LU 144			3.474	(35/2+)	144
171LU 145			3.477	(37/2+)	145
171LU 146			3.480	(35/2-)	146
171LU 147			3.540	(35/2-)	147
171LU 148			3.583	(37/2-)	148
171LU 149			3.583	(35/2-)	149
171LU 150			3.621	(35/2-)	150

171LU 151			3.642	(35/2+)	151
171LU 152			3.730	(37/2+)	152
171LU 153			3.797	(37/2-)	153
171LU 154			3.815	(39/2+)	154
171LU 155			3.882	(37/2-)	155
171LU 156			3.891		156
171LU 157			3.895	(41/2-)	157
171LU 158			3.914	(37/2-)	158
171LU 159			3.919	(37/2+)	159
171LU 160			4.035	(39/2+)	160

171LU 161			4.059		161
171LU 162			4.100	(41/2+)	162
171LU 163			4.119	(39/2+)	163
171LU 164			4.129	(39/2-)	164
171LU 165			4.180	(39/2-)	165
171LU 166			4.185	(39/2-)	166
171LU 167			4.218	(39/2-)	167
171LU 168			4.244	(41/2-)	168
171LU 169			4.257	(39/2+)	169
171LU 170			4.337	(41/2+)	170

S-p	=	4.354 (0.002)	-----		
171LU 171			4.459	(41/2-)	171

171LU 172			4.479	(41/2-)	172
171LU 173			4.479	(43/2+)	173
171LU 174			4.588	(41/2+)	174
171LU 175			4.600	(45/2-)	175
171LU 176			4.665	(43/2+)	176
171LU 177			4.793	(45/2+)	177
171LU 178			4.828	(43/2+)	178
171LU 179			4.837	(43/2-)	179
171LU 180			4.995	(45/2+)	180

171LU 181			5.208	(47/2+)	181
171LU 182			5.214	(45/2-)	182
171LU 183			5.342	(49/2-)	183
171LU 184			5.353	(47/2+)	184
171LU 185			5.558	(49/2+)	185
171LU 186			5.718	(49/2+)	186
171LU 187			5.991	(49/2-)	187
171LU 188			5.998	(51/2+)	188
171LU 189			6.105	(51/2+)	189
171LU 190			6.134	(53/2-)	190

171LU 191			6.391	(53/2+)	191
171LU 192			6.506	(53/2+)	192
171LU 193			6.845	(55/2+)	193
171LU 194			6.982	(57/2-)	194
171LU 195			7.292	(57/2+)	195
171LU 196			7.750	(59/2+)	196
171LU 197			7.886	(61/2-)	197
171LU 198			8.257	(61/2+)	198
S-n = 8.594 (0.017)	-----				
171LU 199			8.841	(65/2-)	199
171LU 200			9.848	(69/2-)	200

S-p = 4.354 (0.002)-----
S-n = 8.594 (0.017)-----
S-2p = 11.132 (0.002)-----
S-2n = 15.889 (0.004)-----
S-alpha= -2.290 (0.002)-----

S+p = -5.863 (0.024)
S+n = -6.979 (0.003)
S+2p = -9.146 (0.028)
S+2n = -15.195 (0.002)
S+alpha = 2.995 (0.028)

gap p = -1.509 (0.025)
gap n = 1.615 (0.017)
gap 2p = 1.986 (0.028)

gap 2n = 0.694 (0.004)
gap alpha = 0.705 (0.028)