

^{177}Lu $Z = 71$ $N = 106$ adopted link ENSDF link

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

BE = 1425.461 (0.001) MeV

Qbeta- = 0.497 (0.002) MeV

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

S-alpha=	-1.447	(0.005)	-----		
177LU 1	0.000	7/2+			1 6.6443 D 9
177LU 2	0.122	9/2+			2 0.117 NS 4
177LU 3			0.150	9/2-	3 133.1 NS 24
177LU 4	0.269	11/2+			4
177LU 5			0.289	11/2-	5
177LU 6	0.441	13/2+			6
177LU 7			0.452	13/2-	7
177LU 8	0.458	5/2+			8 0.45 NS LE
177LU 9	0.552	7/2+			9
177LU 10	0.570	1/2+			10 155 US 7

177LU 11	0.574	3/2+			11 3.5 NS 10
177LU 12	0.636	15/2+			12
177LU 13			0.637	15/2-	13
177LU 14	0.672	9/2+			14
177LU 15	0.709	5/2+			15
177LU 16	0.721	7/2+			16
177LU 17			0.762	5/2-	17 33 NS 2
177LU 18				0.762 (3/2+)	18
177LU 19				0.795 (1/2-)	19
177LU 20			0.811	9/2-	20 1.0 NS 1

177LU 21	0.817	11/2+			21
177LU 22				0.823 (5/2+)	22
177LU 23				0.832	23
177LU 24			0.845	17/2-	24
177LU 25	0.854	17/2+			25
177LU 26				0.908 (7/2+)	26
177LU 27				0.956 (3/2-)	27
177LU 28	0.957	9/2+			28
177LU 29			0.957	13/2-	29
177LU 30			0.970	23/2-	30 160.4 D 3

177LU 31	0.980	11/2+			31
177LU 32	0.985	13/2+			32
177LU 33				1.021 (9/2+)	33
177LU 34			1.049	9/2-	34
177LU 35				1.073 (3/2+)	35
177LU 36			1.074	19/2-	36

177LU 37				1.089	7/2-					37
177LU 38		1.094	19/2+							38
177LU 39							1.098	(3/2+,5/2+)		39
177LU 40							1.133	(5/2+)		40

177LU 41		1.150	7/2+							41
177LU 42							1.152	(11/2+)		42
177LU 43							1.166	9/2-,11/2		43
177LU 44		1.177	15/2+							44
177LU 45							1.184			45
177LU 46							1.188	(11/2-)		46
177LU 47				1.202	17/2-					47
177LU 48		1.231	11/2+						60 PS	15
177LU 49		1.236	7/2+							49
177LU 50		1.242	7/2+						25 PS	8

177LU 51				1.243	25/2-					51
177LU 52				1.287	11/2-					52
177LU 53		1.303	13/2+							53
177LU 54		1.306	11/2+							54
177LU 55							1.320	(13/2+)		55
177LU 56							1.322	(3/2-)		56
177LU 57				1.322	21/2-					57
177LU 58		1.324	25/2+						62 NS	4
177LU 59							1.328	(11/2-)		59
177LU 60		1.337	7/2+							60

177LU 61							1.344	(11/2+)		61
177LU 62		1.345	15/2+							62
177LU 63							1.349	(13/2-)		63
177LU 64		1.352	21/2+							64
177LU 65		1.357	15/2+						10.8 NS	5
177LU 66							1.388	(13/2+)		66
177LU 67		1.390	17/2+							67
177LU 68							1.394	(5/2-)		68
177LU 69							1.429			69
177LU 70							1.438	(17/2-)	13 NS	LT

177LU 71		1.444	9/2+							71
177LU 72							1.454	(13/2+)		72
177LU 73							1.465			73
177LU 74		1.471	13/2+							74
177LU 75							1.481			75
177LU 76							1.488	(11/2+)		76
177LU 77							1.503	(13/2+)		77
177LU 78							1.506	(13/2+)		78
177LU 79							1.513			79
177LU 80				1.537	27/2-					80

177LU 81							1.541			81

177LU 82						1.543	(21/2-)	82		
177LU 83						1.544	(17/2+)	83	0.8 NS	+2-1
177LU 84						1.555		84		
177LU 85				1.564	15/2-			85		
177LU 86						1.566	(15/2+)	86		
177LU 87						1.573	(7/2-)	87		
177LU 88						1.574	(11/2+)	88		
177LU 89				1.589	23/2-			89		
177LU 90						1.591		90		

177LU 91						1.602		91		
177LU 92		1.606	27/2+					92		
177LU 93						1.607	(15/2+)	93		
177LU 94		1.623	19/2+					94		
177LU 95						1.623	(9/2+)	95		
177LU 96						1.628	(9/2-)	96		
177LU 97						1.630	(23/2+)	97		
177LU 98						1.633	(15/2+)	98		
177LU 99		1.635	13/2+					99		
177LU 100						1.640	(3/2-)	100		

177LU 101						1.651		101		
177LU 102		1.661	15/2+					102		
177LU 103						1.668		103		
177LU 104						1.671	(19/2-)	104		
177LU 105						1.677	(15/2+)	105		
177LU 106						1.679		106		
177LU 107						1.693	(15/2+)	107		
177LU 108						1.706		108		
177LU 109						1.712	(7/2+)	109		
177LU 110		1.729	13/2+					110		

177LU 111						1.733	(7/2-)	111		
177LU 112						1.739		112		
177LU 113						1.746	(17/2+)	113		
177LU 114						1.747	(19/2+)	114		
177LU 115						1.749		115		
177LU 116						1.757	(7/2-)	116		
177LU 117						1.757	(11/2+)	117		
177LU 118						1.766		118		
177LU 119						1.773		119		
177LU 120						1.786	(17/2+)	120		

177LU 121						1.804	(19/2+)	121		
177LU 122						1.812	(17/2+)	122		
177LU 123						1.821	(15/2+)	123		
177LU 124						1.822	(9/2+)	124		
177LU 125						1.828	(5/2-)	125		
177LU 126						1.829	(19/2+)	126		
177LU 127						1.842		127		

177LU 128			1.851	29/2-		128
177LU 129					1.852	129
177LU 130					1.859 (11/2-)	130

177LU 131					1.862	131
177LU 132			1.872	25/2-		132
177LU 133					1.874 (17/2+)	133
177LU 134					1.882 (11/2+)	134
177LU 135					1.895	135
177LU 136					1.902	136
177LU 137	1.907	29/2+				137
177LU 138					1.913 (13/2+)	138
177LU 139					1.919	139
177LU 140					1.922 (25/2+)	140

177LU 141	1.925	15/2+				141
177LU 142					1.926 (21/2-)	142
177LU 143					1.935	143
177LU 144					1.943	144
177LU 145					1.948	145
177LU 146					1.955 (11/2+)	146
177LU 147					1.957 (11/2-)	147
177LU 148					1.960	148
177LU 149					1.967	149
177LU 150					1.977 (25/2-)	150

177LU 151					1.983	151
177LU 152					1.991	152
177LU 153					1.998	153
177LU 154					2.006	154
177LU 155					2.013	155
177LU 156					2.020	156
177LU 157					2.033	157
177LU 158					2.049	158
177LU 159					2.053 (13/2+)	159
177LU 160					2.077	160

177LU 161					2.090 (15/2+)	161
177LU 162					2.111 (13/2+)	162
177LU 163					2.117	163
177LU 164					2.134	164
177LU 165					2.142	165
177LU 166	2.155	17/2+				166
177LU 167					2.158	167
177LU 168					2.174 (27/2-)	168
177LU 169			2.185	31/2-		169
177LU 170					2.185	170

177LU 171					2.201 (23/2-)	171
177LU 172					2.206	172

177LU 173		2.229		31/2+						173
177LU 174						2.230				174
177LU 175						2.248		(15/2+)		175
177LU 176						2.278				176
177LU 177						2.294				177
177LU 178						2.345		(23/2+)		178
177LU 179						2.373				179
177LU 180						2.417				180

177LU 181						2.427				181
177LU 182						2.498		(29/2-)		182
177LU 183				2.539		33/2-				183
177LU 184						2.605				184
177LU 185						2.637				185
177LU 186						2.668				186
177LU 187		2.772		33/2+						187 625 NS 62
177LU 188				2.912		35/2-				188
177LU 189		3.128		35/2+						189
177LU 190				3.304		37/2-				190

177LU 191		3.505		37/2+						191
177LU 192				3.530		39/2-				192 6 US 2

S-p = 6.182 (0.001)-----
S-n = 7.073 (0.002)-----
S-2p = 14.651 (0.050)-----
S-2n = 13.361 (0.002)-----
S-alpha= -1.447 (0.005)-----

S+p = -7.340 (0.002)
S+n = -6.025 (0.003)
S+2p = -12.551 (0.002)
S+2n = -12.818 (0.005)
S+alpha = 1.520 (0.002)

gap p = -1.159 (0.002)
gap n = 1.048 (0.003)
gap 2p = 2.100 (0.050)
gap 2n = 0.543 (0.006)
gap alpha = 0.073 (0.005)