

^{176}Lu $Z = 71$ $N = 105$ adopted link ENSDF link

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

BE = 1418.388 (0.001) MeV
 Qbeta- = 1.194 (0.002) MeV
 Qbeta+ = 0.109 (0.001) MeV

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

S-alpha=	-1.566	(0.006)	-----					
176LU 1				0.000	7-			1 3.76E+10 Y 7
176LU 2				0.123	1-			2 3.664 H 19
176LU 3				0.184	8-			3 80 PS 6
176LU 4		0.194						4 35.0 NS 10
176LU 5		0.233						5
176LU 6				0.236	3-			6
176LU 7				0.237	0-			7
176LU 8		0.299						8
176LU 9				0.305	2-			9
176LU 10		0.339						10

176LU 11		0.372						11
176LU 12		0.381						12
176LU 13				0.387	1-			13
176LU 14				0.389	9-			14 7.5 PS 11
176LU 15		0.425						15 2 NS LE
176LU 16				0.433	2-			16
176LU 17				0.437	5-			17
176LU 18		0.450						18
176LU 19				0.464	4-			19
176LU 20		0.488						20

176LU 21		0.488						21 6.9 NS LE
176LU 22				0.505	3-			22
176LU 23		0.533						23
176LU 24							0.564	(6)- 24
176LU 25							0.578	25
176LU 26		0.592						26
176LU 27				0.596	4-			27
176LU 28				0.613	10-			28
176LU 29		0.615						29
176LU 30		0.635						30 7.8 NS 4

176LU 31				0.638	1-			31
176LU 32		0.650						32
176LU 33		0.657						33 0.5 NS LT
176LU 34				0.658	3-			34 6.3 NS 3
176LU 35		0.683						35

176LU 36				0.688	2-				36	
176LU 37							0.688	3,4	37	
176LU 38							0.694	(5)+	38	
176LU 39							0.696		39	
176LU 40							0.709	(7)+	40	

176LU 41		0.710	6+						41	
176LU 42					0.710	6-			42	
176LU 43								0.715	3,4	43
176LU 44					0.715	5-			44	
176LU 45					0.723	4-			45	
176LU 46					0.725	7-			46	
176LU 47								0.725	(7)-	47
176LU 48								0.734	(7+)	48
176LU 49		0.734	3+						49	
176LU 50					0.752	4-			50	

176LU 51								0.757	(7)-	51
176LU 52		0.758	7+						52	
176LU 53					0.764	3-			53	
176LU 54								0.766	(6)-	54
176LU 55								0.772	(6)+	55
176LU 56					0.780	0-			56	
176LU 57		0.786	4+						57	
176LU 58		0.787	7+						58	
176LU 59					0.788	4-			59	
176LU 60								0.792	(2)+	60

176LU 61					0.797	1-			61	
176LU 62		0.827	10+						62	
176LU 63					0.832	2-			63	
176LU 64								0.834	3,4	64
176LU 65								0.835	(5)-	65
176LU 66					0.839	5-			66	
176LU 67					0.843	3-			67	
176LU 68					0.848	6-			68	
176LU 69		0.851	5+						69	
176LU 70								0.855	(7)+	70

176LU 71					0.857	11-			71	
176LU 72					0.861	4-			72	
176LU 73		0.866	2+						73	
176LU 74					0.868	5-			74	
176LU 75								0.870	(5)-	75
176LU 76								0.871	(4)+	76
176LU 77					0.883	3-			77	
176LU 78		0.889	8+						78	
176LU 79		0.897	10+						79	
176LU 80								0.903		80

176LU 81						0.908	(4)-	81		
176LU 82						0.910	(2-)	82		
176LU 83						0.921	(5)-	83	0.2 NS	LT
176LU 84						0.928	5+, (2+)	84		
176LU 85		0.931	3+					85		
176LU 86						0.938	(7)+	86		
176LU 87						0.941	(7)-	87		
176LU 88				0.945	4-			88		
176LU 89				0.958	4-			89		
176LU 90				0.958	3-			90		

176LU 91						0.959		91		
176LU 92						0.960	(3)-	92	0.7 NS	2
176LU 93						0.963	(6-)	93		
176LU 94						0.973	(6)-	94		
176LU 95						0.974	(5)+	95		
176LU 96		0.986	4+					96	1.2 NS	3
176LU 97				0.988	5-			97		
176LU 98						0.990	(3+)	98		
176LU 99						1.001	(6)-	99		
176LU 100						1.003	(6-)	100		

176LU 101		1.013	9+					101		
176LU 102		1.015	4+					102		
176LU 103						1.018	(3+,4+)	103		
176LU 104						1.020	(4+)	104		
176LU 105						1.030	(2)-	105		
176LU 106						1.031	(3-,4-)	106		
176LU 107						1.032	(5)-	107		
176LU 108				1.043	5-			108		
176LU 109						1.046		109		
176LU 110						1.054	(3,4)	110		

176LU 111						1.057	(0+)	111		
176LU 112		1.061	11+					112		
176LU 113						1.061	(2-,5-)	113		
176LU 114				1.067	4-			114		
176LU 115						1.069	(5-)	115		
176LU 116						1.072		116		
176LU 117						1.080	(5-,2-)	117		
176LU 118						1.100	(3)-	118		
176LU 119						1.105		119		
176LU 120				1.119	12-			120		

176LU 121						1.120		121		
176LU 122						1.130		122		
176LU 123		1.132	11+					123		
176LU 124						1.143		124		
176LU 125		1.160	10+					125		
176LU 126						1.164		126		

176LU 127				1.167	(3,4)	127
176LU 128				1.182		128
176LU 129				1.228		129
176LU 130				1.237		130

176LU 131				1.241		131
176LU 132				1.275	(7+)	132
176LU 133				1.278		133
176LU 134				1.294	(4+)	134
176LU 135				1.301		135
176LU 136		1.314	12+			136
176LU 137				1.326		137
176LU 138		1.329	11+			138
176LU 139				1.349		139
176LU 140				1.352	(10+)	140 2 NS LE

176LU 141				1.371		141
176LU 142				1.395	(5-)	142
176LU 143			1.399 13-			143
176LU 144				1.426		144
176LU 145				1.462	(8+)	145
176LU 146				1.510	(3+)	146
176LU 147		1.515	12+			147 312 NS 69
176LU 148		1.519	12+			148
176LU 149				1.533	(6-)	149
176LU 150				1.569		150

176LU 151				1.587	(14+)	151 40 US 3
176LU 152		1.589	13+			152
176LU 153				1.617		153
176LU 154				1.655	(9+)	154
176LU 155				1.679		155
176LU 156				1.689	(7-)	156
176LU 157			1.694 14-			157
176LU 158				1.730	(5+)	158
176LU 159		1.730	13+			159
176LU 160		1.961	14+			160

176LU 161			2.005 15-			161
176LU 162			2.329 16-			162
176LU 163				2.671	(17-)	163
176LU 164				3.021	(18-)	164

S-p = 5.976 (0.001)-----
S-n = 6.288 (0.002)-----
S-2p = 14.096 (0.045)-----
S-2n = 13.955 (0.002)-----
S-alpha= -1.566 (0.006)-----

S+p = -6.787 (0.002)
S+n = -7.073 (0.002)
S+2p = -11.842 (0.001)
S+2n = -13.098 (0.003)
S+alpha = 2.024 (0.002)

gap p = -0.812 (0.002)
gap n = -0.785 (0.002)
gap 2p = 2.254 (0.045)
gap 2n = 0.857 (0.003)
gap alpha = 0.458 (0.006)