

^{240}Pu $Z = 94$ $N = 146$ [link to full NNDC output](#)

Based on ENSDF from Dec 2018, and mass evaluation from 2016

BE = 1813.450 (0.001) MeV

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

S-alpha=	-5.256	(0.002)	-----		
240PU 1	0.000	0+			1 6561 Y 7
240PU 2	0.043	2+			2 167 PS 6
240PU 3	0.142	4+			3
240PU 4	0.294	6+			4
240PU 5	0.497	8+			5
240PU 6			0.597	1-	6
240PU 7			0.649	3-	7
240PU 8			0.742	5-	8 2 NS LT
240PU 9	0.747	10+			9
240PU 10	0.861	0+			10

240PU 11				0.878 (7-)	11
240PU 12	0.900	2+			12
240PU 13				0.938 (1-)	13
240PU 14				0.959 (2-)	14
240PU 15	0.992	4+			15
240PU 16				1.002 (3-)	16
240PU 17				1.031 (3+)	17 1.32 NS 15
240PU 18				1.038 (4-)	18
240PU 19	1.041	12+			19
240PU 20				1.057 (9-)	20

240PU 21				1.076 (4+)	21
240PU 22	1.089	0+			22
240PU 23				1.116 (5-)	23
240PU 24				1.131 (2+)	24
240PU 25				1.137 (2+)	25
240PU 26				1.138 (6+)	26
240PU 27				1.162 (6-)	27
240PU 28				1.178 (3+)	28
240PU 29				1.181 (2+)	29
240PU 30				1.199	30

240PU 31				1.223 (2+)	31
240PU 32				1.232 (4+)	32
240PU 33				1.241 (2-)	33
240PU 34				1.262 (3+)	34
240PU 35				1.278 (11-)	35
240PU 36				1.282 (3-)	36
240PU 37				1.309 (5-)	37 165 NS 10

240PU	38				1.321	(1,2+)	38
240PU	39				1.323	(8+)	39
240PU	40				1.337	(2+,3,4+)	40

240PU	41	1.375	14+				41
240PU	42				1.379		42
240PU	43				1.407		43
240PU	44				1.411	0(-)	44
240PU	45				1.413	(+)	45
240PU	46				1.438	2(-)	46
240PU	47				1.488	(1,2+)	47
240PU	48				1.526	(0+)	48
240PU	49				1.540	(1-)	49
240PU	50				1.540	(13-)	50

240PU	51				1.557	(10+)	51
240PU	52				1.559	(2+)	52
240PU	53				1.574		53
240PU	54				1.580		54
240PU	55				1.608	(1-)	55
240PU	56				1.627	(1,2+)	56
240PU	57				1.633	(1,2+)	57
240PU	58				1.641		58
240PU	59				1.675		59
240PU	60				1.710	(2+)	60

240PU	61	1.746	16+				61
240PU	62				1.752		62
240PU	63				1.775	(1-)	63
240PU	64				1.784		64
240PU	65				1.796	(1,2+)	65
240PU	66				1.808	(1-,2+)	66
240PU	67				1.830	(12+)	67
240PU	68				1.842	(15-)	68
240PU	69				1.861		69
240PU	70				1.881	(0,1,2)	70

240PU	71				1.902		71
240PU	72				1.918	(1-)	72
240PU	73				1.955	(2+)	73
240PU	74				1.996	(1,2+)	74
240PU	75				2.118	(1,2+)	75
240PU	76				2.127	(-)	76
240PU	77				2.137	(14+)	77
240PU	78	2.152	18+				78
240PU	79				2.183	(17-)	79
240PU	80				2.475	(16+)	80

240PU	81				2.560	(19-)	81
240PU	82	2.590	20+				82

240PU 83					2.837	(18+)	83
240PU 84					2.974	(21-)	84
240PU 85		3.060	22+				85
240PU 86					3.218	(20+)	86
240PU 87					3.421	(23-)	87
240PU 88		3.559	24+				88
240PU 89					3.627	(22+)	89
240PU 90					3.901	(25-)	90

240PU 91					4.063	(24+)	91
240PU 92		4.086	26+				92
240PU 93					4.411	(27-)	93
240PU 94					4.531	(26+)	94
240PU 95		4.639	28+				95
240PU 96					4.950	(29-)	96
240PU 97					5.030	(28+)	97
240PU 98		5.220	30+				98
240PU 99					5.512	(31-)	99
240PU 100					5.559	(30+)	100

240PU 101		5.819	32+				101
240PU 102					6.096	(33-)	102
240PU 103					X		103 3.6 NS 2
240PU 104					20.1+X		104
240PU 105					66.8+X		105
240PU 106					139.9+X		106
240PU 107					239.2+X		107
240PU 108					364.5+X		108
240PU 109					516.9+X		109
240PU 110					554.7+X		110

240PU 111					589.7+X		111
240PU 112					769.9+X		112
240PU 113					785.1+X		113
240PU 114					806.2+X		114
240PU 115					825.0+X		115
240PU 116					825.6+X		116
240PU 117					836.0+X		117
240PU 118					846.8+X		118
240PU 119					851.1+X		119
240PU 120					866.0+X		120

240PU 121					882.8+X		121
240PU 122					891.2+X		122
240PU 123					892.4+X		123
240PU 124					918.8+X		124
240PU 125					920.7+X		125
240PU 126					936.4+X		126
240PU 127					952.5+X		127
240PU 128					960.7+X		128

240PU 129		966.5+X	129
240PU 130		970.6+X	130

240PU 131		986.8+X	131
240PU 132		998.3+X	132
240PU 133		1012.2+X	133
240PU 134		1019+X	134
240PU 135		1044.0+X	135
240PU 136		1054.9+X	136
240PU 137		1078+X	137
240PU 138		1104+X	138
240PU 139		1104.2+X	139
240PU 140		1109.0+X	140

240PU 141		1161.5+X	141
240PU 142		1172+X	142
240PU 143		1230.4+X	143
240PU 144		1232+X	144
240PU 145		1246.5+X	145
240PU 146		1261.0+X	146
240PU 147		1287.0+X	147
240PU 148		1300.9+X	148
240PU 149		1322.0+X	149
240PU 150		1344.5+X	150

240PU 151		1360.9+X	151
240PU 152		1366.5+X	152
240PU 153		1382.9+X	153
240PU 154		1386.6+X	154
240PU 155		1421.0+X	155
240PU 156		1421.4+X	156
240PU 157		1461.8+X	157
240PU 158		1465.7+X	158
240PU 159		1485.5+X	159
240PU 160		1518.7+X	160

240PU 161		1559.0+X	161
240PU 162		1580.5+X	162
240PU 163		1641.5+X	163
240PU 164		1654.7+X	164
240PU 165		1732+X	165
240PU 166		1733.5+X	166
240PU 167		1816+X	167
240PU 168		1835.0+X	168
240PU 169		1910.0+X	169
240PU 170		2011.0+X	170

240PU 171		2184+X	171
240PU 172		2276+X	172
240PU 173		2375+X	173

240PU 174			2435+X	174
240PU 175			2453+X	175
240PU 176			2483+X	176
240PU 177			2800+X	177

S-p = 6.475 (0.002)-----
 S-n = 6.534 (0.002)-----
 S-2p = 11.760 (0.002)-----
 S-2n = 12.180 (0.002)-----
 S-alpha= -5.256 (0.002)-----

S+p = -4.480 (0.002)
 S+n = -5.242 (0.002)
 S+2p = -9.900 (0.002)
 S+2n = -11.551 (0.002)
 S+alpha = 5.901 (0.002)

gap p = 1.995 (0.002)
 gap n = 1.292 (0.002)
 gap 2p = 1.861 (0.003)
 gap 2n = 0.629 (0.002)
 gap alpha = 0.646 (0.002)