

^{238}Pu $Z = 94$ $N = 144$ [link to full NNDC output](#)

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

BE = 1801.270 (0.001) MeV

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

S-alpha=	-5.593 (0.002)				
238PU 1	0.000	0+			1 87.7 Y 1
238PU 2	0.044	2+			2 175 PS 3
238PU 3	0.146	4+			3
238PU 4	0.303	6+			4
238PU 5	0.513	8+			5
238PU 6			0.605 1-		6
238PU 7			0.661 3-		7
238PU 8			0.763 5-		8
238PU 9	0.772	10+			9
238PU 10			0.912 7-		10

238PU 11	0.941	0+			11
238PU 12			0.963 1-		12
238PU 13				0.968 (2-)	13 8.5 NS LT
238PU 14	0.983	2+			14 0.55 PS +15-11
238PU 15			0.985 2-		15
238PU 16				1.019	16
238PU 17	1.029	2+			17
238PU 18	1.070	3+			18
238PU 19	1.078	12+			19
238PU 20				1.083 (4)-	20 8.5 NS 5

238PU 21			1.102 9-		21
238PU 22				1.126 (4+)	22
238PU 23				1.134 (0+)	23
238PU 24				1.174 (2+)	24
238PU 25				1.202 (3)-	25
238PU 26	1.229	0+			26
238PU 27				1.252	27
238PU 28	1.264	2+			28
238PU 29				1.310 1+,2+	29
238PU 30			1.340 11-		30

238PU 31	1.426	14+			31
238PU 32	1.427	0+			32
238PU 33			1.447 1-		33
238PU 34	1.458	2+			34
238PU 35			1.560 1-		35
238PU 36				1.596 (2+)	36
238PU 37			1.621 1-		37

238PU	38			1.622	13-				38
238PU	39			1.636	1-				39
238PU	40					1.651	1,2+		40

238PU	41					1.726	1,2+		41
238PU	42					1.783	1,2+		42
238PU	43	1.816	16+						43
238PU	44			1.898	2-				44
238PU	45			1.945	15-				45
238PU	46	2.242	18+						46
238PU	47			2.308	17-				47
238PU	48					2.400			48 0.6 NS 2
238PU	49	2.702	20+						49
238PU	50			2.709	19-				50

238PU	51			3.144	21-				51
238PU	52	3.195	22+						52
238PU	53					3.500	(0+)		53 6.0 NS 15
238PU	54			3.611	23-				54
238PU	55	3.717	24+						55
238PU	56			4.105	25-				56
238PU	57	4.264	26+						57
238PU	58			4.623	27-				58
238PU	59	4.833	28+						59
238PU	60					5.161	(29-)		60

238PU	61					5.426	(30+)		61

S-p = 5.997 (0.002)-----
S-n = 7.000 (0.002)-----
S-2p = 10.859 (0.002)-----
S-2n = 12.881 (0.002)-----
S-alpha= -5.593 (0.002)-----

S+p = -4.062 (0.002)
S+n = -5.646 (0.002)
S+2p = -9.017 (0.002)
S+2n = -12.180 (0.002)
S+alpha = 6.216 (0.002)

gap p = 1.936 (0.003)
gap n = 1.353 (0.003)
gap 2p = 1.842 (0.003)
gap 2n = 0.701 (0.003)
gap alpha = 0.622 (0.002)