

^{242}Pu $Z = 94$ $N = 148$ [link to full NNDC output](#)

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

BE = 1825.001 (0.001) MeV

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

S-alpha=	-4.984	(0.002)	-----		
242PU 1	0.000	0+			1 3.75E+5 Y 2
242PU 2	0.045	2+			2 158 PS 3
242PU 3	0.147	4+			3
242PU 4	0.306	6+			4
242PU 5	0.518	8+			5
242PU 6	0.779	10+			6
242PU 7				0.780 (1-)	7
242PU 8			0.832 3-		8
242PU 9				0.865	9
242PU 10				0.927 (5-)	10

242PU 11				0.956 (0+)	11
242PU 12				0.993 (2+)	12
242PU 13			1.020 3-		13
242PU 14				1.039 (1+,2+)	14
242PU 15				1.064 (4-)	15
242PU 16	1.084	12+			16
242PU 17				1.092 (6+)	17
242PU 18				1.102 (2+)	18
242PU 19				1.122 (5-)	19
242PU 20				1.151 (2-)	20

242PU 21				1.155 (3-)	21
242PU 22				1.182 (2+)	22
242PU 23				1.204	23
242PU 24				1.259	24
242PU 25				1.357	25
242PU 26				1.401 (0,1+)	26
242PU 27				1.428 (2-)	27
242PU 28	1.432	14+			28
242PU 29				1.501	29
242PU 30				1.518 (1-)	30

242PU 31				1.613	31
242PU 32				1.638	32
242PU 33				1.650 (3-)	33
242PU 34				1.683	34
242PU 35				1.701	35
242PU 36				1.745	36
242PU 37				1.776	37

242PU	38		1.817	16+					38
242PU	39						1.826	(4+)	39
242PU	40						1.871		40

242PU	41						1.874		41
242PU	42						1.904		42
242PU	43						1.950	(1,2+)	43
242PU	44						1.970	(1,2+)	44
242PU	45						2.000		45 3.5 NS 6
242PU	46						2000+Y		46 28 NS
242PU	47						2.092		47
242PU	48		2.236	18+					48
242PU	49						2.246	(1,2+)	49
242PU	50						2.331	(2+)	50

242PU	51						2.438		51
242PU	52		2.686	20+					52
242PU	53		3.163	22+					53
242PU	54		3.662	24+					54
242PU	55		4.172	26+					55

S-p = 6.832 (0.071)-----
S-n = 6.309 (0.002)-----
S-2p = 12.576 (0.003)-----
S-2n = 11.551 (0.002)-----
S-alpha= -4.984 (0.002)-----

S+p = -4.831 (0.002)
S+n = -5.034 (0.003)
S+2p = -10.843 (0.002)
S+2n = -11.054 (0.003)
S+alpha = 5.475 (0.002)

gap p = 2.001 (0.071)
gap n = 1.276 (0.003)
gap 2p = 1.733 (0.003)
gap 2n = 0.497 (0.003)
gap alpha = 0.491 (0.003)