

^{237}Np $Z = 93$ $N = 144$ adopted link ENSDF link

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

BE = 1795.272 (0.001) MeV

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

S-alpha=	-4.957	(0.002)	-----		
237NP 1	0.000	5/2+			1 2.144E+6 Y 7
237NP 2	0.033	7/2+			2 54 PS 24
237NP 3			0.060	5/2-	3 67.2 NS 7
237NP 4	0.076	9/2+			4 28 PS AP
237NP 5			0.103	7/2-	5 80 PS 40
237NP 6	0.130	11/2+			6
237NP 7			0.158	9/2-	7
237NP 8	0.192	13/2+			8
237NP 9			0.226	11/2-	9
237NP 10			0.268	3/2-	10 5.2 NS 2

237NP 11	0.269	15/2+			11
237NP 12			0.281	1/2-	12
237NP 13			0.305	13/2-	13
237NP 14				0.317	14
237NP 15				0.324 (7/2-)	15
237NP 16	0.332	1/2+			16 1.0 NS LE
237NP 17	0.348	17/2+			17
237NP 18				0.360 (5/2-)	18
237NP 19	0.369	5/2+			19
237NP 20	0.371	3/2+			20

237NP 21			0.396	15/2-	21
237NP 22				0.418	22
237NP 23				0.434 (11/2-)	23
237NP 24				0.445	24
237NP 25	0.453	19/2+			25
237NP 26	0.453	9/2+			26
237NP 27	0.460	7/2+			27
237NP 28				0.486 (9/2-)	28
237NP 29			0.497	17/2-	29
237NP 30				0.514 (3/2-)	30

237NP 31	0.545	21/2+			31
237NP 32				0.546 (5/2-)	32
237NP 33				0.590 (7/2-)	33
237NP 34	0.592	13/2+			34
237NP 35	0.598	11/2+			35
237NP 36			0.609	19/2-	36
237NP 37				0.618	37

237NP	38					0.646	(9/2-)	38
237NP	39					0.666	(5/2+,7/2-)	39
237NP	40		0.682	23/2+				40

237NP	41					0.709	(11/2-)	41
237NP	42				0.722	5/2-		42
237NP	43				0.732	21/2-		43
237NP	44				0.756	7/2-		44
237NP	45					0.758		45
237NP	46					0.771		46
237NP	47		0.784	25/2+				47
237NP	48				0.800	9/2-		48
237NP	49					0.806	(7/2+,9/2+)	49
237NP	50					0.823		50

237NP	51				0.853	11/2-		51
237NP	52					0.862	(5/2+,7/2)	52
237NP	53				0.863	23/2-		53
237NP	54					0.906		54
237NP	55					0.914		55
237NP	56					0.921		56
237NP	57					0.945	11/2,13/2	57 0.71 US 4
237NP	58					0.946		58
237NP	59		0.956	27/2+				59
237NP	60					0.961		60

237NP	61					0.963		61
237NP	62					0.984		62
237NP	63				1.005	25/2-		63
237NP	64					1.013		64
237NP	65					1.020		65
237NP	66					1.030		66
237NP	67					1.040		67
237NP	68		1.065	29/2+				68
237NP	69					1.066		69
237NP	70					1.072		70

237NP	71					1.112		71
237NP	72					1.137		72
237NP	73				1.151	27/2-		73
237NP	74		1.274	31/2+				74
237NP	75				1.313	29/2-		75
237NP	76		1.384	33/2+				76
237NP	77				1.474	31/2-		77
237NP	78		1.634	35/2+				78
237NP	79				1.653	33/2-		79
237NP	80		1.744	37/2+				80

237NP	81				1.824	35/2-		81
237NP	82				2.024	37/2-		82

237NP	83		2.035	39/2+						83
237NP	84		2.140	41/2+						84
237NP	85				2.201	39/2-				85
237NP	86				2.423	41/2-				86
237NP	87		2.473	43/2+						87
237NP	88		2.571	45/2+						88
237NP	89				2.602	43/2-				89
237NP	90						2.800			90

237NP	91				2.849	45/2-				91
237NP	92		2.948	47/2+						92
237NP	93				3.029	47/2-				93
237NP	94		3.036	49/2+						94
237NP	95				3.301	49/2-				95
237NP	96		3.456	51/2+						96
237NP	97				3.481	51/2-				97
237NP	98		3.533	53/2+						98
237NP	99				3.780	53/2-				99
237NP	100				3.962	55/2-				100

237NP	101		3.994	55/2+						101
237NP	102		4.059	57/2+						102
237NP	103						4.288	(57/2-)		103
237NP	104						4.470	(59/2-)		104
237NP	105		4.564	59/2+						105
237NP	106		4.615	61/2+						106

S-p = 4.862 (0.002)-----
S-n = 6.578 (0.050)-----
S-2p = 11.995 (0.014)-----
S-2n = 12.314 (0.002)-----
S-alpha= -4.957 (0.002)-----

S+p = -5.998 (0.002)
S+n = -5.488 (0.002)
S+2p = -10.059 (0.002)
S+2n = -11.703 (0.002)
S+alpha = 5.638 (0.002)

gap p = -1.136 (0.002)
gap n = 1.089 (0.050)
gap 2p = 1.936 (0.014)
gap 2n = 0.611 (0.002)
gap alpha = 0.681 (0.002)