

^{238}Np $Z = 93$ $N = 145$ adopted link ENSDF link

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

BE = 1800.761 (0.001) MeV
 Qbeta- = 1.292 (0.002) MeV
 Qbeta+ = 0.147 (0.002) MeV

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

S-alpha=	-4.691	(0.004)							
238NP 1	0.000	2+						1 2.099 D 2	
238NP 2	0.026	3+						2	
238NP 3	0.062	4+						3	
238NP 4	0.087	3+						4	
238NP 5	0.106	5+						5	
238NP 6	0.122	4+						6	
238NP 7			0.136	3-				7 6.0 NS	
238NP 8	0.162	6+						8	
238NP 9	0.166	5+						9	
238NP 10			0.179	4-				10	

238NP 11			0.183	2-				11	
238NP 12			0.216	3-				12	
238NP 13			0.218	0-				13	
238NP 14					0.219	(6+)		14	
238NP 15			0.233	5-				15	
238NP 16					0.244	(1)+		16	
238NP 17					0.246	1 TO 4		17	
238NP 18					0.250	(1+)		18	
238NP 19					0.250	(2)-		19	
238NP 20			0.259	4-				20	

238NP 21	0.276	5+						21	
238NP 22					0.278	(2)+		22	
238NP 23					0.286	1 TO 4		23	
238NP 24					0.297	(6-)		24	
238NP 25	0.298	3+						25	
238NP 26					0.299	(3+)		26	
238NP 27					0.300	(1)-		27	
238NP 28					0.301	1-,2,3,4-		28	
238NP 29					0.301	(6-)		29	
238NP 30			0.305	1- TO 4-				30	

238NP 31			0.313	5-				31	
238NP 32					0.315	4+,5+		32	
238NP 33					0.324	(4)-		33	
238NP 34			0.325	1-				34	
238NP 35	0.329	6+						35	

238NP	36				0.334	1- TO 3-			36
238NP	37				0.342	5-			37
238NP	38				0.349	1- TO 3-			38
238NP	39						0.352	(3)-	39
238NP	40						0.367	(2)-	40

238NP	41						0.374	(1)-	41
238NP	42						0.375	(5+)	42
238NP	43						0.377	(6-)	43
238NP	44						0.381	(3)-	44
238NP	45						0.386	1 TO 4	45
238NP	46		0.389	7+					46
238NP	47						0.395	(5)+	47
238NP	48						0.397		48
238NP	49				0.408	6-			49
238NP	50						0.410	(8-)	50

238NP	51						0.418	2+,3+,4+	51
238NP	52						0.431	(4+)	52
238NP	53						0.434	3+,4+	53
238NP	54						0.442	(4)-	54
238NP	55						0.456	(8+)	55
238NP	56				0.458	1- TO 3-			56
238NP	57						0.460	(6+)	57
238NP	58				0.469	1- TO 4-			58
238NP	59				0.473	1- TO 4-			59
238NP	60				0.484	7-			60

238NP	61						0.497	2-,3-,4-	61
238NP	62				0.505	1- TO 4-			62
238NP	63						0.524	3+,4+,5+	63
238NP	64						0.524	(6+)	64
238NP	65						0.525	(7+)	65
238NP	66				0.530	3-			66
238NP	67						0.543	3-,4-	67
238NP	68				0.567	3-			68
238NP	69						0.578		69
238NP	70				0.585	1- TO 4-			70

238NP	71				0.601	1- TO 3-			71
238NP	72						0.604		72
238NP	73						0.619	1 TO 4	73
238NP	74						0.631		74
238NP	75				0.635	1- TO 4-			75
238NP	76						0.647	2+,3+,(4)+	76
238NP	77				0.648	1- TO 3-			77
238NP	78				0.674	1- TO 3-			78
238NP	79				0.677	1- TO 4-			79
238NP	80				0.692	1- TO 3-			80

238NP 81			0.709	81
238NP 82			0.722	82
238NP 83			0.764	83
238NP 84			0.782	84
238NP 85			0.797	85
238NP 86			0.800	86
238NP 87			0.810	87
238NP 88			0.814	88
238NP 89			0.835	89
238NP 90			0.869	90

238NP 91			0.903	91
238NP 92			0.917	92
238NP 93			0.929	93
238NP 94			0.949	94
238NP 95			0.971	95
238NP 96			0.987	96
238NP 97			1.027	97
238NP 98			1.033	98
238NP 99			1.046	99
238NP 100			1.065	100

238NP 101			1.081	101
238NP 102			1.089	102
238NP 103			1.108	103
238NP 104			1.120	104
238NP 105			1.143	105
238NP 106			1.163	106
238NP 107			1.176	107
238NP 108			1.256	108
238NP 109			1.260	109
238NP 110			1.276	110

238NP 111			1.291	111
238NP 112			1.314	112
238NP 113			1.331	113
238NP 114			1.365	114
238NP 115			1.370	115
238NP 116			1.376	116
238NP 117			1.385	117
238NP 118			1.393	118
238NP 119			1.408	119
238NP 120			1.446	120

238NP 121			1.484	121
238NP 122			1.493	122
238NP 123			1.509	123
238NP 124			1.546	124
238NP 125			1.712	125
238NP 126			1.822	126

238NP 127			2.104	127		
238NP 128			2.109	128		
238NP 129			2.300	129	112 NS	39
238NP 130			2.857	130		

S-p = 5.225 (0.002)-----

S-n = 5.488 (0.002)-----

S-2p = 12.457 (0.014)-----

S-2n = 12.066 (0.050)-----

S-alpha= -4.691 (0.004)-----

S+p = -6.155 (0.002)

S+n = -6.215 (0.002)

S+2p = -10.522 (0.014)

S+2n = -11.281 (0.017)

S+alpha = 5.589 (0.002)

gap p = -0.931 (0.002)

gap n = -0.726 (0.002)

gap 2p = 1.935 (0.020)

gap 2n = 0.785 (0.053)

gap alpha = 0.898 (0.005)