

^{149}Nd $Z = 60$ $N = 89$ adopted link ENSDF link

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

BE = 1230.061 (0.002) MeV

Qbeta- = 1.689 (0.003) MeV

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

S-alpha=	-0.267	(0.034)	-----		
149ND 1			0.000	5/2-	1 1.728 H 1
149ND 2			0.109	7/2-	2 0.7 NS LT
149ND 3			0.138	5/2-	3 0.6 NS LT
149ND 4				0.165 1/2-,3/2-	4 0.5 NS LT
149ND 5				0.192 (9/2-,11/2-)	5
149ND 6			0.221	9/2-	6 2.1 NS 5
149ND 7			0.258	3/2-	7 0.7 NS LT
149ND 8				0.271 (9/2+)	8 5.1 NS 3
149ND 9			0.285	1/2-	9 0.6 NS LT
149ND 10				0.316 (5/2-,7/2-)	10 0.8 NS LT

149ND 11				0.321 (5/2-,7/2-)	11 0.9 NS LT
149ND 12	0.333	5/2+			12 0.4 NS LT
149ND 13				0.341 11/2+,13/2+	13
149ND 14				0.352 (13/2+)	14
149ND 15			0.366	3/2-	15 0.5 NS LT
149ND 16			0.404	1/2-	16
149ND 17				0.447 5/2-,7/2-	17
149ND 18				0.460 (3/2-,5/2-)	18
149ND 19				0.475 (3/2,5/2,7/2)	19
149ND 20	0.483	1/2+			20 0.8 NS LT

149ND 21				0.493 (11/2-)	21
149ND 22				0.517 (3/2,5/2,7/2)	22
149ND 23			0.549	3/2-	23 0.5 NS LT
149ND 24	0.571	3/2+			24
149ND 25				0.591 (5/2+)	25
149ND 26				0.591 (9/2-,11/2-)	26
149ND 27				0.613	27
149ND 28				0.647 9/2-,11/2-	28
149ND 29				0.689	29
149ND 30				0.700 (13/2-)	30

149ND 31				0.705 (3/2,5/2)	31
149ND 32				0.709 (3/2,5/2-)	32
149ND 33	0.741	3/2+			33
149ND 34	0.796	1/2+			34
149ND 35				0.804	35
149ND 36	0.814	1/2+			36

149ND 37						0.836		37
149ND 38						0.861		38
149ND 39		0.881	3/2+					39
149ND 40						0.914	(1/2,3/2)	40

149ND 41						0.918	(15/2-)	41
149ND 42						0.921	(3/2,5/2,7/2-)	42
149ND 43						0.956		43
149ND 44						0.963		44
149ND 45		0.985	1/2+					45
149ND 46						1.025	1/2-,3/2-	46
149ND 47						1.045	3/2+,5/2+	47
149ND 48						1.067		48
149ND 49						1.081		49
149ND 50						1.129	3/2+,5/2+	50

149ND 51						1.149	3/2+,5/2+	51
149ND 52						1.166	(17/2-)	52
149ND 53						1.168		53
149ND 54						1.178		54
149ND 55						1.189		55
149ND 56						1.220		56
149ND 57						1.231		57
149ND 58						1.245		58
149ND 59				1.282	1/2-			59
149ND 60						1.311		60

149ND 61		1.359	1/2+					61
149ND 62						1.465		62
149ND 63						1.481		63
149ND 64						1.505	1/2-,3/2-	64
149ND 65						1.531	1/2-,3/2-	65
149ND 66						1.553	1/2-,3/2-	66
149ND 67						1.622	9/2-,11/2-	67
149ND 68						1.709	9/2-,11/2-	68
149ND 69						1.718	3/2+,5/2+	69
149ND 70						1.736	3/2+,5/2+	70

149ND 71						1.785	3/2+,5/2+	71
149ND 72						1.797	3/2+,5/2+	72
149ND 73						1.817		73
149ND 74						1.858	3/2+,5/2+	74
149ND 75						1.882		75
149ND 76						1.909		76
149ND 77						1.957	3/2+,5/2+	77
149ND 78						1.980	3/2+,5/2+	78
149ND 79						2.029	3/2+,5/2+	79
149ND 80						2.055		80

149ND 81						2.078	3/2+,5/2+	81

149ND	82				2.102		82
149ND	83				2.121		83
149ND	84				2.151		84
149ND	85				2.227	3/2+,5/2+	85
149ND	86				2.266		86
149ND	87				2.293	3/2+,5/2+	87
149ND	88				2.321		88

S-p = 9.129 (0.015)-----
S-n = 5.039 (0.003)-----
S-2p = 16.940 (0.009)-----
S-2n = 12.371 (0.002)-----
S-alpha= -0.267 (0.034)-----

S+p = -6.511 (0.020)
S+n = -7.376 (0.002)
S+2p = -14.779 (0.002)
S+2n = -12.710 (0.002)
S+alpha = -0.609 (0.002)

gap p = 2.618 (0.025)
gap n = -2.337 (0.004)
gap 2p = 2.161 (0.009)
gap 2n = -0.339 (0.003)
gap alpha = -0.876 (0.034)