

^{160}Gd $Z = 64$ $N = 96$ [link to full NNDC output](#)

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

BE = 1309.282 (0.001) MeV

	Energy T	J+	J-	J-other	T1/2	
160GD 1	0.000	0+			1 STABLE	
160GD 2	0.075	2+			2 2.72 NS 1	
160GD 3	0.249	4+			3	
160GD 4	0.515	6+			4	
160GD 5	0.868	8+			5	
160GD 6				0.913	6	
160GD 7				0.946	7	
160GD 8	0.988	2+			8 1.30 PS 6	
S-alpha= 1.006 (0.009)-----						
160GD 9				1.016	9	
160GD 10	1.058	3+			10	

160GD 11	1.070	4+			11	
160GD 12	1.148	4+			12	
160GD 13	1.193	5+			13	
160GD 14			1.224	1-	14 0.015 PS 4	
160GD 15	1.261	5+			15	
160GD 16			1.290	3-	16 0.051 PS 14	
160GD 17				1.296 (4+,5+)	17	
160GD 18	1.301	10+			18	
160GD 19				1.326 (0+)	19	
160GD 20	1.331	6+			20	

160GD 21				1.351	1,2+	21
160GD 22				1.377	(2+)	22
160GD 23	1.380	0+			23	
160GD 24				1.389	(2+)	24
160GD 25	1.393	6+			25	
160GD 26			1.428	5-	26	
160GD 27	1.436	2+			27	
160GD 28				1.460	(3-)	28
160GD 29				1.532	2+,3,4+	29
160GD 30	1.537	4+			30	

160GD 31				1.549	(7+)	31
160GD 32				1.569	1,2+	32
160GD 33	1.584	2+			33	
160GD 34				1.587	1,2+	34
160GD 35				1.599	1,2+	35
160GD 36				1.634		36
160GD 37				1.643	(7-)	37

160GD 38						1.653	4+,5,6+	38
160GD 39						1.665	(3+)	39
160GD 40						1.686		40

160GD 41						1.688	(3-)	41
160GD 42						1.717	(8+)	42
160GD 43						1.720		43
160GD 44						1.779		44
160GD 45		1.806	12+					45
160GD 46						1.913		46
160GD 47						1.941	(9-)	47
160GD 48				1.967	1-			48
160GD 49						1.972	1(-),2+	49
160GD 50		1.997	2+					50

160GD 51						2.031		51
160GD 52						2.052	2+,3,4+	52
160GD 53						2.059		53
160GD 54						2.109		54
160GD 55						2.112		55
160GD 56						2.118	(10+)	56
160GD 57		2.121	4+					57
160GD 58						2.139		58
160GD 59						2.163	1	59
160GD 60						2.176		60

160GD 61						2.231		61
160GD 62						2.238		62
160GD 63						2.244		63
160GD 64						2.253		64
160GD 65						2.278	1	65
160GD 66						2.313	(11-)	66
160GD 67						2.319		67
160GD 68						2.346		68
160GD 69		2.348	1+					69
160GD 70						2.368		70

160GD 71						2.377		71
160GD 72		2.377	14+					72
160GD 73						2.379		73
160GD 74						2.408		74
160GD 75						2.450		75
160GD 76				2.471	1-			76
160GD 77						2.538		77
160GD 78						2.548		78
160GD 79						2.582	(12+)	79
160GD 80						2.597		80

160GD 81		2.670	1+					81
160GD 82						2.761	1	82

160GD 83		2.796	1+						83	
160GD 84							2.820		1(+)	84
160GD 85							2.999		1	85
160GD 86		3.008	16+							86
160GD 87					3.032		1-			87
160GD 88					3.131		1-			88
160GD 89							3.166		1(-)	89
160GD 90		3.170	1+							90

160GD 91							3.228		1	91
160GD 92		3.277	1+							92
160GD 93							3.292		1	93
160GD 94		3.308	1+							94
160GD 95							3.328		1	95
160GD 96		3.331	1+							96
160GD 97		3.340	1+							97
160GD 98							3.357		1	98
160GD 99							3.376		1	99
160GD 100					3.415		1-			100

160GD 101					3.460		1-			101
160GD 102							3.477		1(+)	102
160GD 103							3.537		1	103
160GD 104							3.550		1	104

S-p = 9.188 (0.004)-----
S-n = 7.452 (0.002)-----
S-2p = 17.269 (0.005)-----
S-2n = 13.395 (0.002)-----
S-alpha= 1.006 (0.009)-----

S+p = -6.809 (0.002)
S+n = -5.635 (0.002)
S+2p = -14.818 (0.002)
S+2n = -12.482 (0.004)
S+alpha = -0.451 (0.002)

gap p = 2.379 (0.005)
gap n = 1.816 (0.003)
gap 2p = 2.452 (0.005)
gap 2n = 0.913 (0.005)
gap alpha = 0.555 (0.009)