

^{160}Gd $Z = 64$ $N = 96$ adopted link ENSDF link

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

BE = 1309.283 (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	0.869	8+			5
160GD 6				0.913	6
160GD 7				0.946	7
160GD 8	0.989	2+			8 1.40 PS 6
S-alpha=	1.006 (0.009)				
160GD 9				1.016	9
160GD 10	1.057	3+			10 1525 FS GT
160GD 11	1.070	4+			11
160GD 12	1.148	4+			12 0.75 PS +51-22
160GD 13				1.173 (5)+	13
160GD 14				1.224 1(-)	14 14.2 FS 14
160GD 15	1.261	5+			15 243 FS +83-55
160GD 16			1.290 3-		16 23.6 FS 21
160GD 17				1.295 (6+)	17
160GD 18	1.301	10+			18
160GD 19				1.326 (2+)	19
160GD 20			1.351 1-		20 125 FS 14
160GD 21			1.377 2-		21 381 FS GT
160GD 22	1.380	0+			22 936 FS GT
160GD 23	1.393	6+			23
160GD 24			1.427 5-		24 35 FS 7
160GD 25	1.436	2+			25 236 FS GT
160GD 26				1.437 (7+)	26
160GD 27				1.460 (3-)	27
160GD 28			1.464 3-		28 5.0 FS 35
160GD 29				1.483 (4+)	29
160GD 30			1.499 4-		30 277 FS GT
160GD 31			1.532 3-		31
160GD 32				1.548 (7+)	32
160GD 33	1.558	0+			33 409 FS GT
160GD 34	1.561	4+			34 222 FS GT
160GD 35	1.569	1+			35 0.7 PS +13-3
160GD 36				1.582 (5+)	36
160GD 37				1.584	37

160GD	38	1.587	2+					38	347	FS	GT
160GD	39					1.597	(8+)	39			
160GD	40	1.599	2+					40	0.56	PS	+51-21

160GD	41					1.608		41			
160GD	42			1.621	2-			42	0.2	PS	+25-1
160GD	43					1.644	(7-)	43			
160GD	44	1.648	4+					44	0.21	PS	+18-7
160GD	45			1.653	5-			45	42	FS	+14-10
160GD	46					1.657	(1-,2)	46			
160GD	47					1.662	(2+,3,4+)	47	0.6	PS	+11-3
160GD	48	1.665	3+					48			
160GD	49					1.668	(6-)	49			
160GD	50					1.688	(3-)	50			

160GD	51			1.691	3-			51	0.15	PS	+24-7
160GD	52					1.693	(4+)	52			
160GD	53					1.698	(5,6+)	53			
160GD	54					1.717	(8+)	54			
160GD	55					1.720	(2+)	55			
160GD	56					1.732	NOT 1	56			
160GD	57					1.749	(6+)	57			
160GD	58					1.782	(4)-	58			
160GD	59	1.805	2+					59	208	FS	GT
160GD	60	1.807	12+					60			

160GD	61					1.884	(5-)	61			
160GD	62					1.887	(1,2)	62			
160GD	63					1.911	(7-)	63			
160GD	64	1.932	2+					64	0.5	PS	+12-2
160GD	65					1.941	(9-)	65			
160GD	66					1.967	(1-)	66	23	FS	8
160GD	67	1.970	2+					67			
160GD	68					1.973		68			
160GD	69					1.996		69			
160GD	70					1.999	(5-)	70			

160GD	71					2.031	2+,3+	71			
160GD	72					2.060	2(-),3(-)	72	159	FS	+62-35
160GD	73					2.109	1(+)	73	229	FS	+83-49
160GD	74					2.119	(10+)	74			
160GD	75	2.119	2+					75			
160GD	76					2.136		76	0.29	PS	+61-13
160GD	77					2.139		77			
160GD	78					2.163	1	78			
160GD	79					2.236	(0+)	79			
160GD	80					2.242	(1,2)	80			

160GD	81					2.253		81			
160GD	82					2.277	1	82			

160GD 83						2.283	(1+,2+)	83
160GD 84		2.302	2+					84
160GD 85						2.313	(11-)	85
160GD 86						2.316	(1,2)	86
160GD 87						2.328	(1+,2)	87
160GD 88						2.333	(1,2+)	88
160GD 89						2.345		89
160GD 90		2.347	1+					90

160GD 91						2.362	(2+,3-)	91
160GD 92		2.378	14+					92
160GD 93						2.384	(2+,3,4+)	93
160GD 94						2.386	(1,2)	94
160GD 95						2.433	(1-,2+)	95
160GD 96						2.445	(2+,3,4+)	96
160GD 97						2.456	(2+,3,4+)	97
160GD 98						2.464	(1-)	98
160GD 99					2.472	1-		99
160GD 100						2.490	(5+,6+)	100

160GD 101						2.511	(1,2-)	101
160GD 102						2.516	(2)	102
160GD 103						2.530	(1-,2)	103
160GD 104						2.547	(0+,1,2+)	104
160GD 105						2.560	(5+,6+)	105
160GD 106						2.583	(12+)	106
160GD 107		2.670	1+					107
160GD 108						2.761	1	108
160GD 109		2.796	1+					109
160GD 110						2.820	1(+)	110

160GD 111						2.999	1	111
160GD 112		3.009	16+					112
160GD 113					3.032	1-		113
160GD 114					3.131	1-		114
160GD 115						3.166	1(-)	115
160GD 116		3.170	1+					116
160GD 117						3.228	1	117
160GD 118		3.277	1+					118
160GD 119						3.292	1	119
160GD 120		3.308	1+					120

160GD 121						3.328	1	121
160GD 122		3.331	1+					122
160GD 123		3.340	1+					123
160GD 124						3.357	1	124
160GD 125						3.376	1	125
160GD 126					3.415	1-		126
160GD 127					3.460	1-		127
160GD 128						3.477	1(+)	128

160GD 129				3.537	1	129
160GD 130				3.550	1	130

S-p = 9.188 (0.004)-----

S-n = 7.451 (0.001)-----

S-2p = 17.268 (0.005)-----

S-2n = 13.395 (0.001)-----

S-alpha= 1.006 (0.009)-----

S+p = -6.809 (0.002)

S+n = -5.635 (0.002)

S+2p = -14.817 (0.001)

S+2n = -12.481 (0.004)

S+alpha = -0.451 (0.001)

gap p = 2.379 (0.005)

gap n = 1.816 (0.002)

gap 2p = 2.451 (0.005)

gap 2n = 0.913 (0.004)

gap alpha = 0.556 (0.009)