

$^{65}\text{Ga}$        $Z = 31$        $N = 34$       adopted link      ENSDF link

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

BE = 563.040 ( 0.001) MeV

Qbeta+ = 3.254 ( 0.001) MeV

	Energy T	J+	J-	J-other	T1/2
65GA 1			0.000	3/2-	1 15.2 M 2
65GA 2				0.062 (1/2)-	2 1.2 NS LT
65GA 3			0.191	5/2-	3 700 PS LT
65GA 4				0.650 1/2-,3/2-	4
65GA 5				0.809 1/2-,3/2-	5
65GA 6			0.815	3/2-	6
65GA 7			1.076	7/2-	7
65GA 8				1.084 7/2+,9/2+	8
65GA 9				1.135	9
65GA 10				1.287 (9/2)-	10 1.4 PS LT
65GA 11				1.299	11
65GA 12				1.326	12
65GA 13				1.353	13
65GA 14				1.371	14
65GA 15				1.377 5/2-,7/2-	15
65GA 16				1.469	16
65GA 17				1.662 1/2-,3/2-	17
65GA 18				1.807	18
65GA 19				1.864 1/2-,3/2-	19
65GA 20				1.879	20
65GA 21				1.902	21
65GA 22				1.967	22
65GA 23				1.983	23
65GA 24	2.038	9/2+			24 7 PS 4
65GA 25				2.046	25
65GA 26				2.162	26
65GA 27			2.207	5/2-	27
65GA 28				2.280	28
65GA 29				2.324	29
65GA 30				2.357	30
65GA 31				2.388	31
65GA 32				2.427	32
65GA 33				2.447	33
65GA 34				2.470	34
65GA 35				2.503	35
65GA 36				2.548	36
65GA 37				2.575	37

65GA 38						2.647				38
65GA 39						2.669				39
65GA 40						2.704				40
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65GA 41						2.716				41
65GA 42						2.754				42
65GA 43				2.789		13/2-				43 0.6 PS 3
65GA 44						2.811		(3/2,5/2)		44
65GA 45						2.814		(11/2+)		45 0.55 PS 21
65GA 46						2.820		3/2+,5/2+		46
65GA 47						2.906				47
65GA 48						2.924		3/2+,5/2+		48
65GA 49						2.929				49
65GA 50						2.960				50
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65GA 51						3.006		(3/2+,5/2+)		51
65GA 52						3.036				52
65GA 53		3.065		13/2+						53
65GA 54						3.077				54
65GA 55						3.085				55
65GA 56						3.095				56
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S-alpha=		3.098 ( 0.001)								
65GA 57						3.143				57
65GA 58						3.173				58
65GA 59						3.197				59
65GA 60						3.229				60
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65GA 61						3.250				61
65GA 62						3.279				62
65GA 63						3.310				63
65GA 64						3.415				64
65GA 65						3.488				65
65GA 66						3.733		(15/2+)		66
65GA 67						3.911		15/2(+)		67
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S-p	=	3.943 ( 0.001)								
65GA 68		4.123		17/2+						68 0.62 PS LE
65GA 69		4.331		17/2+						69
65GA 70		4.434		17/2+						70
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65GA 71						4.548		19/2(+)		71
65GA 72		4.633		17/2+						72
65GA 73						4.851				73
65GA 74						5.023				74
65GA 75						5.065				75
65GA 76						5.116				76
65GA 77						5.192				77
65GA 78						5.240				78
65GA 79						5.298				79
65GA 80						5.339				80
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65GA 81						5.352	(1/2+)	81
65GA 82						5.384		82
65GA 83						5.393		83
65GA 84						5.438		84
65GA 85				5.468	19/2-			85
65GA 86						5.481		86
65GA 87		5.498	21/2+					87
65GA 88						5.507		88
65GA 89						5.553		89
65GA 90						5.563		90
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65GA 91						5.597		91
65GA 92						5.644		92
65GA 93						5.656		93
65GA 94						5.678		94
65GA 95						5.709		95
65GA 96						5.759		96
65GA 97						5.760		97
65GA 98						5.799		98
65GA 99						5.821		99
65GA 100						5.844		100
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65GA 101						5.854		101
65GA 102						5.868		102
65GA 103						5.898		103
65GA 104		5.918	21/2+					104
65GA 105						5.927		105
65GA 106						5.936		106
65GA 107						5.945	21/2(-)	107
65GA 108						5.993		108
65GA 109						6.122		109
65GA 110						6.296	23/2(-)	110
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65GA 111				6.672	1/2-			111
65GA 112				6.718	3/2-			112
65GA 113						6.815		113
65GA 114		6.817	25/2+					114
65GA 115						6.824	(9/2)	115
65GA 116						6.835		116
65GA 117						6.840		117
65GA 118						7.035	(27/2+)	118
65GA 119						7.090	25/2(-)	119
65GA 120		7.115	5/2+					120
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65GA 121						7.138	(3/2)	121
65GA 122						7.142	(5/2)	122
65GA 123						7.146	(5/2)	123
65GA 124						7.152		124
65GA 125						7.363	27/2(-)	125
65GA 126		7.660	1/2+					126

65GA 127				7.690		127
65GA 128	7.942	29/2+				128
65GA 129				8.200	(27/2+)	129
65GA 130				8.499	29/2(-)	130
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65GA 131				8.605		131
65GA 132				8.606	31/2(-)	132
65GA 133				8.833		133
65GA 134				8.888		134
65GA 135	9.332	33/2+				135
65GA 136				9.403	(31/2+)	136

S-p = 3.943 ( 0.001)-----  
 S-n = 11.896 ( 0.002)-----  
 S-2p = 11.656 ( 0.001)-----  
 S-2n = 22.253 ( 0.002)-----  
 S-alpha= 3.098 ( 0.001)-----

S+p = -6.238 ( 0.003)  
 S+n = -9.138 ( 0.001)  
 S+2p = -8.508 ( 0.001)  
 S+2n = -20.364 ( 0.001)  
 S+alpha = -2.880 ( 0.032)

gap p = -2.296 ( 0.003)  
 gap n = 2.759 ( 0.002)  
 gap 2p = 3.148 ( 0.001)  
 gap 2n = 1.889 ( 0.002)  
 gap alpha = 0.219 ( 0.032)