

^{242}Am $Z = 95$ $N = 147$ adopted link ENSDF link

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

BE = 1823.468 (0.001) MeV
 Qbeta- = 0.664 (0.002) MeV
 Qbeta+ = 0.751 (0.002) MeV

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

S-alpha=	-5.589	(0.002)	-----					
242AM 1				0.000	1-			1 16.02 H 2
242AM 2				0.044	0-			2
242AM 3				0.049	5-			3 141 Y 2
242AM 4				0.053	3-			4
242AM 5				0.076	2-			5
242AM 6							0.099	6
242AM 7				0.114	6-			7
242AM 8				0.148	5-			8
242AM 9				0.150	4-			9
242AM 10							0.171	10

242AM 11				0.190	7-			11
242AM 12							0.198	12
242AM 13		0.231						13
242AM 14				0.244	3-			14
242AM 15							0.263	(6-)
242AM 16		0.270						16
242AM 17				0.274	1-			17
242AM 18							0.283	18
242AM 19				0.289	4-			19
242AM 20				0.293	2-			20

242AM 21				0.296	2-			21
242AM 22							0.307	22
242AM 23				0.328	3-			23
242AM 24				0.331	3-			24
242AM 25		0.342						25
242AM 26							0.342	(5-)
242AM 27							0.356	(2)+
242AM 28		0.365						28
242AM 29							0.370	29
242AM 30				0.372	4-			30

242AM 31				0.374	4-			31
242AM 32							0.377	(3)+
242AM 33		0.388						33
242AM 34							0.401	(1)-
242AM 35							0.406	(4)+

242AM	36				0.409	(6-)	36
242AM	37				0.418	(4)+	37
242AM	38				0.418	(4)+	38
242AM	39				0.419	(2)-	39
242AM	40				0.429		40

242AM	41				0.434	(5-)	41
242AM	42				0.442	(5+)	42
242AM	43				0.447	(3)-	43
242AM	44				0.457	(5)+	44
242AM	45				0.464	3-,4-	45
242AM	46				0.484	(4-)	46
242AM	47				0.486	(7-)	47
242AM	48				0.500	(6-)	48
242AM	49				0.503		49
242AM	50				0.529		50

242AM	51				0.568	(4)-	51
242AM	52				0.581	(7-)	52
242AM	53				0.584		53
242AM	54				0.608		54
242AM	55		0.613	2-			55
242AM	56				0.621		56
242AM	57				0.626		57
242AM	58				0.630		58
242AM	59				0.640		59
242AM	60				0.645		60

242AM	61				0.651		61
242AM	62				0.658		62
242AM	63				0.661		63
242AM	64				0.664		64
242AM	65				0.670		65
242AM	66				0.677	(8-)	66
242AM	67				0.683		67
242AM	68				0.689		68
242AM	69				0.697		69
242AM	70				0.700		70

242AM	71				0.715		71
242AM	72				0.721		72
242AM	73				0.725		73
242AM	74				0.735		74
242AM	75				0.745		75
242AM	76				0.760		76
242AM	77				0.767		77
242AM	78				0.780		78
242AM	79				0.790		79
242AM	80				0.796		80

242AM 81			0.796		81
242AM 82			0.803		82
242AM 83			0.818		83
242AM 84			0.821		84
242AM 85			0.823		85
242AM 86			0.833		86
242AM 87			0.846		87
242AM 88			0.852		88
242AM 89			0.865		89
242AM 90			0.874	(2-)	90

242AM 91			0.884		91
242AM 92			0.897		92
242AM 93			0.902	(3-)	93
242AM 94			0.907	(3-)	94
242AM 95			0.916		95
242AM 96			0.920		96
242AM 97			0.930		97
242AM 98			0.935		98
242AM 99			0.935		99
242AM 100			0.950	(4-)	100

242AM 101			0.951		101
242AM 102			0.968		102
242AM 103			0.975	(3+)	103
242AM 104			0.978		104
242AM 105			0.994		105
242AM 106			1.003	(5-)	106
242AM 107			1.011	(2+)	107
242AM 108			1.012	(4+)	108
242AM 109			1.029		109
242AM 110			1.049	(3+)	110

242AM 111			1.065	(5+)	111
242AM 112			1.073		112
242AM 113			1.088		113
242AM 114			1.097	(4+)	114
242AM 115			1.119		115
242AM 116			1.142		116
242AM 117			1.151		117
242AM 118			1.162		118
242AM 119			1.170		119
242AM 120			1.187		120

242AM 121			1.192		121
242AM 122			1.199		122
242AM 123			1.210		123
242AM 124			1.227		124
242AM 125			1.243		125
242AM 126			1.262		126

242AM 127			1.287		127
242AM 128			1.300		128
242AM 129			1.325		129
242AM 130			1.343		130

242AM 131			1.362		131
242AM 132			1.380		132
242AM 133			1.406		133
242AM 134			1.417		134
242AM 135			1.443		135
242AM 136			1.455		136
242AM 137			1.467		137
242AM 138			1.482		138
242AM 139			1.507		139
242AM 140			1.519		140

242AM 141			1.562		141
242AM 142			2.200	(2+,3-)	142 14.0 MS 10

S-p = 4.776 (0.002)-----
S-n = 5.538 (0.002)-----
S-2p = 11.426 (0.017)-----
S-2n = 12.185 (0.014)-----
S-alpha= -5.589 (0.002)-----

S+p = -5.575 (0.002)
S+n = -6.364 (0.002)
S+2p = -9.332 (0.014)
S+2n = -11.731 (0.002)
S+alpha = 6.074 (0.060)

gap p = -0.799 (0.002)
gap n = -0.827 (0.002)
gap 2p = 2.094 (0.022)
gap 2n = 0.453 (0.014)
gap alpha = 0.485 (0.060)