

$^{58}\text{Cu}$        $Z = 29$        $N = 29$       adopted link      ENSDF link

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

BE = 497.116 ( 0.001) MeV

Qbeta+ = 8.561 ( 0.001) MeV

	Energy T	J+	J-	J-other	T1/2
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58CU 1	0.000	1+			1 3.204 S 7
58CU 2	0.203 1	0+			2
58CU 3	0.444 0	3+			3 0.32 NS 6
58CU 4	1.051 0	1+			4 78 FS +19-13
58CU 5	1.428 0	2+			5 0.66 PS GT
58CU 6				1.549 0 (4+)	6 0.34 PS GT
58CU 7				1.647 (3+)	7 0.90 PS GT
58CU 8	1.653	2+			8 35 FS 7
58CU 9				2.065 (5+)	9
58CU 10				2.070	10
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58CU 11				2.170	11
58CU 12				2.249	12
58CU 13				2.270	13
58CU 14	2.690	4+			14
58CU 15				2.750 1 (4+)	15
58CU 16				2.780	16
58CU 17				2.815	17
58CU 18				2.840	18
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S-p =	2.873 ( 0.001)				
58CU 19				2.921 (5+)	19
58CU 20				2.931 (0+:4+)	20
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58CU 21				2.949 (1)+	21
58CU 22				3.230	22
58CU 23				3.280 (0+:4+)	23
58CU 24				3.310	24
58CU 25				3.421 (7+)	25
58CU 26				3.460 (1)+	26
58CU 27				3.513	27
58CU 28				3.570	28
58CU 29				3.678 (1)+	29
58CU 30				3.717 (1)+	30
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58CU 31				3.820	31
58CU 32				3.890	32
58CU 33				4.010	33
58CU 34				4.066 (7+)	34
58CU 35				4.210	35
58CU 36				4.441 (8+)	36

58CU 37				4.720 0	(1)+	37
58CU 38				5.065 0	(1)+	38
58CU 39				5.160 0	(1)+	39
58CU 40				5.191	(7+)	40
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58CU 41				5.348	(9+)	41
58CU 42				5.451 0	(1)+	42
58CU 43				5.575	(9+)	43
58CU 44				5.645 0	(1)+	44
58CU 45				6.038 0	(1)+	45
S-alpha=	6.083	(	0.001)	-----		
58CU 46				6.086 0	(1)+	46
58CU 47				6.387	(10+)	47
58CU 48				6.497 0	(1)+	48
58CU 49				6.794	(9)	49
58CU 50				6.844 0	(1)+	50
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58CU 51				7.105 0	(1)+	51
58CU 52				7.143 0	(1)+	52
58CU 53				7.393	(11+)	53
58CU 54				7.586 1	(1)+	54
58CU 55				7.700 0	(1)+	55
58CU 56				7.752 0	(1)+	56
58CU 57				7.907 1	(1)+	57
58CU 58				7.993 0	(1)+	58
58CU 59				8.063	(1)+	59
58CU 60				8.127	(11)	60
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58CU 61				8.159 0	(1)+	61
58CU 62				8.199 0	(1)+	62
58CU 63				8.228	(9+)	63
58CU 64				8.282 0	(1)+	64
58CU 65				8.370 1	(1)+	65
58CU 66				8.421 1	(1)+	66
58CU 67				8.487	(12+)	67
58CU 68				8.520 1	(1)+	68
58CU 69				8.566 1	(1)+	69
58CU 70				8.614 1	(1)+	70
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58CU 71				8.725 1	(1)+	71
58CU 72				8.837 1	(1)+	72
58CU 73				8.882		73
58CU 74				8.900		74 2.8 MEV
58CU 75				8.917	(9+)	75 0.22 PS 18
58CU 76				8.959 0	(1)+	76
58CU 77				9.000 1	(1)+	77
58CU 78				9.129 1	(1)+	78
58CU 79				9.172 0	(1)+	79
58CU 80				9.209 1	(1)+	80
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58CU 81				9.307 1	(1)+	81
58CU 82				9.371 1	(1)+	82
58CU 83				9.444 1	(1)+	83
58CU 84				9.567 0	(1)+	84
58CU 85				9.645 1	(1)+	85
58CU 86				9.681		86
58CU 87				9.747	(11+)	87 0.38 PS 4
58CU 88				9.783 0	(1)+	88
58CU 89				9.804	(12)	89
58CU 90				9.861 2	(1)+	90
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58CU 91				9.989 1	(1)+	91

S-p = 2.873 ( 0.001)-----  
S-n = 12.430 ( 0.001)-----  
S-2p = 10.205 ( 0.001)-----  
S-2n = 29.181 ( 0.006)-----  
S-alpha= 6.083 ( 0.001)-----

S+p = -2.837 ( 0.001)  
S+n = -12.762 ( 0.001)  
S+2p = -2.504 ( 0.180)  
S+2n = -22.820 ( 0.002)  
S+alpha = -2.744 ( 0.001)

gap p = 0.036 ( 0.001)  
gap n = -0.332 ( 0.001)  
gap 2p = 7.702 ( 0.180)  
gap 2n = 6.361 ( 0.007)  
gap alpha = 3.339 ( 0.001)