

^{47}Ca $Z = 20$ $N = 27$ adopted link ENSDF link

Based on ensdf_240402 (Apr 2024), and mass evaluation from 2020

BE = 406.050 (0.002) MeV

Qbeta- = 1.992 (0.003) MeV

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

47CA 1			0.000	7/2-	1 4.536 D 3
47CA 2			2.014	3/2-	2 6 PS GT
47CA 3	2.578	3/2+			3 12 PS GT
47CA 4	2.600	1/2+			4 1 PS GT
47CA 5				2.849 (1/2-,3/2	5
47CA 6				2.875 (1/2-,3/2	6
47CA 7				3.267 (5/2-,7/2	7
47CA 8				3.296	8
47CA 9			3.425	7/2-	9
47CA 10			3.562	(9/2-)	10

47CA 11				3.844 (7/2+,11/	11
47CA 12			3.877	(5/2-)	12
47CA 13				3.933 (5/2-,7/2	13
47CA 14			3.934	(11/2-)	14
47CA 15				4.000 (13/2)	15
47CA 16				4.019 1/2-,3/2-	16
47CA 17				4.058 1/2-,3/2-	17
47CA 18				4.103 (3/2+,5/2	18
47CA 19				4.205 (7/2+,9/2	19
47CA 20	4.386	(7/2+)			20

47CA 21				4.402 1/2-,3/2-	21
47CA 22				4.403 (15/2)	22
47CA 23				4.455	23
47CA 24	4.531	(3/2+)			24
47CA 25	4.584	(5/2+)			25
47CA 26	4.611	(5/2+)			26
47CA 27			4.714	(9/2-)	27
47CA 28				4.785 5/2-,7/2-	28
47CA 29				4.809 1/2-,3/2-	29
47CA 30				4.811 (17/2)	30

47CA 31			4.880	(13/2-)	31
47CA 32			4.918	(9/2-)	32
47CA 33				4.960 3/2+,5/2+	33
47CA 34				4.980 3/2+,5/2+	34
47CA 35	5.053	(7/2+)			35
47CA 36				5.189 1/2-,3/2-	36

47CA 37				5.220	37
47CA 38				5.254 3/2+,5/2+	38
47CA 39				5.305 3/2+,5/2+	39
47CA 40				5.325 7/2+,9/2+	40

47CA 41				5.427	41
47CA 42				5.459 3/2+,5/2+	42
47CA 43				5.488 1/2-,3/2-	43
47CA 44				5.503 1/2,3/2,5	44
47CA 45				5.550	45
47CA 46				5.588	46
47CA 47				5.639	47
47CA 48				5.760 (1/2-,3/2	48
47CA 49		5.785	1/2+		49
47CA 50				5.809	50

47CA 51				5.842	51
47CA 52				5.866 1/2-,3/2-	52
47CA 53				5.875 3/2+,5/2+	53
47CA 54				5.916	54
47CA 55				5.963 (5/2-,7/2	55
47CA 56				6.062 3/2+,5/2+	56
47CA 57				6.127 3/2+,5/2+	57
47CA 58				6.158	58
47CA 59				6.191	59
47CA 60				6.253 3/2+,5/2+	60

47CA 61				6.276 3/2+,5/2+	61
47CA 62				6.366	62
47CA 63				6.465 3/2+,5/2+	63
47CA 64				6.540 3/2+,5/2+	64
47CA 65				6.610 3/2+,5/2+	65
47CA 66				6.635 3/2+,5/2+	66
47CA 67				6.670 3/2+,5/2+	67
47CA 68				6.719 (5/2-,7/2	68
47CA 69				6.760 (5/2-,7/2	69
47CA 70				6.878 (5/2-,7/2	70

47CA 71				6.920 (3/2+,5/2	71
47CA 72				7.023	72
47CA 73				7.063 (5/2-,7/2	73
47CA 74				7.117	74
47CA 75				7.151 3/2+,5/2+	75

S-n	=	7.276	(0.003)	-----	
47CA 76				7.296 3/2+,5/2+	76
47CA 77				7.415 3/2+,5/2+	77
47CA 78				7.489 3/2+,5/2+	78
47CA 79				7.545	79
47CA 80				7.642	80

47CA 81				7.679	81
47CA 82				7.736 3/2+,5/2+	82
47CA 83				7.785	83
47CA 84				7.842	84
47CA 85	7.893	1/2+			85
47CA 86				7.893 3/2+,5/2+	86
47CA 87				7.954 3/2+,5/2+	87
47CA 88				7.995	88
47CA 89	8.021	1/2+			89
47CA 90	8.121	1/2+			90

47CA 91				8.264 (5/2-,7/2	91
47CA 92				8.301 3/2+,5/2+	92
47CA 93				8.352 3/2+,5/2+	93
47CA 94	8.380	1/2+			94
47CA 95				8.447	95
47CA 96	8.595	1/2+			96
47CA 97				8.595 3/2+,5/2+	97
47CA 98	8.669	1/2+			98
47CA 99				8.669 3/2+,5/2+	99
47CA 100	8.748	1/2+			100

47CA 101				8.748 3/2+,5/2+101	
47CA 102				8.902	102
47CA 103				8.995	103
47CA 104	9.124	1/2+			104
47CA 105				9.230 3/2+,5/2+105	
47CA 106				9.271 (5/2-,7/2+106	
47CA 107	9.341	1/2+			107
47CA 108	9.451	1/2+			108
47CA 109				9.545 3/2+,5/2+109	
47CA 110				9.612	110

47CA 111				9.678 3/2+,5/2+111	
47CA 112	9.720	1/2+			112
47CA 113				9.720 3/2+,5/2+113	
47CA 114	9.776	1/2+			114
47CA 115				9.776 3/2+,5/2+115	
47CA 116				9.830	116
47CA 117				9.924	117
47CA 118				9.978 3/2+,5/2+118	
47CA 119				10.056 3/2+,5/2+119	
47CA 120				10.182 3/2+,5/2+120	

47CA 121				10.238	121
47CA 122				10.302 3/2+,5/2+122	
47CA 123				10.358 3/2+,5/2+123	
47CA 124				10.431 3/2+,5/2+124	
47CA 125				10.485 3/2+,5/2+125	
47CA 126				10.581 3/2+,5/2+126	

47CA 127				10.640	3/2+,5/2+127
47CA 128				10.680	3/2+,5/2+128
47CA 129		10.765	1/2+		129
47CA 130				11.003	3/2+,5/2+130

47CA 131				11.187	131
47CA 132				11.580	132
47CA 133				11.826	133
47CA 134		12.737	9/2 1/2+		134
S-alpha=	12.760	(0.006)	-----		
47CA 135		13.084	9/2 (3/2)+		135
S-p	=	14.220	(0.002)	-----	
47CA 136		16.218	(9/ (5/2+)		136
S-2n	=	17.675	(0.002)	-----	
47CA 137				18.149	(5/2-,7/2137
S-p	=	14.220	(0.002)	-----	
S-n	=	7.276	(0.003)	-----	
S-2p	=	27.152	(0.002)	-----	
S-2n	=	17.675	(0.002)	-----	
S-alpha=	12.760	(0.006)	-----		
S+p	=	-9.448	(0.005)		
S+n	=	-9.952	(0.002)		
S+2p	=	-20.797	(0.002)		
S+2n	=	-15.098	(0.002)		
S+alpha	=	-9.813	(0.002)		
gap p	=	4.771	(0.006)		
gap n	=	-2.675	(0.004)		
gap 2p	=	6.355	(0.003)		
gap 2n	=	2.577	(0.003)		
gap alpha	=	2.946	(0.006)		