

$^{44}\text{Ca}$        $Z = 20$        $N = 24$       adopted link      ENSDF link

Based on ensdf\_240402 (Apr 2024), and mass evaluation from 2020

BE = 380.960 ( 0.000) MeV

	Energy T	J+	J-	J-other	T1/2
44CA 1	0.000	0+			1 STABLE
44CA 2	1.157	2+			2 2.94 PS 12
44CA 3	1.570	2+			3
44CA 4	1.884	0+			4 13.9 PS 42
44CA 5	2.030	2+			5
44CA 6	2.283	4+			6 1.9 PS 7
44CA 7	2.657	2+			7 30 FS 3
44CA 8	3.044	4+			8 4.6 PS +13-10
44CA 9	3.285	6+			9 13.3 PS 12
44CA 10	3.301	2+			10 35 FS 18
44CA 11			3.308 3-		11 0.15 PS 6
44CA 12				3.357 (2+,3,4+)	12 28 FS LT
44CA 13	3.581	0+			13
44CA 14			3.662 1-		14
44CA 15	3.676	(2+)			15
44CA 16				3.692 1	16 46 FS +30-13
44CA 17			3.712 4-		17 0.42 NS LT
44CA 18			3.776 2-		18 0.69 NS LT
44CA 19				3.880	19
44CA 20			3.914 5-		20 2 PS GT
44CA 21			3.923 5-		21 0.56 NS LT
44CA 22				3.934 (2+,3+,4+)	22
44CA 23				4.011	23
44CA 24	4.092	(6+)			24
44CA 25				4.094 (2+,3,4+)	25
44CA 26	4.170	(2+)			26
44CA 27	4.196	2+			27 50 FS +13-8
44CA 28				4.260 (2+,3)	28
44CA 29				4.315 (1,2,3)	29
44CA 30			4.358 3-		30
44CA 31			4.399 3-		31
44CA 32			4.409 (1)-		32
44CA 33				4.437 (1,2+)	33
44CA 34	4.480	2+			34
44CA 35			4.553 (3)-		35
44CA 36				4.562	36
44CA 37			4.565 (5-)		37

44CA 38						4.573 (1,2,3)	38			
44CA 39						4.584 (2+,3,4+)	39	3.5 NS	LT	
44CA 40						4.616	40			
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44CA 41						4.649 1	41	7.4 FS	+16-11	
44CA 42		4.650		2+			42			
44CA 43						4.690 (1-,2,3,4	43			
44CA 44						4.804 (1-,2,3,4	44			
44CA 45						4.824 (1,2,3)	45			
44CA 46						4.848 1	46	17 FS	+5-3	
44CA 47						4.866 1	47	4.3 FS	+14-9	
44CA 48						4.884 (1,2,3)	48			
44CA 49						4.893	49			
44CA 50				4.905		3-	50			
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44CA 51						4.914 2+,3+,4+,	51			
44CA 52				4.931		(6-)	52			
44CA 53						4.992 2+,3+,4+,	53			
44CA 54		5.006		4+			54			
44CA 55				5.026		3-	55			
44CA 56		5.088		8+			56	0.53 PS	14	
44CA 57						5.097 3-,4-	57			
44CA 58						5.130 (2,3)+	58			
44CA 59						5.162 1	59	2.6 FS	3	
44CA 60						5.201 (1,2,3)-	60			
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44CA 61		5.210		1+			61	2.0 FS	+4-3	
44CA 62				5.222		(3-)	62			
44CA 63						5.230 2+,3+,4+,	63	4.2 NS	LT	
44CA 64				5.245		7-	64			
44CA 65						5.289	65			
44CA 66						5.300	66			
44CA 67						5.325 (1,2,3)	67			
44CA 68		5.342		(2)+			68			
44CA 69						5.367 (1,2,3)	69			
44CA 70						5.375 (2,3,4)+	70			
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44CA 71						5.406 3-,4-	71			
44CA 72						5.459 (2,3,4)+	72			
44CA 73						5.512	73			
44CA 74						5.549 (2,3,4)+	74			
44CA 75				5.561		3-	75			
44CA 76						5.612 1	76	1.4 FS	+7-4	
44CA 77		5.647		8(+)			77			
44CA 78				5.656		(1 TO 6)-	78			
44CA 79						5.733 (4,5)+	79	3.5 NS	LT	
44CA 80						5.776 (2,3,4)+	80			
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44CA 81						5.801 1	81	11 FS	+5-3	
44CA 82				5.806		1-	82	2.3 FS	3	

44CA 83						5.832		83	
44CA 84		5.864	0+					84	
44CA 85						5.867 (4+,5+)		85	
44CA 86					5.876	1-		86	4.2 FS +8-5
44CA 87							5.911 1	87	1.9 FS +6-4
44CA 88					5.971	8(-)		88	
44CA 89							5.975	89	
44CA 90							6.014	90	
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44CA 91							6.040 2+,3+,4+,	91	
44CA 92		6.083	1+					92	2.1 FS +4-3
44CA 93					6.137	1-		93	1.27 FS +20-15
44CA 94							6.146 (4,5)+	94	
44CA 95							6.211	95	
44CA 96							6.245 1	96	9 FS +3-2
44CA 97					6.422	1-		97	0.21 FS 2
44CA 98		6.446	1+					98	5.9 FS +16-11
44CA 99							6.507 1	99	3.3 FS +9-6
44CA 100							6.578	100	
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44CA 101					6.658	9(-)		101	
44CA 102							6.673	102	
44CA 103							6.675 1	103	4.5 FS +9-6
44CA 104							6.744	104	
44CA 105							6.778	105	
44CA 106							6.913	106	
44CA 107							6.961 1	107	5.6 FS +13-9
44CA 108							6.972 1	108	0.47 FS +14-9
44CA 109							6.996	109	
44CA 110							7.066 1	110	2.7 FS +6-4
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44CA 111					7.093	(9-)		111	
44CA 112							7.226 1	112	2.8 FS +6-4
44CA 113							7.275 1	113	1.9 FS +4-3
44CA 114							7.403 1	114	3.7 FS +9-6
44CA 115		7.471	(10+)					115	
44CA 116							7.557 (9)	116	
44CA 117		7.572	1(+)					117	2.6 FS +8-5
44CA 118					7.579	1-		118	0.51 FS +7-6
44CA 119					7.662	1-		119	4.7 FS +21-11
44CA 120					7.783	1-		120	4.2 FS +19-11
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44CA 121					7.809	1-		121	8 FS +4-2
44CA 122							7.829 1	122	6 FS +3-2
44CA 123					7.835	1-		123	3.0 FS +9-6
44CA 124							7.844	124	
44CA 125					7.880	(10-)		125	
44CA 126							7.953 1	126	1.7 FS +7-4
44CA 127							8.050	127	
44CA 128							8.070 1	128	2.2 FS +5-3

44CA 129				8.086	1	129	2.1 FS	+5-3
44CA 130		8.286	(11-)			130		
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44CA 131				8.290		131		
44CA 132				8.321	1	132	9.5 FS	+7-3
44CA 133				8.395	1	133	1.6 FS	+5-3
44CA 134				8.405	1	134	0.42 FS	+7-5
44CA 135		8.557	1-			135	2.4 FS	+16-7
44CA 136		8.615	1-			136	2.3 FS	+10-5
44CA 137		8.802	1-			137	11 FS	+13-4
44CA 138		8.828	1-			138	0.8 FS	+3-2
44CA 139		8.851	1-			139	0.70 FS	+17-12
S-alpha=	8.854	( 0.000)	-----					
44CA 140				8.860		140		
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44CA 141		8.909	1-			141	0.33 FS	+7-5
44CA 142		9.024	1-			142		
44CA 143		9.148	1-			143		
44CA 144		9.274	1-			144	1.1 FS	+3-2
44CA 145		9.317	1-			145		
44CA 146				9.460		146		
44CA 147		9.665	1-			147		
44CA 148				9.750		148		
44CA 149				9.789		149		
44CA 150		9.814	1-			150		
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44CA 151		9.859	(12-)			151		
44CA 152		9.898	1-			152		
44CA 153		10.568	(13-)			153		
S-n =	11.131	( 0.000)	-----					
44CA 154				11.132	3-,4-	154		
44CA 155		11.133	4-			155	1.13 EV	
44CA 156				11.134	+	156		
44CA 157		11.135	(4)-			157	0.67 EV	
44CA 158		11.135	4-			158	0.522 EV	7
44CA 159				11.136	+	159		
44CA 160		11.136	3-			160	1.23 EV	10
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44CA 161		11.136	4-			161		
44CA 162		11.138	3-			162	0.69 EV	7
44CA 163		11.140	4-			163	0.68 EV	7
44CA 164				11.141	+	164		
44CA 165				11.141	+	165		
44CA 166		11.142	(4)-			166	0.76 EV	10
44CA 167				11.143		167		
44CA 168				11.143		168		
44CA 169				11.144	+	169		
44CA 170				11.144		170		
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44CA 171		11.145	4-			171	1.0 EV	1

44CA 172		11.145	(3)-		172	0.8 EV	9
44CA 173				11.146 +	173		
44CA 174				11.146 +	174		
44CA 175				11.146 +	175		
44CA 176				11.148 3-,4-	176		
44CA 177		11.150	4-		177	0.66 EV	7
44CA 178				11.151 +	178		
44CA 179		11.151	(3)-		179	0.80 EV	12
44CA 180		11.152	(3)-		180	0.79 EV	10
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44CA 181				11.153 (3)	181	0.5 EV	
44CA 182		11.154	(4)-		182	0.57 EV	9
44CA 183				11.154 +	183		
44CA 184	11.155	(2)+			184	0.92 EV	12
44CA 185		11.155	(3)-		185	0.81 EV	12
44CA 186				11.155 +	186		
44CA 187	11.155	(2)+			187	0.74 EV	11
44CA 188				11.158	188		
44CA 189		11.158	(4)-		189	0.60 EV	8
44CA 190				11.158 3-,4-	190		
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44CA 191				11.159 +	191		
44CA 192				11.159 +	192		
44CA 193		11.160	(4)-		193	0.66 EV	8
44CA 194		11.160	(4)-		194	0.75 EV	10
44CA 195				11.161 +	195		
44CA 196		11.162	(4)-		196	0.66 EV	7
44CA 197				11.162 +	197		
44CA 198		11.162	(4)-		198	0.75 EV	9
44CA 199				11.163	199		
44CA 200				11.164	200		
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44CA 201				11.165	201		
44CA 202				11.166	202		
44CA 203				11.167	203		
44CA 204				11.167	204		
44CA 205				11.167	205		
44CA 206		11.168	(4)-		206	1.4 EV	2
44CA 207				11.170	207		
44CA 208				11.850	208		
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S-p	=	12.182 ( 0.001)		-----			
44CA 209				12.188	209		
44CA 210				16.500	210	4.9 MEV	+21-24
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44CA 211				17.130	211	9.40 MEV	14
-----							
S-2n	=	19.064 ( 0.000)		-----			
44CA 212				19.500	212	5.8 MEV	+9-7
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S-p	=	12.182 ( 0.001)		-----			

S-n = 11.131 ( 0.000) -----  
S-2p = 21.624 ( 0.006) -----  
S-2n = 19.064 ( 0.000) -----  
S-alpha= 8.854 ( 0.000) -----

S+p = -6.893 ( 0.001)  
S+n = -7.415 ( 0.000)  
S+2p = -17.237 ( 0.000)  
S+2n = -17.814 ( 0.002)  
S+alpha = -9.449 ( 0.000)

gap p = 5.290 ( 0.001)  
gap n = 3.716 ( 0.001)  
gap 2p = 4.387 ( 0.006)  
gap 2n = 1.251 ( 0.002)  
gap alpha = -0.595 ( 0.000)