

^{128}Ce $Z = 58$ $N = 70$ adopted link ENSDF link

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

BE = 1063.286 (0.028) MeV

Qbeta+ = 3.092 (0.061) MeV

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

S-alpha=	-1.131	(0.031)	-----					
128CE 1	0.000	0+						1 3.93 M 2
128CE 2	0.207	2+						2 0.30 NS 3
128CE 3	0.607	4+						3 8.0 PS +18-14
128CE 4	0.869	2+						4
128CE 5	1.052	0+						5
128CE 6	1.138	3+						6
128CE 7	1.157	6+						7 1.49 PS 35
128CE 8	1.306	2+						8
128CE 9	1.312	4+						9
128CE 10	1.663	5+						10

128CE 11						1.701		11
128CE 12	1.819	8+						12 0.46 PS 7
128CE 13	1.847	6+						13
128CE 14				1.889	5-			14
128CE 15						1.980	4(-)	15
128CE 16	2.177	6+						16
128CE 17						2.240	(5-)	17
128CE 18				2.245	7-			18
128CE 19				2.286	5-			19
128CE 20	2.298	7+						20

128CE 21						2.332	6(-)	21
128CE 22						2.370		22
128CE 23				2.385	6-			23
128CE 24	2.466	8+						24
128CE 25				2.520	7-			25
128CE 26	2.530	10+						26 0.31 PS 7
128CE 27				2.586	7-			27
128CE 28	2.659	8+						28
128CE 29				2.700	8-			29
128CE 30				2.735	9-			30

128CE 31				2.812	8-			31
128CE 32				2.860	9-			32
128CE 33	2.870	10+						33
128CE 34						2.975		34
128CE 35	3.001	9+						35
128CE 36				3.086	9-			36

128CE	37	3.106	12+					37	1.7 PS	5	
128CE	38			3.130	10-			38			
128CE	39					3.132	(10+)	39			
128CE	40	3.144	10+					40			

128CE	41	3.269	10+					41			
128CE	42			3.324	11-			42			
128CE	43					3.383	(11-)	43			
128CE	44			3.398	10-			44			
128CE	45	3.478	12+					45			
128CE	46					3.585	(12+)	46			
128CE	47	3.666	14+					47	1.5 PS	4	
128CE	48			3.723	11-			48			
128CE	49			3.727	12-			49			
128CE	50					3.809	(12+)	50			

128CE	51					3.966	(13-)	51			
128CE	52	3.996	12+					52			
128CE	53			4.086	12-			53			
128CE	54					4.102	(13-)	54			
128CE	55					4.121		55			
128CE	56	4.282	14+					56	0.90 PS	14	
128CE	57	4.357	16+					57			
128CE	58			4.405	13-			58			
128CE	59			4.477	14-			59			
128CE	60					4.544	(14+)	60			

128CE	61	4.595	14+					61			
128CE	62			4.688	15-			62			
128CE	63					4.792	(14-)	63			
128CE	64					4.847		64			
S-p	=	4.927	(0.038)	-----							
128CE	65					4.936	(15-)	65			
128CE	66					5.069		66			
128CE	67					5.073	(15-)	67			
128CE	68	5.127	16+					68			
128CE	69	5.185	18+					69	0.21 PS	3	
128CE	70	5.192	16+					70			

128CE	71					5.302	(16-)	71			
128CE	72					5.352	(16+)	72			
128CE	73			5.479	17-			73			
128CE	74	5.854	18+					74			
128CE	75	6.006	18+					75			
128CE	76	6.143	20+					76	0.12 PS	3	
128CE	77					6.199	(18-)	77			
128CE	78					6.225	(18+)	78			
128CE	79			6.317	19-			79			
128CE	80			6.376	19-			80			

128CE	81						6.501	(19-)		81	
128CE	82		6.605	20+						82	
128CE	83		6.930	20+						83	
128CE	84					7.175	21-			84	
128CE	85		7.219	22+						85	
128CE	86					7.296	21-			86	
128CE	87								7.380	(21-)	87

S-2p	=		7.442	(0.031)							
128CE	88		7.462	22+						88	
128CE	89		7.912	22+						89	
128CE	90					8.139	23-			90	

128CE	91								8.361	(23-)	91
128CE	92		8.405	24+							92
128CE	93		8.432	24+							93
128CE	94		8.957	24+							94
128CE	95								9.219	(25-)	95
128CE	96								9.472	(25-)	96
128CE	97		9.514	26+							97
128CE	98								9.695	(26+)	98

S-p = 4.927 (0.038)-----
S-n = 11.626 (0.040)-----
S-2p = 7.442 (0.031)-----
S-2n = 20.856 (0.040)-----
S-alpha= -1.131 (0.031)-----

S+p = -1.529 (0.041)
S+n = -8.825 (0.040)
S+2p = -5.640 (0.040)
S+2n = -20.032 (0.040)
S+alpha = 1.683 (0.037)

gap p = 3.398 (0.056)
gap n = 2.801 (0.056)
gap 2p = 1.802 (0.050)
gap 2n = 0.824 (0.056)
gap alpha = 0.552 (0.048)