

^{124}Ce $Z = 58$ $N = 66$ adopted link ENSDF link

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

BE = 1020.396 (-0.248) MeV

Qbeta+ = 5.330 (0.254) MeV

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

S-alpha=	-1.535	(-0.389)	-----		
124CE 1	0.000	0+			1 6 S 2
124CE 2	0.142	2+			2 0.88 NS 19
124CE 3	0.448	4+			3 19 PS 6
124CE 4	0.892	6+			4
124CE 5	1.451	8+			5
124CE 6				1.850 (7-)	6
124CE 7	2.101	10+			7
124CE 8				2.128 (9-)	8
124CE 9				2.184 (8+)	9
124CE 10				2.510 (11-)	10

124CE 11				2.601 (10+)	11
124CE 12	2.818	12+			12
124CE 13				2.984 (13-)	13
124CE 14				3.072 (12+)	14
124CE 15				3.544 (15-)	15
124CE 16	3.545	14+			16

S-p	= 3.555	(-0.349)	-----		
124CE 17				3.593 (14+)	17
124CE 18				4.183 (16+)	18
124CE 19				4.189 (17-)	19
124CE 20	4.239	16+			20

124CE 21				4.846 (18+)	21

S-2p	= 4.898	(-0.250)	-----		
124CE 22				4.917 (19-)	22
124CE 23	4.998	18+			23
124CE 24				5.584 (20+)	24
124CE 25				5.724 (21-)	25
124CE 26	5.848	20+			26
124CE 27				6.403 (22+)	27
124CE 28				6.611 (23-)	28
124CE 29				6.788 (22+)	29
124CE 30				7.305 (24+)	30

124CE 31				7.578 (25-)	31
124CE 32				7.818 (24+)	32
124CE 33				8.285 (26+)	33
124CE 34				8.621 (27-)	34

124CE	35				8.947	(26+)	35
124CE	36				9.335	(28+)	36
124CE	37				9.734	(29-)	37

S-p = 3.555 (-0.349)-----
 S-n = 12.657 (-0.349)-----
 S-2p = 4.898 (-0.250)-----
 S-2n = 23.168 (-0.442)-----
 S-alpha = -1.535 (-0.389)-----

S+p = -0.479 (-0.352)
 S+n = -9.854 (-0.352)
 S+2p = -2.976 (-0.354)
 S+2n = -22.035 (-0.250)
 S+alpha = 2.036 (-0.356)

gap p = 3.076 (0.496)
 gap n = 2.803 (0.496)
 gap 2p = 1.922 (0.433)
 gap 2n = 1.133 (0.508)
 gap alpha = 0.501 (0.528)