

^{209}Ra $Z = 88$ $N = 121$ adopted link ENSDF link

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

BE = 1616.201 (0.006) MeV

Qbeta+ = 5.641 (0.013) MeV

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

S-alpha=	-7.143	(0.008)	-----		
209RA 1			0.000	5/2-	1 4.8 S 2
209RA 2			0.644	9/2-	2
209RA 3	0.882	13/2+			3 117 US 5
209RA 4				1.015 (11/2-)	4
209RA 5				1.409 (13/2-)	5
209RA 6				1.451 (17/2+)	6
209RA 7				1.888 (21/2+)	7
209RA 8				2.224 (25/2+)	8
209RA 9				2.453 (27/2+)	9
209RA 10				2.760 (29/2+)	10

S-p = 2.766 (0.013)-----
 S-n = 7.941 (0.011)-----
 S-2p = 4.085 (0.007)-----
 S-2n = 17.798 (0.059)-----
 S-alpha= -7.143 (0.008)-----

S+p = -0.383 (0.062)
 S+n = -9.487 (0.011)
 S+2p = -2.560 (0.086)
 S+2n = -17.169 (0.008)
 S+alpha = 7.837 (0.011)

gap p = 2.383 (0.064)
 gap n = -1.546 (0.015)
 gap 2p = 1.525 (0.087)
 gap 2n = 0.629 (0.059)
 gap alpha = 0.694 (0.013)