

$^{120}\text{Ba}$        $Z = 56$        $N = 64$       adopted link      ENSDF link

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

BE = 993.635 ( 0.300) MeV

Qbeta+ = 5.000 ( 0.300) MeV

	Energy T	J+	J-	J-other	T1/2
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S-alpha=	-1.733	( 0.300)	-----		
120BA 1	0.000	0+			1 24 S 2
120BA 2				0.186 (2+)	2
120BA 3				0.544 (4+)	3
120BA 4				1.040 (6+)	4
120BA 5				1.645 (8+)	5
120BA 6				1.764 (5-)	6
120BA 7				2.105 (7-)	7
120BA 8				2.336 (10+)	8
120BA 9				2.567 (9-)	9
120BA 10				3.083 (12+)	10
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120BA 11				3.138 (11-)	11
120BA 12				3.815 (13-)	12
120BA 13				3.856 (14+)	13
S-p	= 3.872	( 0.300)	-----		
120BA 14				4.244 (14+)	14
120BA 15				4.588 (15-)	15
120BA 16				4.656 (16+)	16
120BA 17				5.064 (16+)	17
S-2p	= 5.388	( 0.300)	-----		
120BA 18				5.434 (17-)	18
120BA 19				5.517 (18+)	19
120BA 20				5.876	20
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120BA 21				6.455 (20+)	21
120BA 22				6.688 (20+)	22
120BA 23				7.471 (22+)	23
120BA 24				7.569 (22+)	24
120BA 25				8.502 (24+)	25
120BA 26				8.602 (24+)	26
120BA 27				9.548 (26+)	27
120BA 28				9.786 (26+)	28
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S-p	= 3.872	( 0.300)	-----		
S-n	= 12.370	( 0.361)	-----		
S-2p	= 5.388	( 0.300)	-----		
S-2n	= 22.849	( 0.382)	-----		
S-alpha=	-1.733	( 0.300)	-----		

S+p = -0.622 ( 0.386)  
S+n = -9.927 ( 0.332)  
S+2p = -3.593 ( 0.473)  
S+2n = -21.863 ( 0.301)  
S+alpha = 1.535 ( 0.389)

gap p = 3.251 ( 0.489)  
gap n = 2.442 ( 0.490)  
gap 2p = 1.795 ( 0.561)  
gap 2n = 0.986 ( 0.486)  
gap alpha = -0.198 ( 0.492)