

$^{221}\text{Ac}$        $Z = 89$        $N = 132$       adopted link      ENSDF link

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

BE = 1699.601 ( 0.057) MeV

Qbeta+ = 1.567 ( 0.057) MeV

	Energy T	J+	J-	J-other	T1/2
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S-alpha=	-7.792	( 0.057)	-----		
221AC 1				0.000 (3/2-)	1 52 MS 2
221AC 2				0.009 (5/2-)	2
221AC 3				0.052	3
221AC 4				0.148 (7/2-)	4
221AC 5				0.201 (9/2-)	5
221AC 6				0.321 (9/2+)	6
221AC 7				0.381 (11/2-)	7
221AC 8				0.414 (11/2+)	8
221AC 9				0.460 (13/2-)	9
221AC 10				0.523 (13/2+)	10
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221AC 11				0.639 (15/2+)	11
221AC 12				0.663 (15/2-)	12
221AC 13				0.763 (17/2-)	13
221AC 14				0.790 (17/2+)	14
221AC 15				0.926 (19/2+)	15
221AC 16				0.980 (19/2-)	16
221AC 17				1.097 (21/2-)	17
221AC 18				1.106 (21/2+)	18
221AC 19				1.261 (23/2+)	19
221AC 20				1.325 (23/2-)	20
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221AC 21				1.457 (25/2-)	21
221AC 22				1.460 (25/2+)	22
221AC 23				1.631 (27/2+)	23
221AC 24				1.697 (27/2-)	24
221AC 25				1.844 (29/2+)	25
221AC 26				1.844 (29/2-)	26
221AC 27				2.030 (31/2+)	27
221AC 28				2.095 (31/2-)	28
221AC 29				2.255 (33/2-)	29
221AC 30				2.255 (33/2+)	30
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221AC 31				2.454 (35/2+)	31
221AC 32				2.514 (35/2-)	32

S-p = 3.030 ( 0.057)-----

S-n = 7.284 ( 0.057)-----

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S-2p = 8.664 ( 0.057)-----  
S-2n = 13.181 ( 0.077)-----  
S-alpha= -7.792 ( 0.057)-----  
  
S+p = -4.617 ( 0.058)  
S+n = -5.981 ( 0.057)  
S+2p = -6.771 ( 0.095)  
S+2n = -12.849 ( 0.057)  
S+alpha = 7.401 ( 0.100)  
  
gap p = -1.587 ( 0.081)  
gap n = 1.303 ( 0.081)  
gap 2p = 1.892 ( 0.111)  
gap 2n = 0.332 ( 0.096)  
gap alpha = -0.391 ( 0.115)
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