

$^{120}\text{I}$        $Z = 53$        $N = 67$       adopted link      ENSDF link

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

BE = 1010.841 ( 0.015) MeV

Qbeta+ = 5.615 ( 0.015) MeV

	Energy T	J+	J-	J-other	T1/2
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S-alpha=	-0.650 ( 0.016)-----				
120I	1		0.000 2-		1 81.6 M 2
120I	2	0.025 1+			2 13.6 NS 7
120I	3			0.073 1+,2+,3+	3 228 NS 15
120I	4			0.090 0-,1-	4 2.0 NS 2
120I	5	0.102 1+			5 1.35 NS 5
120I	6			0.114 1+,2+,3+	6
120I	7	0.154 1+			7
120I	8	0.159 1+			8
120I	9			0.172 1+,2+	9
120I	10	0.201 1+			10
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120I	11	0.203 1+			11
120I	12	0.212 1+			12
120I	13			0.278 1,2	13
120I	14			0.320 (7-)	14 53 M 4
120I	15			0.335	15
120I	16			0.369 0-,1	16
120I	17	0.375 1+			17
120I	18			0.396 0-,1	18
120I	19			0.425 0,1,2-	19
120I	20	0.449 1+			20
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120I	21			0.476 0,1	21
120I	22			0.489 (8-)	22
120I	23			0.490 0,1	23
120I	24			0.530 0-,1	24
120I	25			0.581 0-,1	25
120I	26			0.659 0,1	26
120I	27			0.665 0-,1	27
120I	28			0.677 0,1	28
120I	29			0.708 0-,1	29
120I	30			0.765 (9-)	30
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120I	31	0.851 1+			31
120I	32			0.898 0-,1	32
120I	33	0.966 1+			33
120I	34	1.024 1+			34
120I	35			1.039 0-,1	35
120I	36			1.058 0-,1	36

120I	37						1.086	0-,1	37
120I	38						1.099	(10-)	38
120I	39		1.143		1+				39
120I	40						1.466	(11-)	40
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120I	41						1.858	(12-)	41
120I	42						2.278	(13-)	42
120I	43						2.724	(14-)	43
120I	44						3.199	(15-)	44
120I	45						3.695	(16-)	45

S-p = 3.854 ( 0.017)-----  
 S-n = 8.041 ( 0.026)-----  
 S-2p = 10.329 ( 0.015)-----  
 S-2n = 18.919 ( 0.025)-----  
 S-alpha= -0.650 ( 0.016)-----

S+p = -6.023 ( 0.018)  
 S+n = -10.570 ( 0.016)  
 S+2p = -8.975 ( 0.037)  
 S+2n = -18.475 ( 0.016)  
 S+alpha = -0.419 ( 0.018)

gap p = -2.169 ( 0.025)  
 gap n = -2.529 ( 0.031)  
 gap 2p = 1.353 ( 0.040)  
 gap 2n = 0.444 ( 0.030)  
 gap alpha = -1.069 ( 0.024)