

^{159}Eu $Z = 63$ $N = 96$ adopted link ENSDF link

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

BE = 1300.095 (0.004) MeV

Qbeta- = 2.519 (0.004) MeV

	Energy T	J+	J-	J-other	T1/2
159EU 1	0.000	5/2+			18.1 M 1
159EU 2	0.075	7/2+			2
159EU 3	0.172	9/2+			3
159EU 4			0.190	5/2-	4
159EU 5			0.255	7/2-	5
159EU 6	0.291	11/2+			6
159EU 7	0.334	3/2+			7
159EU 8			0.337	9/2-	8
159EU 9	0.392	5/2+			9
159EU 10			0.442	11/2-	10
159EU 11	0.571	9/2+			11
159EU 12				0.571 (13/2-)	12
159EU 13				0.704 (15/2-)	13
159EU 14				0.806 (3/2+)	14
159EU 15				0.887	15
159EU 16			1.052	7/2-	16
159EU 17	1.076	1/2+			17
159EU 18				1.140 (3/2+)	18
159EU 19				1.140 (5/2+)	19
159EU 20				1.260	20
159EU 21				1.287	21
159EU 22				1.310 (7/2+)	22
159EU 23				1.488	23
S-alpha=	1.528 (0.006)				
159EU 24				1.635	24
159EU 25				1.670	25
159EU 26				1.690	26
159EU 27				1.765	27
159EU 28				1.803	28
159EU 29				1.825	29
159EU 30				1.905	30
159EU 31				1.954	31
159EU 32				2.460	32

S-p = 8.080 (0.006)

S-n = 6.844 (0.005)

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S-2p = 18.324 ( 0.008)-----  
S-2n = 12.727 ( 0.006)-----  
S-alpha= 1.528 ( 0.006)-----  
  
S+p = -9.188 ( 0.004)  
S+n = -5.521 ( 0.004)  
S+2p = -15.996 ( 0.004)  
S+2n = -11.891 ( 0.011)  
S+alpha = -0.977 ( 0.006)  
  
gap p = -1.107 ( 0.008)  
gap n = 1.323 ( 0.007)  
gap 2p = 2.328 ( 0.009)  
gap 2n = 0.836 ( 0.013)  
gap alpha = 0.551 ( 0.009)
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