

^{142}Eu $Z = 63$ $N = 79$ adopted link ENSDF link

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

BE = 1168.148 (0.030) MeV

Qbeta+ = 7.673 (0.030) MeV

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

S-alpha=	-1.180	(0.032)	-----		
142EU 1	0.000	1+			1 2.34 S 12
142EU 2				0.179 (2)-	2
142EU 3				0.280 1+,2+	3
142EU 4				0.284 0+,1+,2+	4
142EU 5				0.496	5
142EU 6				0.503 +	6
142EU 7				0.526 +	7
142EU 8				0.545	8
142EU 9				0.551 +	9
142EU 10				0.586	10

142EU 11				0.591	11
142EU 12				0.615 +	12
142EU 13				0.620	13
142EU 14				0.632	14
142EU 15				0.661	15
142EU 16				0.705	16
142EU 17				0.732	17
142EU 18				0.750	18
142EU 19				0.936	19
142EU 20				1.000	20

142EU 21				1.210	21
142EU 22				1.383	22
142EU 23				1.413	23
142EU 24				1.438	24
142EU 25				1.481	25
142EU 26				1.486	26
142EU 27				1.779	27
142EU 28				1.949	28
142EU 29				1.957	29
142EU 30				2.026	30

142EU 31				2.161	31

S-p = 2.664 (0.031)-----

S-n = 9.455 (0.033)-----

S-2p = 7.675 (0.039)-----

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S-2n = 20.466 ( 0.060)-----  
S-alpha= -1.180 ( 0.032)-----  
  
S+p = -4.211 ( 0.203)  
S+n = -11.004 ( 0.032)  
S+2p = -5.637 ( 0.041)  
S+2n = -20.453 ( 0.032)  
S+alpha = 1.120 ( 0.054)  
  
gap p = -1.547 ( 0.205)  
gap n = -1.549 ( 0.046)  
gap 2p = 2.038 ( 0.056)  
gap 2n = 0.013 ( 0.068)  
gap alpha = -0.060 ( 0.063)
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