

$^{116}\text{Pd}$        $Z = 46$        $N = 70$       adopted link      ENSDF link

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

BE = 980.116 ( 0.007) MeV

Qbeta- = 2.712 ( 0.008) MeV

	Energy T	J+	J-	J-other	T1/2
116PD 1	0.000	0+			1 11.8 S 4
116PD 2	0.340	2+			2 0.11 NS 3
116PD 3				0.738 (2)+	3
116PD 4	0.878	4+			4
116PD 5				1.066 (3+)	5
116PD 6				1.110 (0+)	6
116PD 7				1.373 (4+)	7
116PD 8				1.532 (4-)	8
116PD 9	1.559	6+			9
116PD 10				1.695 (3-,4+)	10
116PD 11				1.718 (5+)	11
116PD 12				1.733 (0+)	12
116PD 13				1.810 (4-)	13
116PD 14				1.982 (5-)	14
116PD 15				2.006	15
116PD 16				2.074 (2+)	16
116PD 17				2.101 (6+)	17
116PD 18				2.276 (6-)	18
116PD 19				2.316	19
116PD 20				2.333	20
116PD 21	2.343	8+			21
116PD 22				2.433	22
116PD 23				2.435 (7-)	23
116PD 24				2.449	24
116PD 25				2.492 (7+)	25
116PD 26				2.603	26
116PD 27				2.617	27
116PD 28				2.654 (7-)	28
116PD 29				2.718	29
116PD 30				2.812	30
116PD 31				2.825 (8-)	31
116PD 32				2.840 (8+)	32
116PD 33				2.869	33
116PD 34				2.970 (9-)	34
116PD 35				3.067 (9-)	35
116PD 36	3.091	10+			36
116PD 37				3.255 (9+,8-)	37

116PD	38						3.492	(10-)	38
116PD	39						3.630	(11-)	39
116PD	40		3.683	12+					40
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116PD	41						3.697	(11-)	41
116PD	42						3.805	(11+,10-)	42
116PD	43		4.393	14+					43
116PD	44						4.416	(13-)	44
116PD	45						4.505	(13+,12-)	45
116PD	46		5.243	16+					46
116PD	47		6.094	18+					47
S-alpha=	6.625		( 0.012)						
116PD	48		6.917	20+					48
S-n	7.477		( 0.015)						
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116PD	49		7.819	22+					49

S-p = 12.891 ( 0.010)-----  
S-n = 7.477 ( 0.015)-----  
S-2p = 24.188 ( 0.008)-----  
S-2n = 12.483 ( 0.010)-----  
S-alpha= 6.625 ( 0.012)-----

S+p = -9.640 ( 0.015)  
S+n = -4.664 ( 0.010)  
S+2p = -21.449 ( 0.021)  
S+2n = -11.700 ( 0.008)  
S+alpha = -6.551 ( 0.008)

gap p = 3.251 ( 0.018)  
gap n = 2.812 ( 0.018)  
gap 2p = 2.739 ( 0.023)  
gap 2n = 0.783 ( 0.013)  
gap alpha = 0.074 ( 0.014)