

^{29}P $Z = 15$ $N = 14$ adopted link ENSDF link

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

BE = 239.286 (0.000) MeV

Qbeta+ = 4.942 (0.000) MeV

	Energy T	J+	J-	J-other	T1/2
29P 1	0.000	1/2+			1 4.142 S 15
29P 2	1.384	3/2+			2 151 FS 12
29P 3	1.954	5/2+			3 268 FS 21
29P 4	2.423	3/2+			4 19 FS 3
S-p =	2.749 (0.000)				
29P 5	3.106	5/2+			5 23 FS 10
29P 6			3.448 7/2-		6 9 FS 6
29P 7	4.081	7/2+			7 11 FS 1
29P 8			4.343 3/2-		8 52 KEV 8
29P 9				4.642 (7/2+,9/2+)	9 35 FS 15
29P 10	4.759	1/2+			10 15.6 KEV 6
29P 11				4.954 (5/2+)	11 2 KEV LT
29P 12				5.047 (7/2+,9/2+)	12
29P 13				5.293 (7/2+)	13 2 KEV LT
29P 14			5.527 1/2-		14 400 KEV 20
29P 15				5.583	15
29P 16				5.716	16
29P 17			5.740 7/2-		17 12.5 KEV 7
29P 18				5.826	18
29P 19	5.968	3/2+			19 9.5 KEV 15
29P 20			6.191 3/2-		20 95 KEV 6
29P 21				6.328 (1/2,3/2)	21 73 KEV 5
29P 22				6.505	22
29P 23	6.577	1/2+			23 200 KEV 20
29P 24				6.828 (3/2+,5/2+)	24 4.9 KEV 4
29P 25	6.956	1/2+			25 120 KEV 10
29P 26				7.021 (1/2-,3/2-)	26 100 KEV 8
29P 27				7.148	27
29P 28				7.272 (5/2+)	28 3 KEV LT
29P 29				7.361	29
29P 30				7.456 (7/2-,5/2-)	30 8.4 KEV 7
29P 31				7.523 (3/2+)	31 7 KEV 3
29P 32	7.641	1/2+			32 165 KEV 25
29P 33				7.755 (5/2+)	33 2 KEV AP
29P 34				7.950 (1/2-,3/2-)	34 14 KEV 4
29P 35				7.998 (1/2-,3/2-)	35 125 KEV 25
29P 36				8.106 (5/2+)	36 36 KEV 10

29P	37				8.234	(3/2+)	37	20 KEV	4
29P	38				8.297	(1/2-, 3/2-)	38	40 KEV	AP
29P	39				8.379	3/2 (5/2+)	39	0.271 KEV	10
29P	40				8.432	(5/2+)	40		

29P	41				8.510	(1/2+)	41	36 KEV	10
29P	42				8.532	(3/2+, 5/2+)	42	25 KEV	7
29P	43				8.645		43	10 KEV	AP
29P	44				8.693	(1/2+, 3/2+)	44	120 KEV	30
29P	45				8.780	(1/2+)	45	14 KEV	3
29P	46				8.810		46		
29P	47				8.865	(1/2+, 3/2+)	47	9 KEV	3
29P	48				8.915	(3/2+, 5/2+)	48	33 KEV	6
29P	49				9.002	(5/2+, 3/2+)	49	50 KEV	AP
29P	50				9.079	(1/2-, 3/2-)	50	23 KEV	5

29P	51				9.118		51	150 KEV	AP
29P	52				9.301		52	7 KEV	3
29P	53				9.369		53		
29P	54				9.389	(3/2+)	54	13 KEV	5
29P	55				9.455	(1/2+)	55	20 KEV	5
29P	56				9.548	(1/2+)	56	50 KEV	10
29P	57				9.625	(1/2+)	57	40 KEV	10
29P	58				9.664	(1/2+)	58	3.07 KEV	5
29P	59				9.743	(3/ (1/2+)	59	6.5 KEV	3
29P	60				9.760	(3/2+, 5/2+)	60	7.6 KEV	3

29P	61				9.773	(3/2+, 5/2+)	61	7.6 KEV	3
29P	62				9.815	(3/2+, 5/2+)	62	19.8 KEV	10
29P	63				9.855	(3/2+, 5/2+)	63	11.7 KEV	5

S-p = 2.749 (0.000)-----
S-n = 17.876 (0.001)-----
S-2p = 14.334 (0.000)-----
S-2n = 32.436 (0.009)-----
S-alpha= 10.462 (0.000)-----

S+p = -4.395 (0.000)
S+n = -11.319 (0.000)
S+2p = -4.660 (0.003)
S+2n = -23.630 (0.000)
S+alpha = -6.475 (0.001)

gap p = -1.646 (0.001)
gap n = 6.557 (0.001)
gap 2p = 9.674 (0.003)
gap 2n = 8.806 (0.009)
gap alpha = 3.986 (0.001)