

^{33}P $Z = 15$ $N = 18$ adopted link ENSDF link

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

BE = 280.956 (0.001) MeV

Qbeta- = 0.249 (0.001) MeV

	Energy T	J+	J-	J-other	T1/2
33P 1	0.000	1/2+			1 25.35 D 11
33P 2	1.432	3/2+			2 0.43 PS 7
33P 3	1.848	5/2+			3 0.77 PS 11
33P 4	2.539	3/2+			4 35 FS 7
33P 5	3.276	3/2+			5 0.14 PS 3
33P 6	3.491	5/2+			6 58 FS 12
33P 7	3.628	7/2+			7 0.14 PS 3
33P 8				3.989	8
33P 9	4.048	5/2+			9 62 FS 21
33P 10	4.193	5/2+			10 104 FS 35
33P 11			4.226	7/2-	11 0.32 PS 7
33P 12				4.856 (3/2,5/2)	12 76 FS LT
33P 13	5.050	5/2+			13 62 FS LT
33P 14				5.191 (3/2+,5/2)	14 125 FS LT
33P 15				5.206	15
33P 16				5.220	16
33P 17				5.234	17
33P 18				5.407 (3/2,5/2,7/2+)	18 76 FS LT
33P 19			5.452	9/2-	19 24 PS 5
33P 20				5.500 (3/2-:9/2+)	20 62 FS LT
33P 21				5.548 (1/2+:9/2+)	21 330 FS 120
33P 22				5.558 3/2	22 56 FS LT
33P 23			5.638	11/2-	23 9.7 PS 14
33P 24	5.674	1/2+			24 49 FS LT
33P 25				5.731 3/2	25
33P 26				5.785 (1/2,3/2,5/2+)	26 35 FS LT
33P 27				5.816 (3/2+,5/2,7/2+)	27 75 FS 40
33P 28				5.931	28
33P 29				5.973 (1/2,3/2,5/2+)	29 56 FS LT
33P 30				6.115 (1/2+:9/2+)	30 0.14 PS LT
33P 31				6.125	31 55 FS 40
33P 32				6.181	32 60 FS LT
33P 33				6.327	33
33P 34	6.432	5/2+			34
33P 35				6.509	35
33P 36				6.518	36
33P 37				6.559	37

33P	38						6.807	(7/2,9/2,11/2)	38
33P	39		6.820	5/2+					39
33P	40						6.936	(9/2,13/2)	40

33P	41						6.950		41
33P	42						6.987	(7/2-,9/2,11/2-	42)
33P	43		7.146	5/2+					43
33P	44						7.310	(9/2,11/2,13/2+	44)
33P	45						7.564		45
33P	46						7.964	(11/2,15/2)	46
33P	47						8.080	(9/2,11/2)	47
33P	48						8.510		48
33P	49						8.850	(3/2+,5/2,7/2)	49
33P	50						9.078	(7/2-:15/2-)	50

S-p	=		9.549	(0.001)	-----				
33P	51						9.940	(1/2:11/2)	51

S-p	=		9.549	(0.001)	-----				
S-n	=		10.104	(0.001)	-----				
S-2p	=		25.965	(0.002)	-----				
S-2n	=		18.039	(0.001)	-----				
S-alpha	=		10.555	(0.001)	-----				

S+p	=		-10.883	(0.001)					
S+n	=		-6.283	(0.001)					
S+2p	=		-17.254	(0.001)					
S+2n	=		-14.663	(0.002)					
S+alpha	=		-7.849	(0.001)					

gap p	=		-1.335	(0.002)					
gap n	=		3.821	(0.002)					
gap 2p	=		8.710	(0.003)					
gap 2n	=		3.376	(0.002)					
gap alpha	=		2.705	(0.002)					