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

Based on ENSDF from Apr 2024, 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
 29P   64 |                 |                 |  10.095 (3/                  64
S-alpha=  10.462 ( 0.000)-------------------------------------------------------------------------
 29P   65 | 10.490 3/2 (3/2+|                 |                              65  0.88 KEV  17
 29P   66 | 11.360 3/2 (5/2+|                 |                              66  3.5 KEV   5
 29P   67 | 11.480 3/2 (5/2+|                 |                              67  1.53 KEV  12


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)
```