

$^{142}\text{Dy}$        $Z = 66$        $N = 76$       adopted link      ENSDF link

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

BE = 1144.662 (-0.710) MeV

Qbeta+ = 6.390 ( 0.997) MeV

|             | Energy T | J+       | J-    | J-other    | T1/2      |
|-------------|----------|----------|-------|------------|-----------|
| -----       |          |          |       |            |           |
| S-alpha=    | -3.090   | (-0.723) | ----- |            |           |
| 142DY 1     | 0.000    | 0+       |       |            | 1 2.3 S 3 |
| 142DY 2     |          |          |       | 0.316 (2+) | 2         |
| 142DY 3     |          |          |       | 0.799 (4+) | 3         |
| 142DY 4     |          |          |       | 1.387 (6+) | 4         |
| 142DY 5     |          |          |       | 2.011 (8+) | 5         |
| 142DY 6     |          |          |       | 2.639      | 6         |
| S-p =       | 2.918    | (-0.718) | ----- |            |           |
| S-2p =      | 2.965    | (-0.711) | ----- |            |           |
| 142DY 7     |          |          |       | 3.241      | 7         |
|             |          |          |       |            |           |
| S-p =       | 2.918    | (-0.718) | ----- |            |           |
| S-n =       | 12.855   | (-0.764) | ----- |            |           |
| S-2p =      | 2.965    | (-0.711) | ----- |            |           |
| S-2n =      | 23.542   | (-0.825) | ----- |            |           |
| S-alpha=    | -3.090   | (-0.723) | ----- |            |           |
|             |          |          |       |            |           |
| S+p =       | 0.805    | (-0.765) |       |            |           |
| S+n =       | -10.071  | (-0.710) |       |            |           |
| S+2p =      | -1.002   | (-0.724) |       |            |           |
| S+2n =      | -22.543  | (-0.710) |       |            |           |
| S+alpha =   | 3.423    | (-0.710) |       |            |           |
|             |          |          |       |            |           |
| gap p =     | 3.723    | ( 1.049) |       |            |           |
| gap n =     | 2.784    | ( 1.043) |       |            |           |
| gap 2p =    | 1.963    | ( 1.015) |       |            |           |
| gap 2n =    | 0.999    | ( 1.088) |       |            |           |
| gap alpha = | 0.333    | ( 1.014) |       |            |           |