

$^{187}\text{Os}$        $Z = 76$        $N = 111$       adopted link      ENSDF link

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

BE = 1491.097 ( 0.001) MeV

|          | Energy T | J+       | J-    | J-other             | T1/2         |
|----------|----------|----------|-------|---------------------|--------------|
| -----    |          |          |       |                     |              |
| S-alpha= | -2.722   | ( 0.001) | ----- |                     |              |
| 187Os 1  |          |          | 0.000 | 1/2-                | 1 STABLE     |
| 187Os 2  |          |          | 0.010 | 3/2-                | 2 2.38 NS 18 |
| 187Os 3  |          |          | 0.074 | 3/2-                | 3 37 PS 28   |
| 187Os 4  |          |          | 0.075 | 5/2-                | 4 2.16 NS 16 |
| 187Os 5  |          |          | 0.100 | 7/2-                | 5 112 NS 6   |
| 187Os 6  |          |          |       | 0.117               | 6            |
| 187Os 7  |          |          | 0.187 | 5/2-                | 7 107 PS 9   |
| 187Os 8  |          |          | 0.191 | 7/2-                | 8            |
| 187Os 9  | 0.257    | 11/2+    |       |                     | 9 231 US 2   |
| 187Os 10 |          |          |       | 0.263 (9/2-)        | 10           |
| -----    |          |          |       |                     |              |
| 187Os 11 |          |          |       | 0.333 (7/2-)        | 11           |
| 187Os 12 |          |          |       | 0.342 (9/2-)        | 12           |
| 187Os 13 |          |          |       | 0.350               | 13           |
| 187Os 14 |          |          |       | 0.419 (13/2+)       | 14           |
| 187Os 15 |          |          |       | 0.442               | 15           |
| 187Os 16 |          |          |       | 0.445 (7/2-,9/2-)   | 16           |
| 187Os 17 |          |          |       | 0.459 (11/2-)       | 17           |
| 187Os 18 |          |          |       | 0.464               | 18           |
| 187Os 19 |          |          | 0.501 | 3/2-                | 19           |
| 187Os 20 |          |          |       | 0.508 (9/2-)        | 20           |
| -----    |          |          |       |                     |              |
| 187Os 21 |          |          |       | 0.512 (11/2-)       | 21           |
| 187Os 22 |          |          |       | 0.537               | 22           |
| 187Os 23 |          |          |       | 0.557 (9/2+)        | 23           |
| 187Os 24 |          |          | 0.586 | 5/2-                | 24           |
| 187Os 25 |          |          |       | 0.596 1/2-,3/2-     | 25           |
| 187Os 26 |          |          |       | 0.611               | 26           |
| 187Os 27 |          |          |       | 0.618 (15/2+)       | 27           |
| 187Os 28 |          |          |       | 0.642               | 28           |
| 187Os 29 |          |          |       | 0.664 (3/2-,5/2-)   | 29           |
| 187Os 30 |          |          |       | 0.670               | 30           |
| -----    |          |          |       |                     |              |
| 187Os 31 |          |          |       | 0.684 (13/2-)       | 31           |
| 187Os 32 |          |          |       | 0.684 (11/2-,13/2-) | 32           |
| 187Os 33 |          |          | 0.711 | 5/2-                | 33           |
| 187Os 34 |          |          | 0.726 | 3/2-                | 34           |
| 187Os 35 |          |          |       | 0.727 (11/2+)       | 35           |
| 187Os 36 |          |          |       | 0.745               | 36           |
| 187Os 37 |          |          |       | 0.756               | 37           |

|          |  |       |      |       |             |    |
|----------|--|-------|------|-------|-------------|----|
| 1870S 38 |  |       |      | 0.817 | (17/2+)     | 38 |
| 1870S 39 |  |       |      | 0.838 |             | 39 |
| 1870S 40 |  |       |      | 0.886 | (13/2+)     | 40 |
| -----    |  |       |      |       |             |    |
| 1870S 41 |  |       |      | 0.935 | (15/2-)     | 41 |
| 1870S 42 |  |       |      | 0.935 | 5/2-,7/2-   | 42 |
| 1870S 43 |  |       |      | 0.942 | (5/2+,7/2-) | 43 |
| 1870S 44 |  |       |      | 0.964 |             | 44 |
| 1870S 45 |  | 0.987 | 3/2- |       |             | 45 |
| 1870S 46 |  |       |      | 1.005 |             | 46 |
| 1870S 47 |  |       |      | 1.053 |             | 47 |
| 1870S 48 |  |       |      | 1.069 |             | 48 |
| 1870S 49 |  |       |      | 1.084 | (19/2+)     | 49 |
| 1870S 50 |  |       |      | 1.090 | (5/2-)      | 50 |
| -----    |  |       |      |       |             |    |
| 1870S 51 |  |       |      | 1.112 | 1/2-,3/2-   | 51 |
| 1870S 52 |  |       |      | 1.193 |             | 52 |
| 1870S 53 |  |       |      | 1.210 | (17/2-)     | 53 |
| 1870S 54 |  |       |      | 1.227 | (5/2-,7/2-) | 54 |
| 1870S 55 |  |       |      | 1.248 |             | 55 |
| 1870S 56 |  |       |      | 1.278 |             | 56 |
| 1870S 57 |  |       |      | 1.354 |             | 57 |
| 1870S 58 |  |       |      | 1.369 |             | 58 |
| 1870S 59 |  |       |      | 1.563 |             | 59 |
| 1870S 60 |  |       |      | 1.613 |             | 60 |
| -----    |  |       |      |       |             |    |
| 1870S 61 |  |       |      | 1.647 |             | 61 |
| 1870S 62 |  |       |      | 1.657 | (3/2-)      | 62 |
| 1870S 63 |  |       |      | 1.784 |             | 63 |
| 1870S 64 |  |       |      | 1.843 |             | 64 |
| 1870S 65 |  |       |      | 1.881 |             | 65 |
| 1870S 66 |  |       |      | 2.097 |             | 66 |
| 1870S 67 |  |       |      | 2.266 |             | 67 |

S-p = 6.581 ( 0.001)-----  
S-n = 6.290 ( 0.001)-----  
S-2p = 12.409 ( 0.001)-----  
S-2n = 14.556 ( 0.001)-----  
S-alpha= -2.722 ( 0.001)-----

S+p = -4.415 ( 0.009)  
S+n = -7.990 ( 0.001)  
S+2p = -9.828 ( 0.010)  
S+2n = -13.910 ( 0.001)  
S+alpha = 3.096 ( 0.004)

gap p = 2.166 ( 0.010)  
gap n = -1.699 ( 0.001)  
gap 2p = 2.581 ( 0.010)

gap 2n = 0.646 ( 0.001)  
gap alpha = 0.374 ( 0.004)