

^{189}Pb $Z = 82$ $N = 107$ adopted link ENSDF link

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

BE = 1479.171 (0.014) MeV

Qbeta+ = 6.772 (0.016) MeV

| | Energy T | J+ | J- | J-other | T1/2 |
|----------|----------|----------|----------|---------------|-------------------|
| ----- | | | | | |
| S-alpha= | -5.915 | (0.020) | ----- | | |
| 189PB 1 | | | | 0.000 (3/2-) | 1 39 S 8 |
| 189PB 2 | | | | 0.040 (13/2+) | 2 50 S 3 |
| 189PB 3 | | | | 0.549 (3/2-) | 3 |
| 189PB 4 | | | | 0.678 (13/2+) | 4 |
| 189PB 5 | | | | 0.859 (17/2+) | 5 |
| 189PB 6 | | | | 0.951 (15/2+) | 6 |
| 189PB 7 | | | | 1.182 (17/2+) | 7 6.9 NS LT |
| 189PB 8 | | | | 1.327 (21/2+) | 8 |
| 189PB 9 | | | | 1.340 (19/2+) | 9 |
| 189PB 10 | | | | 1.607 (21/2+) | 10 2.8 NS LT |
| ----- | | | | | |
| 189PB 11 | | | | 1.813 (23/2+) | 11 |
| 189PB 12 | | | | 1.865 (25/2+) | 12 |
| 189PB 13 | | | | 2.138 (25/2+) | 13 2.1 NS LT |
| 189PB 14 | | | | 2.280 (27/2+) | 14 |
| 189PB 15 | | | | 2.475 (31/2-) | 15 22.2 US +69-14 |
| 189PB 16 | | | | 2.476 | 16 |
| 189PB 17 | | | | 2.654 (33/2) | 17 |
| 189PB 18 | | | | 2.681 (33/2-) | 18 |
| ----- | | | | | |
| S-p | = | 2.797 | (0.033) | ----- | |
| 189PB 19 | | | | 3.070 (35/2-) | 19 |
| 189PB 20 | | | | 3.142 | 20 |
| ----- | | | | | |
| 189PB 21 | | | | 3.229 (33/2-) | 21 |
| 189PB 22 | | | | 3.488 (37/2-) | 22 |
| 189PB 23 | | | | 3.923 (39/2-) | 23 |
| ----- | | | | | |
| S-2p | = | 4.303 | (0.019) | ----- | |
| 189PB 24 | | | | 4.337 (41/2-) | 24 |
| 189PB 25 | | | | 4.672 (43/2-) | 25 |
| 189PB 26 | | | | 0.040 (13/2+) | 26 |
| ----- | | | | | |
| S-p | = | 2.797 | (0.033) | ----- | |
| S-n | = | 8.104 | (0.017) | ----- | |
| S-2p | = | 4.303 | (0.019) | ----- | |
| S-2n | = | 19.000 | (0.015) | ----- | |
| S-alpha= | = | -5.915 | (0.020) | ----- | |
| ----- | | | | | |
| S+p | = | -0.041 | (0.025) | ----- | |

S+n = -10.644 (0.019)
S+2p = -1.803 (0.016)
S+2n = -18.590 (0.016)
S+alpha = 7.094 (0.020)

gap p = 2.756 (0.042)
gap n = -2.540 (0.026)
gap 2p = 2.501 (0.025)
gap 2n = 0.410 (0.022)
gap alpha = 1.179 (0.028)