

$^{46}\text{Ca}$        $Z = 20$        $N = 26$       adopted link      ENSDF link

Based on ensdf\_240402 (Apr 2024), and mass evaluation from 2020

BE = 398.773 ( 0.002) MeV

|       | Energy T | J+    |      | J-    |      | J-other |    | T1/2      |
|-------|----------|-------|------|-------|------|---------|----|-----------|
| ----- |          |       |      |       |      |         |    |           |
| 46CA  | 1        | 0.000 | 0+   |       |      |         | 1  | STABLE    |
| 46CA  | 2        | 1.346 | 2+   |       |      |         | 2  | 3.6 PS 3  |
| 46CA  | 3        | 2.423 | 0+   |       |      |         | 3  | 4.5 PS GT |
| 46CA  | 4        | 2.575 | 4+   |       |      |         | 4  |           |
| 46CA  | 5        | 2.974 | 6+   |       |      |         | 5  | 10.4 NS 5 |
| 46CA  | 6        | 3.023 | 2+   |       |      |         | 6  |           |
| 46CA  | 7        |       |      | 3.614 | 3-   |         | 7  |           |
| 46CA  | 8        | 3.639 | 2+   |       |      |         | 8  |           |
| 46CA  | 9        | 3.860 | 4+   |       |      |         | 9  |           |
| 46CA  | 10       |       |      |       |      | 3.952   | 10 |           |
| ----- |          |       |      |       |      |         |    |           |
| 46CA  | 11       |       |      | 3.988 | (3-) |         | 11 |           |
| 46CA  | 12       |       |      | 4.185 | 5-   |         | 12 |           |
| 46CA  | 13       |       |      |       |      | 4.261   | 13 |           |
| 46CA  | 14       |       |      | 4.407 | 3-   |         | 14 |           |
| 46CA  | 15       | 4.430 | 2+   |       |      |         | 15 |           |
| 46CA  | 16       | 4.489 | (4+) |       |      |         | 16 |           |
| 46CA  | 17       |       |      | 4.729 | 5-   |         | 17 |           |
| 46CA  | 18       | 4.745 | (4+) |       |      |         | 18 |           |
| 46CA  | 19       | 4.758 | 0+   |       |      |         | 19 |           |
| 46CA  | 20       | 4.995 | (4+) |       |      |         | 20 |           |
| ----- |          |       |      |       |      |         |    |           |
| 46CA  | 21       |       |      |       |      | 5.014   | 21 |           |
| 46CA  | 22       | 5.051 | (4+) |       |      |         | 22 |           |
| 46CA  | 23       | 5.152 | (4+) |       |      |         | 23 |           |
| 46CA  | 24       |       |      |       |      | 5.218   | 24 |           |
| 46CA  | 25       | 5.252 | 4+   |       |      |         | 25 |           |
| 46CA  | 26       | 5.317 | 0+   |       |      |         | 26 |           |
| 46CA  | 27       |       |      | 5.380 | (3-) |         | 27 |           |
| 46CA  | 28       |       |      |       |      | 5.392   | 28 |           |
| 46CA  | 29       |       |      |       |      | 5.417   | 29 |           |
| 46CA  | 30       | 5.437 | 4+   |       |      |         | 30 |           |
| ----- |          |       |      |       |      |         |    |           |
| 46CA  | 31       |       |      | 5.474 | (3-) |         | 31 |           |
| 46CA  | 32       | 5.537 | (4+) |       |      |         | 32 |           |
| 46CA  | 33       | 5.600 | 0+   |       |      |         | 33 |           |
| 46CA  | 34       | 5.628 | 0+   |       |      |         | 34 |           |
| 46CA  | 35       |       |      |       |      | 5.638   | 35 |           |
| 46CA  | 36       |       |      |       |      | 5.679   | 36 |           |
| 46CA  | 37       |       |      |       |      | 5.690   | 37 |           |

|          |  |        |          |          |       |        |                |    |
|----------|--|--------|----------|----------|-------|--------|----------------|----|
| 46CA 38  |  |        |          |          |       | 5.722  |                | 38 |
| 46CA 39  |  |        |          |          |       | 5.782  |                | 39 |
| 46CA 40  |  |        |          |          |       | 5.821  |                | 40 |
| -----    |  |        |          |          |       |        |                |    |
| 46CA 41  |  |        |          |          |       | 5.851  |                | 41 |
| 46CA 42  |  | 5.863  | (6+)     |          |       |        |                | 42 |
| 46CA 43  |  | 5.958  | (2+)     |          |       |        |                | 43 |
| 46CA 44  |  | 5.987  | (6+)     |          |       |        |                | 44 |
| 46CA 45  |  |        |          |          |       | 6.010  |                | 45 |
| 46CA 46  |  | 6.036  | (4+)     |          |       |        |                | 46 |
| 46CA 47  |  | 6.047  | (0+)     |          |       |        |                | 47 |
| 46CA 48  |  |        |          |          |       | 6.077  |                | 48 |
| 46CA 49  |  | 6.116  | (2+)     |          |       |        |                | 49 |
| 46CA 50  |  |        |          |          |       | 6.156  |                | 50 |
| -----    |  |        |          |          |       |        |                |    |
| 46CA 51  |  |        |          |          |       | 6.201  |                | 51 |
| 46CA 52  |  | 6.252  | (4+)     |          |       |        |                | 52 |
| 46CA 53  |  | 6.267  | 2+       |          |       |        |                | 53 |
| 46CA 54  |  |        |          |          |       | 6.309  |                | 54 |
| 46CA 55  |  | 6.372  | 2+       |          |       |        |                | 55 |
| 46CA 56  |  | 6.555  | (0+)     |          |       |        |                | 56 |
| 46CA 57  |  | 6.626  | 2+       |          |       |        |                | 57 |
| 46CA 58  |  |        |          |          |       | 6.745  |                | 58 |
| 46CA 59  |  |        |          |          |       | 6.836  |                | 59 |
| 46CA 60  |  |        |          |          |       | 6.964  |                | 60 |
| -----    |  |        |          |          |       |        |                |    |
| 46CA 61  |  | 7.025  | (2+)     |          |       |        |                | 61 |
| 46CA 62  |  |        |          |          |       | 7.055  | 5-,6+          | 62 |
| 46CA 63  |  |        |          |          |       | 7.098  |                | 63 |
| 46CA 64  |  |        |          |          |       | 7.168  |                | 64 |
| 46CA 65  |  | 7.233  | (0+)     |          |       |        |                | 65 |
| 46CA 66  |  | 7.267  | (0+)     |          |       |        |                | 66 |
| 46CA 67  |  |        |          |          |       | 7.311  |                | 67 |
| 46CA 68  |  |        |          |          |       | 7.380  |                | 68 |
| 46CA 69  |  |        |          |          |       | 7.438  |                | 69 |
| 46CA 70  |  | 7.490  | (2+)     |          |       |        |                | 70 |
| -----    |  |        |          |          |       |        |                |    |
| 46CA 71  |  |        |          |          |       | 7.503  |                | 71 |
| 46CA 72  |  |        |          |          |       | 7.667  | (2+,5-)        | 72 |
| 46CA 73  |  |        |          |          |       | 7.738  |                | 73 |
| 46CA 74  |  | 7.830  | 0+       |          |       |        |                | 74 |
| 46CA 75  |  |        |          |          |       | 7.914  |                | 75 |
| 46CA 76  |  |        |          |          | 8.382 | 7-     |                | 76 |
| 46CA 77  |  |        |          |          | 8.770 | 7-     |                | 77 |
| 46CA 78  |  |        |          |          | 9.070 | 5-     |                | 78 |
| 46CA 79  |  |        |          |          |       |        | 9.680 5-,6+,8+ | 79 |
| -----    |  |        |          |          |       |        |                |    |
| S-alpha= |  | 11.142 | ( 0.006) |          |       |        |                |    |
| S-n      |  | =      | 10.399   | ( 0.002) |       |        |                |    |
| 46CA 80  |  |        |          |          |       | 12.660 | 6+,8+,7-       | 80 |
| -----    |  |        |          |          |       |        |                |    |

