

^{127}Sb $Z = 51$ $N = 76$ adopted link ENSDF link

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

BE = 1071.856 (0.005) MeV

Qbeta- = 1.582 (0.005) MeV

| | Energy T | J+ | J- | J-other | T1/2 | |
|----------|----------|------|----|-------------------------|------|----------|
| 127SB 1 | 0.000 | 7/2+ | | | 1 | 3.85 D 5 |
| 127SB 2 | | | | 0.491 (5/2)+ | 2 | |
| 127SB 3 | | | | 0.765 (3/2)+ | 3 | |
| 127SB 4 | | | | 1.095 (11/2+) | 4 | |
| 127SB 5 | 1.110 | 1/2+ | | | 5 | |
| 127SB 6 | | | | 1.114 (9/2+) | 6 | |
| 127SB 7 | 1.186 | 1/2+ | | | 7 | |
| 127SB 8 | | | | 1.352 (5/2+) | 8 | |
| 127SB 9 | | | | 1.471 (7/2+) | 9 | |
| 127SB 10 | | | | 1.584 (9/2+) | 10 | |
| 127SB 11 | | | | 1.610 | 11 | |
| 127SB 12 | | | | 1.701 (1/2+,3/2,5/2) | 12 | |
| 127SB 13 | | | | 1.712 (7/2) | 13 | |
| 127SB 14 | | | | 1.840 (3/2+,5/2) | 14 | |
| 127SB 15 | | | | 1.920 (15/2-) | 15 | 11 US 1 |
| 127SB 16 | | | | 1.937 (7/2,9/2,11/2+) | 16 | |
| 127SB 17 | | | | 1.947 (15/2+) | 17 | |
| 127SB 18 | | | | 1.955 | 18 | |
| 127SB 19 | | | | 1.990 | 19 | |
| 127SB 20 | | | | 1.995 | 20 | |
| 127SB 21 | | | | 2.003 (9/2,11/2+) | 21 | |
| 127SB 22 | | | | 2.051 (13/2,15/2+) | 22 | |
| 127SB 23 | | | | 2.055 (3/2+,5/2+) | 23 | |
| 127SB 24 | | | | 2.093 (9/2,11/2+) | 24 | |
| 127SB 25 | | | | 2.102 (7/2+,9/2+) | 25 | |
| 127SB 26 | | | | 2.110 | 26 | |
| 127SB 27 | | | | 2.124 (11/2-,13/2,15/2) | 27+ | |
| 127SB 28 | | | | 2.140 (11/2-,13/2,15/2) | 28+ | |
| 127SB 29 | | | | 2.150 (1/2+,3/2,5/2) | 29 | |
| 127SB 30 | | | | 2.151 (9/2,11/2+) | 30 | |
| 127SB 31 | | | | 2.160 (7/2+,9/2,11/2+) | 31 | |
| 127SB 32 | | | | 2.194 | 32 | |
| 127SB 33 | | | | 2.202 | 33 | |
| 127SB 34 | | | | 2.222 (11/2-,13/2,15/2) | 34+ | |
| 127SB 35 | | | | 2.256 7/2+,9/2+ | 35 | |
| 127SB 36 | | | | 2.275 (9/2,11/2,13/2+) | 36 | |
| 127SB 37 | | | | 2.304 (7/2+,9/2+) | 37 | |

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|----------|--|--|--|-------|------------------|----------------|
| 127SB 38 | | | | 2.304 | (1/2+,3/2,5/2) | 38 |
| 127SB 39 | | | | 2.318 | (7/2+,9/2,11/2+) | 39 |
| 127SB 40 | | | | 2.325 | | 40 0.165 US 20 |
| ----- | | | | | | |
| 127SB 41 | | | | 2.346 | (11/2-,13/2,15/2 | 41+) |
| 127SB 42 | | | | 2.352 | | 42 |
| 127SB 43 | | | | 2.359 | (11/2-,13/2) | 43 |
| 127SB 44 | | | | 2.373 | (11/2-,13/2,15/2 | 44+) |
| 127SB 45 | | | | 2.378 | | 45 |
| 127SB 46 | | | | 2.378 | | 46 |
| 127SB 47 | | | | 2.379 | | 47 |
| 127SB 48 | | | | 2.406 | (9/2,11/2,13/2+) | 48 |
| 127SB 49 | | | | 2.423 | | 49 |
| 127SB 50 | | | | 2.447 | (9/2,11/2+) | 50 |
| ----- | | | | | | |
| 127SB 51 | | | | 2.456 | (9/2,11/2,13/2) | 51 |
| 127SB 52 | | | | 2.470 | (7/2+,9/2,11/2+) | 52 |
| 127SB 53 | | | | 2.483 | (9/2,11/2,13/2+) | 53 |
| 127SB 54 | | | | 2.486 | | 54 |
| 127SB 55 | | | | 2.501 | (9/2,11/2,13/2+) | 55 |
| 127SB 56 | | | | 2.514 | (7/2+,9/2,11/2+) | 56 |
| 127SB 57 | | | | 2.530 | (11/2-,13/2) | 57 |
| 127SB 58 | | | | 2.549 | 1/2-,3/2- | 58 |
| 127SB 59 | | | | 2.554 | (9/2,11/2,13/2) | 59 |
| 127SB 60 | | | | 2.587 | (9/2-,11/2-) | 60 |
| ----- | | | | | | |
| 127SB 61 | | | | 2.631 | (9/2,11/2+) | 61 |
| 127SB 62 | | | | 2.638 | (9/2,11/2,13/2) | 62 |
| 127SB 63 | | | | 2.664 | (9/2,11/2,13/2) | 63 |
| 127SB 64 | | | | 2.678 | | 64 |
| 127SB 65 | | | | 2.696 | (9/2,11/2+) | 65 |
| 127SB 66 | | | | 2.747 | 3/2-,1/2- | 66 |
| 127SB 67 | | | | 2.762 | (9/2-,11/2-) | 67 |
| 127SB 68 | | | | 2.785 | (11/2-,13/2) | 68 |
| 127SB 69 | | | | 2.790 | (1/2-,3/2-) | 69 |
| 127SB 70 | | | | 2.805 | (9/2,11/2+) | 70 |
| ----- | | | | | | |
| 127SB 71 | | | | 2.834 | (9/2,11/2,13/2+) | 71 |
| 127SB 72 | | | | 2.847 | (9/2-) | 72 |
| 127SB 73 | | | | 2.864 | | 73 |
| 127SB 74 | | | | 2.866 | 5/2-,7/2- | 74 |
| 127SB 75 | | | | 2.867 | (9/2-,11/2-) | 75 |
| 127SB 76 | | | | 2.881 | (9/2+) | 76 |
| 127SB 77 | | | | 3.164 | 7/2+,9/2+ | 77 |
| 127SB 78 | | | | 3.194 | | 78 |
| 127SB 79 | | | | 3.256 | | 79 |
| 127SB 80 | | | | 3.671 | | 80 |
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| 127SB 81 | | | | 3.868 | | 81 |
| 127SB 82 | | | | 4.007 | | 82 |

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|-------|----|--|--|--|-------|----|
| 127SB | 83 | | | | 4.255 | 83 |
| 127SB | 84 | | | | 4.736 | 84 |
| 127SB | 85 | | | | 5.102 | 85 |
| 127SB | 86 | | | | 5.354 | 86 |

S-p = 7.972 (0.012)-----
 S-n = 8.376 (0.032)-----
 S-2p = 20.864 (0.005)-----
 S-2n = 14.586 (0.006)-----
 S-alpha= 5.694 (0.020)-----

S+p = -9.585 (0.005)
 S+n = -6.003 (0.019)
 S+2p = -16.387 (0.006)
 S+2n = -14.074 (0.022)
 S+alpha = -3.169 (0.005)

gap p = -1.613 (0.013)
 gap n = 2.374 (0.038)
 gap 2p = 4.477 (0.008)
 gap 2n = 0.512 (0.023)
 gap alpha = 2.525 (0.021)