

^{57}Ni $Z = 28$ $N = 29$ adopted link ENSDF link

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

BE = 494.243 (0.001) MeV

Qbeta+ = 3.262 (0.001) MeV

| | Energy T | J+ | J- | J-other | T1/2 |
|---------|----------|----|----------------|---------------------|---------------|
| 57NI 1 | | | 0.000 3/2- | | 1 35.60 H 6 |
| 57NI 2 | | | 0.768 5/2- | | 2 3.2 PS 4 |
| 57NI 3 | | | 1.113 1/2- | | 3 106 FS 23 |
| 57NI 4 | | | 2.443 5/2- | | 4 31 FS 5 |
| 57NI 5 | | | 2.577 1/2 7/2- | | 5 47 FS 6 |
| 57NI 6 | | | 3.007 3/2- | | 6 12 FS 4 |
| 57NI 7 | | | | 3.009 7/2+,9/2+ | 7 |
| 57NI 8 | | | 3.230 7/2- | | 8 |
| 57NI 9 | | | | 3.311 (5/2-,7/2-) | 9 |
| 57NI 10 | | | 3.364 7/2- | | 10 |
| 57NI 11 | | | | 3.702 (5/2)- | 11 |
| 57NI 12 | | | | 3.714 (+) | 12 |
| 57NI 13 | | | | 3.729 (+) | 13 |
| 57NI 14 | | | 3.840 3/2- | | 14 |
| 57NI 15 | | | 3.866 11/2- | | 15 0.29 PS 10 |
| 57NI 16 | | | | 3.882 - | 16 |
| 57NI 17 | | | | 4.027 | 17 |
| 57NI 18 | | | | 4.046 (7/2-,5/2-) | 18 |
| 57NI 19 | | | | 4.073 - | 19 |
| 57NI 20 | | | 4.234 1/2 7/2- | | 20 |
| 57NI 21 | | | | 4.372 3/2+,5/2+ | 21 |
| 57NI 22 | | | | 4.374 - | 22 |
| 57NI 23 | | | | 4.461 (3/2)- | 23 |
| 57NI 24 | | | | 4.503 | 24 |
| 57NI 25 | | | | 4.544 1/2 (9/2+) | 25 |
| 57NI 26 | | | 4.576 7/2- | | 26 |
| 57NI 27 | | | | 4.606 - | 27 |
| 57NI 28 | | | | 4.711 (11/2-) | 28 |
| 57NI 29 | | | | 4.886 7/2-,5/2- | 29 |
| 57NI 30 | | | 4.927 3/2- | | 30 |
| 57NI 31 | | | | 4.941 | 31 |
| 57NI 32 | | | | 5.009 | 32 |
| 57NI 33 | | | | 5.092 3/2 3/2-,1/2- | 33 |
| 57NI 34 | | | 5.134 3/2 7/2- | | 34 |
| 57NI 35 | | | 5.193 3/2- | | 35 |
| 57NI 36 | | | 5.239 3/2 7/2- | | 36 |
| 57NI 37 | | | 5.321 15/2- | | 37 0.64 PS 17 |

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|---------|--|----------------|--|----------------------|----|
| 57NI 38 | | | | 5.352 3/2 | 38 |
| 57NI 39 | | | | 5.368 3/2 7/2- | 39 |
| 57NI 40 | | | | 5.435 | 40 |
| ----- | | | | | |
| 57NI 41 | | | | 5.488 | 41 |
| 57NI 42 | | | | 5.505 | 42 |
| 57NI 43 | | | | 5.515 | 43 |
| 57NI 44 | | | | 5.546 (+) | 44 |
| 57NI 45 | | | | 5.561 (+) | 45 |
| 57NI 46 | | 5.580 1/2 1/2+ | | | 46 |
| 57NI 47 | | | | 5.601 | 47 |
| 57NI 48 | | | | 5.646 | 48 |
| 57NI 49 | | | | 5.663 | 49 |
| 57NI 50 | | | | 5.664 3/2-, 1/2- | 50 |
| ----- | | | | | |
| 57NI 51 | | | | 5.706 7/2-, 5/2- | 51 |
| 57NI 52 | | | | 5.740 | 52 |
| 57NI 53 | | | | 5.765 (7/2)- | 53 |
| 57NI 54 | | | | 5.795 7/2-, 5/2- | 54 |
| 57NI 55 | | | | 5.848 7/2-, 5/2- | 55 |
| 57NI 56 | | | | 5.980 (3/2)+ | 56 |
| 57NI 57 | | | | 6.029 1/2 3/2+, 5/2+ | 57 |
| 57NI 58 | | | | 6.079 | 58 |
| 57NI 59 | | | | 6.115 7/2-, 5/2- | 59 |
| 57NI 60 | | | | 6.231 3/2-, 1/2- | 60 |
| ----- | | | | | |
| 57NI 61 | | | | 6.280 7/2-, 5/2- | 61 |
| 57NI 62 | | | | 6.318 3/2+, 5/2+ | 62 |
| 57NI 63 | | | | 6.328 | 63 |
| 57NI 64 | | | | 6.341 | 64 |
| 57NI 65 | | | | 6.418 7/2-, 5/2- | 65 |
| 57NI 66 | | | | 6.421 | 66 |
| 57NI 67 | | | | 6.454 - | 67 |
| 57NI 68 | | | | 6.475 (9/2-) | 68 |
| 57NI 69 | | | | 6.520 3/2 7/2-, 5/2- | 69 |
| 57NI 70 | | | | 6.546 3/2 3/2-, 1/2- | 70 |
| ----- | | | | | |
| 57NI 71 | | | | 6.592 3/2 3/2-, 1/2- | 71 |
| 57NI 72 | | | | 6.631 - | 72 |
| 57NI 73 | | | | 6.655 3/2+, 5/2+ | 73 |
| 57NI 74 | | | | 6.693 1/2-, 3/2- | 74 |
| 57NI 75 | | | | 6.721 3/2+, 5/2+ | 75 |
| 57NI 76 | | | | 6.807 | 76 |
| 57NI 77 | | | | 6.851 7/2-, 5/2- | 77 |
| 57NI 78 | | | | 6.880 7/2-, 5/2- | 78 |
| 57NI 79 | | | | 6.905 - | 79 |
| 57NI 80 | | | | 6.920 | 80 |
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| 57NI 81 | | | | 6.935 - | 81 |
| 57NI 82 | | | | 6.955 3/2 (3/2)- | 82 |

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|------------------------------|--|----------------|----------------|-------|------------------|-----|
| 57NI 83 | | | | 7.005 | | 83 |
| 57NI 84 | | | | 7.042 | 3/2-, 1/2- | 84 |
| 57NI 85 | | | 7.131 3/2 7/2- | | | 85 |
| 57NI 86 | | | | 7.194 | 3/2+, 5/2+ | 86 |
| 57NI 87 | | | | 7.275 | 3/2+, 5/2+ | 87 |
| 57NI 88 | | | | 7.313 | 3/2+, 5/2+ | 88 |
| S-p = 7.332 (0.001)----- | | | | | | |
| 57NI 89 | | | | 7.355 | | 89 |
| 57NI 90 | | | | 7.416 | | 90 |
| ----- | | | | | | |
| 57NI 91 | | | | 7.452 | 3/2+, 5/2+ | 91 |
| 57NI 92 | | | | 7.455 | | 92 |
| 57NI 93 | | | | 7.529 | 3/2+, 5/2+ | 93 |
| 57NI 94 | | | | 7.551 | | 94 |
| S-alpha= 7.561 (0.002)----- | | | | | | |
| 57NI 95 | | | | 7.580 | 3/2 (7/2)- | 95 |
| 57NI 96 | | | | 7.640 | | 96 |
| 57NI 97 | | | | 7.671 | | 97 |
| 57NI 98 | | | | 7.700 | (3/2+, 5/2+) | 98 |
| 57NI 99 | | | | 7.745 | | 99 |
| 57NI 100 | | | | 7.802 | 3/2+, 5/2+ | 100 |
| ----- | | | | | | |
| 57NI 101 | | | | 7.872 | (3/2+, 5/2+) | 101 |
| 57NI 102 | | | | 7.900 | | 102 |
| 57NI 103 | | | | 7.985 | 7/2-, 5/2- | 103 |
| 57NI 104 | | | | 8.015 | 3/2+, 5/2+ | 104 |
| 57NI 105 | | | | 8.062 | | 105 |
| 57NI 106 | | | | 8.102 | 3/2+, 5/2+ | 106 |
| 57NI 107 | | | | 8.130 | 3/2+, 5/2+ | 107 |
| 57NI 108 | | | | 8.170 | | 108 |
| 57NI 109 | | | | 8.234 | 1/2 3/2+, 5/2+ | 109 |
| 57NI 110 | | 8.287 1/2 1/2+ | | | | 110 |
| ----- | | | | | | |
| 57NI 111 | | | | 8.325 | (3/2+, 5/2+) | 111 |
| 57NI 112 | | | | 8.346 | | 112 |
| 57NI 113 | | | | 8.380 | | 113 |
| 57NI 114 | | | | 8.410 | | 114 |
| 57NI 115 | | | | 8.445 | (5/2+, 3/2+) | 115 |
| 57NI 116 | | | | 8.477 | (-) | 116 |
| 57NI 117 | | 8.521 (3/ 1/2+ | | | | 117 |
| 57NI 118 | | | | 8.541 | (3/ (5/2-, 7/2-) | 118 |
| 57NI 119 | | | | 8.630 | | 119 |
| 57NI 120 | | | | 8.668 | 5/2+, 3/2+ | 120 |
| ----- | | | | | | |
| 57NI 121 | | 8.723 1/2+ | | | | 121 |
| 57NI 122 | | | | 8.759 | 3/2 | 122 |
| 57NI 123 | | | | 8.780 | 3/2 | 123 |
| 57NI 124 | | | | 8.795 | 3/2 (5/2+, 3/2+) | 124 |
| 57NI 125 | | | | 8.840 | 3/2 3/2+, 5/2+ | 125 |
| 57NI 126 | | | | 8.872 | - | 126 |

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| 57NI 127 | | | 8.952 | 5/2+,3/2+ | 127 |
| 57NI 128 | | | 9.030 | | 128 |
| 57NI 129 | | | 9.110 | (7/2-,5/2-) | 129 |
| 57NI 130 | | | 9.150 | | 130 |
| ----- | | | | | |
| 57NI 131 | | | 9.185 | (5/2+,3/2+) | 131 |
| 57NI 132 | | | 9.205 | | 132 |
| 57NI 133 | | | 9.280 | 5/2+,3/2+ | 133 |
| 57NI 134 | | | 9.340 | | 134 |
| 57NI 135 | | | 9.400 | 5/2+,3/2+ | 135 |
| 57NI 136 | | | 9.430 | 5/2+,3/2+ | 136 |
| 57NI 137 | | | 9.495 | | 137 |
| 57NI 138 | | | 9.585 | 5/2+,3/2+ | 138 |
| 57NI 139 | | | 9.705 | | 139 |
| 57NI 140 | | | 9.790 | | 140 |
| ----- | | | | | |
| 57NI 141 | | | 9.865 | 5/2+,3/2+ | 141 |
| 57NI 142 | | | 9.930 | 5/2+,3/2+ | 142 |

S-p = 7.332 (0.001)-----
S-n = 10.248 (0.001)-----
S-2p = 13.181 (0.001)-----
S-2n = 26.891 (0.001)-----
S-alpha= 7.561 (0.002)-----

S+p = -2.873 (0.001)
S+n = -12.216 (0.001)
S+2p = -5.710 (0.001)
S+2n = -21.215 (0.001)
S+alpha = -2.690 (0.016)

gap p = 4.460 (0.001)
gap n = -1.969 (0.001)
gap 2p = 7.471 (0.001)
gap 2n = 5.675 (0.001)
gap alpha = 4.872 (0.016)