

^{78}As $Z = 33$ $N = 45$ adopted link ENSDF link

Based on ensdf_240402 (Apr 2024), and mass evaluation from 2020

BE = 676.562 (0.010) MeV

Qbeta- = 4.209 (0.010) MeV

| | Energy T | J+ | J- | J-other | T1/2 |
|---------|----------|------|-------|-----------------|---------------|
| 78AS 1 | | | 0.000 | 2- | 1 90.7 M 2 |
| 78AS 2 | | | 0.184 | (3-) | 2 |
| 78AS 3 | | | 0.212 | (4-) | 3 3.9 NS 8 |
| 78AS 4 | 0.277 | 1+ | | | 4 |
| 78AS 5 | 0.294 | 1+ | | | 5 |
| 78AS 6 | | | 0.365 | (5-) | 6 3.0 NS 6 |
| 78AS 7 | 0.372 | (4+) | | | 7 0.90 NS 28 |
| 78AS 8 | | | 0.439 | (5-) | 8 |
| 78AS 9 | | | | 0.459 | 9 |
| 78AS 10 | | | | 0.504 0-,1-,2- | 10 |
| 78AS 11 | 0.536 | 1+ | | | 11 |
| 78AS 12 | 0.568 | (5+) | | | 12 0.69 NS LT |
| 78AS 13 | | | | 0.617 0-,1-,2- | 13 |
| 78AS 14 | 0.622 | (6+) | | | 14 |
| 78AS 15 | | | | 0.664 | 15 |
| 78AS 16 | | | | 0.736 | 16 |
| 78AS 17 | 0.750 | (7+) | | | 17 |
| 78AS 18 | | | | 0.752 0-,1-,2- | 18 |
| 78AS 19 | | | 0.758 | (6-) | 19 |
| 78AS 20 | | | | 0.848 (0-,1-,2- | 20 |
| 78AS 21 | | | | 0.891 | 21 |
| 78AS 22 | | | | 0.939 | 22 |
| 78AS 23 | 0.967 | 1+ | | | 23 |
| 78AS 24 | 1.008 | (8+) | | | 24 |
| 78AS 25 | 1.072 | 1+ | | | 25 |
| 78AS 26 | | | | 1.105 | 26 |
| 78AS 27 | | | | 1.131 | 27 |
| 78AS 28 | | | | 1.178 | 28 |
| 78AS 29 | | | | 1.273 | 29 |
| 78AS 30 | | | | 1.355 | 30 |
| 78AS 31 | | | | 1.428 | 31 |
| 78AS 32 | | | | 1.480 | 32 |
| 78AS 33 | 1.503 | (9+) | | | 33 |
| 78AS 34 | | | | 1.558 | 34 |
| 78AS 35 | | | | 1.626 | 35 |
| 78AS 36 | | | | 1.710 | 36 |

| | | | | | | |
|-------|----|--|-------|-------|-------|----|
| 78AS | 37 | | | | 1.757 | 37 |
| 78AS | 38 | | | | 1.875 | 38 |
| 78AS | 39 | | | | 1.973 | 39 |
| 78AS | 40 | | 2.024 | (10+) | | 40 |
| ----- | | | | | | |
| 78AS | 41 | | | | 2.068 | 41 |
| 78AS | 42 | | | | 2.285 | 42 |
| 78AS | 43 | | | | 2.383 | 43 |

S-p = 8.893 (0.010) -----
 S-n = 6.972 (0.010) -----
 S-2p = 21.098 (0.010) -----
 S-2n = 16.668 (0.010) -----
 S-alpha= 7.192 (0.010) -----

S+p = -10.389 (0.010)
 S+n = -8.890 (0.011)
 S+2p = -17.650 (0.010)
 S+2n = -15.540 (0.010)
 S+alpha = -7.107 (0.010)

gap p = -1.496 (0.014)
 gap n = -1.919 (0.015)
 gap 2p = 3.448 (0.014)
 gap 2n = 1.128 (0.014)
 gap alpha = 0.086 (0.014)