

^{83}Nb $Z = 41$ $N = 42$ adopted link ENSDF link

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

BE = 695.456 (0.162) MeV

Qbeta+ = 8.299 (0.162) MeV

| | Energy T | J+ | J- | J-other | T1/2 |
|----------|----------------|----|----|---------------|-----------|
| 83NB 1 | | | | 0.000 (5/2+) | 1 3.9 S 2 |
| 83NB 2 | | | | 0.130 (7/2+) | 2 |
| 83NB 3 | | | | 0.229 (3/2-) | 3 |
| 83NB 4 | | | | 0.251 (9/2+) | 4 |
| 83NB 5 | | | | 0.380 (5/2-) | 5 |
| 83NB 6 | | | | 0.641 (7/2-) | 6 |
| 83NB 7 | | | | 0.710 (11/2+) | 7 |
| 83NB 8 | | | | 0.874 (13/2+) | 8 |
| 83NB 9 | | | | 0.942 (9/2-) | 9 |
| S-p = | 1.288 (0.162) | | | | |
| 83NB 10 | | | | 1.325 (11/2-) | 10 |
| 83NB 11 | | | | 1.441 (15/2+) | 11 |
| 83NB 12 | | | | 1.721 (17/2+) | 12 |
| 83NB 13 | | | | 1.721 (13/2-) | 13 |
| S-alpha= | 2.235 (0.181) | | | | |
| 83NB 14 | | | | 2.236 (15/2-) | 14 |
| 83NB 15 | | | | 2.484 (19/2+) | 15 |
| 83NB 16 | | | | 2.689 (17/2-) | 16 |
| 83NB 17 | | | | 2.777 (21/2+) | 17 |
| 83NB 18 | | | | 4.009 (25/2+) | 18 |
| 83NB 19 | | | | 5.241 (29/2+) | 19 |
| S-2p = | 6.478 (0.162) | | | | |
| 83NB 20 | | | | 6.664 (33/2+) | 20 |

S-p = 1.288 (0.162)-----
S-n = 13.872 (0.366)-----
S-2p = 6.478 (0.162)-----
S-2n = 27.368 (0.436)-----
S-alpha= 2.235 (0.181)-----

S+p = -3.844 (0.373)
S+n = -11.652 (0.162)
S+2p = -2.819 (0.455)
S+2n = -24.809 (0.162)
S+alpha = -2.502 (0.162)

gap p = -2.556 (0.407)

gap n = 2.220 (0.400)
gap 2p = 3.659 (0.483)
gap 2n = 2.559 (0.465)
gap alpha = -0.267 (0.243)