

$^{82}\text{Br}$        $Z = 35$        $N = 47$       [link to full NNDC output](#)

Based on ENSDF from Dec 2018, and mass evaluation from 2016

BE = 711.964 ( 0.001) MeV  
 Qbeta- = 3.093 ( 0.001) MeV  
 Qbeta+ = 0.095 ( 0.001) MeV

|         | Energy T | J+ | J-    | J-other          | T1/2          |
|---------|----------|----|-------|------------------|---------------|
| 82BR 1  |          |    | 0.000 | 5-               | 1 35.282 H 7  |
| 82BR 2  |          |    | 0.046 | 2-               | 2 6.13 M 5    |
| 82BR 3  |          |    |       | 0.075 (1)+       | 3 7.2 NS 8    |
| 82BR 4  |          |    |       | 0.291 (3)-       | 4             |
| 82BR 5  |          |    |       | 0.363 (2)+       | 5             |
| 82BR 6  |          |    |       | 0.377 (6)-       | 6 0.2 NS LT   |
| 82BR 7  |          |    |       | 0.420 (2)        | 7             |
| 82BR 8  |          |    |       | 0.475 (4)-       | 8             |
| 82BR 9  |          |    |       | 0.541 (2+,3+)    | 9             |
| 82BR 10 |          |    |       | 0.627 (2,3+)     | 10            |
| 82BR 11 |          |    |       | 0.638            | 11            |
| 82BR 12 |          |    |       | 0.641 (3+)       | 12            |
| 82BR 13 |          |    |       | 0.689 (1-,2-,3-) | 13            |
| 82BR 14 |          |    |       | 0.760 (1+,2,3+)  | 14            |
| 82BR 15 |          |    |       | 0.762            | 15            |
| 82BR 16 |          |    |       | 0.764 (1)+       | 16            |
| 82BR 17 |          |    |       | 0.792 (5)        | 17            |
| 82BR 18 |          |    |       | 0.823            | 18            |
| 82BR 19 |          |    |       | 0.847 (1+,2,3+)  | 19            |
| 82BR 20 |          |    |       | 0.887            | 20            |
| 82BR 21 |          |    |       | 0.911 (4,5+)     | 21            |
| 82BR 22 |          |    |       | 0.935            | 22            |
| 82BR 23 |          |    |       | 0.968 (6)+       | 23            |
| 82BR 24 |          |    |       | 0.971 (2,3+)     | 24            |
| 82BR 25 |          |    |       | 0.988            | 25            |
| 82BR 26 |          |    |       | 1.008            | 26            |
| 82BR 27 |          |    |       | 1.022            | 27            |
| 82BR 28 |          |    |       | 1.059 (1,2,3)    | 28            |
| 82BR 29 |          |    |       | 1.069 (7)+       | 29 0.14 NS LT |
| 82BR 30 |          |    |       | 1.083            | 30            |
| 82BR 31 |          |    |       | 1.093            | 31            |
| 82BR 32 |          |    |       | 1.110 (1-,2,3)   | 32            |
| 82BR 33 |          |    |       | 1.140            | 33            |
| 82BR 34 |          |    |       | 1.155            | 34            |
| 82BR 35 |          |    |       | 1.179 (2,3)      | 35            |
| 82BR 36 |          |    |       | 1.187            | 36            |

|         |  |  |  |       |          |              |
|---------|--|--|--|-------|----------|--------------|
| 82BR 37 |  |  |  | 1.217 |          | 37           |
| 82BR 38 |  |  |  | 1.227 |          | 38           |
| 82BR 39 |  |  |  | 1.233 |          | 39           |
| 82BR 40 |  |  |  | 1.244 |          | 40           |
| -----   |  |  |  |       |          |              |
| 82BR 41 |  |  |  | 1.261 | (8)+     | 41 0.2 NS LT |
| 82BR 42 |  |  |  | 1.276 | (1,2,3+) | 42           |
| 82BR 43 |  |  |  | 1.366 |          | 43           |
| 82BR 44 |  |  |  | 1.386 | (+)      | 44           |
| 82BR 45 |  |  |  | 1.432 |          | 45           |
| 82BR 46 |  |  |  | 1.478 |          | 46           |
| 82BR 47 |  |  |  | 1.489 |          | 47           |
| 82BR 48 |  |  |  | 1.497 | (-)      | 48           |
| 82BR 49 |  |  |  | 1.535 |          | 49           |
| 82BR 50 |  |  |  | 1.548 |          | 50           |
| -----   |  |  |  |       |          |              |
| 82BR 51 |  |  |  | 1.629 |          | 51           |
| 82BR 52 |  |  |  | 1.650 | -        | 52           |
| 82BR 53 |  |  |  | 1.678 |          | 53           |
| 82BR 54 |  |  |  | 1.721 |          | 54           |
| 82BR 55 |  |  |  | 1.743 | 1-,2-    | 55           |
| 82BR 56 |  |  |  | 1.774 |          | 56           |
| 82BR 57 |  |  |  | 1.794 | (9)+     | 57           |
| 82BR 58 |  |  |  | 1.807 | -        | 58           |
| 82BR 59 |  |  |  | 1.830 |          | 59           |
| 82BR 60 |  |  |  | 1.866 |          | 60           |
| -----   |  |  |  |       |          |              |
| 82BR 61 |  |  |  | 1.897 |          | 61           |
| 82BR 62 |  |  |  | 1.916 |          | 62           |
| 82BR 63 |  |  |  | 1.942 |          | 63           |
| 82BR 64 |  |  |  | 1.955 | (-)      | 64           |
| 82BR 65 |  |  |  | 2.026 |          | 65           |
| 82BR 66 |  |  |  | 2.112 |          | 66           |
| 82BR 67 |  |  |  | 2.212 |          | 67           |
| 82BR 68 |  |  |  | 2.243 | (10+)    | 68           |

S-p = 8.399 ( 0.001)-----  
S-n = 7.593 ( 0.001)-----  
S-2p = 19.862 ( 0.004)-----  
S-2n = 17.752 ( 0.001)-----  
S-alpha= 7.107 ( 0.010)-----

S+p = -9.781 ( 0.001)  
S+n = -9.586 ( 0.004)  
S+2p = -16.838 ( 0.002)  
S+2n = -16.427 ( 0.026)  
S+alpha = -7.673 ( 0.001)

gap p = -1.382 ( 0.002)

gap n = -1.994 ( 0.004)  
gap 2p = 3.024 ( 0.004)  
gap 2n = 1.325 ( 0.026)  
gap alpha = -0.567 ( 0.010)