

$^{78}\text{Ga}$        $Z = 31$        $N = 47$       [link to full NNDC output](#)

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

BE = 669.016 ( 0.002) MeV

Qbeta- = 8.156 ( 0.004) MeV

|         | Energy T | J+ | J- | J-other         | T1/2        |
|---------|----------|----|----|-----------------|-------------|
| 78GA 1  |          |    |    | 0.000 (3+)      | 1 5.09 S 5  |
| 78GA 2  |          |    |    | 0.281 (1+,2,3+) | 2           |
| 78GA 3  |          |    |    | 0.342 (1+,2,3+) | 3           |
| 78GA 4  |          |    |    | 0.454           | 4           |
| 78GA 5  |          |    |    | 0.560           | 5 500 NS LT |
| 78GA 6  |          |    |    | 0.636 (1+,2,3+) | 6           |
| 78GA 7  |          |    |    | 0.728 (1+,2,3+) | 7           |
| 78GA 8  | 0.860    | 1+ |    |                 | 8           |
| 78GA 9  |          |    |    | 0.958 (1+)      | 9           |
| 78GA 10 | 0.980    | 1+ |    |                 | 10          |
| 78GA 11 | 1.031    | 1+ |    |                 | 11          |
| 78GA 12 |          |    |    | 1.048 0:3+      | 12          |
| 78GA 13 |          |    |    | 1.123 (1)       | 13          |
| 78GA 14 |          |    |    | 1.398 0:3+      | 14          |
| 78GA 15 | 1.867    | 1+ |    |                 | 15          |
| 78GA 16 | 2.206    | 1+ |    |                 | 16          |
| 78GA 17 |          |    |    | 2.627 (1+,2,3+) | 17          |
| 78GA 18 | 2.655    | 1+ |    |                 | 18          |
| 78GA 19 |          |    |    | 2.831 (1+)      | 19          |
| 78GA 20 |          |    |    | 3.425 (1+)      | 20          |
| 78GA 21 |          |    |    | 3.554 (1+)      | 21          |

S-p = 12.206 ( 0.003)-----  
 S-n = 5.785 ( 0.003)-----  
 S-2p = 27.308 ( 0.007)-----  
 S-2n = 13.552 ( 0.003)-----  
 S-alpha= 10.125 ( 0.006)-----

S+p = -13.110 ( 0.037)  
 S+n = -6.913 ( 0.003)  
 S+2p = -23.087 ( 0.004)  
 S+2n = -11.660 ( 0.003)  
 S+alpha = -8.824 ( 0.004)

gap p = -0.904 ( 0.037)  
 gap n = -1.128 ( 0.004)  
 gap 2p = 4.221 ( 0.008)

gap 2n = 1.891 ( 0.004)  
gap alpha = 1.300 ( 0.008)