

$^{136}\text{Xe(d,p)}$  1968Mo21

| Type            | Author                | History             | Citation | Literature Cutoff Date |
|-----------------|-----------------------|---------------------|----------|------------------------|
| Full Evaluation | E. Browne, J. K. Tuli | NDS 108,2173 (2007) |          | 1-Oct-2006             |

Measured: E,  $\sigma(\theta)$ .

1991Kr12 studied (d,p) reaction in inverse kinematics  $d(^{136}\text{Xe,p})^{137}\text{Xe}$  and are in good agreement with results of 1968Mo21 in  $^{136}\text{Xe(d,p)}$ .

In both experiments E(level) determinations are of low precision, thus association with levels seen in other experiments is not obvious for E(level)>1410 keV.

Other: 1966Sc13.

 $^{137}\text{Xe Levels}$ 

| E(level) | $J^\pi^\dagger$ | L | $S^\ddagger$ | E(level) | $J^\pi^\dagger$ | L   | $S^\ddagger$ | E(level) | $J^\pi^\dagger$ | L | $S^\ddagger$ |
|----------|-----------------|---|--------------|----------|-----------------|-----|--------------|----------|-----------------|---|--------------|
| 0.0      | $7/2^-$         | 3 | 0.70         | 1840     | $5/2^+$         | 2   | 0.20         | 2800     | $5/2^-$         | 3 | 0.26         |
| 550      | $3/2^-$         | 1 | 0.41         | 1930     |                 |     |              | 2920     |                 |   |              |
| 910      | $1/2^-$         | 1 | 0.13         | 2030     |                 |     |              | 3030     |                 |   |              |
| 1120     | $9/2^-$         | 5 | 0.31         | 2110     |                 |     |              | 3200     |                 |   |              |
| 1200     | $5/2^-$         | 3 | 0.24         | 2170     |                 |     |              | 3320     |                 |   |              |
| 1410     | $5/2^-$         | 3 | 0.16         | 2300     | $3/2^-$         |     | 0.20         | 3480     |                 |   |              |
| 1610     |                 |   |              | 2430     | $(1/2^-)$       | (1) | 0.22         | 3610     |                 |   |              |
| 1700     |                 |   |              | 2620     | $(1/2^-)$       | (1) | 0.04         |          |                 |   |              |

$^\dagger$  From 1968Mo21 based on  $J^\pi$  determinations in N= $^{83}, ^{139}\text{Ba67Ve02}$ ).

$^\ddagger$  Calculated with given J value (1991Kr12).