

$^{198}\text{Pt}(^{136}\text{Xe},\text{X})$     **2004Va03**

| Type            | Author                                  | History | Citation             | Literature Cutoff Date |
|-----------------|---|---------|----------------------|------------------------|
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**2004Va03:**  $^{131}\text{I}$  from  $^{198}\text{Pt}(^{136}\text{Xe},\text{X})$  E=850 MeV; measured  $\gamma\gamma$ ,  $\gamma(t)$  deduced  $T_{1/2}$ . GAMMASPHERE: 103 Compton-suppressed Ge detectors.

 $^{131}\text{I}$  Levels

The 2352 keV,  $T_{1/2}=43$  ns level is introduced in the  $^{131}\text{I}$  level scheme on the basis of coincidences of 774  $\gamma$  with 783, 679 and 117 keV  $\gamma$ 's, a sequence of the last two  $\gamma$ 's is not known. For this reason the energy of the level connected by 679 and 117 keV transitions is not established.

| E(level) <sup>†</sup>    | J <sup>‡</sup>                       | T <sub>1/2</sub> | Comments                         |
|--------------------------|--------------------------------------|------------------|----------------------------------|
| 0                        | 7/2 <sup>+</sup>                     | 8.0252 d 6       | $T_{1/2}$ : from Adopted Levels. |
| 773.664 <sup>‡</sup> 19  | 9/2 <sup>+</sup> , 11/2 <sup>+</sup> |                  |                                  |
| 1556.145 <sup>‡</sup> 21 | +                                    |                  |                                  |
| 2235.2? 10               |                                      |                  |                                  |
| 2352.2 15                |                                      | 43 ns 1          |                                  |

<sup>†</sup> From least-squares fit to  $E\gamma$ 's, assuming 1 keV uncertainty by evaluators when not stated.

<sup>‡</sup> From Adopted Levels.

 $\gamma(^{131}\text{I})$ 

| E <sub><math>\gamma</math></sub> | E <sub>i</sub> (level) | J <sup>π</sup> <sub>i</sub>          | E <sub>f</sub> | J <sup>π</sup> <sub>f</sub>          | Mult. | Comments                    |
|----------------------------------|------------------------|--------------------------------------|----------------|--------------------------------------|-------|-----------------------------|
| 117 <sup>‡</sup>                 | 2352.2                 |                                      | 2235.2?        |                                      |       |                             |
| 679 <sup>‡</sup>                 | 2235.2?                |                                      | 1556.145       | +                                    |       |                             |
| 773.67 <sup>‡</sup> 3            | 773.664                | 9/2 <sup>+</sup> , 11/2 <sup>+</sup> | 0              | 7/2 <sup>+</sup>                     | M1,E2 | Mult.: from adopted gammas. |
| 782.49 <sup>‡</sup> 4            | 1556.145               | +                                    | 773.664        | 9/2 <sup>+</sup> , 11/2 <sup>+</sup> |       |                             |

<sup>†</sup> From adopted gammas.

<sup>‡</sup> Placement of transition in the level scheme is uncertain.

## Legend

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## Level Scheme

—→  $\gamma$  Decay (Uncertain)  
● Coincidence

