

${}^{252}\text{Cf}$  SF decay 2006Hw01

| <u>Type</u>     | <u>Author</u> | <u>History Citation</u> | <u>Literature Cutoff Date</u> |
|-----------------|---------------|-------------------------|-------------------------------|
| Full Evaluation | N. Nica       | NDS 111, 525 (2010)     | 19-Nov-2009                   |

Parent:  ${}^{252}\text{Cf}$ :  $E=0$ ;  $J^\pi=0^+$ ;  $T_{1/2}=2.645$  y  $\delta$ ; %SF decay=?

${}^{252}\text{Cf}$ -From 2005Ni22 (Adopted Levels).

2003Hw03: measured  $E_\gamma$ ,  $I_\gamma$ ,  $\gamma\gamma\gamma$ ,  $T_{1/2}$  using the Gammasphere array comprised of 102 Compton-suppressed Ge detectors.

All data are from 2006Hw01.

 ${}^{97}\text{Zr}$  Levels

| <u>E(level)</u> | <u><math>J^\pi</math></u> | <u><math>T_{1/2}</math></u> |
|-----------------|---------------------------|-----------------------------|
| 0.0             | $1/2^+$                   |                             |
| 1103.4          | $3/2^+$                   |                             |
| 1264.9          | $7/2^+$                   | 97 ns 16                    |
| 1859.2          | $(3/2^+)$                 | †                           |
| 2234.6          | $(7/2^+)$                 | †                           |

† This value differs from adopted value.

 $\gamma({}^{97}\text{Zr})$ 

| <u><math>E_\gamma</math></u> | <u><math>E_i(\text{level})</math></u> | <u><math>J_i^\pi</math></u> | <u><math>E_f</math></u> | <u><math>J_f^\pi</math></u> |
|------------------------------|---------------------------------------|-----------------------------|-------------------------|-----------------------------|
| 161.5                        | 1264.9                                | $7/2^+$                     | 1103.4                  | $3/2^+$                     |
| 375.4                        | 2234.6                                | $(7/2^+)$                   | 1859.2                  | $(3/2^+)$                   |
| 594.3                        | 1859.2                                | $(3/2^+)$                   | 1264.9                  | $7/2^+$                     |
| 1103.4                       | 1103.4                                | $3/2^+$                     | 0.0                     | $1/2^+$                     |

$^{252}\text{Cf}$  SF decay 2006Hw01Level Scheme