²⁴⁰Np IT decay **1981Hs02**

Type Author Citation Literature Cutoff Date

Full Evaluation C. Morse NDS 206,359 (2025) 27-Sep-2024

Parent: 240 Np: E=x; J^{π} =(1+); $T_{1/2}$ =7.22 min 2; %IT decay=0.12 I

1981Hs02: Source obtained from chemical separation of Pu and its decay products including 240 Np and 240m Np. Measured γ ray spectrum from decay of 7.22-min 240m Np in secular equilibrium with its 14.1-h 240 U parent.

Others: 1966Qa01, 1953Kn23.

²⁴⁰Np Levels

E(level) $J^{\pi^{\dagger}}$ $T_{1/2}$ Comments

0 (5⁺)
x (1⁺) 7.22 min 2 %IT=0.12 *I* (1981Hs02)
E(level): x≈20 (1981Hs02).

²⁴⁰Np-T_{1/2}: from 1981Hs02. Others: 7.3 min 3 (1953Kn23), 7.50 min 6 (1966Qa01).

 $^{^{240}}$ Np-%IT decay: From 1981Hs02 based on fractional decay to the ground state by observing growth and decay of 566.3γ (the strongest transition and the intensity of the 973.9γ following the decay of 61.9-min 240 Np).

[†] From Adopted Levels.