²⁴⁰Np IT decay (7.22 min) 1981Hs02

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Parent: 240 Np: E=0+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, 1948Hy61.

²⁴⁰Np Levels

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

0 (5^+) 0+x (1^+) 7.22 min 2 Isomeric transition(s) unknown.

²⁴⁰Np-E: x=20 *15* (1981Hs02,2003Au02); see ²⁴⁰Np 'Adopted Levels'.

²⁴⁰Np-T_{1/2}: from 1981Hs02. Others: 7.3 min 3 (1948Hy61), 7.3 min 3 (1953Kn23), 7.50 min 6 (1966Qa01).

²⁴⁰Np-%IT decay: %IT=0.12 I (% β -=99.88 I) from fractional decay to the ground state by observing growth and decay of 566.3 γ (the strongest transition and the intensity of the 973.9 γ following the decay of 61.9-min ²⁴⁰Np) (1981Hs02). 1986LoZT quoted %IT=0.11 β from an earlier NDS evaluation.

[†] From 'Adopted Levels'.