^{123}Ce ε decay (3.8 s) 1988GeZR,1984Ni03

Type	Author	History Citation	Literature Cutoff Date
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Parent: ^{123}Ce: E=0.0; J^{π}=(5/2); $T_{1/2}$=3.8 s *2*; Q(ε)=8370 *SY*; %ε+%$β^+$ decay=100.0

^{123}Ce-J^{π}: From Adopted Levels of ^{123}Ce; proposed by 1984Ni03 from a comparison of proton decay to 2^+, 4^+ and possibly 6^+ rotational levels in ^{122}Ba with calculated branchings.

^{123}Ce-$T_{1/2}$: from weighted average of 3.9 s *2* from delayed decay of protons and 3.3 s *6* from decay of La x-ray (1984Ni03); adopted in Adopted Levels in ^{123}Ce.

^{123}Ce-Q(ε): From 2021Wa16, ΔQ(ε)=360 (syst).

1988GeZR: ^{123}Ce source was produced via ^{92}Mo(^{36}Ar,αnγ) reaction with ^{36}Ar beam provided by the variable-energy cyclotron at SARA. Measured Eγ, E(x ray), He-jet γγ-coin, (x ray)γ-coin.

1984Ni03: ^{123}Ce source was produced via ^{92}Mo(^{36}Ar,αnγ) reaction with E=196 MeV ^{36}Ar beam provided by the LBL SuperHILAC. Fragments were separated with the isotope separator OASIS. Measured Eγ, E(x ray), γ(t), (x ray)-proton-coin, γ-proton-coin.

γ(^{123}La)

E_γ [†]
x66 [‡]
x113 [‡]
x178 [‡]

† Weak γ rays observed and tentatively assigned to ^{123}La by 1988GeZR. Those γ rays are also seen in ^{124}Pr εp decay (1986Wi15).

‡ Placement of transition in the level scheme is uncertain.

x γ ray not placed in level scheme.