

^{125}Nd ϵp decay [1999Xu05,2005Xu04](#)

<u>Type</u>	<u>Author</u>	<u>History</u>	<u>Citation</u>	<u>Literature Cutoff Date</u>
Full Evaluation	J. Katakura, Z. D. Wu		NDS 109, 1655 (2008)	1-Apr-2008

Parent: ^{125}Nd : $E=0$; $J^\pi=(5/2)$; $T_{1/2}=0.65$ s 15; $Q(\epsilon\text{p})=9.92\times 10^3$ SY; % ϵp decay=?

^{125}Nd - $T_{1/2}$: From [2005Xu04](#).

^{125}Nd - $Q(\epsilon\text{p})$: 9920 500 ([2003Au03](#)).

[2005Xu04,1999Xu05](#): $^{36}\text{Ar} + ^{92}\text{Mo}$, $E(^{36}\text{Ar})=169$ MeV ([2005Xu04](#)) and 220 MeV ([1999Xu05](#)); 97 % enriched ^{92}Mo target; He-jet tape transport system, $\text{p}\gamma$ coin; measured E_γ , x-ray.

 ^{124}Ce Levels

<u>E(level)</u>	<u>J^π[†]</u>
0	0 ⁺
142	2 ⁺
448	4 ⁺

[†] From Adopted Levels.

 $\gamma(^{124}\text{Ce})$

<u>E_γ</u>	<u>$E_i(\text{level})$</u>	<u>J_i^π</u>	<u>E_f</u>	<u>J_f^π</u>
142	142	2 ⁺	0	0 ⁺
306	448	4 ⁺	142	2 ⁺

^{125}Nd ϵp decay 1999Xu05,2005Xu04Decay Scheme