

^{113}Xe β^+ p decay 2005Ja10

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	S. Lalkovski, F. G. Kondev		NDS 124, 157 (2015)	1-Aug-2014

Parent: ^{113}Xe : $E=0.0$; $J^\pi=(5/2^+)$; $T_{1/2}=2.74$ s 8; $Q(\beta^+p)=8075$ 11; $\% \beta^+p$ decay=7 4

^{113}Xe -Q(g.s.)=Q(ϵp) from 2012Wa38.

2005Ja10: Facility: GSI; Source: mass-separated ^{113}Xe from ^{58}Ni ($^{58}\text{Ni}, 2pn$); Beam: $E(^{58}\text{Ni})=275$ MeV; Target: 3.7 mg/cm² thick ^{58}Ni ; Detectors: Nb/Ta catcher, ion source, transport tape, total absorption spectrometer comprising one large-volume NaI(Tl) crystal, one germanium x-ray detector, one 600- μm thick silicon β -particle counter and one telescope for β -delayed particles; Measured: γ , p, β , β -p.

Others: 1985Ti02, 1981TiZY, 1980GoZX.

 ^{112}Te Levels

E(level) [†]	J^π [‡]
0	0 ⁺
688.7 5	2 ⁺
1475.3 7	4 ⁺
1483.3 7	(2 ⁺)

[†] From a least-squares fit to E_γ .

[‡] From the Adopted Levels.

 $\gamma(^{112}\text{Te})$

E_γ [†]	I_γ [†]	E_i (level)	J_i^π	E_f	J_f^π	Comments
688.7 5	53 5	688.7	2 ⁺	0	0 ⁺	E_γ : Other: 689 keV in 2005Ja10, 688.8 keV 2 (1980GoZX).
786.6 5	3.8 7	1475.3	4 ⁺	688.7	2 ⁺	E_γ : Other: 786.7 keV 2 (1980GoZX).
794.6 5	3.3 6	1483.3	(2 ⁺)	688.7	2 ⁺	E_γ : Other: 794.5 keV 2 (1980GoZX).

[†] From 1985Ti02 using a Ge(Li) detector.

Delayed Protons (^{112}Te)

E(^{112}Te)	I(p) ^{†#}	Comments
0	32 2	I(p): Other: 47 5 in 1985Ti02.
688.7	60 3	I(p): Other: 46 5 in 1985Ti02.
1475.3	8 [‡] 1	I(p): Other: 3.8 7 in 1985Ti02.
1483.3	8 [‡] 1	I(p): Other: 3.3 6 in 1985Ti02.

[†] From 2005JA10 using NaI, TAS.

[‡] Doublet in 2005Ja10; uncorrected value is given.

For absolute intensity per 100 decays, multiply by 0.07 4.

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Decay Scheme

Intensities: Type not specified

Legend

- $I_\gamma < 2\% \times I_\gamma^{\max}$
- $I_\gamma < 10\% \times I_\gamma^{\max}$
- $I_\gamma > 10\% \times I_\gamma^{\max}$

