^{238}U(p,X),^{136}Xe(^{9}Be,X) 2009Pe09,2007Ha20,1999Wa09

History

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

2009Pe09: Facility: Superconducting Cyclotron Laboratory at Michigan State University; Beam: ^{136}Xe at 120 MeV/α, I=1.5 pnA; Target: 1242 mg/cm^2 ^{9}Be; Detectors: fragment separator, three plastic scintillator detectors, degraders, four silicon PIN detector, 40x40 pixel double-sided silicon strip detector, 10 mm Ge detector, neutron detector (NERO) comprising 16 ^{3}He and 44 B_3F proportional gas counters; Measured: Time-of-flight, energy loss, HI positions, mass-to-charge ratio, HI-β and HI-β-N(t) correlations; Deduced: β^-n.

2007Ha20: Facility: IGISOL at Jyvaskyla; Beam: P at E=25 MeV; Target: 10 mg/cm^2 of natural uranium; Detectors: JYFLTRAP Penning trap, consisting of radiofrequency cooler, two Penning traps, superconducting magnet, microchannel plate detector; Measured: Time-of-flight, mass excess; Mass excess: −65250 *6* keV (2007Ha20) differs from the AME03 by 750 units which might be explained with a possible feeding of excited states in ^{112}Tc.

1999Wa09: Facility: IGISOL at Jyvaskyla; Beam: E(p)=50 MeV, I=10 $\mu\alpha$; Target: ^{238}U; Detectors: collection tape, Mainz 4π neutron counter consisting of 42 ^{3}He ionization chambers, plastic scintillator, 23% HPGE; Measured: β, n, γ, β-n(t); Deduced: β^-n; Also, from the same authors: 1996Me09, 1990AyZX, 1990AyZY, 1990AyZZ, 1990JoZY, 1989TaZW.

Others: 2008Su19, 2000Lh02, 1990Ay02.

^{112}Tc Levels

E(level)†	J$^\pi$†	$T_{1/2}$	Comments
0	(2$^+$)	271 ms *15*	%β^-n=4 *1* (2009Pe06), 1.5 *2* (1999Wa09), and 2.6 *5* (1996Me09). $T_{1/2}$: Weighted average of 290 ms *20* (2009Pe09) 280 ms *30* (1990Ay02), 290 ms *20* (1999Wa09) and 230 ms *20* (1996Me09).

† From the Adopted Levels.