^{109}Te α decay (4.4 s) 1977Ki11

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	S. Lalkovski, J. Timar and Z. Elekes	NDS 161, 1 (2019)	1-Apr-2019

Parent: ^{109}Te: E=0; J^π=(5/2$^+$); $T_{1/2}$=4.4 s *2*; Q(α)=3198 *6*; %α decay=3.9 *13*

Facility: GSI; Source: on-line mass separated ^{109}Te from (HI,xn) reaction; Beam: E(^{58}Ni)=290 MeV; Target: 3 mg/cm^2 thick ^{58}Ni and ^{63}Cu; Detectors: mass separator, mylar tape, plastic scintillator, one Ge(Li), one x-ray Ge detector, windmill system, ΔE-E telescope; Measured: β, p, α, γ, Eγ, Eα.

^{105}Sn Levels

E(level)	J^π	Comments
0	(5/2$^+$)	J^π: from the Adopted Levels.

α radiations

Eα	E(level)	Iα[‡]	HF[†]	Comments
3040 *30*	0	100	0.58 *20*	Eα: From 1977Ki11.

[†] $r_0(^{105}Sn)$=1.627 *13* weighted average of $r_0(^{106}Sn)$=1.57 $r_0(^{106}Sn)$=1.57 *5* and $r_0(^{104}Sn)$=1.632 *14*.

[‡] For absolute intensity per 100 decays, multiply by 0.039 *13*.