^{161}Re α decay (14.7 ms) 1997Ir01,1979Ho10

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	N. Nica	NDS 132, 1 (2016)	4-Dec-2015

Parent: ^{161}Re: E=123.8 *13*; J^{π}=11/2$^-$; $T_{1/2}$=14.7 ms *3*; Q(α)=6328 *7*; %α decay=95.2 *6*

^{161}Re-from ^{161}Re Adopted Levels.

^{161}Re-%α decay: from ^{161}Re Adopted Levels and based on %α = 95.2 *6* (1997Ir01); other: %α > 1 from measurement and %α ≈ 99 from theoretical α and ε+β+ half-lives (1979Ho10).

1997Ir01: produced by ^{106}Cd(^{58}Ni,p2n) at E=270 MeV.

1997Ho10: produced by ^{107}Ag(^{58}Ni,4n) on enriched (99.5%) target at E(^{58}Ni)=263 and 275 MeV. Products separated in velocity selector and implanted in position-sensitive detector.

Additional information 1.

^{157}Ta Levels

E(level)	J^{π}	$T_{1/2}$	Comments
22 *5*	11/2$^-$	4.3 ms *1*	E(level): from proton decay energies of ^{157}Ta and ^{161}Re and α decay energies of ^{161}W and ^{161}Re (1997Ir01).

α radiations

Eα	E(level)	Iα[†]	Comments
6270 *4*	22	100	Eα: from weighted average of 6279 *10* (1979Ho10), 6265 *6* (1996Pa01), and 6272 *7* (1997Ir01).

[†] For absolute intensity per 100 decays, multiply by 0.952 *6*.