

^{211}Th α decay 1995Uu01

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	F. G. Kondev, S. Lalkovski		NDS 112, 707 (2011)	1-Aug-2010

Parent: ^{211}Th : $E=0$; $T_{1/2}=37$ ms +28-11; $Q(\alpha)=7942$ 14; % α decay \approx 100.0

^{211}Th - $Q(\alpha)$ from measured $E\alpha=7792$ keV 14 (1995Uu01).

1995Uu01: ^{211}Th activity was produced by $^{181}\text{Ta}(^{35}\text{Cl},5n)$, $E=182, 191$ MeV, and was separated using a gas-filled magnetic recoil separator. ^{211}Th was identified on the basis of correlated alpha-decay from the granddaughter nuclei ^{203}Rn . Others (from the same collaboration): 1995Le41, 1995Le15.

Other: 1997Mi03.

 ^{207}Ra Levels

$E(\text{level})^\dagger$	J^π^\dagger	$T_{1/2}^\dagger$
0	(3/2 ⁻ , 5/2 ⁻)	1.35 s -13+22

† From Adopted Levels.

 α radiations

$E\alpha$	$E(\text{level})$	$I\alpha^\ddagger$	HF^\dagger	Comments
7792 14	0	100	≈ 1.2	$E\alpha, I\alpha$: From 1995Uu01. It is assumed that the observed $E\alpha$ feeds directly the ^{207}Ra g.s..

† Using $r_0(^{207}\text{Ra})=1.517$ 24, weighted average deduced from values for neighboring even-even ^{206}Ra ($r_0=1.517$ 50) and ^{208}Ra ($r_0=1.519$ 27) nuclei.

‡ For absolute intensity per 100 decays, multiply by ≈ 1.00 .