^{152}Gd α decay 1961Ma05

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	N. Nica	NDS 117, 1 (2014)	1-Oct-2013

Parent: ^{152}Gd: E=0.0; $J^\pi=0^+$; $T_{1/2}=1.08\times10^{14}$ y *8*; Q(α)=2204.9 *14*; %α decay=100.0
$T_{1/2}(^{152}Gd)=1.08\times10^{14}$ y *8*, measured by 1961Ma05 and adopted in 1996Ar09, is used in calculations here.

%α=100. ^{152}Gd is β stable.

^{148}Sm Levels

E(level)	J^π
0.0	0^+

α radiations

Eα	E(level)	Iα[†][#]	HF[‡]	Comments
2146.9 *14*	0.0	100	1.000	Eα: calculated from Q(α)(^{152}Gd)=2204.9 *14*. Eα=2140 *30* was measured by 1961Ma05. Iα: only one α group was observed. An upper limit of 2.3×10^{-9}% is calculated for intensity of an unobserved 1595-keV α branch to the 2^+ state at 550.265-keV in ^{148}Sm by requiring Hf(1611.2α)>1.

† α intensity per 100 α decays.
‡ $r_0(^{148}Sm)$=1.576 *5* is calculated from Hf(2145.1α)=1.0.
# Absolute intensity per 100 decays.