^{144}Nd α decay

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	N. Nica	NDS 154,1 (2018)	20-Nov-2018

Parent: ^{144}Nd: E=0.0; $J^{\pi}=0^+$; $T_{1/2}=2.29\times10^{15}$ y *16*; Q(α)=1903.2 *16*; %α decay=100

^{144}Nd-E,J^{π},$T_{1/2}$: From 2001So16.

^{144}Nd-Q(α): From 2017Wa10.

$T_{1/2}(^{144}Nd)=2.29\times10^{15}$ y *16*, adopted by 2001So16, is used in calculations of r_0. This half-life is the unweighted average of the measured half-lives: 2.65×10^{15} y *37* (1987Al28), 2.4×10^{15} y *3* (1961Ma05), 2.2×10^{15} y (1956Po16) and 1.9×10^{15} y (1965Is01).

%α=100. The nucleus ^{144}Nd is stable against β decay.

^{140}Ce Levels

E(level)	J^{π}
0.0	0^+

α radiations

Eα	E(level)	Iα[†][#]	HF[‡]	Comments
1830 *15*	0.0	100	1.0	Additional information 1. Iα: only α to g.s. observed (1987Al28).

[†] α intensity per 100 α decays.

[‡] $r_0(^{140}Ce)=1.594$ *6* is computed from HF(1853.4α)=1.0.

[#] Absolute intensity per 100 decays.