

^{76}Ge $2\beta^-$ decay (1.926×10^{21} y) [2013Ag11](#),[2015Ag10](#),[2004KI01](#)

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	Balraj Singh, Jun Chen and Ameenah R. Farhan		NDS 194,3 (2024)	8-Jan-2024

Parent: ^{76}Ge : $E=0$; $J^\pi=0^+$; $T_{1/2}=1.926 \times 10^{21}$ y *94*; $Q(2\beta^-)=2039.06$ I; % $2\beta^-$ decay=100

^{76}Ge - $T_{1/2}$: From [2013Ag02](#) for $2\nu\beta\beta$ decay mode, GERDA collaboration. Average value obtained in [2012Zu07](#) compilation is 1.88×10^{21} y *10*. $T_{1/2}(0\nu\beta\beta \text{ decay}) > 2.1 \times 10^{25}$ y ([2013Ag11](#), GERDA collaboration). $T_{1/2}(0\nu\beta\beta \text{ decay}) = 2.23 \times 10^{25}$ y *+44-31* ([2004KI01](#),[2008KI01](#)) in Heidelberg-Moscow collaboration experiment.

^{76}Ge - $Q(2\beta^-)$: From [2021Wa16](#).

[2013Ag11](#) (also [2013Ac01](#)): GERDA collaboration for measurements of neutrinoless double β decay of ^{76}Ge . No signal was found. An upper limit of half-life given.

[2015Ag10](#), [2015Ag06](#), [2015Ag01](#), [2015He19](#), [2013Ag02](#): GERDA collaboration for measurements of $2\nu\beta\beta$ decay mode of ^{76}Ge .

Half-life was measured as 1.926×10^{21} y *94* in [2015Ag06](#) and 1.84×10^{21} y *+14-10* in [2013Ag02](#). The authors compare their result with nine previous measurements from 1990 to 2005.

[2004KI01](#): Heidelberg-Moscow collaboration, half-life of $0\nu\beta\beta$ decay mode measured.

Numerous other experimental and theoretical references can be accessed via NSR database at www.nndc.bnl.gov; as well as $\beta\beta$ decay database of experimental data at www.nndc.bnl.gov/bbdecay/.

[Additional information 1](#).

 ^{76}Se Levels

E(level)	J^π
0	0^+