

**Adopted Levels**

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	Balraj Singh	NDS 156, 70 (2019)	31-Jan-2019

$Q(\beta^-)=-2420$  SY;  $S(n)=5890$  SY;  $S(p)=1910$  SY;  $Q(\alpha)=10850$  50    [2017Wa10](#)

Estimated uncertainties ([2017Wa10](#)):  $\Delta Q(\beta^-)=570$ ,  $\Delta S(n)=630$ ,  $\Delta S(p)=520$ .

$S(2n)=13110$  720,  $S(2p)=5380$  640 (syst, [2017Wa10](#)).

[2007Og02](#), [2013Og01](#) (also [2011Og07](#), [2012OgZZ](#), [2007Og05](#), [2007Og01](#)):  $^{278}\text{Rg}$  produced as  $\alpha$  daughter of  $^{282}\text{Nh}$  formed in  $^{237}\text{Np}(^{48}\text{Ca},3n),E=244$  MeV at FLNR-JINR-Dubna, in collaboration with LLNL. See  $^{282}\text{Nh}$  Adopted Levels for details of two decay chains observed.

For theoretical studies, consult Nuclear Science References (NSR) database at NNDC, BNL for 42 primary references dealing with the half-lives and other aspects of nuclear structure in this mass region.

 **$^{278}\text{Rg}$  Levels****Cross Reference (XREF) Flags**

[A](#)     $^{282}\text{Nh}$   $\alpha$  decay (0.07 s)

E(level)	T <sub>1/2</sub>	XREF	Comments
0	4.2 ms +75-17	<a href="#">A</a>	% $\alpha\approx 100$ ; %SF=? Only the $\alpha$ decay observed. E(level): the reported activity is assumed to belong to the g.s. of $^{278}\text{Rg}$ . $J^\pi$ : $1^-, 10^-$ from $\Omega(\text{proton})=9/2^-$ ; $\Omega(\text{neutron})=11/2^+$ ( <a href="#">1997Mo25</a> ,theory). T <sub>1/2</sub> : from <a href="#">2017Og01</a> and <a href="#">2015Og05</a> reviews, based on data for two events in <a href="#">2007Og02</a> and <a href="#">2013Og01</a> . $E\alpha=10.69$ MeV 8 ( <a href="#">2017Og01</a> and <a href="#">2015Og05</a> reviews) from decay of $^{278}\text{Rg}$ .