Adopted Levels

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

Q(β^-)=−1180 *SY*; S(n)=5570 *SY*; S(p)=2920 *SY*; Q(α)=9160 *30* 2017Wa10,2017Og01
Estimated uncertainties (2017Wa10): ΔQ(β^-)=930, ΔS(n)=1040, ΔS(p)=870, ΔQ(α)=210.
Q(α) from 2017Og01, from Eα=8.86-9.05. Other: 9640 *210* (syst, 2017Wa10).
S(2n)=12230 *840* (syst,2017Wa10). S(2p)=7670 (theory,1997Mo25).
^{282}Rg produced as α great grand-daughter of ^{294}Ts in the studies carried out at FLNR-Dubna-JINR (2010Og01, 2011Og04, 2011Og07, 2012Og06, 2013Og04,2013Og01) and at GSI (2014Kh04). See ^{294}Ts Adopted Levels for details of six correlated decay chains assigned to ^{294}Ts decay, which terminate in SF decay of ^{270}Db.
One EVR-α-SF correlated decay chain reported by 2011Og04, three by 2013Og04 and 2012Og06, and two by 2014Kh04, all starting with the decay of ^{294}Ts and ending in SF-decaying ^{270}Db nuclide in Dubna work (2013Og04, 2011Og04) and in SF-decaying ^{266}Lr in GSI work (2014Kh04). 2011Og07 and 2012OgZZ are also related reports for the Dubna work. See Adopted Levels for ^{294}Ts for details of above three studies.
For theoretical studies, consult Nuclear Science References (NSR) database at NNDC, BNL for 48 primary references dealing with the half-lives and other aspects of nuclear structure in this mass region.

^{282}Rg Levels

Cross Reference (XREF) Flags

A ^{286}Nh α decay (9.5 s)

E(level)	$T_{1/2}$	XREF	Comments
0	100 s *+70−30*	A	%α≈100; %SF=? Only the α-decay mode has been observed. E(level): the reported activity is assumed to belong to the g.s. of ^{282}Rg. J^π: 5^+,8^+ from Ω(proton)=13/2$^+$, Ω(neutron)=3/2$^+$ (1997Mo25, theory). $T_{1/2}$: from 2017Og01 and 2015Og05 reviews. Other: 0.51 s *+250−23* (2011Og07 review, from one event, this value seems erroneous); 3.1 min *+57−12* (2014Kh04); 59 s *+55−19* (2013Og04). Eα=8.86-9.05 MeV (Q(α)=9.16 MeV *3*) from decay of ^{282}Rg decay (2017Og01 and 2015Og05 reviews); 9.00 MeV *10* (2011Og07 review, also 2010Og01 measurement). Measured Eα=9.05 MeV *3* and 8.86 MeV *3* (2014Kh04); 9.01 MeV *5* (2013Og04).