Adopted Levels

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

S(n)=6150 *SY*; S(p)=1030 *SY*; Q(α)=11480 *50* 2017Wa10
Estimated uncertainties (2017Wa10): ΔS(n)=560, ΔS(p)=220.
S(2n)=14300 *290*, S(2p)=3550 *520*, Q(εp)=2610 *460* (syst, 2017Wa10).
2004Mo42, 2007Mo43, 2012Mo25: ^{274}Rg produced as α-daughter of ^{278}Nh which is formed in ^{209}Bi(^{70}Zn,n),E=349 MeV, cold fusion experiment at RILAC-RIKEN facility, where three correlated decay chains were observed. Results are summarized by 2015Mo25. See also 2008Mo09, 2009Mo34 and 2013Su04.
For theoretical studies, consult Nuclear Science References (NSR) database at NNDC, BNL for 28 primary references dealing with the half-lives and other aspects of nuclear structure in this mass region.

^{274}Rg Levels

Cross Reference (XREF) Flags

A ^{278}Nh α decay (1.4 ms)

E(level)	$T_{1/2}$	XREF	Comments
0	12 ms *+17−5*	A	%α≈100 Only the α decay mode observed with no SF events detected. E(level): the observed α activity is assumed to correspond to the ground state of ^{274}Rg. J^{π}: 5^+,8^+ from Ω(proton)=3/2$^-$, Ω(neutron)=13/2$^-$ (1997Mo25,theory). $T_{1/2}$: from mean lifetime=18 ms *+24−7* (2015Mo25 review article based on measurements in 2004Mo42, 2007Mo43 and 2012Mo25 at RIKEN). Eα=11.15 MeV *7* (2004Mo42), 11.31 MeV *7* (2007Mo43), 10.65 MeV *6* (2012Mo25) from α decay of ^{274}Rg. Average (unweighted) Eα=11.04 MeV *20* (evaluator).