

Adopted Levels

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

$Q(\beta^-) = -1950$  SY;  $S(n) = 5540$  SY;  $S(p) = 1930$  SY;  $Q(\alpha) = 10600$  SY [2017Wa10](#)

Estimated uncertainties ([2017Wa10](#)):  $\Delta Q(\beta^-) = 530$ ,  $\Delta S(n) = 550$ ,  $\Delta S(p) = 510$ ,  $\Delta Q(\alpha) = 210$ .

$S(2n) = 12480$  600,  $S(2p) = 6120$  640 (syst, [2017Wa10](#)).

Other  $Q(\alpha) = 10.2$  MeV *11* ([2017Og01](#) review from  $E\alpha = 10.0$  MeV *11*; also 9.90 MeV *10* from  $E\alpha = 9.76$  MeV *10* ([2007Og02](#)).

[2007Og02](#), [2013Og01](#) (also [2011Og07](#), [2012OgZZ](#), [2007Og05](#), [2007Og01](#)):  $^{274}\text{Mt}$  produced as  $\alpha$  grand-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 39 primary references dealing with the half-lives and other aspects of nuclear structure in this mass region.

 $^{274}\text{Mt}$  LevelsCross Reference (XREF) Flags

**A**  $^{278}\text{Rg}$   $\alpha$  decay (4.2 ms)

E(level)	$T_{1/2}$	XREF	Comments
0	0.44 s +81-17	<b>A</b>	<p><math>\% \alpha \approx 100</math>; <math>\% \text{SF} = ?</math></p> <p>Only the <math>\alpha</math> decay mode observed with no SF events detected.</p> <p>E(level): the observed <math>\alpha</math> activity is assumed to correspond to the ground state of <math>^{274}\text{Mt}</math>.</p> <p><math>J^\pi</math>: <math>4^+, 7^+</math> from <math>\Omega(\text{proton}) = 11/2^+</math>, <math>\Omega(\text{neutron}) = 3/2^+</math> (<a href="#">1997Mo25</a>, theory).</p> <p><math>T_{1/2}</math>: from <a href="#">2017Og01</a> and <a href="#">2015Og05</a> reviews, based on experimental data in <a href="#">2007Og02</a> and <a href="#">2013Og01</a>.</p> <p><math>E\alpha = 9.76</math> MeV <i>10</i> or 10.0 MeV <i>11</i> (<a href="#">2017Og01</a> and <a href="#">2015Og05</a> reviews) from <math>^{274}\text{Mt}</math> <math>\alpha</math> decay, based on measurements in <a href="#">2007Og02</a> and <a href="#">2013Og01</a>.</p>