



## Yuliya Toporivska and Andrejz Mular 25 October 2021

## Gold(III)

Reaction	Baes and Mesmer, 1976
$Au(OH)_3 +2 H^+ \rightleftharpoons AuOH^{2+} + 2 H_2O$	$1.51 \pm 0.2$
$Au(OH)_3 + H^+ \rightleftharpoons Au(OH)_2^+ + H_2O$	< 1.0
$Au(OH)_3 + H_2O \rightleftharpoons Au(OH)_4^- + H^+$	$-11.77 \pm 0.2$
$Au(OH)_3 + 2 H_2O \rightleftharpoons Au(OH)_5^{2-} + 2 H^+$	$-25.13 \pm 0.1$
$Au(OH)_5^{2-} + 3 H_2O \rightleftharpoons Au(OH)_6^{3-} + 3 H^+$	<-41.1
$Au(OH)_3(c) \rightleftharpoons Au(OH)_3$	$-5.51 \pm 0.07$

C.F. Baes and R.E. Mesmer, The Hydrolysis of Cations. Wiley, New York, 1976, pp. 279–285.