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## Gold(III)

| Reaction  | Baes and<br>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.