

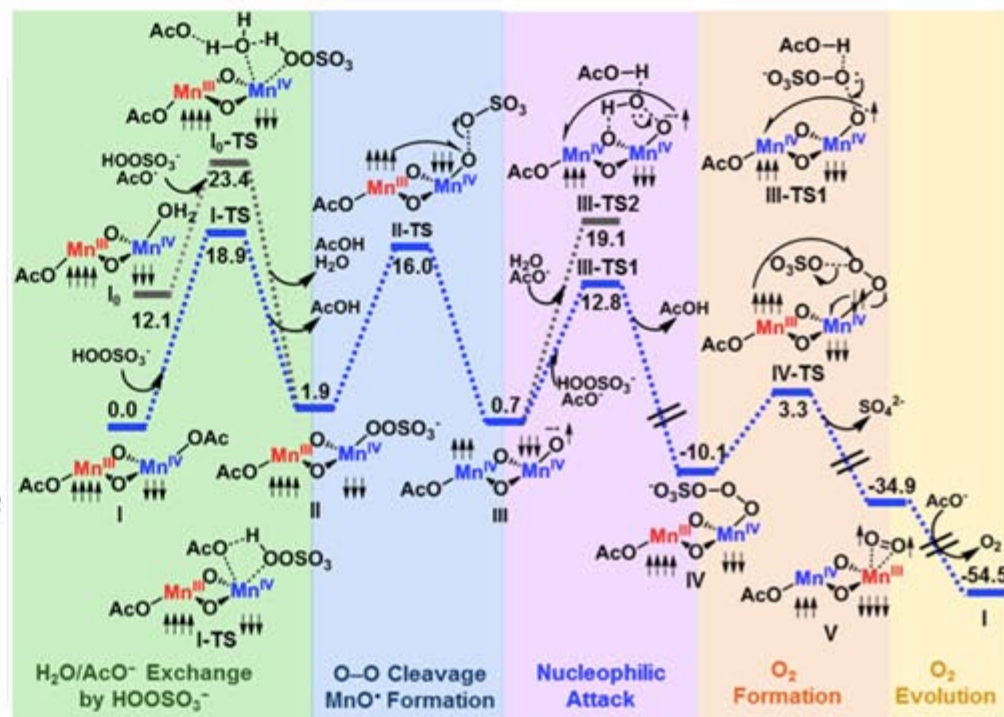
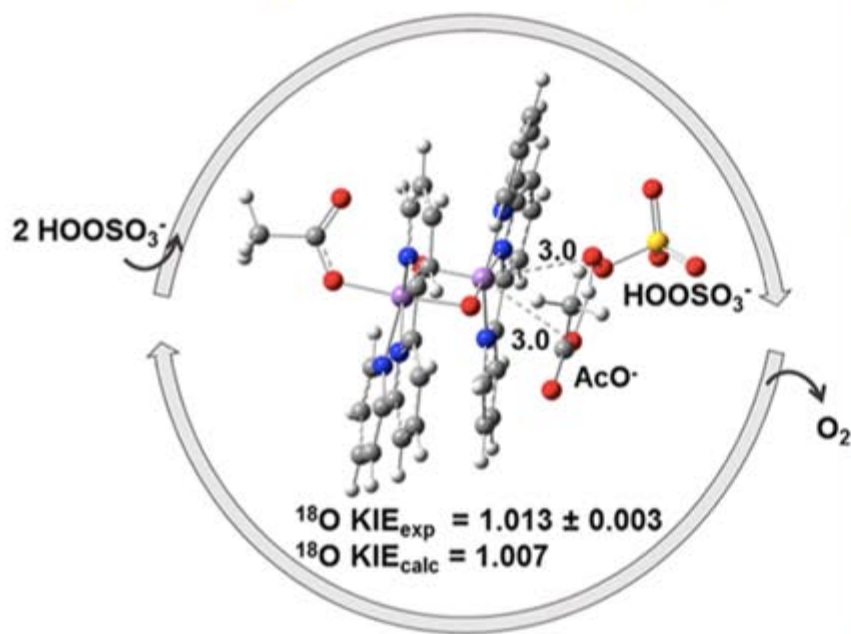
Mechanism of Manganese-Catalyzed Oxygen Evolution from Experimental and Theoretical Analyses of ^{18}O Kinetic Isotope Effects

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Reaction mechanism of O_2 evolution due to activation of the precatalyst $[(\text{AcO})\text{Mn}^{\text{III}}(\mu\text{-O})_2\text{Mn}^{\text{IV}}(\text{OH}_2)(\text{terpy})_2]^{2+}$ and the active catalyst $[(\text{AcO})\text{Mn}^{\text{III}}(\mu\text{-O})_2\text{Mn}^{\text{IV}}(\text{OOSO}_3)(\text{terpy})_2]^+$ by peroxydisulfate as a primary oxidant.