

Adsorption of O₂ on Anionic Silver Clusters: Spins and Electron Binding Energies Dominate in the Range up to Nano Sizes

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Supporting Materials

Figure SP

The mass spectra showing reaction of Au_2^- with O_2 under the same condition described in the manuscript. The linear fitting of $-\ln(I/I_0)$ vs O_2 flow rates get a slope representing the relative decay rate. The k_{III} rate for reaction of Au_2^- with O_2 in pure helium gas is estimated to be around $5.8 \times 10^{-28} \text{ cm}^6\text{s}^{-1}$ in ref [23] of the manuscript. The ratio of the slope and the k_{III} value was used to calibrate reaction rate constants of other sizes. For example, the slope of Ag_{10}^- is 21.9 and its k_{III} is calibrated to be around $6 \times 10^{-26} \text{ cm}^6\text{s}^{-1}$.

