Janus Nanoparticle Systems Cross-linked via Bisdithiol for Enhanced Stability

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Abstract:

This project concerns the development and characterization of gold nanoparticle films that undergo a ligand exchange. These may prove useful in increasing the efficiency of photovoltaic panels. This research involves synthesizing new nanoparticles, running PM-IRRAS on self-assembled monolayers, synthesizing cross-linkers for making a monolayer of gold nanoparticles, running isotherms on gold nanoparticles, and creating self-assembled monolayers.