

Abstract Submitted
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Island formation and dynamics of gold clusters on amorphous carbon films GUENTER SCHNEIDER, Oregon State University — A growing number of potential applications in electronics and catalysis has led to continued experimental and theoretical interest in the dynamics of metal nanoclusters. Experiments of Au clusters deposited on amorphous carbon films showed the formation of Au islands at room temperature. Monte Carlo simulations at multiple length scales give a consistent picture of the complex dynamics in this system. The Au-Au interaction is described by an empirical many-body Gupta potential while the Au-substrate interaction has been determined from ab initio density functional calculations.

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