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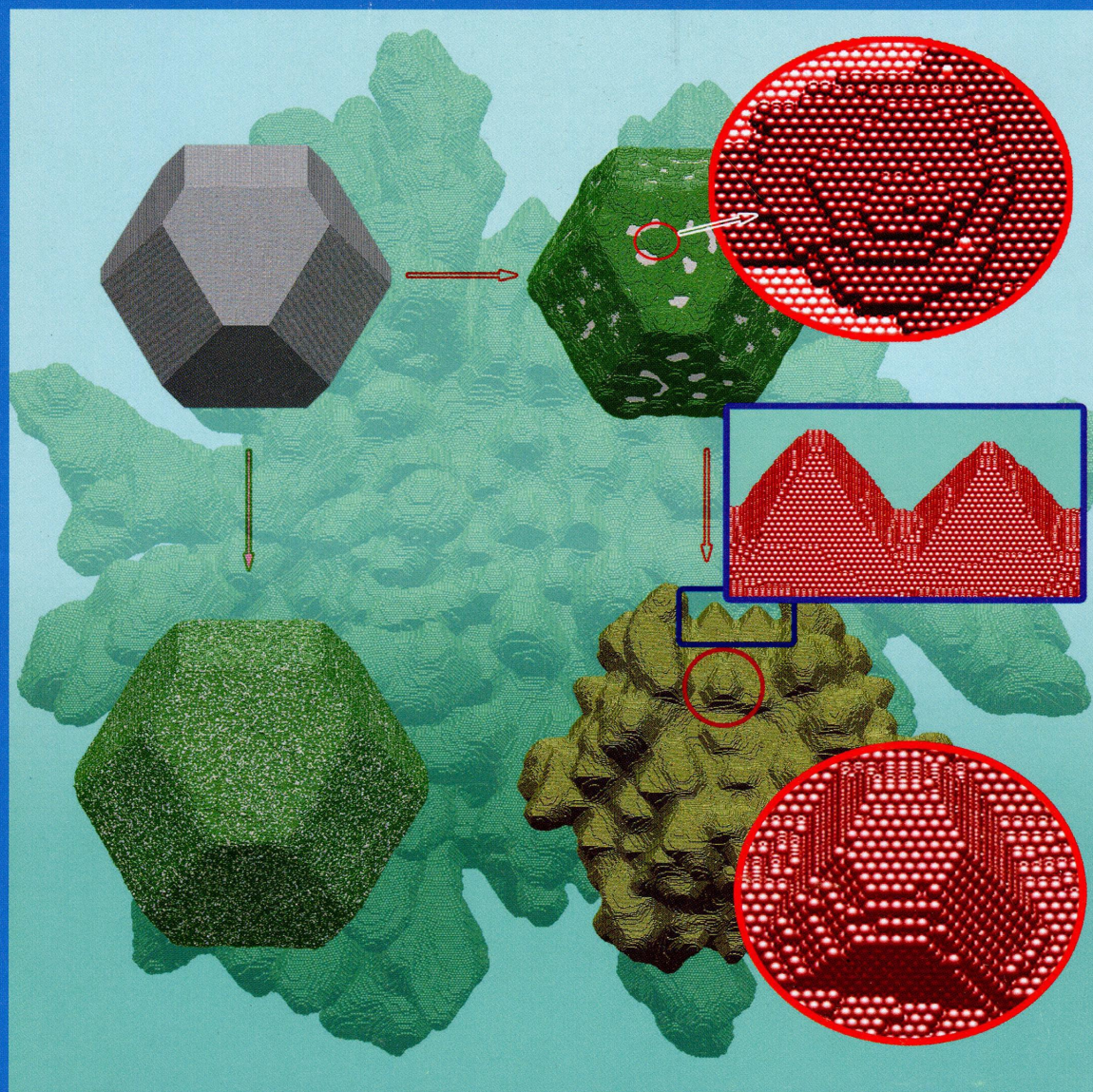
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Kinetic Modeling of
Shell Growth and
Morphology of
Core-Shell
Noble-Metal
Nanoparticles
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ENERGY CONVERSION AND STORAGE, OPTICAL AND ELECTRONIC DEVICES,
INTERFACES, NANOMATERIALS, AND HARD MATTER



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ON THE COVER: Kinetic modeling of shell growth and morphology of core–shell noble-metal nanoparticles. The kinetic Monte Carlo modeling approach is shown to reproduce smooth-shell and cluster-structured shell growth morphologies identified in recent experiments on core–shell noble-metal nanoparticle synthesis, including the formation of smooth epitaxially grown shells. The effects of temperature and supply of matter on the resulting shell morphology are considered for growth on presynthesized nanocrystal cores. See page 24959.

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