NANOFAB ADVANCED MANUFACTURING

CNST Center for Nanoscale Science & Technology

Self-Assembly of Lithographically Patterned Cubic Nanostructures

PROJECT LEADER: David Gracias (Johns Hopkins University)

COLLABORATOR: Si-Young Park (Johns Hopkins University)

GOAL

To develop strategies for mass fabrication of precisely patterned three-dimensional (3D) nanostructures.

KEY ACCOMPLISHMENTS

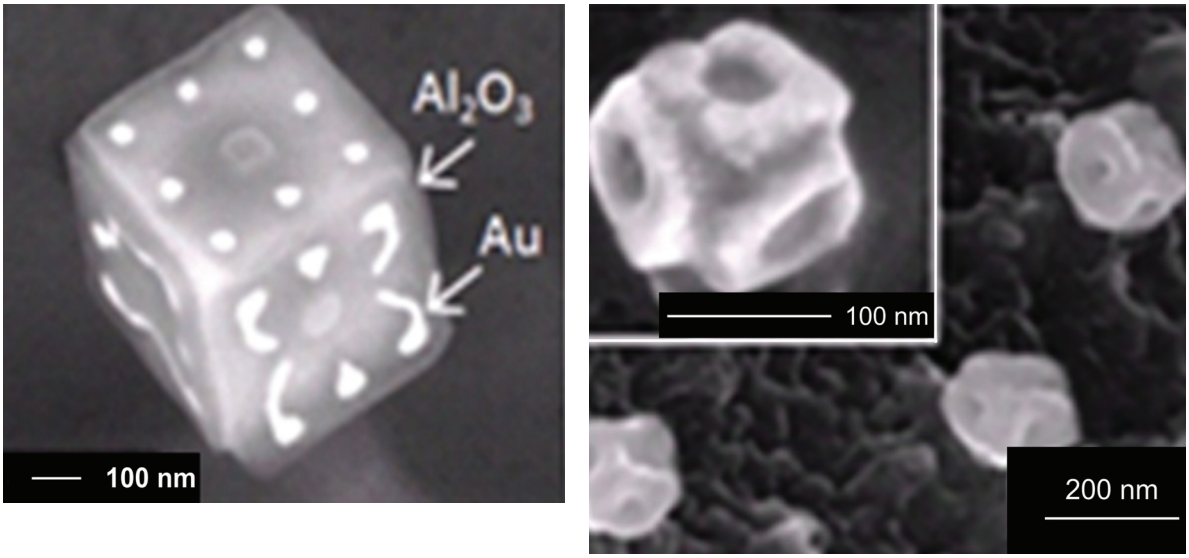
Demonstrated the use of nanoimprint lithography and self-assembly to synthesize 3D nanostructures.

Created nanoporous membranes using nanoimprint lithography.

KEY NANOFAB PROCESS

Nanoimprint lithography for high throughput creation of nanometer scale features.

Scanning electron micrographs of fabricated nanoparticles, including precisely patterned polyhedral nanostructures.



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