Nanostructured Superhydrophobic Materials

Nanotechnology Material Breakthrough

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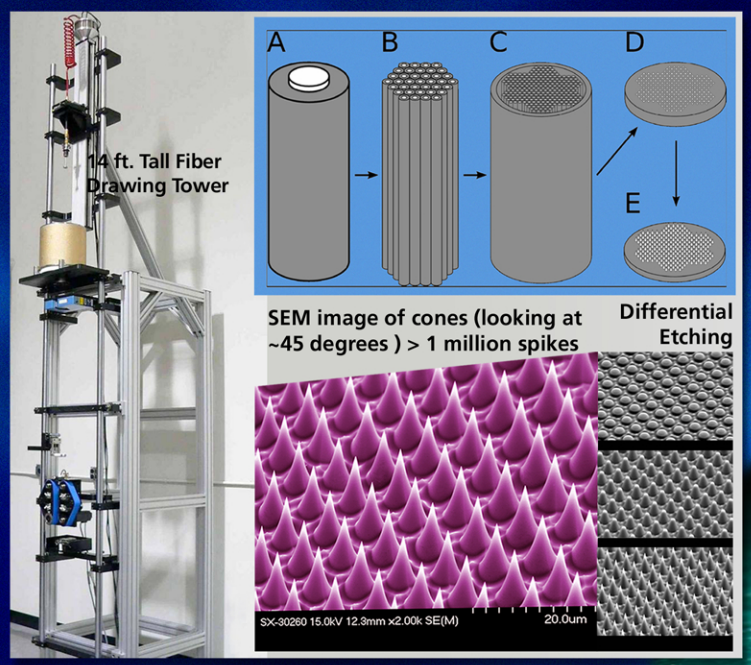
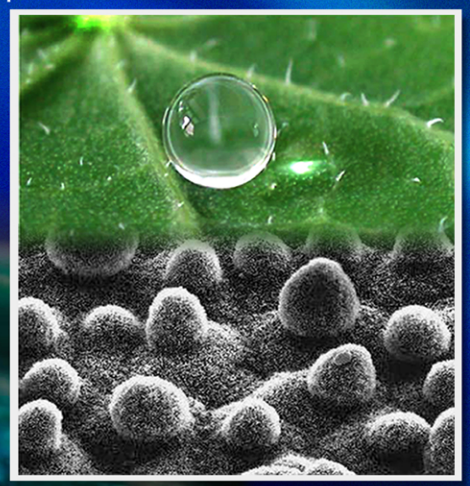
Nanocone Array Glass Fabrication

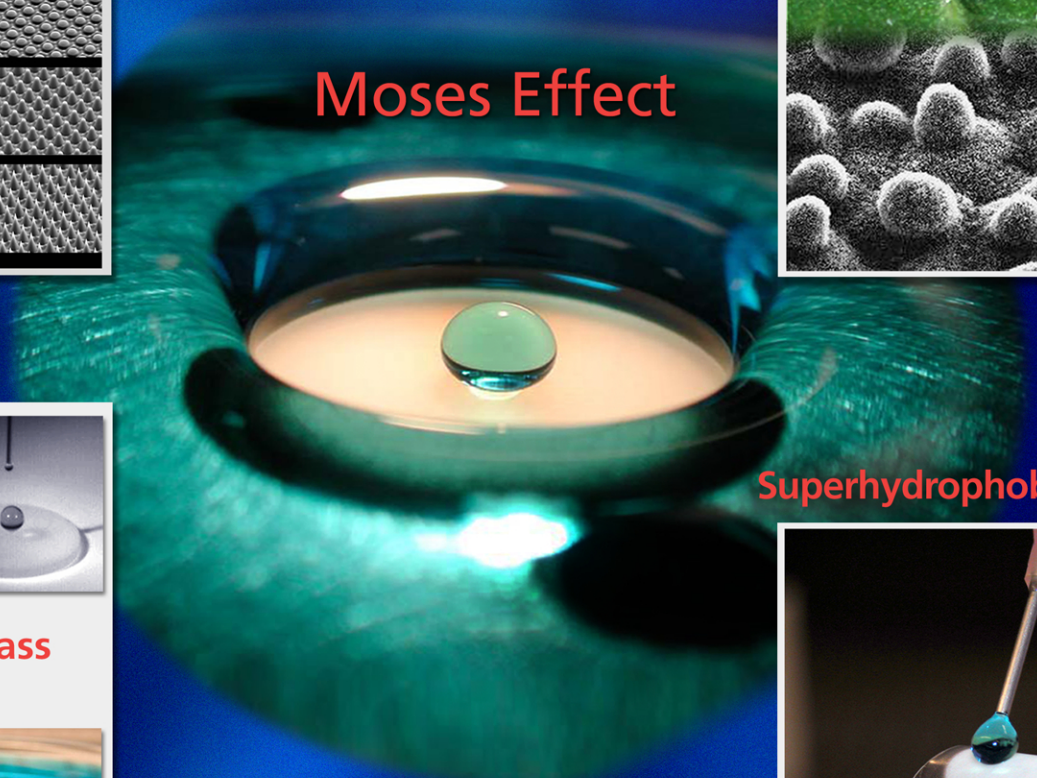


Natural Superhydrophobic Surfaces

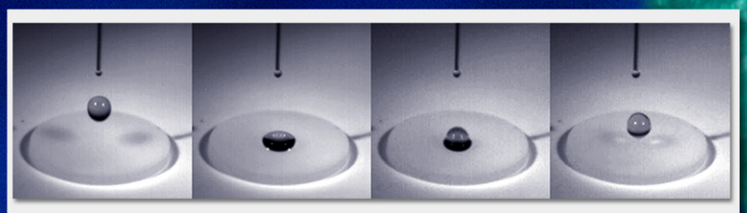
- Lotus leaf is superhydrophobic
  - Water beads up on surface
  - Waxy hydrophobic material
  - Nanoscale and microscale structure
- Superhydrophobic applications:
  - Water-repellent, self-cleaning coatings
  - Microfluidics
  - Drag reduction



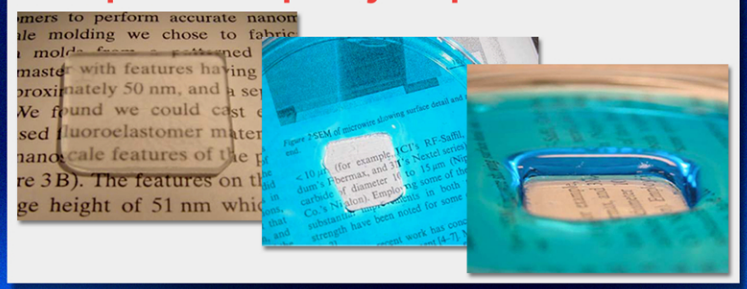
Moses Effect



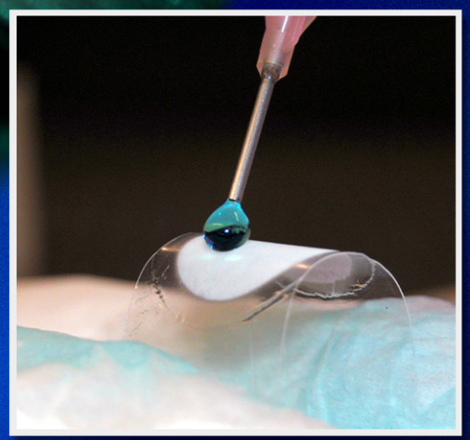
Water Drop Sequence



Transparent Superhydrophobic Glass



Superhydrophobic Polymer



Potential Impact

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