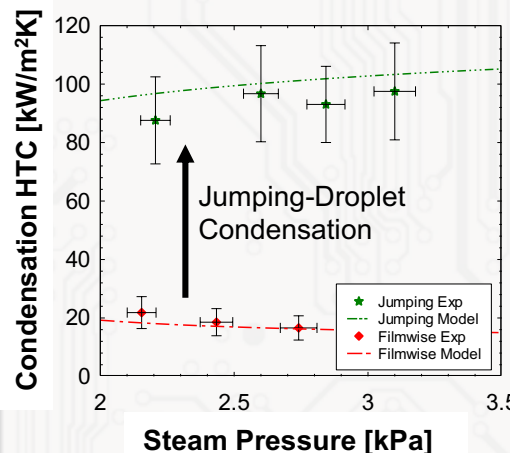


- Phase change heat transfer and fluid dynamics for energy and thermal management applications
- Interfacial nanoengineering for enhanced heat transfer
- Experiments and Simulation



## Heat Transfer Measurements & Modeling



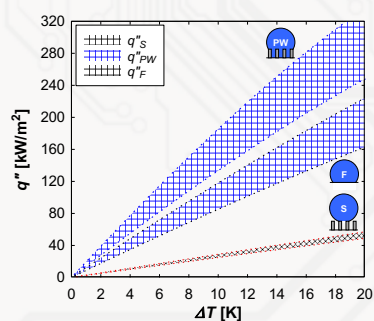
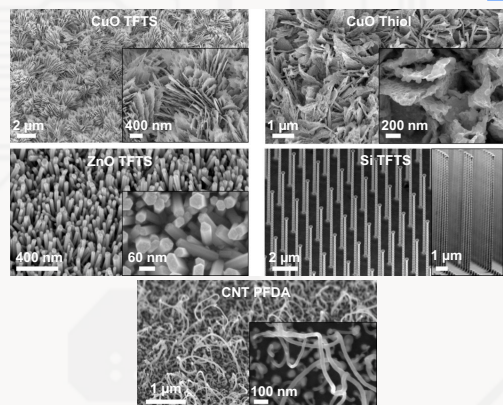
Vacuum System Fabrication and Two-Phase Heat Transfer Measurements

<http://etrl.mechanical.illinois.edu>

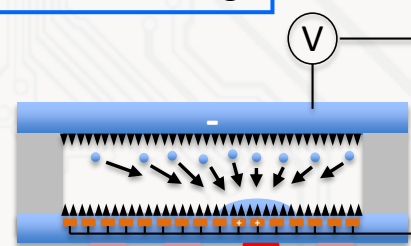
### Surface Fabrication

### Theory and Experiment

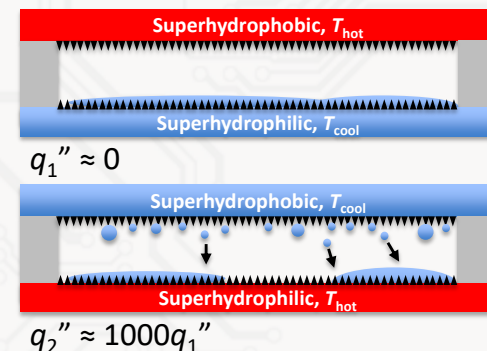
### Device Building



Structure Optimization



Jumping Droplet Vapor Chambers for Active Hot-Spot Thermal Management



Jumping Droplet Thermal Diodes