



POETS

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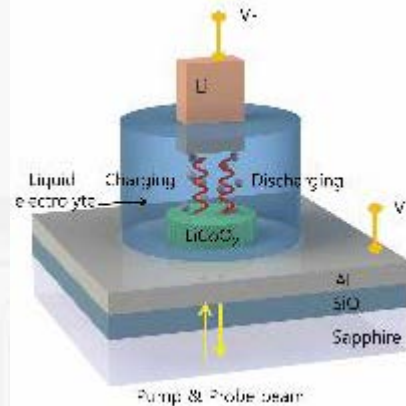
AN NSF SPONSORED CENTER



- Synthesis of materials with unique dynamic thermal properties
- Advanced electrode materials for energy storage
- Materials Characterization

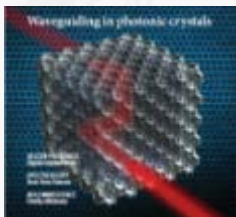
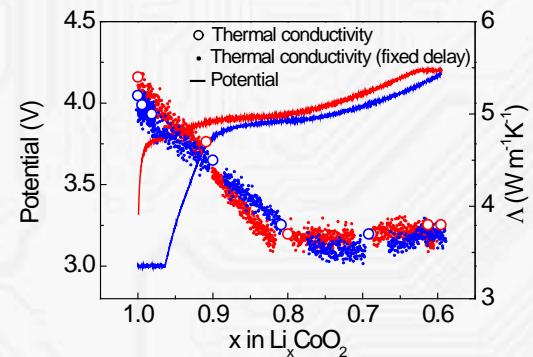


<http://braingroup.beckman.illinois.edu/>



Dynamic Thermal Materials

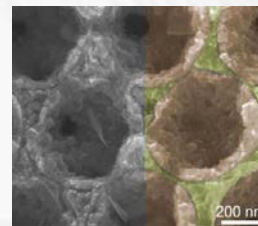
Demonstrated in a Li-ion cathode material



Optical Materials

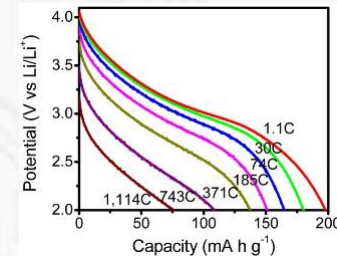
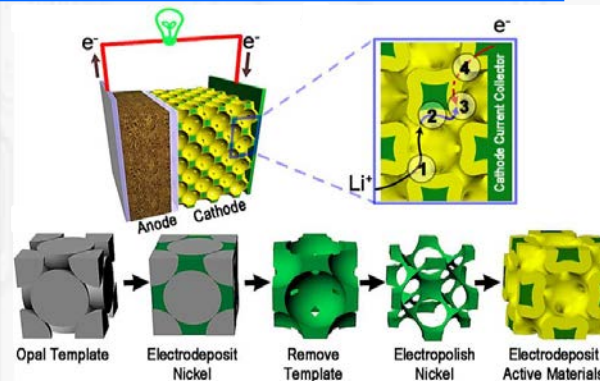
Materials Synthesis

3D Structured Materials



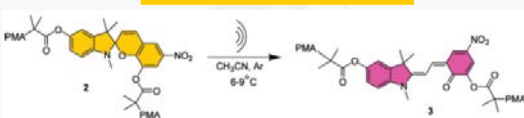
V₂O₅-graphene composite

High Power and Energy Batteries



Optimized 3D structures for Li-ion and electron transport

Advanced Polymers



Properties change with applied stress