Nanostructures for Electrical Energy Storage (NEES)

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MISSION: To reveal scientific insights and design principles that enable a next-generation electrical energy storage technology based on dense mesoscale architectures of multifunctional solid state nanostructures.



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MICHIGAN STATE

Nationa

RESEARCH PLAN

- Synthesizes precision nanostructures and mesoscale architectures for solid state electrochemical energy storage
- Reveals interacting roles of ions and electrons in transport and energetics
- Elucidates and controls interfacial chemistry during synthesis and operation
- Enables nanostructure-based all-solid-state batteries for safety and simultaneous high power and energy.



