

Title: Prospects for Safer Batteries for Transportation

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Abstract:

The Advanced Research Project Agency - Energy (ARPA-E) has been funding battery projects that address the need for low cost energy storage for transportation since its inception a decade ago. More recent programs are IONICS and REFUEL. Progress has been made with various battery chemistries and cell designs, including aqueous batteries and solid state electrolytes as well as liquid fuels. Developing load bearing batteries that require less safe guards allows for lower energy density, while still achieving the vehicle's targeted range.