

AOI	Applicant Name	Technology	Location	Description	Total Federal Share
1	Miltec UV International, LLC	High speed precision printing and UV curing for ceramic separators	Stevensville, MD	This project will develop the next generation of safer Lithium Ion PEV batteries by combining high speed precision printing and UV curing to instantly fixture ceramics on separator film.	\$1,560,000
	Sila Nanotechnologies	Core shell non-intercalation cathodes and anodes	Atlanta, GA	This project will develop a nano-structured core to limit particle volume changes and protect the active material from undesired interactions with the electrolyte	\$1,000,000
	24M Technologies, Inc.	High active loading cathodes by new manufacturing approach	Cambridge, MA	This project will demonstrate a novel semi-solid electrode, cell, and manufacturing approach to prismatic cells for automotive applications.	\$1,945,770
	Amprius	A Commercially Scalable Process for Silicon Anode Prelithiation	Sunnyvale, CA	This project will develop a cost-effective and scalable pre-lithiation process.	\$1,260,000
	Lambda Technologies, Inc	Variable frequency microwave drying of electrodes	Morrisville, NC	This project will significantly reduce the size of inline drying ovens used in the manufacturing of batteries by using VFM technology, reducing size and energy usage and increasing throughput capabilities.	\$1,011,453
	Parthian Energy LLC	Unique S-cell design for reduction of inactive materials	Irvine, CA	This project will develop a novel S-cell to reduce the inactive battery materials by 50%.	\$591,364
2	University of Colorado Boulder	30 kW Modular DC-DC System using Superjunction MOSFETs	Boulder, CO	This project will develop a new modular power conversion approach that utilizes both silicon and WBG devices to address the fundamental power conversion, loss, and component stress mechanisms.	\$1,998,658

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	University of Wisconsin - Madison	Brushless and Permanent Magnet free Wound Field Synchronous Motor (WFSM)	Madison, WI	This project will research, design, and demonstrate a brushless and permanent magnet free wound field synchronous motor (WFSM) for electric vehicles.	\$493,247
3	University of Connecticut	In-situ grown Metal Oxide Nano-Array Catalysts for Low Temperature Diesel Oxidation	Storrs, CT	This project will develop cost-competitive, stable and efficient nano-array catalysts for automotive diesel oxidation after-treatment at low temperature.	\$1,450,000
	University of Illinois at Urbana-Champaign	Micro-Jet Enhanced Ignition for High Efficiency Lean-Burn Combustion	Champaign, IL	This project will develop and test a micro-jet enhanced fuel injection and combustion system.	\$672,000
4	RMX Technologies	Demonstration scale plasma oxidation of carbon fiber	Knoxville, TN	This project will scale up a carbon fiber oxidation technology that reduces energy consumption and oxidation time.	\$1,998,054
	Utah State University	Carbon fiber precursor from biomimetic polymer	Logan, UT	This project will use spider silk fiber as a model for engineering a biomimetic polymer precursor to replace polyacrylonitrile (PAN) precursors.	\$1,988,042
	The Ohio State University	Low-cost Titanium casting alloy	Columbus, OH	This project will develop and demonstrate a new titanium alloy and its casting process using permanent mold technology for a cast titanium connecting rod.	\$799,336
5	The Regents of the University of Michigan	Alternative Fuel Ignition	Ann Arbor, MI	This project will utilize alternative fuel ignition to improve engine efficiency	\$874,024