Closed Topic Search

Enter terms
Search

Reset Sort By: Close Date (descending)

- Relevancy (descending)
- Title (ascending)
- Open Date (descending)
- Close Date (ascending)
- Release Date (descending)

NOTE: The Solicitations and topics listed on this site are copies from the various SBIR agency solicitations and are not necessarily the latest and most up-to-date. For this reason, you should visit the respective agency SBIR sites to read the official version of the solicitations and download the appropriate forms and rules.

Displaying 1 - 10 of 23 results

1. OSD13-C01: Integrated Computational Materials Engineering in Multiphysics Software

Release Date: 07-26-2013Open Date: 08-26-2013Due Date: 09-25-2013Close Date: 09-25-2013

OBJECTIVE: The objective of this research is to demonstrate a spatially-dependent calculation of detailed microstructural evolution (e.g., grain structure, texture, precipitation kinetics, phase transformations, etc.) in the modeling of processing of a structural material ultimately providing or enhancing commercial multiphysics software (e.g., general multiphysics or specialized for welding, for ...

SBIR Department of DefenseOffice of the Secretary of Defense

2. OSD13-C02: A Semantic Technology for Materials Design and Development

Release Date: 07-26-2013Open Date: 08-26-2013Due Date: 09-25-2013Close Date: 09-25-2013

OBJECTIVE: Develop and demonstrate the foundational elements required to create a semantic technology for materials design and development. DESCRIPTION: Several foundational elements required to achieve Sir Tim Berners-Lee"s vision for a semantic web are in place and available to the materials community. The semantic web, sometimes referred to as the web-of-data, focuses on ontologies as well ...

SBIR Department of DefenseOffice of the Secretary of Defense

3. OSD13-C03: Making Practical Use of Electromagnetic Fields in Materials Processing and Applications

Release Date: 07-26-2013Open Date: 08-26-2013Due Date: 09-25-2013Close Date: 09-25-2013

OBJECTIVE: Develop predictive computational models/tools to exploit the effect of electromagnetic fields in materials processing that enables tailored polycrystalline microstructures, enhanced properties, and shortened materials development cycles beyond the current state-of-the-art. DESCRIPTION: The Army is interested in applying external physics-based fields during the processing of materia ...

SBIR Department of DefenseOffice of the Secretary of Defense

4. OSD13-C04: Stochastic Modeling for Structural Materials Properties

Release Date: 07-26-2013Open Date: 08-26-2013Due Date: 09-25-2013Close Date: 09-25-2013

OBJECTIVE: The objective of this project is to design and develop a modeling tool for materials designers, which uses as input on the microstructure quantitative statistical measures of structure variations and features, and provides efficiently information on materials behavior with robust quantitative measures of performance variations and their correlations with microstructure features. This ...

SBIR Department of DefenseOffice of the Secretary of Defense

5. OSD13-C05: Design Automation Software for Integrated Nanophotonics

Release Date: 07-26-2013Open Date: 08-26-2013Due Date: 09-25-2013Close Date: 09-25-2013

OBJECTIVE: Develop and validate next generation system-on-chip electronic-photonic system simulation tools. DESCRIPTION: Today, the military and commercial application spaces for silicon photonics are expanding very rapidly. The first wave of commercial products are aimed at the telecommunications and data communications spaces, but applications in biosensing, analog data processing, coheren ...

SBIR Department of DefenseOffice of the Secretary of Defense

6. OSD13-EP1: Phase Change Thermal Buffers for Environmental Control Unit Efficiency Improvement

Release Date: 07-26-2013Open Date: 08-26-2013Due Date: 09-25-2013Close Date: 09-25-2013

OBJECTIVE: Develop and demonstrate a phase change material based thermal buffer to enable"rightsizing"of environmental control units (ECUs) and improve overall efficiency through reduced peak loads, more stabilized ECU operation, and off-peak thermal energy storage. DESCRIPTION: Military Environmental Control Units (ECUs) represent one of the dominant energy users in forward operating environm ...

SBIR Department of DefenseOffice of the Secretary of Defense

7. OSD13-EP2: High Efficiency Electric Power Manager for Man-Portable Photovoltaic Systems

Release Date: 07-26-2013Open Date: 08-26-2013Due Date: 09-25-2013Close Date: 09-25-2013

OBJECTIVE: Develop and demonstrate an electric power management system that will couple low power photovoltaic (PV) energy generating devices with a Li-ion battery with at least 96% module efficiency. DESCRIPTION: Renewable energy, specifically photovoltaic, is an attractive technology for man-portable power sources and tactical applications. However, to be effective as a system, it is necess ...

SBIR Department of DefenseOffice of the Secretary of Defense

8. OSD13-EP3: High Efficiency Flexible Photovoltaics

Release Date: 07-26-2013Open Date: 08-26-2013Due Date: 09-25-2013Close Date: 09-25-2013

OBJECTIVE: Develop and demonstrate photovoltaic arrays that are flexible and can achieve greater than 20% solar photon to electrical conversion efficiency in a lightweight configuration. DESCRIPTION: Photovoltaics (solar cells) are an attractive technology to provide renewable energy sources for forward operating bases, man-portable power sources, and tactical applications. Solar arrays can p ...

SBIR Department of DefenseOffice of the Secretary of Defense

9. OSD13-EP4: Ultra-High Power Density Solid Oxide Fuel Cell Stack for High Efficiency Propulsion and Power Systems

Release Date: 07-26-2013Open Date: 08-26-2013Due Date: 09-25-2013Close Date: 09-25-2013

OBJECTIVE: To develop an ultra-high power dense solid oxide fuel cell (SOFC) stack (>500 W/kg) capable of supporting high efficiency, logistic-fueled propulsion and power systems for small autonomous vehicles and mobile power generation. DESCRIPTION: Small unmanned aerial systems (S-UAS), unmanned ground systems (UGS), vehicle auxiliary power units (APU), and mobile power generation units r ...

SBIR Department of DefenseOffice of the Secretary of Defense

10. OSD13-EP5: Precision In-Cylinder Pressure Sensor System for Heavy Duty Diesel Engines

Release Date: 07-26-2013Open Date: 08-26-2013Due Date: 09-25-2013Close Date: 09-25-2013

OBJECTIVE: Develop a high data-rate real-time pressure measurement system to continuously measure combustion pressure in diesel engine cylinders, which is affordable, durable, and accurate, for future use in real-time adaptive engine controls of fuel injection. BACKGROUND/DESCRIPTION: Unlike commercial diesel engines which are typically designed to operate on a single fuel such as U.S. ultra-l ...

SBIR Department of DefenseOffice of the Secretary of Defense

- 1
- 2
- 3
- Next
- Last

jQuery(document).ready(function() { (function ($) { $('#edit-keys').attr("placeholder", 'Search Keywords'); $('span.ext').hide(); })(jQuery); });