Advanced Polymer Systems for Defense Application - Power Generation, Protection and Sensing

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Project Description:
This effort will use fundamental chemical science to: (a) develop synthetic methodology for new monolithic porous nanostructured materials and explore their structure-property relationships; (b) use the developed materials to demonstrate time- and energy-efficient synthesis of new porous nanostructured metals, ceramics, metal-ceramic composites; (c) probe the reactivity of materials at the nanoscale size regime; and ultimately, (d) investigate factors that correlate composite nanostructures to macroscopic properties such as high mechanical strength.

Publications: