Abstract Submitted
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Integrated Semiconductor-Ferroelectric Nanostructures[1] S. S. NONNENMANN, R. S. JOSEPH, L. CAO, J. E. SPANIER, Department of Materials Science and Engineering and the A. J. Drexel Nanotechnology Institute, Drexel University, Philadelphia PA — The integration of semiconductor and ferroelectric nanostructured materials provides new opportunities for investigating ferroelectric stability in nanostructures and for the design of multifunctional nanoscale devices. We present progress in the development of new synthetic strategies for the preparation of nanostructures consisting of semiconducting and ferroelectric components. We report on characterizations of the structural, electronic and functional properties of these hybrid nanostructures and devices via electron microscopy, Raman scattering spectroscopy, scanning probe microscopy, and electronic transport measurements.

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