Abstract Submitted
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Optimizing Energy Conversion: Magnetic Nanomaterials[1] DYLAN MCINTYRE, MARTIN DANN, CAROLINA C. ILIE, State University of New York at Oswego — We present herein the work started at SUNY Oswego as a part of a SUNY 4E grant. The SUNY 4E Network of Excellence has awarded SUNY Oswego and collaborators a grant to carry out extensive studies on magnetic nanoparticles. The focus of the study is to develop cost effective rare-earth-free magnetic materials that will enhance energy transmission performance of various electrical devices (solar cells, electric cars, hard drives, etc.). The SUNY Oswego team has started the preliminary work for the project and graduate students from the rest of the SUNY 4E team (UB, Alfred College, Albany) will continue the project. The preliminary work concentrates on analyzing the properties of magnetic nanoparticle candidates, calculating molecular orbitals and band gap, and the fabrication of thin films.

[1]SUNY 4E Network of Excellence Grant

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