

Abstract Submitted  
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**Fabrication and Characterization of Electrodeposited Nanoporous Alloys**<sup>1</sup> KYLA KOBOSKI, NATHAN GRABER, EVAN NELSEN<sup>2</sup>, JENNIFER HAMPTON, Hope College — Nanoporous Ni and NiFe thin films were created by electrodeposition of NiCu and NiFeCu followed by electrochemical dealloying to remove the Cu component. The structure and composition of the resulting materials, before and after the dealloying step, was characterized using scanning electron microscopy and energy dispersive spectroscopy. The electrochemical double-layer capacitance was measured to estimate the active surface area. The catalytic behavior of these complex nanoporous materials was investigated using hydrogen evolution as a model reaction.

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