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Fabrication of Microcantilevers on Silicon Wafers¹ ALLEN SCHEIE², NATHANIEL RUPPRECHT³, Grove City College — Over the past six years, the Grove City College nanotechnology group has been developing processes for the reproducible creation of micro-devices. In this report, we discuss one type of microstructure that we fabricated during the summer of 2011: the cantilever. Microcantilevers have many applications in sensory technology and fundamental physics research, and are the subject of much active inquiry. We discuss how we produced microcantilevers, the problems we encountered, the strategies used to overcome these difficulties, and where this work will take us in the future. We also discuss computer modeling of our microcantilevers and how to experimentally characterize them in the near future.

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