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**Structural and Electrical Study of ZnO Nanowires Grown on Silicon and Titanium Substrates** EDWARD LIKOVICH, ERIC PETERSEN, VENKATESH NARAYANAMURTI, Harvard University School of Engineering and Applied Sciences — We studied the VLS (vapor-liquid-solid) growth of ZnO nanowires on catalytically patterned Silicon and Titanium foil substrates. We provide evidence for VLS growth from the formation of a eutectic liquid between Au catalyst particles and the Si or Ti substrate. In order to further understand conduction in nanowires, we present preliminary data from electrical measurements on wires grown on each substrate and provide a comparison. We show that the use of metal foil substrates exhibits promise for future nanowire applications in large-area light emitters, collectors, and thermoelectrics.

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