

Abstract Submitted
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Templated Nanowires for Electrical and Electro-Optic Applications YUN PENG, CHRIS LAFRATTA, DANIEL LIM, J.T. FOURKAS, M.J. NAUGHTON, Boston College — We have prepared multi-metal nanowires via electrodeposition in AAO template membranes. The wires are 100 nm nominal diameter, and 5 to 20 μm in length. Most nanowires are composed of varying lengths of Ag and Au, including sections of submicron length. The wires have been characterized by SEM (including backscattered detection), TEM and AFM. We have made electrical contact to the nanowires by a direct laser writing technique, and have made electrical measurements in the presence and absence of pulsed laser illumination. In this talk, we will discuss the preparation and above characterizations, including with regard to electro-optic applications.

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