

Abstract Submitted
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Highly ordered nanoelectronics switches fabricated by electrochemical processes in alumina templates¹ HOLLI NULL, RYAN MARSON, LAM YU, University of Memphis — Periodic arrays of layered structures fabricated by template synthesis in anodized alumina substrates are the basis of a new type of nanoelectronics switches. We performed electrical characterization on these nanoscale devices, and our results suggested that the mechanism for the switching behavior observed is based on nano-filament formation in the layered structures. We will present preliminary data demonstrating the functionality of these nanoscale devices and outline the fabrication process of these structures.

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