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Controlled fabrication of sub-15nm nanostructures of an arbitrary conductive material[1] HANNAH HUGHES, TYLER MORGAN-WALL, NIKOLAUS HARTMAN, NINA MARKOVIC, Johns Hopkins University — Traditional lithographic techniques that are used to produce low-dimensional nanostructures are often limited in both the minimum achievable size and the control over the final resistance of the device. To achieve such control, we had developed a wet etching method with in-situ monitoring of resistance, but this method relies on an oxide layer to electrically isolate the monitoring circuit from the etching solution. We will present a more general method for fabricating sub-15 nm nanostructures out of various conductive materials without a need for an oxide layer.

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