

Abstract Submitted
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Transport Properties and Crosssection Dependence on PEDOT (Poly(3,4-ethylenedioxythiophene)) Nanoribbons OMAR VEGA, Department of Physics, University of Puerto Rico - Rio Piedras, P.O. Box 23343, San Juan, PR 00931, USA, JEILEEN LUCIANO, EDUARDO VEGA, NICHOLAS PINTO, LUIS ROSA, Department of Physics and Electronics, University of Puerto Rico-Humacao, Call Box 860, Humacao, PR 00792, USA — Electronic transport properties of PEDOT (Poly(3,4-ethylenedioxythiophene)) have been characterized by fabricating nanoribbons by electrospinning and nanostructuri modification by AFM Nanoshaving. The nanoribbons dimensions tend to be 10nm to 30 nm X (30 μm , 20 μm , 10 μm). In order to get insight information of the electron transport the nanostructuring of the nanoribbon are made by changing its crosssection by AFM nanoshaving. The cross sections have been modify by removing a 200nm by 2 μm gap in the center of the nanoribbon. We have shown that reducing the dimensions of the ribbons to less than 100 nm of the PEDOT ribbon don't behave Ohmic.

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