Abstract Submitted
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Photoconductivity of nanowires that are self-assembled from chiral porphyrins J.G. MENKO, W.F. SMITH, Haverford College, Y. LU, A.T. JOHNSON, U. Pennsylvania, P. IAVICOLI, Institut de Ciencia de Materials de Barcelona (CSIC) — Recently synthesized chiral porphyrin molecules[1] in a methlocyclohexane solvent self-assemble into aggregates which appear as a network of nanoscale filaments when deposited onto oxidized silicon. We have shown in preliminary experiments conducted in air that the aggregates are photoconductive, with an action spectrum (photoconductivity vs. wavelength) that matches the in-solution absorbance curve. We discuss these results, and also experiments conducted in a dry nitrogen environment.

[1]M. Linares, P. Iavicoli, K. Psychogyiopoulou, D. Beljonne, S. De Feyter, D. B. Amabilino, and R. Lazzaroni, Langmuir **2008**, 24, 9566-9574.

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