

Abstract Submitted
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Breath figures of P3HT and of its photovoltaic blend with PC71BM¹ AURORA NOGALES, JING CUI, Instituto de Estructura de la Materia, IEM-CSIC, ESTHER REBOLLAR, Instituto de Quimica Fisica Rocasolano, IQFR-CSIC, ADOLFO DEL CAMPO, Instituto de Ceramica y Vidrio, ICV-CSIC, MIRCEA COTLET, Center for Functional Nanomaterials, BNL, JUAN RODRIGUEZ, Instituto de Ciencia y Tecnologia de Polimeros, ICTP-CSIC — Surface structured films of poly(3-hexyl thiophene) and of its photovoltaic blend with PC71BM are obtained by the breath figure technique, a micropatterning process that is based on the competition between solvent evaporation and water condensation. By this method, long range honey-comb like ordered structures of these functional organic blends are obtained. The characterization of these systems by several techniques including micron-resolved Raman Spectroscopy, microphotoluminescence and Kelvin probe microscopy allow to probe that, due to the different hydrophobicity of both components of the blend, a hierarchical phase separation is obtained around the pores formed.

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