

Project n°: PIEF-GA-2007-219770

Project Acronym: HESPERUS

Project Full Name: Hierarchical self-assembly of electroactive supramolecular systems on pre-patterned surfaces: multifunctional architectures for organic FETs

Images for publishable summary:

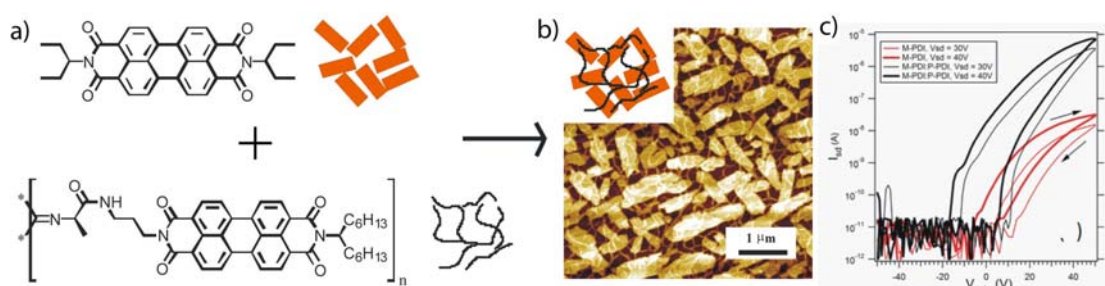


Figure 1. a) PDI chromophore (M-PDI) and polymer (P-PDI) and schematic representation of PDI crystals; b) AFM height image of ultrathin film of blended monomeric M-PDI and P-PDI deposited from CHCl₃ on mica; (a) Transfer characteristics, at source-drain bias of 25 V, of P-PDI:M-PDI TFTs with varying weight fractions of P-PDI, as indicated. The channel length was 2 μm in each case, and the direction of gate-voltage sweep is indicated by the arrows.

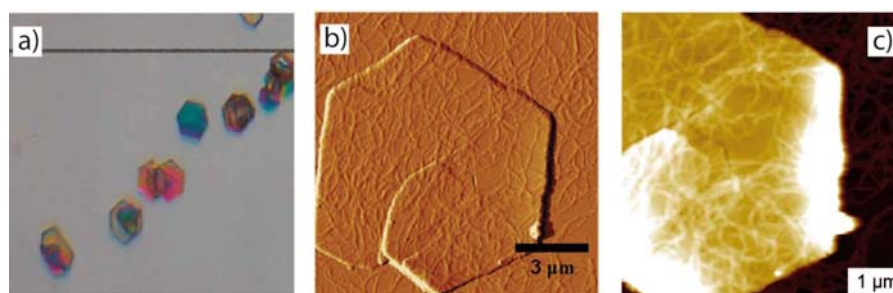


Figure 2. a) Optical microscopy image of monocrystalline PCBM hexagonal crystals on silanized SiO_x, grown at 4-10 °C; b-c) PCBM crystal coated with HBC nanofibers, as deposited from CHCl₃-MeOH 2:1 (v/v): b) AFM gradient topography, z-range: 3860 nm nm⁻¹; c) topography, z-range: 180 nm.