

Abstract Submitted
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Local EFM measurements of organic conducting materials at various temperatures TSE NGA NG, WILLIAM SILVEIRA, JOHN MAROHN¹, Cornell University — We have investigated the charge injection processes in regioregular poly-3-hexylthiophene (P3HT) and in a molecularly-doped polymer, triarylamine (TPD) dispersed in polystyrene (PS), by electric force microscopy under high vacuum and at various temperatures. This microscopic study unambiguously reveals space-charge limited conduction within TPD-PS, in contrast to bulk current-voltage measurements. The temperature dependence of charge injection will also be shown to compare with current theories on charge injection into organic semiconductors.

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