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Organic field effect transistors having single wall carbon nanotubes electrodes FABIO CICOIRA¹, MSE/Cornell University, CARLA M. AGUIRRE, PATRICK DESJARDINS, Genie Physique /Polytechnique Montreal, RICHARD MARTEL, Chimie/Universite de Montreal — Single Wall Carbon Nanotubes (SWCNTs) are of great interest as electrode materials in Organic Field Effect Transistors (OFETs). Thanks to their field emission properties, SWCNTs electrodes, in principle, are able to inject both electrons and holes into organics with low injection barriers, promoting tunneling injection. We well present recent result on the electrical properties of OFETs using *hairy* SWCNTs electrodes (see Figure 1), where the CNTs are attached on the substrate by means of metallic Ti contact pads. Devices with SWCNTs electrodes show improved injection characteristics compared with devices using conventional metallic electrodes.

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