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Novel polymer - attached Nitrogen - doped Carbon nanotube solar cells

A novel photovoltaic device employing poly-3-hexylthiophene attached N-CNTs as active layer, giving $V_{oc} > 0.3V$ and $J_{sc} \sim 1 \text{ mA/cm}^2$, at 100 mW/cm^2 white light illumination is presented. The polymer attached N-CNTs were produced by polymerizing 3-hexylthiophene using FeCl_3 catalyst in the presence of functionalized N-CNTs that had been synthesized by the floating catalyst CVD method.

Primary author: Mr BEPETE, George (DST/NRF Centre of Excellence in Strong Materials and Molecular Sciences Institute, School of Chemistry, University of the Witwatersrand, Private Bag 3, Johannesburg 2050, South Africa)

Co-authors: Mr MAMO, Messai A. (DST/NRF Centre of Excellence in Strong Materials and Molecular Sciences Institute, School of Chemistry, University of the Witwatersrand, Private Bag 3, Johannesburg 2050, South Africa); Prof. COVILLE, Neil J. (DST/NRF Centre of Excellence in Strong Materials and Molecular Sciences Institute, School of Chemistry, University of the Witwatersrand, Private Bag 3, Johannesburg 2050, South Africa); Dr CHIGUVARE, Zivayi (DST/NRF Centre of Excellence in Strong Materials, School of Physics, University of the Witwatersrand, Private Bag 3, Johannesburg 2050, South Africa)

Presenter: Mr BEPETE, George (DST/NRF Centre of Excellence in Strong Materials and Molecular Sciences Institute, School of Chemistry, University of the Witwatersrand, Private Bag 3, Johannesburg 2050, South Africa)

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