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Electroluminescence Properties of Carbon Nanotube Network Transistors BENOIT ST-ANTOINE, ELYSE ADAM, CARLA AGUIRRE, DAVID MENARD, Departement de genie physique, Ecole Polytechnique de Montreal, RICHARD MARTEL, Departement de chimie, Universite de Montreal — Carbon nanotubes network transistors (CNNT) open a promising route for the integration of nanotubes in electronics for that they circumvent major issues related to their fabrication. [1] They also reduce device-to-device discrepancies because they combine the properties of an ensemble of nanotube species. Here, we investigated the optoelectronic properties of the CNNT fabricated from different nanotube sources and found bright electroluminescent (EL) emission. The EL is specific to the nanotube source and can be linked using absorption spectra to their diameter distribution. (1) E.S. Snow, P.M. Campbell, M.G. Ancona, Appl. Phys. Lett., 2005, 86, 033105.

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