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High-frequency characterization of SWNT array FETs R. CALD-

WELL, J. HONE, K. SHEPARD, Columbia University — We discuss measurements of the high-frequency response of FET devices made from parallel arrays of SWNTs. Dense parallel arrays are grown by rapid-heating CVD using CO as a feedstock. Interdigitated finger pads are laid down to yield high-current devices. Devices are converted to pure semiconducting behavior by a selective burning technique, and are still able to carry currents in excess of 20 milliamperes. S-parameter testing using a high frequency network analyzer allows for full frequency characterization of the devices.

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