Supporting Information

Single Wall Carbon Nanotube Films for Photocurrent Generation. A Prompt Response to Visible Light Irradiation

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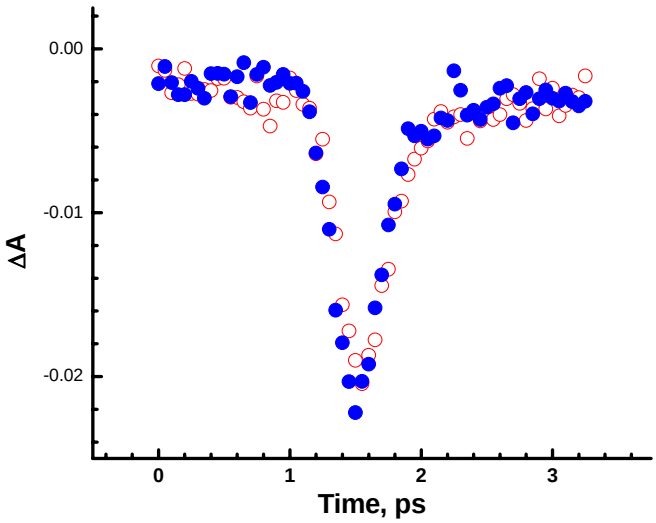
Description of the Movie on Electrophoretic Deposition. of SWCNT Film

Two optically transparent electrodes are held parallel (~5 mm apart) in a cell containing TOAB capped SWCNT suspension in THF. The electric field of 100V/cm is applied as the stopwatch is turned ON. The CNT's are slowly driven to the electrode on the right (positive electrode) and a film is deposited. The solution between the two electrodes (in the center part of the cell) becomes clear as all the CNTs are deposited on the electrode. At this stage the power supply is turned off and the electrode is washed with solvent to remove excess of TOAB.

Transient Absorption of SWCNT Film recorded following Laser Pulse Excitation



Time-resolved transient absorption spectra SWCNT film cast on an optically transparent electrode. The bleaching and its recovery at 590 nm was recorded using 387 nm laser pulse excitation (pulse width 150 fs). The traces were recorded with forward (solid circles) and reverse scan (open circles) of the probe pulse. The reproducibility of the two traces confirmed the transient recovery. The recovery consists of a fast component (laser pulse limited) and a slow component (~15% decay at longer times). The close packing of the SWCNT in the film is likely to enhance the annihilation of the excited state and enhance the rate of recovery of the signal.