2871 Near Infrared Optical Transduction on Single-Walled Carbon Nanotubes

Daniel A. Heller, Esther S. Jeng, Tsun-Kwan Yeung, Brittany M. Martinez, Anthonie E. Moll, and Michael S. Strano

Single-Walled Carbon Nanotubes have been developed into solution-phase optical sensors via transduction on the nanotube's surface. Detection involves spectral shifts in the carbon nanotube's intrinsic near-infrared fluorescence. Via near-infrared emission, the sensor can detect and relay information in solutions with high optical densities such as living tissue.