

Recent Research High Lights at the Center for Nano Science and Technology of University System of Taiwan

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The Center for Nano Science and Technology (CNST) of University System of Taiwan (UST) has been established for over two years. In addition to having established some advanced core facilities and common fabrication labs for the researchers in the UST, which consists of four national research universities (Central University, Chao Tung University, Tsing Hua university, and Yang Ming University), we have also grouped some of the best talents in its constituents to do research in some selected areas in nanoelectronics, nanophotonics and nanobiotechnology. In this presentation, I will present some high lights about our recent research progress and achievements. In particular, I will describe our efforts on advanced high k dielectrics for nanoelectronics, carbon nanotubes for both field emission and nanoelectronics applications, semiconductor quantum dots for 1.3 μm and 1.55 μm light sources and detectors, applying advanced photonic and AFM tools to address cell's and molecular dynamics and interactions in living cells, and developing new tools for future biological studies.

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