

Nanoelectrochemical Systems on CMOS



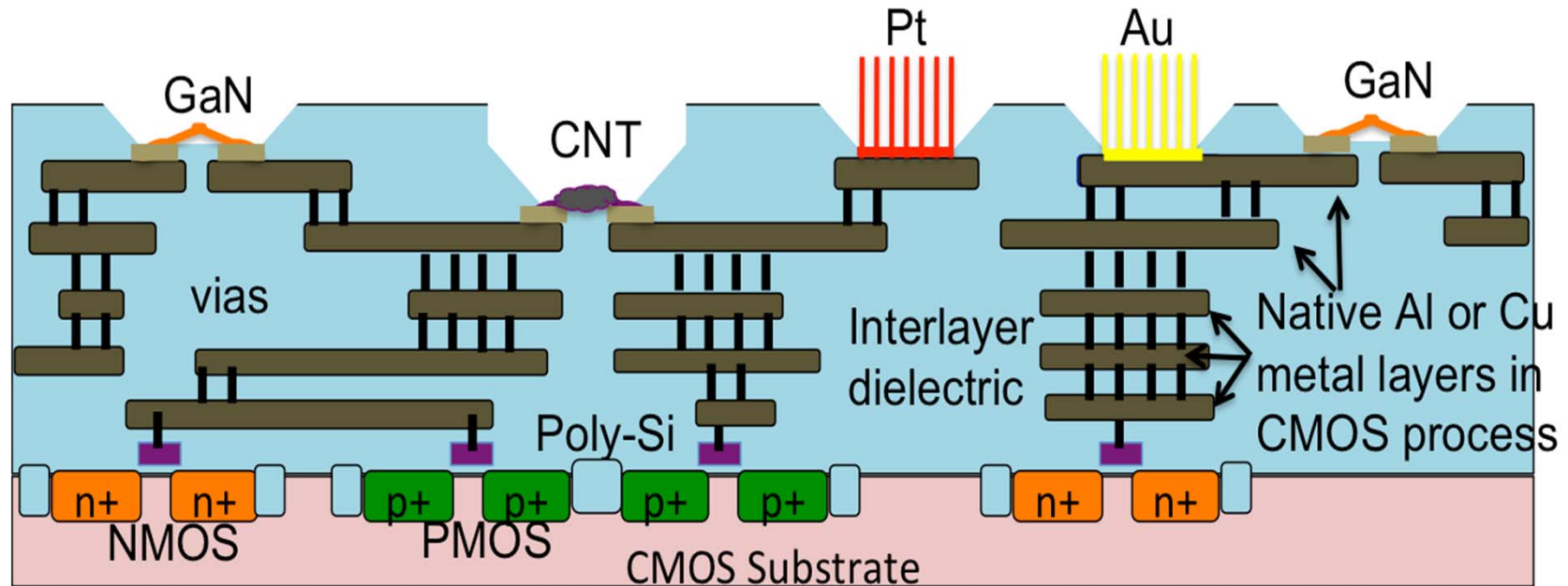
PI: Sameer R Sonkusale
Associate Professor
PhD University of Pennsylvania



Nanoscale Integrated Sensors and Circuits Laboratory
Department of Electrical and Computer Engineering
Advanced Technology Laboratory
200 Boston Avenue, Medford, MA 02155

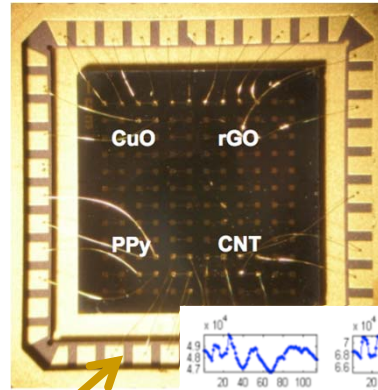
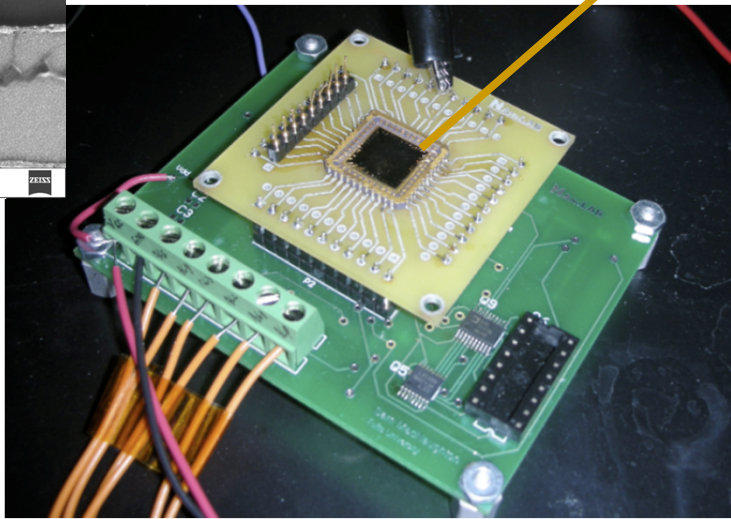
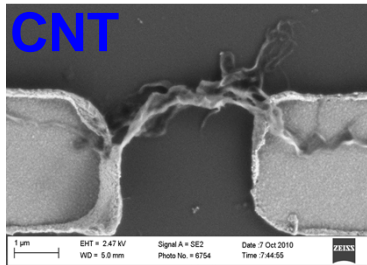
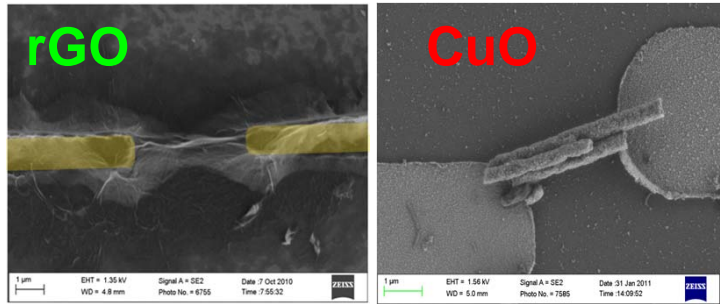


Goal



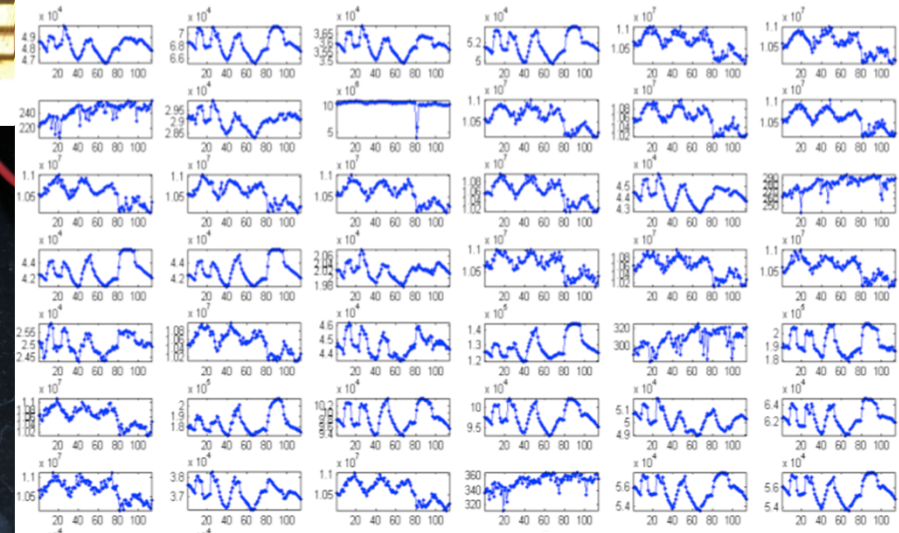
To develop a low-cost, mask-less nano-fabrication paradigm that combines the top-down process (CMOS) with the bottom-up approach (directed assembly) for single chip sensing applications

Artificial Nose

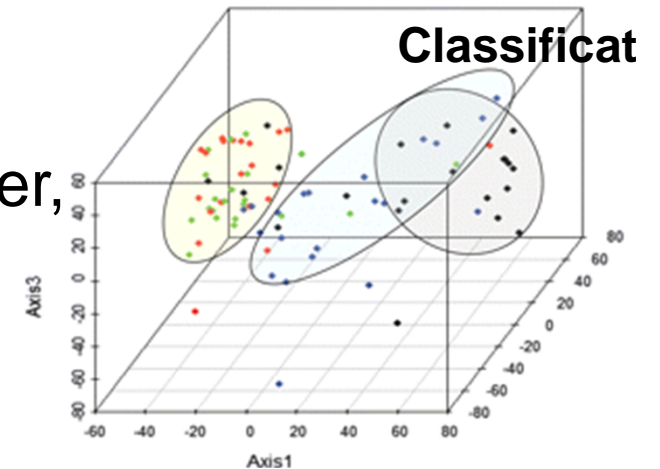


Sensor Chip

Sensor Array output



Breath diagnostics for detection of lung cancer, asthma, COPD is possible



Classificat