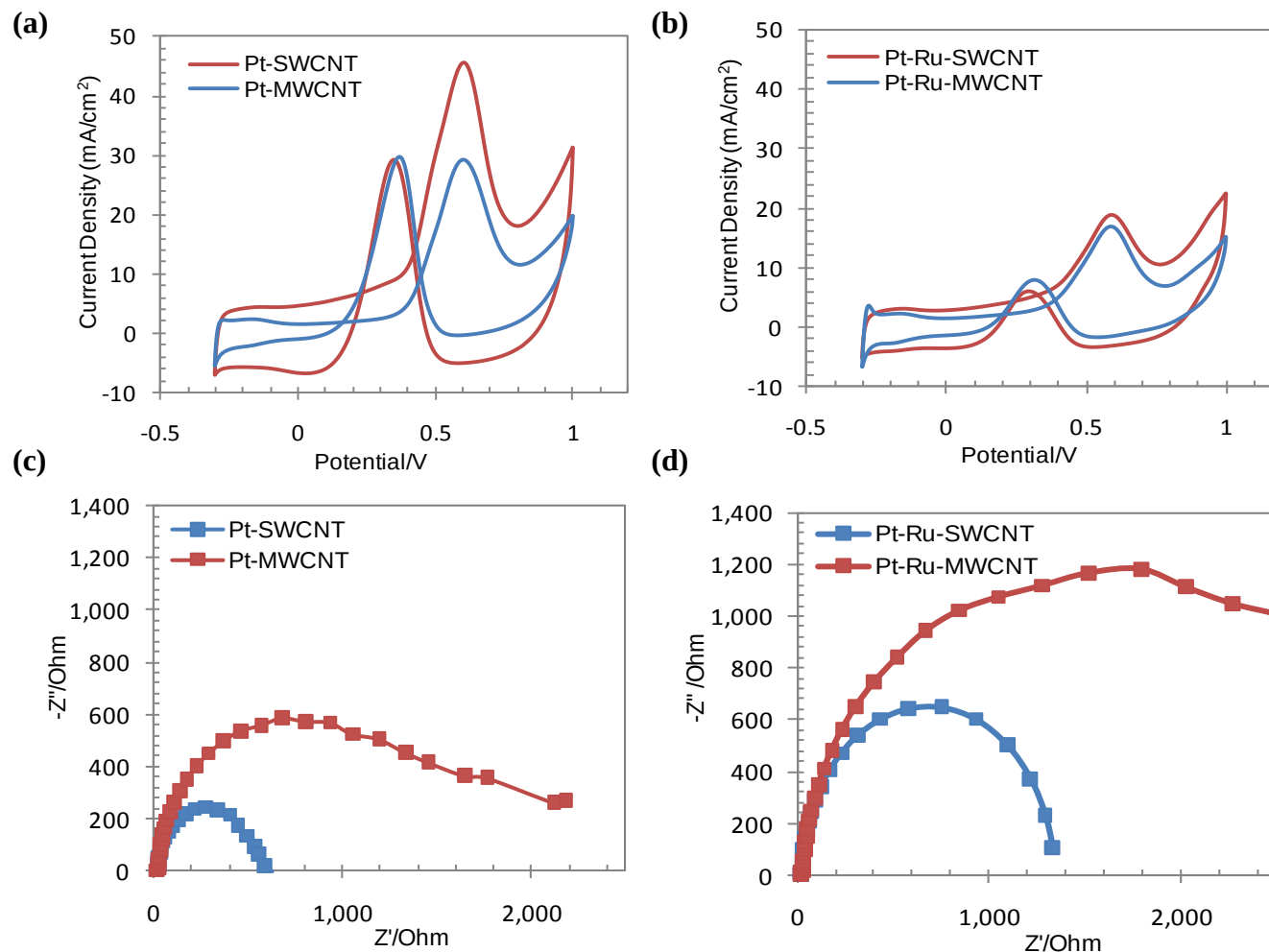


A Novel Approach for Controlled Synthesis of Single-Walled Carbon Nanotube-Supported Pt Nanoparticle Catalysts and their Electrochemical Properties

Lifeng Dong

Department of Physics, Astronomy, and Materials Science, Missouri State University



Electrocatalytic activity of SWCNT and MWCNT supported Pt and Pt-Ru nanoparticles for methanol oxidation: cyclic voltammograms of (a) Pt nanoparticles and (b) Pt-Ru nanoparticles in 1 M CH₃OH/0.5 M H₂SO₄ at 50 mV/s between -0.3 and +1.0 V vs. Ag/AgCl, and impedance plots of (c) Pt nanoparticles and (d) Pt-Ru nanoparticles at 0.3 V.