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Functionalization of Multibranched Carbon Nano-Rods and synthesis of metal transition oxides for sensing Applications

IRG :4
NASA
Collaboration

Multibranched amorphous graphitic carbon nanostructures were grown on porous alumina substrates to be used in protein immobilization applications. Their morpho-logical structure makes them mechanically stable to withstand chemical manipulations required by the immobilization protocols. We work with synthesis and the charac-terization of the nanostructures and intro-duce the procedures used to activate the surface . Also the fabrication of transition metal oxide nano and micros structures for thermal sensor.

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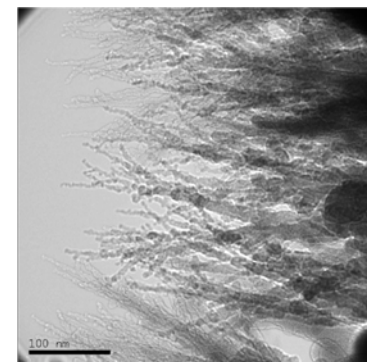
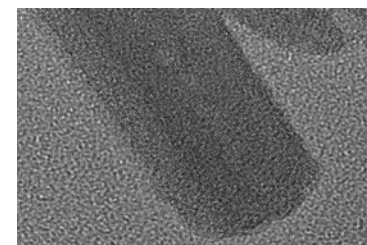


Figure 1: Nano trees



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Figure 2: MoO₃ nano rods

NASA Visit 2006-2010, Internship program at Cornell University (REU-CCMR), summer 2010