Science and Technology of Multifunctional Oxide and Ultrananocrystalline Diamond (UNCD) Films and Applications to a New Generation of Multifunctional Devices/System

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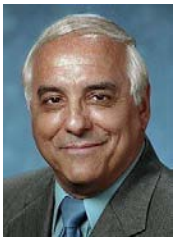
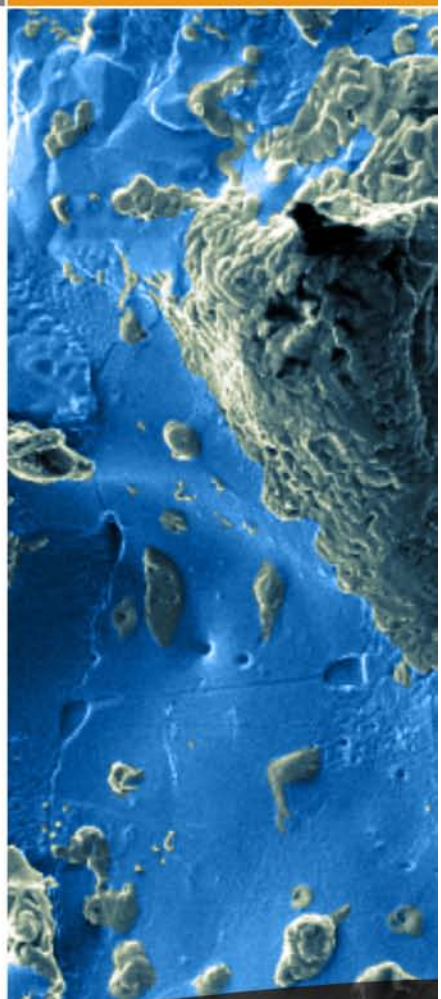


Orlando H. Auciello, Ph.D.

Argonne Distinguished Fellow
AAAS and MRS Fellow
Materials Science Division,
Argonne National Laboratory



Thursday

February 9, 2012

11:00 am

EMSL Auditorium

Abstract

New paradigms in the research and development of novel multifunctional oxide and nanocarbon thin films are providing the bases for new physics, new materials science and chemistry, and their impact in a new generation of multifunctional devices for micro/nano-electronics and biomedical devices and biosystems. This talk will focus on discussing the science, technology, and engineering of multifunctional oxide and nanocarbon thin films extensively investigated, developed and patented at Argonne National Laboratory during the last 15 years, and the efforts focused on integrating them into a new generation of micro/nano-electronic devices and implantable biomedical devices and biosystems.

Bio

Dr. Auciello has received international recognition for his research in the field of ferroelectric, ultra-nanocyrstalline diamond and high-k dielectric films. He has published more than 400 papers, which have been cited more than 6,300 times, and holds 15 patents. A sought-after speaker, he has given more than 200 talks at conferences around the world.