

1st AI-NanoFunc Workshop

Advanced Microstructural Characterization of Nanomaterials

Seville 5 July

08:45-09:10	Registration	
09:10-09:15	Welcome	
Session 1	New trends in advanced nanoscopies	L. C. Gontard; A. Kovacs
09:15-09:55	Inv. 3D characterization of complex nanostructures S. Lozano-Pérez	
09:55-10:00	questions	
10:00-10:15	<i>Applications of electron tomography to characterize the spatial distribution of nanoparticles</i> J.C. González	
10:15-10:20	questions	
10:20-10:35	<i>Crystal symmetry and domain structure of morphotropic PbZr_{1-x}Ti_xO₃-ceramics</i> R. Schierholz	
10:35-10:40	questions	
10:40-10:55	<i>Determination of nanostructure and chemical composition by TEM techniques in a complex CrAl(Y)N multilayered architecture</i> T.C. Rojas	
10:55-11:00	questions	
11:00-11:30	coffee break	
11:30-12:10	Inv. Advanced transmission electron microscopy: structure and composition of complex oxide interfaces M. Luysberg	
12:10-12:15	questions	
12:15-12:30	<i>Transmission electron microscopy as a tool to study defects in rock-forming minerals and high-pressure synthesised materials</i> A. Escudero	
12:30-12:35	questions	
12:35-12:50	<i>"An Essay on Contact Angle Measurements": Determination of Surface Roughness and Modeling of the Wetting Behavior</i> A. Terriza	
12:50-12:55	questions	
12:55-13:10	<i>Applications of atomic force microscopy to visualize magnetic domains and conductivity maps on the surfaces</i> C. Cerrillos	
13:10-13:15	questions	
13:15-15:00	lunch	
Session 2	Photonic and low dimensional nanostructures	T.C.Rojas; H. Miguez
15:00-15:40	Inv. Plasma assisted fabrication of 1D supported heterostructures A. Borras	
15:40-15:45	questions	
15:45-16:00	<i>A vacuum methodology for the fabrication of hybrid core@shell nanowires based on small molecules single crystal nanowires and nanocrystalline ZnO</i> M. Macias-Montero	
16:00-16:05	questions	
16:05-16:20	<i>Flexible, Self-standing and Selective UV-VIS-NIR Optical Filters Based on Polymer Infiltration of Porous One Dimensional Photonic Crystals</i> M.E. Calvo	
16:20-16:25	questions	
16:25-16:40	<i>Photonic Crystals for Enhanced Light Harvesting in Dye Solar Cells</i> C. Lopez-Lopez	
16:40-16:45	questions	
16:45-17:00	<i>Modification of Mesoporous Films by Electrochemical Doping- Impact on Photocatalytic and Photovoltaic Performance</i> Jesús Idígoras	
17:00-17:05	questions	
17:05-19:00	poster session	coffee break



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Session 3	Multifunctional Nanoparticles and Nanostructures	A.Fernandez; J.C.Sanchez-Lopez
09:30-10:10	Inv. Nanotechnology for life science: an example of bottom up approach, from PVD reactor to in-vivo evaluation	S. Lucas
10:10-10:15	questions	
10:15-10:30	<i>TEM of hybrid Au nanoparticles capped with allylamine</i>	L.C. Gontard
10:30-10:35	questions	
10:35-10:50	<i>Nanosecond-laser control of the dichroism in supported silver nanoparticles deposited by evaporation at glancing angles</i>	A. N. Filippin
10:50-10:55	questions	
10:55-11:25	coffee break	
Session 4	Catalytic Materials	A.Fernandez; J.C.Sanchez-Lopez
11:25-11:40	<i>Microstructure, chemical stability and conductivity of LSM based cathodes obtained by mechanochemical method at room temperature</i>	R. Moriche
11:40-11:45	questions	
11:45-12:25	Inv. Quantitative electron microscopy for rationalizing the activity and stability of nanocatalysts	J.J.Delgado
12:25-12:30	questions	
12:30-12:45	<i>The Co-Ru-B series as catalysts for hydrogen generation: synergistic effect, chemistry and nanostructure</i>	G.Arzac
12:45-12:50	questions	
12:50-13:30	Inv. Looking into Copper in CO-PROX Catalysts: A Multitechnique Approach	G. Munuera
13:30-13:35	questions	
13:35-13:45	Closure ceremony dedicated to Prof. Guillermo Munuera in occasion of his retirement	
13:45	Farewell cocktail	

