



SCIENTIFIC PROGRAMME

10th JULY

Time	Title	Speaker
12:00 h	ARRIVAL OF PARTICIPANTS	
13:00 – 15:20	LUNCH TIME	
Chair: Dr. Felip SANDIUMENGE		
15:20 – 15:30	Welcome	XAVIER OBRADORS
15:30 – 16:15	Beyond electro-static effects at oxide hetero-interfaces: Electrochemical phase change, strong electric field and strain	Bilge Yildiz
16:15 – 16:35	Mechanisms of novel transient liquid assisted growth for ultrafast production of YBa ₂ Cu ₃ O _{7-x} thin films	Laia SOLER
16:35 – 16:55	The role of Oxygen exchange kinetics in the engineering of carrier concentration of YBa ₂ Cu ₃ O _{7-x} thin films	Alexandr STANGL
16:55 – 17:25	Coffee-Break	
Chair: Prof. ^a Amparo FUERTES		
17:25 – 17:45	Light emission from C60 molecules explored at the atomic scale	Pablo MERINO
17:45 – 18:10	Synthesis, structure and magnesium diffusion in MgMoN ₂ : a combined experimental and theoretical approach	Roberta VERRELLI
18:10 – 19:00	SPEED FAST POSTER PRESENTATIONS (2')	
20:00 – 22:30	DINNER	

11th JULY

Time	Title	Speaker
Breakfast (buffet)		
Chair: Prof. Xavier OBRADORS		
09:00 – 09:45	Influence of granularity and artificial pinning centers on superconducting properties of thick YBCO films grown on technical templates	Ruben HÜHNE
09:45 – 10:05	Reversible tuning of spin textures and resistance states in High Temperature Superconducting films	Anna PALAU
10:05 – 10:25	Transient Liquid Assisted Growth of YBa ₂ Cu ₃ O _{7-δ} films at low oxygen pressure	Jordi FARJAS
10:25 – 10:45	Chemical growth techniques to nanoengineer functional oxide thin films and interfaces	Mariona COLL
10:45 – 11:15	Coffee-Break	
Chair: Dr. Gervasi HERRANZ		
11:15 – 11:35	First-principles theory of polar twin boundaries in ferroelastic SrTiO ₃	Massimiliano STENGEL
11:35 – 11:55	CONSOLIDER NanoTHERM, an overview: Nanostructuring materials to empower Thermoelectricity	Alejandro GOÑI
11:55 – 12:15	Tunneling through ferromagnetic La ₂ Co _{1-x} Mn _{1+x} O ₆ ultrathin insulating barrier	Laura LÓPEZ-MIR
12:15 – 12:35	Formation of complex molecular nanostructures by on-surface synthesis	Nerea RUIZ DEL ARBOL
12:35 – 12:55	Complex behaviour of Mn _{0.85} Co _{0.15} WO ₄ multiferroic crystal disclosed by resonant magnetic x-ray scattering	Javier HERRERO-MARTÍN
12:55 – 13:20	SPEED FAST POSTER PRESENTATIONS (2')	
13:20 – 15:30	LUNCH TIME	
Chair: Dr. Lourdes FÀBREGA		
15:30 – 16:15	Sustainable materials applied to electronics	Elvira FORTUNATO
16:15 – 16:35	Competition between octahedral tilts and polar shifts in perovskites	Jaume GÁZQUEZ
16:35 – 16:55	High temperature properties of frustrated Fe-based multiferroics	Arnau ROMAGUERA
16:55 – 17:30	SPEED FAST POSTER PRESENTATIONS (2')	

17:30 – 19:00	Coffee-Break and POSTER SESSION
20:00 – 22:30	DINNER

12th JULY

Time	Title	Speaker
Breakfast (buffet)		
Chair: Prof. Alejandro GOÑI		
09:00 – 09:45	The role of metal-oxide grain boundaries for applications in photovoltaics and spintronics	Keith McKENNA
09:45 – 10:05	Spin currents generated with oxide magnetic insulators	Ferran MACIÀ
10:05 – 10:25	Real and reciprocal space mapping of multifunctional plasmonic and photonic systems	Rafael Cichereho
10:25 – 10:45	Time dependent Adjustable magnetoelectric coupling in Martensitic FeRh alloys	Ignasi FINA
10:45 – 11:15	Coffee-Break	
Chair: Prof. Benjamín MARTÍNEZ		
11:15 – 11:35	Magnetic simulations of structures and devices: from skyrmions to metamaterials	Núria del VALLE
11:35 – 11:55	Thermal conductivity of silicon dioxide close to a structural phase transition from first principles	Hugo ARAMBERRI
11:55 – 12:15	Structural distortions triggered by the most common YBCO defect: the Y2Ba4Cu8O16 intergrowth	Bernat MUNDET
12:15 – 12:35	Tailoring lattice strain and ferroelectric polarization of epitaxial BaTiO3 thin films on Si(001)	Lyu JIKE
12:35 – 12:55	Thermal boundary resistance of domain walls in ferroelectric oxides through non-equilibrium molecular dynamics	Juan Antonio SEIJAS BELLIDO
12:55 – 15:30	LUNCH TIME	



Chair: Dr. Carles NAVAU		
15:30 – 16:00	Analytical microsystems for biochemical detection	César FERNÁNDEZ-SÁNCHEZ
16:00 – 16:20	Atomic-specific mapping of the magnetization decoupling in Ce-substituted YIG films	Hari Babu VASILI
16:20 – 16:40	Piezo-generated charge mapping revealed through direct piezoelectric force microscopy	Andrés GÓMEZ
16:40 – 17:00	Thermoelectric far-infrared sensors fabricated on SiGe membranes	Pablo VACCARO
17:00 – 17:30	Summary and conclusions	Xavier Obradors
17:30	END OF SESSION	