

Programme CEN2023
12/06/2023

CONFERENCIA ESPAÑOLA DE NANOFOTONICA

ZARAGOZA 2023, JUN 12 - 14

Title	Authors	Contribution	Starts	Ends
Welcome CEN 2023	Luis Martín Moreno		8:45	9:00
On the response to disorder in photonic structures	Cefe Lopez	Keynote Speaker	9:00	9:45
Nanoneuro: optically manipulating neuronal activity with nanoparticles	Teresa Celaya-Garmendia, F.J. Alfaro-Mozaz, Zuzanna Lawera, Marek Grzelczak, Rafael Yuste, Aitzol García-Etxarri	Oral	9:45	10:05
Investigation of the ultrastructure of cancerous cells using infrared nano-imaging and nano-spectroscopy	Florina Marxer, Carlos Sanchez Cano, Marta Gallego, WolfgangParak, Rainer Hillenbrand and Martin Schnell	Oral	10:05	10:25
Enhanced BTO/SiN platform with VO2 technology for 956nm-length amplitude switching	Juan José Seoane, Jorge Parra, Juan Navarro, Pablo Sanchis	Oral	10:25	10:45
Bismuth plasmonic metastructures: a versatile route for structural color generation	Fernando Chacón, Carlota Ruiz de Galarreta, Eva Nieto-Pinero, Marina Garcia-Pardo, Nicolás Ramos, Martín Lopez-García, Jan Siegel, Rosalía Serna	Oral	10:45	11:05
Coffee Break (30min)				
Engineering gold nanorods for label-free detection of toxic gases by surface enhanced Raman spectroscopy	Kissia Batista Ferreira, Marta Lafuente Adiego, Sergio Gutiérrez-Rodrigo, Reyes Mallada Viana, María Pilar Pina Iritia	Oral	11:35	11:55
Applications of light and porous anodic alumina for sensing and drug delivery	Josep Ferre	Oral	11:55	12:15
Interaction-driven circular dichroism through absorption modes in stacked triskelia nanostructures	Javier Rodríguez -Álvarez	Oral	12:15	12:35
Thermal photonics with emerging materials	Georgia T. Papadakis	Invited	12:35	13:05
Control of radiative heat transfer in nanostructures	Juan R. Deop-Ruano and Alejandro Manjavacas	Oral	13:05	13:25
Novel Thermal Emission Features Enabled by Temporal Metamaterials	J. Enrique Vázquez-Lozano and Iñigo Liberal	Oral	13:25	13:45
Lunch (1h 30min)				
Rare Earth Platforms for Quantum Nanophotonics	Philippe Goldner	Invited	15:15	15:45
Modelling and design of photonic structures for quantum levitation	Sol Carretero Palacios	Invited	15:45	16:15
Strongly driven quantum emitters for quantum applications	Carlos Sánchez-Muñoz	Invited	16:15	16:45
Gallium sulfide as a phase-change material for photonic applications	Yael Gutiérrez	Invited	16:45	17:15
Coffee Break (30min)				
Remote near-field infrared spectroscopy of vibrational strong coupling	Carlos Maciel Escudero, Irene Dolado, Elizaveta Nikulina, Evgenii Modin, Francisco Calavalle, Shu Chen, Andrei Bylinkin, Francisco Javier Alfaro-Mozaz, Jiahua Li, James H. Edgar, Fèlix Casanova, Saül Vélez, Luis E. Hueso, Ruben Esteban, Javier Aizpurua, Rainer Hillenbrand	Oral	17:45	18:05
Photonic processing of microwave signals via on-chip silicon optomechanical cavities	Laura Mercadé Morales	Oral	18:05	18:25
Tuning of Quantum Emitters in 2D Materials by Strain Fields	Javier Martín-Sánchez	Oral	18:25	18:45
Dirty and Messy Cavity-Optomechanics	Pedro David Garcia	Oral	18:45	19:05

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Optical and Electronic Fourier Surfaces	David J. Norris	Keynote Speaker	9:00	9:45
Emerging inorganic chalcogenides for photovoltaic applications	Ana Raquel Caballero Mesa	Invited	9:45	10:15
Multiband solar cell based on Nitrogen diluted	María Nair López Martínez	Invited	10:15	10:45
Photonics to Enhance the Performance of Perovskite based Optoelectronic Devices	Miguel Anaya	Invited	10:45	11:15
Integrating 2D materials and plasmonics on lithium niobate platforms for pulsed laser operation at the nanoscale	Mariola O Ramirez, Pablo Molina, David Hernandez-Pinilla, Guillermo López-Polín, Fabrice Leardini, Manesh Chhowalla, Pablo Ares, Julio Gómez-Herrero and Luisa E. Bausá	Oral	11:15	11:35
			Coffee Break (30min)	
Hyperbolic light interacting with molecules	Alexey Nikitin	Invited	12:05	12:35
Biotic photonic materials as sustainable platforms for light manipulation at the nanoscale	Martin Lopez-Garcia	Invited	12:35	13:05
Exploring quantum spin models with Rydberg atom arrays	Daniel Barredo	Invited	13:05	13:35
Template-assisted fabrication of periodic arrays: patterning meets chirality	David Vila-Liarte, Mathias Charconnet, Luis Pérez, Agustín Mihi, Luis M. Liz-Marzán	Oral	13:35	13:55
			Lunch (1h 30min)	
Single accurate nanoparticle patterning onto photonic nanostructures	Javier Redolat Querol, María Camarena Pérez, Amadeu Griol, Mirovslana Kovylna, Angelo Xomalis, Jeremy J. Baumberg, Alejandro Martínez Abietar, Elena Pinilla Cienfuegos	Oral	15:30	15:50
Nanophotonic structures for efficient light-emission of perovskite nanocrystals	Jose Mendoza-Carreño, Clara Otero-Martínez, Lakshminarayana Polavarapu Nicolas Passarelli, Luis A. Perez, Pau Molet, Juan Sebastian Reparaz, Maria Isabel Alonso, Agustin Mihi	Oral	15:50	16:10
Functionalized metasurface-based refractometer for high-sensitivity measuring of bulk liquid samples	Jose Antonio Álvarez-Sanchis. Borja Vidal	Oral	16:10	16:30
			Coffee Break (30min)	
Porous TiO ₂ optical sensing layers created using bottom-up synthesis methods	Jaime García-Rupérez, Salvador Ponce-Alcántara, David Ortiz de Zárate	Oral	17:00	17:20
Perovskite quantum dots coupled to optical cavities	Clara Bujalance, Laura Calìo, Carlos Romero-Pérez, Mauricio E. Calvo, David Otto Tiede, Juan Galisteo López, Hernán Míguez	Oral	17:20	17:40
Resonant nanophotonics with strong molecular dipoles	Sara Nuñez Sánchez	Oral	17:40	18:00
			Poster Session (18:00 - 20:00)	

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Title	Authors	Contribution	Starts	Ends
Solar energy: Current trends, recent developments and the role of nanophotonics	Christiane Becker	Keynote Speaker	9:00	9:45
Programmable dielectric metasurfaces. A path for efficient dynamic control of light wavefronts	Ramón Paniagua	Invited	9:45	10:15
Nonlinear and quantum nanophotonics with two-dimensional materials	Carlos Antón-Solanas	Invited	10:15	10:45
Computing the optical response of molecular materials: From nano to device scales	Ivan Fernandez-Corbaton	Invited	10:45	11:15
Non-locality in the optical response of plasmonic nanostructures: a dispersive surface-response formalism	Antton Babaze, Tomas Neuman, Ruben Esteban, Javier Aizpurua, and Andrei G. Borisov	Oral	11:15	11:35
Optimization of the design parameters for a graphene-on-SiN integrated waveguide mode filter	Fernando Martín-Romero, Francisco J. Díaz-Fernández, Víctor J. Gómez	Oral	11:35	11:55
			Coffee Break (30min)	
The two-level approximation in ultrastrong waveguide quantum electrodynamics	Sergi Terradas Briansó	Oral	12:25	12:45
Electronic probing and manipulation of nanophotonic phenomena	Jaime Abad-Arredondo	Oral	12:45	13:05
Exploring electron-light interactions in nanoplasmonics	P. André D. Gonçalves and F. Javier García de Abajo	Oral	13:05	13:25
Engineering Bound States in the Continuum in metasurfaces based on graphene nanodisks arrays	Jose Luis Pura, Juan Ramón Deop-Ruano, Alejandro Manjavacas, Jose Antonio Sánchez-Gil	Oral	13:25	13:45
Tight-binding model of a 3D photonic crystal	Antonio Morales Pérez, Aitzol García Etxarri, Maia García Vergniory and Juan Luis Mañes Palacios	Oral	13:45	14:05
			Lunch (1h 30min)	