



European Materials Research Society

2023 Spring Meeting May 29 | June 2

40<sup>th</sup> Anniversary

Congress & Exhibition Centre, Strasbourg, France

## SYMPOSIUM F

Smart materials for nanoelectronics and nanophotonics

*Symposium Organizers:*

Yogendra Kumar MISHRA, University of Southern Denmark

Dawid JANAS, Silesian University of Technology, Poland

Maksym KOVALENKO, ETH Zurich, Switzerland

Teresa MONTEIRO, University of Aveiro, Portugal



**APL Machine  
Learning**

**Monday May 29**

**F01**  
**Plasmonics 1**

**Chairperson(s) : MISHRA Yogendra Kumar - SHARMA Sunny**

**OPS (Ground floor)**

<b>08:45</b>	<b>758</b>	<b>INV</b>	Silicon nanowires: synthesis and characterization of the plasmonic properties	<b>PUGLISI Rosaria Anna</b>
<b>09:30</b>	<b>1221</b>		Selective IR emitters based on plasmonic metasurfaces - design and fabrication	<b>CRISTEA Dana</b>
<b>09:45</b>	<b>1360</b>		Self-Assembled Au Nanoparticle Monolayers on Silicon in Two- and Three-Dimensions for SERS Sensing	<b>BARTSCHMID Theresa</b>

**Monday May 29**

**F02**  
**Plasmonics 2**

**Chairperson(s) : MISHRA Yogendra Kumar - PUGLISI Rosaria Anna**

**OPS (Ground floor)**

<b>10:30</b>	<b>534</b>	<b>INV</b>	Periodic Arrays of Epitaxially Aligned Atomically Flat Single-Crystal Gold Nanoplates	<b>NERETINA Svetlana</b>
<b>11:00</b>	<b>712</b>		Plasmonic nanoparticles growth in polymeric thin films in situ monitored by spectroscopic ellipsometry	<b>KFOURY Patrick</b>
<b>11:30</b>	<b>2618</b>		Probing into the plasmonic effect on surface reactions of Au clusters on CeO <sub>2</sub> and UO <sub>2</sub> single crystals and thin films	<b>IDRISS Hicham</b>
<b>11:45</b>	<b>2847</b>	<b>INV</b>	Charge transport mechanisms in printed thin films based on two-dimensional materials	<b>TORRISI Felice</b>

**Monday May 29**

**F03**  
**Plasmonics 3**

**Chairperson(s) : AVASTHI Devesh Kumar - PUGLISI Rosaria Anna**

**OPS (Ground floor)**

<b>13:00</b>	<b>2853</b>	<b>INV</b>	Nanoengineered Surfaces for Functional Applications: Self-Cleaning/Wetting Control / SERS-PIERS	<b>AKTAS Oral Cenk</b>
<b>13:30</b>	<b>2279</b>	<b>INV</b>	Smart materials based on metallic nanowires: a brief overview	<b>BELLETT Daniel</b>
<b>14:00</b>	<b>2710</b>		Plasmonic effect of aluminum nanoparticles elaborated by self assembling method	<b>LACHEBI Ines</b>
<b>14:15</b>	<b>1358</b>		Bimetal Ag/Cu/PEG plasmonic nanofluids prepared by sputter-based gas aggregation cluster sources	<b>BILIAK Kateryna</b>
<b>14:30</b>	<b>1033</b>		Nanostructured dielectric metasurfaces and plasmonic displays via controlled fluid Instabilities	<b>DASGUPTA Tapajyoti</b>
<b>14:45</b>	<b>2083</b>		Rh in the Gap: Maximizing E-Field Enhancement Within Nanorod Heterodimers	<b>PIASKOWSKI Joshua</b>

**Monday May 29**

**F04**  
**Plasmonics 4**

**Chairperson(s) : AVASTHI Devesh Kumar - SHARMA Sunny**

**OPS (Ground floor)**

<b>15:00</b>	<b>123</b>	<b>INV</b>	Friend or foe: Unraveling the SiO evolution reaction and how it impacts silicon quantum formation	<b>VEINOT Jonathan</b>
<b>15:30</b>	<b>955</b>		Modulation of optical properties in self-assembled Carbon dot-Plasmonic functional nanohybrids	<b>REALE Marco</b>

**Monday May 29**

**F05**

**2D Materials**

**Chairperson(s) : JANAS Dawid - MISHRA Yogendra Kumar**

**OPS (Ground floor)**

<b>16:30</b>	<b>535</b>	<b>INV</b>	Liquid metals for harvesting low dimensional materials	<b>KALANTAR-ZADEH Kourosh</b>
<b>17:00</b>	<b>130</b>		Liquid metal-based synthesis of high mobility 2D semiconductors	<b>DAENEKE Torben</b>
<b>17:15</b>	<b>642</b>		Ternary Mixed Metal Thiophosphate (FexMnyNiz)2P2S6 (x + y + z = 1) - Study of structural evolution and tuning of physical properties.	<b>CHATURVEDI Apoorva</b>
<b>17:30</b>	<b>848</b>		Intrinsic ionic superlattices in two-dimensional DJ-phase oxide perovskites	<b>CHO Kyungjune</b>
<b>17:45</b>	<b>1118</b>		De-wrinkling the 2D black phosphorus using electron beam irradiation	<b>KAUR Manpreet</b>
<b>18:00</b>	<b>1137</b>		First Principle Investigation of Strain Induced Electronic Properties of Janus MoSeTe Monolayer	<b>SINGH Sanjai</b>
<b>18:15</b>	<b>2257</b>		3D-Heterostructuring via Mechanochemical Reshuffling of Layered and Non-Layered 2D - Metal Chalcogenides.	<b>BALEMA Viktor</b>

**Tuesday May 30**

**F06**

## **Electronic Applications 1**

**Chairperson(s) : PUGLISI Rosaria Anna - SRIVASTAVA Sanjeev Kumar**

**OPS (Ground floor)**

<b>10:00</b>	<b>1503</b>	<b>INV</b>	2D materials in back-gate field effect transistors: electric transport and photoresponse	<b>DI BARTOLOMEO Antonio</b>
<b>10:30</b>	<b>960</b>		Electrical Transport in Monolithic Al-Si/Al-Ge Heterojunction based Nanowire Schottky Barrier Field-Effect Transistors	<b>SISTANI Masiar</b>
<b>10:45</b>	<b>282</b>		Integrated photodetectors for compact Fourier-transform waveguide spectrometers	<b>GROTEVENT Matthias J.</b>
<b>11:00</b>	<b>711</b>		Reconfigurable Silicon Transistors with Single-Elementary Metal Contacts for Complementary and Combinational Logic	<b>BEHRLE Raphael</b>
<b>11:30</b>	<b>493</b>		Tin-based phases distribution along silicon nanowires matrix	<b>LIU Poting</b>
<b>11:45</b>	<b>2187</b>		Excellent Ferroelectric and Long Retention Response in $\beta$ -PVDF thin film Prepared by Direct Heat-Controlled Spin Coating	<b>MALIK Pinki</b>

**Tuesday May 30**

**F07**

## **Electronic Applications 2**

**Chairperson(s) : PUGLISI Rosaria Anna - SHARMA Sunny**

**OPS (Ground floor)**

<b>14:00</b>	<b>496</b>		Green Electrically Conductive Textile with Tunable Piezoresistivity and Transiency	<b>CATALDI Pietro</b>
<b>14:15</b>	<b>348</b>		Molecular Engineering Improves Thermoelectric Performance of Carbon Nanotubes/p-Conjugated Organic Small Molecule Hybrids	<b>KIM Tae-Hoon</b>
<b>14:30</b>	<b>312</b>		Controlling Liquid Crystal Topological Defects on Fixed Boojum Colloidal Arrays via Capillary-Assisted Particles Assembly	<b>YUN Hee Seong</b>

**Tuesday May 30**

**F08**

## **Nanomaterials growth**

**Chairperson(s) : JANAS Dawid - MISHRA Yogendra Kumar**

**OPS (Ground floor)**

<b>15:00</b>	<b>587</b>	<b>INV</b>	Square Tin Dioxide Nanotubes: Synthesis, Structure, and Devices	<b>ALLEN Martin</b>
<b>15:30</b>	<b>1451</b>		Optical and electrical properties of magnetron sputtered CrN films for thermoelectric devices	<b>BULIR Jiri</b>
<b>15:45</b>	<b>2003</b>		Improved low temperature sinter bonding using Ag nanocube superlattices	<b>GOUGEON Julie</b>

**Tuesday May 30**

**F09**

## **Electronic Applications 3**

**Chairperson(s) : SHARMA Sunny - SRIVASTAVA Sanjeev Kumar**

**OPS (Ground floor)**

<b>16:30</b>	<b>2434</b>	<b>INV</b>	Phase transition in atomically thin structures for memristive devices	<b>SONG Peng</b>
<b>17:00</b>	<b>907</b>		Ag-PEG nanofluid – a versatile medium with memristive properties	<b>NIKITIN Daniil</b>
<b>17:15</b>	<b>543</b>		Immobilizing polyoxovanadates on surfaces as molecular memristors	<b>MOORS Marco</b>
<b>17:30</b>	<b>2716</b>		Polyoxometalate memories fabricated with coplanar nanogap electrodes	<b>GEORGIADOU Dimitra</b>
<b>18:00</b>	<b>1131</b>		In-situ TEM Observation of Filament Formation in Twined Copper Oxide Nanowire for Resistive random-access memory	<b>HUNG Ching-Heng</b>
<b>18:15</b>	<b>1387</b>		HfO <sub>2</sub> -based memristive devices for neuromorphic networks that learn from mistakes	<b>NIKIRUY Kristina</b>

**Wednesday May 31**

**F10**

**Energy/Sensors 1**

**Chairperson(s) : KUMAR Vipin - MISHRA Yogendra Kumar**

**OPS (Ground floor)**

<b>10:00</b>	<b>2850</b>	<b>INV</b>	Engineering photocatalytic 2D systems using Atmospheric pressure plasma jet for wastewater treatment	<b>KRISHNAMURTHY Satheesh</b>
<b>10:30</b>	<b>141</b>		Advanced Characterization of SnO <sub>2</sub> and TiO <sub>2</sub> Nanomaterials for Energy Applications	<b>KAVAN Ladislav</b>
<b>10:45</b>	<b>1786</b>		Low cost, high yield zinc oxide based nanostars for alkaline overall water splitting	<b>DI MARI Gisella Maria</b>
<b>11:00</b>	<b>1683</b>		Cost-effective spray coating of graphene ink for smart antifog substrates in sustainable greenhouse applications	<b>LEONARDI Antonio Alessio</b>
<b>11:15</b>	<b>2731</b>		One pot synthesis of Cu@M (M=Ni, Sn) bimetallic core-shell nanowires for a new generation of transparent electrodes	<b>KRIZAN Andela</b>
<b>11:30</b>	<b>2018</b>		A new platform based on MoTe <sub>2</sub> (1-x)Se <sub>2x</sub> alloy and functionalized with EGaIn nanoparticles for H <sub>2</sub> gas sensing	<b>GORDILLO Nuria</b>
<b>11:45</b>	<b>750</b>		Publishing for Impact: A guide to peer review and tips & tricks to make your paper stand out	<b>ALLEN Jeremy</b>

**Wednesday May 31**

**F11**

**Energy/Sensors 2**

**Chairperson(s) : KUMAR Vipin - PUGLISI Rosaria Anna**

**OPS (Ground floor)**

<b>13:30</b>	<b>641</b>	<b>INV</b>	Tetrapods based Smart Materials for Advanced Technologies	<b>MISHRA Yogendra Kumar</b>
<b>14:00</b>	<b>354</b>		Novel Nanoporous Gold Organic Hybrid Materials for Photocatalytic Oxidation Reactions	<b>WITTSTOCK Arne</b>
<b>14:15</b>	<b>559</b>		Enhanced the selectivity and sensitivity of SnO <sub>2</sub> -rGO nanocomposites synthesized from sol-gel for NO gas sensors	<b>SINGH Vishal</b>

14:30	2240	Metal Halide Perovskites as Gas Sensing Elements: From Bulk to Micro to Nano	ALEXAKI Konstantina
14:45	2057	Fabrication of MoTeSe alloy based hydrogen gas sensor	TABARES Gema

**Wednesday May 31**

**F12**

## Energy/Sensors 3

Chairperson(s) : AVASTHI Devesh Kumar - SRIVASTAVA Sanjeev Kumar

**OPS (Ground floor)**

15:00	1634	INV	Cu-based nanostructures embedded in transparent and conductive oxides thin films: new plasmonic systems for photovoltaic applications	BOSCARINO Stefano
15:30	1489		Photothermal Application of Plasmonic Titanium Nitride Nanotubes in Solar Steam Generation	AFSHAR Morteza
15:45	2667		Gold nanorods as shape-dependent light-harvesting plasmonic enhancers in perovskite solar cells	CARVALHO Diogo

**Wednesday May 31**

**F\_P**

## Poster session

**Etoile (1st floor) - 4.30 p.m to 6.30 p.m**

01_75	pH sensing, bioimaging, and Fluorescence lifetime imaging microscopy using polyethyleneimine coated carbon dots and gold nanoparticles	SHWETA PAWAR Shweta
02_1147	Cellulose Acetate-Based Plasmonic Crystals for Surface-Enhanced Raman and Fluorescence Spectroscopy	RICE James
03_1239	Fabrication of Ag nanostructures directly from Piezo Inkjet printed equidistance microdots for surface plasmonics resonance enhancement	AISSA Brahim
04_1257	The influence of the shape and size of gold nanoparticles on their ultrafast plasmon relaxation dynamics	TAMULEVICIUS Sigitas



<a href="#">05_1427</a>	Morphology optimized MoS <sub>2</sub> /Ag nanocomposites based SERS substrates with ultralow detection limits	<b>KAUSHIK Arvind</b>
<a href="#">07_2469</a>	Electron tomography: a powerful method for the characterization of Au chiral nanoparticles.	<b>MYCHINKO Mikhail</b>
<a href="#">08_162</a>	High quantum yield InP based quantum dots synthesis and QD film coating to prevent light pollution	<b>LEE Jeong-Mi</b>
<a href="#">09_202</a>	InP quantum dot adhesive sheet with high dissipating bio-inspired composite 4CL resins	<b>LEE Min-Sang</b>
<a href="#">10_465</a>	Optical Activation of Different Rare-Earth Ions Implanted into AlN Nanowires	<b>CORREIA Maria</b>
<a href="#">11_632</a>	Optimized NiO/ZnS Nanoparticles as a Hole Injection Layer for Enhanced Quantum Dot Light-Emitting Diodes	<b>KIM JungHo</b>
<a href="#">12_635</a>	Highly efficient quantum dots light-emitting diodes with a Zn <sub>0.85</sub> Mg <sub>0.15</sub> O thin films as an electron transport layer by RF sputtering	<b>KIM Bomi</b>
<a href="#">13_1495</a>	Thermoluminescent powder lead material doped with Gd <sup>3+</sup> /Sm <sup>3+</sup>	<b>AVETISOV Igor</b>
<a href="#">14_1787</a>	Ionizing radiation detection and dosimetric applications of Cr-doped Zinc Gallogermanate	<b>BATISTA Maria</b>
<a href="#">15_2037</a>	Impact of functionalization of MoTe <sub>2</sub> (1-x)Se <sub>2x</sub> alloy by EGaIn nanoparticles on its optical properties	<b>MAGRO Raúl</b>
<a href="#">16_2258</a>	Optically active centres in Pr-implanted β-Ga <sub>2</sub> O <sub>3</sub> single crystals	<b>ZANONI Julia</b>
<a href="#">17_2267</a>	Synchrotron-excited luminescence of Zn <sub>2</sub> SiO <sub>4</sub> nanoparticles in ion-implanted silica	<b>BUNTOV Evgeny</b>
<a href="#">18_2291</a>	Luminescent performance of polylactic acid/lanthanide-based metal-organic framework composites	<b>ZANONI Julia</b>
<a href="#">19_2590</a>	Study of passive, active and smart programmable shape memory nanocomposite polymers for 3D printing	<b>GUARNACCIO Ambra</b>
<a href="#">20_170</a>	Strong piezoelectric response in two-dimensional van der Waals layered CuInP <sub>2</sub> S <sub>6</sub> for piezoelectric nanogenerators	<b>IO Weng Fu</b>
<a href="#">21_485</a>	Facile fabrication of tin monoxide and application of bendable memristor	<b>LEE Dong Jin</b>

22_946	Giant photo-amplification in air-stable a-CsPbI <sub>3</sub> nanocrystals / WS <sub>2</sub> 0D / 2D mixed-dimensional phototransistor with asymmetric contacts	DAS Shreyasi
23_1912	Nanoscale probing of surface potential landscape at MoS <sub>2</sub> /BP van der Waals p-n heterojunction	RATURI Mamta
24_2585	Transparent and anti-icing MXene-polymer self-cleaning coatings for solar panels	MARIAM Ezrah
25_278	Characteristics of V doped TiO <sub>2</sub> thin films fabricated by spray coating system for photovoltaic application	PARK Yong Seob
26_830	X-ray absorption spectroscopy study of ZnS:M (M=Mn, Cu) nanoparticles	KUZMIN Alexei
27_846	Comparison of Electroconductive Properties of Silver, Copper-Silver and Copper Nanowire Films	POLYAKOV Boris
28_873	Dispersion kinetics of silver, gold and palladium nanofilms deposited onto oxide materials and annealed in vacuum	STESYUK Tatyana
29_909	Synthesis, characterization and spectroscopic properties of Er, Yb -doped SrTiO <sub>3</sub> ceramics sintered from sol-gel derived powders	TIHON Elena-Cristina
30_922	Investigation of rare earth (Er, Yb) effects on structural, morphological, and optical properties of SrTiO <sub>3</sub> doped ceramics elaborated from sol-gel synthesized nanopowders.	STANCIU Catalina
31_1215	Study of the stabilization of the orthorhombic phase pure ZrO <sub>2</sub> deposited on a Nb:SrTiO <sub>3</sub> substrate with different orientations, using TEM/HRTEM techniques	ISTRATE Marian Cosmin
32_1340	numerical simulation of splat formation dynamics of two molten ceramic particles in plasma spray process	BENOUMSAAD Kamel
33_2278	Bio-Inspired Polymeric Functional Platform for Sensing application	VERMA Gulshan Kumar
34_606	Composition effect of Pd-Au gradient alloy core on hydrogen gas sensing performance of Pd-Au-gr-alloy@ZnO core-shell nanoparticles	TRAN Tuong Van
35_2551	MOF Textile Patch for Humidity Sensing	XU Lulu
36_647	Nickel Coated Silver Core-Shell Nanowires for High Efficient Electromagnetic Interference Shielding	SAHOO Raghunath

<a href="#">38_1487</a>	A new efficient strategy based on light management to improve the broadband photodetector performances	<b>DJEFFAL Faycal</b>
<a href="#">39_1492</a>	A efficient design paradigm of nanoscale junctionless TFET via global and multi-objective optimization approach	<b>DJEFFAL Faycal</b>
<a href="#">40_1794</a>	Relationship between Processing Conditions and Electrical Properties of Single-Walled Carbon Nanotube Networks for Infrared Detectors	<b>SHIBUYA Taizo</b>
<a href="#">41_2264</a>	Quantum study of different structures of the Cis-Trans transition of substituted polyacetylene by different methods: semi empirical AM1+PM6, HF (Ab-initio) and DFT (B3LYP)	<b>MASMOUDI Redha</b>
<a href="#">42_62</a>	A mechanochromic strain sensor of wide working range with angle compensators	<b>NGUYEN Hoang Minh</b>

Thursday June 1

F13

## Synthesis/Characterization 1

Chairperson(s) : PUGLISI Rosaria Anna - SRIVASTAVA Sanjeev Kumar

OPS (Ground floor)

10:00	1523	INV	The Amphipathic Nature of Pristine Graphene Flakes and Short and Thin Pristine Carbon Nanotubes	MILOWSKA Karolina Z.
10:30	2299		Novel self-assembled supramolecular dyads on graphene	KREHER David
10:45	2557		Synergy effects in carbon/magnetic nanoparticles epoxy resin composites	MACUTKEVIC Jan
11:00	1663		Study of Magneto-Electric (M-E) Coupling Effect in Spin Triangle Based Metal (III) Carboxylate $[M_3O(O_2CPh)_6(py)_3] ClO_4 \cdot py$ (M= Fe, Ga) Molecular Nanomagnet.	CHAUHAN Balwant Singh
11:15	233		Influence of Fe and Cu Co-Doping on Structural, Magnetic and Electrochemical Properties of CeO <sub>2</sub> Nanoparticles	ALSHOAIBI Adil
11:30	235		Structural, Electrical and Optical Properties of TM (Mn and Cr) Doped BiFeO <sub>3</sub> Nanoparticles	ALSHOAIBI Adil
11:45	406		Synthesis of palladium nanoparticles using colloid approach	SALDAN Ivan

Thursday June 1

Fbis01

## Photonics/Optoelectronics 1

Chairperson(s) : MISHRA Yogendra Kumar - SHARMA Sunny

Madrid 1 (Ground floor)

10:00	688	INV	Nanoprobes based on 3D GaP nanocones prepared by integration on single mode fibre.	NOVÁK Jozef
10:30	124		Improvement of strained quantum well based on new material ZnSnN <sub>2</sub> /InyGa <sub>1-y</sub> N for optical components applications	AISSAT Abdelkader
10:45	1428		Absorption dominant electromagnetic interference shielding effectiveness of reduced graphene oxide/zinc oxide coated cellulose-based textiles	GUPTA Shivam

11:00	790		Inverted top-emitting red quantum-dot light-emitting diodes on silicon for microdisplay applications	SIM Soobin
11:15	1531		Oxidation in nanocrystalline silicon: spatial resolution, photooxidation, and photoluminescence quenching after laser irradiation	RAMIREZ-PORRAS Arturo
11:30	1963		Synthesis and optical characterization of NIR photoluminescent PbS nanocrystal-based aerogels	PLUTA Denis

Thursday June 1

F14

## Synthesis/Characterization 2

Chairperson(s) : AVASTHI Devesh Kumar - KUMAR Vipin

OPS (Ground floor)

13:30	1526	INV	Solution grown multifunctional ZnO nanostructures: From heterostructured to large-scale efficient growth	GOKARNA Anisha
14:00	1678		Structural, electrical and optical properties of indium-zinc oxide thin films prepared from solutions	KUSCER Danjela
14:15	1707		Synthesis of 3D metal oxide fiber networks using polymer-egg protein electrospun fibers as templates	EVANGHELIDIS Alexandru
14:30	1153		Influence of electrodes on electrical properties of CBVD grown high-k composite ternary oxides.	RANI Rashmi
14:45	1370		High uniform thickness thin film on 450 mm substrates by Chemical Beam Vapour Deposition for smart multi-functional complex oxides	BENVENUTI Giacomo

Thursday June 1

Fbis02

## Photonics/Optoelectronics 2

Chairperson(s) : MISHRA Yogendra Kumar - SHARMA Sunny

Madrid 1 (Ground floor)

13:30	287	INV	Enhancing the Electrical and Optical Properties of Thermochromic VO <sub>2</sub> : The Impact of Nanostructuring and Gold Nanoparticles	SAVORIANAKIS Gregory
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14:00	2218		Thermo- and Electrochromic Properties of Nanostructured Porous Silicon/VO <sub>2</sub> Hybrid Thin Films	VOLK János
14:15	2103		Antireflective structures directly imprinted on chalcogenide glasses	TZADKA Sivan
14:30	1566		One-step printing for high-efficiency metasurfaces down to the deep Ultra violet region	KIM Wonjoong
14:45	1357		Smart radiation fluxes for nanoelectronics and nanophotonics	EGOROV Vladimir

Thursday June 1

F15

### Synthesis/Characterization 3

Chairperson(s) : AVASTHI Devesh Kumar - JANAS Dawid

OPS (Ground floor)

15:00	1763	INV	Engineering hexagonal/monoclinic WO <sub>3</sub> phase junctions for improved electrochemical hydrogen evolution reaction	MINEO Giacometta
15:30	588		All-ceramic Zirconia-Alumina Nanofibers for Durable Passive Daytime Radiative Cooling	CHEN Tai-Chi

Thursday June 1

Fbis03

### Photonics/Optoelectronics 3

Chairperson(s) : BENIWAL Ajay - MISHRA Yogendra Kumar

Madrid 1 (Ground floor)

15:00	460	INV	New Emissive Organic-Inorganic Hybrid Nanomaterials Based on Organic Fluorophores Grafted onto Nanocrystals	MARGEAT Olivier
15:30	1864		Spectroscopic studies of hybrids derived from organic-phosphonic acid with alkaline earth elements (Mg, Ca, Sr, Ba)	GANESAN Parameshwari
15:45	1420		EDOT-based nanostructures written by STED-inspired nanolithography	GVINDZHILIA Georgii

Thursday June 1

F16

## Synthesis/Characterization 4

Chairperson(s) : AVASTHI Devesh Kumar - SRIVASTAVA Sanjeev Kumar

OPS (Ground floor)

16:30	2677	INV	Direct Laser Writing of Complex 3D Ag Nanoparticle Patterns inside Prefabricated Polymer Microstructures	LAVELLE Luisa
17:00	2662		Mechanical and Optical Properties of Silica Nanocomposite Microstructures Fabricated via Direct Laser Writing	AUGUSTINE Amrutha
17:15	700		Gelation Methods to Achieve Tunable Properties of Semiconductor and Noble Metal Nanoparticles in Assemblies	ROSEBROCK Marina
17:45	1467		Preparing and exploring the versatility of mixed surface silicon quantum dots	TRACH Jonathan
18:00	851		One-Step printed metahologram using Nanoparticle-Embedded-Resin	PARK Chanwoong
18:15	361		Elaboration and characterization of pure carbon transparent electrodes presenting equivalent performances to Indium Tin Oxide	MEYER Renzo

Thursday June 1

Fbis04

## Photonics/Optoelectronics 4

Chairperson(s) : BENIWAL Ajay - SHARMA Sunny

Madrid 1 (Ground floor)

16:30	1700	INV	Efficient White LEDs Made of Near Unity Emitting Quantum Dots for Wide Color Gamut Displays	ONAL Asim
17:00	444		Zinc germanate ( $Zn_2GeO_4$ ) deep-red emitter	BATISTA Maria
17:15	2683		Investigations on shape-property relationship of magnetic and persistence luminescence nanomaterials coupled in a single assembly	ULLAH Hameed
17:30	1962		Understanding the texture degree on Zinc Aluminate Nd, Ce sub-micrometer films by screen printing for NIR Emitting applications	ROJAS HERNANDEZ Rocio

<b>18:00</b>	<b>1119</b>	Rare-earth complex as self-calibrated photoluminescent sensor for low-range pressure measurement	<b>ZHOU Yujiao</b>
<b>18:15</b>	<b>914</b>	Nanocatalyst-enabled physically unclonable functions as smart reversible anticounterfeiting agents with instrument-free AI-aided authentication	<b>MOGLIANETTI Mauro</b>



Friday June 2

F17

## Photonics/Optoelectronics 1

Chairperson(s) : BENIWAL Ajay - MISHRA Yogendra Kumar

OPS (Ground floor)

08:45	982	INV	Reconfigurable THz Metamaterials: Present and Future	SHARMA Sunny
09:15	2019		Beyond Metal-Halide Perovskites: Metal Free Halide Perovskites as Materials for THz Photonics	GALLOP Nathaniel
09:30	1516		Kerker Conditions in Mid-index Mesoscale Dielectric Materials	MANNA Uttam
09:45	1220		Patternable Physical Unclonable Functions Based on Racemized Photonic Crystals	PARK Hyewon

Friday June 2

F18

## Nanomaterials Growth and Applications

Chairperson(s) : MISHRA Yogendra Kumar - PUGLISI Rosaria Anna

OPS (Ground floor)

10:30	2792	INV	Nature-inspired Shapes Using Integration of Electrospinning and Additive Processing for Atmospheric Water Harvesting	VASEASHTA Ashok
11:00	2786		Materials at Nanoscale: Manifestations of Quantum Phenomena and Other Aspects	SRIVASTAVA Sanjeev Kumar
11:15	2768		Disposable Sensors for Non-invasive Disease Detection: Current Trends and Future	BENIWAL Ajay
11:30	1462		Green and Facile Synthesis of Hyperbranched Gold Nanostructures for SERS Applications	REGULACIO Michelle D.
11:45	2754		Low Energy Ions Induced Structural Modifications in Tungsten Carbide (WC) thin films	BIST Shristi

