



European Materials Research Society

2024 Spring Meeting

May 27 - 31 / Strasbourg Convention Centre

SYMPOSIUM G

Nanomaterials for healthcare and biomedical engineering

Symposium Organizers:

Gerardo F. GOYA, Condensed Matter Physics Department,
University of Zaragoza, Spain

Małgorzata KUJAWSKA, Department of Toxicology,
Poznan University of Medical Sciences, Poznan, Poland

Sanjay MATHUR, Department of Chemistry, University of Köln,
Institute of Inorganic and Materials Chemistry, Germany

Yogendra Kumar MISHRA (Main organizer), Mads Clausen Institute,
University of Southern Denmark, Sønderborg, Denmark

Yunbing WANG, Sichuan University, National Engineering Research
Center for Biomaterials, P. R. China



Monday May 27
G01_Metal Oxide Nanomaterials for Healthcare

MARIE CURIE B - FIRST FLOOR

08:45	1329	INV	Tailoring ZnO Nanowire Dimensions through Anodization for Enhanced Antibacterial Efficacy and Self-Powered Dual Energy Harvesting	TUFAN Yigithan
09:15	299		Oxygen vacancy rich ZnO/CeO ₂ quantum dots for multi-modal sono-photodynamic cancer therapy through augmented cascade-enzyme mimicking behaviour	SARKAR Sayoni
09:30	244		Antibacterial and Catalytic efficiency of Transition Metal Doped ZnO Thin films coated over large surfaces	KHARROUBI Bachir
09:45	867		Evaluating the antineoplastic action of LASSBio-1735-covered superparamagnetic iron oxide nanoparticles	FERREIRA Fabio Furlan

Monday May 27
G02_Carbon Nanomaterials and Graphene for Healthcare

MARIE CURIE B - FIRST FLOOR

10:30	110	INV	The plant-inspired GO reinforced chitosan-gelatin bone scaffold with exceptional mechanical and hydrophilic properties	MA Xiao
11:00	2967		Surface Modified Laser-Induced Graphene based Flexible Biosensors for Multiplexed Sweat Analysis	CHOUDHURY Sudipta
11:15	113		Lithium halide filled carbon nanocapsules: Paving the way towards lithium neutron capture therapy (LiNCT)	SANDOVAL Stefania
11:30	1092		Carbon Nanotubes As Carriers for Hydrophobic Bioactive Compounds	ALISARAIE Laleh
11:45	2269		Synthesis and Toxicity Evaluation of Graphene Oxide Nanosheets for Ecological Implications	REDKAR Neha

Monday May 27
G03_3D Printed Materials for Healthcare

MARIE CURIE B - FIRST FLOOR

13:45	1098	INV	3D Printed Liquid Metal Valve on PCB for Microfluidic Applications	HAMZA Ahmed
14:15	1433		3D-printed lightweight high-strength mandibular scaffolds integrated with nanohydroxyapatite-reinforced biocomposite and titanium alloy thin plates	CHO Kiho
14:30	700		Electrically Conductive Biomaterials for Controlling Stem Cell Fate	GELMI Amy
14:45	2392		Tetrapods based Smart Materials for Advanced Technologies	MISHRA Yogendra Kumar
15:00	1055		A three-dimensional ex ovo model of vascularized tumor as a platform for screening nanomaterials in cancer therapy	LEFEVRE Marie
15:15	2946	INV	Micro- and Nanostructured Functional Surfaces for Orthopaedic and Dental Implants	AKTAS Oral Cenk
15:45	316		Impact of Gaussian curvature of nanoparticles on cellular uptake	KUMARI Pramina
16:00	3056		Therapeutic Organic Nanocrystals for Drug Delivery	Corvis Yohann
16:15	150	INV	A Real BandAid: Incorporating Artificial Intelligence (RI) into Biomaterials and Nanomedicine	Webster Thomas
16:45	1620	INV	Microstructure-Dependent Optical Properties of Doped Spinel Oxide Nanosystems	BEKE David

Monday May 27
GP01_Poster Session

ETOILE - FIRST FLOOR

16:30	01_1014	120	01_1014 Evaluation of physical, electrochemical and antimicrobial properties of surface-modified Co alloy after plastic processing and 3D printing intended for urological applications	SZEWCZENKO Janusz
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16:30	02_1021	120	02_1021 Modification of the surface topography and metallographic structure of Ti6Al4V scaffolds using thermal treatment	SZEWCZENKO Janusz
16:30	03_1022	120	03_1022 Bioresorbable, implantable materials loaded with anticancer drugs-degradation study and in vitro anticancer activity on prostate cancer cells	SZEWCZENKO Janusz
16:30	04_1027	120	04_1027 Physicochemical properties of Ta2O5 layers on NiTi alloy substrate	SZEWCZENKO Janusz
16:30	05_1028	120	05_1028 Evaluation of mechanical and physicochemical properties of Ti6Al4V alloy after plastic working and 3D printing intended for orthopedics implants	SZEWCZENKO Janusz
16:30	06_1029	120	06_1029 Numerical analysis of atraumatic vascular clamps used during cardiac surgery	SZEWCZENKO Janusz
16:30	07_1334	120	07_1334 Enhancing Biomolecular Detection with Clickable Azide-Functionalized Retroreflective Janus Particles as Biophotonic Probes	LEE Kyung-Jin
16:30	08_1569	120	08_1569 Acoustic stimulation based on piezoelectric materials for reducing the proliferation of triple negative breast cancer cells	CARDOSO Vanessa
16:30	09_1632	120	09_1632 Combined experimental, computational, and machine learning approach to calculating pore sizes in capped MOF systems and initial studies with MOF-5 and triphenyl acetate caps	DARER Samuel
16:30	10_1646	120	10_1646 Organic Nanoparticles with Aggregation-Induced Emission and Two-Photon Excitation for Fluorescence Imaging of Living Cells/ Tissues	ZHAO Xiurong
16:30	11_1703	120	11_1703 Plasmonic nano-composites loaded with retinoic acid for precise theranostics in neuroblastoma	GHOSAL Manorama
16:30	12_1845	120	12_1845 New approaches to directly image the surface of the nucleus at nanometer scale	BOROWIAK Alexis
16:30	13_1883	120	13_1883 Immobilization of lignin micro/nanoparticles on polymer nanofibrous mats as potential antimicrobial and antioxidant textiles	SOUAWDA Nada
16:30	14_2008	120	14_2008 Impact of the Hydrocarbon Chain Length of Biodegradable Ester-bonded Cationic Gemini Surfactants on Self-assembly, in-vitro Gene Transfection, Cytotoxicity, and Antimicrobial activity	DAHAL Homen

16:30	15_2040	120	15_2040 Tailoring the properties of TiO ₂ nanotubes for superior anticoagulant efficiency	MISHRA Subhashree
16:30	16_2078	120	16_2078 Structure-Oriented Design Strategy (SODS) for Enhanced PDT effect : Case Studies with BDPTV and Mito-AIE-Cl	KIM Heejeong
16:30	17_2146	120	17_2146 Macrocyclic Diacetylene based Multi-functional Soft Nanostructures	KADAMANNIL Nila Nandha
16:30	18_2224	120	18_2224 3D printed membrane-based hollow fibers for cell encapsulation and enrichment	YU Yafeng
16:30	19_2259	120	19_2259 Microfluidic processing of biodegradable and electroactive nanocarriers for tissue engineering	FERNANDES Mariana
16:30	20_2335	120	20_2335 Functionalization of paper-based substrates for early sepsis biomarkers detection	ALMEIDA SILVA Cláudia Sofia
16:30	21_2395	120	21_2395 Amylovis-grafted contrast agents as tracers for the detection of Alzheimer's disease by Magnetic Resonance Imaging	GUERRERO PORRAS Gabriel Rafael
16:30	22_2492	120	22_2492 Carbon-Dot-Decorated Silver and Gold Nanocomposites for Antibacterial Activity and Degradation of Organic Dyes	GHOSH Purnadas
16:30	23_2606	120	23_2606 Carbon-Dot-Decorated Silver and Gold Nanocomposites for Antibacterial Activity and Degradation of Organic Dyes	GHOSH Purnadas
16:30	24_2613	120	24_2613 Synthesis, Assembling and Monitoring/Diagnostics of Nucleic Acids and Healthcare/Biomedical Applications	HAN Mingyong
16:30	25_2676	120	25_2676 Electrocatalytic Reduction of nitrate ions at Cu electrode modified by Cu ₂ O thin film	HAMMACHE Houa
16:30	26_2802	120	26_2802 Organic Molecular Crystals Thin-film Transistors Charge Carrier Tuning Effect and Their Biosensing Investigation	LI Siyu
16:30	27_2846	120	27_2846 Photoactive Triphase Oxides for Reliable Detection of Femtomolar-Level Alzheimer's Biomarkers	KIM Kayoung
16:30	28_2898	120	28_2898 3D Photonic crystal amplified fluorescent emission enhancement of Mn ₃ O ₄ Quantum Dots	P JACOB Dhanya
16:30	29_2919	120	29_2919 Composite coatings for hard tissue engineering	GRUMEZESCU Valentina
16:30	30_2989	120	30_2989 Antibacterial activity of Ag-Cu alloy nanoparticles obtained by green process	MAKHOLOUFI Laid

16:30	31_2995	120	31_2995 Specific and label-free sensing of Enzyme-DNA interaction with BioFET in the realm of drug discovery	SHUBHAM Babbar
16:30	32_3013	120	32_3013 Laponite-CPO hydrogels for applications in skin wounds	MARCIANO Fernanda
16:30	33_357	120	33_357 Adaptive Organization of Silver Nanomaterials for Metal-like Conductivity and Stretchable Strain-insensitive Nanocomposite	PARK Chansul
16:30	34_892	120	34_892 A Physicochemically Compatible Ferrofluid Droplet Robot for Automated Bioanalytical Assays	AU YEUNG Christina Chi Ki

Tuesday May 28

G04_Quantum Dots in Healthcare Technologies

MARIE CURIE B - FIRST FLOOR

08:15	2534	INV	Quantum Dot Based Fluorescent Biosensing Device for early detection of cancer .	TIWARI Arpita
08:45	301	INV	Phenol-containing Boron Nitride Quantum Dots: Synthesis, Optical Properties and Cell Damage Protective Effects	PETRALIA Salvatore
09:15	946		Quantum Dot Based Fluorescent Biosensing Device for early screening and detection of cancer biomarkers	TIWARI Arpita
09:30	2186		Optical tracing and inhibition of metastatic tumor with metal quantum clusters	SHARMA Priyanka

Tuesday May 28

G05_Nanoparticles for Healthcare Applications

MARIE CURIE B - FIRST FLOOR

10:30	163	INV	Effects of Silver Nanoparticle Exposure on Mouse Organs, Tissues, and Behavior: Implications for Human Health	GARCIA Sheena Anne Henson
11:00	365		Design, Fabrication, and Characterization of Plasmonic Nanoarrays for Point-of-Care Diagnostics	SOYLUKAN Caner
11:15	410		Plasmonic Hot-Spot Generation for SERS Application through Foldable Polymeric Materials	DEMIREL Gokhan
11:30	759		Dual-Mode Optical and Electrochemical Sensing Using Luminescent Gold Nanoclusters on ITO-PET Substrate	CHIECHIO Regina Maria
11:45	1473		Inorganic/Organic Nanocomposite Particle (I/O-NP) Tracer design for Magnetic Particle Imaging (MPI).	GIARDIELLO Marco
12:00	266	INV	Single-Crystal Gold Films as a Novel Platform for Biosensors	NERETINA Svetlana

Tuesday May 28
G06_Layered Materials for Healthcare

MARIE CURIE B - FIRST FLOOR

13:45	1430	INV	Biocompatible-L-Cysteine-Capped MoS2 Nanoflowers for Antibacterial Applications: Mechanistic Insights	KAUSHIK Rupal
14:15	2909		Efficient One-Step Synthesis of MoS2 on FTO substrate for Targeted Detection of Dopamine	THOMAS Christeena
14:30	438		The Design and Applications of Membrane-intercalating Conjugated Oligoelectrolytes	ZHOU Cheng
14:45	1000		External magnetic-field driven delivery of exosomes modulates immune and metabolic changes of dystrophic muscle	MONGUZZI Angelo
15:00	629		Photocatalytic removal of gaseous ethyl acetate in a continuous reactor pilot scale : reactor efficiency in simulated real conditions	HAJJAJI Mohamed Aziz
15:15	3106	INV	How nano is shaping up the future corneal transplantation	Patra Hirak

Tuesday May 28
G07_Hydrogels for Biomedical Engineering

MARIE CURIE B - FIRST FLOOR

16:30	641	INV	Highly adhesive hydrogel patches fabricated from the design of polymer network for the wound dressing of human beings	LAN Bin
17:00	2708		Protein-Driven Hydrogel Lenses: Unveiling Biocompatible, Transparent, and pH-Responsive Optical Actuators	KAEEK Maria
17:15	2577		Tailoring mechanical properties of bioprinted GelMA scaffolds with multilayers of PLA/Laponite nanocomposite fibers	OLIVEIRA LOBO Anderson
17:30	677		Microfluidics for small Extracellular vesicles	TORINO Enza
17:45	741		Soft tissue-like ultrathin membrane-based fluidic system	SHUM Ho Cheung
18:00	2658	INV	Multifunctional Blood-Contacting ECM Materials Based on Dual-Bond Polymerization Crosslinking Method	GAOYANG Guo

Wednesday May 29
G08_Coatings and Composites for Healthcare Technologies

MARIE CURIE B - FIRST FLOOR

08:45	2720	INV	Investigation of the antibacterial properties of silver-doped amorphous carbon coatings produced by low pressure magnetron assisted acetylene discharges	JOB Valentin
09:30	648		PDMS/ZnS:Cu Flexible Composites for Self-Powered Applications via Triboelectricity and Mechanoluminescence	HAJRA Sugato
09:45	1859		Controlling silk fibroin/black phosphorous conformation for printable, NIR-responsive, and multistate resistive memory biomaterials	VALENTINI Luca

Wednesday May 29
G09_Nanostructures for Biosensing

MARIE CURIE B - FIRST FLOOR

10:30	518	INV	Label-free Optical Biosensors based on Silicon Nanowires	LEONARDI Antonio Alessio
11:00	651		Biodegradable self-powered sensor for bacteria detection using triboelectric nanogenerator	PANDA Swati
11:30	992		Ultra-sensitive Copper Oxide Sensor to Detect Hydrogen Sulfide in Human Oral Cavity	ZAN Hsiao-Wen
11:45	1680		Air sampling and simultaneous detection of airborne influenza virus via gold nanorod-based plasmonic PCR	NAM Kang Sik

Wednesday May 29
GP02_Poster Session

ETOILE - FIRST FLOOR

13:45	01_1	105	01_1 Metal-Organic Framework with Enhanced Defects for Effective Elimination of Micro-Pollutants from Water	Haidar Ola
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13:45	02_1012	105	02_1012 Physical properties of the PEEK+HA/TCP composite used for implants manufactured using FFF 3D printing technology	SZEW CZENKO Janusz
13:45	03_1037	105	03_1037 Attomolar-level detection of respiratory virus long-chain oligonucleotides based on FRET biosensor with upconversion nanoparticles and Au-Au dimer	MA Yingjin
13:45	04_1154	105	04_1154 Plasmon-Enhanced FRET Biosensor Based on Tm ³⁺ /Er ³⁺ Co-doped Core-Shell Upconversion Nanoparticles for Ultrasensitive Virus Detection	LAO Xinyue
13:45	05_1215	105	05_1215 Microfluidic Chip-assisted Upconversion Luminescent Materials of Biosensing Platform for Point-of-care Virus Diagnostics	LIU Yuan
13:45	06_1253	105	06_1253 Nanoporous Gold SERS (Surface-Enhanced Raman Spectroscopy) Substrates for Effective Peanut Allergen (Ara h1) Detection	HUH Yoonseo
13:45	07_1262	105	07_1262 Oil Droplets Enclosed by Ultrastable Double-Network Hydrogel Shell for High Payload and Controlled Release of Lipophilic Drugs	OH Yoonjin
13:45	08_1290	105	08_1290 Designing Tough Microbeads and Microcapsules Composed of Highly-Entangled Hydrogels through Droplet Microfluidics	HAMONANGAN WAHYU MARTUMPAL
13:45	09_1335	105	09_1335 Antibiotic and silver loaded apatite for bone tissue healing	BUSTIUCEL Sergiu Ionut
13:45	10_1340	105	10_1340 Antibiotic and silver loaded apatite for bone tissue healing	BUSTIUCEL Sergiu Ionut
13:45	11_138	105	11_138 Sub-picomolar Dopamine Detection using Flexible Paper-based Sensor on Two-dimensional Cobalt Telluride	CHAKRABORTY Anyesha
13:45	12_164	105	12_164 Impact of Fe-based Nanoparticles on Oxidative Stress and Antioxidant Responses in Mice Organs	GARCIA Sheena Anne Henson
13:45	13_165	105	13_165 Impact of Iron-based Nanoparticles on Oxidative Stress and Antioxidant Responses in Mice Organs	GARCIA Sheena Anne Henson
13:45	14_205	105	14_205 Global nanomedicine market dynamics: state, features, and influencing factors	STETSYUK Tatyana
13:45	15_253	105	15_253 Fabrication and characterization of Zn-hydroxy double salt-loaded composite: Antimicrobial and flame-retardancy properties	REDA Alemtsehay Tesfay

13:45	16_278	105	16_278 Surface modification of zirconia substrates by bioactive glass nanoparticle coating for enhancing biocompatibility	KIM Young-Jin
13:45	17_3103	105	17_3103 Advanced carriers for Drug and RNA Encapsulation: Bioconjugation and Quantification of Molecules	IQBAL Sumiya
13:45	18_440	105	18_440 The Role of Structural Hydrophobicity on Cationic Amphiphilic Aggregation-Induced Emission Photosensitizer-Bacterial Interaction and Photodynamic Efficiency	LEE Mei Suet
13:45	19_442	105	19_442 Recyclable and Environmentally Friendly Magnetic Nanoparticles with Aggregation-Induced Emission Photosensitizer for Sustainable Bacterial Inactivation in Water	CHAU Hon Chung
13:45	20_472	105	20_472 A novel luminescent, photothermal and biocompatible Carbon nanodots from (2-Hydroxypropyl)- β -cyclodextrin for biomedical applications	MAUGERI Ludovica
13:45	21_558	105	21_558 Fabrication of Silk/MXene-based Smart Hydrogel System with Antibacterial Property for Chronic Wound Healing	HAN Cheol-Min
13:45	22_581	105	22_581 EPD coatings of chitosan from alternative source: Evaluation of biocompatibility and antimicrobial activity	MARSICO Michela
13:45	23_582	105	23_582 Antimicrobial and cytocompatible silver nanoparticles-chitosan composite material, obtained by laser ablation in liquid.	MARSICO Michela
13:45	24_61	105	24_61 In Vitro Dissolution and Biomineralization of Calcined and Uncalcined Hydroxyapatite in Citric Acid	JEONG HO Chang
13:45	25_62	105	25_62 In Vitro Dissolution and Biomineralization of Melt-driven Bioactive Glasses in Citric Acid and Tris Buffer	JEONG HO Chang
13:45	26_625	105	26_625 Characteristics of laser micro-marked dental implants	UDREA Radu
13:45	27_64	105	27_64 Enhancement of Thermal Stability and Reusability of Nano-fructosome coated CalB enzyme Particles by Silica Encapsulation for Rapid Enzymatic Hydrolysis and Acylation	JEONG HO Chang
13:45	28_761	105	28_761 Advancements in Magnetic Sensing: Iron Oxide Nanoparticles in Fluxgate Magnetometer Applications	CHIECHIO Regina Maria
13:45	29_763	105	29_763 Paramagnetic radiation-induced radicals in calcium pyrophosphate	ANTUZEVICS Andris

13:45	30_909	105	30_909 Microbial Electrical Stimulation Platforms from Biokinetic Triboelectric Energy Harvesting	PARK Yong Tae
13:45	31_924	105	31_924 Self-Assembly Induced Photosensitization of Long-Tailed Heavy-Atom-Free BODIPY Derivatives for Photodynamic Therapy	LEE Yeju
13:45	32_927	105	32_927 Janus-Type ESIPT Chromophores with Distinctive Intramolecular Hydrogen-bonding Selectivity	HWANG Bokyeong
13:45	33_95	105	33_95 Evaluating the formation of Protein corona on nanoparticles with different surface chemistry	YANG Chenxi

Thursday May 30
G11_Nanocarriers and Nanomedicines

MARIE CURIE B - FIRST FLOOR

08:15	2814	INV	Improved vascular grafts using electrospun nanofibres and extrusion-printed polymer gels	Koutsos Vasileios
08:45	3010	INV	Manufacturing chitosan/poly(vinyl alcohol) with incorporated essential oil sutures threads using modified “wet spinning” method	OLIVEIRA LOBO Anderson
09:15	2920		Optimizing Steroid Encapsulation in Polymeric Nanoparticles: A Comparative Study of Microfluidic Synthesis and Nanoprecipitation Methods	GIRMATSION Hermon
09:30	1291		Amino-graphene quantum dot-modified cationic polymer gene carriers for vascularization	Duo Xinghong
09:45	2132		SiC Monolayers for efficient anticancer drug delivery: a DFT study	BIN IQBAL Abdullah Jubair

Thursday May 30
G12_Regenerative Nanomedicine

MARIE CURIE B - FIRST FLOOR

10:30	2918	INV	Bioactive glass nanofibers produced by laser spinning technique for boosting wound healing and tissue regeneration	FERNÁNDEZ-ARIAS Mónica
11:00	2227		Synergistic Effects of Extrinsic Photobiomodulation with Specific Collagen Micropatterns to Promote Mesenchymal Stem Cell Differentiation	TSAI Guan Ying
11:15	1225		Frontiers in nanomedicine: unlocking wound healing potentials with PVP-capped gold and silver nanoparticles and nanorods	FOTI Alice
11:45	2175		Phase stability and mechanical properties of Ta-enriched TiTaNbZrMo refractory high entropy alloys for articulating surfaces in total joint arthroplasty	AVULA Indu

Thursday May 30
G13_Polymeric Nanoparticles

MARIE CURIE B - FIRST FLOOR

13:45	2855	INV	Understanding Degradation and Mechanical Performance of Hyperelastic Polylactide Copolymers through Bulk and Ultrathin Film Studies	ALKHAMIS Hanin
14:15	2777		Biporous silica nanofilm with high surface area and dynamic flow: Enrichment and isolation of nucleic acids towards PCR-free detection	EUNYOUNG Jeon
14:30	1342		Multi-hydrophilic block copolymer directed synthesis of low-dimensional functional mesoporous silica nanostructures	VASHISHTHA Anu
14:45	1554		Conjugated polymer-based nanoparticles for the optical modulation of living cell physiology	TULLII Gabriele
15:00	1357		Significant UV emission absorption by silicon in upconversion nanoparticles	SIVAKOV Vladimir
15:15	844		Formation of controllable diffusion barrier layer on the surface of polydimethylsiloxane films by infrared laser irradiation	TRAN Hung Quoc
15:30	1428		Biomimetic cell walls of antifreeze activity based on monodisperse cellulose oligomers	LI Wei

Thursday May 30
G14_Nanotheranostics

MARIE CURIE B - FIRST FLOOR

16:30	2637	INV	Local water-heating nanoprobe for Nir long-lifetime imaging-guided photothermal therapy of glioblastoma	KANG Dongkyu
17:00	1699		A new type of Synthetic Magnetosomes for combined Chemotherapy and Magnetic Hyperthermia	GOYA Gerardo F.
17:15	2253		Engineering Theranostic Nanomaterials: from Synthetic Design to Potential Applications	CHAKRABORTTY Sabyasachi
17:30	1373		Developing Semiconducting Polymers with Photoacoustic/Photothermal Effects for Biomedical Applications	WU Jiayingzi

17:45	1267		Catalytic Nanoprobes for Biofilm Eradication, Drug-delivery and Bioimaging	NITEE Kumari
18:00	401		Azobenzene-based organic photoelectrochemical transistor (OPECT) transistor and its applications as neurohybrid building blocks	BETTUCCI Ottavia

Thursday May 30

Gbis01_Advanced Materials for Healthcare

LUXEMBOURG - GROUND FLOOR

08:30	3072	INV	Electrospun Nanofibers for Enhanced Wound Management and Disease Monitoring	Park Inkyu
09:00	100		Inhibiting Pathological Calcium Phosphate Mineralization: Implications for Disease Progression	Vidavsky Netta
09:45	1687		Advancing Boron Neutron Capture Therapy: Novel Insights from Boron-Based Nanomaterials	Kumar Akshay

Thursday May 30

Gbis02_Carbon Materials for Healthcare

LUXEMBOURG - GROUND FLOOR

10:30	1856		Graphene-based nanostructures as an active agent targeting α -synuclein inclusions	KUJAWSKA Malgorzata
10:45	1833		Graphene Oxide (GO) and Metal Organic Frameworks (MOFs) innovative electro modification of Titanium-Based Implants for Enhanced Antibacterial and Cellular Growth Properties.	PARATORE Vincenzo
11:00	1330		α -Synuclein Anti-Aggregation Activity of Graphene Oxide Functionalized with Selenium	Oz Tuba
11:15	2364		Investigating the Ecotoxicity of Metal-Doped Carbon Quantum Dots: Assessing Environmental Sustainability	Mishra Jyotsna
11:30	1183		CAG peptide-graphene quantum dot-functionalized triblock cationic polymer carrier promotes endothelial cell proliferation	Duo Xinghong
11:45	983		Hydrothermal-assisted synthesis of carbon dots using palm wine for the simultaneous quantification of copper and glucose	MANDAL Anisha

12:00	803	Design of maghemite/MOF Bimodal Nanovector for the therapy of inflammatory diseases.	Steunou Nathalie
12:15	1124	Impedimetric immunosensor based on nanoyeast platforms to detect SARs-CoV-2	CINTRA HENSEL Rafael

Thursday May 30

Gbis03_Smart Materials for Imaging & Sensing

LUXEMBOURG - GROUND FLOOR

13:30	3104	INV	Tailoring silica nanocarriers to overcome hydrophobic drug challenges: an investigation into enhanced molecular weight and hydrophobicity modulation	IQBAL Sumiya
14:00	1540		Persistent nanophosphors applied to bioimaging and biosensing	RICHARD Cyrille
14:30	1510		Highly selective H ₂ S gas sensing in the ppb – regime using ZnO nanowire ChemFETs functionalized with metal (Cu, Ag, Au, Pt) nanoparticles	HERR Ulrich
14:45	1851		Nd ³⁺ , Y ³⁺ codoped CaF ₂ colloids as optical nanothermometers in the biological windows	Radicchi Eros
15:00	2191		Optical tracing and inhibition of metastatic tumor with metal quantum clusters	SHARMA Priyanka
15:15	2623		Magnetic nanoparticles as tracers for early diagnosis of Alzheimer's disease by Magnetic Resonance Imaging	GUERRERO PORRAS Gabriel Rafael

Thursday May 30

Gbis04_Complex Materials based Approaches in Healthcare

LUXEMBOURG - GROUND FLOOR

15:30	649		Humidity-induced protein-based artificial synaptic devices for neuroprosthetic applications	Sadhukhan Riya
15:45	94		Antibacterial enzymes/tannic acid-based layer-by-layer coatings	HAGA KOBIRAKI Fernanda
16:00	2621		Tuning the electron injection mechanism by changing the adsorption mode: the case study of Alizarin on TiO ₂	Daldossi Chiara

16:15	2593	Synergistic Effects of Cerium and Hot forging on Biodegradation, Antibacterial Properties, and In Vivo Biocompatibility of Micro-alloyed Mg-Zr-Sr Alloy	NIGAMANANDA SAHOO Satyabrata
16:30	2518	Photo-responsive carrier system for the controlled release of multifunctional copper oxide nanoparticles	Weitz Iris
16:45	2097	Structural and biological suitability of meta-materials for the construction of atraumatic vascular instruments	MAJOR Roman
17:00	1740	Biocompatible Interfaces by Atomic Layer Deposition for Neuronal Applications	EL HABRA Naida
17:15	1670	Stimuli-responsive Self-assembly of Liquid Crystal Droplets through DNA Hybridization	SHIN Jisu
17:30	1647	Design of Self-Reporting Liquid Crystals-Based System for Food Poisoning Bacteria	Choi Yena
17:45	1061	Sensor-integrated microfluidic model of the human blood-brain barrier for neuro-nanotoxicity studies	LEFEVRE Marie
18:00	167	Liquid Crystal-based Immunosensor for the Optical Detection of Escherichia coli at Low Concentration Levels	De Almeida Pedro
18:15	510	Discovery of Unusual and Non-intuitive Self-assembling Peptides using Machine Learning	TALLURI Yahwah Nissi

Friday May 31
G15_Nanotechnology for Neuroscience

MARIE CURIE B - FIRST FLOOR

08:45	2223	INV	Optical based device for early detection of Alzheimer's biomarkers	FINLAY Allan J.
09:15	889		Microplasma-Enabled Synthesis of Nanohybrids as Surface Enhanced Raman Scattering (SERS) Biosensor for Alzheimer's Disease Biomarker	YEN LING Chiu
09:30	769		Multicomponent nanoscintillators for Alzheimer's disease treatment by low dose radiotherapy	SECCHI Valeria
09:45	1002		Unraveling Parkinson's: Self-Control Binding Probes with Two-Photon Absorption for Precise Molecular Analysis	PORCU Stefania

Friday May 31
G16_Nanocomposite-based Devices

MARIE CURIE B - FIRST FLOOR

10:30	2281	INV	Opto-electronic devices based on biological photoreceptor for quantum optics and expanded vision	CARDACE Ilaria
11:00	339		Evaluating the formation of Protein corona on nanoparticles with different surface chemistry	YANG Chenxi
11:15	478		Intelligent Multi-Fluorescent Magnetic Microrobots with Fluorescent Memory for Gastric Acidity Monitoring	SENTHILNATHAN Natarajan
11:30	1781		Membrane-free Liver on a chip model for Drug Screening	PREETI Sati
11:45	1227		Designing Nanoreactors for Bioorthogonal Catalysis	KUMAR Amit

