<u>ANM2018 (www. http://advanced-nanomaterials-conference.com)</u>

18-20 July 2018, Reitoria, University of Aveiro, Portugal

Program at a glance

| Hours | 18 July 2018 | 19 July 2018 | 20 July 2018 |
|-------------|---------------------------------------|--|------------------------------|
| 8.30-9.45 | Registration | Registration | Registration |
| 9.00-9.45 | Coffee session | Coffee session | Coffee session |
| 9.45- 10.00 | Opening Session (Auditorium) | Plenary talk (Auditorium) | - |
| 10.00-13.00 | Invited & Oral presentations | Invited & Oral presentations | Invited & Oral presentations |
| 13.00-14.00 | Lunch | Lunch | Lunch |
| 14.00-17.30 | Invited/Oral presentations | Invited/Oral presentations | Invited/Oral presentations |
| 17.00-18.00 | Poster presentations & Coffee session | Poster presentations & Coffee session | Coffee Session |
| 17.30 | - | - | Aveiro city tour & Boat trip |
| 18.00 | - | Banquet, Visit to Vista Alegre Musuem, Band by Tuna University of Aveiro. (Bus will leave University of Aveiro by 18.00 hours) | - |

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| Session | Page No | Room |
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| AGM- Oral | 9 | В |
| ANE- Oral | 10 | А |
| ANM- Poster | 11 | Main Hall |
| AMM- Poster | 15 | Main Hall |
| ANE- Poster | 16 | Main Hall |
| AGM- Poster | 16 | Main Hall |
| APM- Poster | 17 | Main Hall |
| HE- Poster | 18 | Main Hall |

| | Auditorium | | | |
|-------------|---|--|--|--|
| | 18 July | | | |
| | Opening Session & ANM (Advanced Nano Materials) | | | |
| Pro | <u> </u> | Babu Selvaraj, Olga Karavai, Budhendra Kumar Singh, Silvia Reis | | |
| | | Campos Gil, Carmen M. Rangel, João Pedro Araújo, Luiz Pereira | | |
| Time | Name | Title | | |
| 9.45- 10.00 | Joao Campos Gil/ Luiz Pereira | Welcome address | | |
| 10.00-10.20 | Luis Manuel Costa (Invited) | Using impedance spectroscopy to characterize industrial processes: from materials to agriculture | | |
| 10.20-10.35 | Jeffrey M. Gordon | Singular nanostructures by highly concentrated sunlight | | |
| 10.35-10.50 | Katerina Prouzova | Layered Organophosphonates as Suitable Starting Materials for Production of Nanosheets via Top-down Approach | | |
| 10.50-11.05 | Md. Abdul Matin | PtZn Nanoparticle Electrocatalysts Synthesized by Solution Combustion for Ethanol Oxidation Reaction in an Alkaline Medium | | |
| 11.05-11.20 | Sudhir Kumar Sharma | Production of NSAID pharmaceutical molecular liquids via RESS Processing | | |
| 11.20-11.35 | Victor Lopez- Richard | Exploring the Functionalities of Quantum Dot-Based Transistors | | |
| 11.35-11.50 | Fernando J.A.L. Cruz | Thermodynamics and Kinetics of DNA in Hydrophilic Nanopores | | |
| 11.50-12.05 | Vera Deeva | Nanolayer in brush collector contact under Joule heating | | |
| 12.05-12.20 | Jianhai Yue | Fault Diagnosis of Rolling Bearing Based on Coaxial Vibration Signal Fusion | | |
| 12.20-12.35 | Racca Laiza | Synthesis of Calcium Carbonate Nanoparticles Using Miristic Acid as Surface Modifier | | |
| 12.35-12.50 | Georgii Kharlamov | The Surface Tension of Critical Nuclei | | |
| 12.50-13.05 | Beya Ouertani | Characterization of Ru-alloyed iron oxide thin films, synthesized by spray pyrolysis | | |
| 13.05-14.00 | | Lunch | | |
| | | 18 July- ANM- Auditorium | | |
| S | ession Chairs: Fernar | do J.A.L. Cruz, Luiz Pereira, Joao Campos Gil, Carmen M. Rangel | | |
| 14.00-14.15 | Marinella Striccoli (Invited) | Colloidal Nanostructured Materials for Optical and Photonic Application | | |
| 14.15-14.30 | Satyapaul A. Singh | Role of transition metals substitution in Co3O4 – ZrO2 composites for methane combustion | | |
| 14.30-14.45 | Min Guo | Preparation and performance study of TiO2 nanorod arrays based perovskite solar cells employing different PbI2 solutions | | |
| 14.45-15.00 | Natalia Fernández- Delgado | Structural and Compositional Characterization of Lead Halide Perovskites for Solar Cells by (S)TEM Techniques | | |
| 15.00-15.15 | Alexey Sherchenkov | Development and Investigation of the Effective Thermoelectric Materials for the Multisectional Generator Thermoelements | | |

| 15.15-15.30 | Tiago Entradas | Gold Nanoparticles, a New Approach to Photodynamic Therapy for Cancer |
|-------------|------------------------------|---|
| | | Treatment |
| 15.30-15.45 | Samar Damiati | Exploiting Natural Nanomaterials in Biosensor Technology |
| 15.45-16.00 | Leonardo Kleber Castelano | Implementing the Universal Set of Quantum Gates in Quantum Dots |
| 16.00-16.15 | Hak Yong Kim | Synthesis and Photoluminescence Properties of Amorphous La2O3- |
| | | ZrO2:Eu3+ Nanofibrous Membranes as Photonic Application |
| 16.15-16.30 | Mehdi Khalaj | Palladium Nanoparticles as reusable catalysts in the Synthesis of N-aryl |
| | | sulfonamides under mild reaction conditions |
| 16.30-16.45 | Silvio Scaravonati | Electrochemical intercalation of fullerene and hydrofullerene with sodium |
| 16.45-17.00 | Sergio Catalán- | Plasmonic gallium nanoparticles for the photoluminescence enhancement |
| | Gómez | of monolayer MoS2 |
| 17.00-17.15 | Jin Woo Jo | Fabrication and Characterization of Color Particle Using the Reactive dye |
| | | and Ion Exchange Particles |

| | 19 July - ANM- Auditorium | | |
|-------------|--|---|--|
| | Session Chairs: Elamathy Balamoorthy, Luiz Pereira, Carmen M. Rangel | | |
| 9.45- 10.00 | Luis Fonseca | Free transnational access to the widest range of tools for research at the | |
| | (Plenary) | nanoscale | |
| 10.00-10.20 | Irina Buyanova | GaAs/GaNAs Core/Shell Nanowires - a Novel Material System for Near- | |
| | (Invited) | Infrared Nanolasers | |
| 10.20-10.40 | Duanjun Cai | Cu nanosilk network: the next generation of transparent conductors | |
| 10.40-10.55 | Cristina M. Sabliov | Nanoentrapped Polyphenol Coating For Sustained Drug Release from A Balloon Catheter | |
| 10.55-11.10 | Mieczyslaw | Self-organized ZnMgO nanocolumns with ZnO/ZnMgO quantum wells grown | |
| | Pietrzyk | on different substrates by MBE technique | |
| 11.10-11.25 | Jae-Ho Kim | Surface modification of nano-metal oxides using fluorine gas | |
| 11.25-11.40 | Alexander A. | Structure and properties of biocompatible polymers-based coatings | |
| | Rogachev | deposited from active gas phase with controlled release of antibacterial | |
| | | components | |
| 11.40-11.55 | Mei Zhang | Metal oxides nanoparticles enhancing Na2CO3 /Al2O3 sorbents for selective | |
| | | removal HCl at low temperature | |
| 11.55-12.10 | Masanari Namie | Nano etching of oxide layers on SiC materials using fluorine gas | |
| 12.10-12.25 | Daniel F. Reyes | Effect of GaAs(Sb)(N) capping layers on (un)coupled InAs/GaAs multi quantum dot layers for enhanced solar cells | |
| 12.25-12.40 | Peng Diao | Nanostructured Copper Tungstate Film: Preparation and Application in Solar | |
| | (Invited) | Water Splitting | |
| 12.40-12.55 | Stefanie Kreft | Photocatalytic Reduction of Aqueous CO2 Using Cu/TiO2 Aerogel and the | |
| | | Mystery of Oxygen | |
| 12.55-14.00 | | Lunch | |
| | 19 July- ANM- Auditorium | | |
| | Session Chairs: Mei Zhang, Duanjun Cai, Nivas Babu Selvaraj | | |
| 14.00-14.15 | Florent Pourcin | Hybrid materials using multi-layer architectures with near-ideal tunable | |
| | | large band absorption for stealth applications | |
| 14.15-14.30 | Jose Francisco | Numerical study of the effect of nanoparticle softening on the size of fractal | |
| | Wilson | aggregates | |

| 14.30-14.45 | Marcos Lanzon | Nanoparticle-based Ca(OH)2 coatings for consolidating heritage materials: evaluation of efficiency and surface-dispersion using microscopy and image analysis. |
|-------------|---------------------------|--|
| 14.45-15.00 | Abdulilah Dawoud Bnai- | Computational Insights into the Interactions of Diclofenac with the Surface of Hydroxyapatite in Solutions |
| | Yaseen | of Frydroxyapatite iii Solutions |
| 15.00-15.15 | Alexandre Jeronimo | Development of nanoaditivated antifungal lime mortars |
| 15.15-15.30 | Rimzhim Gupta | An approach towards photoelectrocatalytic inactivation of E. coli using vertically aligned FTO/ZnO/CuI |
| 15.30-15.45 | Aaryashree | Synergetic assembly of Zn-OPV Composite for Ammonia Sensing |
| 15.45-16.00 | Margaux Desseigne | Shape dependence of photosensitive properties of WO3 for photocatalysis under UV-Vis light irradiation |
| 16.00-16.15 | Arif Ibrahim | Nano-structured palladium impregnated graphitic carbon nitride composite for an efficient hydrogen gas sensing |
| 16.15-16.30 | Elamathy Balamoorthy | Stable 1T- Metallic MoS2 for Supercapacitor Application |

| | 20 July- ANM- Auditorium | | | |
|-------------|--|--|--|--|
| | Session Chairs: Catarina Dias, Bruna F. Gonçalves, Mónica Tirado | | | |
| 10.00-10.20 | Tito Trindade (Invited) | Nanometal loaded polymers as versatile SERS substrates for the trace detection of aqueous pollutants | | |
| 10.20-10.40 | Francis Leonard (Invited) | Structural and Chemical Analysis of Filled Nanotubes | | |
| 10.40-10.55 | Paul Joyce | Designing Nanostructured Particles that Modulate Fat Digestion and Absorption for the Treatment of Obesity | | |
| 10.55-11.10 | Yuanyuan Chen | Nb doped K-OMS-2 as the cathode materials of the aqueous sodium ion battery | | |
| 11.10-11.25 | Wai Kian Tan | Investigation on the Anchor Layer Formation Mechanism of Aerosol Deposition | | |
| 11.25-11.40 | Anil Ch | Kinetic study of Mn2.94M0.06O4-δ(M=Pt, Pd, Ru) catalysts for low temperature Water gas shift (WGS) and CO oxidation | | |
| 11.40-11.55 | Gulcihan Guzel Kaya | The effect of polyethylene glycol and carbon black addition on the properties of silica xerogels synthesized from groundnut hull ash | | |
| 11.55-12.10 | Jialiang Du | CuCo2S4 Nanowires Arrays Supported on Nickle Foams with Ultrahigh Capacitance for Aqueous Asymmetric Supercapacitor Applications | | |
| 12.10-12.25 | Sami Dursun | Synthesis, characterization and photocatalytic activity of SnO2 nanofibers | | |
| 12.25-12.40 | Sergey Bozhko | Writing with atoms using electric field of STM probe | | |
| 12.40-12.55 | Anara Molkenova | Gd2O3 nanoparticles coated with nitrogen doped carbon layer for potential biomedical application | | |
| 12.55-13.10 | Thiru G. Manivasagam | Insitu grown Hematite/g-C3N4 Composites for Supercapacitor Applications | | |
| 13.10-14.00 | | Lunch | | |
| | 20 July- ANM- Auditorium | | | |
| | Session Chairs: Anil Ch, Jialiang Du, Sergey Bozhko | | | |
| 14.00-14.15 | Veronica Braza Blanco | Analysis of bismuth segregation in InAsBi/InAs superlattices grown by MBE | | |
| 14.15-14.30 | Mónica Tirado | ZnO Nanowires on Graphite with Improved UV Photoluminescence | | |

| 14.30-14.45 | Zoltán Dudás | Methyl-substituted silica xerogels for controlled release of captopril |
|-------------|------------------|--|
| 14.45-15.00 | Sushant Kumar | Paper Based Non Enzymatic Glucose Sensor |
| 15.00-15.15 | Ismail Cihan | Synthesis of CuSbS2 Nanoplates by Hot-injection Method |
| | Kaya | |
| 15.15-15.30 | Marko Milojević | Evaluation of material properties and suitability for growth of pancreatic |
| | | cells |
| 15.30-15.45 | Andrey Kovalskii | The Development of BN Nanoparticles as Promising Catalysts Support |
| 15.45-16.00 | Raminta | Comparison of Carbon Based Cobalt Catalysts for Oxygen Reduction |
| | Stagniunaite | Reaction using β-cyclodextrine and morpholineborane as reducing agents |
| 16.00-16.15 | Catarina Dias | Resistive Switching behaviors of Al2O3/MgO Bilayer Structures |
| 16.15-16.30 | Bruna F. | Water-based CulnxGa1-xSe2 chalcopyrite screen printed thin films for |
| | Gonçalves | printable solar cells |
| 16.30-16.45 | Wen-Hao | Silver Nanoparticles Immobilized on Thermo-Sensitive Dendritic-Polymer |
| | Chuang | Micelles for SERS Detections |
| 16.45-17.00 | Sapto | Gold Nanoparticles Immobilized on Zinc Oxide Nanoparticles for for |
| | Wijanarko R | Photodegradation and SERS Detection of Water Pollutants |

| | 18 July- HE (Hydrogen Energy)- Room A | | |
|-------------|--|--|--|
| | Program Chairs: D. Pukazhselvan,R. Devaraj, Ming Fang, Wei Jian Xu | | |
| Session | Chairs: Ftwi Yohane | ess Hagos, Myo-eun Kim, Thillai Sivakumar Natarajan, Giacomo Magnani | |
| 10.00-10.15 | Daniel De Wolf | A comparison of distribution of energy between Fuel Cell Electrical Vehicles and Battery Electrical Vehicles in Europe | |
| 10.15-10.30 | Ilenia Rossetti | Hydrogen Production by Exploiting Diluted Second Generation Bio-ethanol: Process Design and Economic Assessment | |
| 10.30-10.45 | Türkan Kopaç | Effect of Ammonia and Boron Modification on the Surface and Hydrogen sorption characteristics of activated carbons from coal | |
| 10.45-11.00 | A.V. Shlyakhtina | Structural stability of Nd6MoO12-based electron-proton conductors under dry and wet oxidizing and mild reducing conditions | |
| 11.00-11.15 | Min Zhu | In Situ Growth of Ni0.85Se on Graphene as a Robust Electrocatalyst for Hydrogen Evolution Reaction | |
| 11.15-11.30 | Mauro Riccò | Hydrogen Storage in Alkali Clusters Intercalated Fullerides | |
| 11.30-11.45 | Cong Geng | Improved Energy Management Research for Fuel Cell Extension | |
| 11.45-12.00 | Jurga Juodkazyte | Dimensionally Stable Nickel Oxide Anode for Selective Oxygen Evolution from Seawater | |
| 12.00-12.15 | Palyam Subramanyam | TiO2-Ag-Bi2S3 nanocomposite as photoanode for enhanced photoelectrochemical water splitting for hydrogen generation | |
| 12.15-12.30 | Anand Kumar | Highly active and stable bi-functional NiCo2O4 catalyst for Oxygen reduction and Oxygen evolution reactions in alkaline medium | |
| 12.30-12.45 | Gianguido Ramis | Photoreactors Design in the Exploitation of Biorefinery Processes: the Case of Hydrogen Production | |
| | Lunch | | |

| | 19 July- HE (Hydrogen Energy)- Room A | | |
|-------------|---|--|--|
| | Session Chairs: Türkan Kopaç, Ilenia Rossetti. Carmen M. Rangel | | |
| 10.00-10.15 | Dorin Boldor | Optimization of Gasification Process for Conversion of Agricultural Residues to Syngas: Evolution of Hydrogen and Carbon Monoxide | |
| 10.15-10.30 | Maria A. Goula | Investigating the Correlation between Deactivation and Carbon Deposition on Ni/Al2O3 and Ni/CaO-MgO-Al2O3 catalysts | |
| 10.30-10.45 | Billel Boumaaraf | A detailed thermal-electrical study and modeling of a hybrid photovoltaic thermal collector under meteorological conditions of Algiers | |
| 10.45-11.00 | Karolina Kordek | Electrocatalytic hydrogen evolution using partially oxidized nickel-cobalt composite films | |
| 11.00-11.15 | Zhunqing Hu | Experimental study on flame instability of hydrogen blended low calorific value gas | |
| 11.15-11.30 | Xin Zhang | Simulation calculation of laminar premixed flame instability of hydrogen blended low calorific value gas | |
| 11.30-11.45 | Jianhai Yue | Experimental study on self acceleration characteristics of unstable flame of low calorific value gas | |
| 11.45-12.00 | Julio J. Conde | Forcing water distribution inside a PEM fuel cell by asymmetric MEAs with hydrophobic catalyst layers | |
| 12.00-12.15 | Aysenur Gencer | Properties of BaYO3 Perovskite and Hydrogen Storage Properties of BaYO3Hx | |
| 12.15-12.30 | El Mahdi Khetabi | Effects of mechanical compression on the performances of Proton Exchange Membrane fuel cells by the use of in-situ characterization techniques | |
| 12.30-12.45 | Nilson Kunioshi | Silicon Surfaces as Substrates for Carbon Dioxide Reactions with Hydrogen | |
| | Lunch | | |

| | 20 July- HE (Hydrogen Energy)- Room A | | |
|-------------|---|---|--|
| | Session Chairs: Maria A. Goula, Julio J. Conde, Hang Zhou | | |
| 10.00-10.20 | Duncan P.Fagg (Invited) | Protonic Ceramic Electrochemical Cells | |
| 10.20-10.40 | Munoz-GDaniel | The role of the synthesis on protonic conductivity in ZIF-8 | |
| 10.40-10.55 | Patrick Da Costa | Iron promoted nickel containing hydrotalcite-derived catalysts for plasma and thermal CO2 methanation reaction | |
| 10.55-11.10 | Giacomo Magnani | Metal Decorated Graphene as a Substrate to Promote the Formation of Nanosized MgH2 | |
| 11.10-11.25 | Maria A. Goula | Hydrogen production through the glycerol steam reforming reaction: The influence of Y2O3 doping on Ni/ZrO2 catalysts | |
| 11.25-11.40 | Thillai Sivakumar | Visible light responsive La(OH)3/ZnIn2S4 composite photocatalyst for non- sacrificial H2 production from water | |
| 11.40-11.55 | Ivan Cabria | Hydrogen Storage Capacities of Nanoporous Carbons using DFT-based methods that include Dispersion Interactions | |
| 11.55-12.10 | Ftwi Yohaness Hagos | CFD Modelling of Combustion of CNG and Hydrogen-rich Syngas Under a Dual Fueling Strategy | |
| 12.10-12.25 | Huseyin B.Yildiz | A Photoelectrochemical Device for Water Splitting- | |
| 12.25-12.40 | Maria Elena Gálvez | Solar-assisted thermochemical process for the production of syngas from methane and/or biogas using solid oxygen carriers | |
| 12.40-12.55 | Myo-eun Kim | Optimization of efficiency for PEM fuel cells on dead-end operation. | |
| | Lunch | | |

| | 18 July- APM (Advanced Polymer Materials)- Room B | | |
|-------------|--|---|--|
| | Program Chairs: Mario Santos, Estelina Da Silva, Olena Okhay | | |
| | Session Chai | rs: Subhash Chandra,Ada Saccà,Gisele Boiteux,Guiling Wang | |
| 10.00-10.15 | Sang Youl Kim | Modification of Carbon Nanotubes by Surface-Initiated Chain-Growth Condensation Polymerization | |
| 10.15-10.30 | Aurelia Visa | Synthesis, Characterization and Rare Earth Elements Adsorption Properties of Phoaphonate Metal Organic Framework | |
| 10.30-10.45 | B. Guiffard | Electromechanical couplings in soft polymer films for smart microwave antennas and curvature sensors | |
| 10.45-11.00 | Cristian Mendes-Felipe | Electro-mechanical properties of UV-curable piezoresistive composites for sensor applications | |
| 11.00-11.15 | Ander Reizabal López-Para | Piezoresistive silk fibroin-based composites for force and deformation sensing | |
| 11.15-11.30 | Sarani Zakaria | Rigid Polyurethane Foams from Liquefied Empty Fruit Bunch based Polyols | |
| 11.30-11.45 | Przemyslaw Data | Electropolymerized Xanthone derivatives as materials for TADF emitters | |
| 11.45-12.00 | Miguel de Dios | Study and examples of the application of Key Enabling Technologies (KETs) in the habitat sector: KrEaTive Habitat Project | |
| 12.00-12.15 | Pablo Franco Betancur | Effect of Fiber Morphological Defects on the Electrochemical Properties of LiFePO4 Cathode Material for Li-ion Batteries | |
| 12.15-12.30 | Nicolas Castano-Villa | Synthesis and characterization of micro/nanostructured Li4Ti5O12 fibers with different morphologies as anode materials for Li-ion batteries | |
| 12.30-12.45 | Maria Alexandra López | Electrospinning synthesis of LiFePO4/Carbon Nanofibers as cathode material for fiber-like batteries | |
| 12.45-13.00 | M. R. El-Aassar | Surface-Functionalization of novel poly (Acrylonitrile -co- Styrene/ Pyrrole) copolymer electrospun nanofibers for using as high-performance carrier for laccase immobilization | |
| 13.00-13.15 | Ji Hyeon Kim | Synthesis of POSS-PEG Materials and Manufacturing of Gas Separation Membranes for Carbon dioxide Separation | |
| | Lunch | | |

| 19 July- APM (Advanced Polymer Materials)- Room B | | | | |
|---|---|--|--|--|
| Ses | Session Chairs: Maria Alexandra Cortés López, Sarani Zakaria, Sang Youl Kim, Aurelia Visa | | | |
| 10.00-10.15 | Alexander A. The structure and properties of polyaniline-based coating deposited from act | | | |
| | Rogachev | gas phase | | |
| 10.15-10.30 | Guiling | Polyaniline coated 3D cross-linked carbon nanosheets for high energy density | | |
| | Wang | supercapacitors | | |
| 10.30-10.45 | José Javier | Design and characterisation of Polysulfone/Graphene nanocomposites used as | | |
| | Relinque | membranes for water filtration | | |
| 10.45-11.00 | I-Yun Cheng | Magnetic Microcapsule Induced the Crosslinking of Self-Healing Hydrogel for | | |
| | | Intraarticular Injection to Promote Cartilage Repair | | |
| 11.00-11.15 | Wei-Hung | Temperature-sensitive Immunanoparticles with Photothermic Therapy Synergic | | |
| | Cheng | with Immune Checkpoint Blockade to Enhance Immune Response and Anti- | | |
| | | metastatic Effect on Breast Cancers | | |

| 11.15-11.30 | Milena Setka | Electrochemically deposited gold/polypyrrole nanorods and study of their ammonia sensing properties | |
|-------------|-----------------|---|--|
| 11.30-11.45 | Mohamed | Surface-Functionalization of novel poly (Acrylonitrile -co- Styrene/ Pyrrole) | |
| | El-Aassar | copolymer electrospun nanofibers for using as high-performance carrier for laccase immobilization | |
| 11.45-12.00 | Evgeny Modin | Electron Tomography of Multiphase Polymeric Nanoparticles | |
| 12.00-12.15 | O. M. Hemeda | Study of Some Physical Properties of Some Ferrite- PVDF Composite | |
| 12.15-12.30 | Subhash | Polymer Nanocomposite of Quantum Dots and Plasmonic Nanoparticles for | |
| | Chandra | Quantum Dot Solar Concentrators | |
| 12.30-12.45 | Belkacem | Synthesis, characterization and analysis of electrochemical properties of | |
| | Nessark | copolymers from heterocyclic: pyrrole, bithiophene and 2-methylfuran | |
| 12.45-13.00 | Ada Saccà | Composite Nafion membranes with nano-crystalline Yttria-Stabilised Zirconia | |
| | | for Polymer Electrolyte Fuel Cells (PEFC) applications in drastic conditions | |
| 13.00-13.15 | Gisele | Structure and electrophysical properties of composites with ordered | |
| | Boiteux | distribution of carbon nanofillers in polymer matrix | |
| 13.15-13.30 | Abhijeet | Enhancement of Pressure Sensing Range for PDMS based Capacitive Sensor by | |
| | Choudhury | Polymer Matrix Composite Engineering | |
| | Lunch | | |

| | 18 July- AMM (Advanced Magnetic Materials)- Room A | | |
|-------------|---|---|--|
| | Program Chairs: D. Pukazhselvan, R. Devaraj, Ming Fang, Wei Jian Xu | | |
| | Session Chairs | : Alex Trukhanov, Mahendran Samykano, Arxel de Leon Santillan | |
| 14.00-14.20 | Weimin M. | Fundamental building blocks for room-temperature semiconductor spintronic | |
| | Chen | | |
| 44.20.44.25 | (Invited) | | |
| 14.20-14.35 | Alia H. Salama | Effect of Temperature and frequency on electrical conductivity and Dielectric | |
| 14.25.44.50 | | Properties of Cobalt Ferrite Nanoparticles Prepared via Combustion Method | |
| 14.35-14.50 | Ivan Cabria | Magnetostatic Dipolar Anisotropy Energy of Ferromagnetic Thin Layers and Nanowires | |
| 14.50-15.05 | Mahendran Samykano | Nickel Nanowire: Magnetic Ordering Synthesis | |
| 15.05-15.20 | Alex Trukhanov | Magnetoresistance in multilayered magnetic nanowires for spintronic applications | |
| 15.20-15.35 | Ekaterina Trukhanova | Origin of the dual ferroic properties in In-substituted M-type hexaferrites | |
| 15.35-15.50 | Vyacheslav Storchak | Atomic-Scale Engineering of Si and Ge Interfaces with a Ferromagnet | |
| 15.50-16.05 | Jan Soltys | Study of ferromagnetic/non-magnetic multilayer patterned dots | |
| 16.05-16.20 | Andrzej Wawro | Engineering of interlayer magnetic coupling in Co-based ultrathin multilayers | |
| 16.20-16.35 | Natalia Kovaleva | Localization effects in the disordered Ta interlayer of multilayer Ta-FeNi films | |
| 16.35-16.50 | Ana Lima | Highly anisotropic response of polymer-based magnetoelectric materials through oriented magnetic nanostructures | |
| 16.50-17.05 | Arxel de Leon Santillan | Synthesis of Co3O4 nanoparticles reduced with NaBH4, optical and magnetic properties | |

| 19 July- AGM (Advanced Graphene Materials)- Room B | | | |
|--|--|--|--|
| | Program Chairs: Mario Santos, Estelina Da Silva, Olena Okhay | | |
| | Session Chairs: I | Daniele Pontiroli, Piotr Wiench, Sunil P. Lonkar, Nurhafizah M.D | |
| 14.00-14.20 | Fa-Nian Shi (Invited) | The pH Controlled Excellent Photocatalytic Activity of a Composite Designed from a CuBi-MOO with Graphene | |
| 14.20-14.35 | Aires Ferreira | Charge-spin conversion in atomically-thin van der Waals heterostructures | |
| 14.35-14.50 | George S. Kliros | Strain Effects on the Quantum Capacitance of Graphene Nanoribbon Devices | |
| 14.50-15.05 | Eunice Cunha | Silane functionalized graphene materials for silicone rubber composites | |
| 15.05-15.20 | Rasuolė Lukošė | Magnetoresistive Properties of Co-doped Manganite-Graphene Structure in High Pulsed Magnetic Field | |
| 15.20-15.35 | Fatima Akhtar | Study the effect of different ambient conditions on the annealing of polycrystalline Ni/SiO2/Si and the growth of graphene | |
| 15.35-15.50 | Adriana Marinoiu | Synthesis of well dispersed gold nanoparticles on reduced graphene oxide and its application in PEM Fuel Cells | |
| 15.50-16.05 | Natalia Candido Homem | Surface modification of a polyethersulfone microfiltration membrane with graphene oxide for reactive dyes removal | |
| 16.05-16.20 | Chun-Da Liao | The Growth of Millimeter-Scaled Graphene Single Crystal through Nucleation Density Control in Height-Confined Reaction Slits | |
| 16.05-16.25 | Paata J. Kervalishvili (Invited) | Boron10 isotope doped silicon-graphene nanosensory element for neutron detection | |

| 20 July- AGM (Advanced Graphene Materials)- Room B | | | |
|--|---|---|--|
| | Session Chairs: Fa-Nian Shi, Paata J. Kervalishvili, Aires Ferreira | | |
| 14.00-14.15 | Daniele | Metal-Oxides Decorated Graphene Materials for Supercapacitors | |
| | Pontiroli | | |
| 14.15-14.30 | Marie | Comparison of properties of graphite and carbon nanotubes treated by | |
| | Bohacova | different oxidation agents | |
| 14.30-14.45 | Piotr | Influence of nitrogen functional groups in N-doped reduced graphene oxides on | |
| | Wiench | the electrochemical sensing parameters of dopamine | |
| 14.45-15.00 | Valentin | Graphene Materials for Mode-Locking of Bulk 2-μm Lasers | |
| | Petrov | | |
| 15.00-15.15 | Alba María | Graphene as corrosion protection films for metal surfaces | |
| | Sotillo | | |
| 15.15-15.30 | Abbas | Mitoxantrone Delivery with Gold Nanoparticle and Gold/Graphene Oxide Nano | |
| | Jafarizad | Composite in Vitro Brain Cancer Therapy | |
| 15.30-15.45 | Nurhafizah | The Production of Graphene Oxide via Electrochemical Exfoliation and Its | |
| | M.D | Application As Conductive Electrodes | |
| 15.45-16.00 | Sunil P. | 3D Nanostructured Assembly of MoS2-WS2/Graphene as High Performance | |
| | Lonkar | Electrocatalysts | |
| 16.00-16.15 | Mourad | Raman study of bithiophene encapsulated in single-walled carbon nanotubes | |
| | Boutahir | | |
| 16.15-16.30 | John Texter | Graphene Dispersions for Printing, Composites, and Energy | |
| 16.30-16.45 | Masayuki | Synthesis and Hydrogenation Catalysis of Platinum Nanosheet Intercalated | |
| | Shirai | Graphite Layers | |

| | 19 July- ANE (Advanced Nano Electronics)- Room A | | |
|---|--|--|--|
| Program Chairs: D. Pukazhselvan,R. Devaraj,Ming Fang, Wei Jian Xu | | | |
| | Session | Chairs: Sebastian Zlotnik, Ioan Baldea, Fernando B. Dias | |
| 14.00-14.20 | Henrique L. Gomes (Invited) | Nano-fibrous bacterial cellulose for electrophysiological transducers | |
| 14.20-14.35 | Gintautas Simkus | Organic Vapor Phase Deposition for OLED Technology | |
| 14.35-14.50 | Manish Kumar | High efficient deep-yellow organic light emitting diodes based on a thermally activated delayed fluorescence emitter | |
| 14.50-15.05 | Marian Chapran | High triplet level acceptors for multicolor exciplex emission | |
| 15.05-15.20 | Fernando B. Dias (Invited) | Photophysics of TADF Emitters for Efficient Triplet Harvesting in OLEDs | |
| 15.20-15.35 | Beata Luszczynska (Invited) | Influence of space charge limited current and unbalanced mobilities on the organic photodetector parameters | |
| 15.35-15.50 | Amruth C | Slot-die coating of double polymer layers for the fabrication of organic light emitting diodes (OLEDs) | |
| 15.50-16.05 | Anastasia Klimash | Synthesis and Properties of Novel Monodisperse Conjugated Materials Based on Truxene-Benzothiadiazole-Truxene Core | |
| 16.05-16.20 | Ramin Pashazadeh | Room Temperature Phosphorescence and Thermally Activated Delayed Fluorescence from Purely Organic Compound | |
| 16.20-16.35 | Xiaofeng Tan | Synthesis and Characterization of Donor-Acceptor Materials with Novel triazine substituent for TADF Emitters | |
| 16.35-16.50 | Juozas Vidas Grazulevicius | Molecular Glasses Containing Donor and Acceptor Moieties as Emitters and Hosts for Efficient Organic Light Emitting Diodes | |
| 16.50-17.05 | Gabriela W. Salyga | Iridium (III) complexes with donor and acceptor units as emitters in polymer light emitting diodes | |
| 17.05-15.20 | Antonio Maggiori | Novel benzonitrile compounds with mixed carbazole and phenothiazine substituents exhibiting TADF, AIE and Mechanochromism | |

| 20 July- ANE (Advanced Nano Electronics)- Room A | | |
|--|----------------------------|---|
| | Session Cha | irs: Victor Lopez-Richard, Henrique L. Gomes, Amruth C |
| 14.00-14.15 | Victor Lopez- Richard | Engineering the Bistable Electroluminescence in Resonant Tunneling Devices |
| 14.15-14.30 | Yasuhisa Omura | Physics-Based Model for Resistance Transition of Sputter-Deposited Silicon Oxide Films |
| 14.30-14.45 | Uvanesh Kasiviswanathan | In-house Developed Electric Cell–Substrate Impedance Sensing (ECIS) System for Studying Dynamic Behaviour of Myoblast cells |
| 14.45-15.00 | Sebastian Zlotnik | Wide-Bandgap AlGaN Epitaxial Structures: Technological Challenges |
| 15.15-15.30 | Ali Gokirmak | Phase Change Memory as a Hardware Security Platform |
| 15.15-15.30 | Marco Colella | 26DCzPPy:PO-T2T interfacial TADF exciplex as a tool to localise excitons, improve efficiency and increase lifetime |

| Pavel Chulkin | Organic Light Emitting Diode Optimisation based on Charge Carrier Mobility |
|----------------|--|
| | and Density Monitoring |
| Piotr Pander | Reinterpretation of the Role of Local Triplet States in Exciplexes Utilized as |
| | Organic Light Emitting Diode Emitters |
| Marharyta | Electrochemical and spectroelectrochemical investigation of differently |
| Vasylieva | substituted pyridine by phenoxazine or phenothiazine units |
| Helena Silva | Phase Change Memory and High Temperature Electro-Thermal Processes |
| Gema Martinez- | Polarized Picosecond Optical Emission from Single InGaN/GaN Core-Shell |
| Criado | Wires |
| Oleh Vybornyi | Buchwald-Hartwig cross coupling amination reactions as a valuable tool in |
| | the preparation of the organic compounds for high efficiency OLEDs |
| Ioan Baldea | Impact of Molecular Conformation on Transport and Transport-Related |
| | Properties at the Nanoscale |
| Manish Kumar | Boosting the Understanding of the Underlying Mechanisms in Deep Blue |
| | Organic Emitters |
| | Piotr Pander Marharyta Vasylieva Helena Silva Gema Martinez- Criado Oleh Vybornyi Ioan Baldea |

Poster Presentations

Main Hall, Reitoria, University of Aveiro

| ANM -19 July, 17.00-18.00 hours | | | |
|---------------------------------|------------------------|--|--|
| ANM01 | Hsin-Yi Lee | Great Performance of Al-doped ZnO Films Prepared by Atomic Layer | |
| | | Deposition | |
| ANM02 | Abderrahim EL HAT | Molar optimization and comparison of SnxSy thin films deposited by spray | |
| | | pyrolysis technique | |
| ANM03 | S.L. Patel | Structural and Electrical Properties of CdTe Thin Films with the Application | |
| | | of CdCl2 Treatment | |
| ANM04 | Yerkezhan | One-dimensional hematite nanoneedles for the potential degradation of | |
| | Amangeldinova | organic dyes | |
| ANM05 | Dimaral Aben | Eu, Li codoped zirconia nanoparticles with enhanced optical properties | |
| ANM06 | Jau-Shiung Fang | Strengthening of porous low-k dielectric by nitrogen stuffing treatment | |
| | | and capping an ultrathin Mn barrier | |
| ANM07 | Gilmar Eugenio Marques | Photovoltaic Efficiency of Intermediate Band Solar Cells Based on | |
| | | CdTe/CdMnTe Coupled Magnetic Quantum Dots | |
| ANM08 | Rong-Fuh Louh | Electrospun Porous Nanocomposites of Titania Fibers Doped with Silver | |
| | | Nanoparticles as Visible Light Photocatalytic Wound Dressing | |
| ANM09 | Cristina Busuioc | Template Assisted Synthesis of Calcium Phosphates - BaTiO3 Composite | |
| | | Scaffolds | |
| ANM10 | Chi-Jung Chang | Metal wire-mesh supported flower-like BiOBr as immobilized | |
| | | photocatalysts with enhanced photocatalytic degradation activity | |
| ANM11 | Samia Kosa | Direct Hydroxylation of Benzene over Cu-Exchanged Hydroxy-Sodalite | |
| ANM12 | Anchu Ashok | Shape controlled three dimensional flower shaped copper nanostructure | |
| | | and its catalytic activity | |
| ANM13 | Yi-Lung Cheng | Comparison of Electrical Characteristics and Reliability for Various Low | |
| | | Dielectric Constant Dielectric Films | |
| ANM14 | T. Rozmanowsk | Methanol electrooxidation at NiCl2-FeCl3-graphite intercalation compound | |
| | | affected by ozone treatment | |
| ANM15 | Chia-Yu Su | Development and Characterization of Lecithin Stabilized Polymeric | |
| | | Nanocarriers for Improving Efficacy of Chemotherapy in CT-26 | |

| ANM16 | Małgorzata Osińska | The electrochemical performance of graphite intercalation compound-doped carbon xerogels |
|-------|-------------------------------|--|
| ANM17 | A. Zhukeshov | The powders and coatings produced by pulsed arc plasma accelerator |
| ANM18 | M.A. Pietrzyk | ZnO/ZnMgO quantum wells in ZnMgO nanocolumns on r- and c-plane |
| | , | Al2O3 substrates: growth conditions and optical properties |
| ANM19 | Snejana Bakardjieva | 2D-TiO2 Photocatalysts Including Nanocavities and Metallic Silver |
| | | Nanoparticles |
| ANM20 | Martina Urbanova | Liquisolid Drug Delivery Systems Based on Mesoporous Silica Particles |
| ANM21 | Jiri Brus | Transferring Lithium Ions in Nanochannels of Hybrid MIL 53(AI)@[LiCoD] MetalOrganic Frameworks |
| ANM22 | Yasuhisa Omura | Measuring Impact of Light on Resistance of Non-doped ZnO Films |
| ANM23 | Min-sook Yu | Development of the roll to roll gravure coater for printed pouch of Battery |
| ANM24 | Min Guo | Effect of Srl2 substitution on the perovskite film formation and its photovoltaic property via two-step spin-coating method |
| ANM25 | Natalia Fernández- | Colloidal Core/shell QDs specimen preparation for Atom Probe |
| | Delgado | Tomography |
| ANM26 | Natalia Fernández- Delgado | Analysis of Small Colloidal QDs by HAADF-STEM |
| ANM27 | Alexey Sherchenkov | Mechanical Properties and Adhesion of Ge2Sb2Te5 Thin Films for Phase Change Memory Application |
| ANM28 | Yung Pin Tsai | Photocatalytic decolorization of dye by Ag-Fe/TiO2 induced by irradiation of visible light |
| ANM29 | Fwu-Long Mi | Algae Polysaccharide/Peptide Complex Nanoparticles for Inhibition of Angiogenesis |
| ANM30 | Alexey Yakubov | Influence of substrate thermal conductivity on the crystallization process of Ge2Sb2Te5 thin films by nanosecond single laser pulse |
| ANM31 | How Tseng | Decellularized Plant Extracellular Matrices as a Scaffold for Tissue Engineering |
| ANM32 | Denis Mihaela Panaitescu | Design of nanocellulose aerogels by functionalization and cross-linking |
| ANM33 | Ana Amaral | Dependence of InOx and ITO properties produced by Plasma Enhanced Reactive Thermal Evaporation on Temperature Deposition |
| ANM34 | Victor Y. Zenou | Effect of annealing (treatment) on properties of Sc doped TiO2 nanoparticles |
| ANM35 | Sang-Chul Jung | Preparation of Silicon oxide - Carbon Composite from Benzene and Trimethoxy Phenylsilane by Liquid Phase Plasma Method for Supercapacitor Applications |
| ANM36 | José Edgar Alfonso O | Influence of Si in the Optical and electrical properties of nanostructured TIALSIN Films deposited Via Sputtering |
| ANM37 | Jhon Jairo Olaya Florez | Influence of deposition current in the optical and electrical properties of nanostructured TiWSiN films deposited via co-sputtering |
| ANM38 | Heiddy Paola Quiroz Gaitán | Synthesis Temperature Dependence on Magnetic Properties of Cobalt Doped TiO2 Thin Films for Spintronic Applications |
| ANM39 | Giin-Shan Chen | Fabrication of Porous Anatase TiO2-WO3 Films on Sodalime Sheet Glass with Enhanced Photoactivity |
| ANM40 | Maeum Han | Carbon nanotube polymer sponge for self-powered electronic systems |
| ANM41 | Daewoong Jung | Carbon nanotube yarn-based wearable sensor |
| ANM42 | Jung-Hyung Lee | Preparation and Characterization of Nanocomposite Coating on Aluminum Alloy by Plasma Electrolytic Oxidation |

| ANM43 Kwang-Hu Jung Corrosion Characteristics of 9Cr Martensitic Steel dispersed w Nanometer-scale Carbonitride under SO2 gas ANM44 Seong-Jong Kim Effect of Applying Electric Charge on Corrosion Characteristics Al Alloy ANM45 II-Cho Park Evaluation of Cavitation-Erosion Resistance for Ni-P Electroles Cast Iron in Natural Seawater ANM46 Dubkov Sergey Optimization of nanostructures based on Au, Ag, Au-Ag nanon formed by thermal evaporation in vacuum for SERS-application ANM47 Piotr Krawczyk Thermal exfoliation of electrochemically obtained graphitic mandal Study of dye sensitized solar cells photoelectrodes consisting ZnO/TiO2/Bi2O3 nanostructures ANM49 Gna Ahn Synthesis of Triangular Ag-NanoPrims and Diagnostic Applicated Thyroid dysfunction ANM50 Ioana Chiulan Cellulose/ethylene glycol methyl ether acrylate 3D structure of Controllable physical properties Evidence of the Berreman Effect in TiO2:Co Thin Layers Depose Magnetron Co-Sputtering: A correlation Between Optical Propular Control Splitting Modes ANM52 Ilya Gavrilin Influence of thermal treatment on the morphology and computation and Maltanava Rhodamine-loaded TiO2 particles for detection of polymer codegradation | s of Anodized ss Plated Gray particles |
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| formed by thermal evaporation in vacuum for SERS-application ANM47 Piotr Krawczyk Thermal exfoliation of electrochemically obtained graphitic mand properties ANM48 Pawel Jarka Study of dye sensitized solar cells photoelectrodes consisting ZnO/TiO2/Bi2O3 nanostructures ANM49 Gna Ahn Synthesis of Triangular Ag-NanoPrims and Diagnostic Applicate Thyroid dysfunction ANM50 Ioana Chiulan Cellulose/ethylene glycol methyl ether acrylate 3D structure vacontrollable physical properties ANM51 Anderson Dussán Cuenca Evidence of the Berreman Effect in TiO2:Co Thin Layers Depos Magnetron Co-Sputtering: A correlation Between Optical Properties ANM52 Ilya Gavrilin Influence of thermal treatment on the morphology and componence of the manowires formed by electrochemical deposition ANM53 Hanna Maltanava Rhodamine-loaded TiO2 particles for detection of polymer co | ons |
| ANM48 Pawel Jarka Study of dye sensitized solar cells photoelectrodes consisting ZnO/TiO2/Bi2O3 nanostructures ANM49 Gna Ahn Synthesis of Triangular Ag-NanoPrims and Diagnostic Applicat Thyroid dysfunction ANM50 Ioana Chiulan Cellulose/ethylene glycol methyl ether acrylate 3D structure v controllable physical properties ANM51 Anderson Dussán Cuenca Evidence of the Berreman Effect in TiO2:Co Thin Layers Depos Magnetron Co-Sputtering: A correlation Between Optical Prop LO-TO Splitting Modes ANM52 Ilya Gavrilin Influence of thermal treatment on the morphology and comp nanowires formed by electrochemical deposition ANM53 Hanna Maltanava Rhodamine-loaded TiO2 particles for detection of polymer co | |
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| nanowires formed by electrochemical deposition ANM53 Hanna Maltanava Rhodamine-loaded TiO2 particles for detection of polymer co | perties and |
| ANM53 Hanna Maltanava Rhodamine-loaded TiO2 particles for detection of polymer co | osition of Ge |
| | ating UV |
| ANM54 Alexey Dronov Morphology and structure features of carbon-containing and nanotubes formed using ethylene glycol based electrolyte at temperatures | |
| ANM55 Shubhangi Madan Adsorption dynamics of Congo red dye removal using ZnO fur high silica zeolitic particles | nctionalized |
| ANM56 Wagd Ajeeb Hydraulic and Heat transfer behavior of MWNT nanofluids in channels | Micro- |
| ANM57 Raimonds Meija Resonance assisted NEM switch ON voltage reduction | |
| ANM58 Monica Cerquido Ag thin film sulfurization for resistive switching applications | |
| ANM59 Lijian Meng Study of structural properties and phase transitions of Bi2O3 prepared by rf reactive magnetron sputtering | films |
| ANM60 Verónica Henao-Holguín Gas-Phase Derivatization of Multi-Walled Carbon Nanotubes Riboflavin Sodium Phosphate for Collagen Crosslinking | with |
| ANM61 Margaux Desseigne Gold decorated nanostructured WO3 for high performance pl | hotocatalysis |
| ANM62 Margaux Desseigne Metal-Oxides Decorated Graphene Materials for Supercapacit | tors |
| ANM63 Críssia Fontainha X-ray shielding: polymeric composites made of P(VDF-TrFE) confilled with 3100 and cheap NTCs | |
| ANM64 Cátia R. S. Rodrigues Active Pressure-Sensitive Triboelectric Insole for Real-Time Administrating | ctivity |
| ANM65 Belkacem Nessark New electrochemical biosensor for the direct detection of into (IL-10) - an anti-inflammatory cytokine | erleukin10 |
| ANM66 Olga Karavai Strontium ferrite based catalyst for internal combustion engir | nes |
| ANM67 Daewoong Jung Annealing effect on gas sensing property of carbon nanotube | |
| ANM68 Martina Jezkova Preparation of Gold Nanoaggregates for Biomedical Application | sheet |
| ANM69 Libor Kobera New experimental insight into the nanostructure of zinc-boro frameworks (ZBIF-1): | |

| ANM70 | Fumihiro Nishimura | Nano etching of Si wafer using F2 gas |
|-------|----------------------------------|---|
| ANM71 | Seung-Pyo Kim | Surface Morphologies of Ti-Ta-Ag-Pt Alloy after Nanotube Formation |
| ANM72 | Victoria E. García-Vera | The role of Ca(OH)2 nanoparticles as consolidating and protective coatings to extend the durability of earthen materials |
| ANM73 | Han-Cheol Choe | Formation of Bone-like Apatite on the PEO-treated Ti-6Al-4V Surface with Nano-sized Bioactive Substance |
| ANM74 | Ji-Min Yu | Cell Culture on the Nano-sized and Functionalized Ti-6Al-4V Alloy by Plasma Electrolytic Oxidation |
| ANM75 | Jin Woo Jo | Synthesis of Organic Electrophoresis Particle using high-refraction coating materials |
| ANM76 | Chang Hwa Woo | Fabrication and Characterization of Nano Color Particles for Electronic Paper |
| ANM77 | Malwina Gabryel | Time influence of stabilization of silver nanocolloids reduced by NaBH4 |
| ANM78 | Malwina Gabryel | Complexation in binary systems including Cu(II) ions and phosphoethanolamine |
| ANM79 | Julia Micova | Surface-Modified Zinc Oxide Nanostructures with Conjugated Polymer |
| ANM80 | Eurico Felix Pieretti | Scanning Vibrating Electrode Technique Applied to Localized Corrosion Evaluation of Odontologic Devices |
| ANM81 | Han-Cheol Choe | Nano-particle Observation on the Pore-formed Ti-6Al-4V Alloy by PEO- treatment in Solution Containing Si and Mg Ions |
| ANM82 | Lenka Pazourkova | Preparation of calcium deficient hydroxyapatite on the monoionic form of montmorillonite by precipitation and sonication |
| ANM83 | Askerbay Aktanberdi | Latent fingerprint detection with luminescent Y2O3:Eu3+ nanoparticles |
| ANM84 | Murat Tleukhanov | Preparation of fluorescent silica nanoparticles using a hydrothermal method |
| ANM85 | Dariusz Lukowiec | Catalytic activity of non-spherical shaped magnetite nanoparticles in degradation of Sudan I, Rhodamine B and Methylene Blue dyes |
| ANM86 | Daria. I. Tishkevich | Morphology-dependent wettability of membranes based on porous alumina |
| ANM87 | Buthaina Albanyan | Structure-Activity Effects in Self-Assembled Multivalent (SAMul) Polyanion Binding – Adaptive and Shape-Persistent Multivalency |
| ANM88 | Jinyu Zhang | One-step homogeneous precipitation method synthesis of Nb-Mn bimetallic oxide for high-performance lithium ion battery |
| ANM89 | Askar Zhunisbekov | Obtaining of copper nanoparticles in combined RF + DC discharge plasma |
| ANM90 | Askar Zhunisbekov | Obtaining hydrophobic and hydrophilic surfaces in atmospheric pressure plasma |
| ANM91 | Alexandru Pascu | Laser Welding of Stainless Steel Using SiO2-CNTs Active Flux |
| ANM92 | Mrunal Patil | Active Lipid Based Nanomedicine: Kicking Out Drug Combination Therapy and Overcoming Antifungal Resistance |
| ANM93 | Heejoon Ahn | Polypyrrole/CNT-web Paper for High Performance Flexible and Stackable Allsolid-state Supercapacitors |
| ANM94 | Sasan Yazdani | Replacing Martensite with Nanobainite in Carburised Steel for Better Wear Performance |
| ANM95 | Críssia Carem Paiva Fontainha | Preparation and characterization of PVDF / BaSO4 composites for use in X rays shielding |
| ANM96 | Katarzyna Balin | Effect of Eu doping on electronic and crystallographic structure of Bi2Te3 thin films |
| ANM97 | Jaíne Webber | pKa Values of Surface Sites on α -Al2O3 Determined by Potentiometric Titration |

| ANM98 | Anna Nowak | Physicochemical studies of copper and silver nanoparticles and their |
|--------|---------------------|---|
| | | combination in metal-oxide matrix |
| ANM99 | Alexey Dronov | Synthesis mechanism in availability of electromagnetic field and large |
| | | temperature gradients and properties of ceramics based |
| ANM100 | Malwina Liszewska | Silver diffusion in metal-titania core-shell nanostructures |
| ANM101 | Bartosz Bartosewicz | Synthesis and Characterization of Noble Metal–Titania Core–Shell |
| | | Nanostructures with a Tunable Shell Thickness |
| ANM102 | Mourad Boutahir | Raman study of phosphorene nanoribbons |
| ANM103 | San-Yuan Chen | Neural Probe with Fucoidan Immunoparticles-Based Interface for |
| | | Detecting Amyloid-beta in Alzheimer's Disease |
| ANM104 | Nivas Babu Selvaraj | Sol-gel synthesized plasmonic nanoparticle and their integration into dye |
| | | sensitized solar cells |
| ANM105 | Sahil Goel | 8-hydroxyquinolinium hydrogen squarate crystal: a new piezoelectric and |
| | | NLO active crystal |
| ANM106 | R.Devaraj | Fabrication and Characterization of Metal-Metal Composites Reinforced |
| | | with AlCoCrCuFe High Entropy Alloy |

| AMM-18 July, 17.00-18.00 hours | | |
|--------------------------------|--------------------|--|
| AMM01 | Fares Almomani | Toluene Oxidation Over NiO Nano-catalyst |
| AMM02 | Fredy Rodriguez | Mn2Sb2 and Mn2Sb phases effect on magnetic properties of GaMnSb thin films grown by DC Magnetron co-Sputtering |
| AMM03 | Jose Malta | Synthesis and characterization of nanostructured Cu2OSeO3, a topological chiral magnet |
| AMM04 | Heiddy P. Quiroz | Synthesis Temperature Dependence on Magnetic Properties of Cobalt Doped TiO2 Thin Films for Spintronic Applications |
| AMM05 | Crissia Fontainha | Spectroscopy Characterization of PVDF/Fe3O4 |
| AMM06 | Daniel Merkel | In situ study of electric field controlled ion transport in the Fe/BaTiO3 interface |
| AMM07 | Fares Almomani | Heavy metal ions from industrial wastewater using magnetic nanoparticles (MNP) |
| AMM08 | Simona Muntean | Combustion Synthesis of Fe3O4/Ag/C Nanocomposites and Application for Dyes Removal from Multicomponent Systems |
| AMM09 | Sílvio Meneses | Magnetoresistance due to pinned uncompensated magnetization in IrMn |
| AMM10 | Chahra Meftah | Structural stability and magnetic properties of NdCu4Au: a DFT study |
| AMM11 | Maryia Baranava | Exchange Interaction in Cr2Ge2Te6 Monolayers |
| AMM12 | Yun Teng | Folate-Conjugated Au/Fe2O3 Nanoparticles Based Nanoprobe for Targeted Detection of Hela Cell |
| AMM13 | Yun Teng | Fabrication of IONP-Hollow Mesoporous Silica Sphere (IONP-HMSs) Composite and Their Drug Delivery Application |
| AMM14 | E. Lora da Silva | Ab-Initio Study of the Structural, Electronic and Phonon properties of Pr2O2SO |
| AMM15 | E. Lora da Silva | Theoretical study of Sb2Se3, Sb2S3 and Bi2S3 under compression |
| AMM16 | Abhilash J. Joseph | Crystal growth and characterizations of flux grown MPB compositions of ferroelectric PZN-PT and PMN-PT single crystals |

| | ANE-18 July, 17.00-18.00 hours | | |
|-------|--------------------------------|---|--|
| ANE01 | Leonardo Kleber Castelano | The Quantum Permutation Algorithm in a Qutrit formed in Quantum Dots | |
| ANE02 | Adam Lubos | Optical properties and surface morphology of Organic Light Emitting Diodes based on oxygen perovskites | |
| ANE03 | Bartlomiej Hrapkowicz | Characteristics of PLZT and PZO oxygen perovskite organic solar cells | |
| ANE04 | Jurate Simokaitiene | Diphenylethenyl-Substituted Triphenylamines as Efective Charge-Transporting Materials for Optoelectronics | |
| ANE05 | Fang-Cheng Liang | Ultra-Performance Polymer-Based of Inorganic Perovskites for Light-Emitting Diodes | |
| ANE06 | Dong Jun Lee | Metal Transparent Electrode Optimized for Micro-cavity Effect of OLED | |
| ANE07 | Chan Hyuk Park | Highly efficient and simplified thermally activated delayed fluorescence organic light-emitting diodes | |
| ANE08 | Jae Geun Kim | Enhanced efficiency of organic light-emitting diodes by inserting nano-sized dot pattern by laser interference lithography | |
| ANE09 | Byeonggon Kim | Enhanced Color Purity Polymer Light Emitting Device Using Coplanar Chain Conformation of Conjugated Polymers by Adopting Solvent Vapor Exposure | |
| ANE10 | Issam Oueslati | Calixarene functionalization of TiO2 nanoarrays: a smart strategy for enhancing the sensor versatility | |
| ANE11 | WonJe Oh | Optimization of solar cell electrode structure for shingled module | |
| ANE12 | Jisu Park | Optimization of Electrically Conductive Adhesives for High Density Modules | |
| ANE13 | Kheyar Camelia | Extension of the light absorption range of TiO2 thin films toward visible light range | |
| ANE14 | Fayçal Djeffal | Performance Evaluation of Nanoscale Halo Dual Material Double Gate SiGe MOSFET Using 2D Numerical Simulation | |
| ANE15 | Nivas Babu Selvaraj | Sol-gel synthesized Curcumin/silver doped Zirconia–Silica Matrices for DSSC Applications | |
| ANE16 | Agata Sotniczuk | Electrochemical behavior of modern Ti-based materials for biomedical applications | |
| ANE17 | Halina Garbacz | A method for further enhancement of nanotitanium cellular response | |

| AGM- 18 July, 17.00-18.00 hours | | |
|---------------------------------|------------------|---|
| AGM01 | Leila Rouaiguia | Adsorption of NO and CO on graphene decorated with Li, B, Si and Al : DFT and |
| | | Dispersive Forces correction |
| AGM02 | Kang Bok Ko | Graphene based transparent and flexible ultraviolet photoconductors |
| AGM03 | Chang-Hee Hong | Characterization of boron-doped reduced graphene oxide for solar cell application |
| AGM04 | Sónia O. Pereira | Diamond-graphite nanoplatelet electrodes for electrochemical label-free biosensors |
| AGM05 | Enrique Giménez | Effect of Synthesis Conditions on CO2 Capture of Ethylenediamine-modified Graphene Aerogels |
| AGM06 | Enrique Giménez | Eco-friendly graphene aerogels for oil/water separation |
| AGM07 | Ming-Wei Lee | Gellan gum/ grapheme/doxorubicin microspheres as potential multifunctional embolic agent |
| AGM08 | Luiza Lima | Characterization of Commercial Graphene-based Materials for Application in Thermoplastic Nanocomposites |
| AGM09 | Valentin Petrov | Single-Walled Carbon Nanotubes Mode-locked Tm:MgWO4 Laser |

| AGM10 | Faycal Djeffal | A new Graphene based-phototransistor for high-performance infrared sensing applications |
|-------|-----------------------|---|
| AGM11 | Adriana Marinoiu | High-performance oxygen reduction reaction and demonstration of the durability of the catalytic system in PEM fuel cell |
| AGM12 | Javier Molina | Hybrid photocatalysts of ZnO obtained by waste valorization combined with reduced graphene oxide |
| AGM13 | Rumiana Kotsilkova | Study on the Shelf-life of PLA Filament with Graphene and Carbon Nanotubes |
| AGM14 | E. Lora da Silva | Electronic and Phonon Instabilities in Bilayer Graphene Systems under Applied External Bias |
| AGM15 | R. Devaraj | Corrosion resistance behaviour of reduced graphene oxide /epoxy nanocomposite coating for Magnesium. |

| APM, 18 July, 17.00-18.00 hours | | |
|---------------------------------|------------------------|--|
| APM01 | Victor Balcão | Hybrid biopolymer-ionic liquid hydrogels for the transdermal delivery of biomacromolecules |
| APM02 | Naohiro Terasawa | High-performance ionic and non-ionic fluoropolymer/ionic liquid (with quaternary cation and perfluoroalkyltrifluoroborate anion) gel hybrid actuators with electrochemical window of 6 V |
| APM03 | Chien-Ming Hsieh | Optimization and Characterization of PD-L1 siRNA Targeted Delivery from Zein Nanoparticles |
| APM04 | Sarani Zakaria | Dimensional Titanium Oxide Nanowires |
| APM05 | Lingyun Wang | Enhanced Performance of Polymer based Mechanical Energy Harvester via Morphology Control |
| APM06 | Maxim Silibin | Preparation, Stability and Local Piezoelectrical Properties of P(VDFTrFE)/Graphene Oxide Composite Fibers |
| APM07 | Rohit Kandulna | Synthesis and performance evolution of PPY-TiO2-GO nanocomposite as electron transporting layer material for OLED devices |
| APM08 | Tze-Wen Chung | Investigating hyaluronic acid/silk fibroin interpenetration network hydrogel for intervertebral disc tissue engineering |
| APM09 | Sara Haoue | Green synthesis of nanocomposite Polyethylene glycol dimethacrylate/ Algerian clay (Maghnite-CTAB) |
| APM10 | Hodahaifa Derdar | Polylimonene/Clay Green Nanocomposites Prepared With Algerian Modified Clay (Maghnite-CTAB) |
| APM11 | Ling-Chun Chen | Lecithin-Stabilized Polymeric Micelles (LsbPMs) for Delivering Quercetin: Pharmacokinetic Studies and Therapeutic Effects of Quercetin Alone and in Combination with Doxorubicin |
| APM12 | Mayara de Lima | Study of thermal and morphological properties of PVDF/MMT based composites for offshore applications |
| APM13 | Asta Griguceviciene | Suitability of Difunctional Esters for Curing Nanostructured Rubber Powder with Polyurethane Adhesives |
| APM14 | Bianca Maranescu | Phosphonic Acid vs Phoaphonate Metal Organic Framework Influence on Mild Steel Corrosion Protection |
| APM15 | Adel Len | Polyester - carbon nanotube – graphite composites studied by small angle neutron scattering |
| APM16 | Ginka Exner | Multilayered Polyelectrolyte Structures with Potential for Intracavity Drug Delivery System |
| APM17 | Iga Jankowska | Cellulose Materials as a Biopolymer Matrix in Synthesis of New Solid State Proton Conducting Composites |

| APM18 | Iga Jankowska | Polymeric Proton Conductor Based on Pure Cellulose Fibers Functionalized |
|-------|------------------|--|
| | | with Imidazole Molecules |
| APM19 | Kinga Kepska | Poly(3-hexylthiophene) synthesised via GRIM method: investigation of |
| | | molecular weight determination |
| APM20 | Tina Maver | Evaluation of Influence on the Skin Regeneration of Different Materials with |
| | | in situ Included Growth Factors or/and Skin Cells |
| APM21 | Anna Facibeni | Facile synthesis in-situ of AgNPs-polymer-Graphite nanocomposite |
| APM22 | Carmen M. Rangel | Nafion® phosphonic acid composite membranes for proton exchange |
| | | membranes fuel cells |
| APM23 | Gisele Boiteux | Electroactive organic-inorganic polymer system based on thermoset and |
| | | thermoplastic oligomers and lithium perchlorate salt |
| APM24 | El Montassir | Preparation, characterization and antioxidant activities of biocomposite |
| | Dahmane | chitosan film containing Syzygium aromaticum. essential oil |
| APM25 | El Montassir | Physicochemical properties of α-chitin whiskers-reinforced chitosan |
| | Dahmane | nanocomposite films |
| APM26 | Yun Teng | Fe2O3-SiO2 @ poly(acrylamide-co-N,N-diethylacrylamide)/poly (N,N- |
| | | diethylacrylamide) Interpenetrating Network (IPN) Nanogels |

| HE-18 July, 17.00-18.00 hours | | |
|-------------------------------|------------------------|--|
| HE01 | Oh-Shim Joo | Photoelectrochemical Hydrogen Production Using Bulk Heterojunction Structure of Cu2O/TiO2 Photocathode |
| HE02 | Rahul Bhosale | Mg-ferrite Based Thermochemical H2O/CO2 Splitting Cycle for H2/CO Production |
| HE03 | Rahul Bhosale | Thermodynamic Efficiency Analysis of H2 Production via a Two-Step Sm2O3/SmO Based Thermochemical H2O Splitting Cycle |
| HE04 | Anchu Ashok | Cerium Sulfate – Cerium oxide based Thermochemical Water Splitting Driven by Concentrated Solar Power |
| HE05 | Anchu Ashok | H2 and Syngas Production via Solar Driven CH4 Reforming and H2O Splitting via MgO/Mg Based Redox Reactions |
| HE06 | Anand Kumar | Single step solution combustion synthesis of NiO/Co2O3 catalyst for ethanol decomposition |
| HE07 | Ting-Kan Tsai | Preparation and hydrogen separation of electroless Pd membrane on ultrasonicassisted-activated alumina support |
| HE08 | Leila Rouaiguia | DFT and Wagner-Schottky studies of Hydrogen insertion in Fe2Nb Laves phases |
| HE09 | Zuo-Yu SUN | Effects of Turbulence on Explosion Characteristics in a Stoichiometric Syngas (the mixtures of H2/CO) with High-BTU |
| HE10 | Zuo-Yu SUN | Experimental Study on the Explosion Indices in Homogeneous H2/CH4/Air Mixtures |
| HE11 | Biaopeng Li | Effect of graphene on the performance of nickel foam-based CoNi nanosheets anode catalyzed direct urea-hydrogen peroxide fuel cell |
| HE12 | A.V. Shlyakhtina | Ca and Mg doped Ln2Zr2O7 (Ln = Sm, Gd) pyrochlores: oxygen-ion and proton conductivity |
| HE13 | Valentina Voronkova | Physical properties and polymorphism of F-containing rare-earth fluorite-like molybdates with structure Nd5Mo3O16 type doped with sodium |
| HE14 | Valentina Voronkova | Polymorphism and Conductivity of Bi2O3-Based Fluorite-Like Compounds in Bi2O3- Nd2O3-MoO3 System |
| HE15 | Elena Anikina | Investigation of hydrogen interaction with Ti0.9Zr0.1Mn1.3V0.6 by calorimetric method |

| HE16 | Türkan Kopaç | An analysis of the microporous structure of KOH/boron modified activated carbons |
|------|------------------------|---|
| HE17 | M. Jesus Sanchez- M | Effect of pressure and temperature on the gasification of dodecane with steam and supercritical water and consequences for H2 production |
| HE18 | Catarina Serafim | Development of a chamber for in-situ powder diffraction under hydrogen atmosphere at controlled pressure |
| HE19 | Houria Boumaaraf | Management of hybrid system operating in grid–connected and standalone mode |
| HE20 | Karolina Kordek | Cobalt doped low rank coal based catalyst for electrochemical water splitting |
| HE21 | Souad Abderafi | Techno-economic evaluation of distillation-pervaporation process for bieoethanol production |
| HE22 | Jong-Sang Youn | The Effect of Crystallinity and Morphology of Carbon Electrode for Hydrogen Production |
| HE23 | Sang Yong Nam | The composite membranes of poly(phenylene oxide) and polyethylene support containing quaternary ammonium for alkaline anion exchange fuel cell |
| HE24 | Ji Hyeon Kim | Imidazolium-Functionalized Poly(ether-ether-ketone) for Alkaline Membrane Fuel Cell |
| HE25 | Ji Hyeon Kim | Manufacture and Characterization of Polybenzimidazole-Multiwall Carbon Nanotubes Composite Membrane for Gas Separation |
| HE26 | Sangmin Jeong | Exploration of electrodeposited palladium on directly grown graphene/stainless steel (SS 304) substrate for hydrogen production application |
| HE27 | Tae Hyun Kim | The effect of controlling hydrophilic-hydrophobic block ratio in quarternary ammoniumfunctionalized poly(ether sulfone ketone)s as anion exchange membranes |
| HE28 | Javier Molina | Electrochemical synthesis of platinum nanoparticles on gas diffusion layers as cathodes for PEM electrolyzers |
| HE29 | Nivas Babu Selvaraj | Neutron imaging studies of a MH storage tank during operation |
| HE30 | Julio J. Conde | Superhydrophobic electrosprayed deposits: breakthrough method for water management in PEMFCs |
| HE31 | Nivas B. Selvaraj | Hydrogen concentration in TiZrNi ribbon |