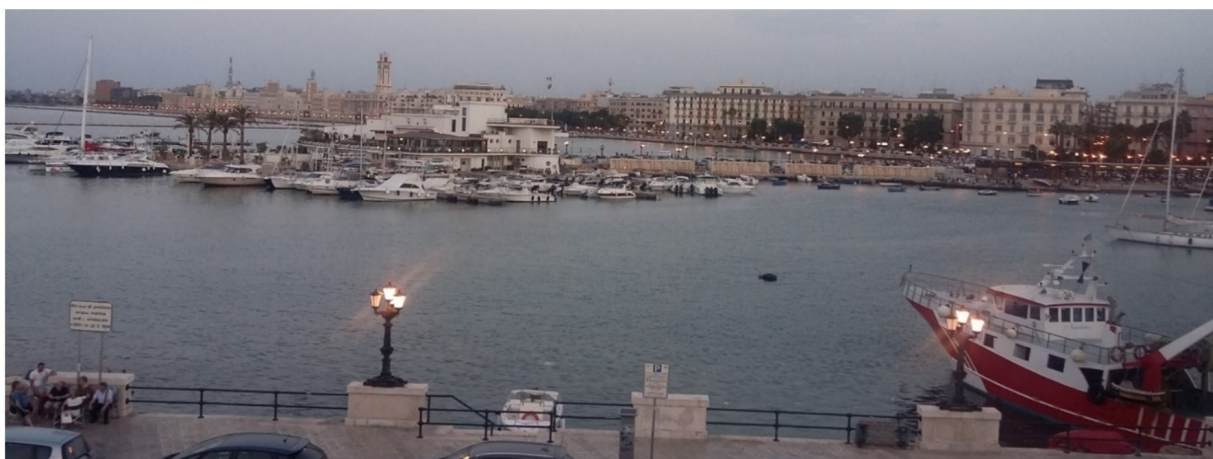


# AIM 2022 Workshop program

Bari, 23-24 June, 2022



**Aula A Department of Physics – University of Bari  
Campus, via Orabona 4, 70126 Bari**

## Abbreviations

**PI** – Plenary lecture (35 minutes + 5 minutes discussion)

**KN** – Keynote lecture (30 minutes + 5 minutes discussion)

**OP** – Oral presentation (15 minutes + 5 minutes discussion)

**FP** – Flash presentation (7 minutes + 3 minutes discussion)

23<sup>th</sup> June 2022

8:30	<b>Registration desk opens</b>	
<b>Opening Session</b>		
<b>Chairperson:</b> Prof. M. Lucia Curri, University of Bari		
9:00 - 9:30	<b>Opening welcome</b>	
9:30 - 10:10	<b>PI1</b>	<b>Prof. Liberato Manna</b> Italian Institute of Technology, IIT (Italy) <i>Halide Perovskite Nanocrystals: Their Synthesis, Chemical, Structural, and Surface Transformations</i>
10:10 - 10:30	<b>OP1</b>	<b>Dr. Alice Debot</b> University of Luxembourg (Luxembourg) <i>Inkjet printing of thin chalcogenide semiconductor layers for solar cell applications</i>
10:30 - 10:50	<b>OP2</b>	<b>Dr. Rosanna Mastria</b> Institute of Nanotechnology, NANOTEC-CNR (Italy) <i>Photoluminescence emission induced by localized states in halide-passivated colloidal two-dimensional WS<sub>2</sub> nanoflakes</i>
10:50 - 11:30	<b>Coffee break</b>	
11:30 - 12:00	<b>KN1</b>	<b>Prof. Jawwad A. Darr</b> University College London (United Kingdom) <i>Green unconventional supercritical water flow routes to energy materials discovery and Kg/h scale-up</i>
12:00 - 12:20	<b>OP3</b>	<b>Mrs. Franca Marina</b> University of Padua (Italy) <i>Unveiling the impact of doping ions on aluminum oxide as automotive catalyst support</i>
12:20 - 12:40	<b>OP4</b>	<b>Dr. Francesco Miccio</b> Institute of science and technology for ceramics, ISTEC-CNR (Italy) <i>Geopolymer based catalysts and oxygen carriers for application in thermochemical processes</i>
12:40 - 13:00	<b>OP5</b>	<b>Prof. Alessandro De Giacomo</b> University of Bari (Italy) <i>Nanostructures produced via Laser Ablation in Liquids</i>
13:00 - 14:30	<b>Lunch break &amp; Poster session</b>	
<b>Afternoon Session</b>		
<b>Chairperson:</b> Prof. Silvia Gross, University of Padua		
14:30 - 15:00	<b>KN2</b>	<b>Dr. Cinzia Giannini</b> Institute of Crystallography, IC-CNR (Italy) <i>Structural and morphological X-ray studies of Inorganic nanomaterials</i>
15:00 - 15:20	<b>OP6</b>	<b>Mr. Filippo Colombo</b> University of Hamburg (Germany) <i>Bimetallic exsolution of Ni-Fe nanoparticles from perovskite oxides: an insight on mechanistic aspects through in-situ synchrotron measurements</i>
15:20 - 15:40	<b>OP7</b>	<b>Dr. Aurora Rizzo</b> Institute of Nanotechnology, NANOTEC-CNR (Italy) <i>Polymer-Assisted Perovskite Assembly</i>
15:40 - 16:20	<b>Coffee break</b>	
16:20 - 16:30	<b>FP1</b>	<b>Dr. Kioseoglou Effrosyni</b> Aristotle University of Thessaloniki (Greece) <i>Advanced Vanadium-Peroxido Materials in Sustainable Catalytic Systems</i>
16:30 - 16:40	<b>FP2</b>	<b>Dr. Leonarda Francesca Liotta</b> Institute of nanostructured materials, ISMN-CNR (Italy) <i>Ag/Cu supported on SiO<sub>2</sub>-TiO<sub>2</sub> oxides as potential antifouling systems: Characterization of chemical physical and rheological properties</i>
16:40 - 16:50	<b>FP3</b>	<b>Mrs. Giada Mannias</b> University of Sassari (Italy) <i>Innovative and green perspectives of Iron (III) Trimesate Metal Organic Frameworks via Mechanochemical and Sonochemical approaches</i>
16:50 - 17:00	<b>FP4</b>	<b>Mrs. Zuharia Arshad</b> University College London (United Kingdom) <i>Continuous Hydrothermal Flow Synthesis of Therapeutic Magnetic Nanoparticles</i>
20:30	<b>Social Dinner</b>	

24<sup>th</sup> June 2022

<b>Morning Session</b>		
<b>Chairperson:</b> Prof. Jawwad A. Darr, University College London (United Kingdom)		
9:00 - 9:40	<b>PI2</b>	<b>Prof. Sanjay Mathur</b> University of Cologne (Germany) <i>Efficient Photon-harvesting Technologies for Water Splitting Reactions</i>
9:40 - 10:00	<b>OP8</b>	<b>Dr. Massimo Dell'Edera</b> Institute for chemical and physical processes, IPCF-CNR (Italy) <i>CuO-CeO<sub>2</sub>-TiO<sub>2</sub> photocatalysts prepared in situ by Solution Combustion Synthesis for the efficient degradation of Methyl Blue and Nalidixic Acid under UV and Visible light</i>
10:00 - 10:20	<b>OP9</b>	<b>Mrs. Regina Del Sole</b> University of Bari (Italy) <i>Aerosol-Assisted Atmospheric Pressure Plasma Deposition of TiO<sub>2</sub>/rGO nanocomposite coatings</i>
10:20 - 11:00	<b>Coffee break</b>	
11:00 - 11:30	<b>KN3</b>	<b>Prof. Simone Mascotto</b> University of Hamburg (Germany) <i>Self-regenerating supported metal nanoparticles for CO<sub>2</sub> conversion applications</i>
11:30 - 11:50	<b>OP10</b>	<b>Dr. Silvia Mostoni</b> University of Milano-Bicocca (Italy) <i>Porphyrin functionalized ZnO/SiO<sub>2</sub> hybrid nanoparticles as scintillator agents</i>
11:50 - 12:10	<b>OP11</b>	<b>Mr. Benjamin Rudolph</b> University of Hamburg (Germany) <i>Exsolution of Ni nanoparticles from nanostructured perovskite oxides for biogas reforming</i>
12:10 - 12:30	<b>OP12</b>	<b>Dr. Raffaella Soave</b> Institute of Chemical Science and Technology, SCITEC-CNR (Italy) <i>Ferrate salts as stand-alone catalysts for chemical fixation of CO<sub>2</sub> into epoxides and aziridines: a theoretical perspective</i>
12:30 - 12:40	<b>FP5</b>	<b>Mrs. Susanna Tinello</b> University of Padua (Italy) <i>Optimisation of a green synthesis of zinc oxide nanoparticles exploiting an algae-mediated biogenic approach</i>
12:40 - 12:50	<b>FP6</b>	<b>Dr. Giuseppe Dilauro</b> University of Bari (Italy) <i>Synthesis of Functionalized Oxygenated Heterocyclic Compounds via Mizoroki-Heck Coupling reaction in Deep Eutectic Solvents</i>
12:50 - 13:00	<b>FP7</b>	<b>Dr. Alberto Perrotta</b> Institute of Nanotechnology, NANOTEC-CNR (Italy) <i>Development of nanoporous ZnO layers derived from molecular layer deposition (MLD) hybrid polymers</i>
13:00 - 14:00	<b>Lunch break (Independent)</b>	
<b>Afternoon Session</b>		
<b>Chairperson:</b> Prof. Simone Mascotto, University of Hamburg		
14:00 - 14:30	<b>KN4</b>	<b>Dr. Iñigo Bretos</b> Materials Science Institute of Madrid, ICMM-CSIC (Spain) <i>Low-temperature strategies to induce the crystallization of metal oxide thin films by wet chemical methods</i>
14:30 - 14:50	<b>OP13</b>	<b>Dr. Sebastiano Campisi</b> University of Milan (Italy) <i>Synthesis and functionalization of sustainable hydroxyapatite-based materials for multipurpose applications in environmental protection</i>
14:50 - 15:10	<b>OP14</b>	<b>Mr. Rafal Lysowski</b> Wroclaw University of Science and Technology (Poland) <i>Selected spinel-based oxygen carriers for CLC application</i>
15:10 - 15:30	<b>OP15</b>	<b>Prof. Mauro Carraro</b> University of Padua (Italy) <i>Halloysite nanotubes as scaffold for the support of nano-catalysts</i>
15:30 - 15:50	<b>OP16</b>	<b>Dr. Federico Olivieri</b> Institute for Polymer Composite and Biomaterials, IPCB- CNR (Italy) <i>Smart nanocarriers based on mesoporous silica nanoparticles for the tailored release of corrosion inhibitors</i>
15:50 - 16:10	<b>OP17</b>	<b>Prof. Roberto Scotti</b> University of Milano-Bicocca (Italy) <i>Zinc single sites anchored on silica as curing activators for rubber</i>
16:10 - 16:20	<b>FP8</b>	<b>Mrs. Debora Carrozza</b> University of Modena and Reggio Emilia (Italy) <i>Synthesis and characterization of large-pore mesoporous silica structures</i>
16:20 - 16:30	<b>FP9</b>	<b>Dr. Lorenzo Degli Esposti</b> Institute of science and technology for ceramics, ISTEC-CNR (Italy) <i>Use of Amorphous Calcium Phosphate as Innovative Precursor for the Synthesis of Hydroxyapatite Biomaterials</i>
16:30 - 16:40	<b>FP10</b>	<b>Mrs. Sevasti Matsia</b> Aristotle University of Thessaloniki (Greece) <i>Polymeric microparticle synthesis as advanced materials in Chronic Obstructive Disease therapeutics</i>
16:40 - 17:10	<b>Poster Award Ceremony – Closing remarks</b>	

## Poster presentations

- Continuous and Scalable Production of Advanced Energy Materials** P1  
Thomas E. Ashton  
*University College London (United Kingdom)*
- Rice husk derived carbon aerogels for supercapacitor applications** P2  
Pierfrancesco Atanasio, Eva Gualtieri, Francesca A. Scaramuzzo, Mauro Pasquali, and Marco Rossi  
*Sapienza University of Rome (Italy)*
- Pt-loaded, Se-doped Hydroxyapatite Nanoparticles with Potential Application against Bone Tumors and Metastases** P3  
Alessandra Barbanente, Carmela Iliaria Pierro, Daniele Vitone, Michele Iafisco, Sander Leeuwenburgh, Giovanni Natile, Fabio Arnesano, Nicola Margiotta  
*University of Bari (Italy)*
- Novel Mn-Based Metal Organic Framework Derived Metal Oxide And Their Application In Electrocatalytic ORR Process** P4  
Khanindram Baruah, Sagarmani Rasaily and Anand Pariyar  
*Sikkim University (India)*
- Green-Graphene from agro-food waste: a sustainable chemical production technology** P5  
Giuseppe Valerio Bianco, Alberto Sacchetti, Giovanni Bruno  
*Institute of Nanotechnology, NANOTEC-CNR (Italy)*
- Low-temperature crystallization of solution-processed functional metal oxide thin films via hydroxyl free radicals** P6  
Iñigo Bretos, Alicia López-Gómez, Andrea Y. Rivas, Ricardo Jiménez, Jesús Ricote, M. Lourdes Calzada  
*Materials Science Institute of Madrid, ICMM-CSIC (Spain)*
- Surface functionalization of 2D black phosphorus for catalysis and sensor applications** P7  
Maria Caporali, Matteo Vanni, Manuel Serrano-Ruiz, Maurizio Peruzzini  
*Institute of Chemistry of Organometallic Compounds, ICCOM-CNR (Italy)*
- Hydrothermal Synthesis of New Iridium Pyrochlores** P8  
Jasmine A. Clayton, Richard I. Walton  
*University of Warwick (United Kingdom)*
- “Customized” phenols to introduce specific moieties in Metal Phenolic Networks** P9  
Maddalena Corsini, Andrea Atrei, Fabrizia Fabrizi de Biani, Maria Pagliara, Sofia Siciliano, Elena Cini and Giuseppe Di Florio  
*University of Siena, (Italy)*
- Screening of Pd and Ni supported catalysts for the production of renewable diesel** P10  
Valeria D'Ambrosio, Antonella Angelini, Carla Calabrese, Leonarda Francesca Liotta, Carlo Pastore  
*Water Research Institute, IRSA-CNR (Italy)*
- Study of the Antimicrobial Inactivation Assisted by Photocatalytic Mesoporous TiO<sub>2</sub> Nanoparticles** P11  
Iliaria De Pasquale, Massimo Dell'Edera, Chiara Lo Porto, Elisabetta Roberto, Angela Agostiano, Maria Lucia Curri, and Roberto Comparelli  
*Institute for chemical and physical processes, IPCF-CNR (Italy)*
- Decorating TiO<sub>2</sub> Nanocrystals Seeds with PbS Quantum Dots** P12  
Carlo Nazareno Dibenedetto, Teresa Sibillano, Rosaria Brescia, Mirko Prato, Cinzia Giannini, Annamaria Panniello, Roberto Comparelli, Chiara Ingrosso, Nicoletta Depalo, M. Lucia Curri, Marinella Striccoli and Elisabetta Fanizza  
*University of Bari (Italy)*
- Biomass-Derived Carbon-Supported Calcium Oxide Nanostructures: Efficient and Eco-Friendly Catalysts for the Biodiesel Production from Waste Cooking Oils** P13  
Luigi di Bitonto, Hilda Elizabeth Reynel-Ávila, Didilia Ileana Mendoza-Castillo, Adrián Bonilla-Petriciolet, Carlos J. Durán-Valle and Carlo Pastore  
*Water Research Institute, IRSA-CNR (Italy)*
- Hybrid nanocomposites based on Reduced Graphene Oxide decorated with TiO<sub>2</sub> Nanocrystals for photocatalysis and antimicrobial applications** P14  
A. Disha, M. Dell'Edera, I. De Pasquale, E. Mesto, E. Schingaro, G. V. Bianco, A. Milella, E. Fanizza, R. Comparelli, M. Striccoli, A. Agostiano, M. L. Curri, C. Ingrosso  
*University of Bari, (Italy)*
- Large-Scale MOCVD Deposition of Nanostructured TiO<sub>2</sub> on Stainless Steel Woven: A Systematic Investigation of Photoactivity as a Function of Film Thickness** P15  
Naida El Habra, Marta Maria Natile, Alessandro Galenda  
*Institute of Condensed Matter Chemistry and Technologies for Energy, ICMATE-CNR (Italy)*
- Biocompatible encapsulating TiO<sub>2</sub> thin films deposited via Atomic Layer Deposition for neuronal interfaces** P16  
Naida El Habra, Alessia Famengo, Giacomo Sagrini, Patrizia Canton, Stefano Boldrini, Alberto Ferrario, Alessandro Galenda, Marta Maria Natile, Alessandro Leparulo, Marta Maschietto, Stefano Vassanelli  
*Institute of Condensed Matter Chemistry and Technologies for Energy, ICMATE-CNR (Italy)*
- A New Metastable Nanocrystalline Polymorphic Form of Diclofenac Acid by Manual Grinding** P17

- Guido Ennas, Francesco Lai, Francesca Marongiu and Alessandra Scano  
*University of Cagliari (Italy)*
- Hybrid Nanocellulose/TiO<sub>2</sub> materials for biomedical applications** P18  
Alessia Famengo, Naida El Habra, Andrea Riccioni, Elisabetta Schievano, Tommaso Carofiglio  
*Institute of Condensed Matter Chemistry and Technologies for Energy, ICMATE-CNR (Italy)*
- Controlled synthesis and characterization of 0-1-2-3 dimensional SnO<sub>2</sub> nanocrystals** P19  
Mariangela Giancaspro, Marica Tancredi, Teresa Sibillano, Cinzia Giannini, Antonella Milella, Rachele Castaldo, Gennaro Gentile, Marino Lavorgna, Antonino Madonia, Annamaria Panniello, Maria Lucia Curri, Marinella Striccoli, and Elisabetta Fanizza  
*University of Bari (Italy)*
- Novel synthetic pathway for antimicrobial hybrid nanocomposites based on Reduced Graphene Oxide decorated with Ag Nanoparticles** P20  
A. Grandolfo, G. Mandriota, G. V. Bianco, E. Fanizza, R. Comparelli, M. Striccoli, A. Agostiano, M. L. Curri, C. Ingrosso  
*Polytechnic of Bari (Italy)*
- Aminopropylsilica-based materials containing tris(catecholato)silicate moiety from hydrolysis of 3-ammoniumpropylbis(catecholato)silicate** P21  
Vincenzo Campisciano, Benedetto Taormina, Alberto Spinella, Leonarda F. Liotta, Francesco Giacalone and Michelangelo Gruttadauria  
*University of Palermo (Italy)*
- Silicon/carbon composite anodes from rice husk for lithium-ion batteries: optimizing the Si/C ratio to enhance battery performances and durability** P22  
Eva Gualtieri, Pierfrancesco Atanasio, Francesca A. Scaramuzzo, Alessandro dell'Era and Mauro Pasquali  
*Sapienza University of Rome (Italy)*
- Solar-driven photocatalytic removal of sulfonamides from the aquatic environment - Comparison of the efficiency of selected photocatalysts** P23  
Katarzyna Kowalska, Paulina Sowik, and Waclaw Bartolewski  
*Silesian University of Technology (Poland)*
- Oxygen carriers as examples of advanced inorganic materials-synthesis and structural analysis** P24  
Ewelina Ksepko, Rafal Lysowski  
*Wroclaw University of Science and Technology (Poland)*
- Green synthesis of multifunctional MIL-100 for CO<sub>2</sub> cycloaddition to epoxides** P25  
Paulina Jagódka, Krzysztof Matus, Joaquin Silvestre-Albero, Erika de Oliveira Jardim, Agata Łamacz  
*Wroclaw University of Science and Technology (Poland)*
- Plasmo-chemical method for deposition of photocatalytic nanocomposite coatings for environmental applications** P26  
Chiara Lo Porto, Fabio Palumbo, Massimo Dell'Edera, Ilaria De Pasquale, Elisabetta Roberto, M. Lucia Curri, Roberto Comparelli  
*Institute for chemical and physical processes, IPCF-CNR (Italy)*
- Morphological changes in metal mixed oxygen carries examined using SEM-EDS method** P27  
Rafal Lysowski, Ewelina Ksepko  
*Wroclaw University of Science and Technology (Poland)*
- Synthetic Approaches for Bright Red-Emitting Carbon Nanoparticles** P28  
Antonino Madonia, Gianluca Minervini, Angela Terracina, Alice Sciortino, Fabrizio Messina, Carlo Maria Carbonaro, Roberto Comparelli, Annamaria Panniello, and Marinella Striccoli  
*Institute for chemical and physical processes, IPCF-CNR (Italy)*
- Novel <sup>19</sup>F-MRI tracer based on Solid Lipid Nanoparticles Encapsulating Superfluorinated Molecular Probes** P29  
G. Mandriota, N. Depalo, E. Fanizza, V. Dichiarante, M. L. Curri, F. Baldelli Bombelli, P. Mentrangolo, C. Ingrosso  
*Institute for chemical and physical processes, IPCF-CNR (Italy)*
- Optical traceable PEG-Liposomes as suitable nanodelivery systems of MCC950, inhibitor of the NLRP3 inflammasome activation** P30  
R. Mastrogiacomo, F. Rizzi, G. Minervini, L. Carrieri, A. Panniello, M. Striccoli, A. Madonia, R. Comparelli, G. Giannelli, M. L. Curri, E. Fanizza, M. P. Scavo and N. Depalo  
*Institute for chemical and physical processes, IPCF-CNR (Italy)*
- Highly Fluorescent Carbon Nanoparticles Synthesized in Open Reactor as Efficient pH-Responsive Materials** P31  
Gianluca Minervini, Antonino Madonia, Carlo Maria Carbonaro, Francesca Mocci, Teresa Sibillano, Cinzia Giannini, Elisabetta Fanizza, Angela Agostiano, Maria Lucia Curri, Marinella Striccoli, and Annamaria Panniello  
*Polytechnic of Bari (Italy)*
- Synthesis of sodium ion-exchanged functionalized UiO-66 MOFs** P32  
Nicole C. Mitchell, Richard I. Walton, and Melanie J. Loveridge  
*University of Warwick (United Kingdom)*
- Novel Coordination Polymers Based on Carboxylate And 4,4'-Trimethylenedipyridine Ligands for the Removal Of Heavy Metal And 2,4,6-Trichlorophenol from Water** P33

Adetola C. Oladipo, Adedibu C. Tella, Adeniyi S. Ogunlaja, Guy J. Clarkson and Richard I. Walton  
*Landmark University (Nigeria)*

**Solvothermal Synthesis of Multiferroic Bismuth Ferrite Nanoparticles and the Influence of Annealing Temperature on Structural, Optical and Magnetic Properties** P34

Sonia Pérez, Souad Ammar, Sophie Nowak, and Fayna Mammeri  
*University Paris Cité, ITODYS (France)*

**The crystallisation and characterisation of basic magnesium chloride salts studied in situ using a laboratory SAXS/WAXS instrument** P35

Katie Pickering, Steven Huband, Kirill Shafran, and Richard Walton  
*University of Warwick (United Kingdom)*

**Engineering Upconverting Nanocrystals for FRET** P36

F. Pini, L. Frances-Soriano, N. Hildebrandt and M. M. Natile  
*University of Rouen Normandy (France)*

**Sequential Biocatalytic Resolution of Secondary Alcohols and Metal-catalyzed Reactions in Deep Eutectic Solvents for the Synthesis of Pharmaceutically Relevant Molecules** P37

M. Pulpito, G. Dilauro, L. Cicco, P. Vitale, F. M. Perna, A. Biundo, V. Capriati  
*University of Bari (Italy)*

**Design of core@shell nanostructures for biomedical applications** P38

Federica Rizzi, Pierluigi Lasala, Marialuisa Cistulli, Miria Lafranceschina, Vanessa Lanzillotta, Rachele Castaldo, Gennaro Gentile, Marino Lavorgna, Roberto Comparelli, Marinella Striccoli, Maria Lucia Curri, Nicoletta Depalo and Elisabetta Fanizza  
*University of Bari (Italy)*

**New Green Tandem Protocol Combining Organolithium Oxidation and Organolithium Chemistry to Obtain Chemoselective Tertiary Alcohols** P39

M. J. Rodríguez-Álvarez, D. Elorriaga, A. Presa-Soto, E. Hevia and J. García-Álvarez  
*University of Oviedo (Spain)*

**Supercritical CO<sub>2</sub>-assisted introduction of Cu into Zr-MOFs** P40

Maciej Róziewicz, Joanna Oczeretko, Janusz Trawczyński, and Agata Łamacz  
*Wroclaw University of Science and Technology (Poland)*

**Analysis of the influence of activator type on the synthesis and performance of based on metakaolin geopolymers** P41

Fabiana M. A Santos, Joubert P. Ferreira, Maria T. P. Aguiar  
*Federal University of Minas Gerais, UFMG (Brazil)*

**Bio-based strategies for enhancing supercapacitors' energy density** P42

Paolo Stufano, Matteo Grattieri, Rossella Labarile, Maria Varsalona, Alberto Perrotta, Pinalysa Cosma, Gianluca M. Farinola, Massimo Trotta  
*Institute of Nanotechnology, NANOTEC-CNR (Italy)*

**Synthesis and catalytic applications of metal oxocluster-based hybrid nanoparticles** P43

Davide Vendrame, Giulia Bragaglia, Silvia Gross, Mauro Carraro  
*University of Padua (Italy)*

**Hybrid nanocomposite based on Au nanoparticles densely coated nanographene oxide towards theranostic applications** P44

Fabio Vischio, Livianna Carrieri, Giuseppe Valerio Bianco, Francesca Petronella, Nicoletta Depalo, Elisabetta Fanizza, Maria Principia Scavo, Luciano De Sio, Antonella Calogero, Marinella Striccoli, Angela Agostiano, Gianluigi Giannelli, Maria Lucia Curri, Chiara Ingrosso  
*University of Bari (Italy)*

**High Power, High-Rate Lithium-Ion Battery Wadsley-Roth structure Anodes** P45

Edward C. Williams and Jawwad Darr  
*University College London (United Kingdom)*

**Bottom up Synthesis of Sodium-Ion Battery Cathode Materials** P46

Zaibunisa Khan and Jawwad A. Darr  
*University College London (United Kingdom)*

**Nanostructured Materials for Innovative and Sustainable Production of Hydrogen** P47

Lucia Zanetti, Enrico Verlatto, Andrea Basagni, Daniele Basso, Lidia Armelao, and Marta Maria Natile  
*University of Padua (Italy)*

**TiO<sub>2</sub> nanoparticles in the field of Cultural Heritage: Case study of the sarcophagus of Sparano from Bari** P48

M. Mastrolilli, M. Dell'Edera, I. De Pasquale, P. Acquafredda, A. Monno, L. Spalluto, A. Mangone, R. Comparelli, M. L. Curri  
*University of Bari (Italy)*