

ECME 2023 BARI - ITALY 2 - 6 OCTOBER

Program of the Conference Piccinni Theatre Corso Vittorio Emanuele II, 84, 70122 - Bari BA – Apulia - Italy

Sunday	Sunday, October, 1 st 2023			
17:00- 18:00	Registration			
18:00- 20:00	Welcome party - Museo Archeologico di Santa Scolastica			

Monday, October, 2 nd 2023			
08:30- 09:30	Opening Cerimony		
09:30- 10:50	Session 1A - Chair: Gianluca Maria Farinola		
09:30- 10:00	PL 1.1	Fabio Biscarini	Physico-Chemical insights on Organic Electronics Biosensors
10:00- 10:20	KL 1.1	Guglielmo Lanzani	Intra Membrane Light actuators for Cell Photostimulation
10:20- 10:35	Oral 1.1	Serpil Tekoglu	Conductive Biocomposites for Biomedical Applications
10:35- 10:50	Oral 1.2	Fabrizio Torricelli	Organic Artificial Neurons for in-situ Bioelectronics
10:50- 11:20	Coffee Break & Poster Preview		
11:20- 13:00	Session 1B - Chair: Georges Hadziioannou		
11:20- 11:40	KL 1.2	Roisin Owens	Bioelectronic tools to study the gut-brain axis
11:40- 12:00	KL 1.3	Ifor Samuel	Approaches to Electrically Driven Organic Semiconductor Lasers
12:00- 12:15	Oral 1.3	Hübler Arved	Print the Brain: Neuromorphic 3D-Circuits Based on Printed Organic Memristors

12:15- 12:30	Oral 1.4	Adrica Kyndiah	Direct Recording of Action Potentials of Cardiomyocytes Through Printed Electrolyte-Gated Field-Effect Transistors
12:30- 12:45	Oral 1.5	Maria Rosa Antognazza	Cell mechanotransduction driven by bio-organic optoelectronic devices
12:45- 13:00	Oral 1.6	Giuseppe M. Paternò	Membrane Targeted Azobenzene Drives Optical Modulation of Bacterial Membrane Potential
13:00- 14:00	Free Time		
14:00- 15:55	Session 1C -	Chair: Gitti Fro	еу
14:00- 14:30	PL 1.2	Antonio Facchetti	Unconventional semiconductors and device architectures enabled by molecular design, doping and film morphology engineering
14:30- 14:50	KL 1.4	Natalie Stingelin	Flexible Electronics: Challenges and Opportunities — a Materials Science View
14:50- 15:10	KL 1.5	Christoph Brabec	Towards A Digital Twin for Organic and Perovskite Photovoltaics
15:10- 15:25	Oral 1.7	Tianjun Liu	Chiral emission from halide perovskite semiconductors
15:25- 15:40	Oral 1.8	Lei Ying	Copper Thiocyanate as the Anode Interfacial Layer for Efficient Near-Infrared Organic Photodetector
15:40- 15:55	Oral 1.9	Andrea Nitti	Organic Electronic Materials via Cascade Synthetic Approach based on One Pot DHA-Perkin Annulations
15:55- 16:20	Coffee Break & Poster Preview		
16:20- 17:50	Session 1D - Chair: Rosin Owens		
16:20- 16:35	Oral 1.10	Guido Fratesi	Metal-TetraPhenyl-Porphyrins Adsorption on Atom-Thick and Bulk Magnetic Oxides
16:35- 16:50	Oral 1.11	Marta Penconi	Paradigm Shift in Iridium Emitters Structure: Single Active Ligand in Heteroleptic Complexes for NIR Phosphorescent OLEDs
16:50- 17:05	Oral 1.12	Chloè Dindault	Organic Photodetectors and their tolerance to impurities
17:05- 17:20	Oral 1.13	Yunzhou Deng	Excitation "memory" accelerates transient electroluminescent response of quantum-dot lightemitting diodes
17:20- 17:35	Oral 1.14	Silvia Colella	Chemical insight into perovskite inks behaviour and their implications in photovoltaic devices
17:35- 17:50	Oral 1.15	Elena Molteni	Tuning the magnetic properties of antiferromagnetic oxides via adsorption of organic molecules: pentacene on NiO(001)
17:50- 19:30	Poster Session 1		

Tuesda	y, October,	3 rd 2023	
09:00- 10:50	Session 2A - Chair: Fabio Biscarini		
09:00- 09:30	PL 2.1	Takao Someya	Electronic skins for robotics and wearables
09:30- 09:50	KL 2.1	Fiorenzo Omenetto	ТВА
09:50- 10:05	Oral 2.1	Alessandro Luzio	Copper Phthalocyanine Based Electrochemical Transistors for Future Edible Electronics
10:05- 10:20	Oral 2.2	Yan Wang	Permeable electronic skins for health monitoring
10:20- 10:35	Oral 2.3	Francisco Molina- Lopez	2D/3D-Printed Flexible Organic Thermoelectrics for LowScale Energy Harvesting
10:35- 10:50	Oral 2.4	Eyal Stein	Ambipolar Blend-based Organic Mixed Ionic-Electronic Conductors
10:50- 11:20	Coffee Break	& Poster Prev	riew
11:20- 13:00	Session 2B -	Chair: Nuria C	Crivillers
11:20- 11:40	KL 2.2	Fei Huang	High Performance n-Type Conjugated Polymers for Organic Electronics
11:40- 12:00	KL 2.3	Iain McCulloch	Organic Semiconducting Polymer Photocatalysis for Water and CO2 Reduction
12:00- 12:15	Oral 2.5	Cloutet Eric	Synthesis of (semi)conducting polymers in dispersed media
12:15- 12:30	Oral 2.6	Theresa Rienmüller	Modeling cellular membrane potential using organic photovoltaic devices
12:30- 12:45	Oral 2.7	Jozef Krajcovic	Side chain engineering: the role of bulky substituents towards to original properties of organic optoelectronic materials
12:45- 13:00	Oral 2.8	Johannes Gierschner	Charge Transfer State Engineering for Tailor-Made Luminescent Organic Materials
13:00- 14:00	Free Time		
14:00- 16:10	Session 2C -	Chair: Antonio	o Facchetti
14:00- 14:30	PL 2.2	Magnus Berggren	Substrate-free Organic Bioelectronics Integrated with Living Cells and Tissues
14:30- 14:50	KL 2.4	Eleni Stavrinidou	Plant bioelectronics for high resolution monitoring and electronic control of plant processes
14:50- 15.10	KL 2.5	Annalisa Bonfiglio	Double-gated organic transistors for biomedical sensing applications: overall analysis and future perspectives.
15:10- 15:25	Oral 2.9	Mingna Liao	Cellulose-Based Radiative Cooling and Solar Heating Powers Ionic Thermoelectrics
15:25- 15:40	Oral 2.10	Stefani Valianti	Charge-Transport Mechanisms in Desulfobubaceae Microbial Nanowires (Cable Bacteria)
15:40- 15:55	Oral 2.11	Matteo Grattieri	Bio-inspired Approaches for Biotic/abiotic Interfaces in Intact Bacteria-based Biophotoelectrochemical Systems
15:55- 16:10	Oral 2.12	Marianna Ambrico	Mixing and matching sustainable Melanin&Keratin from waste for green electronics

16:10- 16:30	Coffee Break & Poster Preview		
16:30- 18:00	Session 2D - Chair: Guglielmo Lanzani		
16:30- 16:45	Oral 2.13	Arianna Magni	The Photophysics of Cell Membrane-Targeting Phototransducers
16:45- 17:00	Oral 2.14	Fabio Marangi	On the Coupling Mechanism Occurring at the Neuron-Nanoparticle Interface
17:00- 17:15	Oral 2.15	Elliot Goldberg	The Effects of Strain on the Electronic Properties of Rubrene Single Crystals
17:15- 17:30	Oral 2.16	Giuseppina Pace	2D-Materials and Hydrogels based Triboelectric Nanogenerators (TENGs) for Energy Harvesting and Self-Powered Tactile Sensors
17:30- 17:45	Oral 2.17	Arianna Quesada Ramirez	Ellipsometric measurements in organic semiconducting materials for photovoltaics
17:45- 18:00	Oral 2.18	Hang Yu	Towards a Deeper Understanding of the Ionic Charging in Naphthalenediimide-Based N-Type Conjugated Polymer Electrodes
18:00- 19:30	Poster Session 2		

Wednesday, October, 4 th 2023			
09:00- 10:50	Session 3A - Chair: Alberto Salleo		
09:00- 09:30	PL 3.1	Paolo Samorì	Supramolecular opto-electronics: digital multiresponsive devices with enhanced functionalities
09:30- 09:50	KL 3.1	Maurizio Prato	Synthesis, Properties and Applications of Carbon Nanodots
09:50- 10:05	Oral 3.1	Chris McNeill	Resonant Tender X-ray Scattering of Conjugated Polymers
10:05- 10:20	Oral 3.2	Michal Valasek	Electrically and mechanically decoupled single chromophores by tripodal scaffolds on gold: Towards Organic Optoelectronic Devices
10:20- 10:35	Oral 3.3	Giovanni Costantini	Quantitative characterisation of conjugated polymers: mass distribution and polymerisation defects determined by molecular scale imaging
10:35- 10:50	Oral 3.4	Edmund Leary	How Does Antiaromaticity Affect Single Molecule Conductance?
10:50- 11:20	Coffee Break		
11:20- 13:25	Session 3B - Chair: Zhenan Bao		
11:20- 11:50	PL 3.2	Thuc-Quyen Nguyen	Conjugated Polyelectrolytes for Opto-electronic Devices
11:50- 12:10	KL 3.2	Feng Gao	Minimizing voltage losses in organic solar cells
12:10- 12:25	Oral 3.5	Ergang Wang	Non-Conjugated Polymeric and Dimeric Acceptors for Efficient Polymer Solar Cells
12:25- 12:40	Oral 3.6	Mathias Nyman	Controlled Doping of the Active Layer as a possible Performance Enhancer in Organic Solar Cells
12:40- 12:55	Oral 3.7	Chang-Qi Ma	Degradation Mechanism and Stability Improvement of Organic Solar Cells
12:55- 13:10	Oral 3.8	Jeannine Grune	Triplet excitons and associated efficiency-limiting pathways in organic photovoltaics based on non-fullerene acceptors
13:10- 13:25	Oral 3.9	Ramesh Y. Adhikari	Transparent Conductive Films of PEDOT:PSS-Amino Acid Composite
13:25- 14:30	Lunch Break		
15:00- 19:00	Excursion		
19:30- 20:00	Transfer to Social Dinner		
20:00- 22:30	Social Dinner		

Thursd	lay, Octobe	r, 5 th 2023	
09:00- 10:50	Session 4A - Chair: Thuc-Quyen Nguyen		
09:00- 09:30	PL 4.1	Alberto Salleo	Do crystals matter in conjugated polymers? Linking microstructure to charge transport at several length scales
09:30- 09:50	KL 4.1	Marta Mas Torrent	Towards reproducible, stable and reliable printed OFETs
09:50- 10:05	Oral 4.1	Natalie Banerji	Terahertz Spectroscopy as a Tool to Study Charge Carriers in Functional Organic Semiconductors
10:05- 10:20	Oral 4.2	Pia Damlin	Probing the electronic and structural properties of organic flexible thin films by in situ spectro-electrochemistry
10:20- 10:35	Oral 4.3	Regina Hoffmann-Vogel	Shell effects in electromigrated Cu-nanocontacts under ambient conditions
10:35- 10:50	Oral 4.4	Tae-il Kim	Choline ion gel based organic electrochemical transistors for bioelectronics
10:50- 11:20	Coffee Break	« & Poster Prev	view
11:20- 13:00	Session 4B -	Chair: Magnu	s Berggren
11:20- 11:40	KL 4.2	Maria Antonietta Loi	SnO2 for inverted non-fullerene acceptor organic solar cells
11:40- 12:00	KL 4.3	Dirk Guldi	Adaptive Down- and Up-Conversion
12:00- 12:15	Oral 4.5	Fengling Zhang	Investigate the Effect of Solvent and Additive in Formation of All- Polymer Solar Cells with Situ Optical Spectroscopy
12:15- 12:30	Oral 4.6	Ning Li	Mastering morphology of non-fullerene acceptors towards long- term stable organic solar cells
12:30- 12:45	Oral 4.7	Peter Baeuerle	Molecular Donor-Acceptor Dyads and Triads for Single Material Organic Solar Cells
12:45- 13:00	Oral 4.8	Nuria Crivillers	Photoluminescence properties of single-walled carbon nanotubes modified with Stable Organic Radicals
13:00- 14:00	Free Time		
14:00- 16:05	Session 4C -	Chair: Mauriz	io Prato
14:00- 14:30	PL 4.2	Takuzo Aida	Electronically or Electrically Active Dynamic Materials Based on Supramolecular Polymers
14:30- 14:50	KL 4.4	Yoann Olivier	Controlling spin by materials design in light-emitting applications: A computational perspective
14:50- 15:05	Oral 4.9	Xianjie Liu	Optoelectronic properties of two-dimensional organic molecular crystals upon their electronic structure
15:05- 15:20	Oral 4.10	Elena Mena- Osteritz	Toroidal Through Space Conjugation in 3D-Aromatic Molecules
15:20- 15:35	Oral 4.11	Alberto Bossi	3D Supramolecular Hybrid Heterostructures on Highly Ordered 2D Thin Film: Coordination Chemistry at Work with Tetrapyrrolic Macrocycles Network
15:35- 15:50	Oral 4.12	Kai Lin Woon	Fast and Accurate Determination of the Singlet–Triplet Gap in Donor–Acceptor and Multiresonance TADF Molecules by Using Hole–Hole Tamm–Dancoff Approximated Density Functional Theory

15:50- 16:05	Oral 4.13	Daniele Padula	Identification of Unknown Inverted Singlet-Triplet Cores by High Throughput Virtual Screening	
16:05- 16:30	Coffee Break & Poster Preview			
16:30- 18:00	Session 4D -	Session 4D - Chair: Natalie Stingelin		
16:30- 16:45	Oral 4.14	Alessandro Landi	Simulation of organic mixed ionic and electronic conductors with a combined classical and quantum mechanical model	
16:45- 17:00	Oral 4.15	Tahereh Nemetiaram	Organic Electronics from Structural Database: New High Mobility Materials and Design Strategies	
17:00- 17:15	Oral 4.16	Wei Wu	Integrated simulation of organic materials: From stationary to dynamical	
17:15- 17:30	Oral 4.17	Hesam Makki	High-throughput modelling of semiconducting polymers: a revolutionary route to in silico design of conjugated polymer	
17:30- 17:45	Oral 4.18	Wenlan Liu	An <i>ab initio</i> method on predicting absorption spectra of crystalline organic semiconducting films	
17:45- 18:00	Oral 4.19	Thomas Baschè	Boosting the Fluorescence Yield of a NIR Quantum Emitter	
18:00- 19:30	Poster Session 3			

Friday,	October, 6 ^t	th 2023	
09:00- 10:45	Session 5A - Chair: Luisa Torsi		
09:00- 09:30	PL 5.1	Zhenan Bao	Skin-inspired organic electronics
09:30- 09:45	Oral 5.1	Cinzia Di Franco	Kelvin-probe force microscopy of surface potential shift triggered by affinity binding in large-area bio-functionalized surfaces
09:45- 10:00	Oral 5.2	Stefano Casalini	Sustainable manufacturing of reduced-graphene oxide electrolytegated transistors: characterization, understanding and applications
10:00- 10:15	Oral 5.3	Stefano Toffanin	Organic Optoelectronic Components in a Smart-integrated System for Plasmonic-based Sensing
10:15- 10:30	Oral 5.4	Gabriel Gomila	Multiparametric nanocharacterization of electrolyte gated organic transistors in operando
10:30- 10:45	Oral 5.5	Sabrina Steffens	Contact Resistance of Low-Voltage n-Channel Thin-Film Transistors Based on Three Different Organic Semiconductors
10:45- 11:15	Coffee Break		
11:15- 12:45	Session 5B - Chair: Marta Mas		
11:15- 11:30	Oral 5.6	Mario Barra	Ambipolar transport and space-charge accumulation effects in organic heterojunction field-effect transistors
11:30- 11:45	Oral 5.7	Ilary Belardi	Brewer's spent grain for greener OTFT structures
11:45- 12:00	Oral 5.8	Li Changbai	Printed Bioelectronics via In-Situ Enzymatic Polymerization of Conjugated Oligomer-based Hydrogel Bioinks
12:00- 12:15	Oral 5.9	Hela Fadool	Enhancing the Performance of State-of-Art solar cells by improving the Built-in Potential
12:15- 12:30	Oral 5.10	Davide Vurro	Printed Wearable Electronics for Healthcare
12:30- 12.45	Oral 5.11	Daniela De Venuto	A Wearable and Flexible Potentiometric Chloride Activity Sensing Platform with Replaceable Electrodes for Cystic Fibrosis Diagnosis at home
12:30- 13:15	Closing Cerimony		