



Date and place of birth 18/08/1987, Turin (Italy)
Sex Male
Nationality Italian
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Career and Education

Mar 2020 – **Associate Professor** @Politecnico di Torino
Chemical Foundations of Technologies [CHIM/07 – 03/B2]
Topics: Materials chemistry for energy conversion and storage (photovoltaics, batteries, supercapacitors); Photopolymerization and UV-curing; Green, biosourced and waste-derived materials for energy; Applied chemometrics.

Oct 2016 – Feb 2020 **Fixed-Time Researcher** (RTD/A) @Politecnico di Torino

Aug 2016 – Oct 2019 **Affiliated Researcher** @Italian Institute of Technology

Jan 2015 – Oct 2016 **Post-Doc Researcher** @Politecnico di Torino

Jan 2012 – Dec 2014 **PhD** in Electronic Devices @Italian Institute of Technology
Thesis defended on 02/03/2015 – rank: Excellent

Dec 2011 **State Examination** as Chemist @Università degli Studi di Torino

Sep 2011 – Dec 2011 **R&D** @Studio Chiono & Ass (Rivarolo Canavese, Italy)
Management of a pilot plant for the production of biogas and biosurfactants

Oct 2009 – Jul 2011 **MSc** in Industrial Chemistry @Università degli Studi di Torino
Thesis defended on 11/07/2011 – rank: 110/110 magna cum laude

Oct 2006 – Jul 2009 **BSc** in Industrial Chemistry @Università degli Studi di Torino
Thesis defended on 16/07/2009 – rank: 110/110 cum laude

Institutional roles

Sep 2020 – Sep 2021 **Reference Professor** for the BSc degree in Automotive Engineering at Politecnico di Torino

Jan 2020 – Dec 2022 **Member of the International Relations Commission** of the Italian Chemical Society

Sep 2019 – Sep 2020 **Reference Professor** for the BSc degree in Biomedical Engineering at Politecnico di Torino

Jan 2019 – Dec 2021 **Board Member** of the Industrial Chemistry Division of the Italian Chemical Society

Jan 2019 – Dec 2019 **Past-Coordinator** of the Early-Career Group of the Italian Chemical Society

May 2018 **Italian Delegate** at the 13th Delegates Assembly of the European Young

	Chemists' Network (EYCN-EuCheMS), Turin (Italy)
Jan 2018 – Dec 2020	Board Member of the Safety in Chemical Environment Interdivisional Group of the Italian Chemical Society
May 2017	Italian Delegate at the 12 th Delegates Assembly of the European Young Chemists' Network (EYCN-EuCheMS), Heraklion (Greece)
Apr 2016	Italian Delegate at the 11 th Delegates Assembly of the European Young Chemists' Network (EYCN-EuCheMS), Guimarães (Portugal)
Feb 2016 – Dec 2018	Coordinator of the Early-Career Group of the Italian Chemical Society <i>Also serving as Board Member of the Industrial Chemistry Division</i>
Apr 2015	Italian Delegate at the 10 th Delegates Assembly of the European Young Chemists' Network (EYCN-EuCheMS), Berlin (Germany)
Jun 2013 – Dec 2015	Board Member of the Early-Career Group of the Italian Chemical Society <i>Also serving as Board Member of the Industrial Chemistry Division</i>
May 2009 – May 2012	Student Representative @Università degli Studi di Torino <i>Elected in two Boards: Industrial Chemistry BSc/MSc degrees, Faculty of Science</i>

Publications and journals

Score

78 peer-reviewed articles, **75** of which in ISI-indexed journals (see [list](#))
33 articles (**42%**) as first author
45 articles (**58%**) as corresponding author
6 articles (**8%**) as senior author
1 article as single author

53 articles (**68%**) published in Q1 quartile
47 articles (**60%**) published with IF > 5, **12** articles (**15%**) with IF > 10

h-index: **51**
>4600 citations (Scopus, 30th August 2020)

Editorial roles

- **Chemical Engineering Journal** (ISSN: 1385-8947, IF 10.6, Elsevier)
Member of the Editorial Board, since August 2017
- **ChemSusChem** (ISSN: 1864-564X, IF 8.0, John Wiley & Sons, Inc.)
Member of the International Advisory Board, since January 2020
- **Electrochimica Acta** (ISSN: 0013-4686, IF 6.2, Elsevier)
Guest Editor for 2 special issues: "69th Annual Meeting of the International Society of Electrochemistry" (2018), "Giornate dell'Elettrochimica Italiana - GEI 2018" (2018)
- **Polymers** (ISSN: 2073-4360, IF 3.4, MDPI AG)
Guest Editor for the special issue "Polymer-based Batteries" (2018)
- **Molecules** (ISSN: 1420-3049, IF 3.3, MDPI AG)
Member of the Editorial Board, since July 2019
Guest Editor for the special issue "Challenges towards Upscaling and Stabilization of Perovskite Solar Cells" (2020)
- **Materials** (ISSN: 1996-1944, IF 3.1, MDPI AG)
Member of the Editorial Board, since May 2016

Guest Editor for the special issue "Electrode Materials" (2015)

- **Frontiers in Energy Research** (ISSN: 2296-598X, IF 2.7, Frontiers Media S.A.)
Review Editor, since 2014
- **Heliyon** (ISSN: 2405-8440, IF tbd, Elsevier)
Member of the Editorial Board, from February 2019 to September 2020
- **Sci** (ISSN: 2413-4155, IF tbd, MDPI AG)
Member of the Advisory Board and of the Editorial Board, since September 2018
- **Challenges** (ISSN: 2078-1547, IF tbd, MDPI AG)
Member of the Advisory Board, since May 2020
- **La Chimica e L'Industria** (ISSN: 2283-544X, AGICOM srl)
Member of the Editorial Board, since December 2017

Research projects

- Jan 2021 – Dec 2025 **SuN₂rise – Solar driven electrochemical nitrogen fixation for ammonia refinery**
H2020 project (ERC-StG, grant agreement n° 948769)
Principal investigator (total grant: 1.498.750 EUR)
Activity: materials and processes for the electrochemical nitrogen reduction powered by photovoltaics
- Oct 2020 – Sep 2023 **SYNERGY – Symbiosis for energy harvesting concepts for smart platforms on foils**
H2020 project (WIDESPREAD, grant agreement n° 952169)
Principal investigator of PoliTO unit (total grant: 897.000 EUR)
Activity: energy harvesting and micropower management as a key component towards self-sustainable smart platforms on flexible substrates
- Jan 2019 – Jan 2023 **Si-DRIVE – Silicon alloying anodes for high energy density batteries comprising lithium rich cathodes and safe ionic liquid based electrolytes for enhanced high voltage performance**
H2020 project (LC-NMBP, grant agreement n° 814464)
Scientific activity as Assistant Professor @PoliTO unit
Activity: development of polymer electrolytes based on ionic liquids for lithium ion batteries
- Oct – Dec 2018 **2018 Annual Implementation Plan - Project C.5 "Energy storage systems for the electric system"**
MiSE-ENEA Agreement on Electric System Research
Scientific activity as Assistant Professor @PoliTO unit
Activity: improvement of interface and cycling at room temperature for sodium batteries
- Jan – Dec 2018 **PEPETOC – Perovskite photovoltaics: experimental efforts towards commercialization**
Research networking project funded by Massachusetts Institute of Technology (MITOR by MISTI call)
Principal investigator of PoliTO unit (total grant: 20.000 USD)
Activity: scale-up of fabrication processes of perovskite solar cells

- Jan 2018 – Dec 2021 **EnABLES – European infrastructure powering the internet of things**
H2020 project (INFRAIA, grant agreement n° 730957)
Scientific activity as Assistant Professor @PoliTO unit
Activity: development of polymer electrolytes and lab-scale devices in the lithium-ion battery framework
- Oct 2017 – Sep 2018 **2017 Annual Implementation Plan - Project C.5 "Energy storage systems for the electric system"**
MiSE-ENEA Agreement on Electric System Research
Scientific activity as Assistant Professor @PoliTO unit
Activity: optimization of titanium dioxide nanotube electrode materials and optimization of safe and highly conductive polymeric electrolytes for sodium ion batteries
- Sep 2017 – Sep 2019 **PEPPY – Perovskite photovoltaic by polymers**
Research project funded by PoliTO / Compagnia di S. Paolo
Principal investigator (150.000 EUR)
Activity: development of polymeric materials for perovskite solar cells
- Aug 2017 – Jul 2021 **RECODE – Recycling carbon dioxide in the cement industry to produce added-value additives: a step towards a CO₂ circular economy**
H2020 project (RIA, grant agreement n° 768583)
Scientific activity as Assistant Professor @PoliTO unit
Activity: development of CO₂-derived cyclic carbonates and polycarbonates for Li-ion batteries electrolytes
- May 2017 – May 2018 **Industrial contract with Solvay SA**
Scientific activity as Assistant Professor
Activity: feasibility study of using PFPE in solid polymer electrolyte composites for lithium batteries
- Oct 2016 – Sep 2017 **2016 Annual Implementation Plan - Project C.5 "Energy storage systems for the electric system"**
MiSE-ENEA Agreement on Electric System Research
Scientific activity as Assistant Professor @PoliTO unit
Activity: study of electrode materials based on titanium dioxide nanotubes and electrolytes for sodium ion batteries
- Jan – Oct 2016 **NANOMAX**
Ministerial Project ("Progetto Bandiera")
Scientific activity as Post-Doc researcher
Activity: development of materials for biological sensors
- Jul – Oct 2015 **CARVOUR**
Regional project (Det. n. 55 del 11/02/2013)
560 h of scientific activity as Post-Doc researcher
Activity: development of active materials containing lithium compounds as a main element of a system for energy storage in vehicles
- Jan – Jun 2015 **IDEA**
Regional project (Det. n. 55 del 11/02/2013)
770 h of scientific activity as Post-Doc researcher
Activity: electrochemical characterization of commercial Li-ion cells for hybrid diesel engines
- Sep 2012 – May 2014 **Smash gaming**
Regional project (POR. Piemonte 2007-2013)

1415 h of scientific activity as PhD student

Activity: development of a miniaturized sensor for the analysis and sensing of H₂S and other toxic gases by means of nanostructures integration

Feb – Aug 2012

VERDE-PIEZO

Regional project (POR. Piemonte 2007-2013)

490 h of scientific activity as PhD student

Activity: development of a lead-free piezoelectric material optimized for energy harvesting applications

Awards and medals

Oct 2020

“Ivano Bertini” Medal

Award assigned by Società Chimica Italiana to a under-40 researcher, author of particularly significant and innovative contributions in the Chemical Sciences field

Apr 2020

“2019 Outstanding Reviewer” Award

Awarded by Royal Society of Chemistry for the outstanding contribution is reviewing manuscripts for “Photochemical & Photobiological Sciences”

Oct 2019

“Coatings” Young Investigator Award 2019

Awarded by MDPI (2000 CHF) for the significant contribution to the advancement of an important area in the field of coatings

Jun 2019

International award “Roberto Piontelli” 2019

Prize awarded by Accademia Nazionale dei Lincei (5000 EUR) for the scientific contribution in the field of electrochemistry for energy. The President of the Italian Republic presides over the award ceremony

Apr 2019

Environment, Sustainability & Energy Division Early Career Award

Awarded by the Royal Society of Chemistry for the inventive development of photoinduced polymerization strategies for solar cells and batteries (2000 GBP)

Mar 2019

Special contribution Award

Awarded by the European Young Chemists’ Network (youth division of the European Chemical Society) for the personal involvement in organizing activities for young chemists

Nov 2018

“2018 Outstanding Reviewer” Award

Awarded by Elsevier for the outstanding contribution is reviewing manuscripts for these journals: “Chemical Engineering Journal”, “European Polymer Journal”, “Heliyon”, “Journal of Alloys and Compounds”, “Journal of Industrial and Engineering Chemistry”, “Journal of Photochemistry & Photobiology, A Chemistry”, “Journal of Physics and Chemistry of Solids”, “Journal of Power Sources”, “Materials Chemistry and Physics”, “Materials Letters”, “Nano Energy”

Nov 2018

“2018 Outstanding Reviewer” Award

Awarded by Springer Nature for the outstanding contribution is reviewing manuscripts for “Energy, Ecology & Environment”

Nov 2017

“2017 Outstanding Reviewer” Award

Awarded by Elsevier for the outstanding contribution is reviewing manuscripts for these journals: “Electrochemistry Communications”, “Electrochimica Acta”, “Industrial Crops & Products”, “International Journal of Hydrogen Energy”, “Materials Science & Engineering B”, “Materials Science in Semiconductor Processing”, “Microporous and Mesoporous Materials”, “Organic Electronics”, “Physica B: Physics of Condensed Matter”, “Solar Energy”

- Jun 2017 **ISE-Elsevier Prize for Applied Electrochemistry**
In recognition of the outstanding achievements in the field of solar cells and batteries (2000 EUR)
- May 2017 **Ranked 1st in the “Top Young Scientists” chart by VIA-Academy**
First classified among young people of all nationalities who have started working in the research world in Italy, Germany and United Kingdom over the last five years
- Apr 2017 **Electrochimica Acta Travel Award for Young Electrochemists**
1st classified over 40 candidates, awarded (1000 EUR) by the International Society of Electrochemistry for the research quality in the field of Electrochemistry
- Jan 2017 **Innovazione Leonardo 2016 Award**
1st classified over 700 candidates, awarded (3000 EUR) for the valorization of talent and ideas in view of the contact with the business world. The Minister of Education, University and Research presides over the award ceremony
- Oct 2016 **“2016 Outstanding Reviewer” Award**
Awarded by Elsevier for the outstanding contribution in reviewing manuscripts for these journals: “Applied Surface Science”, “Arabian Journal of Chemistry”, “Chemical Engineering Journal”, “Journal of Alloys and Compounds”, “Journal of Power Sources”, “Materials Chemistry and Physics”
- Oct 2016 **Electron Devices PhD Program: Prize for the Best 2015 Thesis**
Awarded by Politecnico di Torino (2500 EUR)
- Sep 2016 **“Royal Society of Chemistry – Materials Horizons” Award**
For the best oral presentation in the field of Materials Science during the 6th EuCheMS Chemistry Congress, Seville (Spain)
- Sep 2016 **Special Mention at “European Young Chemist Award 2016”**
Prize awarded by the Asociación Nacional de Químicos de España (500 EUR) to the talk given in the final of the European Young Chemist Award 2016
- Jun 2016 **ENI Award 2016 – Debut in Research**
Prize awarded by ENI company (25000 EUR) to the best PhD Thesis in the field of Renewable Energy. The President of the Italian Republic presides over the award ceremony
- Jun 2016 **“2015 Outstanding Reviewer” Award**
Awarded by the international scientific journal “Solar Energy Materials and Solar Cells” (edited by Elsevier) as the best referee among 2000 others
- May 2016 **Silver medal at “GiovedìScienza Prize” (5th Edition)**
Ranked 2nd among the Top-10 under-35 researchers of Piedmont, Lombardy and Liguria regions
- May 2016 **“MiPiace (I like it!) Award” @ “GiovedìScienza Prize” (5th Edition)**
For the best scientific communication, awarded by the popular jury during the final among the 10 best under-35 researchers of Piedmont, Lombardy and Liguria regions
- Mar 2016 **Sapio Junior Prize for Research and Innovation**
Prize awarded by Sapio company (15000 EUR) to the best under-30 Italian researcher who stands out for his scientific studies and research. The award ceremony took place in the Parliament of the Italian Republic

Dec 2015	Junior Researcher “ENERCHEM-1 2016” Prize <i>Best Italian under-35 researcher for contributions of particular interest in the field of Chemistry of Renewable Energies</i>
May 2015	Best Italian PhD Thesis in Electrochemistry <i>Awarded by Italian Chemical Society (1000 EUR)</i>
Apr 2015	Finalist of the “GiovedìScienza Prize” (4th Edition) <i>Ranked in the Top-10 chart of under-35 researchers of Piedmont (Italy)</i>
Sep 2014	Best talk <i>Macrogiovani @ XXI Congress of the Italian Association of Science and Technology of Macromolecules, Turin (Italy)</i>
Oct 2013	Best talk <i>13° Sigma Aldrich Young Chemists Symposium (SAYCS), Riccione (Italy)</i>
Jun 2013	Best 2011 MSc Thesis in Industrial Chemistry <i>Awarded by Università degli Studi di Torino</i>
Sep 2012	Premio Optime <i>Best MSc graduated in Industrial Chemistry @ Università degli Studi di Torino</i>
Sep 2010	Menzione Optime <i>Best BSc graduated in Industrial Chemistry @ Università degli Studi di Torino</i>
Dec 2009	“Botta&Risposta” Award (Università degli Studi di Torino) <i>2000 EUR for the development of an academic social network</i>

Publications-related awards

- **“Green Chemistry” Hot Articles (2020)**
Publication awarded: Green Chem. 22 (2020) 7168-7218, highlighted by the handling editor or referees
- **“Top downloaded article” in “Chemistry – A European Journal” (2020)**
Publication awarded: Chem. Eur. J. 24 (2018) 12183-12205, among the top 10% most downloaded papers
- **2016 Energies Best Paper Award (2019)**
Publication awarded: Energies 9 (2016) art. no. 384
- **Best of “Energy Technology” 2017 (2018)**
Publication awarded: Energy Technol. 5 (2017) 300-311
- **One of the most relevant articles listed by “Energies” as “Editor's Choice Articles” (2018)**
Publication awarded: Energies 9 (2016) art. no. 384
- **One of the most cited 2016 articles published by “ACS Energy Letters” (2018)**
Publication awarded: ACS Energy Lett. 1 (2016) 678-682
- **One of the most relevant articles listed by “Progress in Photovoltaics” (2017)**
The publication Science 354 (2016) 203-206 has been listed as one of the most relevant articles by this leading journal in the solar cells field (10.1002/pip.2862)
- **Mentioned by “Nature” for having proposed one of the “Five Priorities” in the field of perovskite photovoltaics (2017)**

Publication mentioned: *Science* 354 (2016) 203-206; source: 10.1038/544155a

- **Best paper award 2015-2016 in “Energy Storage Materials”** (2017)
Publication awarded: *Energy Storage Materials* 3 (2016) 69-76
- **One of the most relevant articles listed by “Progress in Photovoltaics”** (2016)
The publication Chem. Commun. 51 (2015) 16308-16311 has been listed as one of the most relevant articles by this leading journal in the solar cells field (10.1002/pip.2737)
- **Article classified among the 2015 “Highlights” by Wiley** (2015)
Publication awarded: *ChemSusChem* 8 (2015) 3668-3676, mentioned by *Chem. Eng. Technol.* 38 (2015) 2112-2113 as the first photopolymerized electrolyte for sodium-ion batteries
- **“Top open access article” Award by Royal Society of Chemistry** (2015)
Publication awarded: *Chem. Soc. Rev.* 44 (2015) 3431-3473
- Chemical Foundations of Technologies [CHIM/07 – 03/B2]: as full professor
- Industrial Chemistry [CHIM/04 – 03/C2]: as full professor

National qualifications

Roles in commissions of trust

For the European Commission

- **ERC Consolidator Grant** (2018)
Remote referee in PE5 panel (Synthetic Chemistry and Materials)

For Universities

- **King Abdullah University of Science and Technology** (2020)
External referee for the “Competitive Research Grants (CRG) program”
- **Università degli Studi di Firenze** (2019)
External referee for the “University call for funding competitive projects for fixed-term researchers”
- **Università degli Studi dell’Insubria** (2019)
External referee for the “Allocation of University funds for the activation of post-doc research grants”
- **Chilean National Commission for Scientific and Technological Research** (2016)
External referee for the “2017 FONDECYT Regular Competition”

For scientific societies and academies

- **“Primo Levi” 2018 Award** (2019)
Member of the Evaluation Committee, prize granted by the Italian Chemical Society to the best publication of the year by a young chemist
- **“Best MSc Thesis in Industrial Chemistry” Award (Ed. 2018, 2019)** (2018-2019)
Member of the Evaluation Committee, prize granted by the Italian Chemical Society
- **“ChiMiCapisce” Award (Ed. 2018, 2019)** (2018-2019)
Chair of the Jury, prize granted by the Italian Chemical Society for merits in the field of the dissemination of chemical sciences

- **“Materials”-MDPI Young Investigator Award 2019 (2018)**
Member of the Commission designed to assign this international prize
- **Member of the “Premio Sapio” Academy (since 2017)**
Member of the Commission designed to assign “Premio Sapio” award (15000 EUR) for innovation and technology
- **“GiovedìScienza Award” (6th Edition) (2017)**
Member of the Technical Jury at the final stage of the competition
- **Member of the Scientific Commission of the Italian Chemical Society (2017-2019)**
Member of the Commission in charge of assigning Prizes and Medals of SCI
- **Board Member of CEUR Foundation (since 2017)**
European Center for University and Research, member of the professors board devoted to education and culture to offer young students the best conditions for building their future
- **“Primo Levi” Award (Ed. 2014, 2015, 2016, 2017) (2015-2018)**
Chair of the Evaluation Committee, prize granted by the Italian Chemical Society to the best publication of the year by a young chemist
- **Reaxys SCI Young Researcher Award (Ed. 2015, 2016, 2017, 2018) (2015-2018)**
Chair of the Evaluation Committee, prize granted by the Italian Chemical Society and Elsevier
- **Reaxys SCI Young Researcher 2015 Award (Ed. 2016, 2017, 2018) (2016-2018)**
Member of the Evaluation Committee, prize granted by the Italian Chemical Society and Elsevier
- **“Primo Levi” 2014 Award (2015)**
Member of the Evaluation Committee, prize granted by the Italian Chemical Society to the best publication of the year by a young chemist

**Referee for
international
journals**

Science (IF = 41.9), Energy Environ. Sci. (30.3), Adv. Mater. (27.4), Adv. Energy Mater. (25.3), Adv. Funct. Mater. (16.8), Nano Energy (16.6), Adv. Sci. (15.8), J. Am. Chem. Soc. (14.6), Sci. Adv. (13.1), Angew. Chem. Int. Ed. (13.0), Renew. Sust. Energ. Rev. (12.1), Nat. Commun. (12.1), Small (11.5), J. Mater. Chem. A (11.3), Chem. Eng. J. (10.7), Green Chem. (9.5), ACS Appl. Mater. Inter. (8.8), J. Power Sources (8.3), Adv. Opt. Mater. (8.3), ChemSusChem (8.0), ACS Sustainable Chem. Eng. (7.6), Solar RRL (7.5), Carbohydr. Polym. (7.2), Sol. Energy Mater. Sol. Cells (7.0), ACS Photonics (6.9), Nanoscale (6.9), Adv. Electron. Mater. (6.6), Green Energy Environ. (6.4), Mater. Design (6.3), Electrochim. Acta (6.2), Appl. Surf. Sci. (6.2), Biomacromolecules (6.1), Energy (6.1), Chem. Commun. (6.0), Inorg. Chem. Front. (6.0), Adv. Mater. Technol. (6.0), Environ. Res. (5.7), Mater. Today Energy (5.6), Sustainable Energy Fuels (5.5), Polym. Chem. (5.3), J. Ind. Eng. Chem. (5.3), J. Mater. Res. Technol. (5.3), Adv. Mater. Interfaces (5.0), Chem. Eur. J. (4.9), Int. J. Hydrogen Energy (4.9), Inorg. Chem. (4.8), J. Taiwan Inst. Chem. Eng. (4.8), Arab. J. Chem. (4.8), J. Alloys Compd. (4.7), Mater. Sci. Eng. B (4.7), Sol. Energy (4.6), Micropor. Mesopor. Mat. (4.6),

Dyes Pigments (4.6), ACS Appl. Energy Mater. (4.5), iScience (4.4), Electrochem. Commun. (4.3), Nanomaterials (4.3), Cellulose (4.2), Ind. Crops Prod. (4.2), Int. J. Mol. Sci. (4.2), ChemElectroChem (4.2), IEEE Electr. Device L. (4.2), Chem. Asian J. (4.1), J. Nanostructure Chem. (4.1), Sci. Rep. (4.0), Prog. Nat. Sci.-Mater. (4.0), Colloid. Surface. A (4.0), Results Phys. (4.0), Eur. Polym. J. (3.9), J. Electroanal. Chem. (3.8), Front. Chem. (3.7), Int. J. Energy Res. (3.7), J. Electrochem. Soc. (3.7), Int. J. Electr. Power Energy Syst. (3.6), J. Mater. Sci. (3.6), J. Am. Ceram. Soc. (3.5), J. Phys. Chem. Solids (3.4), Phys. Chem. Chem. Phys. (3.4), Sustainable Energy Technol. Assess. (3.4), Energy Technol. (3.4), Polymers (3.4), Mater. Chem. Phys. (3.4), J. Phys. Chem. Solids (3.4), Org. Electron. (3.3), J. Photoch. Photobio. A (3.3), New J. Chem. (3.3), Molecules (3.3), IEEE J. Photovolt. (3.1), RSC Adv. (3.1), Materials (3.1), Express Polym. Lett. (3.1), Solid State Ionics (3.1), Chem. Eng. Process. (3.0), Waste Biomass Valori. (2.9), ChemPlusChem (2.8), Energies (2.7), Mater. Lett. (3.2), Mat. Sci. Semicon. Proc. (3.1), Membranes (3.1), IEEE T. Electron Dev. (2.9), J. Polym. Sci., Part A: Polym. Chem. (2.9), ACS Omega (2.9), Wires Energy Environ. (2.9), Opt. Mater. (2.8), Photochem. Photobiol. Sci. (2.8), Processes (2.8), ChemPhotoChem (2.8), Front. Energy Res. (2.8), J. Solid State Electrochem. (2.7), Korean J. Chem. Eng. (2.7), Mater. Today Commun. (2.7), Anal. Methods (2.6), Beilstein J. Nanotech. (2.6), IEEE J. Electron. Dev. Soc. (2.6), Eur. J. Inorg. Chem. (2.5), Micromachines (2.5), J. Appl. Polym. Sci. (2.5), Appl. Sci. (2.5), Coatings (2.4), Ionics (2.4), Res. Chem. Intermediat. (2.3), Thin Solid Films (2.0), Chem. Phys. Lett. (2.0), Nanomater. Nanotechno. (2.0), Polym. Bull. (2.0), Int. J. Photoenergy (1.9), Physica B (1.9), J. Electron. Mater. (1.8), Phys. Status Solidi A (1.8), J. Chemometr. (1.6), J. Iran Chem. Soc. (1.6), Rend. Lincei-Sci. Fis. (1.6), Meas. Control (1.5), Chem. Lett. (1.4), Polimery (1.1), Sci. Adv. Mater. (1.1), J. Nanosci. Nanotechno. (1.1), J. Polym. Eng. (1.1), Russ. J. Electrochem. (1.1), Mater. Sci. Poland (0.91), Inorg. Nano-Met. Chem. (0.84), Indian J. Pure Appl. Phys. (0.65), Iran. J. Chem. Chem. Eng. (0.60), Arch. Metall. Mater. (0.59), ACS Appl. Nano Mater., AIMS Energy, Batteries, Energ. Ecol. Environ., Emergent Materials, Energy Storage, Heliyon, HKIE Trans., Inorganics, J. Compos. Sci., J. Dent. Oral Impl., J. Hypert. Card., J. Manufact. Mater. Proc., Physics, Research.

Conferences, workshops and seminars

Invited

contributions

11 Talks in conferences/workshops
 2 Lectio Magistralis
 4 Keynote lectures
 2 Awardee lectures
 8 Seminars
 4 Lectures in PhD schools or advanced training courses
 (see [list](#))

Contributions

234 contributions (184 in international events)
 39 talks
 (see [list](#))

Organized events 17 events as member of the Organizing/Scientific committee
7 events as a Chair or co-Chair
(see [list](#))

Teaching activity

- **Chemistry**
Titular teacher; BSc courses in Engineering (Politecnico di Torino)
Academic years: 2019/2020; Average enrolment: 250 students
- **Chemistry**
Assistant teacher; BSc courses in Engineering (Politecnico di Torino)
Academic years: 2013/2014, 2014/2015, 2015/2016, 2016/2017, 2017/2018, 2018/2019; Average enrolment: 250 students
- **Photochemistry-related materials for the present and future energy scenario**
Cycle of lessons ERASMUS+ professor; BSc in Chemical Engineering (Universitat Politècnica de València)
Academic years: 2016/2017; Average enrolment: 20 students
- **General Chemistry**
Assistant teacher; BSc in Agricultural Science and Technology & Forest and Environmental Sciences (Università degli Studi di Torino)
Academic years: 2015/2016; Average enrolment: 500 students
- **Propaedeutic Course to General Chemistry**
Titular teacher; BSc in Biological Sciences (Università degli Studi di Torino)
Academic years: 2011/2012, 2013/2014, 2014/2015, 2015/2016; Average enrolment: 180 students
- **Chemical Kinetics**
Cycle of lessons; BSc in Forensic Chemistry (National University of Malaysia)
Academic years: 2012/2013; Average enrolment: 100 students
- **General and Inorganic Chemistry**
Assistant teacher; BSc in Biological Sciences (Università degli Studi di Torino)
Academic years: 2009/2010, 2010/2011; Average enrolment: 180 students
- **General Chemistry**
Assistant teacher; BSc in Biological Sciences (Università degli Studi di Torino)
Academic years: 2008/2009; Average enrolment: 180 students

Mentoring roles FB has supervised **51** Thesis at BSc [**42**] and MSc [**9**] levels (see [list](#)).

Visiting periods

Oct – Nov 2018	Visiting Professor @ Massachusetts Institute of Technology <i>As P.I. of MITOR project</i>
Apr 2017	Visiting Professor @ Universitat Politècnica de València <i>As P.I. of the ERASMUS+ project – Staff Mobility for Teaching</i>
Feb 2013 – May 2013	Visiting PhD Student @ National University of Malaysia <i>Polymer Research Center – Faculty of Science and Technology</i>
May – Jun 2011	Visiting MSc Student @ Universitat Politècnica de València <i>Group for Advanced Oxidation Processes</i>

Advanced schools

- **Learning and Teaching in the Higher Education**
Organized by Politecnico di Torino
Turin (Italy), 20/02-20/06/2017
- **Characterization of polymeric materials: techniques for polymers in solution**
Organized by Italian Association for Science and Technology of Macromolecules
Gargnano (Italy), 19-23/05/2014
- **Synthesis of polymeric materials**
Organized by Italian Association for Science and Technology of Macromolecules
Gargnano (Italy), 21-25/05/2012

Peer-reviewed publications list

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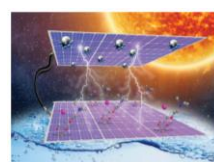
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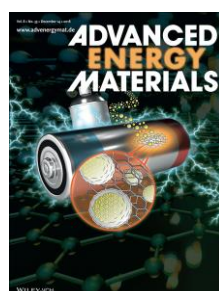
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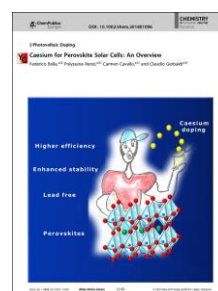
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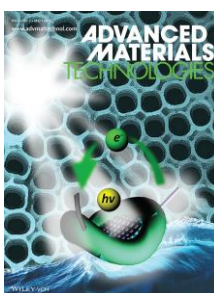
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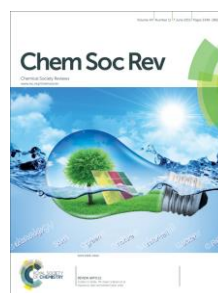
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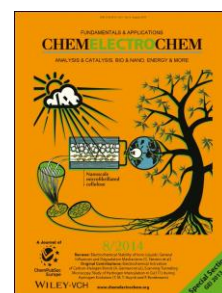
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Editorials in scientific journals list

3. **F. Bella**
Across the Board: Federico Bella on Electrochemical Nitrogen Reduction

ChemSusChem 13 (2020) 3053-3055 – [IF 7.8](#)

2. **F. Bella**, R. Kostecki
Symposium in honor of Prof. Jan Augustynski, “Photo-electrochemical energy conversion: Foreword”
Electrochim. Acta 325 (2019) art. no. 134917 – [IF 5.4](#)
1. **F. Bella**, G. Meligrana, C. Gerbaldi
Sustainable electrochemistry - Functional applied materials and techniques for energy devices and sensing (GEI 2018): Foreword
Electrochim. Acta 303 (2019) 105-109 – [IF 5.4](#)

Books and book chapters list

10. G. Annunziato, M. Atzori, **F. Bella**, C. Bonfio, S. Cinti, M. Da Pian, V. Lazazzara, E. Lenci, E. Paone, F. Ponte, L. Rivoira, M. Schlich, L. Triggiani
Proceedings of the Merck & Elsevier Young Chemists Symposium 2019
ISBN: 978-88-94952-15-5
pp. 1-246, Società Chimica Italiana, Rome, 2019
9. **F. Bella**, L. Botta, R. Cucciniello, A. D’Urso, P. Franco, E. Lenci, G. Mazzone, M. Schlich, A. Soldà, R. Spezzano, S. Staderini, L. Triggiani
Proceedings of the Merck & Elsevier Young Chemists Symposium (MEYCS 2018)
ISBN: 978-88-94952-03-2
pp. 1-212, Società Chimica Italiana, Rome, 2018
8. **F. Bella**, C. Gerbaldi, S. Turri, G. Griffini
Photopolymers for Third-generation Solar Cells
in: **Photopolymerisation Initiating Systems**
ISBN: 978-1-78262-962-7
pp. 504-523, The Royal Society of Chemistry, Cambridge, 2018
7. **F. Bella**, P. Franco, E. Lenci, A. Soldà, S. Staderini, L. Triggiani
Proceedings of the EYCN Symposium – 1st Edition
ISBN: 978-88-86208-88-8
pp. 1-58, Società Chimica Italiana, Rome, 2018
6. **F. Bella**, L. Botta, A. Buchicchio, R. Cucciniello, A. D’Urso, A. Erba, P. Franco, E. Lenci, G. Mazzone, A. Soldà, S. Staderini, L. Triggiani, D. Spinelli
Proceedings of the Merck Young Chemists Symposium – XVII Edition
ISBN: 978-88-86208-89-5
pp. 1-193, Società Chimica Italiana, Rome, 2017
5. **F. Bella**, L. Botta, A. Buchicchio, R. Cucciniello, A. D’Urso, A. Erba, P. Franco, E. Lenci, G. Mazzone, M. Pavone, A. Soldà, S. Staderini, L. Triggiani, D. Spinelli
Proceedings of the Merck Young Chemists Symposium
ISBN: 978-88-86208-92-5
pp. 1-183, Società Chimica Italiana, Rome, 2016
4. **F. Bella**, C. Gerbaldi
Natural Polymers for Dye-Sensitized Solar Cells: Electrolytes and Electrodes
in: **Encyclopedia of Polymer Science and Technology**
ISBN: 978-04-71440-26-0
pp. 1-18, John Wiley & Sons, Inc., Hoboken NJ, 2016

3. **F. Bella**, D. Spinelli
Proceedings of the XV Sigma-Aldrich Young Chemists Symposium (SAYCS 2015)
ISBN: 978-88-86208-94-9
pp. 1-187, Società Chimica Italiana, Rome, 2015
2. **F. Bella**, G. Griffini, R. Bongiovanni, S. Turri
Light-cured Luminescent Coatings for Photovoltaic Devices
in: ***Dyes and Chromophores in Polymer Science***
ISBN: 978-1-84821-742-3
pp. 361-391, Wiley-ISTE, London, 2015
1. A. Sacco, **F. Bella**, S. Bianco, R. Bongiovanni
Photocured Polymer Electrolyte Membranes for Dye-Sensitized Solar Cells
in: ***Photovoltaics: Synthesis, Applications and Emerging Technologies***
ISBN: 978-1-63117-843-6
pp. 53-72, Nova Science Publishers, Inc., Hauppauge NY, 2014

Organized conferences, workshops and scientific events list

- **Chemistry Conference for Young Scientists (CHEMCYS 2020)**
International conference (350 participants)
Member of the Scientific committee
Blankenberge (Belgium), 19-21/02/2020
- **Avogadro Colloquia 2019 - Elements of the Periodic Table for Energy**
International conference (100 participants)
Member of the Scientific and Organizing committee
Rome (Italy), 17-18/12/2019
- **Merck Young Chemists Symposium 2019 (MYCS 2019)**
International conference (240 participants)
Member of the Scientific and Organizing committee
Rimini (Italy), 25-27/11/2019
- **XXI Congresso Nazionale della Divisione di Chimica Industriale della Società Chimica Italiana**
National conference (90 participants)
Member of the Scientific committee
Salerno (Italy), 27/08/2019
- **ChiMiCapisce 2019**
Event on the dissemination of chemical sciences (80 participants)
Member of the Scientific and Promoting committee
Rome (Italy), 28/05/2019
- **Y-RICH 2019 – Young Research Ideas in Chemistry**
National workshop (80 participants)
Member of the Scientific and Promoting committee
Rome (Italy), 27/05/2019
- **Merck & Elsevier Young Chemists Symposium 2018 (MEYCS 2018)**
International conference (210 participants)
Chair of the Scientific and Organizing committee
Rimini (Italy), 19-21/11/2018
- **69th Annual Meeting of the International Society of Electrochemistry**

International conference (2200 participants)

Symposium organizer

Bologna (Italy), 02-07/09/2018

- **XX Congresso Nazionale di Catalisi – XX Congresso Nazionale della Divisione di Chimica Industriale (GIC-DiChIn2018)**

National conference (150 participants)

Member of the Scientific committee

Milan (Italy), 02-05/09/2018

- **Design your Future**

National workshop (80 participants)

Member of the Scientific and Promoting committee

Bari (Italy), 20/08/2018

- **ChiMiCapisce 2018**

Kick-off workshop of the Interdivisional Group for the Diffusion of Chemical Sciences of the Italian Chemical Society (85 participants)

Member of the Scientific and Promoting committee

Rome (Italy), 08/06/2018

- **Y-RICH 2018 – Young Research Ideas in Chemistry**

National workshop (80 participants)

Member of the Scientific and Promoting committee

Rome (Italy), 07/06/2018

- **EYCN Symposium and XIII EYCN Delegate Assembly**

International conference and diplomatic event (50 participants)

Chair of the Scientific and Organizing committee

Turin (Italy), 05-09/05/2018

- **Giornate dell'Elettrochimica Italiana (GEI 2018)**

International conference (100 participants)

co-Chair and member of the Organizing committee

Sestriere (Italy), 21-25/01/2018

- **Merck Young Chemists Symposium 2017 (MYCS 2017)**

International conference (180 participants)

Chair of the Scientific and Organizing committee

Milano Marittima (Italy), 13-15/11/2017

- **Y-RICH 2017 – Young Research Ideas in Chemistry**

National workshop (80 participants)

Member of the Scientific and Promoting committee

Rome (Italy), 23/06/2017

- **Merck Young Chemists Symposium 2016 (MYCS 2016)**

International conference (170 participants)

Chair of the Scientific and Organizing committee

Rimini (Italy), 25-27/10/2016

- **Design your Future**

National workshop (70 participants)

Member of the Scientific and Organizing committee

Fisciano (Italy), 13/10/2016

- **Y-RICH 2016 – Young Research Ideas in Chemistry**

National workshop (100 participants)

Member of the Scientific and Promoting committee
Rome (Italy), 10/06/2016

- **XV Sigma-Aldrich Young Chemists Symposium (SAYCS 2015)**
International conference (175 participants)
Chair of the Scientific and Organizing committee
Rimini (Italy), 27-29/10/2015
- **Y-RICH 2014 – Young Research Ideas in Chemistry**
National workshop (70 participants)
Member of the Scientific and Organizing committee
Rome (Italy), 15/12/2014
- **XIV Società Chimica Italiana & Sigma-Aldrich Young Chemists Symposium (SCI&SAYCS 2014)**
International conference (170 participants)
Chair of the Scientific and Organizing committee
Riccione (Italy), 27-29/10/2014
- **65th Annual Meeting of the International Society of Electrochemistry**
International conference (1800 participants)
Student helper
Lausanne (Switzerland), 31/08-05/09/2014
- **Y-RICH 2013 – Young Research Ideas in Chemistry**
National workshop (40 participants)
Member of the Scientific and Organizing committee
Rome (Italy), 16/12/2013

Invited communications at conferences, workshops and seminars

- Keynote @ Green Chemistry and Renewable Energy: new scenarios and opportunities, L'Aquila (Italy, 2020)
Polymers for unconventional applications in the energy conversion and storage field
- Keynote @ EUROMAT 2019, Stockholm (Sweden, 2019)
Strategies for electrodes and electrolytes design for aqueous solar cells
- Keynote @ 47th IUPAC World Chemistry Congress, Paris (France, 2019)
Publishing in top journals: tips and common mistakes
- Seminar @ University of Bremen, Bremen (Germany, 2019)
Highlight, underline and stress: which CV for each occasion
- Seminar @ Department of Mechanical Engineering - Massachusetts Institute of Technology, Cambridge (USA, 2018)
Hybrid photovoltaics and post-lithium batteries: towards stability, scale up and integration by a polymers-aided approach
- Keynote @ 69th Annual ISE Meeting, Bologna (Italy, 2018)
Biopolymers, Water, and Integrated Systems: the New Frontier of Dye-Sensitized Solar Cells
- Talk @ Electroceramics XVI, Hasselt (Belgium, 2018)
Amorphous and crystalline titanium dioxide in sodium batteries: an experimental and theoretical approach
- Talk @ 16th International Symposium on Polymer Electrolytes (ISPE-16), Yokohama (Japan, 2018)

Overcoming the instability of dye-sensitized and perovskite solar cells through biosourced, fluorinated and water-based polymers

- Lecture @ School on Advanced Materials for Sustainable Energy Technologies (SAMSET18), Lecce (Italy, 2018)
Innovative chemical strategies for the improvement of last generation solar converting/storage devices stability
- Seminar @ Professional Association of Engineers of the Province of Turin (Italy, 2018)
Innovative materials for photovoltaic modules
- Talk @ Y-RICH 2018 – Young Research Ideas in Chemistry, Rome (Italy, 2018)
*Preparing the candidature for prizes and projects: key aspects of the academic CV.
European Projects: general introduction and personal experiences*
- Seminar @ Laboratoire des Sciences Photomoléculaires - École Polytechnique Fédérale de Lausanne, Lausanne (Switzerland, 2018)
A polymeric approach for organic and aqueous dye-sensitized solar cells
- Lecture @ 1st EnerCHEM School – Chemistry for the Energy Transition, Florence (Italy, 2018)
Polymeric materials for energy conversion and storage devices
- Lecture @ 8th EPF Summer School (Transport Phenomena in Polymers and Hybrid Materials), Gargnano (Italy, 2017)
Polymers in batteries and emerging photovoltaics: applications and challenges
- Talk @ CV Clinic Day, Bologna (Italy, 2017)
CV for academic positions and individual EU grants
- Seminar @ Department of Environment, Land and Infrastructure Engineering, Politecnico di Torino, Turin (Italy, 2017)
Frontiers in solar cells and batteries
- Lectio Magistralis @ ENI Award day, Politecnico di Torino, Turin (Italy, 2016)
Photopolymers for Dye-Sensitized Solar Cells
- Lectio Magistralis @ ENI Award day, Università degli Studi di Palermo, Palermo (Italy, 2016)
Photopolymers for Dye-Sensitized Solar Cells
- Talk @ Design your Future, Fisciano (Italy, 2016)
Italian Chemical Society for young scientists
- Talk @ NIS colloquium: Harnessing the Power of Light in Hybrid Materials, Turin (Italy, 2016)
Light-induced design of smart materials for energy devices
- Talk @ Funding in Europe, a workshop by European Young Chemists Network (EYCN) in Cooperation with DFG – German Research Foundation, Seville (Spain, 2016)
A Marie-Curie Post-Doc: Tricks for a Successful Proposal
- Talk @ Final of the European Young Chemist Award 2016 (EUCA2016) @6th EuCheMS Chemistry Congress, Seville (Spain, 2016)
Photopolymers as Emerging Advanced Materials for Sustainable Conversion and Storage Energy Devices
- Talk @ 15th International Symposium on Polymer Electrolytes (ISPE-XV), Uppsala (Sweden, 2016)
Faster Than Light: The Evolution Of Polymer Electrolytes For New Generation Solar Cells In The Last Five Years

- Seminar @ Department of Chemical Sciences, Università degli Studi di Napoli "Federico II", Naples (Italy, 2016)
Polymeric materials for unconventional photovoltaic applications
- Keynote @ 7th Young Chemists Symposium, Rome (Italy, 2016)
Aqueous photovoltaics: a new frontier in the field of solar cells
- Awardee Lecture @ ENERCHEM-1, International Conference, Florence (Italy, 2016)
Photopolymers for stable solar cells, sodium batteries and photoelectrochromic windows
- Seminar @ Department of Chemical Science and Technology, Università degli Studi di Roma Tor Vergata, Rome (Italy, 2015)
Beyond Silicon and Lithium: new trends in electrochemistry for solar cells and batteries
- Awardee Lecture @ Giornate dell'Elettrochimica Italiana (GEI 2015), Bertinoro (Italy, 2015)
Photopolymers for Dye-Sensitized Solar Cells
- Seminar @ Laboratoire des Sciences Photomoléculaires - École Polytechnique Fédérale de Lausanne, Lausanne (Switzerland, 2015)
Photopolymers for DSSCs stability: from electrolytes to coatings
- Lecture @ Graduate School for in Advanced Materials for the 21st Century, Department of Chemistry - Ångström laboratory, Uppsala Universitet (Sweden, 2014)
Photopolymers for dye-sensitized solar cells: from electrolytes to luminescent coatings
- Talk @ 4th International Conference on Functional Materials & Devices 2013 (ICFMD - 2013), Penang (Malaysia, 2013)
Acrylic and methacrylic polymer electrolytes for dye-sensitized solar cells prepared by an elegant and rapid UV-curing process

List of conference contributions

CONTRIBUTIONS PRESENTED BY F.B.

82. **F. Bella**
The rise of ceramics for solar energy conversion and storage technologies
in: ***Electroceraamics XVII***
Talk – Darmstadt (Germany), 24-28/08/2020
81. **F. Bella**, G. Piana, M. Ricciardi, R. Cucciniello, A. Proto, C. Gerbaldi
Recycling poly(glycidyl ether)s from industrial waste and reuse them as electrolytes for sodium batteries
in: ***EYCN Symposium 2020***
Poster – Sitges (Spain), 26/01/2020
80. **F. Bella**, G. Piana, M. Ricciardi, R. Cucciniello, A. Proto, C. Gerbaldi
Poly(glycidyl ether)s recycling from industrial waste and reuse as electrolytes for sodium batteries
in: ***Merck Young Chemists' Symposium 2019 (MYCS 2019)***
Poster – Rimini (Italy), 25-27/11/2019
79. **F. Bella**, L. Fagiolari, M. Bonomo, S. Galliano, G. Viscardi, C. Gerbaldi, C. Barolo
Strategies to design electrodes and electrolytes for aqueous solar cells: performances, sustainability and scenarios
in: ***The 2nd Dyenamo DSSC Conference***
Talk – Uppsala (Sweden), 14-15/10/2019
78. A. Scalia, A. Pedico, A. Lamberti, A. Gigot, P. Rivolo, M. Cocuzza, C. Gerbaldi, E. Tresso,

- F. Bella**
 Designing electrodes and electrolytes for energy conversion/storage integrated devices
 in: **EUROMAT 2019**
 Talk – Stockholm (Sweden), 01-05/09/2019
77. **F. Bella**, F. Colò, G. Piana, M. Falco, E. Maruccia, G. Lingua, L. Fagiolari, G. Meligrana, C. Gerbaldi
 The transition towards solid sodium batteries: easily processable electrodes and electrolytes
 in: **EUROMAT 2019**
 Talk – Stockholm (Sweden), 01-05/09/2019
76. **F. Bella**, L. Fagiolari, M. Bonomo, S. Galliano, G. Piana, G. Viscardi, C. Barolo, C. Gerbaldi
 Strategies for electrodes and electrolytes design for aqueous solar cells
 in: **EUROMAT 2019**
 Keynote – Stockholm (Sweden), 01-05/09/2019
75. **F. Bella**, F. Colò, G. Piana, M. Falco, E. Maruccia, G. Lingua, L. Fagiolari, G. Meligrana, C. Gerbaldi
 Sustainable Matrices and Polymerization Processes for Post-Lithium Batteries
 in: **Chemistry meets Industry and Society (CIS 2019)**
 Talk – Salerno (Italy), 28-30/08/2019
74. **F. Bella**, L. Fagiolari, C. Gerbaldi
 Ambient condition fabrication of perovskite solar cells: towards industrial approaches
 in: **Chemistry meets Industry and Society (CIS 2019)**
 Poster – Salerno (Italy), 28-30/08/2019
73. **F. Bella**, L. Fagiolari, A. Scalia, M. Bonomo, S. Galliano, A. Lamberti, C. Barolo, C. Gerbaldi
 Aqueous Photovoltaics and Integrated Portable Devices: Novel Trends in the Solar Cells Scenario
 in: **Chemistry meets Industry and Society (CIS 2019)**
 Poster – Salerno (Italy), 28-30/08/2019
72. **F. Bella**, F. Colò, L. Zolin, M. Falco, S. Galliano, G. Meligrana, D. Pugliese, C. Barolo, C. Gerbaldi
 Biosourced Polymers and Lignocellulosic Materials for Eco-Friendly Electrochemical Energy Conversion and Storage Devices
 in: **XXI Convegno Nazionale della Divisione di Chimica Industriale della Società Chimica Italiana**
 Poster – Salerno (Italy), 27/08/2019
71. **F. Bella**, A. Scalia, A. Varzi, P. Zaccagnini, A. Lamberti, E. Tresso, C. Gerbaldi, S. Passerini
 Photovoltaic harvesters integrated with electrochemical double layer capacitors: novel approaches
 in: **70th Annual ISE Meeting**
 Poster – Durban (South Africa), 04-09/08/2019
70. **F. Bella**, F. Colò, G. Piana, M. Falco, E. Maruccia, G. Lingua, L. Fagiolari, G. Meligrana, C. Gerbaldi
 The Progressive Transition towards Solid Sodium Batteries: a Polymeric Approach
 in: **70th Annual ISE Meeting**
 Talk – Durban (South Africa), 04-09/08/2019
69. A. Scalia, A. Pedico, A. Lamberti, A. Gigot, P. Rivolo, M. Cocuzza, C. Gerbaldi, E. Tresso,

F. Bella

Chemical technologies for the design of electrodes and electrolytes for energy conversion/storage integrated devices

in: **47th IUPAC World Chemistry Congress**

Talk – Paris (France), 07-12/07/2019

68. **F. Bella**, F. Colò, L. Zolin, D. Pugliese, J. R. Nair, G. Meligrana, C. Gerbaldi
Biosourced components for solar cells and batteries: targeting sustainability issues for energy devices
in: **47th IUPAC World Chemistry Congress**
Poster – Paris (France), 07-12/07/2019
67. **F. Bella**, L. Fagiolari, E. Rozzi, S. Galliano, G. Piana, G. Viscardi, C. Barolo, C. Gerbaldi
Aqueous photovoltaics: merging chemistry issues with payback time
in: **47th IUPAC World Chemistry Congress**
Poster – Paris (France), 07-12/07/2019
66. **F. Bella**
Publishing in top journals: tips and common mistakes
in: **47th IUPAC World Chemistry Congress**
Keynote – Paris (France), 07-12/07/2019
65. **F. Bella**, A. B. Muñoz-García, G. Meligrana, F. Colò, A. Lamberti, M. Destro, M. Pavone, C. Gerbaldi
From chemometrics to theoretical tools: understanding the electrochemical behavior of titanium dioxide electrodes in sodium batteries
in: **EYCN Symposium**
Poster – Bremen (Germany), 17/03/2019
64. **F. Bella**, A. B. Muñoz-García, G. Meligrana, F. Colò, A. Lamberti, M. Destro, M. Pavone, C. Gerbaldi
Multivariate, theoretical and electrochemical approaches to investigate titanium dioxide electrodes in sodium batteries
in: **Merck & Elsevier Young Chemists Symposium (MEYCS 2018)**
Poster – Rimini (Italy), 19-21/11/2018
63. **F. Bella**, A. B. Muñoz-García, G. Meligrana, A. Lamberti, F. Colò, M. Destro, M. Pavone, C. Gerbaldi
Addressing the Controversial Mechanism of Na⁺ Reversible Storage in TiO₂ Nanotubes Arrays: Amorphous, Anatase and Rutile Nanostructures
in: **69th Annual ISE Meeting**
Poster – Bologna (Italy), 02-07/09/2018
62. **F. Bella**, S. Galliano, D. Pugliese, G. Piana, E. Maruccia, A. Scalia, C. Barolo, M. Grätzel, C. Gerbaldi
Biopolymers, Water, and Integrated Systems: the New Frontier of Dye-Sensitized Solar Cells
in: **69th Annual ISE Meeting**
Keynote – Bologna (Italy), 02-07/09/2018
61. A. Scalia, A. Lamberti, E. Tresso, C. Gerbaldi, **F. Bella**
Multipolymer Electrolyte Membranes Designed by Oxygen Inhibited UV-Induced Polymerization for Integrated Energy Conversion and Storage Devices
in: **XX Congresso Nazionale di Catalisi – XX Congresso Nazionale della Divisione di Chimica Industriale (GIC-DiChIn2018)**
Poster – Milan (Italy), 02-05/09/2018

60. **F. Bella**, G. Piana, F. Colò, M. Falco, G. Meligrana, C. Gerbaldi
Crosslinked Polymer Electrolytes Improving the Safety of Rechargeable Batteries
in: **XX Congresso Nazionale di Catalisi – XX Congresso Nazionale della Divisione di Chimica Industriale (GIC-DiChIn2018)**
Talk – Milan (Italy), 02-05/09/2018
59. A. Scalia, A. Lamberti, E. Tresso, C. Gerbaldi, **F. Bella**
Oxygen inhibited UV-crosslinking for multipolymer electrolyte membranes designed for integrated energy conversion and storage devices
in: **7th EuCheMS Chemistry Congress**
Poster – Liverpool (United Kingdom), 26-30/08/2018
58. **F. Bella**, G. Piana, F. Colò, M. Falco, G. Meligrana, C. Gerbaldi
A polymer electrolytes platform for sodium-based batteries
in: **7th EuCheMS Chemistry Congress**
Poster – Liverpool (United Kingdom), 26-30/08/2018
57. **F. Bella**, S. Galliano, G. Piana, M. Falco, G. Viscardi, C. Barolo, M. Grätzel, C. Gerbaldi
Biosourced polymer electrolytes: boosting sustainability of aqueous solar cells
in: **7th EuCheMS Chemistry Congress**
Talk – Liverpool (United Kingdom), 26-30/08/2018
56. **F. Bella**, A. B. Muñoz-García, G. Meligrana, F. Colò, A. Lamberti, M. Destro, M. Pavone, C. Gerbaldi
Amorphous and crystalline titanium dioxide in sodium batteries: an experimental and theoretical approach
in: **Electroceramics XVI**
Invited talk – Hasselt (Belgium), 09-12/07/2018
55. A. Scalia, A. Lamberti, E. Tresso, C. Gerbaldi, **F. Bella**
A multipolymer electrolyte membrane designed by oxygen inhibited UV-crosslinking for integrated energy conversion and storage devices
in: **16th International Symposium on Polymer Electrolytes (ISPE-16)**
Poster – Yokohama (Japan), 24-29/06/2018
54. **F. Bella**, S. Galliano, G. Griffini, C. Barolo, S. Turri, A. Hagfeldt, M. Grätzel, C. Gerbaldi
Overcoming the instability of dye-sensitized and perovskite solar cells through biosourced, fluorinated and water-based polymers
in: **16th International Symposium on Polymer Electrolytes (ISPE-16)**
Invited talk – Yokohama (Japan), 24-29/06/2018
53. **F. Bella**, A. B. Muñoz-García, G. Meligrana, A. Lamberti, M. Destro, M. Pavone, C. Gerbaldi
Addressing the controversial mechanism of Na⁺ reversible storage in TiO₂ nanotube arrays: amorphous, anatase and rutile TiO₂
in: **Giornate dell'Elettrochimica Italiana - GEI 2018**
Poster – Sestriere (Italy), 21-25/01/2018
52. **F. Bella**, S. Galliano, F. Colò, G. Viscardi, C. Barolo, C. Gerbaldi
Lignocellulosic and biosourced materials for electrochemical energy conversion and storage
in: **Merck Young Chemists Symposium – XVII Edition**
Poster – Milano Marittima (Italy), 13-15/11/2017
51. **F. Bella**, S. Galliano, C. Barolo, G. Boschloo, F. Giordano, M. Grätzel, A. Hagfeldt, G. Viscardi, C. Gerbaldi

Aqueous dye-sensitized solar cells: challenges in electrodes and electrolytes design
in: **DSSC strikes back – 1st Dyenamo DSSC Conference**
Talk – Uppsala (Sweden), 16-17/10/2017

50. A. Scalia, M. Gerosa, A. Sacco, S. Bianco, M. Quaglio, A. Chiodoni, E. Tresso, C. F. Pirri, **F. Bella**
Titanium Grids and Polymer Electrolytes for Flexible Dye-Sensitized Solar Cells
in: **XXVI Congresso Nazionale della Società Chimica Italiana**
Poster – Paestum (Italy), 10-14/09/2017
49. **F. Bella**, A. Hagfeldt, M. Grätzel, C. Gerbaldi
Current Efforts to Make Perovskite Solar Cells Industrially Viable
in: **XXVI Congresso Nazionale della Società Chimica Italiana**
Talk – Paestum (Italy), 10-14/09/2017
48. **F. Bella**, J. Popovic, J. Maier, C. Gerbaldi
A Solid-Liquid Soggy-Sand Electrolyte for Dye-Sensitized Solar Cells
in: **XXVI Congresso Nazionale della Società Chimica Italiana**
Poster – Paestum (Italy), 10-14/09/2017
47. **F. Bella**, F. Colò, L. Zolin, D. Pugliese, A. M. Stephan, C. Gerbaldi
Lignocellulosic Materials for Electrochemical Energy Storage and Conversion
in: **XXVI Congresso Nazionale della Società Chimica Italiana**
Talk – Paestum (Italy), 10-14/09/2017
46. **F. Bella**, G. Griffini, J. P. Correa-Baena, G. Saracco, M. Grätzel, A. Hagfeldt, S. Turri, C. Gerbaldi
Light-Induced Design of Fluoropolymers as Efficiency and Stability Booster for Perovskite Solar Cells
in: **68th Annual Meeting of the International Society of Electrochemistry**
Poster – Providence (USA), 27/08-01/09/2017
45. **F. Bella**, S. Galliano, M. Falco, F. Giordano, A. Hagfeldt, M. Grätzel, G. Viscardi, C. Barolo, C. Gerbaldi
At the Electrode/Electrolyte Interface of Aqueous Solar Cells: a Photoelectrochemical and Chemometric Investigation
in: **68th Annual Meeting of the International Society of Electrochemistry**
Talk – Providence (USA), 27/08-01/09/2017
44. **F. Bella**, F. Colò, L. Zolin, J. R. Nair, D. Pugliese, A. M. Stephan, C. Gerbaldi
Lignocellulosic materials for the sustainable market of energy storage and conversion devices
in: **254th American Chemical Society National Meeting & Exposition**
Talk – Washington (USA), 20-24/08/2017
43. **F. Bella**, G. Griffini, A. Lamberti, S. Turri, C. Gerbaldi
Polymers and photopolymers engineering to achieve unconventional properties in solar cells and smart windows
in: **254th American Chemical Society National Meeting & Exposition**
Talk – Washington (USA), 20-24/08/2017
42. **F. Bella**, S. Galliano, M. Falco, F. Giordano, A. Hagfeldt, M. Grätzel, G. Viscardi, C. Barolo, C. Gerbaldi
Aqueous Solar Cells as Emerging Photovoltaics: Photoelectrochemical and Chemometric Investigation
in: **254th American Chemical Society National Meeting & Exposition**

- Talk – Washington (USA), 20-24/08/2017
41. **F. Bella**, G. Griffini, J. P. Correa-Baena, G. Saracco, M. Grätzel, A. Hagfeldt, S. Turri, C. Gerbaldi
Photocurable fluoropolymers improve efficiency and stability of perovskite solar cells
in: **19th Postgraduates Conference on Chemistry**
Poster – Heraklion (Greece), 02-04/05/2017
 40. **F. Bella**, G. Griffini, S. Turri, A. Hagfeldt, M. Grätzel, C. Gerbaldi
Light-induced design of smart materials for energy devices
in: **NIS colloquium: Harnessing the Power of Light in Hybrid Materials**
Invited talk – Turin (Italy), 06-07/10/2016
 39. **F. Bella**
Photopolymers as Emerging Advanced Materials for Sustainable Conversion and Storage Energy Devices
in: **Final of the European Young Chemist Award 2016 (EUCA2016) @6th EuCheMS Chemistry Congress**
Awardee lecture – Seville (Spain), 11-15/09/2016
 38. **F. Bella**, G. Griffini, F. Colò, J. R. Nair, G. Leftheriotis, S. Turri, A. Hagfeldt, M. Grätzel, C. Gerbaldi
Photopolymers as Emerging Advanced Materials for Sustainable Conversion and Storage Energy Devices
in: **6th EuCheMS Chemistry Congress**
Talk – Seville (Spain), 11-15/09/2016
 37. **F. Bella**, F. Colò, J. R. Nair, G. Meligrana, C. Gerbaldi
Na-Ion Polymer Batteries: Cheap and Easily Processable Electrolytes for Large-scale Energy Storage
in: **15th International Symposium on Polymer Electrolytes (ISPE-XV)**
Poster – Uppsala (Sweden), 15-19/08/2016
 36. **F. Bella**, G. Griffini, S. Galliano, G. Leftheriotis, S. M. Zakeeruddin, C. Barolo, S. Turri, M. Grätzel, A. Hagfeldt, C. Gerbaldi
Faster Than Light: The Evolution Of Polymer Electrolytes For New Generation Solar Cells In The Last Five Years
in: **15th International Symposium on Polymer Electrolytes (ISPE-XV)**
Invited talk – Uppsala (Sweden), 15-19/08/2016
 35. **F. Bella**, G. Leftheriotis, G. Griffini, G. Syrokostas, S. Turri, M. Grätzel, C. Gerbaldi
Photopolymers for smart windows
in: **International Conference on Hybrid and Organic Photovoltaics (HOPV16)**
Poster – Swansea (United Kingdom), 28/06-01/07/2016
 34. **F. Bella**, S. Galliano, G. Viscardi, C. Gerbaldi, M. Grätzel, C. Barolo
Aqueous solar cells: novel trends in hybrid devices
in: **International Conference on Hybrid and Organic Photovoltaics (HOPV16)**
Talk – Swansea (United Kingdom), 28/06-01/07/2016
 33. **F. Bella**, S. Galliano, G. Viscardi, C. Barolo, C. Gerbaldi
Fotovoltaico acquoso: una nuova frontiera nel campo del solare
in: **VII Convegno Giovani**
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 32. **F. Bella**, F. Colò, J. R. Nair, A. Lamberti, M. Destro, G. Meligrana, S. Fiorilli, P. P.

Pescarmona, C. Gerbaldi

Advanced Functional Materials for Green, Safe and Large-Scale Na-Ion Batteries

in: **5th Portuguese Young Chemists Meeting (5th PYChem) and 1st European Young Chemists Meeting (1st EYChem)**

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31. **F. Bella**, G. Griffini, G. Leftheriotis, F. Colò, G. Syrokostas, J. R. Nair, N. Vlachopoulos, K. Nonomura, S. M. Zakeeruddin, S. Turri, M. Grätzel, A. Hagfeldt, C. Gerbaldi
Photopolymers for stable solar cells, sodium batteries and photoelectrochromic windows
in: **ENERCHEM-1**
Awardee lecture – Florence (Italy), 18-20/02/2016
30. **F. Bella**, A. Lamberti, S. Bianco, E. Tresso, C. F. Pirri, C. Gerbaldi
Hyper flexible dye-sensitized solar cells: towards microfluidic stable devices
in: **ENERCHEM-1**
Poster – Florence (Italy), 18-20/02/2016
29. **F. Bella**, G. Meligrana, F. Colò, A. Lamberti, M. Destro, J. R. Nair, S. Fiorilli, P. Pescarmona, C. Gerbaldi
Nanostructured anode materials for high-energy Li-/Na-ion large-scale energy storage
in: **XV Sigma-Aldrich Young Chemists Symposium (SAYCS 2015)**
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28. **F. Bella**
Photopolymers for Dye-Sensitized Solar Cells
in: **Giornate dell'Elettrochimica Italiana (GEI 2015)**
Awardee lecture – Bertinoro (Italy), 20-24/09/2015
27. **F. Bella**, A. Lamberti, S. Bianco, E. Tresso, C. F. Pirri, C. Gerbaldi
Embedding dye-sensitized solar cells in PDMS: towards microfluidic, extremely flexible devices
in: **Giornate dell'Elettrochimica Italiana (GEI 2015)**
Poster – Bertinoro (Italy), 20-24/09/2015
26. **F. Bella**, A. Lamberti, S. Bianco, E. Tresso, C. Gerbaldi, F. Pirri
Industrially-scalable encapsulation of flexible, microfluidic and polymeric dye-sensitized solar cells
in: **XIX Congresso Nazionale della Divisione di Chimica Industriale della Società Chimica Italiana**
Poster – Salerno (Italy), 14-16/09/2015
25. **F. Bella**, F. Colò, M. Destro, J. R. Nair, C. Gerbaldi
Towards large-scale energy storage systems: how industrially-scalable polymer electrolytes can be conceived
in: **XIX Congresso Nazionale della Divisione di Chimica Industriale della Società Chimica Italiana**
Talk – Salerno (Italy), 14-16/09/2015
24. **F. Bella**, A. Lamberti, S. Bianco, E. Tresso, C. Gerbaldi, F. Pirri
Microfluidic flexible DSSCs based of UV- and thermal-cured polymeric materials
in: **International Conference on Hybrid and Organic Photovoltaics 2015 (HOPV15)**
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23. **F. Bella**, G. Griffini, V. Gianotti, M. Milanesio, R. Bongiovanni, S. Turri, A. Menozzi, C. Barolo
Multifunctional coatings for photovoltaic devices: when one of the less studied components makes the difference

- in: ***International Conference on Hybrid and Organic Photovoltaics 2015 (HOPV15)***
Poster – Rome (Italy), 10-13/05/2015
22. **F. Bella**, J. R. Nair, C. Gerbaldi
Materials for electrochemical energy conversion and storage: novel approaches and chemistry thereof
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Poster – Berlin (Germany), 09/04/2015
21. **F. Bella**, G. Griffini, F. Nisic, C. Dragonetti, D. Roberto, M. Levi, R. Bongiovanni, S. Turri
Luminescent europium complex-laden coatings as exceptional downshifters for organic dye-sensitized solar cells
in: ***Societ  Chimica Italiana & Sigma-Aldrich Young Chemists Symposium (SCI&SAYCS, 14th Edition)***
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20. **F. Bella**, G. Griffini, S. Turri, R. Bongiovanni
Fotopolimeri luminescenti: come convertire la luce UV in luce visibile utile ai dispositivi fotovoltaici
in: ***Macrogiovani @ XXI Convegno Nazionale dell'Associazione Italiana di Scienza e Tecnologia delle Macromolecole***
Talk – Turin (Italy), 14-19/09/2014
19. **F. Bella**, A. Lamberti, A. Sacco, A. Chiodoni, S. Bianco, R. Bongiovanni
Towards flexible DSSCs combining vertically aligned TiO₂ nanotubes array and UV-cured polymer networks
in: ***XXV Congresso Nazionale della Societ  Chimica Italiana - SCI 2014***
Poster – Rende (Italy), 07-12/09/2014
18. **F. Bella**, A. Sacco, S. De La Pierre, M. Castellino, S. Bianco, R. Bongiovanni
Electrodes/Electrolyte interfaces in the presence of a Si-modified photopolymer electrolyte: application in DSSCs
in: ***XXV Congresso Nazionale della Societ  Chimica Italiana - SCI 2014***
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17. **F. Bella**, D. Pugliese, A. Lamberti, A. Sacco, S. Galliano, V. Cauda, S. Bianco, C. Gerbaldi, C. Barolo
How to approach a Gr tzel solar cell in a multivariate way
in: ***XXV Congresso Nazionale della Societ  Chimica Italiana - SCI 2014***
Talk – Rende (Italy), 07-12/09/2014
16. **F. Bella**, G. Griffini, R. Bongiovanni, S. Turri
Fluoropolymeric luminescent downshifters for organic-dye-sensitized solar cells
in: ***XXV Congresso Nazionale della Societ  Chimica Italiana - SCI 2014***
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15. **F. Bella**, A. Chiappone, J. R. Nair, G. Meligrana, R. Bongiovanni, C. Gerbaldi
Nanoscale microfibrillated cellulose for green polymer electrolytes for DSSCs
in: ***XXV Congresso Nazionale della Societ  Chimica Italiana - SCI 2014***
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14. **F. Bella**, R. Bongiovanni
Photopolymers for Gr tzel's solar cells
in: ***XXV Congresso Nazionale della Societ  Chimica Italiana - SCI 2014***
Talk – Rende (Italy), 07-12/09/2014
13. **F. Bella**, A. Sacco, S. De La Pierre, M. Castellino, S. Bianco, R. Bongiovanni

- A UV-curable silicon monomer introduced in a polymer electrolyte modifies electrodes/electrolyte interfaces in DSSCs
in: ***XIV International Symposium on Polymer Electrolytes (ISPE-14)***
Poster – Geelong (Australia), 24-29/08/2014
12. **F. Bella**, C. Gerbaldi, S. Bianco, E. Tresso, F. Pirri, R. Bongiovanni
Light-produced polymer electrolytes for light-conversion in dye-sensitized solar cells
in: ***XIV International Symposium on Polymer Electrolytes (ISPE-14)***
Talk – Geelong (Australia), 24-29/08/2014
 11. **F. Bella**, A. Lamberti, A. Sacco, S. Bianco, E. Tresso, R. Bongiovanni
Solar energy converted by flexible devices: photocured polymer electrolytes and bendable nanotubes membranes
in: ***VII Giornate Italo-Francesi di Chimica / 7^{èmes} Journées Franco-Italiennes de Chimie (GIFC2014)***
Poster – Turin (Italy), 05-06/05/2014
 10. **F. Bella**, A. Sacco, G. Salvador, S. Bianco, E. Tresso, C. F. Pirri, R. Bongiovanni
Light cured polymer electrolytes for dye-sensitized solar cells with unconventional redox couples
in: ***13° Sigma Aldrich Young Chemists Symposium - 13° S.A. Y.C.S.***
Talk – Riccione (Italy), 28-30/10/2013
 9. A. Lamberti, N. Garino, **F. Bella**, K. Bejtka, S. Bianco, G. Canavese, S. Stassi, A. Chiodoni, D. Manfredi, E.P. Ambrosio, M. Lombardi, C.F. Pirri, M. Quaglio
BaTiO₃ nanotube arrays by hydrothermal conversion of TiO₂ nanotube carpets grown by anodic oxidation
in: ***64th Annual Meeting of the International Society of Electrochemistry***
Poster – Santiago de Queretaro (Mexico), 08-13/09/2013
 8. **F. Bella**, S. Bianco, C. Gerbaldi, D. Pugliese, A. Sacco, A. Chiappone, J. R. Nair, C. Barolo, A.M. Stephan, R. Bongiovanni
Photoelectrochemical characterization of UV-crosslinked polymer electrolytes with non-conventional additives: towards efficient and durable quasi-solid DSSCs
in: ***64th Annual Meeting of the International Society of Electrochemistry***
Talk – Santiago de Queretaro (Mexico), 08-13/09/2013
 7. **F. Bella**, E. D. Ozzello, A. Sacco, S. Bianco, R. Bongiovanni
A highly efficient quasi-solid polymer electrolyte for dye-sensitized solar cells prepared in only 7 minutes
in: ***Frontiers in Polymer Science***
Poster – Sitges (Spain), 21-23/05/2013
 6. **F. Bella**, E. D. Ozzello, S. Bianco, R. Bongiovanni
Photopolymerization of acrylic/methacrylic polymer electrolyte membranes for dye-sensitized solar cells: effect of crosslinking density and addition of iodine salts
in: ***Frontiers in Polymer Science***
Poster – Sitges (Spain), 21-23/05/2013
 5. **F. Bella**, J. R. Nair, A. Sacco, D. Pugliese, E. D. Ozzello, S. Bianco, C. Gerbaldi, R. Bongiovanni
Acrylic and methacrylic polymer electrolytes for dye-sensitized solar cells prepared by an elegant and rapid UV-curing process
in: ***4th International Conference on Functional Materials & Devices 2013 (ICFMD - 2013)***
Invited talk – Penang (Malaysia), 08-11/04/2013

4. **F. Bella**, E. D. Ozzello, A. Sacco, S. Bianco, R. Bongiovanni
A 4.41% sunlight conversion efficiency obtained with a polymer electrolyte prepared in just seven minutes
in: **4th International Conference on Functional Materials & Devices 2013 (ICFMD - 2013)**
Poster – Penang (Malaysia), 08-11/04/2013
3. **F. Bella**, E. D. Ozzello, D. Pugliese, J. R. Nair, A. Sacco, S. Bianco, C. Gerbaldi, C. Barolo, R. Bongiovanni
Polymer electrolyte membranes for dye-sensitized solar cells prepared by an elegant and rapid UV-curing process
in: **NIS colloquium: Dye-sensitized Solar Cells: from materials to devices**
Talk – Turin (Italy), 31/01-01/02/2013
2. **F. Bella**, D. Pugliese, J. R. Nair, S. Bianco, C. Gerbaldi, R. Bongiovanni
A new photo-crosslinked polymer electrolyte for dye-sensitized solar cells optimized by design of experiment
in: **European Symposium of Photopolymer Science**
Poster – Turin (Italy), 04-07/09/2012
1. **F. Bella**, D. Pugliese, J. R. Nair, S. Bianco, C. Gerbaldi, R. Bongiovanni
UV-crosslinked polymer electrolyte for quasi-solid dye-sensitized solar cells with excellent efficiency
in: **XIII International Symposium on Polymer Electrolytes (ISPE-13)**
Talk – Selfoss (Iceland), 26-31/08/2012

Conference contributions

CONTRIBUTIONS PRESENTED BY F.B.'s COLLEAGUES

152. G. Lingua, M. Falco, **F. Bella**, G. Meligrana, A. S. Shaplov, C. Gerbaldi
Innovative single-ion conducting solid electrolytes for safe, high performing energy storage devices
in: **Le Studium Conference – Towards Futuristic Energy Storage; paving its way through Supercapacitors, Li-ion batteries and beyond**
Talk – Tours (France), 22-24/01/2020
151. M. Falco, L. Castro, E. Zanchi, T. Platini, J. R. Nair, **F. Bella**, G. Meligrana, F. Smeacetto, C. Gerbaldi
Crosslinked composite polymer electrolytes with Super Li-ion conductive ceramic materials as electrolytes for Lithium batteries
in: **The 19th International Conference on Micro and Nanotechnology for Power Generation and Energy Conversion Applications (PowerMEMS 2019)**
Talk – Kraków (Poland), 02-06/12/2019
150. F. Colò, M. Falco, G. Piana, **F. Bella**, G. Meligrana, C. Gerbaldi
Development and characterization of polymer-based electrolytes and nanostructured electrodes for energy storage devices
in: **The 19th International Conference on Micro and Nanotechnology for Power Generation and Energy Conversion Applications (PowerMEMS 2019)**
Talk – Kraków (Poland), 02-06/12/2019
149. L. Fagiolari, M. Bonomo, A. Cognetti, C. Gerbaldi, C. Barolo, **F. Bella**
TiO₂-photoanodes from unconventional pastes for aqueous dye-sensitized solar cells
in: **Merck Young Chemists' Symposium 2019 (MYCS 2019)**
Talk – Rimini (Italy), 25-27/11/2019
148. M. Ricciardi, A. Proto, O. Motta, C. Pironti, I. Zarrella, L. Di Filippo, R. Cucciniello, **F. Bella**

- Bio-based polymers for sodium-ion batteries
in: **3rd International Conference on Bio and Nanomaterials (BIONAM 2019)**
Talk – MSC cruise (Mediterranean Sea), 29/09-03/10/2019
147. G. Lingua, M. Falco, **F. Bella**, G. Meligrana, A. S. Shaplov, C. Gerbaldi
Innovative single-ion conducting solid electrolytes for safe, high performing energy storage devices
in: **Giornate dell'Elettrochimica Italiana (GEI 2019)**
Poster – Padua (Italy), 08-12/09/2019
146. M. Bonomo, L. Fagiolari, **F. Bella**, G. Viscardi, C. Gerbaldi, C. Barolo
Electrochemical impedance spectroscopy: a powerful tool to unveil the charge transport/recombination processes in aqueous dye-sensitized solar cells
in: **Giornate dell'Elettrochimica Italiana (GEI 2019)**
Talk – Padua (Italy), 08-12/09/2019
145. F. Colò, A. B. Muñoz-García, **F. Bella**, G. Meligrana, M. Di Carli, M. Pavone, C. Gerbaldi
Safe polymer electrolytes and high performing anode materials for Na-based secondary batteries
in: **Giornate dell'Elettrochimica Italiana (GEI 2019)**
Poster – Padua (Italy), 08-12/09/2019
144. L. Fagiolari, C. Gerbaldi, **F. Bella**
Emerging strategies towards ambient condition fabrication of perovskite solar cells
in: **Giornate dell'Elettrochimica Italiana (GEI 2019)**
Poster – Padua (Italy), 08-12/09/2019
143. M. Falco, L. Castro, **F. Bella**, G. Meligrana, F. Smeacetto, I. Cerri, C. Gerbaldi
UV-crosslinked composite polymer electrolyte for high-rate, ambient temperature Li-based batteries
in: **Giornate dell'Elettrochimica Italiana (GEI 2019)**
Talk – Padua (Italy), 08-12/09/2019
142. L. Fagiolari, M. Bonomo, A. Cognetti, C. Gerbaldi, C. Barolo, **F. Bella**
Photoanodes for aqueous dye-sensitized solar cells: effect of different TiO₂ pastes
in: **Giornate dell'Elettrochimica Italiana (GEI 2019)**
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141. **F. Bella**, S. Galliano, M. Falco, L. Fagiolari, G. Viscardi, M. Grätzel, C. Gerbaldi, C. Barolo
Biosourced Hydrogel Electrolytes for Aqueous Solar Cells
in: **European Polymer Congress 2019 (EPF 2019)**
Poster – Crete (Greece), 09-14/06/2019
140. M. Falco, L. Castro, J. R. Nair, **F. Bella**, F. Bardè, G. Meligrana, C. Gerbaldi
UV crosslinked composite polymer electrolyte for high-rate, ambient temperature lithium batteries
in: **European Polymer Congress 2019 (EPF 2019)**
Talk – Crete (Greece), 09-14/06/2019
139. G. Meligrana, L. Zolin, **F. Bella**, F. Colò, M. Falco, G. Piana, M. Destro, J. R. Nair, C. Gerbaldi
Biosourced Polymers and Lignocellulosic Materials for the Next-Generation of Eco-Friendly Electrochemical Energy Storage and Conversion Devices
in: **European Polymer Congress 2019 (EPF 2019)**
Poster – Crete (Greece), 09-14/06/2019
138. F. Colò, G. Piana, M. Falco, **F. Bella**, G. Meligrana, C. Gerbaldi
Solid-like polymer electrolytes for safe, low-cost and durable sodium-ion batteries working at ambient temperature
in: **European Polymer Congress 2019 (EPF 2019)**

Poster – Crete (Greece), 09-14/06/2019

137. M. Falco, F. Colò, G. Lingua, **F. Bella**, G. Meligrana, C. Gerbaldi
Towards Solid Batteries Operating at Ambient Temperature: Safe, Highly Conducting Polymer Electrolytes Based on Cross-Linked Polymer Matrixes
in: **European Polymer Congress 2019 (EPF 2019)**
Keynote – Crete (Greece), 09-14/06/2019
136. F. Colò, M. Falco, G. Piana, G. Lingua, E. Maruccia, **F. Bella**, G. Meligrana, M. Di Carli, C. Gerbaldi
Safe polymer electrolytes and high performing anode materials for Na-based secondary batteries
in: **NanoInnovation 2019**
Talk – Rome (Italy), 11-14/06/2019
135. C. Barolo, **F. Bella**, S. Galliano, L. Fagiolari, M. Bonomo, G. Boschloo, M. Grätzel, C. Gerbaldi, G. Viscardi
Optimizing Hydrogel Electrolytes for Dye-sensitized Solar Cells
in: **11th International Conference on Hybrid and Organic Photovoltaics (HOPV19)**
Poster – Rome (Italy), 12-15/05/2019
134. A. Scalia, A. Varzi, P. Zaccagnini, A. Lamberti, C. Gerbaldi, **F. Bella**, E. Tresso, S. Passerini
Innovative photovoltaic harvester and electrochemical double layer capacitor integrated devices
in: **International Symposium on Enhanced Electrochemical Capacitors (ISEECap 2019)**
Talk – Nantes (France), 06-10/05/2019
133. L. Fagiolari, C. Gerbaldi, **F. Bella**
Ambient condition fabrication of perovskite solar cells
in: **Merck & Elsevier Young Chemists Symposium (MEYCS 2018)**
Flash communication + Poster – Rimini (Italy), 19-21/11/2018
132. E. Maruccia, **F. Bella**, S. Galliano, V. Cauda, C. Barolo, C. Gerbaldi
Preparation and characterization of zinc oxide based photoanodes for aqueous dye-sensitized solar cells
in: **Merck & Elsevier Young Chemists Symposium (MEYCS 2018)**
Talk – Rimini (Italy), 19-21/11/2018
131. M. Falco, J. R. Nair, F. Colò, G. Piana, **F. Bella**, G. Meligrana, C. Gerbaldi
Crosslinked poly(ethylene oxide)-based polymer electrolytes for advanced Li-ion batteries
in: **Merck & Elsevier Young Chemists Symposium (MEYCS 2018)**
Talk – Rimini (Italy), 19-21/11/2018
130. G. Piana, F. Colò, **F. Bella**, M. Falco, G. Meligrana, C. Gerbaldi
Novel sustainable processes and materials for polymer electrolytes in sodium-ion batteries
in: **Merck & Elsevier Young Chemists Symposium (MEYCS 2018)**
Talk – Rimini (Italy), 19-21/11/2018
129. F. Colò, **F. Bella**, G. Piana, M. Falco, J. R. Nair, G. Meligrana, C. Gerbaldi
Cheap and easily processable polymer electrolytes for sodium-based batteries
in: **10th ECNP International Conference on Nanostructured Polymers and Nanocomposites**
Poster – San Sebastian (Spain), 03-05/10/2018
128. M. Falco, L. Castro, J. R. Nair, **F. Bella**, G. Piana, F. Bardé, G. Meligrana, C. Gerbaldi
Towards solid batteries operating at ambient temperature: (composite) polymer electrolytes based

on cross-linked PEO matrix

in: **10th ECNP International Conference on Nanostructured Polymers and Nanocomposites**

Keynote – San Sebastian (Spain), 03-05/10/2018

127. M. Falco, L. Castro, J. R. Nair, **F. Bella**, F. Bardé, G. Meligrana, C. Gerbaldi
Towards solid-state batteries operating at ambient temperature: (composite) polymer electrolytes in a cross-linked poly(ethylene oxide) matrix
in: **2018 MRS Fall Meeting & Exhibit**
Invited talk – Warsaw (Poland), 17-20/09/2018
126. G. Piana, F. Colò, **F. Bella**, M. Falco, G. Meligrana, C. Gerbaldi
Solid-like polymer electrolytes for safe, low-cost and durable sodium-ion batteries working at ambient temperature
in: **2018 MRS Fall Meeting & Exhibit**
Talk – Warsaw (Poland), 17-20/09/2018
125. G. Piana, S. Galliano, G. Viscardi, M. Grätzel, C. Gerbaldi, C. Barolo, **F. Bella**
Boosting the efficiency of aqueous solar cells by TiCl₄ treatment
in: **2018 MRS Fall Meeting & Exhibit**
Poster – Warsaw (Poland), 17-20/09/2018
124. A. Scalia, A. Lamberti, **F. Bella**, C. Gerbaldi, C. F. Pirri, E. Tresso
Flexible and Floating Photovoltaics
in: **NanoInnovation 2018**
Poster – Rome (Italy), 11-14/09/2018
123. M. Falco, F. Colò, G. Piana, **F. Bella**, G. Meligrana, C. Gerbaldi
Towards Solid Batteries Operating at Ambient Temperature Exploiting Highly-Crosslinked (Composite) PEO-based Polymer Electrolytes
in: **NanoInnovation 2018**
Talk – Rome (Italy), 11-14/09/2018
122. F. Colò, **F. Bella**, G. Piana, M. Falco, J. R. Nair, G. Meligrana, C. Gerbaldi
Cheap and Easily Processable Polymer Electrolytes for Sodium-based Batteries
in: **6th Edition of the International Meeting on Ionic Liquids for Electrochemical Devices (ILED-6)**
Poster – Rome (Italy), 09-11/09/2018
121. M. Falco, J. R. Nair, G. Piana, F. Colò, **F. Bella**, G. Meligrana, C. Gerbaldi
Towards Solid Batteries Operating at Ambient Temperature Exploiting (Composite) Polymer Electrolytes based on Cross-linked PEO
in: **6th Edition of the International Meeting on Ionic Liquids for Electrochemical Devices (ILED-6)**
Talk – Rome (Italy), 09-11/09/2018
120. F. Colò, **F. Bella**, G. Piana, M. Falco, G. Meligrana, C. Gerbaldi
Innovative polymer electrolytes for safe, low-cost and durable sodium-ion batteries
in: **69th Annual ISE Meeting**
Poster – Bologna (Italy), 02-07/09/2018
119. L. Porcarelli, A. S. Shaplov, L. Rubatat, **F. Bella**, J. R. Nair, C. Gerbaldi, D. Mecerreyes
Recent Advancements in Single-Ion Polymer Electrolytes for Energy Storage in Lithium Metal Batteries
in: **69th Annual ISE Meeting**

- Talk – Bologna (Italy), 02-07/09/2018
118. M. Falco, L. Castro, J. R. Nair, **F. Bella**, G. Piana, F. Bardè, G. Meligrana, C. Gerbaldi
High-performing hybrid composite polymer electrolytes for safe ambient temperature lithium metal batteries
in: **69th Annual ISE Meeting**
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117. E. Maruccia, **F. Bella**, S. Galliano, V. Cauda, C. Barolo, C. Gerbaldi
Preparation and Characterization of Zinc Oxide Photoelectrodes for Aqueous Grätzel Solar Cells
in: **69th Annual ISE Meeting**
Poster – Bologna (Italy), 02-07/09/2018
116. E. Maruccia, **F. Bella**, S. Galliano, V. Cauda, C. Barolo, C. Gerbaldi
Preparation and Characterization of Zinc Oxide Photoanodes for Water-Based Dye-Sensitized Solar Cells
in: **XX Congresso Nazionale di Catalisi – XX Congresso Nazionale della Divisione di Chimica Industriale (GIC-DiChIn2018)**
Talk – Milan (Italy), 02-05/09/2018
115. S. Galliano, **F. Bella**, F. Giordano, G. Boschloo, A. Hagfeldt, M. Grätzel G. Viscardi, C. Gerbaldi, C. Barolo
A DoE approach to the formulation of aqueous-based electrolytes for Dye-Sensitized Solar Cells
in: **XX Congresso Nazionale di Catalisi – XX Congresso Nazionale della Divisione di Chimica Industriale (GIC-DiChIn2018)**
Talk – Milan (Italy), 02-05/09/2018
114. C. Barolo, **F. Bella**, S. Galliano, N. Barbero, G. Boschloo, F. Giordano, M. Milanesio, M. Grätzel, A. Hagfeldt, C. Gerbaldi, G. Viscardi
Unravelling aqueous electrolyte formulations through chemometric approaches
in: **International Symposium on Photochemistry (27th PhotolUPAC)**
Talk – Dublin (Ireland), 08-13/07/2018
113. M. Falco, J. R. Nair, F. Colò, G. Piana, **F. Bella**, G. Meligrana, C. Gerbaldi
Crosslinked Polymer Electrolytes for Safe and High-Performing Lithium-based Batteries
in: **XXXIX Meeting of the Electrochemistry Group of the Spanish Royal Society of Chemistry and 3rd E3 Mediterranean Symposium: Electrochemistry for Environment and Energy (XXXIX GE-RSEQ & 3rd E3-MS)**
Poster – Madrid (Spain), 02-05/07/2018
112. **F. Bella**, S. Galliano, M. Falco, M. Grätzel, A. Hagfeldt, C. Barolo, G. Viscardi, C. Gerbaldi
Investigation on Bio-Derived Hydrogel Electrolytes for Dye-Sensitized Solar Cells
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80. G. Griffini, D. Pintossi, **F. Bella**, A. Colombo, J. P. Correa-Baena, M. Graetzel, A. Hagfeldt, M. Levi, C. Dragonetti, C. Gerbaldi, S. Turri
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79. C. Gerbaldi, **F. Bella**, G. Meligrana, F. Colò, M. Falco, G. Piana
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78. L. Porcarelli, A. S. Shaplov, M. A. Aboudzadeh, **F. Bella**, J. R. Nair, C. Gerbaldi, D. Mecerreyes
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76. **F. Bella**, J. Popovic, J. Maier, C. Gerbaldi
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73. J. R. Nair, L. Porcarelli, M. Falco, **F. Bella**, F. Colò, G. Meligrana, R. Lin, G. B. Appetecchi, S. Passerini, C. Gerbaldi
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71. S. Galliano, **F. Bella**, M. Falco, G. Provera, C. Barolo, F. Giordano, G. Boschloo, M. Graetzel, A. Hagfeldt, C. Gerbaldi, G. Viscardi
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70. **F. Bella**, F. Colò, M. Falco, G. Meligrana, J. R. Nair, C. Gerbaldi
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64. M. Falco, **F. Bella**, S. Galliano, C. Gerbaldi, G. Viscardi, M. Grätzel, C. Barolo
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63. S. Galliano, G. Provera, G. Giacona, **F. Bella**, F. Giordano, A. Hagfeldt, G. Boschloo, C. Gerbaldi, C. Barolo, G. Viscardi
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61. S. Galliano, **F. Bella**, C. Gerbaldi, C. Barolo, G. Viscardi
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60. J. R. Nair, L. Porcarelli, **F. Bella**, F. Colò, G. Meligrana, C. Gerbaldi
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56. F. Colò, J. R. Nair, **F. Bella**, L. L. Perreault, A. Lamberti, S. L. Fiorilli, F. Kleitz, G. Meligrana, C. Gerbaldi
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55. C. Gerbaldi, L. Zolin, J. R. Nair, **F. Bella**, G. Meligrana, M. Destro, D. Beneventi
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54. C. Gerbaldi, J. R. Nair, L. Porcarelli, **F. Bella**, G. Meligrana, R. Lin, S. Fantini, G. Maresca, M. Moreno, G. B. Appetecchi
New Insights Towards Aging Resistant Li-ion Polymer Batteries For Wide Temperature Applications
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52. J. R. Nair, L. Porcarelli, **F. Bella**, R. Lin, S. Fantini, G. Maresca, M. Moreno, G. B. Appetecchi, C. Gerbaldi
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47. A. Bianco Prevot, P. Avetta, D. Fabbri, A. Arques, L. Carlos, E. Laurenti, **F. Bella**
Bio-based substances isolated from green compost: application in wastewater treatment
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46. G. Giacona, S. Galliano, C. Barolo, C. Gerbaldi, M. Grätzel, **F. Bella**
Aqueous electrolytes for dye-sensitized solar cells
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45. S. Galliano, N. Barbero, V. Gianotti, C. Gerbaldi, C. Barolo, **F. Bella**
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44. A. Lamberti, A. Sacco, S. Bianco, A. Virga, A. Chiadò, **F. Bella**, A. Chiodoni, K. Bejtka, P. Rivolo, E. Tresso, F. Giorgis, C. F. Pirri
Multi-functional TiO₂ nanotubes arrays by anodic oxidation: from energy to bio-sensing
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43. L. Porcarelli, A. S. Shaplov, M. Salsamendi, **F. Bella**, J. R. Nair, D. Mecerreyes, C. Gerbaldi
New polymeric single-ion conductors for rechargeable lithium-battery
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42. F. Colò, **F. Bella**, J. R. Nair, M. Destro, G. Meligrana, C. Gerbaldi
Polymer electrolytes for green, safe and robust all solid Na-ion batteries
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41. J. R. Nair, L. Porcarelli, **F. Bella**, F. Colò, G. Meligrana, C. Gerbaldi

- Towards aging resistant lithium polymer batteries for wide temperature applications
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40. G. Meligrana, F. Colò, **F. Bella**, A. Lamberti, M. Destro, J. R. Nair, S. Fiorilli, P. Pescarmona, C. Gerbaldi
Nanostructured anode materials for high-energy Li-/Na-ion large-scale energy storage
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39. J. R. Nair, L. Porcarelli, **F. Bella**, R. Lin, S. Fantini, G. Maresca, M. Moreno, G. Appetecchi, C. Gerbaldi
New Insights in Aging Resistant Lithium Polymer Batteries for Highly Stressful Applications
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38. C. Gerbaldi, S. Galliano, C. Barolo, **F. Bella**
Aqueous photovoltaics: a new era in third generation devices
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37. F. Colò, **F. Bella**, J. R. Nair, M. Destro, G. Meligrana, C. Gerbaldi
Polymer Electrolytes for Green, Safe and Robust All-Solid Na-ion Batteries
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36. S. Galliano, **F. Bella**, J. R. Nair, G. Viscardi, C. Gerbaldi, C. Barolo
From organic solvents to water: a more sustainable approach toward industrially-upscalable hybrid solar cells
in: **XIX Congresso Nazionale della Divisione di Chimica Industriale della Società Chimica Italiana**
Talk – Salerno (Italy), 14-16/09/2015
35. J. R. Nair, **F. Bella**, L. Porcarelli, F. Colò, M. Destro, G. Meligrana, C. Gerbaldi
Photo-cured polymer electrolyte membranes for energy storage and conversion systems
in: **Third International Conference on Membranes (ICM-2015)**
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34. **F. Bella**, A. Lamberti, J. R. Nair, S. Bianco, C. Gerbaldi, E. Tresso, C. F. Pirri
Nanostructured photoelectrodes and polymeric nanointerfaces engineering: the critical transition from rigid to flexible dye-sensitized solar cells
in: **15th International Conference on Nanotechnology (IEEE NANO 2015)**
Talk – Rome (Italy), 27-30/07/2015
33. J. R. Nair, **F. Bella**, L. Porcarelli, F. Colò, G. Meligrana, C. Gerbaldi
Novel polymer electrolyte membranes for energy storage and conversion systems
in: **3rd Indo-Italian Workshop on Electrochemistry for Energy & Health**
Talk – Delhi (India), 02-03/07/2015
32. G. Viscardi, S. Galliano, M. Falco, G. Giacona, J. R. Nair, C. Gerbaldi, C. Barolo, **F. Bella**
100% aqueous Dye-sensitized Solar Cells: a starting point for the choice of dyes and iodine salts
in: **International Conference on Hybrid and Organic Photovoltaics 2015 (HOPV15)**
Talk – Rome (Italy), 10-13/05/2015
31. **F. Bella**, S. Galliano, N. Barbero, C. Gerbaldi, V. Gianotti, G. Viscardi, C. Barolo
Is it possible to simultaneously evaluate all the experimental parameters and their relative

importance in a DSSC?

in: **International Conference on Hybrid and Organic Photovoltaics 2015 (HOPV15)**

Poster – Rome (Italy), 10-13/05/2015

30. G. Griffini, **F. Bella**, F. Nisic, C. Dragonetti, D. Roberto, R. Bongiovanni, S. Turri
Multifunctional down-shifting polymeric coatings for highly stable and efficient organic dye-sensitized solar cells
in: **Fourth International Conference on Multifunctional, Hybrid and Nanomaterials (Hybrid Materials 2015)**
Talk – Sitges (Spain), 09-13/03/2015
29. F. Colò, M. Di Stefano, M. Destro, **F. Bella**, N. Penazzi, G. Meligrana, J. R. Nair, C. Gerbaldi
Novel cellulose-based composite polymer electrolytes for green, efficient and durable Na-ion batteries
in: **Società Chimica Italiana & Sigma-Aldrich Young Chemists Symposium (SCI&SAYCS, 14th Edition)**
Poster – Riccione (Italy), 27-29/10/2014
28. S. Galliano, G. Favaro, **F. Bella**, N. Barbero, R. Buscaino, C. Gerbaldi, M. Milanesio, V. Gianotti, C. Barolo, G. Viscardi
Optimization in Dye Sensitized Solar Cells: a multiparametric approach
in: **Photovoltaics: new frontiers and applications**
Talk – Lecce (Italy), 16-18/10/2014
27. E. Tresso, S. Bianco, **F. Bella**, A. Lamberti, A. Sacco, M. Quaglio, A. Chiodoni, R. Bongiovanni, F. Cappelluti, C. F. Pirri
Flexible dye-sensitized solar cell combining light-cured polymer network, metallic grids and vertically aligned TiO₂ nanotube array
in: **Photovoltaics: new frontiers and applications**
Talk – Lecce (Italy), 16-18/10/2014
26. J. R. Nair, L. Porcarelli, **F. Bella**, N. Penazzi, C. Gerbaldi
Novel UV-cured multifunctional polymer electrolytes for efficient energy storage and production devices
in: **10th European Symposium on Electrochemical Engineering – 10th esee**
Talk – Chia (Italy), 28/09-02/10/2014
25. **F. Bella**, A. Chiappone, J. R. Nair, G. Meligrana, C. Gerbaldi
Novel cellulose-based composite polymer electrolytes for green, efficient and durable energy conversion and storage devices
in: **10th European Symposium on Electrochemical Engineering – 10th esee**
Talk – Chia (Italy), 28/09-02/10/2014
24. R. Bongiovanni, **F. Bella**
In situ photopolymerization for making DSSC quasi solid electrolytes and assembling the cell
in: **3rd European Symposium of Photopolymer Science (ESPS 2014)**
Invited talk – Vienna (Austria), 09-12/09/2014
23. A. Chiappone, **F. Bella**, J. R. Nair, G. Meligrana, R. Bongiovanni, C. Gerbaldi
Nanocellulose-based polymer electrolytes for highly efficient quasi-solid dye sensitized solar cells
in: **65th Annual Meeting of the International Society of Electrochemistry**
Poster – Lausanne (Switzerland), 31/08-05/09/2014
22. J. R. Nair, C. Gerbaldi, L. Porcarelli, **F. Bella**, M. Destro, N. Penazzi

Novel multipurpose polymer electrolytes for smart and efficient energy power sources
in: **65th Annual Meeting of the International Society of Electrochemistry**
Poster – Lausanne (Switzerland), 31/08-05/09/2014

21. **F. Bella**, S. Galliano, C. Gerbaldi, C. Barolo
Design of Experiments (DoE): a multivariate approach to dye-sensitized solar cells comprehension and optimization
in: **65th Annual Meeting of the International Society of Electrochemistry**
Poster – Lausanne (Switzerland), 31/08-05/09/2014
20. F. Colò, M. Di Stefano, M. Destro, **F. Bella**, N. Penazzi, J. R. Nair, G. Meligrana, C. Gerbaldi
Novel cellulose-based composite polymer electrolytes for green all-solid Na-ion batteries
in: **65th Annual Meeting of the International Society of Electrochemistry**
Poster – Lausanne (Switzerland), 31/08-05/09/2014
19. L. Porcarelli, J. R. Nair, C. Gerbaldi, **F. Bella**, M. Destro, N. Penazzi
Novel multipurpose polymer electrolytes for smart and efficient energy power sources
in: **2014 Green Chemistry Gordon Conference - Industrial Successes and Challenges**
Poster – Hong Kong (China), 27/07-01/08/2014
18. **F. Bella**, A. Lamberti, A. Sacco, S. Bianco, A. Chiodoni, C. F. Pirri, R. Bongiovanni, E. Tresso
Towards flexible dye-sensitized solar cell combining vertically aligned TiO₂ nanotube array and light-cured polymer network
in: **6th International Conference on Hybrid Inorganic-Organic Photovoltaics (HOPV14)**
Abstract – Lausanne (Switzerland), 11-14/05/2014
17. V. Gianotti, **F. Bella**, C. Barolo, G. Favaro, S. Galliano, M. Milanese, E. Tresso, G. Viscardi
Design of Experiments (DoE): a multivariate approach to DSC optimization
in: **6th International Conference on Hybrid Inorganic-Organic Photovoltaics (HOPV14)**
Poster – Lausanne (Switzerland), 11-14/05/2014
16. L. Porcarelli, J. R. Nair, **F. Bella**, C. Gerbaldi, N. Penazzi
Development of multipurpose PEO-based polymer electrolytes for smart and energy efficient devices
in: **13^o Sigma Aldrich Young Chemists Symposium - 13^o S.A.Y.C.S.**
Poster – Riccione (Italy), 28-30/10/2013
15. A. Chiappone, **F. Bella**, C. Gerbaldi, J.R. Nair, R. Bongiovanni
Nanoscale microfibrillated cellulose reinforced polymer electrolytes for sustainable energy devices
in: **4th International Conference on Biodegradable and Biobased Polymers (BIOPOL-2013)**
Poster – Rome (Italy), 01-03/10/2013
14. **F. Bella**, J. R. Nair, A. Chiappone, C. Gerbaldi, R. Bongiovanni
Novel cellulose-based composite gel-polymer electrolytes for green, efficient and durable dye-sensitized solar cells
in: **Giornate dell'Elettrochimica Italiana - GEI 2013**
Talk – Pavia (Italy), 22-27/09/2013
13. S. Bianco, A. Lamberti, A. Sacco, **F. Bella**, D. Pugliese, R. Gazia, M. Quaglio, R. Bongiovanni, E. Tresso
Metal oxide nanostructures and quasi-solid electrolytes for dye-sensitized solar cells

- in: **SuNEC 2013 – Sun New Energy Conference**
Talk – Santa Flavia (Italy), 10-12/09/2013
12. S. Bodoardo, J.R. Nair, C. Gerbaldi, C. Francia, M. Destro, G. Meligrana, F. Di Lupo, A. Chiappone, **F. Bella**, N. Garino, S. Zanarini, S. Casino, J. Zeng, J. Amici, L. Zolin, L. Porcarelli, N. Penazzi
Polymer electrolytes for safe Lithium ion, electrochromic and photovoltaic applications
in: **64th Annual Meeting of the International Society of Electrochemistry**
Talk – Santiago de Queretaro (Mexico), 08-13/09/2013
 11. D. Pugliese, A. Lamberti, A. Sacco, **F. Bella**, V. Cauda, S. Bianco
ZnO multipod nanostructures for Dye-sensitized Solar Cell application
in: **International Conference on Advanced Complex Inorganic Nanomaterials**
Poster – Namur (Belgium), 15-19/07/2013
 10. D. Pugliese, A. Lamberti, A. Sacco, **F. Bella**, V. Cauda, Quaglio M., Garino N., S. Bianco
Multipod-like zinc oxide nanostructures as photoanodes in Dye-sensitized Solar Cells
in: **20th International Symposium on Metastable, Amorphous and Nanostructured Materials (ISMANAM 2013)**
Talk – Turin (Italy), 30/06-05/07/2013
 9. P. Avetta, A. Bianco Prevot, C. Barolo, **F. Bella**, E. Laurenti, E. Montoneri, A. Arques, L. Carlos, M. C. González
Use of soluble bio-based substances isolated from urban biowastes as organic photocatalysts for the degradation of 4-chlorophenol
in: **14th EuChemS International Conference on Chemistry and the Environment (ICCE 2013)**
Poster – Barcelona (Spain), 25-28/06/2013
 8. R. Bongiovanni, **F. Bella**
Thermoset membranes as electrolytes for Dye Sensitized Solar Cell
in: **Baekeland 2013 Symposium: 4th International Symposium on Thermosets**
Invited talk – Niagara Falls (Canada), 23-27/06/2013
 7. **F. Bella**, E. D. Ozzello, A. Sacco, S. Bianco, R. Bongiovanni
Free-radical photopolymerization of acrylic/methacrylic polymer electrolyte membranes for dye-sensitized solar cells
in: **European Polymer Congress EPF 2013**
Talk – Pisa (Italy), 16-21/06/2013
 6. J. R. Nair, **F. Bella**, C. Gerbaldi
Development of multipurpose ethylene oxide based polymer electrolytes for smart and energy efficient devices
in: **Frontiers in Polymer Science**
Poster – Sitges (Spain), 21-23/05/2013
 5. D. Pugliese, A. Lamberti, A. Sacco, **F. Bella**, V. Cauda, S. Bianco, E. Tresso
ZnO multipods as promising nanostructured photoanodes for Dye-sensitized Solar Cell
in: **Hybrid and Organic Photovoltaics Conference (HOPV-13)**
Poster – Seville (Spain), 05-08/05/2013
 4. S. Bianco, A. Lamberti, D. Pugliese, A. Sacco, **F. Bella**, R. Gazia, M. Quaglio, E. Tresso, C. F. Pirri
Metal oxide nanostructures for the fabrication of efficient DSC photoanodes
in: **NIS colloquium: Dye-sensitized Solar Cells: from materials to devices**

Talk – Turin (Italy), 31/01-01/02/2013

3. **F. Bella**, D. Pugliese, J.R. Nair, S. Bianco, C. Gerbaldi, R. Bongiovanni
Photopolymerisation of acrylic monomers for quasi-solid dye-sensitized solar cells
in: **VIII Convegno Nazionale dell'Associazione Italiana di Chimica per Ingegneria**
Poster – Aci Castello (Italy), 16-19/09/2012
2. S. Bianco, **F. Bella**, D. Pugliese, J. R. Nair, C. Gerbaldi, E. Tresso, C. F. Pirri, R. Bongiovanni
A novel UV-cured quasi-solid polymer electrolyte for dye-sensitized solar cell
in: **Second International Meeting on Organic Materials for a Better Future (FUTURMAT2)**
Talk – Brindisi (Italy), 16-20/09/2012
1. P. Avetta, C. Barolo, **F. Bella**, A. Bianco Prevot, E. Montoneri
Photodegradation of 4-chlorophenol sensitized by waste derived soluble organic substances using experimental design
in: **XXIV Congresso Nazionale della Società Chimica Italiana**
Poster – Lecce (Italy), 11-16/09/2011

Supervised students list

- Luca Barotto (BSc in Energetic Engineering @PoliTO, 2020): *Lignin in the photovoltaic field.*
- Giacomo Isolano (MSc in Chemical and Sustainable Processes Engineering @PoliTO, 2019): *Biomass-derived carbon-based cathodes for aqueous photovoltaic cells.*
- Luca Carallo (BSc in Energetic Engineering @PoliTO, 2019): *Organic solar cells on paper substrates.*
- Laura Bonsignorio (BSc in Energetic Engineering @PoliTO, 2019): *Dye-sensitized solar cells: integration in smart windows.*
- Ahmed Hashish (BSc in Energetic Engineering @PoliTO, 2019): *Third generation solar cells: from laboratory to industrial production.*
- Virginia Alberti (MSc in Chemical and Sustainable Processes Engineering @PoliTO, 2019): *UV-curing of aqueous polymer electrolytes for dye-sensitized solar cells.*
- Alice Benedetto Mas (BSc in Chemical and Food Engineering @PoliTO, 2019): *Implantable energy devices in the medical field: materials and technology.*
- Florence Merlo (BSc in Chemical and Food Engineering @PoliTO, 2019): *Lignin as a platform of materials in the field of batteries.*
- Marco Dibenedetto (BSc in Materials Engineering @PoliTO, 2019): *Hydrolysis phenomena in perovskite solar cells: mechanisms and solutions for the future.*
- Alessia Arcieri (BSc in Chemical and Food Engineering @PoliTO, 2019): *Galvanic treatments of silvering of cages for aerospace applications.*
- Ottavio Montauti (BSc in Materials Engineering @PoliTO, 2019): *Perovskite solar cells: from materials to industrial scale-up.*
- Francesca Panaccione (BSc in Energetic Engineering @PoliTO, 2019): *Analysis of perovskite-based third-generation solar cells development.*
- Alisia Chiadò Rana (BSc in Chemical and Food Engineering @PoliTO, 2019): *Implantable medical devices in the medical field: materials and technology.*
- Silvia Pensa (BSc in Chemical and Food Engineering @PoliTO, 2019): *Electrodes for lithium microbatteries.*
- Stefano Saroglia (BSc in Materials Engineering @PoliTO, 2019): *Dye-sensitized solar cells: analysis of active cell materials and investigation of novel cathodes.*

- Ludovica Salerno (BSc in Chemical and Food Engineering @PoliTO, 2019): *Electrodes for lithium microbatteries.*
- Stefano De Luca (BSc in Energetic Engineering @PoliTO, 2019): *Anodic electrodes for rechargeable magnesium batteries.*
- Enrico Colore (BSc in Energetic Engineering @PoliTO, 2019): *Unconventional applications of dye-sensitized solar cells-based photovoltaics.*
- Emilio Pulli (BSc in Energetic Engineering @PoliTO, 2019): *Transparent photovoltaic technologies: current trends towards upscaling.*
- Chiara Sorrentini (BSc in Chemical and Food Engineering @PoliTO, 2019): *Implantable medical devices in the medical field: materials and technology.*
- Alessio Cognetti (MSc in Chemical and Sustainable Processes Engineering @PoliTO, 2019): *Formulation of titanium dioxide pastes for aqueous solar cells.*
- Elena Rozzi (MSc in Energetic and Nuclear Engineering @PoliTO, 2018): *Aqueous solar cells: development of platinum-free counter electrodes and feasibility study for the application of this technology.*
- Ana Petica (MSc in Chemical and Sustainable Processes Engineering @PoliTO, 2018): *Benzimidazole additives for aqueous electrolytes in dye-sensitized solar cells.*
- Enrico Emanuelli (BSc in Energetic Engineering @PoliTO, 2018): *Progress and challenges of thin-film kesterite solar cells.*
- Cristina Lombardo (BSc in Chemical and Food Engineering @PoliTO, 2018): *Electrolytes for safer lithium batteries.*
- Alberto Bario (BSc in Chemical and Food Engineering @PoliTO, 2018): *Photopolymerization and 3D printing: materials development using unconventional techniques.*
- Chiara Adda (BSc in Chemical and Food Engineering @PoliTO, 2018): *Development of materials to increase the stability of perovskite solar cells.*
- Cesare Miola (BSc in Chemical and Food Engineering @PoliTO, 2018): *Electrode materials for lithium microbatteries.*
- Eugenia Ferrero (BSc in Energetic Engineering @PoliTO, 2018): *Experimental strategies for the reduction of production costs of aqueous solar cells.*
- Diego Orifici (BSc in Construction Engineering @PoliTO, 2018): *Recent developments in glazing for energy production: from photovoltaic glasses to luminescent solar concentrators.*
- Stefano Favero Costa (BSc in Materials Engineering @PoliTO, 2018): *Titanium dioxide nanotubes as sodium battery electrodes.*
- Gabriele Nicoletti (BSc in Energetic Engineering @PoliTO, 2018): *Dye-sensitized solar cells: from laboratory to industrial production.*
- Francesco Pasino (BSc in Energetic Engineering @PoliTO, 2018): *Dye-sensitized solar cells: fabrication and patterning.*
- Mattia Miglietta (BSc in Energetic Engineering @PoliTO, 2018): *Sustainable materials for new generation solar cells.*
- Deborah Marzo (BSc in Chemical and Food Engineering @PoliTO, 2017): *Sustainable materials for new generation solar cells.*
- Nunzia Lauriello (BSc in Chemical and Food Engineering @PoliTO, 2017): *New materials for perovskite solar cells.*
- Anna Gonella (BSc in Materials Engineering @PoliTO, 2017): *Photopolymerization and 3D printing: materials development using unconventional techniques.*
- Paolo Rondine (BSc in Energetic Engineering @PoliTO, 2017): *Sustainable materials for new generation solar cells.*
- Arianna Guglielminotti (BSc in Energetic Engineering @PoliTO, 2017): *New materials for*

perovskite solar cells.

- Elisa Maruccia (MSc in Materials Engineering @PoliTO, 2017): *Preparation and characterization of zinc oxide photoelectrodes for aqueous Grätzel solar cells.*
- Diego Longo (BSc in Chemical and Food Engineering @PoliTO, 2017): *Perovskite solar cells: the role of the active material.*
- Marco Gaggiano (BSc in Chemical and Food Engineering @PoliTO, 2017): *Aqueous DSSC: ecosustainable artificial photosynthesis.*
- Samuel Matrella (BSc in Energetic Engineering @PoliTO, 2017): *Sustainable and low-cost technologies for solar cells.*
- Tamara Sergi (BSc in Chemical and Food Engineering @PoliTO, 2016): *Integrated devices for energy conversion and storage.*
- Ana Petica (BSc in Chemical and Food Engineering @PoliTO, 2016): *Polymer electrolytes for new generation batteries.*
- Chiara La Spina (MSc in Energetic and Nuclear Engineering @PoliTO, 2016): *Evaluation of the economic feasibility and environmental sustainability of water-based photoelectrochemical windows.*
- Andrea Tartaglino (BSc in Energetic Engineering @PoliTO, 2015): *Aqueous matrix electrolytes for advanced photovoltaic devices.*
- Stefano De la Pierre des Ambrois (MSc in Materials Engineering @PoliTO, 2014): *Effect of a photopolymerized electrolyte with gradient composition on the interfaces of a DSSC.*
- Arianna Favre (BSc in Materials Engineering @PoliTO, 2013): *Flexible polymeric matrices-based electrodes for photovoltaic devices: flexible photoanodes for DSSC.*
- Renato Pero (BSc in Materials Engineering @PoliTO, 2013): *Fluorinated polymers for dye-sensitized solar cells.*
- Elena Daniela Ozzello (MSc in Materials Engineering @PoliTO, 2012): *Photocured polymer electrolytes for dye-sensitized solar cells.*

Other information

Languages

- English: excellent understanding, speaking and writing ability. P.E.T. certificate (level B1), obtained *with Merit* (2005)
- Spanish: good understanding and speaking ability

Membership

- Società Chimica Italiana
- European Chemical Society
- Royal Society of Chemistry
- International Society of Electrochemistry
- Electrochemical Society
- National Interuniversity Consortium for Materials Science and Technology

Informatics

- Certificate: E.C.D.L. licence, *full level* (2005)
- Software: Aspen Plus (modeling of chemical processes), Modde (experimental design), Gaussian (theoretical chemistry), Origin (data processing)
- Programming: HTML language

Driving licence

B type, own car

Sports

Tennis, Ski, Futsal, Volley

I authorize the use of my personal data according to Legislative Decree n° 196/03