



Federico Bella
Full Professor

Politecnico di Torino
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Career and Education

Mar 2022 – **Full Professor** @Politecnico di Torino
Chemical Foundations of Technologies [CHIM/07 – 03/B2]
Topics: Materials chemistry for energy conversion and storage (photovoltaics, batteries, supercapacitors); Electrochemical nitrogen reduction; Photopolymerization and UV-curing; Green, biosourced and waste-derived materials for energy; Applied chemometrics

Mar 2020 – Feb 2022 **Associate Professor** @Politecnico di Torino

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

Main institutional roles

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

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

Feb 2016 – Dec 2018 **Coordinator** of the Early-Career Group of the Italian Chemical Society
Also serving as Board Member of the Industrial Chemistry Division

May 2009 – May 2012 **Student Representative** at Università degli Studi di Torino
Elected in two Boards: Industrial Chemistry BSc/MSc degrees, Faculty of Science

See the [list](#) of other institutional roles of FB

Publications and journals

Score

95 peer-reviewed articles, **91** of which in ISI-indexed journals (see [list](#))
34 articles (**36%**) as first author
57 articles (**60%**) as corresponding author
13 articles (**14%**) as senior author
1 article as single author

63 articles (**66%**) published in Q1 quartile
70 articles (**74%**) published with IF > 5, **25** articles (**26%**) with IF > 10

h-index: **64**
>**7300** citations (Scopus, 30th August 2022)

Editorial roles

- **Chemical Engineering Journal** (ISSN: 1385-8947, IF 16.7, Elsevier)
Member of the Editorial Board, since August 2017
- **ACS Sustainable Chemistry & Engineering** (ISSN: 2168-0485, IF 9.2, American Chemical Society)
Member of the Early Career Board, since January 2021
- **ChemSusChem** (ISSN: 1864-564X, IF 9.1, John Wiley & Sons, Inc.)
Member of the International Advisory Board, since January 2020
- **Electrochimica Acta** (ISSN: 0013-4686, IF 7.3, 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 5.0, MDPI AG)
Guest Editor for the special issue "Polymer-based Batteries" (2018)
- **Molecules** (ISSN: 1420-3049, IF 4.9, 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)
- **Frontiers in Energy Research** (ISSN: 2296-598X, IF 3.9, Frontiers Media S.A.)
Review Editor, since June 2014, and Associate Editor, since April 2022
- **Materials** (ISSN: 1996-1944, IF 3.8, MDPI AG)
Member of the Editorial Board, since May 2016
Guest Editor for the special issue "Electrode Materials" (2015)
- **Materials Today Communications** (ISSN: 2352-4928, IF 3.7, Elsevier)
Member of the Editorial Board, since February 2022
- **Chemistry–Methods** (ISSN: 2367-0932, IF tbd, John Wiley & Sons, Inc.)
Member of the Editorial Board, since January 2020
- **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
- **Energy Materials** (ISSN: tbd, IF tbd, OAE Publishing Inc.)
Advisory Editor, since August 2021
- **La Chimica e L'Industria** (ISSN: 2283-544X, AGICOM srl)
Member of the Editorial Board, from December 2017 to December 2022

Research projects

- Feb 2021 – Jan 2026 **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
- Sep 2020 – Aug 2023 **BATTERY 2030+ – Large-scale research initiative: at the heart of a connected green society**
H2020 project (LC-BAT, grant agreement n° 957213)
Scientific activity as Professor @PoliTO unit
Activity: development of European curricula in battery technologies
- 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)
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)
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)
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)

Scientific activity as PhD student

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

Awards and medals

Sep 2022

Junior Prize for Scientific Research in “Organic chemistry for environment, energy and nanoscience”

Awarded by the Organic Chemistry Division of Società Chimica Italiana

Dec 2021

“Italia Giovane” Prize

Special mention to the personal and professional experience as a positive example of prestige to the country and a strong stimulus for the new generations

Nov 2021

USERN Prize

Awarded by the Universal Scientific Education and Research Network (5000 USD) for contributions in the field of biological sciences (mimicking nitrogenases); 10000 eligible candidates were nominated for this award and the jury also included previous Nobel awardees

Ott 2021

“Giorgio Squinzi” Medal

Award assigned by Società Chimica Italiana to an under-45 researcher, author of contributions of particular scientific, innovative or applicative importance, in the field of industrial chemistry

Jul 2021

ISE Prize for Electrochemical Materials Science

Awarded by the International Society of Electrochemistry (1000 EUR) for contributions in the field of electrochemical material science, including corrosion, electrodeposition and surface treatment

May 2021

“2022 Emerging Investigators” Award

Awarded by the Royal Society of Chemistry for the activity in the field of nanoscience and nanotechnology, with a mention included in the “Nanoscale”

Apr 2021

Environment, Sustainability & Energy Division Horizon Prize

Awarded by the Royal Society of Chemistry to recognise significant recent novel discoveries or advances made in the area of environment, sustainability and energy

Feb 2021

“2020 Outstanding Reviewer” Award

Awarded by the Royal Society of Chemistry for the outstanding contribution is reviewing manuscripts for “RSC Advances”

Jan 2021

“Coatings” Travel Award

Awarded by MDPI (800 CHF) for the activity carried out in the field of polymeric coatings for applications in the energy field

Dec 2020

“2021 Emerging Investigators” Award

Awarded by the Royal Society of Chemistry for the activity in the field of materials chemistry for energy and sustainability, with a mention included in the “Journal of Materials Chemistry A”

Oct 2020

One of the 100,000 most cited scientists across all scientific disciplines

Accordingly to the "Updated science-wide author databases of standardized citation indicators" published by PLoS Biol 18 (2020) art. no. e3000918

- Oct 2020 **"Ivano Bertini" Medal**
Award assigned by Società Chimica Italiana to an under-40 researcher, author of particularly significant and innovative contributions in the Chemical Sciences field
- Apr 2020 **"2019 Outstanding Reviewer" Award**
Awarded by the Royal Society of Chemistry for the outstanding contribution is reviewing manuscripts for "Photochemical & Photobiological Sciences"
- Oct 2019 **"Coatings" Young Investigator Award**
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"**
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**
Awarded by the International Society of Electrochemistry (2000 EUR) in recognition of the outstanding achievements in the field of solar cells and batteries
- 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 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 – 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**
Best Italian under-35 researcher for contributions of particular interest in the field of Chemistry of Renewable Energies
- May 2015 **Best Italian PhD Thesis in Electrochemistry**
Awarded by Italian Chemical Society (1000 EUR)
- Apr 2015 **Finalist of the “GiovedìScienza Prize” (4th Edition)**
Ranked in the Top-10 chart of under-35 researchers of Piedmont (Italy)

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

- **“ChemSusChem” Top Cited Article 2020-2021 (2022)**
Publication awarded: ChemSusChem 13 (2020) 6562-6573
- **“Nanomaterials” Highly Cited Paper (2022)**
Publication awarded: Nanomaterials 10 (2020) art. no. 1585
- **Top 1% across Royal Society of Chemistry journals in terms of citations in 2020 (2021)**
Publication awarded: Energy Environ. Sci. 12 (2019) 3437-3472
- **“Green Chemistry” Hot Articles (2020)**
Publication awarded: Green Chem. 22 (2020) 7168-7218, as decided by the editor
- **“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. Comm. 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

Roles in commissions of trust

For the European Commission

- **European Commission’s Health and Digital Executive Agency (2022)**
Expert for the HORIZON-CL4-2022-RESILIENCE-01 call
- **Marie Skłodowska-Curie Individual Fellowships (2020, 2021)**
Evaluator
- **ERC Consolidator Grant (2018)**
Remote referee in PE5 panel (Synthetic Chemistry and Materials)

For Universities

- **National Science Center Poland (2022)**
External referee for the OPUS-22 funding scheme
- **Ministero dell’Università e della Ricerca (2021)**
External referee for the Early Career Researcher “Rita Levi Montalcini” program
External referee for the evaluation of VQR 2015-19 research products
- **Università Italo Francese (2021)**
External referee for the calls entitled “Bando Galileo 2022” e “Bando Vinci 2021”
- **Universiti Kebangsaan Malaysia (2021)**
External panelist of the Battery Technology Research Center (UKMBatt)
- **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

For scientific societies and academies

post-doc research grants”

- **Chilean National Commission for Scientific and Technological Research (2016)**
External referee for the “2017 FONDECYT Regular Competition”
- **USERN Prize in Chemical Sciences (2020, 2022)**
Member of the Advisory Board, prize granted by the Universal Scientific Education and Research Network to a under-40 scientist authors of a relevant achievement in the chemical sciences field
- **“Best MSc Thesis in Industrial Chemistry” Award (Ed. 2018, 2019, 2020, 2022) (2018-2020, 2022)**
Member of the Evaluation Committee, prize granted by the Italian Chemical Society
- **“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
- **“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

For other institutions

- **Provincia autonoma di Trento (2021)**
External referee supporting the Committee for Research and Innovation

Conferences, workshops and seminars

Invited

8 Talks in conferences/workshops

contributions

2 Lectio magistralis

1 Plenary lectures

5 Keynote lectures

3 Awardee lectures

12 Seminars

10 Lectures in PhD schools or advanced training courses

(see [list](#))

Contributions

271 contributions (207 in international events)

52 talks

(see [list](#))

Organized events

25 events as member of the Organizing/Scientific committee

7 events as a Chair or co-Chair

(see [list](#))

Teaching activity

- **Photo-Electro-Catalytic Technologies for a Sustainable Chemical Industry: Fundamentals and Applications**

Assistant teacher; PhD in Chemical Engineering (Politecnico di Torino)

Academic year: 2021/2022; Average enrolment: 15 students

- **Chemistry**

Titular teacher; BSc courses in Engineering (Politecnico di Torino)

Academic years: 2019/2020, 2020/2021, 2021/2022; 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 **74** Thesis at BSc [**54**] and MSc [**20**] levels (see [list](#)).

Visiting periods

Jun – Jul 2021	Visiting Professor @ Universitat Politècnica de València As P.I. of the ERASMUS+ project – Staff Mobility for Teaching
Oct – Nov 2018	Visiting Professor @ Massachusetts Institute of Technology As P.I. of MITOR project
Apr 2017	Visiting Professor @ Universitat Politècnica de València As P.I. of the ERASMUS+ project – Staff Mobility for Teaching
Feb 2013 – May 2013	Visiting PhD Student @ National University of Malaysia Polymer Research Center – Faculty of Science and Technology
May – Jun 2011	Visiting MSc Student @ Universitat Politècnica de València Group for Advanced Oxidation Processes

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

Other institutional roles

Sep 2022 – Sep 2023	Reference Professor for the BSc degree in Computer Engineering at Politecnico di Torino
Sep 2020 – Sep 2021	Reference Professor for the BSc degree in Automotive Engineering at Politecnico di Torino
Sep 2019 – Sep 2020	Reference Professor for the BSc degree in Biomedical Engineering at Politecnico di Torino
Jan 2019 – Dec 2019	Past-Coordinator of the Early-Career Group of the Italian Chemical Society
May 2018	Italian Delegate at the 13 th 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 12th Delegates Assembly of the European Young Chemists' Network (EYCN-EuCheMS), Heraklion (Greece)
- Apr 2016 **Italian Delegate** at the 11th Delegates Assembly of the European Young Chemists' Network (EYCN-EuCheMS), Guimarães (Portugal)
- Apr 2015 **Italian Delegate** at the 10th 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
Also serving as Board Member of the Industrial Chemistry Division

Peer-reviewed publications list

95. L. Fagiolari, M. Sampò, A. Lamberti, J. Amici, C. Francia, S. Bodoardo, **F. Bella (Corr. Author)**
Integrated energy conversion and storage devices: Interfacing solar cells, batteries and supercapacitors
Energy Storage Mater. 51 (2022) 400-434 – [IF 20.8](#)
94. S. Trano, F. Corsini, G. Pascuzzi, E. Giove, L. Fagiolari, J. Amici, C. Francia, S. Turri, S. Bodoardo, G. Griffini, **F. Bella (Corr. Author)**
Lignin as polymer electrolyte precursor for stable and sustainable potassium batteries
ChemSusChem 15 (2022) art. no. e202200294
93. F. Elizalde, J. Amici, S. Trano, G. Vozzolo, R. Aguirresarobe, D. Versaci, S. Bodoardo, D. Mecerreyes, H. Sardon, **F. Bella (Corr. Author)**
Self-healable dynamic poly(urea-urethane) gel electrolyte for lithium batteries
J. Mater. Chem. A 10 (2022) 12588-12596 – [IF 14.5](#)
92. T. M. W. J. Bandara, J. M. C. Hansadi, **F. Bella**
A review of textile dye-sensitized solar cells for wearable electronics
Ionics 28 (2022) 2563-2583
91. E. Manarin, F. Corsini, S. Trano, L. Fagiolari, J. Amici, C. Francia, S. Bodoardo, S. Turri, **F. Bella (Corr. Author)**, G. Griffini
Cardanol-derived epoxy resins as biobased gel polymer electrolytes for potassium-ion conduction
ACS Appl. Polym. Mater. 4 (2021) 3855-3865
90. M. Alidoost, A. Mangini, F. Caldera, A. Anceschi, J. Amici, D. Versaci, L. Fagiolari, F. Trotta, C. Francia, **F. Bella**, S. Bodoardo
Micro-mesoporous carbons from cyclodextrin nanosponges enabling high-capacity silicon anodes and sulfur cathodes for lithiated Si-S batteries
Chem.-Eur. J. 28 (2022) art. no. e202104201
89. M. Reina, A. Scalia, G. Auxilia, M. Fontana, **F. Bella**, S. Ferrero, A. Lamberti
Boosting electric double layer capacitance in laser-induced graphene-based supercapacitors
Adv. Sustain. Syst. 6 (2022) art. no. 2100228
88. L. Fagiolari, E. Varaia, N. Mariotti, M. Bonomo, C. Barolo, **F. Bella (Corr. Author)**
Poly(3,4-ethylenedioxythiophene) in dye-sensitized solar cells: toward solid-state and platinum-free photovoltaics
Adv. Sustain. Syst. 5 (2021) art. no. 2100025

87. M. A. A. M. Abdah, M. Mokhtar, L. T. Khoon, K. Sopian, N. A. Dzulkurnain, A. Ahmad, Y. Sulaiman, **F. Bella (Corr. Author)**, M. S. Su'ait
Synthesis and electrochemical characterizations of poly(3,4-ethylenedioxythiophene)/manganese oxide coated on porous carbon nanofibers as a potential anode for lithium-ion batteries
Energy Rep. 7 (2021) 8677-8687
86. L. Lavagna, G. Syrrokostas, L. Fagiolari, J. Amici, C. Francia, S. Bodoardo, G. Leftheriotis, **F. Bella (Corr. Author)**
Platinum-free photoelectrochromic devices working with copper-based electrolytes for ultrastable smart windows
J. Mater. Chem. A 9 (2021) 19687-19691 – [IF 14.5](#)
85. N. A. Rahman, S. A. Hanifah, N. N. Mobarak, A. Ahmad, N. A. Ludin, **F. Bella (Corr. Author)**, M. S. Su'ait
Chitosan as a paradigm for biopolymer electrolytes in solid-state dye-sensitized solar cells
Polymer 230 (2021) art. no. 124092
84. S. Momtazmanesh, A. Saghadzadeh, J. C. Aldave Becerra, K. Aramesh, F. J. Barba, **F. Bella**, A. Blakney, M. Capaccioli, R. Castagna, U. Crisanti, T. Davtyan, T. Dorigo, J. Ealy, M. Farokhnia, G. Grancini, M. Gupta, A. Harbi, W. Krysztofiak, A. Kulasinghe, C. M. Lam, A. Leemans, B. Lighthill, V. Limongelli, P. Lopreiato, L. Luongo, C. R. Maboloc, R. Malekzadeh, O. Costa Gomes, M. Milosevic, J. Nouwen, D. Ortega-Sánchez, J. Pawelek, S. Pramanik, S. Ramakrishna, O. Renn, S. Sanseviero, D. Sauter, M. Schreiber, F. W. Sellke, M. A. Shahbazi, N. Shelkovaya, W. H. Slater, D. Snoeck, S. Sztajer, L. Q. Uddin, L. Veramendi-Espinoza, R. Vinuesa, W. C. Willett, D. Wu, K. Żyniewicz, N. Rezaei
International scientific collaboration is needed to bridge science to society: USERN2020 consensus statement
SN Compr. Clin. Med. 3 (2021) 1699-1703
83. S. Galliano, **F. Bella (Corr. Author)**, M. Bonomo, F. Giordano, M. Grätzel, G. Viscardi, A. Hagfeldt, C. Gerbaldi, C. Barolo
Xanthan-based hydrogel for stable and efficient quasi-solid truly aqueous dye-sensitized solar cell with cobalt mediator
Sol. RRL 5 (2021) art. no. 2000823 – [Cover](#)
82. J. C. De Haro, E. Tatsi, L. Fagiolari, M. Bonomo, C. Barolo, S. Turri, **F. Bella (Corr. Author)**, G. Griffini
Lignin-based polymer electrolyte membranes for sustainable aqueous dye-sensitized solar cells
ACS Sustain. Chem. Eng. 9 (2021) 8550-8560
81. J. Amici, C. Torchio, D. Versaci, D. Dessantis, A. Marchisio, F. Caldera, **F. Bella**, C. Francia, S. Bodoardo
Nanosponge-based composite gel polymer electrolyte for safer Li-O₂ batteries
Polymers 13 (2021) art. no. 1625
80. **F. Bella (Corr. Author)**, S. De Luca, L. Fagiolari, D. Versaci, J. Amici, C. Francia, S. Bodoardo
An overview on anodes for magnesium batteries: challenges towards a promising storage solution for renewables
Nanomaterials 11 (2021) art. no. 810
79. L. Fagiolari, M. Bonomo, A. Cognetti, G. Meligrana, C. Gerbaldi, C. Barolo, **F. Bella (Corr. Author)**
Photoanodes for aqueous solar cells: exploring additives and formulations starting from a commercial TiO₂ paste

- ChemSusChem** 13 (2020) 6562-6573 – [Cover](#)
78. N. Mariotti, M. Bonomo, L. Fagiolari, N. Barbero, C. Gerbaldi, **F. Bella**, C. Barolo
Recent advances in eco-friendly and cost-effective materials towards sustainable dye-sensitized solar cells
Green Chem. 22 (2020) 7168-7218 – [IF 11.0 + Cover](#)
77. C. Baiano, E. Schiavo, C. Gerbaldi, **F. Bella**, G. Meligrana, G. Talarico, P. Maddalena, M. Pavone, A. B. Muñoz-García
Role of surface defects in CO₂ adsorption and activation on CuFeO₂ delafossite oxide
Mol. Catal. 496 (2020) art. no. 111181
76. G. Meligrana, F. Colò, T. Platini, M. Bartoli, M. Falco, E. Maruccia, L. Fagiolari, G. Lingua, **F. Bella**, P. Jagdale, A. Tagliaferro, C. Gerbaldi
Cheap and easily processable electrode/electrolytes for next-generation sodium-ion batteries
Renewable Energy Power Qual. J. 18 (2020) 475-476
75. S. Galliano, **F. Bella**, M. Bonomo, G. Viscardi, C. Gerbaldi, G. Boschloo, C. Barolo
Hydrogel electrolytes based on xanthan gum: green route towards stable dye-sensitized solar cells
Nanomaterials 10 (2020) art. no. 1585
74. A. Massaro, A. B. Muñoz-García, P. Maddalena, **F. Bella**, G. Meligrana, C. Gerbaldi, M. Pavone
First-principles study of Na insertion at TiO₂ anatase surfaces: new hints for Na-ion battery design
Nanoscale Adv. 2 (2020) 2745-2751
73. E. Pulli, E. Rozzi, **F. Bella (Corr. Author)**
Transparent photovoltaic technologies: current trends towards upscaling
Energy. Conv. Manag. 219 (2020) art. no. 112982 – [IF 11.5](#)
72. **F. Bella (Corr. Author)**, L. Porcarelli, D. Mantione, C. Gerbaldi, C. Barolo, M. Grätzel, D. Mecerreyes
A water-based and metal-free dye solar cell exceeding 7% efficiency using a cationic poly(3,4-ethylenedioxythiophene) derivative
Chem. Sci. 11 (2020) 1485-1493 – [Cover](#)
71. A. Dokouzis, **F. Bella (Corr. Author)**, K. Theodosiou, C. Gerbaldi, G. Leftheriotis
Photoelectrochromic devices with cobalt redox electrolytes
Mater. Today Energy 15 (2020) art. no. 100365
70. G. Piana, M. Ricciardi, **F. Bella (Corr. Author)**, R. Cucciniello, A. Proto, C. Gerbaldi
Poly(glycidyl ether)s recycling from industrial waste and feasibility study of reuse as electrolytes in sodium-based batteries
Chem. Eng J. 382 (2020) art. no. 122934 – [IF 16.7](#)
69. L. Fagiolari, **F. Bella (Corr. Author)**
Carbon-based materials for stable, cheaper and large-scale processable perovskite solar cells
Energy Environ. Sci. 12 (2019) 3437-3472 – [IF 39.7](#)
68. G. Piana, **F. Bella**, F. Geobaldo, G. Meligrana, C. Gerbaldi
PEO/LAGP hybrid solid polymer electrolytes for ambient temperature lithium batteries by solvent-free, “one pot” preparation
J. Energy Storage 26 (2019) art. no. 100947
67. M. Falco, C. Simari, C. Ferrara, J. R. Nair, G. Meligrana, **F. Bella**, I. Nicotera, P. Mustarelli, M. Winter, C. Gerbaldi
Understanding the effect of UV-induced cross-linking on the physicochemical properties of highly

performing PEO/LiTFSI-based polymer electrolytes

Langmuir 35 (2019) 8210-8219 – [Cover](#)

66. T. N. Huan, D. A. Dalla Corte, S. Lamaison, D. Karapinar, L. Lutz, N. Menguy, M. Foldyna, S. H. Turren-Cruz, A. Hagfeldt, **F. Bella**, M. Fontecave, V. Mougel
Low-cost high-efficiency system for solar-driven conversion of CO₂ to hydrocarbons
Proc. Natl. Acad. Sci. U. S. A 116 (2019) 9735-9740 – [IF 12.8](#)
65. M. Falco, L. Castro, J. R. Nair, **F. Bella**, F. Bardè, G. Meligrana, C. Gerbaldi
UV-cross-linked composite polymer electrolyte for high-rate, ambient temperature lithium batteries
ACS Appl. Energy Mater. 2 (2019) 1600-1607
64. **F. Bella (Corr. Author)**, S. Galliano, G. Piana, G. Giacona, G. Viscardi, M. Grätzel, C. Barolo, C. Gerbaldi
Boosting the efficiency of aqueous solar cells: a photoelectrochemical estimation on the effectiveness of TiCl₄ treatment
Electrochim. Acta 302 (2019) 31-37
63. J. R. Nair, F. Colò, A. Kazzazi, M. Moreno, D. Bresser, R. Lin, **F. Bella**, G. Meligrana, S. Fantini, E. Simonetti, G. B. Appetecchi, S. Passerini, C. Gerbaldi
Room temperature ionic liquid (RTIL)-based electrolyte cocktails for safe, high working potential Li-based polymer batteries
J. Power Sources 412 (2019) 398-407
62. A. Scalia, **F. Bella (Corr. Author)**, A. Lamberti, C. Gerbaldi, E. Tresso
Innovative multipolymer electrolyte membrane designed by oxygen inhibited UV-crosslinking enables solid-state in plane integration of energy conversion and storage devices
Energy 166 (2019) 789-795
61. L. Lefrançois Perreault, F. Colò, G. Meligrana, K. Kim, S. Fiorilli, **F. Bella**, J. R. Nair, C. Vitale-Brovarone, J. Florek, F. Kleitz, C. Gerbaldi
Spray-dried mesoporous mixed Cu-Ni oxide@graphene nanocomposite microspheres for high power and durable Li-ion battery anodes
Adv. Energy Mater. 8 (2018) art. no. 1802438 – [IF 29.7 + Cover](#)
60. A. Carella, R. Centore, F. Borbone, M. Toscanesi, M. Trifuoggi, **F. Bella**, C. Gerbaldi, S. Galliano, E. Schiavo, A. Massaro, A. B. Muñoz-García, M. Pavone
Tuning optical and electronic properties in novel carbazole photosensitizers for p-type dye-sensitized solar cells
Electrochim. Acta 292 (2018) 805-816
59. A. Pedico, A. Lamberti, A. Gigot, M. Fontana, **F. Bella**, P. Rivolo, M. Cocuzza, C. F. Pirri
High-performing and stable wearable supercapacitor exploiting rGO aerogel decorated with copper and molybdenum sulfides on carbon fibers
ACS Appl. Energy Mater. 1 (2018) 4440-4447
58. **F. Bella (Corr. Author)**, P. Renzi, C. Cavallo, C. Gerbaldi
Caesium for perovskite solar cells: an overview
Chem. Eur.-J. 24 (2018) 12183-12205 – [Cover](#)
57. S. Suriyakumar, S. Gopi, M. Kathiresan, S. Bose, E. B. Gowd, J. R. Nair, N. Angulakshmi, G. Meligrana, **F. Bella**, C. Gerbaldi, A. M. Stephan
Metal organic framework laden poly(ethylene oxide) based composite electrolytes for all-solid-state Li-S and Li-metal polymer batteries
Electrochim. Acta 285 (2018) 355-364
56. **F. Bella (Corr. Author)**, A. B. Muñoz-García, F. Colò, G. Meligrana, A. Lamberti, M. Destro,

- M. Pavone, C. Gerbaldi
 Combined structural, chemometric, and electrochemical investigation of vertically aligned TiO₂ nanotubes for Na-ion batteries
ACS Omega 3 (2018) 8440-8450
55. A. Abate, J. P. Correa-Baena, M. Saliba, M. S. Su'ait, **F. Bella (Corr. Author)**
 Perovskite solar cells: from the laboratory to the assembly line
Chem. Eur.-J. 24 (2018) 3083-3100 – [Cover](#)
54. S. Galliano, **F. Bella (Corr. Author)**, G. Piana, G. Giacona, G. Viscardi, C. Gerbaldi, M. Grätzel, C. Barolo
 Finely tuning electrolytes and photoanodes in aqueous solar cells by experimental design
Sol. Energy 163 (2018) 251-255
53. **F. Bella (Corr. Author)**, A. Verna, C. Gerbaldi
 Patterning dye-sensitized solar cell photoanodes through a polymeric approach: a perspective
Mater. Sci. Semicond. Process. 73 (2018) 92-98
52. **F. Bella (Corr. Author)**, J. Popovic, A. Lamberti, E. Tresso, C. Gerbaldi, J. Maier
 Interfacial effects in solid-liquid electrolytes for improved stability and performance of dye-sensitized solar cells
ACS Appl. Mater. Interfaces 9 (2017) 37797-37803 – [IF 10.3](#)
51. F. Colò, **F. Bella (Corr. Author)**, J. R. Nair, C. Gerbaldi
 Light-cured polymer electrolytes for safe, low-cost and sustainable sodium-ion batteries
J. Power Sources 365 (2017) 293-302
50. **F. Bella (Corr. Author)**, A. B. Muñoz-García, G. Meligrana, A. Lamberti, M. Destro, M. Pavone, C. Gerbaldi
 Unveiling the controversial mechanism of reversible Na storage in TiO₂ nanotube arrays: amorphous versus anatase TiO₂
Nano Res. 10 (2017) 2891-2903 – [IF 10.3 + Cover](#)
49. A. Scalia, **F. Bella (Corr. Author)**, A. Lamberti, S. Bianco, C. Gerbaldi, E. Tresso, C. F. Pirri
 A flexible and portable powerpack by solid-state supercapacitor and dye-sensitized solar cell integration
J. Power Sources 359 (2017) 311-321
48. **F. Bella (Corr. Author)**, D. Pugliese, L. Zolin, C. Gerbaldi
 Paper-based quasi-solid dye-sensitized solar cells
Electrochim. Acta 237 (2017) 87-93
47. **F. Bella (Corr. Author)**, S. Galliano, M. Falco, G. Viscardi, C. Barolo, M. Grätzel, C. Gerbaldi
 Approaching truly sustainable solar cells by the use of water and cellulose derivatives
Green Chem. 19 (2017) 1043-1051 – [IF 11.0](#)
46. S. Galliano, **F. Bella (Corr. Author)**, C. Gerbaldi, M. Falco, G. Viscardi, M. Grätzel, C. Barolo
 Photoanode/electrolyte interface stability in aqueous dye-sensitized solar cells
Energy Technol. 5 (2017) 300-311
45. D. Pintossi, G. Iannacone, A. Colombo, **F. Bella**, M. Välimäki, K. L. Väisänen, J. Hast, M. Levi, C. Gerbaldi, C. Dragonetti, S. Turri, G. Griffini
 Luminescent downshifting by photo-induced sol-gel hybrid coatings: accessing multifunctionality on flexible organic photovoltaics via ambient temperature material processing
Adv. Electron. Mater. 2 (2016) art. no. 1600288
44. **F. Bella (Corr. Author)**, G. Griffini, J. P. Correa-Baena, G. Saracco, M. Grätzel, A. Hagfeldt,

- S. Turri, C. Gerbaldi
Improving efficiency and stability of perovskite solar cells with photocurable fluoropolymers
Science 354 (2016) 203-206 – [IF 63.8](#)
43. L. Porcarelli, A. S. Shaplov, **F. Bella**, J. R. Nair, D. Mecerreyes, C. Gerbaldi
Single-ion conducting polymer electrolytes for lithium metal polymer batteries that operate at ambient temperature
ACS Energy Lett. 1 (2016) 678-682 – [IF 24.0](#)
42. L. Zolin, J. R. Nair, D. Beneventi, **F. Bella**, M. Destro, P. Jagdale, I. Cannavaro, A. Tagliaferro, D. Chaussy, F. Geobaldo, C. Gerbaldi
A simple route toward next-gen green energy storage concept by nanofibres-based self-supporting electrodes and a solid polymeric design
Carbon 107 (2016) 811-822 – [IF 11.3](#)
41. R. Shanti, **F. Bella**, Y. S. Salim, S. Y. Chee, S. Ramesh, K. Ramesh
Poly(methyl methacrylate-co-butyl acrylate-co-acrylic acid): physico-chemical characterization and targeted dye sensitized solar cell application
Mater. Des. 108 (2016) 560-569
40. B. Miccoli, V. Cauda, A. Bonanno, A. Sanginario, K. Bejtka, **F. Bella**, M. Fontana, D. Demarchi
One-dimensional ZnO/gold junction for simultaneous and bersatile multisensing measurements
Sci. Rep. 6 (2016) art. no. 29763
39. **F. Bella (Corr. Author)**, S. Galliano, M. Falco, G. Viscardi, C. Barolo, M. Grätzel, C. Gerbaldi
Unveiling iodine-based electrolytes chemistry in aqueous dye-sensitized solar cells
Chem. Sci. 7 (2016) 4880-4890
38. **F. Bella (Corr. Author)**, A. Lamberti, S. Bianco, E. Tresso, C. Gerbaldi, C. F. Pirri
Floating, flexible polymeric dye-sensitized solar-cell architecture: the way of near-future photovoltaics
Adv. Mater. Technol. 1 (2016) art. no. 1600002 – [Cover](#)
37. **F. Bella (Corr. Author)**, S. Galliano, C. Gerbaldi, G. Viscardi
Cobalt-based electrolytes for dye-sensitized solar cells: recent advances towards stable devices
Energies 9 (2016) art. no. 384
36. J. R. Nair, **F. Bella**, N. Angulakshmi, A. M. Stephan, C. Gerbaldi
Nanocellulose-laden composite polymer electrolytes for high performing lithium–sulphur batteries
Energy Storage Mater. 3 (2016) 69-76 – [IF 20.8](#)
35. **F. Bella (Corr. Author)**, G. Leftheriotis, G. Griffini, G. Syrokostas, S. Turri, M. Grätzel, C. Gerbaldi
A new design paradigm for smart windows: photocurable polymers for quasi-solid photoelectrochromic devices with excellent long-term stability under real outdoor operating conditions
Adv. Funct. Mater. 26 (2016) 1127-1137 – [IF 19.9](#)
34. M. Gerosa, A. Sacco, A. Scalia, **F. Bella**, A. Chiodoni, M. Quaglio, E. Tresso, S. Bianco
Toward totally flexible dye-sensitized solar cells based on titanium grids and polymeric electrolyte
IEEE J. Photovolt. 6 (2016) 498-505
33. L. Porcarelli, C. Gerbaldi, **F. Bella**, J. R. Nair
Super soft all-ethylene oxide polymer electrolyte for safe all-solid lithium batteries
Sci. Rep. 6 (2016) art. no. 19892

32. J. R. Nair, M. Destro, **F. Bella**, G. B. Appetecchi, C. Gerbaldi
Thermally cured semi-interpenetrating electrolyte networks (s-IPN) for safe and aging-resistant secondary lithium polymer batteries
J. Power Sources 306 (2016) 258-267
31. **F. Bella (Corr. Author)**, F. Colò, J. R. Nair, C. Gerbaldi
Photopolymer electrolytes for sustainable, up-scalable, safe and ambient temperature sodium-ion secondary batteries
ChemSusChem 8 (2015) 3668-3676
30. **F. Bella (Corr. Author)**, N. Vlachopoulos, K. Nonomura, S. M. Zakeeruddin, M. Grätzel, C. Gerbaldi, A. Hagfeldt
Direct light-induced polymerization of cobalt-based redox shuttles: an ultrafast way towards stable dye-sensitized solar cells
Chem. Commun. 51 (2015) 16308-16311 – [Cover](#)
29. N. N. M. Radzir, S. A. Hanifah, A. Ahmad, N. H. Hassan, **F. Bella (Corr. Author)**
Effect of lithium bis(trifluoromethylsulfonyl)imide salt-doped UV-cured glycidyl methacrylate
J. Solid State Electr. 19 (2015) 3079-3085
28. **F. Bella (Corr. Author)**, A. Sacco, G. Massaglia, A. Chiodoni, C. F. Pirri, M. Quaglio
Dispelling clichés at the nanoscale: the true effect of polymer electrolytes on the performance of dye-sensitized solar cells
Nanoscale 7 (2015) 12010-12017
27. F. Colò, **F. Bella (Corr. Author)**, J. R. Nair, M. Destro, C. Gerbaldi
Novel cellulose-based hybrid polymer electrolytes for green and efficient Na-ion batteries
Electrochim. Acta 174 (2015) 185-190
26. J. R. Nair, L. Porcarelli, **F. Bella**, C. Gerbaldi
Newly elaborated multipurpose polymer electrolyte encompassing RTILs for smart energy efficient devices
ACS Appl. Mater. Inter. 7 (2015) 12961-12971 – [IF 10.4](#)
25. M. Destro, C. Gerbaldi, **F. Bella**, J. R. Nair
Siloxane diacrylate-based all-solid polymer electrolytes for lithium batteries
Int. J. Membrane Sci. Techno. 2 (2015) 23-27
24. **F. Bella (Corr. Author)**, C. Gerbaldi, C. Barolo, M. Grätzel
Aqueous dye-sensitized solar cells
Chem. Soc. Rev. 44 (2015) 3431-3473 – [IF 60.6 + Cover](#)
23. **F. Bella (Corr. Author)**
Polymer electrolytes and perovskites: lights and shadows in photovoltaic devices
Electrochim. Acta 175 (2015) 151-161
22. **F. Bella (Corr. Author)**, G. Griffini, M. Gerosa, S. Turri, R. Bongiovanni
Performance and stability improvements for dye-sensitized solar cells in the presence of luminescent coatings
J. Power Sources 283 (2015) 195-203
21. A. Sacco, **F. Bella (Corr. Author)**, S. De La Pierre, M. Castellino, S. Bianco, R. Bongiovanni, C. F. Pirri
Electrodes/electrolyte interfaces in the presence of a surface-modified photopolymer electrolyte: application in dye-sensitized solar cells
ChemPhysChem 16 (2015) 960-969

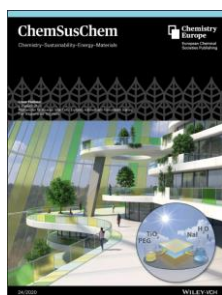
20. **F. Bella (Corr. Author)**, N. N. Mobarak, F. N. Jumaah, A. Ahmad
From seaweeds to biopolymeric electrolytes for third generation solar cells: an intriguing approach
Electrochim. Acta 151 (2015) 306-311
19. G. Griffini, **F. Bella**, F. Nisic, C. Dragonetti, D. Roberto, M. Levi, R. Bongiovanni, S. Turri
Multifunctional luminescent down-shifting fluoropolymer coatings: a straightforward strategy to improve the UV-light harvesting ability and long-term outdoor stability of organic dye-sensitized solar cells
Adv. Energy Mater. 5 (2015) art. no. 1401312 – [IF 29.7](#)
18. D. Pugliese, A. Lamberti, **F. Bella**, A. Sacco, S. Bianco, E. Tresso
TiO₂ nanotubes as flexible photoanode for back-illuminated dye-sensitized solar cells with hemisquaraine organic dye and iodine-free transparent electrolyte
Org. Electron. 15 (2014) 3715-3722
17. **F. Bella**, A. Chiappone, J. R. Nair, G. Meligrana, C. Gerbaldi
Effect of different green cellulosic matrices on the performance of polymeric dye-sensitized solar cells
Chem. Eng. Trans. 41 (2014) 211-216
16. G. P. Salvador, D. Pugliese, **F. Bella**, A. Chiappone, A. Sacco, S. Bianco, M. Quaglio
New insights in long-term photovoltaic performance characterization of cellulose-based gel electrolytes for stable dye-sensitized solar cells
Electrochim. Acta 146 (2014) 44-51
15. A. Chiappone, **F. Bella (Corr. Author)**, J. R. Nair, G. Meligrana, R. Bongiovanni, C. Gerbaldi
Structure-performance correlation of nanocellulose-based polymer electrolytes for efficient quasi-solid DSSCs
ChemElectroChem 1 (2014) 1350-1358 – [Cover](#)
14. **F. Bella (Corr. Author)**, A. Lamberti, A. Sacco, S. Bianco, A. Chiodoni, R. Bongiovanni
Novel electrode and electrolyte membranes: towards flexible dye-sensitized solar cell combining vertically aligned TiO₂ nanotube array and light-cured polymer network
J. Membr. Sci. 470 (2014) 125-131 – [IF 10.5](#)
13. M. Imperiyka, A. Ahmad, S. A. Hanifah, **F. Bella**
A UV-prepared linear polymer electrolyte membrane for dye-sensitized solar cells
Physica B 450 (2014) 151-154
12. **F. Bella (Corr. Author)**, M. Imperiyka, A. Ahmad
Photochemically produced quasi-linear copolymers for stable and efficient electrolytes in dye-sensitized solar cells
J. Photochem. Photobiol. A-Chem. 289 (2014) 73-80
11. **F. Bella (Corr. Author)**, A. Sacco, D. Pugliese, M. Laurenti, S. Bianco
Additives and salts for dye-sensitized solar cells electrolytes: what is the best choice?
J. Power Sources 264 (2014) 333-343
10. V. Cauda, D. Pugliese, N. Garino, A. Sacco, S. Bianco, **F. Bella**, A. Lamberti, C. Gerbaldi
Multi-functional energy conversion and storage electrodes using flower-like zinc oxide nanostructures
Energy 65 (2014) 639-646
9. **F. Bella (Corr. Author)**, E. D. Ozzello, A. Sacco, S. Bianco, R. Bongiovanni
Polymer electrolytes for dye-sensitized solar cells prepared by photopolymerization of PEG-based oligomers
Int. J. Hydrog. Energy 39 (2014) 3036-3045

8. D. Pugliese, **F. Bella**, V. Cauda, A. Lamberti, A. Sacco, E. Tresso, S. Bianco
A chemometric approach for the sensitization procedure of ZnO flower-like microstructures for dye-sensitized solar cells
ACS Appl. Mater. Inter. 5 (2013) 11288-11295 – [IF 10.4](#)
7. **F. Bella (Corr. Author)**, A. Sacco, G. Salvador, S. Bianco, E. Tresso, C. F. Pirri, R. Bongiovanni
First pseudohalogen polymer electrolyte for dye-sensitized solar cells promising for *in situ* photopolymerization
J. Phys. Chem. C 117 (2013) 20421-20430
6. P. Avetta, **F. Bella**, A. Bianco Prevot, E. Laurenti, E. Montoneri, A. Arques, L. Carlos
Waste cleaning waste: photodegradation of monochlorophenols in the presence of waste derived photosensitizer
ACS Sustain. Chem. Eng. 1 (2013) 1545-1550
5. **F. Bella (Corr. Author)**, J. R. Nair, C. Gerbaldi
Towards green, efficient and durable quasi-solid dye-sensitized solar cells integrated with a cellulose-based gel-polymer electrolyte optimized by a chemometric DoE approach
RSC Adv. 3 (2013) 15993-16001
4. **F. Bella (Corr. Author)**, R. Bongiovanni, R. S. Kumar, M. A. Kulandainathan, A. M. Stephan
Light cured networks containing metal organic frameworks as efficient and durable polymer electrolytes for dye-sensitized solar cells
J. Mater. Chem. A 1 (2013) 9033-9036 – [IF 14.5](#)
3. **F. Bella (Corr. Author)**, E. D. Ozzello, S. Bianco, R. Bongiovanni
Photo-polymerization of acrylic/methacrylic gel-polymer electrolyte membranes for dye-sensitized solar cells
Chem. Eng. J. 225 (2013) 873-879 – [IF 16.7](#)
2. **F. Bella (Corr. Author)**, R. Bongiovanni
Photoinduced polymerization: an innovative, powerful and environmentally friendly technique for the preparation of polymer electrolytes for dye-sensitized solar cells
J. Photochem. Photobiol. C-Photochem. Rev. 16 (2013) 1-21 – [IF 17.2](#)
1. **F. Bella (Corr. Author)**, D. Pugliese, J.R. Nair, A. Sacco, S. Bianco, C. Gerbaldi, C. Barolo, R. Bongiovanni
A UV-crosslinked polymer electrolyte membrane for quasi-solid dye-sensitized solar cells with excellent efficiency and durability
Phys. Chem. Chem. Phys. 15 (2013) 3706-3711

Journal covers



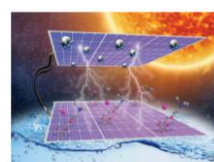
Sol. RRL 5 (2021) art. no. 2000823



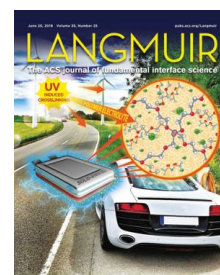
ChemSusChem 13
(2020) 6562-6573



Green Chem. 22
(2020) 7168-7218



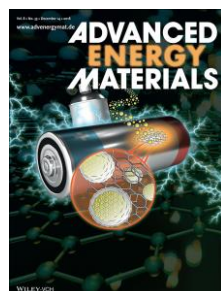
Chem. Sci. 11 (2020)
1485-1493



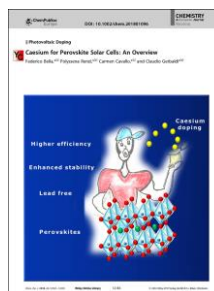
Langmuir 35 (2019)
8210-8219



Chem. Eur.-J. 24
(2018) 3083-3100



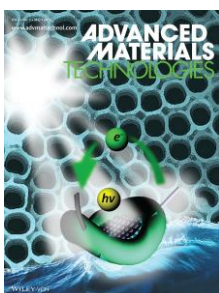
Adv. Energy Mater. 8
(2018) art. no.
1802438



Chem. Eur.-J. 24
(2018) 12183-12205



Nano Res. 10 (2017)
2891-2903



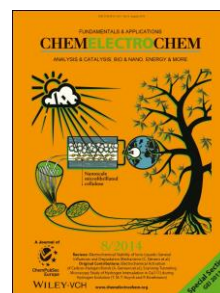
Adv. Mater. Technol. 1
(2016) art. no.
1600002



Chem. Commun. 51
(2015) 16308-16311



Chem. Soc. Rev. 44
(2015) 3431-3473



ChemElectroChem 1
(2014) 1350-1358

Patents list

3. E. Molena, C. Hamon, S. R. Petricci, G. Piana, **F. Bella**, C. Gerbaldi
Solid electrolyte composition
International publication number: WO2020099261A1
2. L. Castro, F. Barde, J. R. Nair, M. Falco, **F. Bella**, C. Gerbaldi
Composite polymer electrolyte (CPE) membranes for secondary solid state Li-metal cells and process for the production thereof
International publication number: WO2019052648A1 (21/03/2019)
1. J. R. Nair, C. Gerbaldi, L. Porcarelli, **F. Bella**, I. Doberdò, S. Bodoardo, N. Penazzi, C. Capiglia
Polymer electrolyte membranes and process for the production thereof
International publication number: WO2015104727A1 (16/07/2015)

Editorials in scientific journals list

4. S. M. Richardson, **F. Bella (Corr. Author)**, V. Mougel, J. V. Milić
Scientific writing and publishing for early-career researchers from the perspective of young chemists

J. Mater. Chem. A 9 (2021) 18674-18680 – [IF 14.5](#)

3. **F. Bella**
Across the Board: Federico Bella on electrochemical nitrogen reduction
ChemSusChem 13 (2020) 3053-3055
2. **F. Bella, R. Kostecki**
Symposium in honor of Prof. Jan Augustynski, "Photo-electrochemical energy conversion: foreword"
Electrochim. Acta 325 (2019) art. no. 134917
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

Books and book chapters list

11. **F. Bella, L. Fagiolari**
New and unconventional trends in dye-sensitized solar cells: materials, devices and attempts towards market entry
in: **Photochemistry: Volume 49**
ISBN: 978-1-83916-388-3
pp. 292-307, The Royal Society of Chemistry, Cambridge, 2022
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

- **Giornate Italiane di Fotochimica del Gruppo Italiano di Fotochimica (GIF²)**
National conference (90 participants)
Member of the Organizing committee
Virtual meeting, 23-24/09/2021
- **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

- Plenary @ Merck Young Chemists' Symposium 2021 (MYCS 2021), Rimini (Italy), 2021
Chemical challenges in energy technologies – A perspective from an under-35 chemist
- Seminar @ American Chemical Society – UKM International Student Chapter, Virtual meeting (2021)
Challenge in paving a career in Chemistry
- Lecture @ Doctochem, Virtual meeting (2021)
Publishing at high impact: common challenges and mistakes
- Seminar @ Professional Association of Engineers of the Province of Turin, Virtual meeting (2021)

- Talk @ 4th International Conference on Science & Engineering of Materials, Virtual meeting (2021)
Challenges of photovoltaics and electrochemical energy storage from 2021
- Talk @ Solar Power Technologies (SPTECH 2021), Virtual meeting (2021)
Advances in electrodes and electrolytes for aqueous photovoltaics
- Talk @ 5th USERN Congress and Prize Awarding Festival, Virtual meeting (2020)
Photovoltaics and energy storage challenges from 2020
- Seminar @ POLYMAT University of the Basque Country UPV/EHU, Virtual meeting (2020)
Polymers for integrable energy devices
- Lecture @ Jornadas CICECO 2020, Virtual meeting (2020)
How to avoid easy rejection of your PhD papers!
- Seminar @ 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
- Lecture @ 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
- Lecture @ 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
- Lecture @ 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
- Lecture @ 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
- Awardee Lecture @ 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.

98. **F. Bella**
Chemical challenges in energy technologies – A perspective from an under-35 chemist
in: **Merck Young Chemists' Symposium 2021 (MYCS 2021)**
Plenary lecture – Rimini (Italy), 22-24/11/2021
97. **F. Bella**, S. Trano, M. Gandolfo, L. Fagiolari, J. Amici, C. Francia, S. Bodoardo
Preliminary studies on polymer electrolytes for potassium-based batteries
in: **Malaysia Polymer International Conference 2021 (MPIC 2021)**
Keynote – Virtual meeting, 22-23/11/2021
96. **F. Bella**, L. Fagiolari, S. Trano, D. Versaci, F. Di Berardino, F. Giraldo, M. Gandolfo, J. Amici, C. Francia, S. Bodoardo
Advanced materials for potassium batteries: chemistry, materials science and engineering
in: **The 6th International USERN Congress**
Talk – Istanbul (Turkey), 06-13/11/2021
95. **F. Bella**, L. Fagiolari, D. Versaci, A. Mangini, N. Pirrone, S. Trano, M. Gandolfo, J. Amici, C. Francia, S. Bodoardo
Electrochemistry for energy: conversion, storage and integration for a self-powered society
in: **The 6th International USERN Congress**
Talk – Istanbul (Turkey), 06-13/11/2021
94. **F. Bella**, J. C. De Haro, E. Tatsi, L. Fagiolari, M. Bonomo, C. Barolo, S. Turri, G. Griffini
Lignin-based electrolytes for water-based solar cells
in: **Giornate Italiane di Fotochimica del Gruppo Italiano di Fotochimica (GIF²)**
Poster – Virtual meeting, 23-24/09/2021
93. L. Fagiolari, M. Bonomo, S. Galliano, G. Viscardi, C. Barolo, **F. Bella**
Hybrid solar cells operating in aqueous environment
in: **XXVII Congresso Nazionale della Società Chimica Italiana**
Talk – Virtual meeting, 14-23/09/2021
92. D. Versaci, L. Fagiolari, F. Di Berardino, F. Giraldo, S. Trano, J. Amici, C. Francia, S. Bodoardo, **F. Bella**
Preliminary investigation of anodic materials for potassium batteries
in: **XXVII Congresso Nazionale della Società Chimica Italiana**
Talk – Virtual meeting, 14-23/09/2021
91. **F. Bella**, J. C. De Haro, E. Tatsi, L. Fagiolari, M. Bonomo, C. Barolo, S. Turri, G. Griffini

- A lignin-based electrolyte for aqueous solar cells
in: **XXVII Congresso Nazionale della Società Chimica Italiana**
Poster – Virtual meeting, 14-23/09/2021
90. L. Fagiolari, M. Bonomo, S. Galliano, G. Viscardi, C. Barolo, **F. Bella**
Environmentally friendly electrodes and electrolytes for aqueous photovoltaics
in: **EUROMAT 2021**
Talk – Virtual meeting, 13-17/09/2021
89. **F. Bella**, A. Mangini, L. Fagiolari, J. Amici, C. Francia, S. Bodoardo
Hybrid solar cells powering electrochemical reduction reactions
in: **XII Congresso Nazionale dell'Associazione Italiana di Chimica per Ingegneria**
Poster – Reggio Calabria (Italy), 05-08/09/2021
88. **F. Bella**, L. Fagiolari, M. Bonomo, S. Galliano, G. Viscardi, C. Barolo
Water-based solar cells: electrochemical behavior of state-of-art electrodes and electrolytes
in: **72th Annual ISE Meeting**
Talk – Virtual meeting, 29/08-03/09/2021
87. L. Fagiolari, D. Versaci, J. Amici, C. Francia, S. Bodoardo, **F. Bella**
An exploratory investigation of electrodes suitable for potassium-based batteries
in: **48th IUPAC World Chemistry Congress**
Talk – Virtual meeting, 13-20/08/2021
86. L. Fagiolari, M. Bonomo, S. Galliano, G. Viscardi, C. Barolo, **F. Bella**
Electrodes, electrolytes and coatings for aqueous photovoltaics to be integrated in sustainable ammonia production plants
in: **48th IUPAC World Chemistry Congress**
Talk – Virtual meeting, 13-20/08/2021
85. **F. Bella**, L. Fagiolari, D. Versaci, J. Amici, C. Francia, S. Bodoardo
Challenges of photovoltaics and electrochemical energy storage from 2021
in: **4th International Conference on Science & Engineering of Materials**
Invited talk – Virtual meeting, 19-22/07/2021
84. **F. Bella**, L. Fagiolari, M. Bonomo, S. Galliano, G. Viscardi, C. Barolo
Advances in electrodes and electrolytes for aqueous photovoltaics
in: **Solar Power Technologies (SPTECH 2021)**
Invited talk – Virtual meeting, 05-08/07/2021
83. **F. Bella**
Photovoltaics and energy storage challenges from 2020
in: **5th USERN Congress and Prize Awarding Festival**
Invited talk – Virtual meeting, 11-14/11/2020
82. **F. Bella**
The rise of ceramics for solar energy conversion and storage technologies
in: **Electroceramics 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**
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71. **F. Bella**, A. Scalia, A. Varzi, P. Zaccagnini, A. Lamberti, E. Tresso, C. Gerbaldi, S.

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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
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69. A. Scalia, A. Pedico, A. Lamberti, A. Gigot, P. Rivolo, M. Cocuzza, C. Gerbaldi, E. Tresso, **F. Bella**
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68. **F. Bella**, F. Colò, L. Zolin, D. Pugliese, J. R. Nair, G. Meligrana, C. Gerbaldi
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67. **F. Bella**, L. Fagiolari, E. Rozzi, S. Galliano, G. Piana, G. Viscardi, C. Barolo, C. Gerbaldi
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66. **F. Bella**
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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
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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**
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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**
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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)**
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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
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58. **F. Bella**, G. Piana, F. Colò, M. Falco, G. Meligrana, C. Gerbaldi
A polymer electrolytes platform for sodium-based batteries
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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
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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
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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)**
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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.

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Addressing the controversial mechanism of Na⁺ reversible storage in TiO₂ nanotube arrays: amorphous, anatase and rutile TiO₂

in: ***Giornate dell'Elettrochimica Italiana - GEI 2018***

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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***
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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
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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
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49. **F. Bella**, A. Hagfeldt, M. Grätzel, C. Gerbaldi
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48. **F. Bella**, J. Popovic, J. Maier, C. Gerbaldi
A solid-liquid soggy-sand electrolyte for dye-sensitized solar cells
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47. **F. Bella**, F. Colò, L. Zolin, D. Pugliese, A. M. Stephan, C. Gerbaldi
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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
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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
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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
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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**
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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**
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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**
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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)**
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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)**
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34. **F. Bella**, S. Galliano, G. Viscardi, C. Gerbaldi, M. Grätzel, C. Barolo
Aqueous solar cells: novel trends in hybrid devices
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Talk – Swansea (United Kingdom), 28/06-01/07/2016
33. **F. Bella**, S. Galliano, G. Viscardi, C. Barolo, C. Gerbaldi
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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
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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
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30. **F. Bella**, A. Lamberti, S. Bianco, E. Tresso, C. F. Pirri, C. Gerbaldi
Hyper flexible dye-sensitized solar cells: towards microfluidic stable devices
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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
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28. **F. Bella**
Photopolymers for dye-sensitized solar cells
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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
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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
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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**

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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. Milanese, R. Bongiovanni, S. Turri, A. Menozzi, C. Barolo
Multifunctional coatings for photovoltaic devices: when one of the less studied components makes the difference
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22. **F. Bella**, J. R. Nair, C. Gerbaldi
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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
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20. **F. Bella**, G. Griffini, S. Turri, R. Bongiovanni
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in: ***Macrogiovani @ XXI Convegno Nazionale dell'Associazione Italiana di Scienza e Tecnologia delle Macromolecole***
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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 Società Chimica Italiana - SCI 2014***
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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 Società 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 Grätzel solar cell in a multivariate way
in: ***XXV Congresso Nazionale della Società Chimica Italiana - SCI 2014***
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16. **F. Bella**, G. Griffini, R. Bongiovanni, S. Turri
Fluoropolymeric luminescent downshifters for organic-dye-sensitized solar cells
in: ***XXV Congresso Nazionale della Società 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 Società Chimica Italiana - SCI 2014**
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14. **F. Bella**, R. Bongiovanni
Photopolymers for Grätzel's solar cells
in: **XXV Congresso Nazionale della Società 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)**
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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

174. L. Fagiolari, M. Bonomo, S. Galliano, A. Cognetti, N. Mariotti, C. Barolo, **F. Bella**
Electrodes and electrolyte materials for aqueous dye-sensitized solar cells
in: **Italian Photochemistry Meeting 2021**
Poster – Turin (Italy), 16-18/12/2021
173. L. Fagiolari, F. Giraldo, S. Trano, D. Versaci, J. Amici, C. Francia, S. Bodoardo, **F. Bella**
Nanostructured TiO₂ as anode material for potassium batteries
in: **Merck Young Chemists' Symposium 2021 (MYCS 2021)**
Talk – Rimini (Italy), 22-24/11/2021
172. A. Mangini, L. Fagiolari, J. Amici, C. Francia, S. Bodoardo, **F. Bella**
An overview on Li-mediated ammonia production
in: **Merck Young Chemists' Symposium 2021 (MYCS 2021)**
Flash communication + Poster – Rimini (Italy), 22-24/11/2021
171. S. Trano, M. Gandolfo, L. Fagiolari, J. Amici, C. Francia, S. Bodoardo, **F. Bella**

Polymer electrolytes for potassium batteries in the SYNERGY project framework
in: **Merck Young Chemists' Symposium 2021 (MYCS 2021)**
Flash communication + Poster – Rimini (Italy), 22-24/11/2021

170. A. Mangini, J. Amici, D. Versaci, D. Dessantis, A. Marchisio, **F. Bella**, C. Francia, S. Bodoardo
New polymer electrolytes for Li-O₂ batteries
in: **NanoInnovation 2021**
Invited talk – Rome (Italy), 21-24/09/2021
169. L. Fagiolari, D. Versaci, F. Di Berardino, M. Gandolfo, J. Amici, C. Francia, S. Bodoardo, **F. Bella**
Exploring promising materials platforms for potassium batteries
in: **NanoInnovation 2021**
Invited talk – Rome (Italy), 21-24/09/2021
168. D. Versaci, I. Canale, S. Goswami, J. Amici, **F. Bella**, C. Francia, L. Pereira, S. Bodoardo
MoS₂/PANI composite as suitable functional interlayer for Li-S batteries
in: **XXVII Congresso Nazionale della Società Chimica Italiana**
Poster – Virtual meeting, 14-23/09/2021
167. A. Mangini, M. Alidoost, F. Caldera, J. Amici, D. Versaci, L. Fagiolari, A. Anceschi, F. Trotta, **F. Bella**, C. Francia, S. Bodoardo
Li-ion batteries with innovative silicon anodes: study of electrolytes based on carbonates
in: **XXVII Congresso Nazionale della Società Chimica Italiana**
Talk – Virtual meeting, 14-23/09/2021
166. A. Mangini, J. Amici, C. Francia, S. Bodoardo, **F. Bella**
An overview on Li-N₂ cells for ammonia production
in: **XXVII Congresso Nazionale della Società Chimica Italiana**
Flash communication + Poster – Virtual meeting, 14-23/09/2021
165. L. Fagiolari, M. Bonomo, S. Galliano, G. Viscardi, C. Barolo, **F. Bella**
Electrodes and electrolytes for aqueous dye-sensitized solar cells
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in: **68th Annual Meeting of the International Society of Electrochemistry**

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83. L. Porcarelli, A. S. Shaplov, M. A. Aboudzadeh, **F. Bella**, J. R. Nair, D. Mecerreyes, C. Gerbaldi

New families of single-ion block copolymer electrolytes based on poly(ethylene oxide) and methacrylic sulfonamide for lithium batteries

in: **68th Annual Meeting of the International Society of Electrochemistry**

Poster – Providence (USA), 27/08-01/09/2017

82. M. Falco, J. R. Nair, R. Lin, G. B. Appetecchi, F. Colò, G. Meligrana, S. Passerini, **F. Bella**, C. Gerbaldi

Safe and highly conducting polymer electrolytes for ageing resistant Li-ion energy storage

in: **68th Annual Meeting of the International Society of Electrochemistry**

Talk – Providence (USA), 27/08-01/09/2017

81. A. Scalia, A. Lamberti, **F. Bella**, S. Bianco, C. Gerbaldi, E. Tresso, C. F. Pirri

A flexible and portable harvesting-storage device by quasi-solid-state supercapacitor and dye-sensitized solar cell integration

in: **5th International Symposium on Enhanced Electrochemical Capacitors (ISEE CAP 2017)**

Talk – Jena (Germany), 10-14/07/2017

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

Photocurable polymeric coatings for improved stability and multifunctionality in solution-processable photovoltaics

in: **13th International Conference on Materials Chemistry (MC13)**

Talk – Liverpool (United Kingdom), 10-13/07/2017

79. C. Gerbaldi, **F. Bella**, G. Meligrana, F. Colò, M. Falco, G. Piana

Nano and biosourced electrode/electrolyte components for next-gen energy storage and conversion devices

in: **MoDeSt Workshop**

Talk – Pantelleria (Italy), 05-07/07/2017

78. L. Porcarelli, A. S. Shaplov, M. A. Aboudzadeh, **F. Bella**, J. R. Nair, C. Gerbaldi, D. Mecerreyes

Single-ion block copolymer electrolytes based on poly(ethylene oxide) and methacrylic sulphonamide for lithium batteries

in: **16th EPF European Polymer Congress**

Poster – Lyon (France), 02-07/07/2017

77. M. Falco, S. Galliano, G. Viscardi, C. Barolo, M. Grätzel, C. Gerbaldi, **F. Bella**

Quasi-solid cellulose-based aqueous electrolytes for sustainable DSSCs

in: **21st International Conference of Solid State Ionics (SSI-21)**

Talk – Padua (Italy), 18-23/06/2017

76. **F. Bella**, J. Popovic, J. Maier, C. Gerbaldi

Interfacial effects in solid-liquid glyme electrolytes for improved performance of DSSCs

in: **21st International Conference of Solid State Ionics (SSI-21)**

Poster – Padua (Italy), 18-23/06/2017

75. F. Colò, **F. Bella**, J. R. Nair, M. Destro, S. Fiorilli, G. Meligrana, C. Gerbaldi
Innovative and functional electrode/electrolyte materials for green and safe post-lithium batteries
in: **21st International Conference of Solid State Ionics (SSI-21)**
Poster – Padua (Italy), 18-23/06/2017
74. M. Falco, J. R. Nair, L. Porcarelli, **F. Bella**, G. Meligrana, C. Gerbaldi
Polymer electrolytes for durable lithium batteries operating in a wide temperature range
in: **21st International Conference of Solid State Ionics (SSI-21)**
Poster – Padua (Italy), 18-23/06/2017
73. J. R. Nair, L. Porcarelli, M. Falco, **F. Bella**, F. Colò, G. Meligrana, R. Lin, G. B. Appetecchi, S. Passerini, C. Gerbaldi
Towards aging resistant lithium polymer batteries for safe wide temperature applications
in: **21st International Conference of Solid State Ionics (SSI-21)**
Talk – Padua (Italy), 18-23/06/2017
72. F. Colò, S. Renault, **F. Bella**, C. Gerbaldi, D. Brandell
An electrolyte study on Na₂BDA anode for Na-based organic batteries
in: **Organic Battery Days**
Poster – Uppsala (Sweden), 08-09/06/2017
71. S. Galliano, **F. Bella**, M. Falco, G. Provera, C. Barolo, F. Giordano, G. Boschloo, M. Graetzel, A. Hagfeldt, C. Gerbaldi, G. Viscardi
Quasi-solid aqueous electrolytes based on bio-derived polymers
in: **International Conference on Hybrid and Organic Photovoltaics (HOPV 17)**
Talk – Lausanne (Switzerland), 21-24/05/2017
70. **F. Bella**, F. Colò, M. Falco, G. Meligrana, J. R. Nair, C. Gerbaldi
Innovative photocured polymer electrolyte membranes for efficient energy storage and conversion systems
in: **The 8th Japanese-German-Italian Meeting of Electrochemists**
Talk – Kazusa Arc (Japan), 02-04/12/2016
69. S. Galliano, **F. Bella**, C. Gerbaldi, C. Barolo, G. Viscardi
Aqueous electrolyte for DSSCs: DoE investigation on redox mediator and gelling agents
in: **Merck Young Chemists Symposium**
Poster – Rimini (Italy), 25-27/10/2016
68. **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: **Merck Young Chemists Symposium**
Poster – Rimini (Italy), 25-27/10/2016
67. A. Scalia, **F. Bella**, S. Bianco, M. Gerosa, A. Sacco, A. Chiodoni, M. Quaglio, E. Tresso, C. F. Pirri
Flexible dye-sensitized solar cells based on titanium grids and polymeric electrolyte
in: **Merck Young Chemists Symposium**
Flash communication + Poster – Rimini (Italy), 25-27/10/2016
66. F. Colò, L. L. Lefrancois Perreault, G. Meligrana, S. L. Fiorilli, **F. Bella**, J. R. Nair, F. Kleitz, C. Gerbaldi
Mixed CuNi oxide-graphene nanocomposite microspheres as anode for energy storage devices
in: **Merck Young Chemists Symposium**
Flash communication + Poster – Rimini (Italy), 25-27/10/2016

65. M. Falco, S. Galliano, C. Gerbaldi, G. Viscardi, C. Barolo, M. Grätzel, **F. Bella**
Aqueous solar cells: novel trends in hybrid photoelectrochemical devices
in: **Merck Young Chemists Symposium**
Flash communication + Poster – Rimini (Italy), 25-27/10/2016
64. M. Falco, **F. Bella**, S. Galliano, C. Gerbaldi, G. Viscardi, M. Grätzel, C. Barolo
Aqueous solar cells: new perspective in photoelectrochemical devices
in: **NIS colloquium: Harnessing the Power of Light in Hybrid Materials**
Poster – Turin (Italy), 06-07/10/2016
63. S. Galliano, G. Provera, G. Giacona, **F. Bella**, F. Giordano, A. Hagfeldt, G. Boschloo, C. Gerbaldi, C. Barolo, G. Viscardi
Study on gelled aqueous electrolytes for DSSCs with different redox mediators
in: **NIS colloquium: Harnessing the Power of Light in Hybrid Materials**
Poster – Turin (Italy), 06-07/10/2016
62. J. R. Nair, F. Colò, **F. Bella**, G. Meligrana, C. Gerbaldi
Graphene-based materials as electrode constituents of energy storage devices
in: **2nd E3 Mediterranean Symposium: Electrochemistry for Environment and Energy**
Flash communication + Poster – Gargnano (Italy), 14-16/09/2016
61. S. Galliano, **F. Bella**, C. Gerbaldi, C. Barolo, G. Viscardi
Aqueous electrolytes: a possible breakthrough toward DSSCs widespread commercialization
in: **6th EuCheMS Chemistry Congress**
Talk – Seville (Spain), 11-15/09/2016
60. J. R. Nair, L. Porcarelli, **F. Bella**, F. Colò, G. Meligrana, C. Gerbaldi
UV- and/or thermally-cured electrolyte membranes for aging resistant lithium polymer batteries
in: **Giornate dell'Elettrochimica Italiana (GEI 2016)**
Poster – Gargnano (Italy), 11-14/09/2016
59. C. Gerbaldi, S. Galliano, C. Barolo, G. Viscardi, M. Grätzel, **F. Bella**
Aqueous solar cells: novel trends in hybrid photoelectrochemical devices
in: **Giornate dell'Elettrochimica Italiana (GEI 2016)**
Poster – Gargnano (Italy), 11-14/09/2016
58. F. Colò, **F. Bella**, J. R. Nair, G. Meligrana, C. Gerbaldi
Recent developments on all solid Na-ion polymer batteries for large-scale energy storage
in: **Giornate dell'Elettrochimica Italiana (GEI 2016)**
Poster – Gargnano (Italy), 11-14/09/2016
57. C. Gerbaldi, L. Porcarelli, A. S. Shaplov, M. Salsamendi, M. A. Aboudzadeh, J. R. Nair, **F. Bella**, D. Mecerreyes
Single-ion conducting block copolymer electrolytes for solid state lithium batteries
in: **Giornate dell'Elettrochimica Italiana (GEI 2016)**
Talk – Gargnano (Italy), 11-14/09/2016
56. F. Colò, J. R. Nair, **F. Bella**, L. L. Perreault, A. Lamberti, S. L. Fiorilli, F. Kleitz, G. Meligrana, C. Gerbaldi
Advanced nanostructured anodes for high energy Li/Na-ion batteries
in: **Giornate dell'Elettrochimica Italiana (GEI 2016)**
Oral presentation – Gargnano (Italy), 11-14/09/2016
55. C. Gerbaldi, L. Zolin, J. R. Nair, **F. Bella**, G. Meligrana, M. Destro, D. Beneventi
Lignocellulosic materials for the next-generation of eco-friendly polymeric energy storage devices
in: **15th International Symposium on Polymer Electrolytes (ISPE-XV)**

- Talk – Uppsala (Sweden), 15-19/08/2016
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
in: **15th International Symposium on Polymer Electrolytes (ISPE-XV)**
Poster – Uppsala (Sweden), 15-19/08/2016
 53. G. Meligrana, F. Colò, J. R. Nair, **F. Bella**, M. Destro, S. Fiorilli, C. Gerbaldi
Innovative and functional materials for green and safe large-scale Li/Na-based energy storage
in: **15th International Symposium on Polymer Electrolytes (ISPE-XV)**
Poster – Uppsala (Sweden), 15-19/08/2016
 52. J. R. Nair, L. Porcarelli, **F. Bella**, R. Lin, S. Fantini, G. Maresca, M. Moreno, G. B. Appetecchi, C. Gerbaldi
New insights towards aging resistant lithium polymer batteries for wide temperature applications
in: **ENERCHEM-1**
Poster – Florence (Italy), 18-20/02/2016
 51. L. Zolin, J. R. Nair, **F. Bella**, G. Meligrana, P. V. Jagdale, I. Cannavaro, A. Tagliaferro, D. Chaussy, D. Beneventi, C. Gerbaldi
A simple route towards next-gen green energy storage by fibre-based self-supporting electrodes and a truly solid polymer electrolyte
in: **ENERCHEM-1**
Poster – Florence (Italy), 18-20/02/2016
 50. L. Porcarelli, A. S. Shaplov, M. Salsamendi, J. R. Nair, **F. Bella**, Y. S. Vygodskii, D. Mecerreyes, C. Gerbaldi
New polymeric single-ion conductors for rechargeable lithium batteries
in: **ENERCHEM-1**
Poster – Florence (Italy), 18-20/02/2016
 49. F. Colò, G. Meligrana, J. R. Nair, **F. Bella**, A. Lamberti, M. Destro, S. Fiorilli, P. P. Pescarmona, C. Gerbaldi
Innovative and functional materials for green and safe Na-ion large-scale energy storage
in: **ENERCHEM-1**
Poster – Florence (Italy), 18-20/02/2016
 48. S. Galliano, **F. Bella**, C. Barolo, C. Gerbaldi, G. Viscardi
Water-based electrolytes in hybrid solar cells: from liquid to gel formulations
in: **ENERCHEM-1**
Talk – Florence (Italy), 18-20/02/2016
 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
in: **16th European Meeting on Environmental Chemistry (EMEC16)**
Talk – Turin (Italy), 30/11-03/12/2015
 46. G. Giacona, S. Galliano, C. Barolo, C. Gerbaldi, M. Grätzel, **F. Bella**
Aqueous electrolytes for dye-sensitized solar cells
in: **XV Sigma-Aldrich Young Chemists Symposium (SAYCS 2015)**
Poster – Rimini (Italy), 27-29/10/2015
 45. S. Galliano, N. Barbero, V. Gianotti, C. Gerbaldi, C. Barolo, **F. Bella**
Multivariate approaches for dye-sensitized solar cells
in: **XV Sigma-Aldrich Young Chemists Symposium (SAYCS 2015)**

- Talk – Rimini (Italy), 27-29/10/2015
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
in: ***XV Sigma-Aldrich Young Chemists Symposium (SAYCS 2015)***
Talk – Rimini (Italy), 27-29/10/2015
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
in: ***XV Sigma-Aldrich Young Chemists Symposium (SAYCS 2015)***
Talk – Rimini (Italy), 27-29/10/2015
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
in: ***XV Sigma-Aldrich Young Chemists Symposium (SAYCS 2015)***
Talk – Rimini (Italy), 27-29/10/2015
41. J. R. Nair, L. Porcarelli, **F. Bella**, F. Colò, G. Meligrana, C. Gerbaldi
Towards aging resistant lithium polymer batteries for wide temperature applications
in: ***228th ECS Meeting***
Talk – Phoenix (USA), 11-15/10/2015
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
in: ***Giornate dell'Elettrochimica Italiana (GEI 2015)***
Poster – Bertinoro (Italy), 20-24/09/2015
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
in: ***Giornate dell'Elettrochimica Italiana (GEI 2015)***
Talk – Bertinoro (Italy), 20-24/09/2015
38. C. Gerbaldi, S. Galliano, C. Barolo, **F. Bella**
Aqueous photovoltaics: a new era in third generation devices
in: ***Giornate dell'Elettrochimica Italiana (GEI 2015)***
Talk – Bertinoro (Italy), 20-24/09/2015
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
in: ***Giornate dell'Elettrochimica Italiana (GEI 2015)***
Talk – Bertinoro (Italy), 20-24/09/2015
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)***

Invited talk – Kochi (India), 21-24/08/2015

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. Milanese, 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° Sigma Aldrich Young Chemists Symposium - 13° 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

- Giovanni Marco Carrabba (MSc in Materials Engineering @PoliTO, 2022): *Dye solar cells with copper-based polymer electrolytes.*
- Giorgia Morone (MSc in Chemical and Sustainable Processes Engineering @PoliTO, 2022): *Lignin-based composite polymer electrolytes for potassium batteries.*
- Daniela Landi (BSc in Chemical and Food Engineering @PoliTO, 2021): *Microplastics: a new challenge for environmental protection.*
- Mattia Prandi (BSc in Materials Engineering @PoliTO, 2021): *Microplastics: a new challenge for environmental protection.*
- Daniele Congiu (BSc in Materials Engineering @PoliTO, 2021): *Polymer electrolytes for rechargeable aluminum batteries.*
- Alessio Jacopo Rizzo (BSc in Energetic Engineering @PoliTO, 2021): *Photovoltaic technologies in airport environments.*

- Elisabetta Giove (MSc in Energetic and Nuclear Engineering @PoliTO, 2021): *Sustainable polymer electrolytes for potassium ion batteries.*
- Gabriele Maffei (BSc in Materials Engineering @PoliTO, 2021): *Innovative floating photovoltaic solutions suitable for salt dynamic environments.*
- Federico Giraldo (MSc in Energetic and Nuclear Engineering @PoliTO, 2021): *Unveiling cathodic and anodic materials for potassium-based batteries.*
- Matteo Gandolfo (MSc in Materials Engineering @PoliTO, 2021): *Gel polymer electrolytes for potassium batteries: development and characterization.*
- Stefano Fuda (MSc in Energetic and Nuclear Engineering @PoliTO, 2021): *Deep eutectic solvents for rechargeable batteries.*
- Noemi Pirrone (MSc in Chemical and Sustainable Processes Engineering @PoliTO, 2021): *Photoelectrochemical systems at the state-of-the-art for the sustainable H₂ and syngas production: literature review and proof-of-concept.*
- Federica Di Berardino (MSc in Materials Engineering @PoliTO, 2021): *Preliminary investigation on anodes for potassium batteries.*
- Elena Basciu (BSc in Chemical and Food Engineering @PoliTO, 2021): *Microplastics: a new challenge for environmental protection.*
- Matteo Sampo' (MSc in Energetic and Nuclear Engineering @PoliTO, 2021): *Processes for the integration of supercapacitors and solar cells.*
- Jessica Pizzo (BSc in Chemical and Food Engineering @PoliTO, 2020): *Lignin as a material platform in the field of photovoltaic cells.*
- Virginia Di Giovanni (BSc in Chemical and Food Engineering @PoliTO, 2020): *3D printing for battery manufacturing.*
- Alessio Bellio (BSc in Energetic Engineering @PoliTO, 2020): *The transition from laboratory to industrial production of perovskite solar cells.*
- Vincenzo Marino (BSc in Chemical and Food Engineering @PoliTO, 2020): *Magnesium batteries: advances and perspectives of a new technology.*
- Gretta Marija Nikkare (BSc in Energetic Engineering @PoliTO, 2020): *Characterization of dye-sensitized solar cells (DSSC) and their future applications.*
- Sebastiano Frandino (BSc in Chemical and Food Engineering @PoliTO, 2020): *Lignin as a material platform in the field of batteries.*
- Erica Varaia (MSc in Chemical and Sustainable Processes Engineering @PoliTO, 2020): *PEDOT in dye-sensitized solar cells: an electrode and a hole-transporting material.*
- Stefano Primo (MSc in Materials Engineering @PoliTO, 2020): *Preliminary investigation of compact TiO₂ layers as blocking layer in aqueous solar cells.*
- 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
- Associazione Italiana Chimica per Ingegneria
- Gruppo Italiano di Fotochimica
- Consorzio Interuniversitario Nazionale per la Scienza e Tecnologia dei Materiali

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

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