Curriculum vitae Claudio Gerbaldi

PERSONAL INFORMATION

Family name, First name: GERBALDI, Claudio (CG)
Researcher unique identifier(s) ORCID: https://orcid.org/0000-0002-8084-0143
Date of birth: 26/08/1976
Nationality: Italian

EDUCATION

2006 (PhD) **Ph.D.** in Materials Science and Technology, Politecnico di Torino
Mesoporous materials and nanostructured $LiFePO_4$ as cathodes for secondary Li-ion batteries: synthesis and characterization (Supervisor: Nerino Penazzi).

2002 (MSc) **Master** Degree in Chemistry
Faculty of Mathematical, Physical and Natural Sciences, Università degli Studi di Torino (Supervisor: Gianmario Martra).

CURRENT POSITION

2014 – present **Associate Professor,** MIUR Sector CHIM/07 - Principles of chemistry for applied technologies, Department of Applied Science and Technology, Politecnico di Torino.

PREVIOUS POSITIONS

2011 – 2014 **Assistant Professor,** MIUR sector CHIM/07 - Principles of chemistry for applied technologies, Department of Applied Science and Technology, Politecnico di Torino.

2010 – 2011 **Senior Post-Doc**
CSHR@POLITO, Italian Institute of Technology - IIT.

2006 – 2009 **Post-Doc**
Institute of Chemistry, Politecnico di Torino.

FELLOWSHIPS AND AWARDS

2018 Visiting scientist in the group of Prof. Andrea C. Ferrari, leader of the EU graphene flagship at the Cambridge Graphene Centre, Engineering Department, University of Cambridge, UK.

2017 Visiting Scientist at the University of Wien, Department of Inorganic Chemistry - functional materials, in the group of Prof. Dr. Freddy Kleitz.

2017 Visiting Scientist at the Hunter College and CUNY Graduate Center, The City University of New York (US), in the group of Prof. Steven G. Greenbaum.

2016 Visiting Scientist at the Department of Chemical Sciences of the University of Naples "Federico II" (IT), in the group of Prof. Michele Pavone.

2015 International "Roberto Piontelli" Award – International award assigned biannuary by The Accademia dei Lincei, delivered in the presence of the President of the Italian Republic, for outstanding scientific or technological contributions in the field of electrochemistry for energy-related applications, corrosion or physical chemistry.

2015 Visiting Scientist at MIT - Massachusetts Institute of Technology Boston (US), in the group of Prof. Mircea Dinca.

2011-2014 Affiliated/External Collaborator at the CSHR - Center for Human Space Robotics @POLITO of the Italian Institute of Technology (IIT).

2010 Prix des Techniques Innovantes pour l'Environnement 2012, assigned by Info Chimie Magazine and ADEME (French Society for Environment and Energy Management) for the high impact of the paper-based battery presented in *J. Mater. Chem.* 20 (2010) 7344.

2007 UniCredit Award - Innovation in Research for the best Ph.D. Thesis defended in Torino in 2006, promoted by UniCredit Group with Unione Industriale di Torino, Politecnico and University of Torino and National Research Council.

2004 Visiting Scientist at Institut de Recherce sur la Catalyse (IRC-CNRS), Lione (France), in the group of Prof. Alain Tuel.

2004 Visiting Scientist at the LABFC - Laboratory for Advanced batteries and Fuel Cells of Prof. Bruno Scrosati, University "La Sapienza" Rome, Italy.

RESEARCH ACTIVITIES

CG is the LEADER of the Group for Applied Materials and Electrochemistry (see the GAME Lab Facebook page in which the results of the group are timely updated - https://it-it.facebook.com/GAMELabPoliTO/) at the DISAT Department of the Politecnico di Torino, composed, at present, of 1 Assistant Professor RTD-A (Dr. Federico Bella), 1 Graduated Technician (Dr. Giuseppina Meligrana), 1 Post-Doc (Dr. Giulia Piana), 1 Graduated Fellow (Marisa Falco), 1 Ph.D. Student (Francesca Colò); 1 Full Professor (Guido Saracco) is also associated to the research group.
The Group for Applied Materials and Electrochemistry is a section of CHENERGY at the Department of Applied Science and Technology (DISAT) (all details can be found here: http://www.disat.polito.it/research/research_groups/chenergy/group_for_applied_materials_and_electrochemistry) of the Politecnico di Torino. The specific mission of GAME Lab is the development and thorough characterization of innovative electrochemical energy conversion and storage systems, which are nowadays fundamental to exploit the full potential of future technologies requiring high performance, such as smart electronics, storage from renewables and electric transportation. The interests and skills of GAME Lab include the development of environmentally friendly materials (nanostructured electrodes and safe polymer electrolytes), along with their thorough physico-chemical and electrochemical characterisation, and innovative technologies for high-performance, lightweight and low cost devices, such as lithium- and sodium-based secondary batteries, lithium-sulphur cells, next-generation photovoltaic devices (dye sensitized solar cells - DSSC and perovskite solar cells) and photoelectrochromic devices, with strong collaboration with academy/research centres worldwide and effective connections with industry and EU.
CG coordinates (or has coordinated) the research activity of Post-Docs (8), research fellows (2) and PhD students (4), he has supervised and actually supervises several students of the Degree Courses in Chemical Engineering in the development of their Experimental Thesis for both Bachelor degree (BSc, 10) and Master's degree (MSc, 11).

TEACHING ACTIVITIES

2011 – to date. Teaching professor (Chair of Chemistry, two classes) at the I Faculty of the Politecnico di Torino from seven years. He also lent support activities for several years (e.g., practical exercises in the classroom and in the laboratory, tutoring, co-chairing).

2013 – Lecturer and Laboratory Instructor at the PhD-School "Energy and Sensors", organized by the Italian Chemical Society at the University of Pavia from September 18-21, 2013.

ORGANISATION OF SCIENTIFIC MEETINGS

Principal Organiser, Chair of the GEI 2018, Conference – Italian Electrochemistry Days, which has been held in Sestriere, 21- 25 January 2018 (also member of the Organising committee and of the Scientific Committee).

Symposium Organiser of Symposium 6 "Batteries into the Future: from Advanced Lithium-Ion Systems to Novel Chemistries and Architectures" of the ISE 2018 – 69th Annual meeting of the International Society of Electrochemistry, 2 - 7 September 2018 Bologna, Italy.

Member of the Organising Committee of the XXXIX Meeting of the Electrochemistry Group of the Spanish Royal Society of Chemistry and 3rd E3 Mediterranean Symposium: Electrochemistry for Environment and Energy (XXXIX GE-RSEQ & 3rd E3-MS), 2 - 5 July 2018, University Complutense of Madrid, Spain.

Member of the Scientific Committee of the 2018 E-MRS Fall Meeting and Exhibit, 17 - 20 September 2018 Warsaw University of Technology.

INSTITUTIONAL RESPONSIBILITIES

2011 – to date: Permanent full member of the PhD Committee (Collegio di Dottorato) in Materials Science and Technology at the Politecnico di Torino.

2011 – to date: Permanent full member of the boards of regents (Collegio dei Docenti) in Energetic Engineering at the Politecnico di Torino.

2012 – CG joined a departmental commission (DISAT Department) aimed at the internal management and collection of the information and publications aimed at the evaluation of the Quality of Research (VQR ANVUR).

2014 to date – The candidate is reviewer of PhD Thesis (5) for National and International Universities.

2016 – to date: Permanent full member of the boards of regents (Collegio dei Docenti) in Materials Engineering at the Politecnico di Torino.

2016 – to date: Elected member of the Governing Board of the Electrochemistry Division of the Italian Chemical Society, in charge for the years 2017-2019.

COMMISSIONS OF TRUST

2017 – present	Elected **Member of the Governing Board of the Electrochemistry Division of the Italian Chemical Society**, in charge for the years 2017-2019.
2016 – present	**Project evaluator**, Competitive Research Grants (CRG) program at King Abdullah University of Science and Technology (KAUST).
2015 – present	**Project evaluator** for Swiss Federal Science Foundation SNSF.
2015 – present	**Associate Editor**, “Batteries” (MDPI AG).
2014 – present	**Review Editor**, “Frontiers in Energy Storage” (Frontiers Media S.A.).
2012 – 2013	**Associate Editor**, “ScienceJet” (Simplex Academic Publishers).
2006 – present	**Reviewer**: “Energy & Environmental Science”, “Advanced Energy Materials”, “ChemSusChem”, “Journal of Power Sources”, “Electrochimica Acta”, “Journal of Materials Chemistry”, “ACS Applied Materials & Interfaces”, “ACS Energy Letters”, “Scientific Reports”, “Applied Energy”.

Guest Editor of the Special Issue "Electrode Materials" in the open access international ISI journal "Materials" (ISSN 1996-1944, I.F. 2.654 source ISI Web of Knowledge, Journal Citation Reports®, Thompson Reuters, data updated to 27/01/2018, http://www.mdpi.com/journal/materials/special_issues/Electrode-Materials). The focus of the Special Issue is to present a comprehensive overview of the new developments in nanostructured materials that will profoundly influence real advancements in electrochemical energy production, storage, and conversion technologies, so as to offer promising prospects for addressing rapidly growing environmental concerns and increasing global energy demand.
A selection of the scientific contributions presented during the Giornate dell’elettrochimica italiana - GEI 2018 Conference, held in Sestriere (21 - 25 January 2018), Torino – Italy will be published in the “Virtual” Special Issue of ELECTROCHIMICA ACTA entitled Sustainable Electrochemistry: Functional Applied Materials and Techniques for Energy Devices and Sensing, short title “GEI 2018 Sestriere”, so as to "capture" timely, high quality papers and, at the same time, to build up an ensemble of contributions closely correlated to the selected theme. It will be Edited by Federico Bella, Giuseppina Meligrana, Claudio Gerbaldi (Guest Editors) and Sergio Trasatti.

MEMBERSHIPS OF SCIENTIFIC SOCIETIES

Italian Chemical Society (SCI, since 2002), International Society of Electrochemistry (ISE, since 2014), Italian Association of Chemical Engineering (AICING, AIDIC, since 2013).

MAJOR COLLABORATIONS

Shahzada Ahmad (Abengoa, Spain): polymer electrolytes and novel nanostructured $LiFePO_4$.

Davide Beneventi (CNRS-INP, France): papermaking of electrodes, paper-based batteries.

Daniel Brandell (Uppsala University): organic electrodes for Na-ion batteries.

Mircea Dincă (MIT, USA): metal organic frameworks for energy storage and conversion.

Michael Grätzel and **Anders Hagfeldt** (EPFL, Switzerland): aqueous electrolytes for solar energy converters, perovskite solar cells.

Freddy Kleitz (ULAVAL, Canada): mesoporous and nanostructured metal oxide anodes.

George Leftheriotis (University of Patras, Greece): photoelectrochromics.

Joachim Maier (Max Planck Institute, Germany): soggy-sand highly conductive electrolytes.

David Mecerreyes (POLYMAT, Spain): poly(ionic liquids) as electrolytes for Li/Na-based batteries.

Piercarlo Mustarelli (Pavia University, Italy): polymer electrolytes and NMR analysis.

Alexander S. Shaplov (INEOS, Russia): single-ion conductors polymer electrolytes and poly(ionic liquid)s.

Arul Manuel Stephan (CSIR-CECRI, India): inorganic fillers for highly conductive solid electrolytes.

José Louis Tirado (University of Córdoba, Spain): composite electrodes for Li batteries.

Alain Tuel (IRCELYON, France): mesoporous and nanostructured electrode materials.

Masamichi Yoshimura (Toyota Tech. Institute, Japan): characterisation of graphene-based anodes.

PAST FUNDING ID – COORDINATING ACTIVITIES

CG is the scientific coordinator (PI) of the research unit of the Politecnico di Torino in the EU project "EnABLES – European Infrastructure Powering the Internet of Things". The project (5.21 M€) is coordinated by the Tyndall National Institute and is funded by the European Commission in the framework of H2020 research programme (call H2020-INFRAIA-2016-2017), GA n. 730957.

CG has been the scientific responsible of WP6, devoted to the development of safe, high performing electrolytes, in the EU project FP7 GC.NMP.2013-1 (2013-2017) "MARS EV - Materials for Ageing Resistant Li-ion High Energy Storage for the Electric Vehicle", GA 609201 (9.00 M€, 6.57 M€ requested EU contribution, closed in November 2017).

CG is actively participating (or has actively participated) in the following international and national research projects, eligible for funding based on competitive calls awarded through a peer-review process: i) EU H2020 project "RECODE - Recycling carbon dioxide in the cement industry to produce added-value additives: a step towards a CO_2 circular economy", GA No 768583 (2017-2021, 7.90 M€); ii) EU H2020 project "MOZART - MesopOrous matrices for localiZed pH-triggered releAse of theRapeuTic ions and drugs", GA n. 685872 (4.65 M€); iii) EU project SMART-EC (FP7-ICT-2009-5), FP7 GA N° 258203 (2010-2014), entitled "Smart electrochromic active matrix components for stand-alone multifunctional devices", coordinated by CRF – Centro Ricerche FIAT.

CG is the scientific coordinator (PI) of research projects funded by International companies, such as TOYOTA MOTOR EUROPE (130 k€) and SOLVAY S.A. (130 k€).

MAIN BIBLIOGRAPHIC DATA – TRACK RECORD

PUBLICATIONS at a GLANCE *(source SCOPUS,* 04th June 2018)

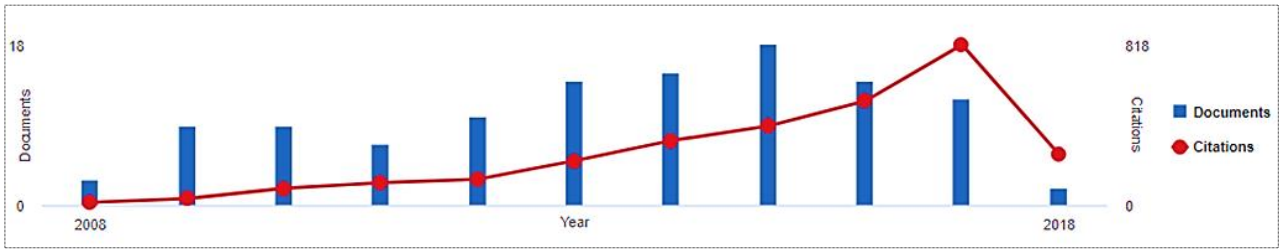
117 articles in ISI peer-reviewed journals, **150** co-authors

H-index: **34** **3180** citations

1 research article as single author, >85 articles as corresponding author

More than 80 % of articles published in ISI journals with IF > 5

Document and citation trends:



Participation in > **50** national/international conferences (**80 oral talks and/or poster presentations**), **5** as a distinguished invited/keynote speaker.

4 International granted patents, **4** research book chapters.

INVITED TALKS/SEMINARS

"Novel Nanostructured Materials For Energy Production And Storage Systems", invited talk at Nanoforum in the session Nanotechnology For Energy 2 (VI Edition, Micro and nanotechnologies: where the research meets business, Torino, June 16-17, 2010).

“Innovative photocured polymer electrolyte membranes for efficient energy storage and conversion systems”, invited talk at the 8th German-Italian-Japanese Meeting of Electrochemists, December 2 - 4, 2016, Kazusa Arc, Chiba, Japan.

“Nano and biosourced electrode/electrolyte components for next-gen energy storage and conversion devices”, invited lecture in the scientific symposium “Bio- and nano-materials for Energy” of the MoDeSt Workshop “Nanomaterials and Bio materials for the next Decade” held in 5-7 July 2017, in Pantelleria Island, Italy.

Invited Keynote Lecturer at the 10th International ECNP Conference on NANOSTRUCTURED POLYMERS AND NANOCOMPOSITES (10th ECNP 2018), organized by the CSIC (Madrid), POLYMAT (San Sebastian) and ECNP that will take place between 3th and 5th of October, 2018 in the Palacio Miramar in San Sebastian, Spain.

<u>Other invited talks/seminars and/or invitations worth to be noticed:</u>

2018 - Invited seminar “New Trends In Energy Storage Materials”, March 16, 2018 at the Cambridge Graphene Center (UK).

2017 – Invited talk “Perché esplodono gli smartphone? – Why do smartphones explode?” at the Festival of Innovation and Science (Festival dell’innovazione e della Scienza), held in Settimo Torinese (Torino, Italy) October 15-22, 2017; the candidate was also interviewed in this respect by the national newspaper “La Repubblica”.

2017 - Invited seminar “New trends in energy storage materials @PoliTO”, December 1, 2017 at the University of Wien, Department of Inorganic Chemistry - functional materials, (Austria).

2017 - Invited seminar “Innovative photocured polymer electrolyte membranes for efficient energy storage and conversion systems”, September 6, 2017 at the Hunter College and CUNY Graduate Center, The City University of New York (US).

2016 - Invited seminar “Nuovi orientamenti nel campo degli accumulatori elettrochimici di energia @POLITO”, June 17, 2016 at the Department of Chemical Sciences of the University of Naples “Federico II” (IT).

2015 - Invited seminar “Materials, Processes and Devices for Energy Storage and Conversion”, June 25, 2017 at the MIT - Massachusetts Institute of Technology in Boston (US).

2015 – Invitation to be Chairman of the morning session of Thursday, September 24, 2015 at the National Conference GEI-2015 Italian Electrochemical Days, held in Bertinoro (BO), 20-24 September 2015.

2013 – Invitation to be Chairman of the session ELECTROCHIMICA and ENERGETICA of Monday, September 23, 2013 at the National Conference GEI-2013 Italian Electrochemical Days, held in Pavia, 22-27 September 2013.

2012 – Invitation to be the Chairman of the session ELECTROCHIMICA and ENERGETICA of Thursday 21 June 2012 at the National Conference GEI-ERA 2012 Italian Electrochemistry Days and Electrochemistry for Environmental Recovery, held in Santa Marina Salina (ME), 17-22 June 2012.

RESEARCH BOOK CHAPTERS

2016 F. Bella, C. Gerbaldi "Natural polymers for dye-sensitized solar cells: electrolytes and electrodes" in *Encyclopedia of polymer science and technology - 4th Edition,* editor: Herman F. Mark, Wiley. ISBN 978-1-118-63389-2, DOI: 10.1002/0471440264.

2012 S. Bianco, A. Chiodoni, C. Gerbaldi, M. Quaglio "Nanostructures for Energy" in *Encyclopedia of nanotechnology,* editor: B. Bushan, Springer, pp. 1803-1813. ISBN 978-9-04819-750-7.

2011 R. Bongiovanni, J.R. Nair, C. Gerbaldi, A.M. Stephan "Membranes for Lithium batteries" in *Advanced membrane science and technology for sustainable energy and environmental applications,* editors: A. Basile, S.P. Nunes, Woodhead Pub., pp. 435-464. ISBN 978-1-84569-969-7.

GRANTED INTERNATIONAL PATENTS

International Patent WO 2011/057646 A1	"Hydrothermal Process for the Production of $LiFePO_4$ Powder". Inventors: S. Bodoardo, C. Gerbaldi, G. Meligrana, F. Di Lupo, N. Penazzi, D. Fontana. Applicants/Owners: Politecnico di Torino, Rockwood Italia S.P.A.
International Patent WO2013/050713 A1	"Method for preparing self-supporting flexible electrodes". Inventors: L. Jabbour, D. Chaussy, D. Beneventi, M. Destro, S. Bodoardo, C. Gerbaldi, N. Penazzi. Applicant/Owner: Institut Polytechnique De Grenoble, Centre National De La Recherche Scientifique.
International Patent WO2015/104727 A1	"Polymer electrolyte membranes and process for the production thereof". Inventors: J.R. Nair, C. Gerbaldi, L. Porcarelli, F. Bella, I. Doberdò, S. Bodoardo, N. Penazzi, C. Capiglia. Applicant/Owner: Lithops S.R.L.
International Patent Application PCT/EP2017/073163	"Composite polymer electrolyte (CPE) membranes for secondary solid state Li-metal cells and process for the production thereof". Inventors: L. Castro, F. Barde, J.R. Nair, F. Marisa, F. Bella, C. Gerbaldi. Applicants/Owners: Toyota Motor Europe and Politecnico di Torino.

TOP 20 SELECTED PUBLICATIONS

1. Bella, F.; Galliano, S.; Falco, M.; Viscardi, G.; Barolo, C.; Grätzel, M.; Gerbaldi, C., Approaching truly sustainable solar cells by the use of water and cellulose derivatives, GREEN CHEMISTRY, pp. 9, 2017, Vol. 19, DOI: 10.1039/C6GC02625G
2. Bella, F.; Muñoz-García, A. B.; Meligrana, G.; Lamberti, A.; Destro, M.; Pavone, M.; Gerbaldi, C., Unveiling the controversial mechanism of reversible Na storage in TiO_2 nanotube arrays: Amorphous versus anatase TiO_2, NANO RESEARCH, pp. 13, 2017, Vol. 10, DOI: 10.1007/s12274-017-1656-6
3. Colò, F.; Bella, F.; Nair, J. R.; Gerbaldi, C., Light-cured polymer electrolytes for safe, low-cost and sustainable sodium-ion batteries, JOURNAL OF POWER SOURCES, pp. 10, 2017, Vol. 365, DOI: 10.1016/j.jpowsour.2017.08.079
4. Zolin, L.; Nair, J. R.; Beneventi, D.; Bella, F.; Destro, M.; Jagdale, P.; Cannavaro, I.; Tagliaferro, A.; Chaussy, D.; Geobaldo, F.; Gerbaldi, C., A simple route toward next-gen green energy storage concept by nanofibres-based self-supporting electrodes and a solid polymeric design, CARBON, pp. 12, 2016, Vol. 107, DOI: 10.1016/j.carbon.2016.06.076
5. Bella, F.; Galliano, S.; Falco, M.; Viscardi, G.; Barolo, C.; Grätzel, M.; Gerbaldi, C., Unveiling iodine-based electrolytes chemistry in aqueous dye-sensitized solar cells, CHEMICAL SCIENCE, pp. 11, 2016, Vol. 7, DOI: 10.1039/C6SC01145D
6. Bella, F.; Griffini, G.; Correa-Baena, J. P.; Saracco, G.; Grätzel, M.; Hagfeldt, A.; Turri, S.; Gerbaldi, C., Improving efficiency and stability of perovskite solar cells with photocurable fluoropolymers, SCIENCE, pp. 4, 2016, Vol. 354, DOI: 10.1126/science.aah4046
7. Porcarelli, L.; Shaplov, A.S.; Salsamendi, M.; Nair, J.R.; Vygodskii, Y.S.; Mecerreyes, D.; Gerbaldi, C., Single-Ion Block Copoly(ionic liquid)s as Electrolytes for All-Solid State Lithium Batteries, ACS APPLIED MATERIALS & INTERFACES, pp. 10, 2016, Vol. 8, DOI: 10.1021/acsami.6b01973

8. Nair, J. R.; Destro, M.; Bella, F.; Appetecchi, G. B.; Gerbaldi, C., Thermally cured semi-interpenetrating electrolyte networks (s-IPN) for safe and aging-resistant secondary lithium polymer batteries, JOURNAL OF POWER SOURCES, pp. 10, 2016, Vol. 306, DOI: 10.1016/j.jpowsour.2015.12.001

9. Porcarelli, L.; Gerbaldi, C.; Bella, F.; Nair, J. R., Super Soft All-Ethylene Oxide Polymer Electrolyte for Safe All-Solid Lithium Batteries, SCIENTIFIC REPORTS, pp. 14, 2016, Vol. 6, DOI: 10.1038/srep19892

10. Bella F.; Leftheriotis G.; Griffini G.; Syrrokostas G.; Turri S.; Grätzel M.; Gerbaldi C., A New Design Paradigm for Smart Windows: Photocurable Polymers for Quasi-Solid Photoelectrochromic Devices with Excellent Long-Term Stability under Real Outdoor Operating Conditions, ADVANCED FUNCTIONAL MATERIALS, pp. 11, 2016, Vol. 26, DOI: 10.1002/adfm.201503762

11. Nair J.R.; Rius G.; Jagdale P.; Destro M.; Tortello M.; Yoshimura M.; Tagliaferro A.; Gerbaldi C., Remarkably stable high power Li-ion battery anodes based on vertically arranged multilayered-graphene, ELECTROCHIMICA ACTA, pp. 7, 2015, Vol. 182, DOI: 10.1016/j.electacta.2015.09.068

12. Colò F.; Bella F.; Nair J. R.; Destro M.; Gerbaldi C., Cellulose-based novel hybrid polymer electrolytes for green and efficient Na-ion batteries, ELECTROCHIMICA ACTA, pp. 6, 2015, Vol. 174, DOI: 10.1016/j.electacta.2015.05.178

13. Nair J.R.; Porcarelli L; Bella F.; Gerbaldi C., Newly Elaborated Multipurpose Polymer Electrolyte Encompassing RTILs for Smart Energy-Efficient Devices, ACS APPLIED MATERIALS & INTERFACES, pp. 11, 2015, Vol. 7, DOI: 10.1021/acsami.5b02729

14. Bella F.; Vlachopoulos N.; Nonomura K.; Zakeeruddin S. M.; Grätzel M.; Gerbaldi C.; Hagfeldt A., Direct light-induced polymerization of cobalt-based redox shuttles: an ultrafast way towards stable dye-sensitized solar cells, CHEMICAL COMMUNICATIONS, pp. 4, 2015, Vol. 51, DOI: 10.1039/C5CC05533D

15. Bella, F.; Colò, F.; Nair, J. R.; Gerbaldi, C., Photopolymer Electrolytes for Sustainable, Upscalable, Safe, and Ambient-Temperature Sodium-Ion Secondary Batteries, CHEMSUSCHEM, pp. 9, 2015, Vol. 8, DOI: 10.1002/cssc.201500873

16. Gerbaldi C.; Nair J.R.; Anbu Kulandainathan M.; Senthil Kumar R.; Ferrara C.; Mustarelli P.; Stephan A.M., Innovative high performing metal organic framework (MOF)-laden nanocomposite polymer electrolytes for all-solid-state lithium batteries, JOURNAL OF MATERIALS CHEMISTRY. A, pp. 7, 2014, Vol. 2, DOI: 10.1039/c4ta01856g

17. Cauda V.; Pugliese D.; Garino N.; Sacco A.; Bianco S.; Bella F.; Lamberti A.; Gerbaldi C., Multi-functional energy conversion and storage electrodes using flower-like Zinc oxide nanostructures, ENERGY, pp. 8, 2014, Vol. 65, DOI: 10.1016/j.energy.2013.12.025

18. Lamberti A.; Garino N.; Sacco A.; Bianco S.; Manfredi D.; Gerbaldi C., Vertically aligned TiO_2 nanotube array for high rate Li-based micro-battery anodes with improved durability, ELECTROCHIMICA ACTA, pp. 7, 2013, Vol. 102, DOI: 10.1016/j.electacta.2013.04.014

19. Gerbaldi C.; Nair J.R.; Ahmad S.; Meligrana G.; Bongiovanni R.; Bodoardo S.; Penazzi N., UV-cured polymer electrolytes encompassing hydrophobic room temperature ionic liquid for lithium batteries, JOURNAL OF POWER SOURCES, pp. 8, 2010, Vol. 195, DOI: 10.1016/j.jpowsour.2009.09.047

20. Jabbour L.; Gerbaldi C.; Chaussy D.; Zeno E.; Bodoardo S.; Beneventi D., Microfibrillated cellulose–graphite nanocomposites for highly flexible paper-like Li-ion battery electrodes, JOURNAL OF MATERIALS CHEMISTRY, pp. 4, 2010, Vol. 20, DOI: 10.1039/c0jm01219j