



National Research
Council of Italy

SCIENTIFIC AND PROFESSIONAL CURRICULUM VITAE

As of January 2022

Nicola Armaroli

Research Director, ISOF-CNR, Bologna, Italy

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SUMMARY

EU format

**PERSONAL INFORMATION**

Name

NICOLA ARMAROLI

Nationality / Date of Birth

Italian / September 2nd, 1966

Marital status

Married, 3 children

Affiliation

**ISTITUTO PER LA SINTESI ORGANICA E LA FOTOREATTIVITÀ
CONSIGLIO NAZIONALE DELLE RICERCHE (CNR)**

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Webpage

<http://www.isof.cnr.it/armaroli-nicola>**PROFESSIONAL EXPERIENCE**

- 2007- present
- 2002-2006
- 1997-2001
- 1996-1997
- 1995-1996
- 1994

CNR Research Director, Istituto per la Sintesi Organica e la Fotoreattività
 CNR Senior Researcher, Istituto per la Sintesi Organica e la Fotoreattività
 CNR Researcher, Istituto per la Fotochimica e le Radiazioni d'Alta Energia
 Post-Doc, University of Bologna
 Post-Doc, Istituto per la Fotochimica e le Radiazioni d'Alta Energia
 Post-Doc, Center for Photochemical Sciences, Bowling Green State University, Ohio, USA

EDUCATION AND TRAINING

- 1991-1994
- 1985-1990
- 1980-1985

University of Bologna, Ph.D. in Chemical Sciences
 University of Bologna, Laurea in Chemistry, 110/110 *magna cum laude*
 Liceo Classico Statale "Marco Minghetti", Bologna, 60/60

AWARDS & RECOGNITIONS

- 2019
- 2019
- 2017
- 2017
- 2009
- 2001

Member of the Italian National Academy of Sciences
 Chemistry Prize Ravani-Pellati of the Turin Academy of Sciences
 Gold Medal "Enzo Tiezzi" of the Italian Chemical Society
 Fellow of the Royal Society of Chemistry (Cambridge, UK)
 National Galileo Prize for Science Dissemination
 Grammaticakis-Neumann International Prize in Photochemistry

MEMBERSHIPS

Italian Chemical Society, American Chemical Society, Royal Society of Chemistry, European Photochemistry Association

**CONSULTANT
(SELECTION)**

European Commission, Italian Government, European Science Foundation, U.S. Department of Energy, Trinity College Dublin, Swiss/Austrian/Israel/Irish National Science Foundations, DFG (Germany), Research Foundation Flanders (Belgium), American Petroleum Fund, RSC

| | |
|--|--|
| REFeree | Nature Publishing Group, AAAS, ACS, RSC, Wiley-VCH, Elsevier, T&F |
| MANAGEMENT ACTIVITIES (SELECTION) | |
| • 2018 - | Executive Board of EucHeMS, elected member |
| • 2015 - | Head , PHEEL - Photonics for Health, Energy and Life Care, CNR-ISOF |
| • 2014 - | Director , Sapere, the first Italian science magazine, established in 1935 |
| • 2013 - | Head , Comessa MACOL - Advanced Materials for the Conversion of Light Energy, CNR-ISOF |
| • 2011 - 2017 | Chairman , Working Party on Chemistry and Energy, European Association for Chemical and Molecular Sciences (EuCheMS) |
| • 2000 - | Coordinator or CNR Principal investigator of national and international scientific projects |
| EDITORIAL APPOINTMENTS | |
| • 2014 - | Editorial Board of Chemistry – A European Journal (Wiley-VCH) |
| • 2013 - | Associate Editor of Photochemical & Photobiological Sciences (RSC) |
| • 2013 - | Editorial Board of Polyhedron (Elsevier Science) |
| RESEARCH TOPICS | <ul style="list-style-type: none"> ○ Luminescent materials ○ Solar energy conversion ○ Photoactive multicomponents arrays ○ Functional carbon nanostructures ○ Energy transition |
| INVITED LECTURES, 2000-2021 | > 200 (Conferences, Universities, Research Centers, Institutions, ...) |
| SCIENTIFIC PAPERS | |
| Intl. Journals & Book Chapt. | 216 |
| Italian Journals & Book Chapt. | 28 |
| Patents | 1 |
| Google Scholar Profile | http://scholar.google.com/citations?user=2fBm2Z8AAAAJ |
| Researcher ID profile | http://www.researcherid.com/rid/B-9094-2009 |
| BOOKS | 8 (3 in English, 5 in Italian, 1 translated in Chinese) |
| BIBLIOMETRIC DATA (AS OF JANUARY 2022) | <p>Google Scholar Overall Citations: > 19500; h-index: 70</p> <p>Scopus Overall Citations: > 15700 (78,1 cit/art); h-index: 62</p> <p>Web of Science Overall Citations: > 15100 (73.3 cit/art); h-index: 62</p> <p>He is one of the most cited 100,000 scientists worldwide including all disciplines (ranking # 15453, standardized citation metrics), which represents about 1.5% of the total number of researchers in science databases, see this paper.</p> |
| MAIN CURRENT COLLABORATIONS | CNRS (Strasbourg and Toulouse, France), University of Vienna (Austria), University of Bologna (IT), University of Ferrara (IT), ICIQ (Tarragona, Spain), CONICET (La Plata, Argentina) |

SCIENTIFIC ACTIVITY

RESEARCH

My scientific activity is concerned with the photochemistry and photophysics of supramolecular materials, carbon nanostructures and coordination compounds (Cu(I), Ir(III), Ru(II), Eu/Tb/Yb/Nd/Er(III)) with focus on luminescence, light harvesting, and photoinduced energy- and electron-transfer. Over my career I have carried out influential work in the fields of photochemistry of complex systems (catenanes, knots, rotaxanes, dendrimers), light-induced molecular motions, Cu(I) phosphine and phenanthroline complexes, multicomponent assemblies containing fullerenes, carbon nanotubes, luminescent coordination compounds, and supramolecular photoactive nanomaterials. This research is of interest both in fundamental science and technological applications such as solar energy conversion, novel materials for lighting, bioimaging and remote sensing. In recent years I have worked on (i) photoactive supramolecular photosynthetic models based on fullerene scaffolds; (ii) luminescent Ir(III) and Cu(I) complexes for light emitting electrochemical cells and photoredox catalysis; (iii) novel approaches to the dispersion of carbon nanotubes in organic solvents and aqueous media; (iv) exohedral and endohedral functionalization of carbon nanotubes with luminescent complexes; (v) preparation of supramolecular materials of predetermined shape and dimension via hydrogen bonding; (vi) systems for the calibration of a satellite that detects the fluorescence of terrestrial vegetation. Across over 20 years I have also deeply investigated the energy system in the context of the decarbonisation of the global economy, also in relation to resource scarcity. On this topic, I serve as an advisor for national and international institutions and companies.

AWARDS

- **2019** Elected Member of the Italian National Academy of Sciences
- **2019** Chemistry Prize Ravani-Pellati of the Turin Academy of Sciences
- **2017** Gold Medal "Enzo Tiezzi" of the Italian Chemical Society
- **2017** Fellow of the Royal Society of Chemistry (Cambridge, UK)
- **2017** Madesimo Prize
- **2009** National Galileo Prize for Science Dissemination
- **2001** Grammaticakis-Neumann International Prize in Photochemistry

APPOINTMENTS

- **Appointed member of the WWF Italy Scientific Board**, 2020 - present
- **Elected Member of the Executive Board**, European Chemical Society (EuChemS), 2018 - present
- **Head**, Research Unit PHEEL - Photonics for Health, Energy and Life Care
CNR-ISOF, 2015 - present
- **Head**, Comessa MACOL - Advanced Materials for the Conversion of Light Energy
CNR-ISOF, 2013 - 2015
- **Director**, *Sapere*, the first Italian science magazine, established in 1935, 2014 - present

- **Chairman**, Working Party on Chemistry & Energy, European Chemical Society, 2011 - 2017
- **Vice-Chair**, Energy Science & Technology Conference, Karlsruhe, Germany, May 2015
- **Member of the Scientific Jury**, Galileo Prize for Science Dissemination, 2014 - 2017
- **Member of the Consulting Panel**, National Board *Secure, Clean and Efficient Energy* Horizon 2020, 2014-present
- **Member of the Scientific Committee**, European Energy Conference, 2011-2015
- **Member of the Scientific Committee**, National Conference on Supramolecular Chemistry, 2010 - present
- **Member of the Scientific Committee**, Enerchem Conference and International School, 2015 - present
- **Member elected of the Institute Board Committee**, ISOF-CNR, 2010 - present
- **Appointed EuCheMS Delegate at the “Missions on Circular Economy” of the European Commission**, Santiago (Chile) and Beijing (China) in 2016, Medellin (Colombia) in 2017, Yokohama (Japan) and Jakarta (Indonesia) in 2018.
- **Member of the board**, Italian Group of Photochemistry, 1999-2001
- **Chairman**, FISS 2011 International Summer School - Advanced Physical Methods for Organic, Inorganic, and Hybrid Materials, 23-27 May 2011
- **Chairman**, FISS 2010 International Summer School – Supramolecular Chemistry in Materials Science, Krutyn (Poland), 15-21 June 2010
- **Member of the International Scientific Advisory Board**: “*Frontiers in Molecular Optoelectronics and Organic Light Emitting Diodes (OLEDs)*”, International Summer School, Krutyn (Poland), 27 May – 2 June 2008
- **Member of the Scientific Committee** “*Porte Aperte sulla Ricerca*”, VIII and IX National Weeks of Science – Ministry of Scientific Research, Bologna, Area della Ricerca - CNR, Bologna, March 1998 and 1999
- **Member of the Library Committee**, Area della Ricerca – CNR, Bologna, 1997-2003

EDITORIAL BOARDS OF INTERNATIONAL JOURNALS

- **Associate Editor**, Photochemical & Photobiological Sciences (Springer Nature), 2013-present
- **Member of the Editorial Board**, Chemistry-A European Journal (Wiley-VCH), 2014-present
- **Member of the Editorial Board**, Polyhedron (Elsevier Science), 2013-present

COORDINATOR OF INTERNATIONAL PROJECTS

- **CNR-CNRS D10-GREEN Italian-French Joint Laboratory, 2021-2023**
d¹⁰ Metal Architectures for Green Lighting, Photocatalysis and Remote Sensing, in cooperation with CNRS Strasbourg, France (Dr. Jean-François Nierengarten)
- **Bilateral project CNR-CONICET (Argentina), 2015-2017**
Carbon Dioxide Reduction on Photocatalytic Nanomaterials, In cooperation with INIFTA – La Plata

- **FP7 MC-IIF, European Commission, 2011-2013**
 π -Electronic Gel Hybrids: Towards Smart Photoactive Nanomaterials (GELBRID)
- **FP7 MC-ITN, European Commission, 2008-2012 (10 industrial and academic units across EU)**
Cavity confined Luminophores for Advanced Photonic Materials (FINELUMEN)
- **Bilateral Project of S&T Cooperation, Italian Ministry of Foreign Affairs and Indian Department of Science and Technology, 2005-2007**
Design of Supramolecular Systems and Nanostructures for the Development of New Luminescent Materials: Synthesis and Study of Light Induced Properties. In cooperation with Photosciences and Photonics Group, Regional Research Laboratory (CSIR), Trivandrum (India)
- **Bilateral project CNR-CNRS (France), 2000-2001**
Fullerene Supramolecular Systems for Solar Energy Conversion. In cooperation with CNRS - Strasbourg.

CNR SCIENTIST IN CHARGE: NATIONAL AND INTERNATIONAL PROJECTS

- **H2020 RIA-CONDOR 2020-2024**
Combined Sun-Driven Oxidation and CO₂ Reduction for Renewable Energy Storage (WP3 leader, Photophysics and Electrochemistry)
- **H2020 CSA-FET Flagship SUNRISE 2019-2020**
Solar Energy for a Circular Economy (WP1 Leader, Strategy and Structuring)
- **CNR – National Flagship Project NANOMAX 2013-2018**
Integrable sensors for pathological biomarkers diagnosis (N-CHEM)
- **PRIN - MIUR 2013-2015**
Integrated supramolecular technologies for chemical information processing: advanced molecular devices and materials (INFOCHEM)
- **FP7 STREP, European Commission 2010-2012**
Cost-Efficient Lighting devices based on Liquid Processes and Ionic Organometallic Complexes (CELLO)
- **FP6 RTN, European Commission 2006-2010**
Supramolecular Hierarchical Self-Assembly of Organic Molecules onto Surfaces towards Bottom-up Nanodevices (PRAIRIES)
- **FP6 IP, European Commission 2004-2008**
High Brightness OLEDs for ICT & Next Generation Lighting Applications (OLLA)
- **FP5 ITN, European Commission 2002-2006**
Fullerene-based Advanced Materials for Optoelectronic Utilizations (FAMOUS)
- **COST D11 Supramolecular Chemistry, 1999-2003**
New Aspects of Supramolecular Photochemistry: from Light Harvesting Arrays to Molecular Machines

ORGANIZATION OF CONFERENCES AND SCHOOLS

- **The Lithium Element – Enabler of the Energy Transition**, EuChemS webinar, December 2021
- **Quarantascienza – Scientists Online**, Italian National Academy of Sciences, Oct-Dec 2021
- **The Carbon Element – Key towards a Sustainable Society**, EuChemS webinar, April 2021
- **5th EuCheMS Conference - Session on Energy Materials**, Istanbul (Turkey), September 2014
- **3rd European Energy Conference**, Budapest (Hungary), October 2013
- **15th Congress of the European Society for Photobiology**, Liege (Belgium), September 2013, Symposium *Powering the Future with Solar Energy*
- **2nd European Energy Conference**, Maastricht (The Netherlands), April 2012
- **Supramolecular and Plastic Electronics International School**, Stresa (Italy), April 2008
- **13th International Symposium on Photochemistry and Photophysics of Coordination Compounds (XIII ISPPCC)**, Lipari (Italy), June 1999
- **3rd National Conference on Supramolecular Chemistry**, Rimini (Italy), September 1997

INVITED LECTURES

- International Conferences and Institutions -

- **8th EuChemS Chemistry Congress**, Lisbon (Portugal), September 2022, **Plenary Lecture**
- **Congreso Futuro – Senate of Chile**, online, January 2022
- **COP26, Methane Pavillon**, Glasgow (UK), November 2021
- **# All for Climate, Pre-COP 26, Green Hydrogen Development**, Milan, September 2021, **Opening lecture**
- **International Renewable Energy Agency and ENEL Foundation - Youth Webinar**, July 2021, **Ice-Breaking Speech**
- **The Italian Embassy in Paris meets the International Energy Agency**, online, April 2021
- **EU Parliament Workshop “The Value is on Circularity”**, online, November 2020
- **2nd Noah and Infusion International School**, online, October 2020, **Opening lecture**
- **Richmond Energy International Business Forum**, Milan (Italy), July 2020
- **Italian Embassy in London and Italian Institute of Culture**, London (UK), October 2019
- **26th Conference of the Portuguese Chemical Society**, Porto (Portugal), July 2019, **Plenary Lecture**
- **Institute for Advanced Studies at Aix-Marseilles (IMÉRA)**, Marseille, France, November 2018
- **Italian Institute of Culture**, Hamburg, Germany, May 2018
- **Alexander Von Humboldt Foundation Meeting**, University of La Tuscia, Viterbo (Italy), June 2017,

- **2nd International Conference on Chromogenic and Emissive Materials**, Caparica (Portugal) September 2016, **Plenary Lecture**
- **XXVI IUPAC Symposium on Photochemistry**, Osaka (Japan), April 2016, **Plenary Lecture**
- **42nd National Convention - South African Chemical Institute**, Durban (South Africa), December 2015, **Plenary Lecture**
- **EuCheMS Workshop “Protecting Endangered Elements”**, Brussels (Belgium), September 2015
- **1st World Convention of the Alumni of the University of Bologna**, June 2015
- **5th International Youth Conference on Energy**, Pisa (Italy) May 2015, **Plenary Lecture**
- **Chemistry for the Future of Europe - Energy, Food, Environment**, University of Rome “La Sapienza”, Italy, November 2014, **EuCheMS Lecture**
- **Trieste NEXT, International Exhibition of Scientific Research**, University of Trieste, September 2014, **Inaugural Event**
- **225th Meeting of the Electrochemical Society**, Orlando (USA), May 2014
- **15th Congress of the European Society for Photobiology**, Liege (Belgium), September 2013
- **Ettore Majorana Center, NATO Advanced Study Institute**, Erice (Italy), July 2013
- **Royal Society of Chemistry / Singapore National Institute of Chemistry: Joint Symposium on Inorganic Chemistry**, Singapore, January 2013, **Plenary Opening Lecture**
- **221th Meeting of the Electrochemical Society**, Seattle (USA), May 2012
- **European Parliament, STOA Workshop *Chemistry for a Better Life***, Brussels (Belgium), November 2011
- **European Parliament - Industry, Research & Energy Committee**, Brussels (Belgium), June 2011
- **FISS 2011, Advanced Physical Methods for Organic, Inorganic and Hybrid Materials**, Lochow, Poland, May 2011
- **Forum in Solar-Electrical Energy Systems (SEES): Technologies for Benign and Perpetual Power**, Abu Dhabi (United Arab Emirates), March 2011
- **e-WISPOC - European Winter School on Physical Organic Chemistry**, Bressanone (Italy), February 2011
- **10th National Meeting on Photochemistry**, Porto (Portugal), December 2010, **Plenary lecture**
- **XXIII IUPAC Symposium on Photochemistry**, Ferrara (Italy), July 2010, **Keynote lecture**
- **European Energy Conference 2010**, Barcellona (Spain), April 2010, **Plenary lecture**
- **Chimie Supramoléculaire - Journées Scientifiques en l'honneur de Jean-Pierre Sauvage**, Strasbourg (France), November 2009
- **213th Meeting of the Electrochemical Society**, San Francisco (USA), May 2009
- **Solar Biofuels 2008**, Bielefeld (Germany), August 2008, **Opening lecture**
- **Supramolecular and Plastic Electronics International School**, Stresa (Italy), April 2008
- **211th Meeting of the Electrochemical Society**, Chicago (USA), May 2007

- **European Science Foundation INIF Workshop on Clean Solar Fuels**, Parsberg (Germany), March 2007
- **Electmol '06, Third Meeting on Molecular Electronics**, Grenoble (France), December 2006
- **209th Meeting of the Electrochemical Society**, Denver (USA), May 2006.
- **Central European Conference on Photochemistry**, Bad Hofgastein (Austria), March 2006, **Plenary lecture**
- **11th Congress of the European Society for Photobiology**, Aix-les-Bains (France), September 2005
- **207th Meeting of the Electrochemical Society**, Quebec City (Canada), May 2005
- **European Materials Research Society Meeting**, Strasburgo (France), May 2004
- **205th Meeting of the Electrochemical Society**, San Antonio, (USA), May 2004
- **3rd Trivandrum International Symposium on Recent Trends in Photochemical Sciences**, Trivandrum (India), January 2004
- **Annual Meeting of the International Society for Optical Engineering (SPIE), Workshop on Nanotechnology in Polymeric Smart Materials**, San Diego (USA), August 2003, **Plenary lecture**
- **203rd Meeting of the Electrochemical Society**, Paris (France), April 2003
- **Swiss Federal Institute of Technology (ETH)**, Zurich (Switzerland), March 2002
- **American Chemical Society Southwest Annual Meeting**, San Antonio (USA), October 2001
- **6th FIGIPS Meeting, European Mediterranean Conference in Inorganic Chemistry**, Barcelona (Spain), July 2001
- **6th International Conference on Solar Energy Storage and Applied Photochemistry**, Cairo (Egypt), April 2001
- **197th Meeting of the Electrochemical Society**, Fullerene Symposium, Toronto (Canada), May 2000
- **Scientia Europaea n. 4**, Bischoffsheim (France), September 1999
- **CERC 3 Workshop "Supramolecular Chemistry Entering the Nanoworld"**, Enschede (The Netherlands), March 1997
- **11th International Conference on Macrocyclic Chemistry**, Young Scientists Symposium, Montecatini Terme (Italy), June 1996
- **NATO Advanced Workshop on Self-Assembly in Synthetic Chemistry**, Val Morin, Quebec (Canada), May 1996

- National Conferences and Schools -

- **Trieste NEXT- ESOF 2020**, September 2020
- **HorizonChem 2019**, University of Milano-Bicocca, April 2019
- **Annual Conference of the Department of Chemical Sciences & Materials Technologies of the CNR**, Assisi, Italy, September 2018, **Plenary Lecture**
- **26th National Conference of the Italian Chemical Society**, Paestum (Italy), September 2017, **Enzo Tiezzi Gold Metal Lecture**

- **Giacomo Ciamician Summer School**, Sesto (Italy), June 2016
- **ENERCHEM -1 National School**, University of Florence (Italy), February 2016
- **XVII CNC National Conference**, Milano (Italy), October 2015
- **National School on Physical Chemistry: Energy Production, Storage and Conversion**, Otranto (Italy), June 2015, **Opening Plenary Lecture**
- **25th National Conference of the Italian Chemical Society**, Rende, September 2014, **Keynote lecture**
- **University of Bologna**, Bologna (Italy), National School on Photochemistry, June 2013
- **University of Bologna**, Bologna (Italy), Round Table “The dream of Giacomo Ciamician 100 years later”, October 2012
- **9th National Conference on Supramolecular Chemistry**, Parma, September 2009, **Plenary lecture**
- **Giacomo Ciamician, Genio della Chimica e Profeta dell'Energia Solare** – Historic and Scientific Workshop in the occasion of the 150th anniversary of the birth of Giacomo Ciamician- Department of Chemistry, University of Bologna, September 2007
- **4th National Conference on Photochemistry and Photobiology**, Maratea, June 2007, **Plenary lecture**
- **University of Bologna**, VB70 International Symposium, Bologna, December 2006
- **20th National Conference of the Italian Chemical Society**, Rimini, June 2000

- *Universities and Research Centers* -

- **University of Trieste, Summer School on Energy Giacomo Ciamician**, June 2022
- **Università Statale di Milano, The Chemists' Interactions**, January 2022
- **ENEA - National Agency for New Technologies, Energy and Sustainable Economic Development** Bologna (Italy), December 2021
- **University of Milano - Bicocca** (Italy), November 2021
- **Collegio Einaudi, University of Turin** (Italy), October 2021
- **University of Milano - Bicocca** (Italy), November 2020
- **University of Trieste** (Italy), August 2020
- **University of Camerino** (Italy), June 2020
- **Scuola Superiore**, University of Catania (Italy), April 2020
- **Scuola Normale Superiore**, Pisa (Italy), November 2019
- **University of Messina** (Italy), Department of Chemical Sciences, May 2019
- **University of Milano - Bicocca** (Italy), April 2018
- **University of Milano - Bicocca** (Italy), Bicocca Foundation, July 2018
- **University of Catania** (Italy), Department of Chemistry, April 2018
- **University of Milano** (Italy), Department of Chemistry, December 2017

- **University of Salerno** (Italy), Department of Chemistry and Biology, November 2017
- **American University of Beirut**, Lebanon, October 2017
- **Collegio Ghisleri** (Pavia, Italy), May 2017
- **University of Bologna** (Italy), Department of Industrial Chemistry, May 2017
- **University of St. Andrews** (United Kingdom), April 2017
- **National University of La Plata** (Argentina), CONICET-INIFTA, March 2017
- **Italian Institute of Technology** (Italy), Genoa Central Headquarters, January 2017
- **University of Bordeaux** (France), Institut des Sciences Moléculaires, November 2016
- **University of Kyoto** (Japan), Department of Molecular Engineering, April 2016
- **Masterclass University of Trieste** (Italy), February 2016
- **University of Basel** (Switzerland), October 2015
- **University of Messina**, International Year of Light: Lights on the Strait, April 2015
- **Sacconi Spring Seminar**, University of Florence and CERM (Italy), March 2015
- **University of Strasbourg** (France), Institut de Science et d'Ingénierie Supramoléculaires, July 2014
- **University of Namur** (Belgium), Namur Advanced Research College, June 2014
- **University of Catania** (Italy), Department of Chemistry, March 2014
- **University of Milano Bicocca** (Italy), School of Chemical Science & Technology, January 2014
- **University of Padova** (Italy), Scuola Galileiana di Studi Avanzati, December 2013
- **University of Torino** (Italy), Agorà Scienza, November 2013
- **University of Sheffield** (United Kingdom), Department of Chemistry, September 2013
- **University of Sheffield** (United Kingdom), E-Futures Doctoral Training Centre in Interdisciplinary Energy, September 2013
- **University of Bologna and Municipality of Bologna** – Scientists Talk with Humanists, April 2013
- **European XFLS Facility**, Hamburg (Germany), January 2013
- **University of Nantes**, Faculté des Sciences et des Techniques, Nantes (France), October 2012
- **CNR, Area della Ricerca di Pisa** (Italy), November 2011
- **University of Valencia** (Spain), Institute of Molecular Sciences, May 2011
- **University of Trieste** (Italy), Department of Chemical Sciences, March 2010
- **University of Palermo** (Italy), Palermo Scienza – Esperienza Insegna, February 2009
- **CNR - Area della Ricerca di Bologna**, Christmas Lecture, December 2008
- **University of Geneva** (Switzerland), Department of Organic Chemistry, April 2008
- **University of Parma and Provincia di Parma** (Italy) - Scientiae Munus, March 2008
- **University of Namur** (Belgium), Department of Chemistry, January 2008
- **University of Bordeaux** (France), Department of Chemistry, November 2007

- **Argonne National Laboratory**, Argonne (IL, USA), Chemical Sciences and Engineering Division, May 2007
- **Council of Scientific and Industrial Research (CSIR)**, Photoscience and Photonics Division, Trivandrum (India), March 2006
- **Indian Institute of Science**, Bangalore (India), March 2006
- **National Institute of Energy & Environment (ENEA)**, Bologna (Italy), November 2005
- **CNR - Area della Ricerca di Bologna**, Campus Highlight, June 2004
- **University of Texas at Arlington**, (TX, USA), Department of Chemistry, May 2004
- **University of Lausanne** (Switzerland), Institute of Condensed Matter Physics (IPMC), Department of Physics, June 2003
- **Ecole Polytechnique Fédéral de Lausanne** (Switzerland), *Supramolecular Chemical Systems: From Design to Functionality*, October 2002, **Grammaticakis-Neumann International Prize Lecture**
- **Swiss Federal Institute of Technology (ETH)**, Zurich (Switzerland), March 2002.
- **University of Amsterdam** (The Netherlands), Department of Chemistry, July 2000
- **University of Bologna**, Department of Chemistry, March 2000
- **University of Strasbourg** (France), Institut de Physique et Chimie des Matériaux, November 1998
- **CNR - Area della Ricerca di Bologna**, March 1998
- **CNR, Area della Ricerca di Bologna**, May 1997

- *Academies and Societies* -

- **Torino Academy of Sciences**, May 2022
- **Torino Academy of Sciences**, February 2022
- **Istituto Lombardo Accademia di Scienza e Lettere**, Jan-Feb 2022
- **Italian National Academy of Sciences (dei 40)**, Rome (Italy), November 2021
- **Italian National Academy of Sciences (dei 40)**, Rome (Italy), **Inaugural Prolusion** as a new member of the Academy, December 2020
- **Italian National Academy of Sciences (dei 40)**, Rome (Italy), November 2019
- **Accademia Nazionale del Lincei**, Rome (Italy), October 2018
- **Italian National Academy of Sciences (dei 40)**, Bologna (Italy), September 2017
- **Bologna Academy of Sciences**, Bologna (Italy), December 2014
- **Bologna Academy of Sciences**, Bologna (Italy), February 2009
- **Petrarca Academy**, Arezzo (Italy), November 2008
- **Société Chimique de Geneve**, Geneve (Switzerland), April 2008

- *Other Invited (short selection)* -

- **Richmond Energy Business Forum**, March 2022

- **Fondazione I Lincei per la Scuola**, March 2022
- **Darwin Day**, Bologna, February 2022
- **Confartigianato Varese**, January 2022
- **Science Festival**, Genova, October 2021
- **ASVIS – Associazione Italia Sviluppo Sostenibile**, October 2021
- **Aperiscienza - Researchers' Night**, University of Bologna, September 2021
- **Festivaletteratura**, Mantova, September 2021
- **Italia Solare**, June 2021
- **Club Alpino Italiano**, June 2021
- **Rotary Club International**, Bari, April 2021
- **Fondazione I Lincei per la Scuola**, March 2021
- **Festival of Science and Philosophy**, Foligno, March 2021
- **CICAP Festival**, Padova, October 2020
- **Rotary Club International**, Bologna, November 2020
- **UK Embassy in Italy**, Rome, July 2020
- **Fondazione Lanza**, Padova, April 2020
- **Prepararsi al Futuro**, Torino, January 2020
- **Blue E-Mobility Days**, Milano, April 2019
- **Fleet Manager Academy**, Milano, March 2019
- **Prepararsi al Futuro**, Torino, February 2019
- **Facoltà Teologica dell'Emilia Romagna**, Bologna, June 2018
- **Festival della Sostenibilità Energetica**, Mantova, April 2018
- **Annual Meeting of the Association of the Italian Science Journalists (UGIS)**, Piacenza, December 2017
- **The Researchers' Night, Marino Golinelli Foundation**, Bologna, September 2017
- **Biennale Democrazia**, Torino, April 2017
- **Istituto per la Storia e le Memorie del '900 "F. Parri"**, Bologna, February 2015 and 2017
- **Università Aperta**, Imola (BO), March 2014
- **Museum of the Industrial Heritage**, Bologna, November 2013
- **Science Festival**, Bergamo, October 2013
- **Science Festival**, Cagliari, November 2012
- **Project Management Institute (c/o ENI)**, Rome, February 2010
- **Science Festival**, Genova, October 2011
- **Barilla Center**, Parma, October 2009
- **Municipality of Mestre** (Venice), October 2009

- **Literature Festival**, Mantova, September 2009
- **Regional Museum of Natural Sciences**, Torino, June 2009
- **Municipality of Vigevano**, Pavia, April 2009
- **Science Festival**, Genova , November 2008
- **Confederazione Generale Italiana del lavoro (CGIL)**, Rome, July 2008
- **Cassa di Risparmio di Cesena**, October 2007
- **Fondazione Ferrero**, Alba (Cuneo, Italy), May 2007
- **Casa della Cultura**, Milan, October 2007

VOLUME EDITOR

- **Topics in Current Chemistry, Springer (Berlin)** [*Photoluminescent Materials and Electroluminescent Devices*](#), Vol. 374, 2017 (ISBN: 978-3-319-59302-9)

AWARDS AND HABILITATIONS

- **Chemistry Prize Ravani-Pellati of the Torino Academy of Sciences**, 2019
- **Gold Medal “Enzo Tiezzi” of the Italian Chemical Society**, 2017
- **Premio Madesimo**, 2017
- **FRSC, Fellow of the Royal Society of Chemistry** (Cambridge, UK), 2017
- **Full professor in Physical Chemistry – Abilitazione Scientifica Nazionale** 2012
- **Full professor in General and Inorganic Chemistry – Abilitazione Scientifica Nazionale** 2012
- **Premio Letterario Galileo per la Divulgazione Scientifica** - 2009
- **Grammaticakis-Neumann International Prize in Photochemistry –** 2001

REFEREEING AND CONSULTING

INTERNATIONAL JOURNALS

- **Nature Publishing Group, London (UK)**
- **American Association for the Advancement of Science (USA)**
- **American Chemical Society, Washington D.C. (USA)**
- **Royal Society of Chemistry, Cambridge, (UK)**
- **Wiley-VCH, Weinheim (Germany)**
- **Elsevier Science, Amsterdam (The Netherlands)**
- **Other Publishers:** Springer, Dekker, IUPAC, World Scientific Publishing, American Scientific Publishers, Hindawi, EPJ.

INSTITUTIONS AND COMPANIES

- **European Commission**, Brussels (Belgium)

- **Italian Ministry of Infrastructures and Sustainable Mobility (MIMS)**, Rome
- **European Science Foundation**, Strasbourg (France)
- **U.S. Department of Energy**, Washington, D.C. (USA)
- **Israel Ministry of Research**, Tel Aviv
- **Research Grants Council**, Hong Kong
- **Canada Excellence Research Chair Program**, Ottawa
- **German Research Foundation (DFG)**, Bonn
- **Austrian Science Fund (FWF)**, Vienna
- **Austrian Academy of Sciences**, Vienna
- **Swiss National Science Foundation**, Bern
- **Polish National Science Center**, Warsaw
- **Science Foundation Ireland**, Dublin
- **Research Foundation Flanders (FWO)**, Brussels (Belgium)
- **International Center for Frontier Research in Chemistry**, Strasbourg (France)
- **Comisión Nacional de Investigación Científica y Tecnológica (CONICYT)**, Santiago (Chile)
- **American Chemical Society - Petroleum Research Fund**, Washington D.C. (USA)
- **Royal Society of Chemistry**, Cambridge (U.K.)
- **Research Promotion Foundation**, (Cyprus)
- **Industrial Research Fund, KU Leuven**, Leuven (Belgium)
- **CEFIC (European Chemical Industry Council)**, Brussels (Belgium)
- **Research Corporation**, Tucson, (AZ, USA)
- **Trinity College**, Dublin (Ireland)
- **University of York**, York (United Kingdom)
- **Nanyang Technological University** (Singapore)
- **University of St. Andrews**, St. Andrews (United Kingdom)
- **American University of Beirut**, Beirut (Lebanon)
- **Italian Ministry of Research**, Rome (Italy)
- **Fondazione Cassa di Risparmio di Verona**, Verona (Italy)
- **Rai-Radiotelevisione Italiana**, Rome (Italy)
- **Mediaset**, Milan (Italy)
- **Fanpage**
- **La7**, Rome (Italy)
- **Il Sole 24 Ore**, Rome (Italy)
- **Zanichelli Editore**, Bologna (Italy)
- **Ferrero Foundation**, Alba (Cuneo, Italy)

- **Center for Innovation on Environmental Sustainability**, Porretta Terme (Bologna, Italy)

INSTITUTIONAL HEARINGS

- **Lower Parliamentary House (Camera dei Deputati), Commissione Attività Produttive**, July 2021
- **Higher Parliamentary House (Senato della Repubblica), Environmental Commission**, May 2004
- **Municipality of Ferrara, Power Plant Commission**, March 2004

COMMITTEES IN FOREIGN UNIVERSITIES

- **PhD Committee, University of Bordeaux** (France), Institut des Sciences Moléculaires, Michael Tsang, December 2016
- **Commission des Habilitation à Diriger des Recherches, ISIS-University of Strasbourg** (France), Dr. Matteo Mauro, July 2014
- **Scientific Site Review at Trinity College Dublin** (Ireland), School of Chemistry, April 2013
- **PhD Committee, University of Namur** (Belgium), Department of Chemistry, February 2013
- **PhD Committee, University of Nantes** (France), Faculty of Sciences, Department of Chemistry, October 2012
- **Commission des Habilitation à Diriger des Recherches, CNRS-University of Bordeaux** (France), Dr. Nathan McClenaghan, November 2007
- **PhD Committee, Swiss Federal Institute of Technology (ETH)**, Zurich (Switzerland), Department of Chemistry, June 2004
- **PhD Committee, University of Uppsala** (Sweden), Department of Physical Chemistry, November 2000

EDUCATIONAL PROJECTS

- **The 150 Years of the Periodic Table**, A national tour for the training of high school teachers (Padova, Milano, Torino, Firenze, Bologna, Desenzano, Napoli, Roma), February-March 2019
- **La Scienza a Scuola**, Zanichelli Publishers, 2016-2022
- **Meet the Scientists Project**, ENEL, 2011 - 2012
- **Scienza Attiva Project**, University of Torino (Italy), 2009 – 2011, 2013
- **Il Linguaggio della Ricerca Project**, CNR-Bologna, 2009 - 2018
- **Progetto Energia**, Provincia di Modena (Italy), 2008

LECTURING AND TUTORING

ACADEMIC LECTURES

- **University of Calabria**, Rende (Italy), May 2021
- **University of Catania**, Collegio Superiore, April 2020
- **University of Bologna**, School of Chemistry, November 2018

- **University of Bologna**, Collegio Superiore, January 2017
- **University of Bologna**, Faculty of Sciences, May 2013
- **University of Bologna**, Faculty of Engineering, December 2012
- **University of Bologna**, Faculty of Sciences, May 2012
- **University of Bologna**, Intefaculty Class on Science and Society, April 2011
- **University of Bologna**, Intefaculty Class on Science and Society, May 2010
- **University of Calabria**, Rende (Italy), PhD School Bernardino Telesio, July 2009
- **University of Bologna**, Intefaculty Class on Science and Society, May 2009
- **University of Bologna**, Faculty of Sciences, May 2009
- **University of Bologna**, Intefaculty Class on Science and Society, March 2009
- **University of Bologna**, Faculty of Industrial Chemistry, January 2009
- **University of Milano-Bicocca**, PhD School in Material Sciences, November 2008
- **S.I.S.S.A., International School for Advanced Studies, Trieste**, Master on Science Communication, January 2007, November 2007, November 2008
- **University of Pisa**, Faculty of Economy, April 2007
- **OLLA Project International Tutorial School**, Pommersfelden (Germany), April 2005
- **University of Bologna**, Department of Chemistry, Academic Years 2003-2004 e 2004-2005
- **National School on Photochemistry**, Department of Chemistry, University of Bologna, September 1998
- **XXV National School of Crystallography**, Perugia (Italy), September 1996

TUTORING OF PhD, MASTER, BACHELOR STUDENTS

- **PhD Thesis in Chemical Sciences**, Federica Ruani: "Fuel production by CO₂ conversion.", University of Bologna, 2021-2024 (Funded by EC project CONDOR).
- **Master Thesis in Chemistry**, Cecilia Bruschi: "Unconventional Cyclometallated Ir(III) Complexes", University of Bologna, 2019
- **PhD Thesis in Chemical Sciences**, Sheng Gao: "Synthesis and characterization of materials for enhanced light harvesting in solar energy conversion devices.", University of Bologna, 2017-2021 (Funded by the Chinese Scholarship Council).
- **Master Thesis in Chemistry**, Flavia Aleotti: "RGB luminescent Ir(III) complexes", University of Bologna, 2016-2017
- **PhD Thesis in Chemical Sciences**, Enrico Leoni: "Photoactive Dendrimers and Metal Complexes", University of Bologna, 2016-2019
- **Master Thesis in Chemistry**, Maria Grazia La Placa: "Cyclometallated Ir(III) Complexes as Active Materials in Electroluminescent Devices", University of Bologna, 2013

- **PhD Thesis in Chemical Sciences**, Eleonora Pavoni: “Carbon nanotubes for solar energy applications”, in the frame of the Project MIUR-FIRB SUPRACARBON, University of Bologna, 2011-2014
- **PhD Thesis in Chemical Sciences**, Filippo Monti: “Luminescent Iridium Complexes”, in the frame of the project CELLO (STREP, FP7), University of Bologna, 2009-2012
- **PhD Thesis in Chemical Sciences**, Joanna Malicka (Poland): “Photoactive carbon nanomaterials”, in the frame of the project FINELUMEN (MC-ITN, FP7), University of Bologna, 2009-2012
- **Master Thesis** in Chemistry, Luca Ravotto: “Dendrimers for Artificial Photosynthesis”, University of Bologna, 2011
- **Bachelor Thesis** in Industrial Chemistry, Federico Bazzanini: “Photochemistry and Photophysics of Iridium complexes”, University of Bologna, 2011
- **PhD Thesis in Chemical Sciences**: John Mohanraj (India),: “Luminescent Carbon Nanotubes”, in the frame of the project FINELUMEN (MC-ITN, FP7), University of Bologna, 2008-2011
- **Master Thesis** in Chemistry, Yilei Wu, “Photophysics and Photochemistry of Fullerene-Porphyrin Arrays Covalently Linked via Click Chemistry”, University of Bologna, 2009-2010
- **Master Thesis** in Industrial Chemistry, Filippo Monti, “Synthesis and Photophysics of New Cu(I)-Tetrazolate Complexes”, University of Bologna, 2008-2009
- **Master Thesis** in Chemistry of Materials, Margherita Bolognesi: “Photoinduced Processes in Supramolecular Systems Containing Fullerenes and Porphyrins”, University of Bologna, 2007-2008
- **Bachelor Thesis** in Industrial Chemistry, Filippo Monti: “Photochemistry and Photophysics of Fullerodendrimers”, University of Bologna, 2007
- **PhD Thesis in Chemical Sciences**, Abdelhalim Belbakra (France): “Photoactive Self-Assembled Systems on Surfaces”, in the frame of the project PRAIRIES (MC-RTN, FP6) University of Bologna, 2007-2010
- **PhD Thesis in Chemical Sciences**, Andrea Listorti: “Copper(I) phenanthroline complexes and supramolecular systems containing fullerenes: Photophysics, photochemistry and potential applications in sustainable energy technologies”, in the frame of the project OLLA (IP, FP6), University of Bologna, 2005-2008
- **PhD Thesis in Chemical Sciences**, Gianluca Accorsi: “Trivalent Lanthanide Ions: Luminescence and Applications”, in the frame of the project OLLA (IP, 6th FP), University of Bologna, 2003-2006
- **Master Thesis** in Chemistry, Andrea Listorti: “Photophysics of Complex Systems Containing Cu(I)-Phenanthrolines”, University of Bologna, 2005-2006
- **Master Thesis** in Chemistry, Gianluca Accorsi: “Luminescence Properties of Lanthanide Complexes”, University of Bologna, 1997-1998

TUTORING OF POST-DOC RESEARCHERS

- **Post-doc supervisor**, Dr. Sheng Gao, 2021-2022
-

- **Post-doc supervisor** in the frame of the CNR-CNRS joint laboratory, Dr. Alejandra Saavedra Moncada, 2020-
- **Post-doc supervisor** in the frame of the Bilateral project CNR-CONICET (Argentina) "*Carbon Dioxide Reduction on Photocatalytic Nanomaterials*", Dr. Filippo Monti, 2015-2017
- **Post-doc supervisor** in the frame of the project FIRB SUPRACARBON (MIUR), Dr. Filippo Monti, 2011-2014
- **Post-doc supervisor** in the frame of the project GELBRID (MC-ITN, FP7), Dr. Praveen Vakayil Karthikeyan (India), 2011-2013
- **Post-doc supervisor** in the frame of the project CELLO (STREP, FP7), Dr. John Mohanraj (India), 2011-2013
- **Post-doc supervisor** in the frame of the project FINELUMEN (MC-ITN, FP7), Dr. Yoosaf Karuvath (India), 2009-2011
- **Post-doc supervisor** in the frame of the project PRAIRIES (MC-RTN, FP6), Dr. Yoosaf Karuvath (India), 2008-2009
- **Post-doc supervisor** in the frame of the project FAMOUS (MC-RTN, FP5), Dr. John Noel Clifford (Irlanda), 2004-2005
- **Post-doc supervisor** in the frame of the project FAMOUS (MC-RTN, FP5), Dr. Yannick Rio (France), 2002-2003

LECTURING IN SCHOOLS

- **Istituto Tecnico "Aldini-Valeriani"**, Bologna, march 2022
- **Liceo Giordano Bruno**, Budrio (BO), February 2021
- **Liceo "Newton"**, Roma, January 2021
- **Liceo "Da Vinci"**, Milano, January 2021
- **Liceo "Massadaglia"**, Verona, December 2020
- **Liceo "Berto"**, Mogliano Veneto (TV), November 2020
- **Istituto Tecnico Tecnologico "Marconi"**, Forlì, November 2020
- **Liceo "Talete"**, Roma, December 2019
- **Liceo "Paleocapa"**, Rovigo, November 2019
- **Istituto di Istruzione Superiore "Roncalli"**, Poggibonsi (SI), December 2018
- **Istituto di Istruzione Superiore "Nobili"**, Reggio Emilia, February 2018
- **Istituto di Istruzione Superiore "Veronese-Marconi"**, Chioggia (VE), November 2017
- **Istituto "A. Avogadro"**, Torino, November 2017
- **Liceo Artistico "Arcangeli"**, Bologna, April 2017
- **Istituto "E. Majorana"**, San Lazzaro di Savena (BO), February 2017, March 2021, March 2022
- **Istituto "C. Balbo"**, Casale Monferrato (AL), January 2017

- Liceo Classico “Virgilio”, Rome, January 2017
- Liceo Scientifico “A. Sabin”, Bologna, December 2016
- Liceo Scientifico “A. Einstein”, Rimini, July 2016
- Istituto Tecnico Belluzzi-Fioravanti, Bologna, February 2015, March 2017
- Liceo Scientifico “A. Oriani”, Ravenna, April 2014
- Istituto Tecnico “Leonardo da Vinci”, Borgomanero (NO), March 2014
- Istituto Magistrale “Tornielli Bellini”, Novara, March 2014
- Liceo Scientifico “Sant’Alberto Magno”, Bologna, March 2014
- Istituto Tecnico “Aldini-Valeriani”, Bologna, February 2014
- Liceo Classico “M. Minghetti”, Bologna; May 2013, June 2014, November 2016
- Secondary Schools in the Province of Ferrara, February 2013
- Abruzzo Secondary Schools, Teramo, November 2012
- Liceo Scientifico “N. Copernico”, Bologna; April 2009, March 2011, February 2012, February 2015
- Istituto Tecnico “E. Mattei”, San Lazzaro di Savena; January 2011, February 2012, February 2013, January 2014
- Liceo Classico “L. Galvani”, Bologna; February 2009, January 2012, March/May 2013, February 2014, January 2015, January 2016, February 2018, March 2019.
- Liceo Ariosto – Science Coffees, Ferrara, April 2011
- Veneto Secondary Schools, Rovigo, March 2011
- Istituto Tecnico “Omar”, Novara, February 2011
- Istituto Tecnico “A. Pacinotti”, Bologna, May 2010
- Liceo Scientifico “I. Nievo”, Padova, March 2010
- Liceo Classico “G. D. Romagnosi”, Parma, February 2009
- Scuola Secondaria Inferiore “E. De Amicis”, Bologna, “December 2008
- Istituto Comprensivo “C. Cavour”, Minerbio, 2004-2005, 2005-2006, 2006-2007, 2007-2008
- Liceo Scientifico “A. Volta”, Riccione (RN), March 2008

INTERVIEWS AND CONTRIBUTIONS ON MASS MEDIA

- **Consultant and science communicator for the general public** on the issues of energy, natural resources and environment, also through contributions on mass media (TV, radio, web, press). He has delivered hundreds of lectures in Italy and abroad and released hundreds of interviews on the media, including RAI – National Italian Broadcasting Corporation, Mediaset, Il Sole 24 Ore, Corriere della Sera, Repubblica, Domani, Il Foglio, Fanpage. Articles, audio and video contributions can be downloaded [here](#) and [here](#) . [Here can be downloaded the Editorials published on Sapere](#), the Science Magazine where I serve as Director.

PAPERS IN INTERNATIONAL JOURNALS AND BOOKS

1. **N. Armaroli**, A. Barbieri
 “[The hydrogen dilemma in Italy’s ecologic transition](#)”
Nat. Italy, **2021**, 10.1038/d43978-021-00109-3
2. M. Marchini, A. Luisa, G. Bergamini, **N. Armaroli**, B. Ventura, M. Baroncini, N. Demitri. E. Iengo, P. Ceroni
 “Giant shape-persistent tetrahedral porphyrin system: light-induced charge separation”
[Chem. Eur. J](#), **2021**, DOI: 10.1002/chem.202102135
3. S. Gao, Y. Gisbert, G. Erbland, S. Abid, C. Kammerer, A. Venturini, G. Rapenne, B. Ventura, **N. Armaroli**
 “Photophysical properties of 1,2,3,4,5-pentaarylcyclopentadienyl hydrotris(indazolyl)borate ruthenium(II) complexes”
[Phys. Chem. Chem. Phys.](#) **2021**, *23*, 17049-17056
4. F. Monti, A. Baschieri, L. Sambri, **N. Armaroli**
 “Excited-State Engineering in Heteroleptic Ionic Iridium(III) Complexes”
[Acc. Chem. Res.](#), **2021**, *59*, 1492-1505
5. A. Baschieri, L. Sambri, A. Mazzanti, A. Carlone, F. Monti, **N. Armaroli**
 “Iridium(III) Complexes with Fluorinated Phenyl-tetrazoles as Cyclometalating Ligands: Enhanced Excited-State Energy and Blue Emission”
[Inorg. Chem.](#) **2020**, *59*, 16238-16250
6. S. Gao, B. Balan, K. Yoosaf, F. Monti, E. Bandini, A. Barbieri, **N. Armaroli**
 “Highly Efficient Luminescent Solar Concentrators Based on Benzoheterodiazole Dyes with Large Stokes’ Shifts”
[Chem. Eur. J.](#) **2020**, *26*, 11013-11023
 Cover page article. Invited paper and hot paper. Special Issue on for the 8th EuChemS Chemistry Conference.
7. F. Monti, A. Barbieri, **N. Armaroli**
 “Battery Electric Vehicles: Perspectives and Challenges”
[Substantia](#) **2019**, *3(2)*, 75-89
 Invited paper, Special Issue on Sustainability and Energy in the occasion of the International Year of the Periodic Table.
8. E. Matteucci, A. Baschieri, L. Sambri, F. Monti, E. Pavoni, E. Bandini, **N. Armaroli**
 “Carbazole-Terpyridine Donor-Acceptor Dyads with Rigid π -Conjugated Bridges”
[ChemPlusChem](#) **2019**, *84*, 1353-1365
 Invited paper, Special Issue on pi-Conjugated Macro(molecules)
9. J.-F. Nierengarten, I. Nierengarten, M. Holler, A. Sournia-Saquet, B. Delavaux-Nicot, E. Leoni, F. Monti, **N. Armaroli**

“Dinuclear Copper(I) Complexes Combining Bis(diphenylphosphanyl)acetylene with 1,10-Phenanthroline Ligands”.

[Eur. J. Inorg. Chem. 2019, 2665-2673](#) - COVER PAGE ARTICLE

10. **N. Armaroli**

"Energy for spaceship Earth", in [“Casting Light on Climate Change” – G. Gioia \(Ed.\)](#)

ETS Publisher, Pisa, 2019, pp. 111-140 – ISBN: 9788846755063

11. **N. Armaroli**

“In my Element: Iridium”

[Chem. Eur. J. 2019, 25, 5104](#) – IYPT 2019 Invited Essay

12. A. Baschieri, F. Monti, **N. Armaroli**, G. Mazzotti, L. Giorgini, L. Sambri, T. Benelli

“Luminescent methacrylic copolymers with side-chain cyclometalated iridium(III) complexes”

[Dyes and Pigments 2019, 160, 188-197](#)

13. E. Leoni, J. Mohanraj, M. Holler, M. Mohankumar, I. Nierengarten, F. Monti, A. Sournia-Saquet, B. Delavaux-Nicot, J.-F. Nierengarten, **N. Armaroli**

“Heteroleptic Cu(I) Complexes Prepared from Phenanthroline and Bis-Phosphine Ligands: Rationalization of the Photophysical and Electrochemical Properties”

[Inorg. Chem. 2018, 57, 15537-15549](#)

14. Y. Troiez, A. D. Finke, F. Silvestri, F. Monti, B. Ventura, C. Boudon, J.-P. Gisselbrecht, W. B. Schweizer, J.-P. Sauvage, **N. Armaroli**, F. Diederich

“Unconventional Synthesis of a Cu^I Rotaxane with a Superacceptor Stopper: Ultrafast Excited-State Dynamics and Near-Infrared Luminescence”

[Chem. Eur. J. 2018, 24, 10422-10433](#)

15. M. Mohankumar, M. Holler, E. Meichsner, J.-F. Nierengarten, F. Niess, J.-P. Sauvage, B. Delavaux-Nicot, E. Leoni, F. Monti, J. M. Malicka, M. Cocchi, E. Bandini, **N. Armaroli**

“Heteroleptic Copper(I) Pseudorotaxanes Incorporating Macrocyclic Phenanthroline Ligands of Different Sizes”

[J. Am. Chem. Soc. 2018, 150, 6291-6299](#)

16. P.-H. Lanoë, J. Chan, A. Groué, G. Gontard, A. Jutand, M.-N. Rager, **N. Armaroli**, F. Monti, A. Barbieri, H. Amouri

“Cyclometalated N-heterocyclic carbene iridium(III) complexes with naphthalimide chromophores: a novel class of phosphorescent heteroleptic compounds”

[Dalton Trans. 2018, 47, 3440-3451](#)

17. E. Matteucci, A. Baschieri, A. Mazzanti, L. Sambri, J. Ávila, A. Pertegás, H. J. Bolink, F. Monti, E. Leoni, **N. Armaroli**

“Anionic Cyclometalated Iridium(III) Complexes with a Bis-Tetrazolate Ancillary Ligand for Light-Emitting Electrochemical Cells”

[Inorg. Chem. 2017, 56, 10584-10595](#)

18. J. Mohanraj, A. Barbieri, **N. Armaroli**, M. Vizuete, F. Langa, B. Delavaux-Nicot, M. Vartanian, J. Iehl, U. Hahn, J.-F. Nierengarten
“Efficient photoinduced energy- and electron-transfer in Zn^{II}-Porphyrin / Fullerene dyads with interchromophoric distance up to 2.6 nm and no wire-like connectivity”
[Chem. Eur. J. 2017, 23, 14200-14212](#)
19. A. Gualandi, D. Mazzarella, A. Ortega-Martínez, L. Mengozzi, F. Calcinelli, E. Matteucci, F. Monti, **N. Armaroli**, L. Sambri, P. G. Cozzi
“Photocatalytic Radical Alkylation of Electrophilic Olefins by Benzylic and Alkyl Zinc-Sulfonates”
[ACS Catal. 2017, 7, 5357–5362](#)
20. A. Nano, M.P. Gullo, B. Ventura, A. Barbieri, **N. Armaroli**, R. Ziesel
“Color-Tunable Heterodinuclear Pt(II)/B(III) and Pt(II)/Ir(III) Arrays with N[^]O-julolidine Ligands”
[Inorg. Chem. 2017, 56, 4807-4817](#)
21. A. Gualandi, E. Matteucci, F. Monti, A. Baschieri, **N. Armaroli**, L. Sambri, P. G. Cozzi,
“Photoredox Radical Conjugate Addition of Dithiane-2-Carboxylate Promoted by an Iridium(III) Phenyl-Tetrazole Complex: A Formal Radical Methylation of Michael Acceptors”
[Chem. Sci. 2017, 8, 1613-1620](#)
22. T. Miletić, E. Pavoni, V. Trifiletti, A. Rizzo, A. Listorti, S. Colella, **N. Armaroli**, D. Bonifazi
“Covalently functionalized SWCNTs as tailored p-type dopants for perovskite solar cells”
[ACS Appl. Mater. Interfaces 2016, 8, 27966-27973](#)
23. A. Baschieri, F. Monti, E. Matteucci, A. Mazzanti, A. Barbieri, **N. Armaroli**, L. Sambri
“A Mesoionic Carbene as Neutral Ligand for Phosphorescent Cationic Ir(III) Complexes”
[Inorg. Chem. 2016, 55, 7912-7919](#)
24. A. Barbieri, E. Bandini, F. Monti, V. K. Praveen, **N. Armaroli**
“The Rise of Near Infrared Emitters: Organic Dyes, Porphyrinoids and Transition Metal Complexes”
[Top. Curr. Chem. 2016, 374, 47](#)
25. **N. Armaroli**, H. J. Bolink
“Luminescence: The Never-Ending Story”
[Top. Curr. Chem. 2016, 374, 44](#)
26. P.-H. Lanoë, J. Chan, G. Gontard, F. Monti, **N. Armaroli**, A. Barbieri, H. Amouri
“Deep-Red Phosphorescent Iridium(III) Complexes with Chromophoric N-Heterocyclic Carbene Ligands: Design, Photophysical Properties, and DFT Calculations”
[Eur. J. Inorg. Chem. 2016, 1631-1634](#)

27. L. Đorđević, T. Marangoni, F. De Leo, I. Papagiannouli, P. Aloukos, S. Couris, E. Pavoni, F. Monti, **N. Armaroli**, M. Prato, D. Bonifazi
“[60]Fullerene–Porphyrin [n]-pseudorotaxanes: Self-Assembly, Photophysics and Third-Order NLO Responses”
[Phys. Chem. Chem. Phys. 2016, 18, 11858-11868](#)
28. **N. Armaroli**, V. Balzani
“Solar Electricity and Solar Fuels: Status and Perspectives in the Context of the Energy Transition”
[Chem. Eur. J. 2016, 22, 32-57](#), 20th Anniversary Invited Review
29. F. Monti, A. Baschieri, E. Matteucci, A. Mazzanti, L. Sambri, A. Barbieri, **N. Armaroli**
“A Chelating Diisocyanide Ligand for Cyclometalated Ir(III) Complexes with Strong and Tunable Luminescence”
[Faraday Discuss. 2015, 185, 233-248](#)
30. F. Monti, **N. Armaroli**
"Molecular Engineering for Solar Energy Conversion and Lighting Materials", Chapter 5 in
[“New Horizons in Nanoscience and Engineering” – D. L. Andrews, J. G. Grote \(Eds.\)](#)
SPIE Press, Bellingham, Washington, **2015**, pp. 191-231 – ISBN: 9781628417951
31. F. Monti, A. Venturini, A. Nenov, F. Tancini, A. D. Finke, F. Diederich, **N. Armaroli**
“Anilino-Substituted Multicyanobuta-1,3-diene Electron Acceptors: TICT Molecules with Accessible Conical Intersections”
[J. Phys. Chem. A 2015, 119, 10677-10683](#)
32. A. Kremer, C. Aurisicchio, F. De Leo, B. Ventura, J. Wouters, **N. Armaroli**, A. Barbieri, D. Bonifazi
“Walking down the Chalcogenic Group of the Periodic Table: From Singlet to Triplet Organic Emitters”
[Chem. Eur. J. 2015, 21, 15377-15387](#)
33. L. Đorđević, T. Marangoni, T. Miletić, J. Rubio-Magnieto, J. Mohanraj, H. Amenitsch, D. Pasini, N. Liaros, S. Couris, **N. Armaroli**, M. Surin, D. Bonifazi
“Solvent Molding of Organic Morphologies Made of Supramolecular Chiral Polymers”
[J. Am. Chem. Soc. 2015, 137, 8150-8160](#)
34. F. Monti, E. Pavoni, **N. Armaroli**
“Nanomaterials for Lighting and Solar Energy Conversion”
[“Nano-Structures for Optics and Photonics: Optical Strategies for Enhancing Sensing, Imaging, Communications and Energy Conversion” – B. Di Bartolo, J. Collins, L. Silvestri \(Eds.\) - NATO Science for Peace and Security Series B: Physics and Biophysics](#)
Springer (Berlin), **2015**, pp. 373-414 – ISBN: 978-94-017-9132-8
35. F. Monti, M. G. I. La Placa, **N. Armaroli**, R. Scopelliti, M. Grätzel, Md. K. Nazeeruddin, F. Kessler

“Cationic Iridium(III) Complexes with Two Carbene-Based Cyclometalating Ligands: Cis Versus Trans Isomers”

[Inorg. Chem. 2015, 54, 3031-3042](#)

36. A. Nano, M.P. Gullo, B. Ventura, **N. Armaroli**, A. Barbieri, R. Ziesel
“Panchromatic Luminescence from Julolidine Dyes Exhibiting Excited State Intramolecular Proton Transfer”
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