



**DEPARTMENT OF  
MATERIALS SCIENCE**

Via Roberto Cozzi, 55  
I-20125 Milano (I)

**Dr. Roberto Nisticò, PhD**  
Assistant Professor (RTD-b)

University of Milano-Bicocca  
E-mail: [roberto.nistico@unimib.it](mailto:roberto.nistico@unimib.it)

*Date and Place of Birth* 04/04/1987, Torino (TO)  
*Nationality* Italian citizenship  
*Gender* Male  
*Address (office)* Department of Materials Science, Via R. Cozzi 55, 20125 Milano (MI), Italy  
*Telephone (office) and E-mail* Ph.: (+39)026448511; E-mail: [roberto.nistico@unimib.it](mailto:roberto.nistico@unimib.it)  
*Personal website* [Roberto Nisticò \(researchgate.net\)](http://Roberto.Nisticò(researchgate.net))  
**Scopus Author ID:** 55224717100; **WOS Researcher ID:** E-5568-2016; **ORCID:** 0000-0001-8986-5542.

### RESEARCH ACTIVITY

Roberto Nisticò (RN) is Fixed-Time Assistant Professor (RTD-b), i.e. tenure track Associate Professor, in General and Inorganic Chemistry at the University of Milano-Bicocca (Department of Materials Science, Italy). Up today, RN published more than 75 papers on renowned international journals (mostly as first and/or corresponding author) and two book chapters. Additionally, RN is member of the Editorial Board of the journal *Inorganics*. The research activity of RN mainly focuses on several aspects at the interface between inorganic chemistry, and materials science, always looking for novel and appealing solutions for a sustainable future. The principal field of interest is the development of magnet-responsive nanomaterials (i.e., iron oxides, ferrites) and other inorganic systems for the environmental remediation of contaminated (waste)water, (photo)catalysis, and energetic applications.

### BIBLIOMETRIC INDICATORS (Scopus Database)

Number of Publications: **77**; Citations: **1817**; H-index: **23**.

### BIBLIOMETRIC INDICATORS (WOS Database)

Number of Publications: **77**; Citations: **1632**; H-index: **23**.

### CAREER

*Feb 2022 – today* Fixed-Time **Assistant Professor** (RTD-b), University of Milano-Bicocca, Milano, Italy  
*General and Inorganic chemistry, CHIM/03 – 03/B1*

*Oct 2020 – Dec 2021* **GMP QC Analyst**, PolyCrystalLine SpA, QC-Unit, Medicina (BO), Italy

*Feb 2019 – Oct 2020* Permanent **Researcher**, Bio-ON SpA, CNS-Unit, Castel S. Pietro Terme (BO), Italy

*Jan 2017 – Feb 2019* Fixed-Time **Researcher** (RTD-a), Polytechnic Institute of Torino, Torino, Italy  
*Materials Science and Engineering, ING-IND/22 – 09/D1*

*Mar 2016 – Jan 2017* **Post-Doc**, University of Torino, Torino, Italy  
*An integrated approach for the treatment of micropollutants: oxidation, membrane technologies and new adsorbing materials*

*Mar 2015 – Feb 2016* **Post-Doc**, University of Torino, Torino, Italy  
*Use of natural substances for obtaining useful materials for environmental applications*

### EDUCATION AND TRAINING

*Jan 2015* **PhD Chemical and Materials Sciences**, University of Torino, Supervisor: Dr. G. Magnacca  
*Development of oxidic and polymeric materials for controlled transport and/or release. Rank: Excellent*

*Dec 2011* **Professional Certification**, Chemist sect. A, Order of Chemists of Piemonte and Valle d'Aosta

*Oct 2011* **MSc Industrial Chemistry**, University of Torino, Tutors: Dr. G. Magnacca, Dr. M.G. Faga (CNR)  
*Physico-chemical characterization of hernioplasty polypropylenic meshes functionalized with antibiotic agent. Marks: 110/110 cum laude*

*Oct 2009* **BSc Industrial Chemistry**, University of Torino, Tutor: Prof. L. Costa  
*Oxidation mechanism after e-beam irradiation of polypropylene films. Marks: 104/110*

## EDITORIAL ACTIVITY

- **Inorganics** (ISSN 2304-6740, MDPI)
  - Member of the **Editorial Board** (since 2022)
  - Member of the **Section Board “Inorganic Materials”** (since 2022)
  - Member of the **Topical Advisory Board** (2021-2022)
  - Member of the **Reviewer Board** (since 2021)
  - Guest Editor SI** *New Advances into Nanostructured Oxides II*. Online (2023)
  - Guest Editor SI** *10<sup>th</sup> Anniversary of Inorganics: Inorganic Materials*. Online (2023)
  - Guest Editor SI** *New Advances into Nanostructured Oxides*. Published online and printed as a book (2023)
  - Guest Editor SI** *Smart Tools for Smart Applications: New Insights into Inorganic Magnetic Systems and Materials*. Published online and printed as a book (2021)
- **Polymers** (ISSN 2073-4360, MDPI)
  - Member of the **Reviewer Board** (since 2020)
- **Frontiers in Materials - Carbon-Based Materials** (ISSN 2296-8016, Frontiers)
  - Member of the **Reviewer Board** (since 2018)
- **Frontiers in Chemistry – Inorganic Chemistry** (ISSN 2296-2646, Frontiers)
  - Member of the **Reviewer Board** (since 2018)
- **Journal of Nanomaterials** (ISSN 1687-4110, Hindawi)
  - Guest Editor SI** *Environmental Sustainability in the Synthesis and Characterization of Hybrid/Composite Nanomaterials*. Published online (2018)

## Reviewer

**Nature Publishing Group** (Scientific Reports).  
**ACS** (ACS Applied Materials and Interfaces).  
**RSC** (Journal of Materials Chemistry B, New Journal of Chemistry, RSC Advances).  
**Elsevier** (Applied Surface Science, Chemical Physics Letters, International Journal of Biological Macromolecules, Journal of Analytical and Applied Pyrolysis, Journal of Hazardous Materials, Journal of Photochemistry and Photobiology A: Chemistry, Journal of the European Ceramic Society, Materials Letters, Materials Science and Engineering C, Polymer Degradation and Stability, Science of the Total Environment).  
**Wiley** (Chemistry Select).  
**Springer** (Cellulose, Journal of Materials Science, Journal of Polymers and the Environment, Korean Journal of Chemical Engineering, Water Air and Soil Pollution).  
**MDPI** (Clean Technologies, Coatings, Energies, Inorganics, International Journal of Molecular Science, Magnetochemistry, Marine Drugs, Materials, Metals, Molecules, Nanomaterials, Polymers, Sustainability).  
**Taylor and Francis** (International Journal of Smart and Nano Materials).  
**IOP** (Materials Research Express).  
**Others:** *BMC - Springer Nature* (BMC Biotechnology) *AIP* (Applied Physics Letters), *BME-PT and GTE* (eXPRESS Polymer Letters), *Frontiers* (Frontiers in Chemistry).

## AWARDS

- 2022** “Premio Giovani Talenti”, Young Talents Award of the University of Milano-Bicocca (Italy) with the sponsorship of the Accademia Nazionale dei Lincei (Italy) – 2022 Edition. This Award is intended for young researchers (under 36 years of age) working at the University of Milano-Bicocca. Category Chemical Sciences and Earth Sciences. Motivation: “For his high-level works in the field of materials science and in particular of magnetic nanomaterials properly functionalized at the surface with products of biological origin”. **Winner of the Second Prize.**
- 2022** “Inorganics 2020 Best Paper” Award, for the category: Review, provided by the journal Inorganics (MDPI, Switzerland). For the best paper/review published during the year 2020. Selected publication: R. Nisticò, F. Cesano, F. Garelo, Magnetic materials and systems: Domain structure visualization and other characterization techniques for the application in the materials science and biomedicine. Inorganics 8 (2020) 6, pp.1-59. DOI: 10.3390/inorganics8010006. **Winner.**
- 2018** “Alfredo Di Braccio” Award, provided by the Accademia Nazionale dei Lincei (Italy). For a scholar in Chemistry. **Finalist with mention of merit by the examining Committee.**
- 2017** N° 3 “Publons Peer Review Awards” (n°3), provided by Publons, and Web of Science (WOS). For being among the “Top Reviewers for the Polytechnic Institute of Turin” in 3 categories: i) Materials Science, ii) Engineering, iii) Physics & Astronomy. **Winner.**
- 2014** “Macrogiovani 2014”, provided by the Associazione Italiana di Scienze e Tecnologie delle Macromolecole (AIM). For the best oral presentation during the XXI Convegno Nazionale AIM of Torino (Italy). **Winner.**

## NATIONAL QUALIFICATIONS

- **General and Inorganic Chemistry [S.C. 03/B1]**  
as Full Professor. Validity from 08/06/2023 to 08/06/2034  
as Associate Professor. Validity from 01/02/2022 to 01/02/2033
- **Materials Science and Engineering [S.C. 09/D1]**  
as Associate Professor. Validity from 31/05/2021 to 31/05/2032
- **Environmental & Cultural Heritage Chemistry [CHIM/12; S.C. 03/A1]**  
as Associate Professor. Validity from 12/11/2020 to 12/11/2031
- **Industrial Chemistry [S.C. 03/C2]**  
as Associate Professor. Validity from 13/05/2019 to 13/05/2030
- **Experimental Physics of Condensed Matter [S.C. 02/B1]**  
as Associate Professor. Validity from 26/07/2018 to 26/07/2029
- **Applied Physics [FIS/07; S.C. 02/D1]**  
as Associate Professor. Validity from 12/09/2018 to 12/09/2029

## MEMBERSHIPS

- **National Interuniversity Consortium of Materials Science and Technology (INSTM)**  
*As Member of the Energy and Environment Section. Since 2022*
- **Italian Chemical Society (SCI) – ID: 18367**  
*as Member of the Inorganic Chemistry Division. Since 2022*  
*as Member of the Physical Chemistry Division. From 2012 to 2020*
- **Associazione Italiana di Scienza e Tecnologia delle Macromolecole (AIM)**  
*as Member of the Scientific Committee. From 2013 to 2015*  
*as Member. From 2012 to 2020*
- **Order of Chemists of Piemonte and Valle d’Aosta**  
*as Member. From 2012 to 2016*

## VISITING PERIODS

Oct 2015 – Nov 2015

**National University of Comahue, PROBIEN**, Neuquen, Argentina

*Project: Magnetic materials from natural sources for wastewater treatments*  
*Supervisors: Prof. M.E. Parolo, Dr. L. Carlos*

Sep 2015 – Oct 2015

**National University of La Plata, INIFTA**, La Plata, Argentina

*Project: Magnetic materials from natural sources for environmental applications*  
*Supervisor: Prof. D.O. Martire*

Apr 2015 – May 2015

**National Polytechnic Institute of Toulouse, AGROMAT**, Tarbes, France

*Project: Extruded biobased composite films from urban biowaste as added value products*  
*Supervisors: Prof. C. Vaca-Garcia, Dr. P. Evon*

Jun 2014 – Aug 2014

**Max-Planck Institute of Colloids and Interfaces**, Potsdam-Golm, Germany

*Project: Synthesis of functional nanoporous oxides and their hybrids under hypersaline conditions*  
*Supervisors: Prof. M. Antonietti, Dr. N. Fechler*

Jun 2013 – Aug 2013

**Max-Planck Institute of Colloids and Interfaces**, Potsdam-Golm, Germany

*Project: Sol-gel chemistry of silica under hypersaline conditions*  
*Supervisors: Prof. M. Antonietti, Dr. N. Fechler*

## DIDACTIC/TEACHING ACTIVITY

University of Milano-Bicocca

**Coordination and Organometallic Chemistry**

*as Titular Teacher (Laboratory). MSc Chemical Sciences and Technologies (IT)*  
*as Member of the Evaluation Committee of the course*  
*Academic Years: 2022/2023*

University of Milano-Bicocca

**Inorganic Chemistry I and Laboratory**

*as Titular Teacher (Laboratory). BSc Chemical Sciences and Technologies (IT)*  
*as Member of the Evaluation Committee of the course*  
*Academic Years: 2021/2022, 2022/2023*

Polytechnic of Torino

**Science and Technology of Materials and Metallurgy**

*as Assistant Teacher. BSc Aerospace Engineering (IT)*  
*Academic Years: 2017/2018*

Polytechnic of Torino

**Concept Design – Materials and Technology for the Design**

*as Assistant Teacher. BSc Design and Visual Communication (IT)*  
*Academic Years: 2016/2017*

University of Torino

**Chemistry of Polymeric Materials**

*Laboratory Assistant. MSc Industrial Chemistry (IT)*  
*Academic Years: 2016/2017*

University of Torino

**Inorganic Industrial Chemistry with Laboratory**

*Laboratory Assistant. BSc Industrial Chemistry (IT)*  
*Academic Years: 2012/2013*

**PROJECTS**

**PRINCIPAL INVESTIGATOR (PI)**

n/a

**UNIT PI**

**STARTING SOON MAPEC - MAgnetic field assisted Photo(Electro) CO<sub>2</sub> Conversion**

as co-Principal Investigator (Total budget: 203,229 EUR) and Unit Principal Investigator (Unit budget: 47,500 EUR) as Fixed-Time Researcher (RTD-b) at University of Milano-Bicocca (4.0 Person Months)  
Progetti di ricerca di Rilevante Interesse Nazionale - PRIN 2022 (D.D. n. 104 del 02-02-2022).  
Fundend by Ministero dell'Università e della Ricerca (MUR).  
Project code: to be defined.

**PARTECIPANT**

- 2018-2019** **DEFLeCT - Digital tEchnology For Lung Cancer Treatment**  
as Fixed-Time Researcher (RTD-a) at Polytechnic of Torino (0.4 Person Months)  
Piemonte Regional project 2018-2021 (Call Piattaforma Tecnologica "Salute e Benessere").
- 2017-2018** **Composite materials for flexible production riser construction**  
as Fixed-Time Researcher (RTD-a) at Polytechnic of Torino  
Research contract with ENI SpA, Unit GEBR - Breakthrough initiative management.
- 2016** **SFERA - Solar Facilities for the European Research Area**  
as Post-Doc at University of Torino  
SFERA program (EC-CIEMAT-PSA; contract n°312643).
- 2015-2017** **MicroBusters - An integrated approach for the treatment of micropollutants: oxidation, membrane technologies and new adsorbing materials**  
as Post-Doc at University of Torino  
Research financial support 2014 (Torino call2014 L2 126).  
Funded by Compagnia di San Paolo and University of Torino.
- 2015-2018** **Mat4treat - Enhancing water quality by developing novel materials for organic pollutant removal in tertiary water treatments**  
as Post-Doc at University of Torino (2.0 Person Months)  
Marie Skłodowska-Curie Research and Innovation Staff Exchange (EU H2020-MSCA-RISE-2014).  
Project Code: 645551
- 2015** **Extruded biobased composite films from urban biowaste added value products**  
as Post-Doc at University of Torino  
COST-European Cooperation in Science and Technology EUBis Action TD1203.  
Project Code: COST-STSM-TD1203-26977).
- 2012-2014** **OXYPOLISTI - Development of oxidic and polymeric materials for stimuli responsive applications**  
as PhD student at University of Torino  
Research financial support 2011. Funded by University of Torino.  
Project Code: ORTO114XNH.
- 2011-2013** **PREVI - Prevenzione e cura dell'infezione in ernioplastica, in chirurgia urologica/uroginecologica e wound care**  
as MSc and PhD student at University of Torino  
European Project POR-FESR ASSE I (I.1.3 Innovation and SME; Regione Piemonte; 2010-2013).

**PUBLICATIONS LIST** (corresponding author)

- 1) B. Di Credico, E. Manzini, L. Viganò, C. Canevali, M. D'Arienzo, S. Mostoni, **R. Nisticò**, R. Scotti, Silica nanoparticles self-assembly process in polymer composites: Towards advanced materials. **Ceramics International** 49 (2023) 26165-26181. DOI: 10.1016/j.ceramint.2023.05.125.
- 2) L. Mirizzi, M. D'Arienzo, **R. Nisticò**, G. Fredi, S. Dirè, E. Callone, A. Dorigato, L. Giannini, S. Guerra, S. Mostoni, B. Di Credico, R. Scotti, Al<sub>2</sub>O<sub>3</sub> decorated with polyhedral silsesquioxane units: An unconventional filler system for upgrading thermal conductivity and mechanical properties of rubber composites. **Composites Science and Technology** 236 (2023) 109977. DOI: 10.1016/j.compscitech.2023.109977.
- 3) L. Lavagna, **R. Nisticò**, An Insight into the chemistry of cement—A review. **Applied Science** 13 (2023) 203. DOI: 10.3390/app13010203.
- 4) S.F. Orsini, L. Cipolla, S. Petroni, S. Dirè, R. Ceccato, E. Callone, R. Bongiovanni, S. Dalle Vacche, B. Di Credico, S. Mostoni, **R. Nisticò**, L. Raimondo, R. Scotti, M. D'Arienzo, Synthesis and characterization of alkoxy silane-bearing photoreversible cinnamic side groups: A promising building-block for the design of multifunctional silica nanoparticles. **Langmuir** 38 (2022) 15662-15671. DOI: 10.1021/acs.langmuir.2c02472.
- 5) **R. Nisticò**, M. D'Arienzo, B. Di Credico, S. Mostoni, R. Scotti, The role of inorganic fillers in electrostatic discharge composites. **Inorganics** 10 (2022) 222. DOI: 10.3390/inorganics10120222.
- 6) **R. Nisticò**, A comprehensive study on the applications of clays into advanced technologies, with particular attention on biomedicine and environmental remediation. **Inorganics** 10 (2022) 40. DOI: 10.3390/inorganics10030040.
- 7) F. Caldera, **R. Nisticò**, G. Magnacca, A. Matencio, Y.K. Monfared, F. Trotta, Magnetic composites of dextrin-based carbonate nanosponges and iron oxide nanoparticles with potential application in targeted drug delivery. **Nanomaterials** 12 (2022) 754. DOI: 10.3390/nano12050754.
- 8) **R. Nisticò**, L. Lavagna, E. Aimo Boot, P. Ivanchenko, M. Lorusso, F. Bosia, N.M. Pugno, D. D'Angelo, M. Pavese, Improving rubber concrete strength and toughness by plasma-induced end-of-life tire rubber surface modification. **Plasma Processes and Polymers** 18 (2021) 2100081. DOI: 10.1002/ppap.202100081.
- 9) M.L. Tummino, **R. Nisticò**, F. Franzoso, A. Bianco Prevot, P. Calza, E. Laurenti, M.C. Paganini, D. Scalarone, G. Magnacca, The "Lab4treat" outreach experience: Preparation of sustainable magnetic nanomaterials for remediation of model wastewater. **Molecules** 26 (2021) 3361. DOI: 10.3390/molecules26113361.
- 10) L. Lavagna, **R. Nisticò**, S. Musso, M. Pavese, Functionalization as a way to enhance dispersion of carbon nanotubes in matrices: a review. **Materials Today Chemistry** 20 (2021) 100477. DOI: 10.1016/j.mtchem.2021.100477.
- 11) M.L. Tummino, **R. Nisticò**, C. Riedo, D. Fabbri, M. Cerruti, G. Magnacca, Waste cleaning waste: Combining alginate with biowaste-derived substances in hydrogels and films for water cleanup. **Chemistry – A European Journal** 27 (2021) 660-668. DOI: 10.1002/chem.202003250.
- 12) I. Corazzari, F. Turci, **R. Nisticò**, TGA coupled with FTIR gas analysis to quantify the vinyl alcohol unit content in ethylene-vinyl alcohol copolymer. **Materials Letters** 284 (2021) 129030. DOI: 10.1016/j.matlet.2020.129030.
- 13) **R. Nisticò**, Zirconium oxide and the crystallinity hallows. **Journal of the Australian Ceramic Society** 57 (2021) 225-236. DOI: 10.1007/s41779-020-00529-2.
- 14) **R. Nisticò**, A synthetic guide toward the tailored production of magnetic iron oxide nanoparticles. **Boletín de la Sociedad Española de Cerámica y Vidrio** 60 (2021) 29-40. DOI: 10.1016/j.bsecv.2020.01.011.
- 15) D. Suarez-Riera, A. Merlo, L. Lavagna, **R. Nisticò**, M. Pavese, Mechanical properties of mortar containing recycled *Acanthocardia tuberculata* seashells as aggregate partial replacement. **Boletín de la Sociedad Española de Cerámica y Vidrio** 60 (2021) 206-210. DOI: 10.1016/j.bsecv.2020.03.011.
- 16) **R. Nisticò**, Polyethylene terephthalate (PET) in the packaging industry. **Polymer Testing** 90 (2020) 106707. DOI: 10.1016/j.polymertesting.2020.106707.

- 17) **R. Nisticò**, F. Guerretta, P. Benzi, G. Magnacca, Chitosan-derived biochars obtained at low pyrolysis temperatures for potential application in electrochemical energy storage devices. **International Journal of Biological Macromolecules** 164 (2020) 1825-1831. DOI: 10.1016/j.ijbiomac.2020.08.017.
- 18) L. Lavagna, D. Burlon, **R. Nisticò**, V. Brancato, A. Frazzica, M. Pavese, **E. Chiavazzo**, Cementitious composite materials for thermal energy storage applications: a preliminary characterization and theoretical analysis. **Scientific Reports** 10 (2020) 12833. DOI: 10.1038/s41598-020-69502-0.
- 19) **L. Lavagna**, S. Marchisio, A. Merlo, **R. Nisticò**, M. Pavese, Poyvinyl butyral-based composites with carbon nanotubes: Efficient dispersion as a key to high mechanical properties. **Polymer Composites** 41 (2020) 3627-3637. DOI: 10.1002/pc.25661.
- 20) **R. Nisticò**, L. Lavagna, D. Versaci, P. Ivanchenko, P. Benzi, Chitosan and its char as fillers in cement-base composites: A case study. **Boletín de la Sociedad Española de Cerámica y Vidrio** 59 (2020) 186-192. DOI: 10.1016/j.bsecv.2019.10.002.
- 21) **L. Lavagna**, **R. Nisticò**, M. Sarasso, M. Pavese, An analytical mini-review on the compression strength of rubberized concrete as a function of the amount of recycled tires crumb rubber. **Materials** 13 (2020) 1234. DOI: 10.3390/ma13051234.
- 22) M.L. Tummino, G. Magnacca, D. Cimino, E. Laurenti, **R. Nisticò**, The innovation comes from the sea: Chitosan and alginate hybrid gels and films as sustainable materials for wastewater remediation. **International Journal of Molecular Sciences** 21 (2020) 550. DOI: 10.3390/ijms21020550.
- 23) **R. Nisticò**, F. Cesano, **F. Garelo**, Magnetic materials and systems: Domain structure visualization and other characterization techniques for the application in the materials science and biomedicine. **Inorganics** 8 (2020) 6. DOI: 10.3390/inorganics8010006.
- 24) S. Tabasso, M. Ginepro, L. Tomasso, **E. Montoneri**, **R. Nisticò**, M. Francavilla, Integrated biochemical and chemical processing of municipal bio-based waste to obtain bio based products for multiple uses. The case of soil remediation. **Journal of Cleaner Production** 245 (2020) 119191. DOI: 10.1016/j.jclepro.2019.119191.
- 25) M.E. Peralta, **R. Nisticò**, F. Franzoso, G. Magnacca, L. Fernandez, M.E. Parolo, E. Garcia Leon, **L. Carlos**, Highly efficient removal of heavy metals from waters by magnetic chitosan-based composite. **Adsorption** 25 (2019) 1337-1347. DOI: 10.1007/s10450-019-00096-4.
- 26) **R. Nisticò**, A. Bianco Prevot, **G. Magnacca**, L. Canone, S. Garcia-Ballesteros, A. Arques, Sustainable magnetic materials (from chitosan and municipal biowaste) for the removal of Diclofenac from water. **Nanomaterials** 9 (2019) 1091. DOI: 10.3390/nano9081091.
- 27) **R. Nisticò**, P. Rivolo, C. Novara, F. Giorgis, New branched flower-like Ag nanostructures for SERS analysis, **Colloids and Surfaces A: Physicochemical and Engineering Aspects** 578 (2019) 123600. DOI: 10.1016/j.colsurfa.2019.123600.
- 28) **E. Montoneri**, **R. Nisticò**, M. Francavilla, Demineralisation of municipal biowaste hydrolysates. **ChemistrySelect** 4 (2019) 7551-7554. DOI: 10.1002/slct.201900369.
- 29) **R. Nisticò**, **L. Carlos**, High yield of nano zero-valent iron (nZVI) from carbothermal synthesis using lignin-derived substances from municipal biowaste. **Journal of Analytical and Applied Pyrolysis** 140 (2019) 239-244. DOI: 10.1016/j.jaap.2019.03.022.
- 30) **R. Nisticò**, P. Rivolo, F. Giorgis, Tips and tricks for the surface engineering of well-ordered morphologically driven silver-based nanomaterials. **ChemistryOpen** 8 (2019) 508-519. DOI: 10.1002/open.201900007.
- 31) **R. Nisticò**, C. Novara, A. Chiadò, P. Rivolo, F. Giorgis, Cysteine-mediated synthesis of silver nanonets and their use for Surface Enhanced Raman Scattering (SERS). **Materials Letters** 247 (2019) 208-210. DOI: 10.1016/j.matlet.2019.03.121.
- 32) V. Polliotto, F.R. Pomilla, V. Maurino, G. Marci, **A. Bianco Prevot**, **R. Nisticò**, G. Magnacca, M.C. Paganini, L. Ponce Robles, L. Perez, S. Malato, Different approaches for the solar photocatalytic removal of micro-contaminants from aqueous environment: Titania vs. hybrid magnetic iron oxides. **Catalysis Today** 328 (2019) 164-171. DOI: 10.1016/j.cattod.2019.01.044.

- 33) **R. Nisticò**, F. Guerretta, P. Benzi, G. Magnacca, D. Mainero, E. Montoneri, Thermal conversion of municipal biowaste anaerobic digestate to valuable char. **Resources** 8 (2019) 24. DOI: 10.3390/resources8010024.
- 34) F. Guerretta, G. Magnacca, F. Franzoso, P. Ivanchenko, **R. Nisticò**, Sodium alginate conversion into char via pyrolysis at the onset temperature. **Materials Letters** 234 (2019) 339-342. DOI: 10.1016/j.matlet.2018.09.127.
- 35) L. Lavagna, **R. Nisticò**, S. Musso, M. Pavese, Hydrophobic cellulose ester as a sustainable material for simple and efficient water purification processes from fatty oils contamination. **Wood Science and Technology** 53 (2019) 249–261. DOI: 10.1007/s00226-018-1060-8.
- 36) **R. Nisticò**, The importance of surfaces and interfaces in clays for water remediation processes. **Surface Topography: Metrology and Properties** 6 (2018) 043001. DOI: 10.1088/2051-672X/aaed09.
- 37) A. Anceschi, F. Guerretta, G. Magnacca, **M. Zanetti**, P. Benzi, F. Trotta, F. Caldera, **R. Nisticò**, Sustainable N-containing biochars obtained at low temperatures as sorbing materials for environmental application: Municipal biowaste-derived substances and nanosponges case studies. **Journal of Analytical and Applied Pyrolysis** 134 (2018) 606-613. DOI: 10.1016/j.jaap.2018.08.010.
- 38) **R. Nisticò**, Block copolymers for designing nanostructured porous coatings. **Beilstein Journal of Nanotechnology** 9 (2018) 2332-2344. DOI:10.3762/bjnano.9.218.
- 39) D. Palma, **A. Bianco Prevot**, M. Brigante, D. Fabbri, G. Magnacca, C. Richard, G. Mailhot, **R. Nisticò**, New insights on the photodegradation of caffeine in the presence of bio-based substances-magnetic iron oxide hybrid nanomaterials. **Materials** 11 (2018) 1084. DOI: 10.3390/ma11071084.
- 40) L. Lavagna, **R. Nisticò**, A. Chiappone, M. Pavese, Facile photo-induced growth of polymeric nanostructures onto cellulose: The poly(ethylene glycol) methacrylate (PEGMA)@cellulose case study. **Materials Letters** 227 (2018) 202-204. DOI: 10.1016/j.matlet.2018.05.074.
- 41) D. Palma, **A. Bianco Prevot**, L. Celi, M. Martin, D. Fabbri, G. Magnacca, M.R. Chierotti, **R. Nisticò**, Isolation, characterization, and environmental application of bio-based materials as auxiliaries in photocatalytic processes. **Catalysts** 8 (2018) 197. DOI: 10.3390/catal8050197.
- 42) **R. Nisticò**, F. Cesano, F. Franzoso, G. Magnacca, D. Scarano, I.G. Funes, L. Carlos, **M.E. Parolo**, From biowaste to magnet-responsive materials for water remediation from polycyclic aromatic hydrocarbons. **Chemosphere** 202 (2018) 686-693. DOI: 10.1016/j.chemosphere.2018.03.153.
- 43) S.A. Jadhav, **R. Nisticò**, G. Magnacca, **D. Scaroni**, Packed hybrid silica nanoparticles as sorbents with thermo-switchable surface chemistry and pore size for fast extraction of environmental pollutants. **RSC Advances** 8 (2018) 1246-1254. DOI: 10.1039/c7ra11869d.
- 44) **R. Nisticò**, L.R. Celi, A. Bianco Prevot, L. Carlos, G. Magnacca, E. Zanzo, M. Martin, Sustainable magnet-responsive nanomaterials for the removal of arsenic from contaminated water. **Journal of Hazardous Materials** 342 (2018) 260-269. DOI: 10.1016/j.jhazmat.2017.08.034.
- 45) G. Magnacca, F. Guerretta, A. Vizintin, P. Benzi, M.C. Valsania, **R. Nisticò**, Preparation, characterization and environmental/electrochemical energy storage testing of low-cost biochar from natural chitin obtained via pyrolysis at mild conditions. **Applied Surface Science** 427 (2018) 883-893. DOI: 10.1016/j.apsusc.2017.07.277.
- 46) **R. Nisticò**, Aquatic-derived biomaterials for a sustainable future: A European opportunity. **Resources** 6 (2017) 65. DOI: 10.3390/resources6040065.
- 47) **R. Nisticò**, Magnetic materials and water treatments for a sustainable future. **Research on Chemical Intermediates** 43 (2017) 6911-6949. DOI: 10.1007/s11164-017-3029-x.
- 48) **R. Nisticò**, P. Evon, L. Labonne, G. Vaca-Medina, **E. Montoneri**, C. Vaca-Garcia, M. Negre, Post-harvest tomato plants and urban food wastes for manufacturing plastic films. **Journal of Cleaner Production** 167 (2017) 68-74. DOI: 10.1016/j.jclepro.2017.08.160.
- 49) M. Sodano, C. Lerda, **R. Nisticò**, M. Martin, G. Magnacca, L. Celi, **D. Said-Pullicino**, Dissolved organic carbon retention by coprecipitation during the oxidation of ferrous iron. **Geoderma** 307 (2017) 19-29. DOI: 10.1016/j.geoderma.2017.07.022.



- 50) **R. Nisticò**, S. Tabasso, G. Magnacca, T. Jordan, M. Shalom, **N. Fechler**, Reactive hypersaline route: One-pot synthesis of porous photoreactive nanocomposites. **Langmuir** 33 (2017) 5213-5222. DOI: 10.1021/acs.langmuir.7b00142.
- 51) **R. Nisticò**, G. Magnacca, S. Martorana, Surface science in hernioplasty: The role of plasma treatments. **Applied Surface Science** 419 (2017) 860-868. DOI: 10.1016/j.apsusc.2017.05.121.
- 52) **R. Nisticò**, D. Scalarone, G. Magnacca, Sol-gel chemistry, templating and spin-coating deposition: a combined approach to control in a simple way the porosity of inorganic thin films/coatings. **Microporous and Mesoporous Materials** 248 (2017) 18-29. DOI: 10.1016/j.micromeso.2017.04.017.
- 53) P. Evon, L. Labonne, **R. Nisticò**, **E. Montoneri**, C. Vaca-Garcia, M. Nègre, Thermopressed binderless fiberboards from post-harvest tomato and maize plants. **Trends in Green Chemistry** 3 (2017) 1-7. DOI: 10.21767/2471-9889.100014.
- 54) M. Morlacchini, G. Fusconi, C. Montoneri, **R. Nisticò**, **E. Montoneri**, Pigs' husbandry as case study to test effects of vegetable residues' hydrolysates on animals. **ARC Journal of Animal and Veterinary Sciences** 3 (2017) 11-23. DOI: 10.20431/2455-2518.0303003.
- 55) **A. Bianco Prevot**, F. Baino, D. Fabbri, F. Franzoso, G. Magnacca, **R. Nisticò**, A. Arques, Urban biowaste-derived sensitizing materials or caffeine photodegradation. **Environmental Science and Pollution Research** 24 (2017) 12599-12607. DOI: 10.1007/s11356-016-7763-1.
- 56) **R. Nisticò**, F. Franzoso, F. Cesano, D. Scarano, G. Magnacca, M.E. Parolo, **L. Carlos**, Chitosan-derived iron oxide systems for magnetically guided and efficient water purification processes from polycyclic aromatic hydrocarbons. **ACS Sustainable Chemistry and Engineering** 5 (2017) 793-801. DOI: 10.1021/acssuschemeng.6b02126.
- 57) F. Franzoso, **R. Nisticò**, F. Cesano, I. Corazzari, F. Turci, D. Scarano, A. Bianco Prevot, G. Magnacca, L. Carlos, D.O. Martire, Biowaste-derived substances as a tool for obtaining magnet-sensitive materials for environmental applications in wastewater treatments. **Chemical Engineering Journal** 310 (2017) 307-316. DOI: 10.1016/j.cej.2016.10.120.
- 58) **R. Nisticò**, G. Magnacca, S.A. Jadhav, D. Scalarone, Polystyrene-*block*-poly(ethylene oxide) copolymers as templates for stacked, spherical large-mesopore silica coatings: dependence of silica pore size on the PS/PEO ratio. **Beilstein Journal of Nanotechnology** 7 (2016) 1454-1460. DOI: 10.3762/bjnano.7.137.
- 59) **R. Nisticò**, P. Evon, L. Labonne, G. Vaca-Medina, **E. Montoneri**, M. Francavilla, C. Vaca-Garcia, G. Magnacca, F. Franzoso, M. Negre, Extruded poly(ethylene-co-vinyl alcohol) composite films containing biopolymers isolated from municipal biowaste. **ChemistrySelect** 1 (2016) 2354-2365. DOI: 10.1002/slct.201600335.
- 60) P. Rivolo, **R. Nisticò**, F. Barone, M.G. Faga, D. Duraccio, S. Martorana, S. Ricciardi, G. Magnacca, Study of the adhesive properties versus stability/aging of hernia repair meshes after deposition of RF activated plasma polymerized acrylic acid coating. **Materials Science and Engineering C** 65 (2016) 287-294. DOI: 10.1016/j.msec.2016.04.049.
- 61) F. Franzoso, C. Vaca-Garcia, A. Rouilly, P. Evon, **E. Montoneri**, P. Persico, R. Mendichi, **R. Nisticò**, M. Francavilla, Extruded versus solvent cast blends of poly(vinyl alcohol-co-ethylene) and biopolymers isolated from municipal biowaste. **Journal of Applied Polymer Science** 133 (2016) 43009, pp. 1-17. DOI: 10.1002/APP.43009.
- 62) **R. Nisticò**, M. Barrasso, G.A. Carrillo Le Roux, M.M. Seckler, W. Sousa, M. Malandrino, G. Magnacca, Biopolymers from composted biowaste as stabilizers for the synthesis of spherical and homogeneously sized silver nanoparticles for textile applications on natural fibers. **ChemPhysChem** 16 (2015) 3902-3909. DOI: 10.1002/cphc.201500721.
- 63) F. Cesano, G. Fenoglio, L. Carlos, **R. Nisticò**, One-step synthesis of magnetic chitosan polymer composite films. **Applied Surface Science** 345 (2015) 175-181. DOI: 10.1016/j.apsusc.2015.03.154.
- 64) **R. Nisticò**, P. Avetta, P. Calza, D. Fabbri, G. Magnacca, D. Scalarone, Selective porous gates made from colloidal silica nanoparticles. **Beilstein Journal of Nanotechnology** 6 (2015) 2105-2112. DOI: 10.3762/bjnano.6.215.

- 65) I. Corazzari, **R. Nisticò**, F. Turci, M.G. Faga, F. Franzoso, S. Tabasso, G. Magnacca, Advanced physico-chemical characterization of chitosan by means of TGA coupled on-line with FTIR and GCMS: Thermal degradation and water adsorption capacity. **Polymer Degradation and Stability** 112 (2015) 1-9. DOI: 10.1016/j.polymdegradstab.2014.12.006.
- 66) **R. Nisticò**, A. Rosellini, P. Rivolo, M.G. Faga, R. Lamberti, S. Martorana, M. Castellino, A. Virga, P. Mandracci, M. Malandrino, G. Magnacca, Surface functionalisation of polypropylene hernia-repair meshes by RF-activated plasma polymerization of acrylic acid and silver nanoparticles. **Applied Surface Science** 328 (2015) 287–295. DOI: 10.1016/j.apsusc.2014.12.050.
- 67) **R. Nisticò**, G. Magnacca, The hypersaline synthesis of titania: From powders to aerogels. **RSC Advances** 5 (2015) 14333-14340. DOI: 10.1039/c4ra13573c; **R. Nisticò**, G. Magnacca, N. Fechner, Correction: The hypersaline synthesis of titania: From powders to aerogels. **RSC Advances** 5 (2015) 18578. DOI: 10.1039/c5ra90013a.
- 68) L. Demarchis, M. Minella, **R. Nisticò**, V. Maurino, C. Minero, **D. Vione**, Photo-Fenton reaction in the presence of morphologically controlled hematite as iron source. **Journal of Photochemistry and Photobiology A: Chemistry** 307 (2015) 99–107. DOI: 10.1016/j.jphotochem.2015.04.009.
- 69) L. Iannarrelli, **R. Nisticò**, P. Avetta, M. Lazzari, G. Magnacca, P. Calza, D. Fabbri, **D. Scalapone**, Composite membranes with hydrophilic nanopores derived from the self-assembly of block copolymer supramolecular complexes. **European Polymer Journal** 62 (2015) 108–115. DOI: 10.1016/j.eurpolymj.2014.11.019.
- 70) **R. Nisticò**, **D. Scalapone**, G. Magnacca, Preparation and physico-chemical characterization of large-mesopore silica thin films templated by block copolymers for membrane technology. **Microporous and Mesoporous Materials** 190 (2014) 208-214. DOI: 10.1016/j.micromeso.2014.02.012.
- 71) **R. Nisticò**, G. Magnacca, M. Antonietti, **N. Fechner**, "Salted silica": Sol-gel chemistry of silica under hypersaline conditions. **Zeitschrift für Anorganische und Allgemeine Chemie** 640 (2014) 582-587. DOI: 10.1002/zaac.201300526.
- 72) **R. Nisticò**, G. Magnacca, M. Antonietti, **N. Fechner**, Highly porous silica glasses and aerogels made easy: The hypersaline route. **Advanced Porous Materials** 2 (2014) 37-41. DOI: 10.1166/apm.2014.1049.
- 73) P. Avetta, **R. Nisticò**, M.G. Faga, D. D'Angelo, E. Aimò, R. Lamberti, S. Martorana, P. Calza, D. Fabbri, G. Magnacca, Hernia-repair prosthetic devices functionalised with chitosan and ciprofloxacin coating: Controlled release and antibacterial activity. **Journal of Materials Chemistry B** 2 (2014) 5287-5294. DOI: 10.1039/c4tb00236a.
- 74) **R. Nisticò**, G. Magnacca, M.G. Faga, G. Gautier, D. D'Angelo, E. Ciancio, R. Lamberti, S. Martorana, Effect of atmospheric oxidative plasma treatments on polypropylenic fibers surface: Characterization and reaction mechanisms. **Applied Surface Science** 279 (2013) 285-292. DOI: 10.1016/j.apsusc.2013.04.087.
- 75) **R. Nisticò**, **M.G. Faga**, G. Gautier, G. Magnacca, D. D'Angelo, E. Ciancio, G. Piacenza, R. Lamberti, S. Martorana, Physico-chemical characterization of functionalized polypropylenic fibers for prosthetic applications. **Applied Surface Science** 258 (2012) 7889-7896. DOI: 10.1016/j.apsusc.2012.04.113.

**EDITORIAL IN SCIENTIFIC JOURNALS (SPECIAL ISSUES) LIST (corresponding author)**

- I) **R. Nisticò**, *New Advances into Nanostructured Oxides*. **Inorganics** 11 (2023) 130. DOI: 10.3390/inorganics11030130.
- II) F. Garelo, **R. Nisticò**, **F. Cesano**, *Smart Tools for Smart Applications: New Insights into Inorganic Magnetic Systems and Materials*. **Inorganics** 8 (2020) 56. DOI: 10.3390/inorganics8100056.
- III) **M.G. Faga**, **R. Nisticò**, J. Kukutschova, G. Magnacca, L. Carlos, *Environmental Sustainability in the Synthesis and Characterization of Hybrid/Composite Nanomaterials*. **Journal of Nanomaterials** 2018 (2018) 7131325. DOI: 10.1155/2018/7131325.

**EDITED BOOKS AND BOOK CHAPTERS LIST**

- I) **R. Nisticò**, *New Advances into Nanostructured Oxides*. Printed Edition of the Special Issue published in **Inorganics**, MDPI, Basel (Switzerland), 2023. ISBN: 978-3-0365-7522-3.
- II) **R. Nisticò**, Valorization of agri-food waste and by-products: Shellfish, in: P. Ferranti, (Ed.), *Sustainable Food Science: A Comprehensive Approach*, Vol. 4, Elsevier Inc., Amsterdam (Netherlands), 2023, pp. 424-446. ISBN: 978-0-12-823960-5. DOI: 10.1016/B978-0-12-823960-5.00082-2.
- III) F. Garelo, **R. Nisticò**, **F. Cesano**, *Smart Tools for Smart Applications: New Insights into Inorganic Magnetic Systems and Materials*. Printed Edition of the Special Issue published in **Inorganics**, MDPI, Basel (Switzerland), 2021. ISBN: 978-3-0365-0235-9.
- IV) A. Bianco Prevot, A. Arques, L. Carlos, E. Laurenti, G. Magnacca, **R. Nisticò**, Innovative sustainable materials for the photoinduced remediation of polluted water, Chapter 7, in: C.M. Galanakis, E. Agrafioti, (Eds.), *Sustainable Water and Wastewater Processes*, Elsevier Inc., Amsterdam (Netherlands), 2019, pp. 203-238. ISBN: 978-0-12-816170-8. DOI: 10.1016/B978-0-12-816170-8.00007-7.

### INVITED COMMUNICATIONS AT CONFERENCES, WORKSHOPS AND SEMINARS

- I) **R. Nisticò**, 50 shades of magnetism: Basic and new trends, In: Mat4treat Winter School Innovative approaches for material synthesis and characterization, Torino (Italy) 26 January 2017. Oral (Invited lecture, ENG).
- II) **R. Nisticò**, F. Franzoso, F. Cesano, D. Scarano, G. Magnacca, M.E. Parolo, L. Carlos, Chitosan and chitosan-derived carbon as magnet-sensitive materials for the removal of polycyclic aromatic hydrocarbons, In: International Workshop on Materials for photocatalytic and water treatment applications, Torino (Italy) 11 July 2016. Oral (Invited, ENG).
- III) **R. Nisticò**, F. Franzoso, F. Cesano, G. Magnacca, L. Carlos, M.E. Parolo, Development of chitosan and chitosan-derived carbon as magnet-sensitive materials for environmental applications, In: 1st Mat4treat Workshop: Innovative materials and methods for tertiary water treatment, Alcoy (Spain) 9 February 2016. Oral (Invited, ENG).
- IV) **R. Nisticò**, Preparation and physico-chemical characterization of ordered large-pore silica films for membranes applications, In: NIS Colloquium Porous Materials for Selective Separation and Controlled Transport: from Membranes to Nanoparticles, Torino (Italy), 9 May 2014. Oral (Invited, ENG).

### LIST OF CONFERENCES, WORKSHOPS AND SEMINARS CONTRIBUTIONS

#### CONTRIBUTIONS PRESENTED BY RN

- I) **R. Nisticò**, G. Magnacca, A. Bianco Prevot, Hybrid magnetic systems for the environmental remediation of wastewater (OC29A), In: XLVIII Italian Conference of Inorganic Chemistry, Pisa (Italy) 6-9 September 2022. Oral (ENG).
- II) **R. Nisticò**, Hybrid inorganic-organic magnetic systems for environmental applications, In: Friday Materials Science Colloquia, Milano (Italy), 1 July 2022. Oral (ENG).
- III) **R. Nisticò**, P. Avetta, P. Calza, D. Fabbri, D. Scalarone, G. Magnacca, Preparation, physico-chemical characterization and transport properties of block copolymer-templated silica coatings, In: 14th European Conference on Organized Films ECOF-14, Genova (Italy) 29 June-2 July 2015. Oral (ENG).
- IV) **R. Nisticò**, G. Magnacca, M. Antonietti, N. Fechner, Salts as structure-directing agents: The hypersaline chemistry of aerogels, In: International Seminar on Aerogels 2014: Properties-Manufacture-Applications, Hamburg (Germany), 6-7 October 2014. Oral (ENG).
- V) **R. Nisticò**, A. Rosellini, P. Avetta, M.G. Faga, R. Lamberti, S. Martorana, D. D'Angelo, P. Rivolo, D. Fabbri, G. Magnacca, Nuove frontiere in ernioplastica: Sviluppo di coating antibatterici e adesivi su reti a base PP, In: XXI Convegno Nazionale dell'Associazione Italiana di Scienza e Tecnologia delle Macromolecole, Macrogiovani 2014, Torino (Italy), 16 September 2014. Oral (IT).

#### CONTRIBUTIONS PRESENTED BY RN'S COLLEAGUES

- I) L. Viganò, M. D'Arienzo, S. Mostoni, **R. Nisticò**, R. Scotti, B. Di Credico, Adsorbent-photocatalytic multifunctional materials for wastewater treatment (OC31), In: *XIII Congresso Nazionale AICInG e II Congresso Nazionale della Divisione di Chimica per le Tecnologie della SCI*, Milano (Italy) 25-28 June 2023. Oral (ENG).
- II) D. Montini, C. Cara, M. D'Arienzo, B. Di Credico, S. Mostoni, **R. Nisticò**, L. Pala, R. Scotti, Recovery and reutilization of silica from waste of fluoro-derivatives industry (O17\_4), In: 30 Years of INSTM: Past, Present and Future of the Consortium, Bressanone (Italy) 22-25 January 2023. Oral (IT).
- III) M. D'Arienzo, R. Scotti, B. Di Credico, S. Mostoni, **R. Nisticò**, A. Vedda, S. Dirè, F. Parrino, Playing with morphology and hybrid interfaces: An ambitious route for integrating oxide nanomaterials in applied technologies (KN2), In: XLVIII Italian Conference of Inorganic Chemistry, Pisa (Italy) 6-9 September 2022. Oral (ENG).
- IV) D. Burlon, **R. Nisticò**, L. Lavagna, M. Pavese, V. Brancato, A. Frazzica, E. Chiavazzo, Synthesis and characterization of cementitious composite materials for thermal storage applications, In: Fifth

International Symposium on Innovative Materials and Processes in Energy Systems, IMPRES2019, Kanazawa (Japan) 20-23 October 2019. Oral (co-author, ENG).

- V) C. Novara, G. Biasotto, **R. Nisticò**, A. Chiadò, N. Paccotti, M. Fontana, M. Armandi, M.A. Zaghete, F. Geobaldo, P. Rivolo, F. Giorgis, Porous plasmonic nanostructures for Surface Enhanced Raman Scattering: development of biosensing platforms, In: Plasmonica 2018 (pp.28), Firenze (Italy), 4-6 July 2018. Oral (co-author, ENG).
- VI) L. Lavagna, **R. Nisticò**, A. Chiappone, S. Musso, M. Pavese, Cellulose functionalization: comparison between wet-chemistry hydrophobization vs. photopolymerization, In: Merck & Elsevier Young Chemists Symposium, Rimini (Italy) 19-21 November 2018. Oral (co-author, ENG).
- VII) D. Palma, A. Bianco Prevot, L. Celi, D. Fabbri, G. Magnacca, **R. Nisticò**, M. Brigante, G. Mailhot, New insights on the photodegradation of caffeine in the presence of bio-based substances; from homogeneous to heterogeneous process, In: 10th European meeting on Solar Chemistry and Photocatalysis: Environmental Applications (SPEA10), Almeria (Spain) 4-8 June 2018. Oral (co-author, ENG).
- VIII) A. Bianco Prevot, F. Franzoso, G. Magnacca, **R. Nisticò**, L. Carlos, D.O. Martire, Urban biowaste derived substances as a tool for obtaining magnet-sensitive materials for caffeine photodegradation, In: 9th European meeting on Solar Chemistry and Photocatalysis: Environmental Applications (SPEA9), Strasbourg (France) 13-17 June 2016. Oral (co-author, ENG).
- IX) D. Scalarone, **R. Nisticò**, P. Avetta, M. Lazzari, D. Fabbri, P. Calza, G. Magnacca, Un approccio supramolecolare per la fabbricazione di membrane polimeriche nano e isoporose a base di copolimeri a blocchi, In: XXI Convegno Nazionale dell'Associazione Italiana di Scienza e Tecnologia delle Macromolecole, Torino (Italy), 14-19 September 2014, Oral (co-author, IT).
- X) P. Avetta, P. Calza, D. Fabbri, **R. Nisticò**, G. Magnacca, D. Scalarone, Microfluidic device: Development and testing of oxidic materials, In: XXIV Congresso della Divisione di Chimica Analitica, Sestri Levante (Italy), 15-19 September 2013. Oral (co-author, ENG).

## POSTERS

- I) S. Dirè, D. Bugnotti, E. Callone, R. Ceccato, S. Petroni, L. Cipolla, R. Bongiovanni, S. Dalle Vacche, L.H. Esposito, A. Vitale, S.F. Orsini, B. Di Credico, S. Mostoni, **R. Nisticò**, R. Scotti, M. D'Arienzo, Biostar-Pack: preparation of starch nanocomposites towards the valorization of organic food waste for sustainable packaging (P16), In: XIII Congresso Nazionale AICInG e II Congresso Nazionale della Divisione di Chimica per le Tecnologie della SCI, Milano (Italy) 25-28 June 2023. Poster (ENG).
- II) B. Di Credico, E. Manzini, M. D'Arienzo, S. Mostoni, **R. Nisticò**, R. Scotti, Design of advanced materials based on controlled functionalized silica nanoparticles (P.072), In: 12th International Colloids Conference, Palma-Mallorca (Spain) 11-14 June 2023. Poster (ENG).
- III) L. Viganò, M. D'Arienzo, S. Mostoni, **R. Nisticò**, R. Scotti, B. Di Credico, TiO<sub>2</sub> based multifunctional nanocomposites for wastewater treatment (P64), In: 30 Years of INSTM: Past, Present and Future of the Consortium, Bressanone (Italy) 22-25 January 2023. Poster (IT).
- IV) E. Manzini, M. D'Arienzo, S. Mostoni, R. Nisticò, R. Scotti, B. Di Credico, Controlled functionalization approaches of silica nanoparticles for advanced materials (P20), In: 30 Years of INSTM: Past, Present and Future of the Consortium, Bressanone (Italy) 22-25 January 2023. Poster (IT).
- V) S.F. Orsini, R. Bongiovanni, E. Callone, L.F. Cipolla, B. Di Credico, S. Dirè, S. Mostoni, **R. Nisticò**, S. Petroni, R. Scotti, M. D'Arienzo, Decoration of silica and sepiolite surfaces with photoreversible coupling agent: A new route for producing multifunctional hybrid nanoparticles (P33), In: XLVIII Italian Conference of Inorganic Chemistry, Pisa (Italy) 6-9 September 2022. Poster (ENG).
- VI) D. Montini, C. Cara, M. D'Arienzo, B. Di Credico, S. Mostoni, **R. Nisticò**, L. Pala, R. Scotti, Silica recovery from industrial waste for functional and structural applications (P29), In: XLVIII Italian Conference of Inorganic Chemistry, Pisa (Italy) 6-9 September 2022. Poster (ENG).
- VII) A. Chiadò, C. Novara, N. Paccotti, P. Rivolo, G. Biasotto, **R. Nisticò**, G. Condorelli, V. de Franciscis, F. Geobaldo, F. Giorgis, Plasmonic Nanostructures integrated in microfluidic chips for the sensitive SERS

- detection of miRNAs, In: 7th International Symposium on Sensor Science (pp.139), Napoli (Italy) 9-11 May 2019. Poster (ENG).
- VIII) V. Polliotto, F.R. Pomilla, V. Maurino, A. Bianco Prevot, **R. Nisticò**, G. Magnacca, M.C. Paganini, L. Ponce Robles, S. Malato, L. Perez, Magnetic hybrid nanomaterials for the photodegradation of microcontaminants in aqueous environment, In: 10th European meeting on Solar Chemistry and Photocatalysis: Environmental Applications (SPEA10), Almeria (Spain) 4-8 June 2018. Poster (ENG).
- IX) M. Sodano, M. Martin, C. Lerda, **R. Nisticò**, G. Magnacca, L. Celi, D. Said-Pullicino, Dissolved organic carbon retention by coprecipitation during the oxidation of ferrous iron (EGU2018-3906), In: European Geoscience Union General Assembly, Vienna (Austria) 8-13 April 2018. Poster (ENG).
- X) F. Franzoso, **R. Nisticò**, F. Cesano, I. Corazzari, L. Carlos, D.O. Martire, D. Scarano, G. Magnacca, A. Bianco Prevot, Urban composted biowaste-based magnetic materials for environmental applications, In: International Winter School "Molecules@Surfaces", Bardonecchia (Italy) 31 January-5 February 2016. Poster (ENG).
- XI) **R. Nisticò**, F. Barone, P. Rivolo, M.G. Faga, S. Martorana, G. Magnacca, Plasma-induced adhesive surface functionalization of polypropylene hernioplasty devices, In: International Winter School "Molecules@Surfaces", Bardonecchia (Italy) 31 January-5 February 2016. Poster (ENG).
- XII) F. Franzoso, **R. Nisticò**, A. Bianco Prevot, S. Tabasso, G. Magnacca, Magnetic materials prepared from natural sources: synthesis, characterization and environmental applications, In: 14th European Conference on Organized Films ECOF-14, Genova (Italy) 29 June-2 July 2015. Poster (ENG).
- XIII) P. Calza, P. Avetta, D. Fabbri, G. Magnacca, **R. Nisticò**, D. Scaralone, Development and testing of nanostructured porous materials for water treatment, In: 248th ACS National Meeting & Exposition, Chemistry & Global Stewardship, Division of Environmental Chemistry, San Francisco (California, U.S.A.), 10-14 August 2014. Poster (ENG).
- XIV) P. Avetta, **R. Nisticò**, P. Calza, G. Magnacca, D. Fabbri, D. Scaralone, Microfluidic device: development and testing of nanoporous membranes, In: VII Giornate Italo-Francesi di Chimica 2014, Torino (Italy), 5-6 May 2014. Poster (ENG).
- XV) **R. Nisticò**, D. Scaralone, G. Magnacca, Synthesis of mesoporous silica films by block copolymers micellization, In: XLI Congresso Nazionale di Chimica Fisica, Alessandria (Italy), 23-27 June 2013. Poster (ENG).
- XVI) **R. Nisticò**, G. Magnacca, D. Scaralone, Block copolymers micellization for the synthesis of mesoporous silicas: A sol-gel approach, In: European Polymer Congress EPF 2013, Pisa (Italy), 16-21 June 2013. Poster (ENG).
- XVII) **R. Nisticò**, G. Magnacca, M.G. Faga, G. Gautier, D. D'Angelo, R. Lamberti, S. Martorana, Physico-chemical characterization of functionalized polypropylene hernia-repair biomaterials, In: European Polymer Congress EPF 2013, Pisa (Italy), 16-21 June 2013. Poster (ENG).
- XVIII) **R. Nisticò**, D. Scaralone, G. Magnacca, Synthesis and physico-chemical characterization of porous silica membranes obtained by using PS-b-PEO block copolymers as soft-templating agents, In: Third International Conference on Multifunctional, Hybrid and Nanomaterials 2013, Sorrento (Italy), 3-7 March 2013. Poster (ENG).
- XIX) **R. Nisticò**, D. Scaralone, G. Magnacca, Development of highly selective silica membranes obtained by using PS-b-PEO as templates, In: ISMAC Workshop 2012 dedicated to Alberto Bolognesi "Self-Assembled Functional Nanostructures: Material Tailoring for Electronics and Bio-Electronics", Milano (Italy), 15 November 2012. Poster (ENG).

#### PARTECIPATION TO HIGH-LEVEL (INTER)NATIONAL SCHOOLS

- 1) High-level course "Apprendere ed insegnare nell'Higher Education", organized by Polytechnic Institute of Torino, Torino (Italy) 20 February – 20 June 2017 (IT).
- 2) International Winter School "Molecules@Surfaces", organized by University of Torino, Bardonecchia (Italy), 31 January – 5 February 2016 (ENG).

- 3) *XXXV Convegno-Scuola AIM "Mario Farina": Caratterizzazione di materiali polimerici, Tecniche per polimeri in soluzione*, organized by *Associazione Italiana di Scienza e Tecnologia delle Macromolecole*, Gargnano (Italy), 19-23 May 2014 (IT).
- 4) *Scuola di Chemiometria*, organized by University of Genova, Genova (Italy), 21-24 January 2013 (IT).
- 5) *XXXIII Convegno-Scuola AIM "Mario Farina": Sintesi di materiali polimerici*, organized by *Associazione Italiana di Scienza e Tecnologia delle Macromolecole*, Gargnano (Italy), 21-25 May 2012 (IT).

**SUPERVISED POSTDOCS AND RESEARCH FELLOWS LISTS**

N/A

**SUPERVISED PHD STUDENTS LISTS**

N/A

**SUPERVISED BSc AND MSc STUDENTS LISTS**

- 1) Edoardo Caravà (University of Milano-Bicocca). BSc Chemical Sciences and Technologies (IT).  
Title: *Analisi di controllo di matrici acquose (acque reflue) e valutazione degli esiti mediante approccio olistico alla stima dell'incertezza di misura secondo la Norma ISO 11352:2012 (on going, IT).*
- 2) Veronica Radice (University of Milano-Bicocca). MSc Materials Science (ENG).  
Title: *Materiali superidrofobici e ghiacciofobici a base di biopolimeri (on going, IT).*
- 3) Gabriele Bona (University of Milano-Bicocca). BSc Chemical Sciences and Technologies (IT).  
Title: *Sintesi attraverso metodi di "soft chemistry" e caratterizzazione di nanoparticelle magnetiche a base di ossidi di ferro per applicazione nel risanamento ambientale (on going, IT).*
- 4) Lorenzo Demuru (University of Milano-Bicocca). MSc Chemical Sciences and Technologies (IT).  
Title: *Sintesi laser-assistita, caratterizzazione e ottimizzazione di nanoparticelle plasmoniche per la realizzazione di sensori ottici multicanale. (on going, IT).*
- 5) Massimiliano Mariani (University of Milano-Bicocca). MSc Materials Science (ENG).  
Title: *Polysaccharide-based materials and coatings (on going, ENG).*
- 6) Sofia Faina (University of Milano-Bicocca). MSc Chemical Sciences and Technologies (IT).  
Title: *Development of thermally conductive and self-healing rubber composites by the inclusion of inorganic nanoparticles and reversible bonds. (on going, ENG).*
- 7) Alexia Micaela Schirripa (University of Milano-Bicocca). BSc Materials Science (IT).  
Title: *Sintesi e caratterizzazione di sistemi a base di ZnO per applicazioni in vulcanizzazione (2023, IT).*
- 8) Andreia Amighini Alerhush (University of Milano-Bicocca). BSc Materials Science (IT).  
Title: *Filler ibridi a base di silice e alumina per applicazioni in nanocompositi polimerici termicamente conduttivi (2022, IT).*
- 9) Davide Burlon (Polytechnic of Torino). MSc Energy and Nuclear Engineering (IT).  
Title: *Cement-based composite materials for thermochemical heat storage (2018, ENG).*
- 10) Davide Palma (University of Torino). MSc Environmental Chemistry (IT).  
Title: *Fotodegradazione di caffeina in presenza di materiali ibridi magnetici contenenti sostanze organiche derivate da compost (2017, IT).*
- 11) Federico Guerretta (University of Torino). MSc Clinical, Forensic Chemistry and Doping Control (IT).  
Title: *Carboni da sostanze naturali a basso costo: Preparazione, caratterizzazione e applicazione (2016, IT).*

*Autorizzo il trattamento dei miei dati personali ai sensi del Decreto Legislativo 30 giugno 2003, n. 196. Dichiaro che quanto riportato nel presente Curriculum Vitae corrisponde a verità ai sensi del D.P.R. 445/2000.*

Milano (MI), 20/07/2023

Dr. Roberto Nisticò, PhD

