DEPARTMENT OF
MATERIALS SCIENCE
Via Roberto Cozzi, 55
I-20125 Milano (I)

Prof. Roberto Nisticò, PhD
Associate Professor

University of Milano-Bicocca
E-mail: 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, U5, Via R. Cozzi 55, 20125 Milano (MI), Italy
Telephone (office) and E-mail	*Ph.: (+39)026448511; E-mail:* roberto.nistico@unimib.it
Personal website	https://en.unimib.it/roberto-nistico; Roberto Nisticò (researchgate.net)

Scopus Author ID: 55224717100; **WOS Researcher ID**: E-5568-2016; **ORCID**: 0000-0001-8986-5542.

PUBLICATIONS LIST (corresponding author)

1) T. Rodriguez-Flores, F. Shafiq, **R. Nisticò**, Synthesis, properties, and application in catalysis of Cu, Ni, Co, Zn ferrites: A comprehensive review study. **Journal of Alloys and Compounds** 1036 (2025) 181926. DOI: 10.1016/j.jallcom.2025.181926.
2) C. Tricella, M. Muhyuddin, **R. Nisticò**, S. Tosoni, C. Santoro, Recent advancements related to silver-based electrocatalysts for carbon dioxide reduction reaction to carbon monoxide. **Current Opinion in Electrochemistry** 51 (2025) 101696. DOI: 10.1016/j.coelec.2025.101696.
3) L. Mirizzi, M. Muhyuddin, C. Lo Vecchio, E. Mosca, V. Baglio, I. Gatto, E. Berretti, A. Lavacchi, V.C.A. Ficca, R. Viscardi, **R. Nisticò**, C. Santoro, Amorphous nanostructured Ni–Fe oxide as a notably active and low-cost oxygen evolution reaction electrocatalyst for anion exchange membrane water electrolysis. **Industrial Chemistry and Materials** (2025), *in press*. DOI: 10.1039/D5IM00008D.
4) G. Bona, L. Viganò, M. Cantoni, R. Mantovan, B. Di Credico, S. Mostoni, R. Scotti, **R. Nisticò**, An experimental demonstration on the recyclability of hybrid magnetite-humic acid nanoparticles. **Sustainable Materials and Technologies** 43 (2025) e01275. DOI: 10.1016/j.susmat.2025.e01275.
5) F. Faina, M. Colombo, L. Mirizzi, M. Hernandez Santana, S.I. Ultrera-Barrios, **R. Nisticò**, S. Diré, E. Callone, S. Mostoni, G. Fredi, B. Di Credico, R. Scotti, M. D'Arienzo, Al_2O_3 decorated with Zn single sites: A multifunctional filler for upgrading the properties of XNBR composites. **ACS Applied Polymer Materials** 7 (2025) 234-246. DOI: 10.1021/acsapm.4c02946.
6) L. Viganò, B. Di Credico, F. Parrino, N. Keller, M. Bellotto, M. D'Arienzo, S. Mostoni, S. Latorrata, A. Dotti, **R. Nisticò**, R. Scotti, A new life for tionite industrial waste: Regeneration strategy towards photocatalytic applications. **ChemSusChem** (2024), e202401698, in press. DOI: 10.1002/cssc.202401698.
7) A. Sansonetti, C. Riminesi, S. Mirouniouk, N. Proietti, V. Di Tullio, **R. Nisticò**, B. Secchi, C. Canevali, Gel cleaning in heritage: Comparison of the water release among gels and traditional pads. **Gels** 10 (2024) 708. DOI: 10.3390/gels10110708.
8) G. Bona, G. Bragaggia, M. Cantoni, B. Di Credico, S. Mostoni, G. Capitani, R. Scotti, S. Gross, **R. Nisticò**, Polyethylene glycol-assisted hydro-solvothermal growth of anisotropic magnetic iron oxides: The role of mixed environment conditions. **Colloids and Surfaces A: Physicochemical and Engineering Aspects** 702 (2024) 135117. DOI: 10.1016/j.colsurfa.2024.135117.
9) I. Tagliaro, V. Radice, **R. Nisticò**, C. Antonini, Chitosan electrolyte hydrogel with low ice adhesion properties. **Colloids and Surfaces A: Physicochemical and Engineering Aspects** 700 (2024) 134695. DOI: 10.1016/j.colsurfa.2024.134695.
10) C. Canevali, A. Sansonetti, L. Rampazzi, D. Monticelli, M. D'Arienzo, B. Di Credico, E. Ghezzi, S. Mostoni, **R. Nisticò**, R. Scotti, The chemistry of chelation for built heritage cleaning: The removal of copper and iron stains. **ChemPlusChem** 89 (2024) e202300709. DOI: 10.1002/cplu.202300709.
11) L. Mirizzi, A. Amighini Alerhush, **R. Nisticò**, M. Malandrino, S. Diré, E. Callone, G. Fredi, A. Dorigato, L. Giannini, S. Guerra, S. Mostoni, B. Di Credico, R. Scotti, M. D'Arienzo, SiO_2@Al_2O_3 binary filler: A chance for enhancing the heat transport in rubber composites for tire applications. **Polymer Composites** 45 (2024) 8091-8103. DOI: 10.1002/pc.28326.

12) I. Tagliaro, M. Mariani, R. Akbari, M. Contardi, M. Summa, F. Saliu, **R. Nisticò**, C. Antonini, PFAS-free superhydrophobic chitosan coating for fabrics. **Carbohydrate Polymers** 333 (2024) 121981. DOI: 10.1016/j.carbpol.2024.121981.
13) **R. Nisticò**, R. Mantovan, M. Cantoni, C. Rinaldi, M. Malandrino, S. Mostoni, M. D'Arienzo, B. Di Credico, R. Scotti, Hydrothermal synthesis of Cu-substituted Ni ferrites: Structural, morphological, and magnetic properties. **Journal of Alloys and Compounds** 981 (2024) 173628. DOI: 10.1016/j.jallcom.2024.173628.
14) D. Montini, C. Cara, M. D'Arienzo, B. Di Credico, S. Mostoni, **R. Nisticò**, L. Pala, R. Scotti, Recent advances on porous siliceous materials derived from waste. **Materials** 16 (2023) 5578. DOI: 10.3390/ma16165578.
15) 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.
16) 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_2O_3 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.
17) L. Lavagna, **R. Nisticò**, An Insight into the chemistry of cement—A review. **Applied Sciences** 13 (2023) 203. DOI: 10.3390/app13010203.
18) 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 alkoxysilane-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.
19) **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.
20) **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.
21) 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.
22) **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.
23) 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.
24) 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.
25) 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.
26) 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.
27) **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.

28) **R. Nisticò**, A synthetic guide toward the tailored production of magnetic iron oxide nanoparticles. **Boletin de la Sociedad Espanola de Ceramica y Vidrio** 60 (2021) 29-40. DOI: 10.1016/j.bsecv.2020.01.011.
29) D. Suarez-Riera, A. Merlo, L. Lavagna, **R. Nisticò**, M. Pavese, Mechanical properties of mortar containing recycled Acanthocardia tubercolata seashells as aggregate partial replacement. **Boletin de la Sociedad Espanola de Ceramica y Vidrio** 60 (2021) 206-210. DOI: 10.1016/j.bsecv.2020.03.011.
30) **R. Nisticò**, Polyethylene terephthalate (PET) in the packaging industry. **Polymer Testing** 90 (2020) 106707. DOI: 10.1016/j.polymertesting.2020.106707.
31) **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.
32) 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.
33) 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.
34) **R. Nisticò**, L. Lavagna, D. Versaci, P. Ivanchenko, P. Benzi, Chitosan and its char as fillers in cement-base composites: A case study. **Boletin de la Sociedad Espanola de Ceramica y Vidrio** 59 (2020) 186-192. DOI: 10.1016/j.bsecv.2019.10.002.
35) 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.
36) 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.
37) **R. Nisticò**, F. Cesano, F. Garello, 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.
38) 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.
39) 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.
40) **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.
41) **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.
42) E. Montoneri, **R. Nisticò**, M. Francavilla, Demineralisation of municipal biowaste hydrolysates. **ChemistrySelect** 4 (2019) 7551-7554. DOI: 10.1002/slct.201900369.
43) **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.
44) **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.

45) **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.

46) V. Polliotto, F.R. Pomilla, V. Maurino, G. Marcì, 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.

47) **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.

48) 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.

49) 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.

50) **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.

51) 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.

52) **R. Nisticò**, Block copolymers for designing nanostructured porous coatings. **Beilstein Journal of Nanotechnology** 9 (2018) 2332-2344. DOI: 10.3762/bjnano.9.218.

53) 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.

54) 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.

55) 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.

56) **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.

57) S.A. Jadhav, **R. Nisticò**, G. Magnacca, D. Scalarone, 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.

58) **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.

59) 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.

60) **R. Nisticò**, Aquatic-derived biomaterials for a sustainable future: A European opportunity. **Resources** 6 (2017) 65. DOI: 10.3390/resources6040065.

61) **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.

UNIVERSITÀ DEGLI STUDI DI MILANO BICOCCA
DEPARTMENT OF MATERIALS SCIENCE
Via Cozzi, 55
I-20125 Milano (I)

62) **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.

63) 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.

64) **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.

65) **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.

66) **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.

67) 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.

68) 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.

69) 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.

70) **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.

71) 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.

72) **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.

73) **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.

74) 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.

75) 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.

76) **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.

77) 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.
78) **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.
79) 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.
80) **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.
81) **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. Fechler, Correction: The hypersaline synthesis of titania: From powders to aerogels. **RSC Advances** 5 (2015) 18578. DOI: 10.1039/c5ra90013a.
82) 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.
83) L. Iannarrelli, **R. Nisticò**, P. Avetta, M. Lazzari, G. Magnacca, P. Calza, D. Fabbri, D. Scalarone, 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.
84) **R. Nisticò**, D. Scalarone, 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.
85) **R. Nisticò**, G. Magnacca, M. Antonietti, N. Fechler, "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.
86) **R. Nisticò**, G. Magnacca, M. Antonietti, N. Fechler, Highly porous silica glasses and aerogels made easy: The hypersaline route. **Advanced Porous Materials** 2 (2014) 37-41. DOI: 10.1166/apm.2014.1049.
87) P. Avetta, **R. Nisticò**, M.G. Faga, D. D'Angelo, E. Aimo Boot, 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.
88) **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.
89) **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.

UNIVERSITÀ DEGLI STUDI DI MILANO BICOCCA

DEPARTMENT OF
MATERIALS SCIENCE

Via Cozzi, 55
I-20125 Milano (I)

EDITORIALS IN SCIENTIFIC JOURNALS LIST (corresponding author)

I) **R. Nisticò**, T.R. Jensen, Featured Papers in Inorganic Materials 2024, **Inorganics** 13 (2025) 110. DOI: https://doi.org/10.3390/inorganics13040110.

II) S. Mostoni, **R. Nisticò**, New Advances into Nanostructured Oxides, 2nd Edition, **Inorganics** 13 (2025) 60. DOI: https://doi.org/10.3390/inorganics13020060.

III) **R. Nisticò**, H. Idriss, L. Carlos, E. Aneggi, T.R. Jensen, 10th Anniversary of *Inorganics*: Inorganics Materials. **Inorganics** 12 (2024) 62. DOI: 10.3390/inorganics12030062.

IV) **R. Nisticò**, New Advances into Nanostructured Oxides. **Inorganics** 11 (2023) 130. DOI: 10.3390/inorganics11030130.

V) F. Garello, **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.

VI) 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.

BOOK CHAPTERS LIST

I) **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.

II) 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.

EDITED BOOKS LIST

I) **R. Nisticò**, T.R. Jensen, Featured Papers in Inorganic Materials 2024. Printed Edition of the Special Issue published in Inorganics, MDPI, Basel (Switzerland), 2025. ISBN: 978-3-7258-3854-7.

II) S. Mostoni, **R. Nisticò**, *New Advances into Nanostructured Oxides, 2nd edition*. Printed Edition of the Special Issue published in **Inorganics**, MDPI, Basel (Switzerland), 2025. ISBN: 978-3-7258-3440-2.

III) **R. Nisticò**, H. Idriss, L. Carlos, E. Aneggi, T.R. Jensen, *10th Anniversary of Inorganics: Inorganics Materials*. Printed Edition of the Special Issue published in **Inorganics**, MDPI, Basel (Switzerland), 2024. ISBN: 978-3-7258-0407-8.

IV) **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.

V) F. Garello, **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.

SCIENTIFIC DISSEMINATION PUBLICATIONS LIST

I) B. Li, M. Guidotti, P. Albanese, F. Cardano, L. Consentino, S. Fulignati, T. Giovannini, **R. Nisticò**, E. Paone, G. Trapasso, Spotlight on IUPAC Italian Young Observers. **Chemistry International** 47(3) (2025) 18-28. https://doi.org/10.1515/ci-2025-0304.

II) P. Albanese, F. Cardano, L. Consentino, S. Fulignati, T. Giovannini, D. Mazzarella, N. Mirotta, **R. Nisticò**, E. Paone, G. Trapasso, Le 10 tecnologie emergenti in chimica 2024. **La Chimica & l'Industria** IX(1) (2025) 15-18. https://www.soc.chim.it/sites/default/files/chimind/pdf/2025_1_15_ca.pdf.

Milano (MI), 30/07/2025

Prof. Dr. Roberto Nisticò, PhD