

Iolanda Francolini – CV

PERSONAL INFO

Citizenship: Italian

Email: iolanda.francolini@uniroma1.it

ORCID: 0000-0002-0180-2334

Google scholar: <https://scholar.google.com/citations?user=4IU9j9QAAAAJ&hl=it&oi=ao>

EDUCATION

2005 PhD in Industrial Chemical Processes, Sapienza University of Rome

2000 Master Degree in Industrial Chemistry, Full Marks (110/110 e lode), Department of Chemistry, Sapienza University of Rome

CURRENT POSITION

2020 Associate Professor, Department of Chemistry, Sapienza University of Rome, Italy

PREVIOUS POSITIONS

2004-2020 Researcher in Industrial Chemistry, Faculty of Mathematical, Physical and Natural Sciences, Department of Chemistry, Sapienza University of Rome, Italy

2003 Visiting Scientist at the Center for Biofilm Engineering (CBE), Montana State University, Montana, USA

2001 Research contract at the Department of Ultrastructures, Italian Institute of Health (ISS), Rome, Italy

APPOINTMENTS

2022 – current Junior Research Fellow, Classe Accademica di Scienze e Tecnologie, Scuola Superiore di Studi Avanzati (SSAS), Sapienza University of Rome, Italy

2022 – current Member of the Scientific Teaching Board of the II level Master Course “Tecniche Scientifiche di Indagine nel Settore Alimentare, Sapienza University of Rome, Italy

2006 – current Member of the PhD board of the PhD School in “Chemical Sciences” of the Sapienza University of Rome, Italy

TEACHING ACTIVITIES

2021 – current *Lecturer* of the course: “Fondamenti di Scienze Macromolecolari” (9 CFU), SSD CHIM/04, Master Degree in Chemical Sciences, Dept. Chemistry, Sapienza University of Rome, Italy.

2010 – current *Lecturer* of the course: “Scienza e Tecnologia dei Materiali Polimerici” (9 CFU), SSD CHIM/04, Master Degree in Industrial Chemistry, Dept. Chemistry, Sapienza University of Rome, Italy.

2005 – 2010 *Lecturer* of the course “Scienza e Tecnologia dei Materiali” (2 CFU), SSD ING/IND 22, Bachelor degree in Industrial Chemistry, Dept. Chemistry, Sapienza University of Rome, Italy.

2005 – 2010 *Lecturer* of the course: “Laboratorio di Chimica delle Macromolecole” (8 CFU), SSD CHIM/05, Bachelor degree in Industrial Chemistry, Dept. Chemistry, Sapienza University of Rome, Italy.

- 2021 *External examiner* for the PhD thesis of the student Sophie Rebecca Goodwin, PhD in EngD Carbon Capture and Storage and Cleaner Fossil Energy, University of Nottingham, Nottingham, UK. *Viva voce* examination on 09/07/2021.
- 2019 *Lecturer* (8 hours): “Biomaterials for medical applications” at the Specialization School in Animal health, breeding and livestock production, Matelica (Ma) – March/April 2019, Università degli studi di Camerino, Italy

ORGANIZATION ACTIVITIES

- 2020 – current Member of the “Comitato di Monitoraggio”, Faculty of Mathematical, Physical and Natural Sciences, Sapienza University of Rome
- 2022 – current Vice-President of the CAD in Industrial Chemistry (LM-71), Dept. Chemistry, Sapienza University of Rome, Italy
- 2022 – current President of the Departmental Commission “Ricerca e Terza Missione”, Dept. Chemistry, Sapienza University of Rome, Italy
- 2018 – 2020 President of the CGAQ Commission (Commissione di Gestione dell’Assicurazione della Qualità)” of the degrees in Industrial Chemistry, Dept. Chemistry, Sapienza University of Rome, Italy

SUMMARY OF SCIENTIFIC PRODUCTION

Author of 84 publications in peer-reviewed journals ($H_{index} = 28$, Total citations = 2525), 4 book chapters, more than 70 contributions to conferences (14 oral presentations).

Number of papers in the last 10 years (2012-2023) (value for Full Professor SSD 03/C2: 30) = 59

Number of citations in the last 15 years (2008-2023) (value Full Professor SSD 03/C2: 898) = 1747

H index in the last 15 years (value Full Professor SSD 03/C2: 18) = 23

Research topics

Polymer chemistry, synthesis and characterization of polyesters and polyacrylates, functionalization and physico-chemical characterization of polymers, antimicrobial polymers, antioxidant polymers, nanostructured polymer systems for drug delivery, composite materials for environmental applications.

International Research Collaborations

Dr. Vincenzo Taresco	University of Nottingham, Dept. of Chemistry, Nottingham, UK
Professor Steve Howdle	University of Nottingham, Dept. of Chemistry, Nottingham, UK
Professor Derek Irvine	University of Nottingham, Dept. of Chemistry, Nottingham, UK
Professor Paul Stoodley	Ohio State University, Department of Orthopaedics, Ohio, USA
Professor Pamela Pasetto	Institut des Molécules et Matériaux du Mans, Le Mans Université, France
Dr. Chanda Madhuranthakam	Abu Dhabi University, United Arab Emirates
Dr. Wafi Siala	Catholic Univ Louvain, Louvain Drug Res Inst, Belgium
Professor Steven Percival	University of Liverpool, Surface Science Research Centre, UK
Professor Vesna Antic	Faculty of Agriculture, University of Belgrade, Serbia
Professor J.B. Kaplan	University of Medicine and Dentistry of New Jersey, Newark, USA

CONFERENCE ACTIVITIES

Invited Talks and Scientific Committee

- 2022 *Chair* of the First Symposium for Young Chemists (SYNC) 2022, an International Conference held in Rome, Department of Chemistry, Sapienza University of Rome, Italy (20-23/06/2022).

- 2020 *Invited speaker*, Nottingham University, UK, Department of Chemistry, Webinar 19/June/2020. Presentation title: "Antimicrobial Polymers: from structural design to applications in the biomedical field".
- 2019 *Invited speaker*, Bristol University, Colston AMR Society Symposium, Bristol 13-14/November/2019. Presentation title: "Antimicrobial biomaterials: chemical and physical approaches".
- 2019 *Member of the Scientific Committee* of the VIII Conference "Young Researchers" 2019, Department of Chemistry, Sapienza University of Rome, Italy (25-26/06/2019).
- 2018 *Keynote speaker* at the "Word Congress on Advanced Biomaterials and Tissue Engineering", Rome, 17- 18/10/2018. Presentation title: "Polymeric and inorganic nanomaterials as promising tools for the battle against microbial biofilms".
- 2018 *Keynote speaker* at the International Conference on Microbiology & Infectious Diseases, Rome, 23- 25/07/2018. Presentation title: "The Application of Nanotechnology for Prevention and Treatment of Microbial Biofilm based Infections".
- 2018 *Member of the Scientific Committee* of the "International Conference on Microbiology & Infectious Diseases", Rome 23- 25/07/2018.
- 2016 *Invited Speaker* at the "6th Clinical Microbiology Conference", Rome, 20-22/10/2016. Presentation title: "Development of innovative coatings for antibiofilm medical devices".
- 2009 *Invited Speaker* at the "First European Congress on Microbial Biofilm", tenutosi a Rome, 2-5, September, 2009. Presentation title: "Novel strategies to prevent and control biofilm growth on central venous catheters".
- 2003 *Selected Speaker at the American Society for Microbiology Conference "Biofilms 2003"*, Victoria British Columbia, Canada, 1-6/November/2003. Presentation title: "Controlled ultrasonic antibiotic release from hydrogel coatings for biofilm prevention".

Member of Conference Organizing Committee

- 2014 Member of the Organizing Committee of the International Meeting e "Biofilm-based healthcare-associated infections: from microbiology to clinics", Rome, 9-10/10/2014.
- 2009 Member of the Organizing Committee of the "First European Congress on Microbial Biofilm", Rome, 2-5, September, 2009.
- 2009 Member of the Organizing Committee of the "First European Congress on Microbial Biofilm", Rome, 2-5, September, 2009.

Oral Presentations to Conferences

- 2010 *Speaker* at the XXXIII International Conference on Microbial Ecology and Disease, Athene, Greece, il 6-10/September/2010. Presentation title: "Novel intrinsically antimicrobial polymers to control biofilm formation on medical devices".
- 2006 *Speaker* at the 34° Congress of the Italian Society for Microbiology, Genova, 15-18/October/2006. Presentation title: "Poliuretani funzionalizzati a rilascio combinato di rifampicina/cefamandolo e polietilenglicole sono in grado di prevenire la colonizzazione batterica e l'insorgenza di antibiotico-resistenza".
- 2005 *Speaker* at the I workshop Nazionale "Biofilm microbici 2005", Rome 20-21/June/2005. Presentation title: "Biomateriali a rilascio di agenti antimicrobici per lo sviluppo di dispositivi medici antibiofilm".
- 2004 *Speaker* at the 32° Congress of the Italian Society for Microbiology, Milan, 26-29/September/2004. Presentation title: "L'acido usnico inibisce la formazione di biofilm in *S. aureus* e interferisce con i fenomeni di quorum sensing in *P. aeruginosa*".
- 2001 *Speaker* at the XV Congress of the Italian Association of Macromolecules (AIM), Trieste, Italy, 24-27/September/2001. Presentation title: "Preparazione di superfici polimeriche antibatteriche per la prevenzione di infezioni".

- 2001** *Speaker* at the 29° Congress of the Italian Society for Microbiology, Genova, Italy, 7-10/November/2001. Presentation title: “Efficacia dell’adsorbimento di antibiotici per la prevenzione delle infezioni associate ai cateteri: nuovi approcci sperimentali”.
- 2001** *Speaker* at the 21° Congress of the Italian Society for Chemotherapy, Florence, Italy, 2-5/December/2001. Presentation title: “Adsorbimento multistrato di un antibiotico sperimentale beta lattamico a matrici polimeriche diverse: un nuovo approccio sperimentale per la prevenzione delle infezioni associate ai cateteri vascolari”.

EDITORIAL ACTIVITY

- 2022 - current Guest Editor of the Focus Collection “Focus on Nanotechnology and Sustainability”, IoP Nanotechnology (I.F. = 3.953), IoP Science Publisher.
- 2020 – current Member of the Editorial Board of “Open Chemistry” (I.F.= 1.51), DE GRUYTER
- 2013 – current Member of the Editorial Board of International Journal of Molecular Science (I.F. = 6.2), MDPI Publisher.
- 2021 – current Guest Editor of the Special Issue “Bioactive Packaging Materials”, International Journal of Molecular Science (I.F. = 6.2), MDPI Publisher.
- 2021 – current Guest Editor of the Special Issue “Polymer-Based Strategies for Fighting Microbial and Viral Infections”, International Journal of Molecular Science (I.F. = 6.2), MDPI Publisher.
- 2019 – current Member of the Reviewer Board of “Polymers” (I.F. = 3.164), MDPI Publisher.
- 2019 – 2002 *Guest Editor* of the Special Issue “Chitosan Functionalizations, Formulations and Composites”, International Journal of Molecular Science (I.F. = 4.183), MDPI Publisher.
- 2018 *Guest Editor* of the Special Issue: “Polymeric Systems as Antimicrobial or Antifouling Agents”, International Journal of Molecular Science (I.F. = 4.183), MDPI Publisher.
- 2016 *Guest Editor* of the Special Issue "Antimicrobial Polymers", International Journal of Molecular Science (I.F. = 3.687), MDPI Publisher.
- 2014 – 2019 *Co-author of 4 Book chapters* for RSC publisher, Woodhead Publisher and Springer
- 2004 – current *Reviewing activity* for numerous journals in the field of Material Science including Acta Biomaterialia, Scientific Reports, Polymers, Journal of Biomaterials Science-Polymer Edition, Progress in Organic Coatings, Applied Science, Colloids and Surface B, International Journal of Biological Macromolecules, Molecules, Journal of Biotechnology, Journal Biomedical Materials Research Part B, Material sciences and Engineering C.

FUNDING INFO

Grants as PI-Principal Investigator

Year	Title	Program	Grant value
2022	Principal Investigator of the Research Project: “Bile acids-based macromolecular antimicrobials for biomedical applications”.	Sapienza University of Rome Progetto n. RG12218166483FFD	73.890,00 euro
2022	Principal Investigator of the Research Project: “Sviluppo di resine poliamminoammide-epicloridrina (PAE) di nuova generazione per l’industria cartaria”.	Research Project with GWA	20.000,00 euro
2021	Principal Investigator of the Research Project: “Study of efficacy of natural antioxidants as rubber stabilizers alternative to conventional oil-based	Research Project with Bridgestone Europe NV/SA	25.000,00 euro

	products to produce environmentally compatible materials”.		
2021	Principal Investigator of the Research Project: “Sviluppo e caratterizzazione di matrici 2D a base di alginato e composti bioattivi di origine naturale per il wound healing”.	Sapienza University of Rome Progetto n. RP12117A5C501A93	4.000,00 euro
2019	Principal Investigator of the Research Project: “Sintesi di polimeri bioattivi a base di eugenolo”.	Sapienza University of Rome Progetto n. RP11916B459A8D63	4.000,00 euro
2017	Principal Investigator of the Research Project: “Sviluppo di nanomateriali polimerici antimicrobici”	Sapienza University of Rome Progetto n. RP11715C785E4434	3.200,00 euro
2016	Principal Investigator at the Research Project: “Sviluppo di matrici polimeriche bioattive per il wound healing”	Sapienza University of Rome Progetto n. RP116154C95A8DC4	4.000,00 euro
2015	Principal Investigator at the Research Project: “Sviluppo di nanoparticelle magnetiche funzionalizzate per l’immobilizzazione enzimatica”	Sapienza University of Rome Progetto n. C26A15LP27	4.000,00 euro
2014	<i>Principal Investigator</i> at the Research Project: “Polimeri antimicrobici a base di sostanze naturali bioattive”.	Sapienza University of Rome Progetto n. C26A14584K	8.000,00 euro
2013	<i>Principal Investigator</i> at the Research Project: “Cationic polymer nanoparticles for the treatment of lung infections by inhalation therapy”.	Sapienza University of Rome Progetto n. C26A13YYBK	12.000,00 euro

Part IX.B - Grants as I-Investigator

2022	Investigator at the Research Project “LIFE MUSCLES: Mussel Sustainable production (re)cyCLES” funded by European Community	LIFE PROJECT Project n: LIFE20 ENV/IT/000570	90.000,00 euro
2021	Investigator at the Research Project “Sviluppo di nanosistemi basati su sostanze di origine naturali nel trattamento delle infezioni da virus respiratori e dei processi infiammatori a esse associate” funded by Lazio region in the framework of the nell’ambito del Regional Operational Program (POR).	Regional Operational Program (POR). Project n: A0375-2020-36535	54.551,43 euro
2020	Investigator at the Research Project “Scaffold biomimetici a base di chitosano reticolato per l'ingegneria tissutale: preparazione e caratterizzazione”. Principal Investigator Prof. A. Piozzi, Dept.	Sapienza University of Rome Progetto n: RM120172A83AD932	15.000,00 euro

	Chemistry, Sapienza University of Rome.		
2018	Investigator at the Research Project "BioCerMat" funded by Lazio region in the framework of the nell'ambito del Regional Operational Program (POR).	Regional Operational Program (POR). Project n: A0112-2016-13358	80.980,65 euro
2018	Investigator at the Research Project: "Studio delle transizioni di polimeri allo stato amorfo mediante spettroscopia MTFTIR e calorimetria DSC". Principal Investigator Prof. A. Piozzi, Dept. Chemistry, Sapienza University of Rome.	Sapienza University of Rome Progetto n: RM11816435F88EF6	14.000,00 euro
2011	Investigator, at the Research Project: "Nanovettori magnetici core-shell a base di ferrite di manganese per il rilascio mirato di acido usnico" Principal Investigator Prof. A. Piozzi, Dept. Chemistry, Sapienza University of Rome.	Sapienza University of Rome Progetto n: C26A11SWNJ	32.818,00 euro
2010	Investigator, at the Research Project: "Polimeri intrinsecamente antimicrobici per la prevenzione ed il controllo della contaminazione batterica di dispositivi medici" Principal Investigator Prof. A. Piozzi, Dept. Chemistry, Sapienza University of Rome.	Sapienza University of Rome Progetto n: C26A10A8WM	9.000,00 euro
2009	Investigator, at the Research Project: "Nuove strategie per la preparazione di scaffold per l'ingegneria tissutale" Principal Investigator Prof. A. Piozzi, Dept. Chemistry, Sapienza University of Rome	Sapienza University of Rome Progetto n: C26F09F9FN	7.760,00 euro
2008	Investigator, at the Research Project: "Macromolecole biodegradabili di interesse farmaceutico: sintesi e caratterizzazione" Principal Investigator Prof. Lucio D'Ilario, Dept. Chemistry, Sapienza University of Rome	Sapienza University of Rome Progetto n: C26A08EE8N	10.000,00 euro
2008	Investigator, at the Research Project: "Processi di cristallizzazione di poliesteri impiegati in campo medico" Principal Investigator Prof. A. Piozzi, Dept. Chemistry, Sapienza University of Rome	Sapienza University of Rome Progetto n: C26F08W43A	5.000,00 euro
2007	Investigator, at the Research Project: "Sistemi nanostrutturati ferrite/albumina per rilascio mirato di farmaci: caratterizzazione chimico-	Sapienza University of Rome Progetto n: C26A07RZPP	12.000,00 euro

	fisica e biologica” Principal Investigator Prof. Lucio D’Ilario, Dept. Chemistry, Sapienza University of Rome		
2007-2009	Investigator, Scientific Research Project of relevant National Interest (PRIN) dal titolo: “Materiali bioattivi a base di poliesteri: sintesi, modificazioni e caratterizzazione” Principal Investigator Prof. Emo Chiellini, Università di Pisa. Local Principal Investigator Prof. M. Delfini, Dept. Chemistry, Sapienza University of Rome,	PRIN 2006 – prot. 2006038548 Italian Ministry of University Education and Research (MIUR)	350.000,00 euro Unità: 52.760,00 euro
2006	Investigator, at the Research Project: “Preparazione di particelle composite polimeriche magnetiche per applicazioni nel settore biomedico” Principal Investigator Prof. Lucio D’Ilario, Dept. Chemistry, Sapienza University of Rome	Sapienza University of Rome Progetto n: C26A06B7PB	8.000,00 euro
2005	Investigator, at the Research Project: “Preparazione ed ottimizzazione di nuove formulazioni polimeriche a rilascio di molecole biologicamente attive” Principal Investigator Prof. Lucio D’Ilario, Dept. Chemistry, Sapienza University of Rome	Sapienza University of Rome Progetto n: C26A050931	9.500,00 euro
2004-2006	Investigator, Scientific Research Project of relevant National Interest (PRIN): “Formulazione di Nuovi Materiali Polimerici Bioattivi per Applicazioni nel Settore dell’Ingegneria Tissutale”, Principal Investigator Prof. Emo Chiellini, Università di Pisa. Local Principal Investigator Prof. A. Piozzi, Dept. Chemistry, Sapienza University of Rome.	PRIN 2004 – Italian Ministry of University Education and Research (MIUR)	540.000,00 euro Unità: 38.300,00 euro
2002-2004	Investigator, Scientific Research Project of relevant National Interest (PRIN): “Nuovi sistemi polimerici nanostrutturati per azioni mirate di principi attivi macromolecolari in tecniche emergenti di ingegneria tissutale e farmacologia avanzata”, Principal Investigator Prof. Emo Local Principal Investigator locale Prof. A. Piozzi, Dept. Chemistry, Sapienza University of Rome	PRIN 2002 – Italian Ministry of University Education and Research (MIUR). Project n. 2002034343_005	542.000,00 euro Unità: 69.500,00 euro

Part XII- List of publications

XII.A – Publications in peer-reviewed journals

*Corresponding Author; I.F._{py}=Impact Factor publication year

	Paper	I.F. _{py}
84.	Di Consiglio M, Sturabotti E, Brugnoli B, Piozzi A, Migneco LM, Francolini I* . Synthesis of sustainable eugenol/hydroxyethylmethacrylate-based polymers with antioxidant and antimicrobial properties. <i>Polym Chem</i> 2023 , https://doi.org/10.1039/D2PY01183B .	5.364
83.	Taresco V, Tulini I, Francolini I* , Piozzi A. Polyglycerol Adipate-Grafted Polycaprolactone Nanoparticles as Carriers for the Antimicrobial Compound Usnic Acid. <i>Int J Mol Sci.</i> 2022 ;23(22):14339. https://doi.org/10.3390/ijms232214339 .	6.208
82.	Silvestro I, Fernández-García M, Ciarlantini C, Francolini I , Girelli A, Piozzi A. Molecularly Imprinted Polymers Based on Chitosan for 2,4-Dichlorophenoxyacetic Acid Removal. <i>Int J Mol Sci.</i> 2022 ;23(21):13192. https://doi.org/10.3390/ijms232113192 .	6.208
81.	Larder RR, Krumins E, Jacob PL, Kortsens K, Cavanagh R, Jiang L, Vuotto C, Francolini I , Tuck C, Taresco V., Howdle SM. Antimicrobial ‘inks’ for 3D printing: block copolymer-silver nanoparticle composites synthesised using supercritical CO ₂ . <i>Polym Chem</i> 2022 ;13:3768-3779. https://doi.org/10.1039/D2PY00398H .	4.790
80.	Henrici De Angelis, L, Stirpe MR, Tomolillo D, Donelli G, Francolini I* , Vuotto C. The multifunctional role of Poloxamer P338 as biofilm disrupter and antibiotic enhancer: a small step forward against the big trouble of catheter-associated Escherichia coli urinary tract infection. <i>Microorganisms.</i> 2022 , 10(9), 1757. https://doi.org/10.3390/microorganisms10091757	4.926
79.	Madhuranthakam CMR, Fernandes SQ, Piozzi A, Francolini I . Mechanical Properties and Diffusion Studies in Wax–Cellulose Nanocomposite Packaging Material. <i>Int. J. Mol. Sci.</i> 2022 ;23(16):9501. https://doi.org/10.3390/ijms23169501 .	6.208
78.	Sturabotti E, Consalvi S, Tucciarone L, Macrì E, Di Lisio V, Francolini I , Minichiello C, Piozzi A, Vuotto C, Martinelli A. Synthesis of Novel Hyaluronic Acid Sulfonated Hydrogels Using Safe Reactants: A Chemical and Biological Characterization. <i>Gels.</i> 2022 ;8(8):480. https://doi.org/10.3390/gels8080480	4.432
77.	De Felice AC, Di Lisio V, Francolini I , Mariano A, Piozzi A, Scotto D’Abusco A, Sturabotti E, Martinelli A. One-Pot preparation of hydrophilic polylactide porous scaffolds by using safe solvent and choline taurinate ionic liquid. <i>Pharmaceutics.</i> 2022 ;14(1):158. https://doi.org/10.3390/pharmaceutics14010158 .	6.321
76.	Di Caprio F, Chelucci R, Francolini I , Altamari P, Pagnanelli F. Extraction of microalgal starch and pigments by using different cell disruption methods and aqueous two-phase system. <i>J. Chem. Technol. Biotechnol.</i> 2022 ;97(1):67-78. https://doi.org/10.1002/jctb.6910 .	2.750
75.	Tedeschi AM, Di Caprio F, Piozzi A., Pagnanelli F, Francolini I.* Sustainable Bioactive Packaging based on thermoplastic starch and microalgae. <i>Int. J. Mol. Sci.</i> 2022 ;23(1):178. https://doi.org/10.3390/ijms23010178	5.923
74.	Silvestro I, Ciarlantini C, Francolini I , Tomai P, Gentili A, Dal Bosco C, Piozzi A. Chitosan-graphene oxide composite membranes for solid-phase extraction of pesticides. <i>Int. J. Mol. Sci.</i> 2021 ;22(16):8374. https://doi.org/10.3390/ijms22168374 .	5.923
73.	Rapone I., Taresco V., Di Lisio V., Piozzi A., Francolini I.* Silver and zinc decorated-polyurethane ionomers with tunable hard/soft phase segregation. <i>Int. J. Mol. Sci.</i> 2021 , 22(11), 6134. https://doi.org/10.3390/ijms22116134 .	5.923

72.	Jacob P.L., Cantu Ruiz L.A., Pearce A.K., He Y., Lentz J.C., Moore J.C., Machado F., Rivers G., Apebende E., Fernandez M.R., Francolini I. , Wildman R., Howdle S.M., Taresco V. Poly (glycerol adipate) (PGA) backbone modifications with a library of functional diols: Chemical and physical effects. <i>Polymer</i> 2021 , 123912. https://doi.org/10.1016/j.polymer.2021.123912	4.430
71.	Silvestro I, Sergi R, Scotto D'Abusco A, Mariano A, Martinelli A, Piozz A, Francolini I.* Chitosan scaffolds with enhanced mechanical strength and elastic response by combination of freeze gelation, photo-crosslinking and freeze-drying. <i>Carbohydr. Polym.</i> 2021 , 261, 118156. https://doi.org/10.1016/j.carbpol.2021.118156 .	9.381
70.	Apriceno A, Silvestro I, Girelli A, Francolini I , Pietrelli L, Piozzi A. Preparation and characterization of chitosan-coated manganese-ferrite nanoparticles conjugated with laccase for environmental bioremediation. <i>Polymers</i> 2021 , 13(9), 1453. https://doi.org/10.3390/polym13091453 .	4.329
69.	Francolini I* , Piozzi A. Role of antioxidant molecules and polymers in prevention of bacterial growth and biofilm formation. <i>Curr Med Chem</i> 2020 ;27(29):4882-4904	3.894
68.	Stirpe M, Brugnoli B, Donelli G, Francolini I* , Vuotto C. Poloxamer 338 Affects Cell Adhesion and Biofilm Formation in Escherichia coli: Potential Applications in the Management of Catheter-Associated Urinary Tract Infections. <i>Pathogens</i> 2020 ;9(11):E885. doi: 10.3390/pathogens9110885	3.018
67.	Silvestro I, Lopreiato M, Scotto d'Abusco A, Di Lisio V, Martinelli A, Piozzi A, Francolini I* . Hyaluronic acid reduces bacterial fouling and promotes fibroblasts' adhesion onto chitosan 2d-wound dressings. <i>Int J Mol Sci.</i> 2020 ;21(6):2070. DOI: 10.3390/ijms21062070.	4.556
66.	Francolini I* , Taresco V, Martinelli A, Piozzi A. Enhanced performance of <i>Candida rugosa</i> lipase immobilized onto alkyl chain modified-magnetic nanocomposites. <i>Enzyme Microb. Technol.</i> 2020 , 132: 109439 Doi: 10.1016/j.enzmictec.2019.109439.	3.553
65.	Pietrelli L, Francolini I , Piozzi A, Sighicelli M, Silvestro I, Vocciante M. Chromium(III) Removal from Wastewater by Chitosan Flakes. <i>Appl. Sci.</i> 2020 , 10, 1925 Doi: 10.3390/app10061925	2.217
64.	Di Lisio V, Sturabotti E, Francolini I , Piozzi A, Martinelli A. Application of temperature modulation to FTIR spectroscopy: an analysis of equilibrium and non-equilibrium conformational transitions of poly(ethylene terephthalate) in glassy and liquid states. <i>J. Therm. Anal. Calorim.</i> 2020 ;142(5):1835-1847. DOI: 10.1007/s10973-020-10169-0.	2.471
63.	Silvestro I, Francolini I , Di Lisio V, Martinelli A, Pietrelli L, Scotto d'Abusco A, Scoppio A, Piozzi A. Preparation and Characterization of TPP-Chitosan Crosslinked Scaffolds for Tissue Engineering. <i>Materials (Basel)</i> . 2020 ;13(16):3577. Doi: 10.3390/ma13163577.	3.057
62.	Francolini I* , Piozzi A. Polymeric systems as antimicrobial or antifouling agents. <i>Int. J. Mol. Sci.</i> 2019 , 20(19), 4866 Doi: doi.org/10.3390/ijms20194866	4,183
61.	Francolini I , Giansanti L, Piozzi A, Altieri B, Mauceri A, Mancini G. Glucosylated liposomes as drug delivery systems of usnic acid to address bacterial infections. <i>Colloids Surf B Biointerfaces</i> , 2019 , 181, 632-638. Doi: 10.1016/j.colsurfb.2019.05.056	3,973
60.	Francolini I* , Silvestro I, Di Lisio V, Martinelli A, Piozzi A. Synthesis, characterization, and bacterial fouling-resistance properties of polyethylene glycol-grafted polyurethane elastomers. <i>Int. J. Mol. Sci.</i> 2019 , 20(4), 1001. Doi: 10.3390/ijms20041001.	4,183
59.	Francolini I , Perugini E, Silvestro I, Lopreiato M, Scotto d'Abusco A, Valentini F, Placidi E, Arciprete F, Martinelli A, Piozzi A. Graphene oxide oxygen content affects physical and biological properties of scaffolds based on chitosan/graphene oxide conjugates. <i>Materials</i> 2019 , 12(7), 1142. Doi: 10.3390/ma12071142.	2.972
58.	Di Lisio V, Sturabotti E, Francolini I , Piozzi A, Martinelli A. Isotactic polypropylene reversible crystallization investigated by modulated temperature and quasi-isothermal FTIR. <i>J Polym Sci B Polym Phys</i> 2019 ; 57(14): 922-931. Doi:	2,596

	10.1002/polb.24847.	
57.	Di Lisio, V.; Sturabotti, E.; Francolini, I. ; Piozzi, A.; Martinelli, A. Effects of annealing above T _g on the physical aging of quenched PLLA studied by modulated temperature FTIR. <i>J Polym Sci B Polym Phys</i> 2019 ; 57(3): 174-181. doi:10.1002/polb.24769.	2,596
56.	Amato A, Migneco LM, Martinelli A, Pietrelli L, Piozzi A, Francolini I* . Antimicrobial activity of catechol functionalized-chitosan versus <i>Staphylococcus epidermidis</i> . <i>Carbohydr. Polym.</i> 2018 ; 179: 273-281. doi:10.1016/j.carbpol.2017.09.073.	5,158
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XII.B – Book chapters

Book chapters	Publisher
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XIII.C – Conference papers

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