

ALESSANDRA PUGLISI

Associate Professor

Dipartimento di Chimica

via Golgi, 19 - 20133 Milano

phone: 02 503 14189

email: alessandra.puglisi@unimi.it

Education

- November 2003, PhD Industrial Chemistry: "Synthesis and immobilization of organic catalysts onto soluble support" Advisor: Prof. Mauro Cinquini
- July 2000, Laurea in Industrial Chemistry: "Sintesi stereoselettiva di un nuovo B-lattame monociclico, precursore avanzato di un inibitore della serina proteasi PSA" Advisor: Prof. Mauro Cinquini
- July 1995, Diploma Scuola Secondaria Superiore, Liceo Scientifico Statale "Leonardo da Vinci", Gallarate

Career

- 28/12/2018- today: Associate Professor at University of Milan (Department of Chemistry) SSD CHIM/06
- 01/12/2010 - 27/12/2018: Assistant Professor at University of Milan (Department of Chemistry) SSD CHIM/06
- 15/01/2009 - 30/11/2010: 3rd Level Researcher at Istituto di Scienze e Tecnologie Molecolari (ISTM) CNR - Milan
- 01/12/2004 - 30/11/2008: Post-Doctoral Fellow at University of Milan (Department of Organic and Industrial Chemistry)
- 01/12/2003 - 30/11/2004: Post-Doctoral Fellow at Boston College, Chestnut Hill (MA, USA)
- 01/09/2000 - 31/10/2000: Fellow at Consorzio Interuniversitario Nazionale "Metodologie e Processi Sintetici" C.I.N.M.P.I.S. and University of Milan (Department of Organic and Industrial Chemistry)

Tutoring/mentoring activity

Supervision of 2 PhD students, > 15MSc students, 2 Postdoc

Current teaching activity (2018-2019)

Teacher in the course "Laboratory of Organic Chemistry - module A", Undergraduate Program in Chemistry

Teacher in the course "Chemistry - module Organic Chemistry", Undergraduate Program in Natural Sciences

Teacher in the course "Organic Chemistry", Undergraduate Program in Sciences and Technologies for the Study and Preservation of Cultural Heritage

Other teaching activities

Teacher in the module "Laboratory of Chemistry (with safety aspects)" of the course "Organic Chemistry and Laboratory of Chemistry", Undergraduate Program in Biological Sciences

Assistant in the course "Laboratory of Organic Chemistry - module B", Undergraduate Program in Chemistry

Assistant in the course "Laboratory of Organic Chemistry - module B", Undergraduate Program in Industrial Chemistry

Current research interests

- 1) Stereoselective synthesis and catalysis
- 2) Design, synthesis and characterization of supported organocatalysts
- 3) Flow Chemistry: development of catalyzed reactions in micro- and mesoreactors

Scientific publications and bibliometrics

Author of 55 publications in peer-reviewed journals (17 as corresponding author) and 3 book chapters

h index = 21 ORCID: 0000-0002-8581-8009 | ResearcherID: A-5219-2013 | Scopus Author ID: 15842136700

Invited Lectures

- 1) Lecture at the seminar “Microreactors and Flow Chemistry: Safe, Green and Scalable”, organized by the Department of Chemistry of the University of Milan and IMCD (Milano, 8 may 2018): “Catalytic reactors and microreactors as useful tools for transformations under continuous flow conditions”.
- 2) Lecture at the congress Incontro con l’Università, il CNR e l’Industria, organized by the Department of Chemistry of the University of Milan (Milano, 29 september 2015): “Reattori Catalitici e Microreattori per Trasformazioni Stereoselettive in Flow Chemistry”
- 3) Lecture at the FIRB Meeting, FIRB RBFR10BF5V, National Project “Multifunctional Hybrid Materials for the development of Sustainable Catalytic Processes” (Milano, 06-07/10/2014): “Supported Organocatalysts: Overview and Perspectives”
- 4) Lecture at the FIRB Meeting, FIRB RBFR10BF5V, National Project “Multifunctional Hybrid Materials for the development of Sustainable Catalytic Processes” (Pisa, 10-11/10/2012): “Immobilization of Achiral and Chiral Organic Catalysts”.

Fundings

March 2019-present

Funding Programme: PRIN 2017

Project title: “SURSUMCAT: Raising up Catalysis for Innovative Developments”

Project number: 20174SYJAF

Funding agency: Ministero dell’Istruzione, dell’Università e della Ricerca (MIUR)

Coordinator: Prof. Pier Giorgio Cozzi (Università degli Studi di Bologna)

Role within the project: member of the UMIL unit

November 2018-present

Funding Programme: “Marie Skłodowska-Curie” ITN-ETN Network (Horizon 2020),

Project title: “Enabling TECHNOlogies-driven chemistry: a tailored TRAINing research program for batch and flow synthesis of chiral amino derivatives” (TECHNOTRAIN)

Funding agency: European Commission

Coordinator: Prof. Maurizio Benaglia (University of Milan)

Role within the project: member of the Supervisory Board

March 2012-February 2107

Funding Programa: FIRB Giovani 2010

Project title: “Multifunctional hybrid materials for the development of sustainable catalytic processes - Materiali ibridi multifunzionali per lo sviluppo di processi catalitici sostenibili”

Project number RBFR10BF5V

Funding agency: Ministero dell’Istruzione, dell’Università e della Ricerca (MIUR)

Coordinator: Prof. Francesca Dell’Anna (Università degli Studi di Palermo)

Role within the project: local coordinator of the University of Milan research unit

October 2017

Funding Programme: “Piano Sostegno alla Ricerca 2015-2017 (anno 2017 LINEA 2 Azione B)

Project title: “3D printed Reactors for Continuous Flow Manufacturing of APIs”

Funding agency: Università degli Studi di Milano

Role within the project: Principal Investigator

October 2015

Funding Programme: “Piano di Sostegno alla Ricerca 2015-2017 (anno 2015 -Linea 2-Azione A)”

Project title: “Microreactors and 3D-printed Mesoreactors for Continuous Flow Manufacturing of APIs”

Funding agency: Università degli Studi di Milano

Role within the project: Principal Investigator

November 2017

Recipient of "Fondo per il finanziamento delle attività base di ricerca" (FFABR)

Funding agency: Ministero dell'Istruzione, dell'Università e della Ricerca (MIUR)

2015-2017

Funding Programme: "Bando Cariplo 2015 Giovani Ricercatori di area biomedical"

Project number: 2015- 1003

Project title: "In vivo and in vitro imaging of pro-thrombotic events in brain ischemic injury: focus on mannose-binding lectin and beta2 glycoprotein I"

Funding agency: Fondazione Cariplo

Coordinator: Prof. Maurizio Benaglia (University of Milan)

Role within the project: member of the unit

2011-2014

Funding Programme: "Bando Cariplo 2011 Materiali Avanzati"

Project number: 2011 - 0293

Project title: "Multifunctional hybrid materials as novel chiral recyclable catalysts for one-pot, multi-step synthesis of structurally complex molecules"

Funding agency: Fondazione Cariplo

Coordinator: Prof. Franco Cozzi (University of Milan)

Role within the project: member of the unit

2007

Funding Programme: PRIN 2007

Project title: "Nuovi sistemi catalitici stereoselettivi e sintesi stereoselettive di molecole funzionali"

Funding agency: Ministero dell'Istruzione, dell'Università e della Ricerca (MIUR)

Coordinator: Prof. Franco Cozzi (Università degli Studi di Milano)

Role within the project: member of the UMIL unit

Full list of publications in peer reviewed journals

1. Rita Annunziata, Maurizio Benaglia, Mauro Cinquini, Franco Cozzi, Alessandra Puglisi, "Efficient and Highly Stereoselective Synthesis of a β -Lactam Inhibitor of the Serine Protease Prostate-Specific Antigen" *Bioorganic and Medicinal Chemistry*, 2002, 10, 1813-1818. DOI: 10.1016/S0968-0896(02)00017-2.
2. Maurizio Benaglia, Giuseppe Celentano, Mauro Cinquini, Alessandra Puglisi, Franco Cozzi, "Poly(ethylene glycol)-Supported Chiral Imidazolidin-4-one: An Efficient Organic Catalyst for the Enantioselective Diels-Alder Cycloaddition" *Advanced Synthesis and Catalysis*, 2002, 344, 149-152. DOI: 10.1002/1615-4169(200202)344:2<149::AID-ADSC149>3.0.CO;2-U.
3. Maurizio Benaglia, Mauro Cinquini, Franco Cozzi, Alessandra Puglisi, Giuseppe Celentano, "Poly(ethylene glycol)-Supported Proline: A Versatile Catalyst for the Enantioselective Aldol and Iminoaldol Reactions" *Advanced Synthesis and Catalysis*, 2002, 344, 533-542. DOI: 10.1002/1615-4169(200207)344:5<533::AID-ADSC533>3.0.CO;2-Y.
4. Maurizio Benaglia, Marinella Caporale, Alessandra Puglisi, "An Improved Methodology for the Synthesis of Enantiomerically Pure (S)-2,3-O-Cyclohexylidene-glyceraldehyde" *Enantiomer-A Journal of Stereochemistry*, 2002, 7, 383-385. DOI: 10.1080/10242430215702 (I.F.2002: 1.189; citazioni: 6; WOS).
5. Rita Annunziata, Maurizio Benaglia, Mauro Cinquini, Franco Cozzi, Francesco Maggioni, Alessandra Puglisi, "Efficient Synthesis of an Enantiopure β -Lactam as an Advanced Precursor of Thrombin and Tryptase Inhibitors" *Journal of Organic Chemistry*, 2003, 68, 2952-2955. DOI: 10.1021/jo020617u.
6. Alessandra Puglisi, Maurizio Benaglia, Rita Annunziata, Alberto Bologna "Enantiomerically Pure Phenanthroline or Bipyridine Containing Macrocycles: a New Class of Ligands for Asymmetric Catalysis" *Tetrahedron Letters*, 2003, 44, 2947-2951. DOI: 10.1016/S0040-4039(03)00425-8.
7. Rita Annunziata, Maurizio Benaglia, Mauro Cinquini, Franco Cozzi, Alessandra Puglisi, "Sequential Stereoselective Catalysis: Two Single-Flask Reactions of a Substrate in the Presence of a Bifunctional Chiral Ligand and Different Transition Metals" *European Journal of Organic Chemistry*, 2003, 1428-1432. DOI: 10.1002/ejoc.200390201.
8. Alessandra Puglisi, Maurizio Benaglia, Giulia Roncan, "Palladium-Catalyzed Synthesis of Nonsymmetrically Functionalized Bipyridines, Poly(bipyridines) and Terpyridines" *European Journal of Organic Chemistry*, 2003, 1552-1558. DOI: 10.1002/ejoc.200390214.
9. Maurizio Benaglia, Alessandra Puglisi, Franco Cozzi, "Polymer-Supported Organic Catalysts" *Chemical Reviews*, 2003, 103, 3401-3429. DOI: 10.1021/cr010440o.

10. Maurizio Benaglia, Mauro Cinquini, Franco Cozzi, Alessandra Puglisi, Giuseppe Celentano, "Poly(ethylene glycol)-Supported Proline: A Recyclable Aminocatalyst for the Enantioselective Synthesis of γ -Nitroketones by Conjugate Addition" *Journal of Molecular Catalysis A: Chemical*, 2003, 204-205, 157-163. DOI: 10.1016/S1381-1169(03)00295-4.
11. Alessandra Puglisi, Maurizio Benaglia, Mauro Cinquini, Franco Cozzi, Giuseppe Celentano, "Enantioselective 1,3-Dipolar Cycloadditions of Unsaturated Aldehydes Promoted by A Poly(ethylene glycol)-Supported Organic Catalyst" *European Journal of Organic Chemistry*, 2004, 567-573. DOI: 10.1002/ejoc.200300571.
12. Maurizio Benaglia, Alessandra Puglisi, Orsolya Holczknecht, Silvio Quici, Gianluca Pozzi, "Aerobic Oxidation of Alcohols to Carbonyl Compounds Mediated by Poly(ethylene glycol)-Supported TEMPO Radicals" *Tetrahedron*, 2005, 61, 12058-12064. DOI: 10.1016/j.tet.2005.07.107 (I.F.2005: 2.610; citazioni: 60).
13. Maurizio Benaglia, Stefania Guizzetti, Clara Rigamonti, Alessandra Puglisi, "PEG-Supported Pyridylthioesters for Racemization-Free Amide Synthesis: a Reagent that Allows Simultaneous Product Formation and Removal from the Polymer" *Tetrahedron*, 2005, 61, 12100-12106. DOI: 10.1016/j.tet.2005.07.111.
14. Ai-Lan Lee, Steven J. Malcolmson, Alessandra Puglisi, Richard R. Schrock, Amir H. Hoveyda, "Enantioselective Synthesis of Cyclic Enol Ethers and All-Carbon Quaternary Stereogenic Centers Through Catalytic Asymmetric Ring-Closing Metathesis" *Journal of the American Chemical Society*, 2006, 128, 5153-5157. DOI: 10.1021/ja058428r.
15. Alessandra Puglisi, Ai-Lan Lee, Richard R. Schrock, Amir H. Hoveyda, "Operationally Simple, Efficient, and Diastereoselective Synthesis of cis-2,6-Disubstituted-4-Methylene Tetrahydropyrans Catalyzed by Triflic Acid" *Organic Letters*, 2006, 8, 1871-1874. DOI: 10.1021/ol060430f.
16. Stefania Guizzetti, Maurizio Benaglia, Luca Pignataro, Alessandra Puglisi, "A Multifunctional Proline-Based Organic Catalyst for Enantioselective Aldol Reactions" *Tetrahedron: Asymmetry*, 2006, 17, 2754-2760. DOI: 10.1016/j.tetasy.2006.10.018.
17. Maurizio Benaglia, Franco Cozzi, Alessandra Puglisi*, "Solvent-Free, One-Pot Synthesis of β -Lactams by the Sc(OTf)₃-Catalyzed Reaction of Silyl Ketene Thioacetals with Imines" *European Journal of Organic Chemistry*, 2007, 2865-2869. DOI: 10.1002/ejoc.200601127.
18. Cinzia Biaggi, Maurizio Benaglia, Alessandra Puglisi*, "Catalysis in Water: Synthesis of β -Amino Amides by Sc(III) Promoted Condensation of Silylketene Pyridylthioacetal and Imines" *Journal of Organometallic Chemistry*, 2007, 692, 5795-5798. DOI: 10.1016/j.jorganchem.2007.10.013.
19. Rita Annunziata, Maurizio Benaglia, Alessandra Puglisi, Laura Raimondi, Franco Cozzi, "Synthesis of Some 2,2':6',2''-Terpyridines Disubstituted in Positions 6 and 6'' with Head-to-Tail Oriented Amino Acids and Dipeptides: A Simple Entry to a Reversible Inducer of Folding in Amino Acid Sequences" *European Journal of Organic Chemistry*, 2008, 3976-3983. DOI: 10.1002/ejoc.200800433.
20. Alessandra Puglisi, Maurizio Benaglia, Rita Annunziata, Davide Rossi, "Stereoselective Nucleophilic Addition to Imines Catalyzed by Chiral Bifunctional Thiourea Organocatalysts" *Tetrahedron: Asymmetry*, 2008, 19, 2258-2264. DOI: 10.1016/j.tetasy.2008.09.030.
21. Alessandra Puglisi*, Rita Annunziata, Maurizio Benaglia, Franco Cozzi, Antonella Gervasini, Vittorio Bertacche, Maria Chiara Sala, "Hybrid Inorganic-Organic Materials Carrying Tertiary Amine and Thiourea Residues Tethered on Mesoporous Silica Nanoparticles: Synthesis, Characterization, and Co-Operative Catalysis" *Advanced Synthesis and Catalysis*, 2009, 351, 219-229. DOI: 10.1002/adsc.200800635. Questa pubblicazione ha ottenuto una citazione sulla rivista *Synfacts* 2009, 4, 0451-0451, come *Synfact of the Month*.
22. Alessandra Puglisi*, Laura Raimondi, Maurizio Benaglia, Martina Bonsignore, Sergio Rossi, "Enantioselective Catalytic Addition of Nitroesters to N-Carboalkoxy Imines: a Route to Quaternary Stereocenters" *Tetrahedron Letters*, 2009, 50, 4340-4342. DOI: 10.1002/adsc.200800635.
23. Stefania Guizzetti, Maurizio Benaglia, Alessandra Puglisi, Laura Raimondi, "Isophthalic Acid-Derived Dicarbothioamides as Novel Metal-Free Catalysts in Hydrogen Bond-Promoted Reactions" *Synthetic Communications* 2009, 39, 3731-3742. DOI: 10.1080/00397910902838847.
24. Alessandra Puglisi, Sara Mondini, Simone Cenedese, Anna M. Ferretti, Nadia Santo, Alessandro Ponti, "Monodisperse Octahedral \square -MnS and MnO Nanoparticles by the Decomposition of Manganese Oleate in the Presence of Sulfur" *Chemistry of Materials* 2010, 22, 2804-2813. DOI: 10.1021/cm903735e.
25. Alessandra Puglisi, Maurizio Benaglia, Laura Raimondi, Luigi Lay and Laura Poletti "Novel carbohydrate-based bifunctional organocatalysts for nucleophilic addition to nitroolefins and imines" *Organic and Biomolecular Chemistry* 2011, 9, 3295-3302. DOI: 10.1039/c0ob01240h.
26. Andrea Genoni, Maurizio Benaglia, Alessandra Puglisi, Sergio Rossi "Chiral Bis-pyridinium Salts as Novel Stereoselective Catalysts for the Metal-Free Diels-Alder Cycloaddition of α,β -Unsaturated Aldehydes" *Synthesis* 2011, 12, 1926-1929. DOI: 10.1055/s-0030-1260462.
27. Alessandra Puglisi, Maurizio Benaglia, Rita Annunziata, Jay S. Siegel "Immobilization of Chiral Bifunctional Organocatalysts on Poly(methylhydrosiloxane)" *ChemCatChem* 2012, 7, 972-975. DOI: 10.1002/cctc.201200114.
28. Sara Mondini, Anna Maria Ferretti, Alessandra Puglisi and Alessandro Ponti "PEBBLES and PEBBLEJUGGLER: Software for Accurate, Unbiased, and Fast Measurement and Analysis of Nanoparticle Morphology from Transmission Electron Microscopy (TEM) Micrographs" *Nanoscale*, 2012, 4, 5356-5372. DOI: 10.1039/c2nr31276j.
29. Alessandra Puglisi, Maurizio Benaglia, Elisabetta Massolo, Giuseppe Celentano "Poly(methylhydrosiloxane)-supported chiral thiourea-based bifunctional catalysts" *Recyclable Catalysis* 2012, 1-5.
30. Sara Mondini, Carmelo Drago, Anna Maria Ferretti, Alessandra Puglisi, Alessandro Ponti "Colloidal stability of iron oxide nanocrystals coated with a PEG-based tetra-catechol surfactant" *Nanotechnology* 2013, 105702. DOI: 10.1088/0957-4484/24/10/105702.
31. Alessandra Puglisi, Maurizio Benaglia, Valerio Chiroli "Stereoselective organic reactions promoted by immobilized chiral catalysts in continuous flow systems" *Green Chemistry*, 2013, 15, 1790-1813. DOI: 10.1039/c3gc40195b.

32. Valerio Chiroli, Maurizio Benaglia, Franco Cozzi, Alessandra Puglisi,* Rita Annunziata, Giuseppe Celentano "Continuous-flow stereoselective organocatalyzed Diels Alder reactions in a chiral catalytic "homemade" HPLC column" *Organic Letters*, 2013, 15, 3590-3593. DOI: 10.1021/ol401390z.
33. Sara Mondini, Alessandra Puglisi, Maurizio Benaglia, Daniela Ramella, Carmelo Drago, Anna M. Ferretti, and Alessandro Ponti, "Magnetic Nanoparticles conjugated to chiral imidazolidinone as recoverable catalyst" *Journal of Nanoparticle Research*, 2013, 15, 2025-2036. DOI: 10.1007/s11051-013-2025-3.
34. Alessandra Puglisi,* Maurizio Benaglia, Rita Annunziata, Valerio Chiroli, Riccardo Porta, Antonella Gervasini, "Chiral Hybrid Inorganic-Organic Materials: Synthesis, Characterization, and Application in Stereoselective Organocatalytic Cycloadditions" *Journal of Organic Chemistry*, 2013, 78, 11326-11324. DOI: 10.1021/jo401852v.
35. Riccardo Porta, Maurizio Benaglia, Valerio Chiroli, Francesca Coccia, Alessandra Puglisi, "Stereoselective Diels-Alder Reactions Promoted under Continuous-Flow Conditions by Silica-Supported Chiral Organocatalysts" *Isreal Journal of Chemistry*, 2014, 54, 381-394. DOI: 10.1002/ijch.201300106.
36. Valerio Chiroli, Maurizio Benaglia, Alessandra Puglisi, Riccardo Porta, Ravindra P. Jumde, Alessandro Mandoli, "A chiral organocatalytic polymer-based monolithic reactor" *Green Chemistry*, 2014, 16, 2798-2806. DOI: 10.1039/c4gc00031e.
37. Sergio Rossi, Maurizio Benaglia, Alessandra Puglisi, Christian C. De Filippo, Michele Maggini "Continuous-flow stereoselective synthesis in microreactors: nucleophilic additions to nitrostyrenes organocatalyzed by a chiral bifunctional catalyst" *Journal of Flow Chemistry*, 2015, 5, 17-21. DOI: 10.1556/JFC-D-14-00030.
38. Riccardo Porta, Maurizio Benaglia, Alessandra Puglisi, Alessandro Mandoli, Andrea Gualandi, Pier Giorgio Cozzi "A catalytic reactor for organocatalyzed enantioselective continuous flow alkylation of aldehydes" *ChemSusChem*, 2014, 3534-3550. DOI: 10.1002/cssc.201402610.
39. Riccardo Porta, Maurizio Benaglia, Francesca Coccia, Franco Cozzi, Alessandra Puglisi* "Solid supported 9-amino-9-deoxy-epi-quinine as efficient organocatalyst for stereoselective reactions in batch and under continuous flow conditions" *Adv. Synth. Catal.* 2015, 357, 377 - 383. DOI: 10.1002/adsc.201400821.
40. Riccardo Porta, Francesca Coccia, Rita Annunziata, and Alessandra Puglisi* "Comparison of Different Polymer- and Silica-Supported 9-Amino-9-deoxy-epi-quinines as Recyclable Organocatalysts" *ChemCatChem*, 2015, 7, 1490-1499. DOI: 10.1002/cctc.201500106.
41. Alessandra Puglisi,* Maurizio Benaglia, Riccardo Porta, Francesca Coccia "Organocatalysis Chemistry in Flow" *Current Organocatalysis* 2015, 2, 79-101.
42. Riccardo Porta, Maurizio Benaglia, Francesca Coccia, Sergio Rossi and Alessandra Puglisi,* "Enantioselective organocatalysis in microreactors: continuous flow synthesis of a (S)-Pregabalin precursor and (S)-Warfarin" *Symmetry* 2015, 7, 1395-1409. DOI: 10.3390/sym7031395.
43. Riccardo Porta, Maurizio Benaglia, Alessandra Puglisi* "Flow Chemistry: Recent Developments in the Synthesis of Pharmaceutical Products" *Organic Process Research and Development*, 2016, 20, 2-25. DOI: 10.1021/acs.oprd.5b00325 This paper was chosen as ACS Editors' Choice .
44. Sergio Rossi, Alessandra Puglisi,* Maurizio Benaglia, Daniela Maria Carminati, Daniela Intrieri and Emma Gallo "Synthesis in mesoreactors: Ru(porphyrin)COcatalyzed aziridination of olefins under continuous flow conditions" *Catal. Sci. Technol.*, 2016, 6, 4700-4704. DOI: 10.1039/c6cy00207b.
45. Silvia D. Fernandes, Riccardo Porta, Pedro C. Barrulas, Alessandra Puglisi, Anthony J. Burke, Maurizio Benaglia "Stereoselective Reduction of Imines with Trichlorosilane using Solid-Supported Chiral Picolinamides" *Molecules*, 2016, 21, 1182-1190. DOI: 10.3390/molecules21091182.
46. Davide Brenna, Elisabetta Massolo, Alessandra Puglisi, Sergio Rossi, Giuseppe Celentano, Maurizio Benaglia, Vito Capriati "Towards the development of continuous, organocatalytic, and stereoselective reactions in deep eutectic solvents" *Beilstein J. Org. Chem.*, 2016, 12, 2620-2626. DOI: 10.3762/bjoc.12.258.
47. Riccardo Porta, Alessandra Puglisi,* Giacomo Colombo, Sergio Rossi, Maurizio Benaglia "Continuous-flow synthesis of primary amines: Metal-free reduction of aliphatic and aromatic nitro derivatives with trichlorosilane" *Beilstein J. Org. Chem.*, 2016, 12, 2614-2619. DOI: 10.3762/bjoc.12.257.
48. S. Rossi, A. Puglisi,* D. Intrieri, E. Gallo "From anilines to aziridines: A two-step synthesis under continuous-flow conditions" *J. Flow Chem.*, 2016, 6, 234-239. DOI: 10.1556/1846.2016.00027.
49. Sergio Rossi, Davide Brenna, Riccardo Porta, Alessandra Puglisi*, Maurizio Benaglia, "Stereoselective catalytic APIs synthesis in home-made 3D-printed mesoreactors", *Angew. Chem. Int. Ed.*, 2017, 56, 4290-4294. DOI: 10.1002/anie.201612192.
50. Riccardo Porta, Maurizio Benaglia, Rita Annunziata, Alessandra Puglisi,* Giuseppe Celentano "Solid supported chiral N-picolylimidazolidinones: recyclable catalysts for the enantioselective, metal- and H₂-free reduction of imines in batch and in flow mode", *Adv. Synth. Catal.*, 2017, 359, 2375-2382. DOI: 10.1002/adsc.201700376.
51. Daniela Intrieri, Sergio Rossi, Alessandra Puglisi and Emma Gallo "Metal-porphyrin catalyzed aziridination of α -methylstyrene: Batch vs. flow process" *J. Porphyrins Phthalocyanines* 2017; 21: 381-390 DOI: 10.1142/S1088424617500365.
52. Sergio Rossi, Alessandra Puglisi, Maurizio Benaglia "Additive Manufacturing Technologies: 3D printing in Organic Synthesis" *ChemCatChem*, 2018, 10, 1512-1525. DOI: 10.1002/cctc.201701619.
53. Margherita Pirola, Maurizio Benaglia, Maria Elena Compostella, Lauramaria Raimondi, Alessandra Puglisi "A continuous flow, two-steps, metal-free process for the synthesis of differently substituted chiral 1,2-diamino derivatives" *Synthesis*, 2018 DOI:10.1055/s-0036-1591911.
54. Sergio Rossi, Alessandra Puglisi, Laura Raimondi, Maurizio Benaglia, "Synthesis of alpha-trifluoromethylthio carbonyl compounds: a survey of the methods for the direct introduction of the SCF₃ group on to organic molecules" *ChemCatChem*, 2018, 10, 2717 -2733. DOI: 10.1002/cctc.201800170.
55. Alessandra Puglisi*, Sergio Rossi, "Nuove tecnologie: flow chemistry e 3D printing per la sintesi di prodotti e intermedi di interesse farmaceutico", *La Chimica e l'Industria*, luglio/Agosto 2018, DOI:10.17374/CI.2018.100.4.10.

Book Chapters

1. Mauro Cinquini, Alessandra Puglisi, "Enantioselective Catalysis by Aminoacids and Small Peptides" Seminars in Organic Synthesis, Summer School "A. Corbella" 28th, Gargnano, 2003, pag. 91-131. Publisher: (Società Chimica Italiana, Rome, Italy) CODEN:69ENFX ISBN: 88-86208-27-8.
2. Editor of the book "Catalyst Immobilization. Methods and Applications" ISBN 978-3- 527-34509-0, published by Wiley VCH, Weinheim, march 2020.
3. Alessandra Puglisi*, Sergio Rossi "Stereoselective organocatalysis and flow chemistry" in "Organocatalysis: Stereoselective Reactions and Applications in Organic Synthesis", Editor M. Benaglia, published by De Gruyter, Berlin, march 2020.