

EUROPEAN CURRICULUM VITAE FORMAT



PERSONAL INFORMATION

Name

ANTONIO PAPAGNI

WORK EXPERIENCE

- Dates (from – to) 1981-1983 chemical researcher
Name and address of employer Zambelletti Pharmaceutical Company, Baranzate (Milan)
 - Type of business or sector Researcher in the drug discovering field
 - Occupation or position held Responsible person of chemical laboratory for the preparation of biological active molecules
- Main activities and responsibilities Planning and realization of the synthesis of bio-active molecules with the responsibility of coordination of a small team of 3-4 chemical technicians
- Dates (from – to) 1986-1990 chemical researcher
Name and address of employer Mediolanum Pharmaceutical Company
 - Type of business or sector Researcher in the drug discovering field
 - Occupation or position held Responsible person of chemical laboratory for the preparation of biological active molecules
- Main activities and responsibilities Planning and realization of the synthesis of bio-active molecules
- Dates (from – to) 1990-1998
Name and address of employer University of Milano, Milan
 - Type of business or sector Research in the organic synthesis and mechanism aspects
 - Occupation or position held researcher
- Main activities and responsibilities Investigation of new strategies for the synthesis of bio-active systems and studies on the mechanism involved in the evolution of organic reactions
- Dates (from – to) 1998-2013
Name and address of employer University of Milano-Bicocca, Milan
 - Type of business or sector Research in the organic synthesis, mechanism aspects and organic semiconductor
 - Occupation or position held Assistant professor
- Main activities and responsibilities Investigation of new strategies for the synthesis of bio-active systems and studies on the mechanism involved in the evolution of organic reactions; synthesis of organic semiconductors; Teaching activities in the material science Bachelor and Master program, Optics and optometry Bachelor program, Chemistry Master program. Responsible and reference person for Optics and Optometry Bachelor program. Reference person for Erasmus-Socrates program
- Dates (from – to) 2013 up to day
Name and address of employer University of Milano-Bicocca, Milan
 - Type of business or sector Research in the organic synthesis, mechanism aspects and organic semiconductor

- Occupation or position held
- Main activities and responsibilities

Full professor

Investigation of new strategies for the synthesis of bio-active systems and studies on the mechanism involved in the evolution of organic reactions; synthesis of organic semiconductors; Teaching activities in the material science Bachelor and Master program, Optics and optometry Bachelor program, Chemistry Master program. Responsible and reference person for Optics and Optometry Bachelor program. Reference person for Erasmus-Socrates program

EDUCATION AND TRAINING

- Dates
- Name and type of organisation providing education and training
- Principal subjects/occupational skills covered
- Title of qualification awarded

1981

University of Milano

General and Organic Chemistry, practical and theoretical aspects; Stereochemical aspects in organic synthesis and mechanistic aspects

Master (5 years program)

- Dates
- Name and type of organisation providing education and training
- Principal subjects/occupational skills covered
- Title of qualification awarded

1986

University of Milano

Research activity on the reactivity of arylazomethylenephosphorane and their potential application in the synthesis of heterocyclic systems

Doctorate in Chemistry

MOTHER TONGUE

ITALIAN

OTHER LANGUAGES

- Reading skills
- Writing skills
- Verbal skills

ENGLISH

good

good

good

TECHNICAL SKILLS AND COMPETENCES

With computers, specific kinds of equipment, machinery, etc.

OFFICE WORK-PACKAGING WINDOWS, ALL EQUIPMENTS FOR RUNNING CHEMICAL EXPERIMENTS

ADDITIONAL INFORMATION

He has been the supervisor of 4 Ph-D students in Materials Sciences and the supervisor of over 100 Master, Bachelor students in Chemistry, Materials Sciences and Optics and Optometry. His main research topics concern the stereoselective organic synthesis, the synthesis of molecular structures with non-linear optical properties and the synthesis of organic based semiconductors. In particular: a) the use of Fischer-type carbene complexes as synthetic equivalents of chiral and non-chiral ester enolates and amides in reactions with different kinds of electrophiles (carbonyl derivatives, electronpoor olefins) and in the synthesis of "Push-Pull" structures with second order non-linear behaviours; b) the use of arenechromiumtricarbonyl complexes as activated substrates in aromatic nucleophilic substitutions and as chiral auxiliaries in the diastereo and enantioselective synthesis of organic compounds with also biological activity; c) synthesis of "Push-Pull" structures bearing fluorinated acceptor groups; d) studies on oligothiophene or fluoroacridine-based organic molecular systems useful in the developing of organic semiconductors or electroluminescent devices (OLED), e) study of reactivity of perfluorinated aromatic systems to nucleophilic substitution and they potential use in the preparation of polyfluorinated heteroaromatic systems, f) synthesis of halogenated acenes for Ullmann-like reactivity studies on metal crystal surfaces. g) synthesis Donor-Acceptor polymers for photovoltaic applications, g) study of surface segregation phenomenon of perfluorinated systems in polymeric matrixes.

The scientific activity is documented by over 110 papers published in international peer reviewer journals and more than 50 poster and oral communication to national and international meetings. He is author of 2 international patents and one of this dedicated to photostabilization of poly-3-hexylthiophene, one of the most employed polymers in bulk heterojunction photovoltaic cells.

He is the reviewer of many international journal in organic chemistry and materials sciences. He has been the local scientific responsible person in research projects supported by the Italian Ministry of Education and Research. He has been the coordinator of an international research project supported by Cariplo Foundation on organic semiconductors. The promotion of young researcher exchanges between the involved institutions was one of the main aims of the project. University involved: Paris-Diderot (Paris, F) and Kingston (London, UK). He has been visiting professor at Kingston University from 2008-2011 and visiting professor at Paris-Diderot in 2009. He has been the Coordinator and the international reference person for Erasmus students and staff mobility exchange program of Bachelor in Optics and Optometry from 2002 up to 2017.

**LIST OF PUBLICATIONS AND
PATENTS (2010-2020)**

- 1 Campiglio, P.; Campione, M.; Canepa, F.; Canevali, C.; Cimberle, M. R.; Fanciulli, C.; Miozzo, L.; Moret, M.; Papagni, A.; Rizzato, S.; Sassella, A. Magnetic behaviour of polyfluoroacridine-based organic molecular materials. *European Physical Journal B: Condensed Matter and Complex Systems* 2010, 73, 495-501.
- 2 Tavazzi, Silvia; Silvestri, Leonardo; Miozzo, Luciano; Papagni, Antonio; Spearman, Peter; Ianelli, Sandra; Girlando, Alberto; Camposeo, Andrea; Polo, Marco; Pisignano, Dario. Polarized Absorption, Spontaneous and Stimulated Blue Light Emission of J-type Tetraphenylbutadiene Monocrystals. *ChemPhysChem* 2010, 11, 429-434
- 3 Papagni, Antonio; Del Buttero, Paola; Bertarelli, Chiara; Miozzo, Luciano; Moret, Massimo; Pryce, Mary T.; Rizzato, Silvia
Novel fluorinated amino-stilbenes and their solid-state photodimerization
New Journal of Chemistry 2010, 34,2612-2621
- 4 Campione, Marcello; Parravicini, Matteo; Moret, Massimo; Papagni, Antonio; Schroter, Bernd; Fritz, Torsten Electroless Silver Plating of the Surface of Organic Semiconductors; *Langmuir* 2011, 27,12008-12015
- 5 Maspero, F.; Sala, S.; Fedi, M. E.; Martini, M.; Papagni, A. A new procedure for extraction of collagen from modern and archaeological bones for ¹⁴C dating
Analytical and Bioanalytical Chemistry 2011, 401, 2019-2023
- 6 Papagni, Antonio; Trombini, Claudio; Lombardo, Marco; Bergantin, Stefano; Chams, Amani; Chiarucci, Michel; Miozzo, Luciano; Parravicini, Matteo Cross-Coupling of 5,11-Dibromotetracene Catalyzed by a Triethylammonium Ion Tagged Diphenylphosphine Palladium Complex in Ionic Liquids. *Organometallics* 2011, 30, 4325-4329.
- 7 Braga, Daniele; Jaafari, Abdelhafid; Miozzo, Luciano; Moret, Massimo; Rizzato, Silvia; Papagni, Antonio; Yassar, Abderrahim, The Rubrenic Synthesis: The Delicate Equilibrium between Tetracene and Cyclobutene.
European Journal of Organic Chemistry 2011, 4160-4169
- 8 Del Buttero, Paola; Girona, Ramona; Moret, Massimo; Papagni, Antonio; Parravicini, Matteo; Rizzato, Silvia; Miozzo, Luciano, Orthogonal synthesis of fluorinated acridones and acridines from perfluorobenzophenone.
European Journal of Organic Chemistry 2011, 2265-227
- 9 Papagni Antonio, Rossella Fonte, Luca Benzoni,
Pre-lens tear film evaluation scale: a tool for analysing the tear film-lens interaction with respect to the material used.
Optometry Reports 2012; 2, 31-37 (eISSN 2039-473X)
- 10 Ramona Girona, Luciano Miozzo, Denis Tondelier, Marc Chaigneau, Jamal Ghabboun, Maryam Faroun, Antonio Papagni, Marco Matteo Salamone, Riccardo Ruffo and Abderrahim Yassar Functional p-conjugated polymers based on maleimide for photovoltaic applications
Organic Photonics and Photovoltaics 2013, 56-66
- 11 Jan Dettmer, Robertas Ursache, Ana Campilho, Shunsuke Miyashima, Ilya Belevich, Seana O'Regan, Daniel Leroy Mullendore, Shri Ram Yadav, Christa Lanz, Luca Beverina, Antonio Papagni, Korbinian Schneeberger, Detlef Weigel, York-Dieter Stierhof, Thomas Moritz, Michael Knoblauch, Eija Jokitalo and Yka Helariutta, Choline transporter-like1 is required for sieve plate development to mediate long-distance cell-to-cell communication,
Nature Communication 2014, 5, 4276
- 12 Girona Ramona; Choi, Jin Woo; Miozzo Luciano; Tondelier Denis; Papagni Antonio; Yassar, Abderrahim, A novel isomer of pyrrolo[3,4-c]pyrrole-1,4 (2H,5H)-dione as a new building block for polymer solar cells.
Synthetic Metals, 2014, 196, 38-47.
- 13 Uttiya, S.; Miozzo, L.; Fumagalli, E. M.; Bergantin, S.; Ruffo, R.; Parravicini, M.; Papagni, A.; Moret, M.; Sassella, A. Connecting molecule oxidation to single crystal structural and charge transport properties in rubrene derivatives. *Journal of Materials Chemistry C: Materials for Optical and Electronic Devices*, 2014, 2, 4147-4155
- 14 Russo, Laura; Battocchio, Chiara; Secchi, Valeria; Magnano, Elena; Nappini, Silvia; Taraballi, Francesca; Gabrielli, Luca; Comelli, Francesca; Papagni, Antonio; Costa, Barbara; et al. Thiol-ene Mediated Neoglycosylation of Collagen Patches: A Preliminary Study.
Langmuir 2014, 30, 1336-1342

- 15 Basagni, Andrea; Ferrighi, Lara; Cattelan, Mattia; Nicolas, Louis; Handrup, Karsten; Vaghi, Luca; Papagni, Antonio; Sedona, Francesco; Valentin, Cristiana Di; Agnoli, Stefano
On-surface photo-dissociation of C-Br bonds: towards room temperature Ullmann coupling. *Chemical Communications* 2015, 51, 12593-12596.
- 16 Ferrighi, Lara; Pis, Igor; Nguyen, Thanh Hai; Cattelan, Mattia; Nappini, Silvia; Basagni, Andrea; Parravicini, Matteo; Papagni, Antonio; Sedona, Francesco; Magnano, Elena;
Control of the Intermolecular Coupling of Dibromotetracene on Cu(110) by the Sequential Activation of C-Br and C-H bonds. *Chemistry - A European Journal* 2015, 21, 5826-5835
- 17 Coghi, Paolo; Papagni, Antonio; Po, Riccardo; Calabrese, Anna; Tacca, Alessandra; Savoini, Alberto; Stuknyte, Milda
Reactivity of decafluorobenzophenone and decafluoroazobenzene towards aromatic diamines: a practical entry to donor-acceptor systems. *New Journal of Chemistry* 2015, 39, 3615-3623.
- 18 Pis, Igor; Ferrighi, Lara; Nguyen, Thanh Hai; Nappini, Silvia; Vaghi, Luca; Basagni, Andrea; Magnano, Elena; Papagni, Antonio; Sedona, Francesco; Di Valentin, Cristiana; et al
Surface-Confined Polymerization of Halogenated Polyacenes: The Case of Dibromotetracene on Ag (110). *Journal of Physical Chemistry C* 2016, 120, 4909-4918.
- 19 Smerieri, Marco; Pis, Igor; Ferrighi, Lara; Nappini, Silvia; Lusuan, Angelique; Di Valentin, Cristiana; Vaghi, Luca; Papagni, Antonio; Cattelan, Mattia; Agnoli, Stefano;
Synthesis of graphene nanoribbons with a defined mixed edge-site sequence by surface assisted polymerization of (1, 6)-dibromopyrene on Ag(110); *Nanoscale* 2016, 8, 17843-17853.
- 20 Antonicci, A.; Ardid, M.; Bertoni, R.; Bruno, G.; Burgio, N.; Caruso, G.; Cattaneo, D.; Chignoli, F.; Clemenza, M.; Corcione, M.; et al
MOSCAB: a geysier-concept bubble chamber to be used in a dark matter search *European Physical Journal C: Particles and Fields* 2017, 77, 1-7
- 21 Ghatora, Baljit K.; Foot, Peter J. S.; Barton, Stephen J.; Thatti, Ravtej S.; Papagni, Antonio; Vaghi, Luca
Surface perfluoroalkyl chains segregation: a tool for reducing calcium deposits in medical grade poly(methyl methacrylate) *Journal of Biomaterials and Nanobiotechnology* (2017), 8, 176-187.
- 22 Andreosso, Ivan; Papagni, Antonio; Vaghi, Luca
Mechanochemical oxidation of fluorinated anilines to symmetric azobenzenes *Journal of Fluorine Chemistry* 2018, 216, 124-127
- 23 Synthesis of corrugated C-based nanostructures by Br-corannulene oligomerization
Smerieri, Marco; Pis, Igor; Ferrighi, Lara; Nappini, Silvia; Lusuan, Angelique; Vattuone, Luca; Vaghi, Luca; Papagni, Antonio; Magnano, Elena; Di Valentin, Cristiana; et al
Physical Chemistry Chemical Physics (2018), 20, 26161-26172
- 24 Vaghi, Luca; Sanzone, Alessandro; Sassi, Mauro; Pagani, Simone; Papagni, Antonio; Beverina, Luca,
Synthesis of Fluorinated Acridines via Sequential Micellar Buchwald-Hartwig Amination/Cyclization of Aryl Bromides
Synthesis (2018), 50, 1621-1628.
- 25 Roberto Guizzardi, Luca Vaghi, Marcello Marelli, Antonino Natalello, Ivan Andreosso , Antonio Papagni and Laura Cipolla
Gelatin-Based Hydrogels through Homobifunctional Triazolinediones Targeting Tyrosine Residues; *Molecules* 2019, 24, 589
- 26 Luca Vaghi, Mattia Coletta, Paolo Coghi, Ivan Andreosso, Luca Beverina, Riccardo Ruffo and Antonio Papagni
Fluorine substituted non-symmetric phenazines: a new synthetic protocol from polyfluorinated azobenzenes
ARKIVOC 2019, 5, 340-351

27. Yousif, Dawod; Monti, Mauro; Papagni, Antonio; Vaghi, Luca
Synthesis of phenazines from ortho-bromo azo compounds via sequential Buchwald-Hartwig amination under micellar conditions and acid promoted cyclization,
Tetrahedron Letters 2020, 61, 152511
28. Zanini, Stefano; Papagni, Antonio; Vaghi, Luca; Thatti, Baljit Kaur; Barton, Stephen; Williams, Neil; Shokri, Navid; Riccardi, Claudia,
Sulfur hexafluoride (SF₆) plasma treatment of medical grade poly(methyl methacrylate)
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Brevetti

1. Giannotta, Giorgio; Papagni, Antonio; Saul Coghi, Paolo; Malatesta, Vincenzo
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- 2 Giannotta, Giorgio; Malatesta, Vincenzo; Papagni, Antonio; Saul, Coghi Paolo
Stabilized photoactive composition and use thereof
Brevetto Ital. 2015, IT 1419033 B1 20151105,
- 3 Papagni, Antonio; Facchetti, Antonio; Chen, Zhihua
Phenazine-based molecular and polymeric semiconductors
U.S. Pat. Appl. Publ. (2016), US 20160351815 A1 20161201.
4. Papagni Antonio, Mauro Monti, Luca Giannini et al.
Patent application: IT 102019000025804
Title: "Composizioni per mescole elastomeriche comprendenti reticolanti politetrazolici e pneumatici che le comprendono".
5. Papagni Antonio, Mauro Monti, Luca Giannini et al.
Patent application: IT 102020000015514
Title: "Composizioni per mescole elastomeriche comprendenti compatibilizzanti tetrazolici e pneumatici che le comprendono"