

Francesca Leonelli

Curriculum Vitae

Part I – General Information

Full Name	Francesca Leonelli
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Part II – Education

Type	Year	Institution	Notes
University graduation	1999	University of Rome “La Sapienza”	<i>Laurea</i> in Chemistry. 19/2/1999. Thesis title: "Studi per l'ottenimento di sistemi biciclo[5.3.1]undecanici". <i>Magna cum laude</i> final mark.
PhD	2003	University of Rome “La Sapienza”, Chemistry Department	PhD in Chemical Sciences (XV cycle). Dissertation title: "Diastereo and enantioselective syntheses of biologically active natural products: studies in the field of stemarane diterpenes". Supervisor: Prof. R. Marini Bettolo.

Part III – Appointments

IIIA – Academic Appointments

Start	End	Institution	Position
Jan-2003	Dec-2004	University of Rome “La Sapienza”, Chemistry Department.	Post-Doc (Assegno di Ricerca). Research title: "Sintesi di sostanze naturali bioattive"
Jan-2005	Dec-2005	University of Rome “La Sapienza”, Chemistry Department.	Post-Doc (Co-Co-Co). Research title: "I carboidrati come precursori nella sintesi di prodotti biologicamente attivi"
Jan-2006	Dec-2007	University of Rome “La Sapienza”, Chemistry Department.	Post-Doc (Borsa post-dottorale). Research title: "Sviluppo di nuove strategie e metodologie per la sintesi di terpeni policiclici"
Jan-2008	Oct-2008	University of Rome “La Sapienza”, Chemistry Department.	Post-Doc (Assegno di Ricerca). Research title: "Sintesi di diterpeni stemaranici"
Nov-2008	Nov-2011	University of Rome “La Sapienza”, Chemistry Department.	Assistant Professor (Permanent Researcher). SSD CHIM-06
Nov-2011	present	University of Rome “La Sapienza”, Chemistry Department.	Assistant Professor (Permanent Researcher confirmed). SSD CHIM-06

IIIB – Other Appointments

Start	End	Position
May 1999		Professional chemistry training (Abilitazione alla professione di chimico)
Jul 2007	Jul 2007	Visiting Scientist, Harvard University, Chemistry Department (MA, USA), (one month)
Nov-2020	Nov-2029	Qualification for the role of “Professore di II fascia” for the “Settore Concorsuale 03/C1, SSD CHIM-06”, Organic Chemistry

Part IV – Teaching experience

IV A – Courses in Academic Institutions

Accademic year	Institution	Lecture/Course
From 2009/10 to 2019/20	University of Rome “La Sapienza”, Faculty of Science	Organic chemistry (6 CFU) for the bachelor degree in “Technologies for Conservation and Restoration of Cultural Heritage”. From A.A. 2016/17 the course was borrowed for the Degree “Environmental Sciences”
2011/12	University of Rome “La Sapienza”, Faculty of Pharmacy and Medicine	Elements of Inorganic and Organic Chemistry (2 CFU) for the bachelor degree in “Environment and Workplace Prevention Techniques C”
2015/16	University of Rome “La Sapienza”, Faculty of Science	Part of the course Organic Chemistry III (3CFU) for the bachelor degree in “Chemistry”
2016/17	University of Rome “La Sapienza”, Faculty of Science	Part of the course Organic Chemistry II (3CFU) for the bachelor degree in “Chemistry”
From 2018/19 to present	University of Rome “La Sapienza”, Faculty of Science	Organic Synthesis with laboratory (9 CFU) for the master degree in “Chemistry”
From 2020/21 to present	University of Rome “La Sapienza”, Faculty of Science	Organic Chemistry I (9 CFU) for the bachelor degree in “Chemical Sciences”

IV B – Supervisor of Master Thesis Works carried out at Università di Roma La Sapienza

Academic Year	Title of the thesis	Student
2012/13	Studi per la sintesi della (+)-orizalessina S: preparazione di un intermedio trans-decalinico	Chinelo Jessica Ekezie
2012/13	Sintesi regio e diastereoselettiva del 3-stemoden-19-olo a partire dall'acido (+)-podocarpico	Luca De Angelis
2014/15	Studi a partire dalla (-)-lobelina per la sintesi di lipidi di tipo bola	Francesca Battista
2014/15	Sintesi enantio e diastereoselettiva di un intermedio per la sintesi della (+)-orizalessina S	Maria Grazia Lombardi
2015/16	Studi per la preparazione enantioselectiva della (+)-orizalessina S. Sintesi di un intermedio biciclico	Mauro Verdiglione
2015/16	Studi per la sintesi della (+)-orizalessina S. Preparazione enantio e diastereoselettiva di un intermedio avanzato	Lorenzo Giannone

2016/17	Studi per la sintesi di lipidi di tipo bola a partire dalla lobelanidina	Tiziano Lucente
2016/17	Studi della reazione di acetalizzazione dell'omologo del chetone di Wieland-Miescher	Irene Piergentili
2016/17	Studi per la formazione enantioselettiva del primo intermedio chiave della sintesi dell'orizalessina S mediante condensazione aldolica	Orsola Marini
2017/18	Studi per la sintesi diastereo- ed enantioselettiva della (+)-orizalessina S	Marco Zequireja
2018/19	Sintesi enantio e diastereoselettiva degli anelli A e B dell'orizalessina S	Luca Pettazzoni
2018/19	Sintesi e caratterizzazione di un derivato amminoacidico della D-glucosammina per l'ingegneria tissutale.	Patrizia Prestigiacomo
2019/20	Studio della reazione di condensazione aldolica intramolecolare enantioselettiva mediata da amminoacidi di un intermedio della sintesi dell'orizalessina S	Damiano Ladisa
2019/20	Studi sulla reazione fotostimolata [2+2] di alcheni su enoni catalizzata da sali di Ir e Ru	Matteo Leone
2019/20	Sintesi e caratterizzazione di nuovi vitrimeri ottenuti da acido oleico	Daniele Di Luca
2019/20	Sintesi e caratterizzazione di polimeri riciclabili reticolati mediante ponti disolfuro	Lorenzo Celio
2019/20	Sintesi di un coniugato NAPA-Acido Ialuronico	Giorgia Toscano
2020/21	Sintesi e Caratterizzazione Spettroscopica di Tirani Chirali	Giorgia Aquila
2020/21	Studio e ottimizzazione della reazione enantioselettiva di un intermedio per la sintesi di composti naturali	Lorenzo Michellini
2020/21	Sintesi e caratterizzazione di polimeri dissociativi reticolati tramite Diels-Alder	Lorenzo De Rocchis

IV C- Supervisor of PhD thesis work carried out at Università di Roma La Sapienza

Accademic Year	Student
2019-2022	Luca Pettazzoni; Cycle XXXV
2021-2024	Lorenzo Celio; Cycle XXXVII
2021-2024	Valerio Napoleone; Cycle XXXVII

IV D- Supervisor of Research Fellows at Università di Roma La Sapienza (Assegni di Ricerca)

Year	Research Title
2022	Sintesi di molecole ad azione antibatterica e di sistemi polimerici funzionalizzati per applicazioni biomediche. Dr.ssa Elisa Sturabotti

Part V - Society memberships, Awards and Honors

Year	Title
2012/13	Award for Teaching Excellence from the Faculty of Science for the course of Organic Chemistry (based on students' opinions). 19/11/2014
2017/18	Award for Teaching Excellence from the Faculty of Science for the course of Organic Chemistry (based on students' opinions). 23/4/2018
From 2000 to present	Member of the Italian Chemical Society (SCI)

Part VI - Funding Information [grants as PI-principal investigator or I-investigator]

Year	Title	Program	Grant value
2013	Sensori a base lipidica per il rilevamento di biomarker tumorali	FIRB 2012. Unit coordinator. 42 months	196000 €
2016	Phytochemical characterization of different cultivars of Cannabis sativa for the evaluation of the nutritional properties of hemp derived foodstuffs and for the development of a field-usable tool for phenotype discrimination	Research Grant from "La Sapienza". Investigator	11000 €
2017	Studio di fattibilità e sintesi di una serie di molecole (derivati del 1,2-difeniletilene) comprensivo dello studio per la preparazione dell'intermedio IM-1Z mediante reazione di McMurry in fase omogenea	Research Contract from A.C.R.A.F. S.p.A. Principal Investigator	50000 €
2017	Preparazione dell'impurezza glycerio-3-phospho-(1-D-myo-inositol)	Research Contract from A.C.R.A.F. S.p.A. Principal Investigator	18000 €
2017		Finanziamento annuale individuale delle attività base di ricerca, Grant from MUR	3000 €
2017	Microscopic and mesoscopic organization in ionic liquid-based systems	Research Grant from "La Sapienza". Investigator	30000 €
2018	Non-heme iron and manganese supramolecular catalysts for the oxidation of aliphatic and aromatic C-H bonds	Research Grant from "La Sapienza". Investigator	31000 €
2019	Time resolved X-ray absorption/UV-vis coupled techniques for the analysis of the activation and oxidations promoted by nonheme manganese complexes	Research Grant from "La Sapienza". Investigator	40000 €
2021	New supramolecular catalysts for selective C-H bond functionalization	Research Grant from "La Sapienza". Investigator	50000 €

	by hydrogen atom transfer (HAT) based oxidative processes		
2021	<i>Nympha</i> - Natural polySaccharides from Microalgae for the Protection of cultural HeritAge	Research Grant from POR FESR Lazio 2014-2020.	149000 €

Part VII – Organization Activities and Other Institutional Roles

Year	Title
2013 to 2020	Member of “Commissione Didattica” for the bachelor degree in “Technologies for Conservation and Restoration of Cultural Heritage” of University of Rome “La Sapienza”.
2018 to present	Member of the Permanent PhD committee of the Chemistry Department of University of Rome “La Sapienza”.
2020	Member of “Commissione Ricerca” of University of Rome “La Sapienza”. (D.R. n° 20/2020, del 24/02/2020)
2021 to present	Member of “Senato Accademico” of University of Rome “La Sapienza”. (D.R. n° 206/2021 del 21/01/2021)
2021 to present	Member of “Commissione mista Senato Accademico/Consiglio di Amministrazione per le riviste di proprietà dell’Ateneo” of University of Rome “La Sapienza” (D.R. n° 1366/2021 del 19/05/2021)
2021 to present	Member of “Commissione Pari Opportunità” of Chemistry Department of University of Rome “La Sapienza” (D.D. n° 117/2021 del 09/11/2021)
2021 to present	Member of “Commissione Apparecchiature di Dipartimento” of Chemistry Department of University of Rome “La Sapienza” (D.D. n° 138/2021 del 15/12/2021)

Part VIII – Reviewer Activity

Francesca Leonelli is a referee for the following international journals:

Chemistry and Biodiversity; Chemistry and Physics of Lipids; Chirality; Crystals; Current Organic chemistry; International Journal of Molecular Sciences; Molecules; Synthesis; Tetrahedron Letters, Toxins; Natural Products Research

Part IX – Research Activities

Keywords	Brief Description
Organic Synthesis	The synthesis of biologically active natural compounds is one of my principal research interests. In this field, I have intensively dealt with stemaranic and stemodanic diterpenes, two classes of natural compounds characterized by a complex tetracyclic skeleton and by interesting biological properties. The enantioselective synthesis of these compounds has also given me the opportunity to carry out methodological studies for obtaining chiral intermediates of more general interest.
Natural Compounds	
Bioactive molecules	
Enantio and Diastereoselective synthesis	
Stemaranic Diterpenes and stemodanic	

Keywords Brief Description

Organic Synthesis	Another topic of my research concerns the preparation of designed molecules with certain pharmacological properties. These studies are often carried out in collaboration with pharmaceutical companies. Among the compounds obtained there are, for example, hyaluronic acid-taxol bioconjugates useful for directing the drug to the tumor mass or estrogenic derivatives capable of improving the wound healing process. The preparation of lipid-based sensors for the detection of tumor biomarkers also falls within this line of research.
designed molecules	
pharmacological properties	
prodrug	

Keywords

Organic Synthesis
bio-based polymers
Covalent adaptable network (CAN)
Vitrimers
reprocessability

Brief Description

Vitrimers are polymeric materials that behave as thermosets at room temperature but, when heated, they exhibit a plastic flow like thermoplastics, enabling their reprocessability. In the field of vitrimers I recently prepared new bio-based polymers which possess interesting mechanical properties.

Keywords

Organic Synthesis
Liquid ionic
Green chemistry

Brief Description

Another line of research includes the preparation of ionic liquids. They are compounds that are studied extensively for their particular properties. In fact, they have a low vapor pressure, a high thermal stability and are used as solvents in many applications such as catalysis, organic synthesis, electrochemistry and green chemistry.

Part X – Summary of Scientific Achievements

Product type	Number	Data Base
Papers	52 (51 papers and 1 book chapter)	Scopus and WOS (highest value)
Papers in the last 5 years	20 (19 papers and 1 book chapter)	Scopus and WOS (highest value)
Total Impact factor*	144.243	Journal Citation Reports (JCR)
Average Impact factor [§]	2.94	Journal Citation Reports (JCR)
Total Citations	570	Scopus and WOS (for each publication the highest number of citations reported in Scopus or WOS has been considered)
Citations in the last 10 years	354	Scopus and WOS (for each publication the highest number of citations reported in Scopus or WOS has been considered)
Average Citations per Product	10.96	Obtained as 570/52
Hirsch (H) index	15	Scopus
H index in the last 10 years	11	Scopus

*The Impact Factor is related to the year of publication (for the most recent publications, if not yet available, the IF related to the previous year of the publication year is used)

§ Obtained by (Total Impact Factor) / 49 since three products do not contribute to the total impact factor (one book chapter and two articles in Organic Syntheses)

Part XI– Direction or Participation to the activities of a research group characterized by international and national collaboration.

I direct a research group that deals with the synthesis of organic molecules. During my research activity I have also collaborated with several research groups.

Groups of Chemistry Department of University of Rome “La Sapienza”: Prof. R. Caminiti, Prof.ssa P. D’Angelo, Prof.ssa P. Gentili, Prof. O. Lanzalunga, Prof. L. Mandolini, Prof. A. Martinelli, Prof. G. Piancatelli, Prof.ssa O. Russina.

Groups of other departments of University of Rome “La Sapienza”: Prof. M. Brufani (Biochemical Sciences Department), Prof. P. Postorino (Physics Department), Prof. A. Valletta (Environmental Biology Department).

Groups of other Universities, research institutions or private entities: Dr. M. Sinibaldi (Istituto di Metodologie Chimiche, CNR), Dr. D. Renier (Fidia Farmaceutici S.p.A.), Prof. A. Maggi (Università degli Studi di Milano), Prof. G.S. Ashcroft (University of Manchester), Dr. P.M. Farina (Euticals Ambrosia S.p.A.), Dr. N. Cazzolla (Angelini Research Center, A.C.R.A.F. S.p.A.), Dr. D. Lamba (Istituto di Cristallografia–CNR), Prof. S. Porcedda (Università degli Studi di Cagliari), Prof. L. Giansanti (Università degli Studi dell’Aquila), Dr. G. Mancini (Istituto per i Sistemi Biologici–CNR), Dr. A. Triolo (Istituto Struttura della Materia–CNR).

Part – XII- Oral Communications held at Congresses

- 1) *6-Eso-idrossibicyclo[2.2.2]ottan-2-oni per Metanolisi dei Corrispondenti Acetati in Presenza di $CH_3ONa/La(OTf)_3$* S. Di Stefano, F. Leonelli, B. Garofalo, L. Mandolini, R. Marini Bettolo, L. M. Migneco, XXVIII Convegno Nazionale della Divisione di Chimica Organica della Società Chimica Italiana, Roma, 16-20 settembre 2002, libro degli Abstract P86
- 2) Studi per la sintesi di composti bioattivi F. Leonelli, Convegno Giovani Chimici (2004), Roma, 15-16 giugno 2004, libro degli Atti pag.50
- 3) Recent Developments in the Synthesis of Stemarane Diterpenes F. Leonelli, A. La Bella, F. Ceccacci, R. Berrino, G. Corso, A. Marchetti, L. M. Migneco, R. Marini Bettolo, NAT 8 VIII Convegno Nazionale Giornate di Chimica delle Sostanze Naturali, Forte dei Marmi (Lu) 22-25 Maggio 2009, libro degli Atti O13
- 4) New Developments in the Synthesis of Stemarane Diterpenes F. Leonelli, P. Dirito, A. Trombetta, A. La Bella, F. Ceccacci, L. M. Migneco, R. Marini Bettolo SISOC VIII 8th Spanish-Italian Symposium on Organic Chemistry 3-6 luglio 2010 Padova, libro degli Atti OC 10
- 5) Enantio- and diastereoselective total synthesis of (+)-13-stemarene by simple third generation methods F. Leonelli, F. Blesi, P. Dirito, A. La Bella, F. Ceccacci, L. M. Migneco, R. Marini Bettolo XXXIII Convegno Nazionale della Divisione di Chimica Organica della Società Chimica Italiana 12-16 settembre 2010, San Benedetto del Tronto (AP), libro degli Atti O21
- 6) Regio and Diastereoselective Synthesis and X-ray Structure Determination of (+)-2-deoxyoryzalexin S. F. Leonelli, V. Latini, A. Trombetta, G. Bartoli, F. Ceccacci, A. La Bella, A. Sferrazza, D. Lamba, L.M. Migneco, R. Marini Bettolo XXXIV Convegno Nazionale della Divisione di Chimica Organica della Società Chimica Italiana, Pavia, 10-14 settembre 2012, libro degli Atti F9
- 7) Recent advances in the synthesis of stemarane diterpenoids F. Leonelli, A. La Bella, L. M. Migneco, R. Marini Bettolo XXVI Convegno Nazionale della Società Chimica Italiana, Paestum (Sa), 10-14 settembre 2017, Programma Scientifico, ORG OR38 pag. 72.

Furthermore the results of my research work have been presented by me with poster presentations, and by my co-workers with poster and oral presentation in additional 30 communications held at national and international congresses from 2001 to 2020.

Part – XIII Complete list of publications, book chapters and patents.

- 1) Elusive 6-exo-Hydroxybicyclo[2.2.2]octan-2-ones from the Corresponding Acetates by Methanolysis in the Presence of CH₃ONa/La(OTf)₃, S. Di Stefano, F. Leonelli, B. Garofalo, L. Mandolini, R. Marini Bettolo, L. M. Migneco, *Org. Lett.* 4 (2002) 2783-2785.
- 2) The Formation of 8-Epipodocarp-9(11)en-12-one in the Course of the Preparation of Podocarp-9(11)en-12-one from O-Methylpodocarpane and Related Studies, F. Leonelli, S. Borocci, L. M. Migneco, R. Marini Bettolo, *Helv. Chim. Acta* 85 (2002) 2817-2826.
- 3) Chiral HPLC Resolution of the Wieland-Miescher Ketone and Derivatives, F. Leonelli, B. Garofalo, L. M. Migneco, R. Marini Bettolo, F. Colais, M. Sinibaldi, *Journal of Liquid Chromatography and Related Technologies*, 26 (2003) 409-424.
- 4) Hydrosoluble, Metabolically Fragile Bioconjugates By Coupling Tetrabutylammonium Hyaluronan With 2'-Paclitaxel-4-Bromobutyrate: Synthesis And Antitumor Properties, A-L. Capodilupo, V. Crescenzi, A. Francescangeli, R. Joudioux, F. Leonelli, R. Marini Bettolo, L. M. Migneco, M. Quagliariello, P. Bellato, G. De Luca, E. Galbiati, D. Renier, A. Banzato, A. Rosato, *Hyaluronan Structure, Metabolism, Biological Activities, Therapeutic Applications*, Endre A. Balazs e Vincent C. Hascall Editori Matrix Biology Institute (New Jersey) 391-395.
(This publication is not indexed in Scopus or Web of Science)
- 5) The intramolecular aldol condensation of 3-oxocyclohexanecetaldehydes, L. M. Migneco, F. Leonelli, R. Marini Bettolo, *ARKIVOC* vii (2004) 253-265.
- 6) A New Preparation of 1,3,3-Trimethylbicyclo[2.2.2]octan-2,6-dione, a Never Isolated Key Intermediate in a Total Synthesis of (+)-Norpatchoulenol. A Formal Total Synthesis of (±)-Iso-Norpatchoulenol, A. La Bella, F. Leonelli, I. De Salve, L. M. Migneco, R. Marini Bettolo, *Helv. Chim. Acta* 87 (2004) 2120-2124.
- 7) Neighboring-group Participation in Nitrile-forming Beckmann Fragmentation: Synthesis of Enantiopure (E)-2,3-di-O-substituted-5-methoxy-pent-4-enitriles and Their Conversion into Pyranosylamines, P. Passacantilli, C. Centore, E. Ciliberti, G. Piancatelli, F. Leonelli, *Eur. J. Org. Chem.* (2004) 5083-5091.
- 8) A New and Simply Available Class of Hydrosoluble Bioconjugates by Coupling Paclitaxel to Hyaluronic Acid through a 4-Hydroxybutyric Acid Derived Linker, F. Leonelli, A. La Bella, A. Francescangeli, R. Joudioux, A.-L. Capodilupo, M. Quagliariello, L. M. Migneco, R. Marini Bettolo, V. Crescenzi, G. De Luca, D. Renier, *Helv. Chim. Acta* 88 (2005) 154-159.
- 9) Stereoselective Michael-Type Addition of Organocopper Reagents to Enones Derived from Glycals in the Synthesis of 2-Phosphono-α-C-Glycosides, F. Leonelli*, M. Capuzzi, V. Calcagno, P. Passacantilli, G. Piancatelli, *Eur. J. Org. Chem.* (2005) 2671-2676.
- 10) Oxidation of Nerol to Neral with Iodosobenzene and TEMPO, G. Piancatelli, F. Leonelli, *Organic Syntheses* 83 (2006) 18-21.
- 11) A highly efficient and stereocontrolled synthesis of 2-deoxy-1,5-thioanhydro-L-hexitols from D-Glycals via a tandem nucleophilic displacement reaction, P. Passacantilli, C. Centore, E. Ciliberti, F. Leonelli, G. Piancatelli, *Eur. J. Org. Chem.* (2006) 3097-3104.
- 12) Glycals in organic synthesis: a systematic strategy for preparation of uncommon piperidine 1,2-dideoxy-L-azasugars and 2-deoxy-1,5-anhydro-L-hexitols, E. Ciliberti, R. Galvani, F. Gramazio, S. Haddas, F. Leonelli, P. Passacantilli, G. Piancatelli, *Eur. J. Org. Chem.* (2007) 1463-1473.
- 13) Spectroscopic characterization of 6-hydroxy- and 1-methyl-6-hydroxybicyclo[2.2.2]octan-2-one ethylene acetals and ethylene dithioacetals. F. Leonelli, B. Garofalo, A. La Bella, E. Lasta, F. Ceccacci, L. M. Migneco, R. Marini Bettolo *Magn. Reson. Chem.* 45 (2007) 420-423.
- 14) Synthesis of (+)-13-Stemarene and (+)-18-Deoxystemarin: Expeditious Preparation of the Key 6-exo-Hydroxybicyclo[2.2.2]octan-2-one Ethylene Dithioacetal, F. Leonelli, B. Caschera, L. Silvestri, A. Prastaro, G. Corso, F. Ceccacci, A. La Bella, L. M. Migneco, R. Marini Bettolo, *Helv. Chim. Acta* 91 (2008) 598-607.
- 15) Design, Synthesis and Applications of Hyaluronic Acid-Paclitaxel Bioconjugates, F. Leonelli, A. La Bella, L. M. Migneco, R. Marini Bettolo, *Molecules* 13 (2008) 360-378.

- 16) Synthesis of New 2-Phosphono- α -D-Glycoside derivatives by Stereoselective Oxa-Michael Addition to D-Galacto Derived Enone, F. Leonelli*, M. Capuzzi, E. Bodo, P. Passacantilli, G. Piancatelli, Carbohydr. Res. 343 (2008) 1133-1141.
- 17) Bicyclo[2.2.2]octane Analogues of Patchouli Alcohol by Sakurai Reaction and Nagata Cyclization. Synthesis and Olfactory Properties of Novel Isopropyl Derivatives, A. La Bella, I. Popolla, M. Felici, F. Leonelli, F. Ceccacci, L. Filocamo, L. M. Migneco, R. Marini Bettolo, ARKIVOC iii (2008) 80-90.
- 18) Novel Locally Active Estrogens Accelerate Cutaneous Wound Healing. A Preliminary Study. M. Brufani, F. Ceccacci, L. Filocamo, B. Garofalo, R. Joudioux, A. La Bella, F. Leonelli, L. M. Migneco, R. Marini Bettolo, P. M. Farina, G. S. Ashcroft, C. Routley, M. Hardman, C. Meda, G. Rando, A. Maggi, Mol. Pharmaceutics 6 (2009) 543-556.
- 19) Diastereoselective Total Synthesis of (+)-13-Stemarene by Fourth Generation Methods: A Formal Total Synthesis of (+)-18-Deoxystemarin. F. Leonelli, F. Blesi, P. Diritto, A. Trombetta, F. Ceccacci, A. La Bella, L. M. Migneco, R. Marini Bettolo, J. Org. Chem. 76 (2011) 6871-6876.
- 20) Discussion addendum for: Oxidation of Nerol to Neral with iodosobenzene and TEMPO. F. Leonelli, R. Margarita, G. Piancatelli, Organic Syntheses 89 (2012) 311-322.
- 21) How stereochemistry affects the physicochemical features of gemini surfactant based cationic liposomes. S. Aleandri, M. G. Bonicelli, F. Bordi, S. Casciardi, M. Diociaiuti, L. Giansanti, F. Leonelli, G. Mancini, G. Perrone, S. Sennato, Soft Matter 8 (2012) 5904-5915.
- 22) DPPH radical scavenging activity of paracetamol analogues, A. Alisi, M. Brufani, N. Cazzolla, F. Ceccacci, P. Dragone, M. Felici, G. Furlotti, B. Garofalo, A. La Bella, O. Lanzalunga, F. Leonelli, R. Marini Bettolo, C. Maugeri, L. M. Migneco, V. Russo, Tetrahedron 68 (2012) 10180-10187.
- 23) Role of ionic liquids in protein refolding: native/fibrillar versus treated lysozyme S. Mangialardo, L. Gontrani, F. Leonelli, R. Caminiti, P. Postorino, RSC Adv. 2 (2012), 12329-12336.
- 24) The interpretation of diffraction patterns of two prototypical protic Ionic Liquids: a challenging task for classical molecular dynamics simulations L. Gontrani, E. Bodo, A. Triolo, F. Leonelli, P. D'Angelo, V. Migliorati, R. Caminiti J. Phys. Chem. B 116 (2012) 13024-13032.
- 25) Regio and Diastereoselective Synthesis from (+)-podocarpic Acid and X-ray Structure Determination of (+)-2-deoxyoryzalexin S. Structural Non Identity with its Nominal Natural Isolated Enantiomer. F. Leonelli*, V. Latini, A. Trombetta, G. Bartoli, A. La Bella, F. Ceccacci, A. Sferrazza, L.M. Migneco, D. Lamba, R. Marini Bettolo J. Nat. Prod. 75 (2012) 1944-1950.
- 26) X-Ray Diffraction Studies of Ionic Liquids: from Spectra to Structure and Back. L. Gontrani, P. Ballirano, F. Leonelli, R. Caminiti, The structure of Ionic Liquids, (2013) 1-37, Springer. **(This book chapter is not indexed in Scopus or Web of Science)**
- 27) Interaction of a Long Alkyl Chain Protic Ionic Liquid and Water E. Bodo, S. Mangialardo, F. Capitani, L. Gontrani, F. Leonelli, P. Postorino J. Chem. Phys. 140, (2014) 204503/1-204503/10.
- 28) Thermo-physical properties of ammonium-based ionic liquid + N-methyl-2-pyrrolidone mixtures at 298.15 K. M. Usula, E. Matteoli, F. Leonelli, F. Mocci, F. Cesare Marincola, L. Gontrani, S. Porcedda Fluid Phase Equilibria 383 (2014) 49-54.
- 29) Two Different Models to Predict Ionic-Liquid Diffraction Patterns: Fixed-Charge versus Polarizable Potentials M. Campetella, L. Gontrani, F. Leonelli, L. Bencivenni, R. Caminiti Chem. Phys. Chem. 16 (2015) 197-203.
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