SUSY PIOVESANA
Curriculum Vitae

Place: Rome
Date: 15/01/2025

Part I – General Information

Full Name	Susy Piovesana
Citizenship	Italian
Spoken Languages	Italian, English
Scopus Author ID	36170963500
ORCID	https://orcid.org/0000-0001-7134-7421

Part II – Education

Type	Year	Institution	Notes (Degree, Experience,…)
Expert teacher qualification	2024	Università degli Studi di Roma "La Sapienza", Gruppo di lavoro qualità e innovazione della didattica - QUID	Completition of the V QuID course
PhD in Chemical Sciences	2014	Università degli Studi di Roma "La Sapienza", Department of Chemistry	Thesis title: "*Proteomic Characterization of Biomedically Interesting Particles by nanoHPLC and High Resolution Mass Spectrometry*"; Thesis supervisor: Prof. Aldo Laganà. XXVII Cycle
Visiting PhD student	2013-2014	Utrecht University, Netherlands Proteomics Centre	Six months in the Biomolecular Mass Spectrometry and Proteomics Center of Prof. Albert Heck. Project title: *Development of molecular imprinted polymers selective for the enrichment of sulfopeptides in biological samples*. Supervisor: Prof. Maarten Altelaar
University graduation, Master's Degree	2010	Università degli Studi di Roma "La Sapienza" , Department of Chemistry	Master's Degree in Chemistry, final mark 110/110, thesis title "*Cascade Organocatalytic Additions"* Supervisor: Prof. Marco Bella Chemistry [LS - Ordin. 2003] (classe 62/S)
University graduation,	2007	Università degli Studi di Roma "La Sapienza" , Department of	Bachelor of Science in Chemistry, final mark 110/110

Bachelor's Degree		Chemistry	cum laude Chemistry [L-509 - Ordin. 2002] (classe 21)
High School Diploma	2004	Liceo Linguistico Europeo "Santa Giovanna d'Arco", Vittorio Veneto (TV).	High School Diploma in languages

Part III – Academic Appointments

III_A – Academic Appointments

Start	End	Institution	Position
02/05/2022	30/04/2025	Università degli Studi di Roma "La Sapienza", Department of Chemistry	Fixed-term researcher (RTD - Type B) (art. 24 c.3-b L. 240/10) in Analytical Chemistry, SSD CHEM-01/A.
01/04/2021	31/03/2022	Università degli Studi di Roma "La Sapienza", Department of Chemistry	Postdoctoral researcher (assegnista di ricerca di categoria B), research project title: "*Approccio analitico untargeted, mediante spettrometria di massa ad alata risolutione per studiare metaboliti e composti nuovi/inaspettati in Antartide*" (academic discipline CHIM/01).
01/03/2020	28/02/2021	Università degli Studi di Roma "La Sapienza", Department of Chemistry	Research fellow (Category B, Type II), project title: "*Caratterizzazione del profilo molecolare di campioni di neve mediante tecnologie omiche*" (academic discipline CHIM/01).
01/03/2017	29/02/2020	Università degli Studi di Roma "La Sapienza", Department of Chemistry	Fixed-term Researcher (RTD-A) in Analytical Chemistry and Separation Sciences, Omics Sciences, and Proteomics (academic recruitment field 03/A1 (Analytical Chemistry) - academic discipline CHIM/01
01/11/2016	28/02/2017	Università degli Studi di Roma "La Sapienza", Department of Chemistry	Three-month fellowship, research project title: "*New materials for enrichment of phosphopeptides in biological matrices*".
01/11/2014	31/10/2016	Università degli Studi di Roma "La Sapienza", Department of Chemistry	Postdoctoral research fellow (Category B), research project title: "*Assessment of quality and safety of seafoods by omics sciences*" (academic discipline CHIM/01).

III_B – Other Appointments

Start	End	Institution	Position
2024		Università degli Studi di Roma "La Sapienza", Department of Chemistry	Member of the PhD Program Committee
2024		Università degli Studi di Roma "La Sapienza", Department of Chemistry	Support member in the Faculty Commission Spaces for Didactics, for preparation of the timetables of the Bachelor's Degree Program in Chemical Sciences and Master's Degree Program in Chemistry and Analytical Chemistry

Part IV – Teaching experience

IV_A – Teaching in Bachelor's Programs

Year	Institution	Lecture/Course
2024-2025	Università degli Studi di Roma "La Sapienza"	Analytical Chemistry II with Laboratory [1022303] Bachelor's Program course in Chemical Sciences (L-27), 3 CFU of 9 CFU, for laboratory activity
2024-2025	Università degli Studi di Roma "La Sapienza"	Analytical Chemistry I with Laboratory [1020315] Bachelor's Program course in Chemical Sciences (L-27), 5 CFU of 9 CFU, for laboratory activity
2023-2024	Università degli Studi di Roma "La Sapienza"	Analytical Chemistry I with Laboratory [1020315] Bachelor's Program course in Chemical Sciences (L-27), 5 CFU of 9 CFU, for laboratory activity
2022-2023	Università degli Studi di Roma "La Sapienza"	Analytical Chemistry I with Laboratory [1020315] Bachelor's Program course in Chemical Sciences (L-27), 5 CFU of 9 CFU, for laboratory activity
2019-2020	Università degli Studi di Roma "La Sapienza"	Analytical Chemistry I with Laboratory [1020315]/30443 Bachelor's Program course in Chemistry (L-27), 6 CFU of 9 CFU, for laboratory activity
2018-2019	Università degli Studi di Roma "La Sapienza"	Analytical Chemistry I with Laboratory [1020315]/30443 Bachelor's Program Course in Chemistry (L-27), 9 CFU, 3 CFU for lecture and 6 CFU for laboratory activity
2017-2018	Università degli Studi di Roma "La Sapienza"	Analytical Chemistry I with Laboratory [1020315]/30443 Bachelor's Program in Chemistry (L-27), 6 CFU of 9 CFU, divided into 3 CFU for lecture and 3 CFU for laboratory activity
2015-	Università degli Studi di Roma "La	General and Inorganic Chemistry module

2017	Sapienza"	within course 323/43 R – Chemical and Epidemiological Sciences, Bachelor's Program in Environmental and Workplace Prevention Techniques (L/SNT4), Faculty of Medicine and Psychology, Sant'Andrea Hospital, (2 CFU)

IV_B – Supervision of Master's Graduate Students

Year	Institution	Description
2022	Università degli Studi di Roma "La Sapienza", Department of Chemistry	Supervisor of the Thesis in Analytical Chemistry by F. Berardo "Sviluppo e validazione di un metodo per l'analisi simultanea di estrogeni liberi e coniugati nel latte" (CdL (30059) Chimica analitica [lm - ordin. 2019])
2019	Università degli Studi di Roma "La Sapienza", Department of Chemistry	Supervisor of the Thesis in Analytical Chemistry by I. Spagnoli "Sviluppo di un nuovo materiale polimerico per l'arricchimento di fosfopeptidi da matrici complesse" (CdL (14565) Chimica analitica [lm - ordin. 2010])

IV_C – Supervision of Bachelor's Graduate Students

Year	Institution	Description
2019	Università degli Studi di Roma "La Sapienza", Department of Chemistry	Supervisor of the Thesis in Chemistry by G. Priori "Metodi analitici per il monitoraggio dell'inquinamento farmaceutico in campioni ambientali" (CdL (14493) Chimica [l-270 - ordin. 2010]
2019	Università degli Studi di Roma "La Sapienza", Department of Chemistry	Supervisor of the Thesis in Chemistry by F. Teragnoli "Analisi di neonicotinoidi e carbammati in matrice acquosa" (CdL (14493) Chimica [l-270 - ordin. 2010]
2019	Università degli Studi di Roma "La Sapienza", Department of Chemistry	Supervisor of the Thesis in Chemistry by M. Paolacci "Rilevamento e determinazione di tetracicline da matrici di origine animale" (CdL (14493) Chimica [l-270 - ordin. 2010]
2019	Università degli Studi di Roma "La Sapienza", Department of Chemistry	Supervisor of the Thesis in Chemistry by D. Zucco "Strategie di monitoraggio dei composti organici volatili nell'aria" (CdL (14493) Chimica [l-270 - ordin. 2010]
2019	Università degli Studi di Roma "La Sapienza", Department of Chemistry	Supervisor of the Thesis in Chemistry by A. Mauri "Metodi analitici per l'indagine dell'acrilammide in matrici alimentari" (CdL (14493) Chimica [l-270 - ordin. 2010]
2019	Università degli Studi di Roma "La Sapienza", Department of Chemistry	Supervisor of the Thesis in Chemistry by I. Demtriyous "Tecniche IMAC per

		l'arricchimento dei fosfopeptidi" (CdL (14493) Chimica [l-270 - ordin. 2010]
2018	Università degli Studi di Roma "La Sapienza", Department of Chemistry	Supervisor of the Thesis in Chemistry by F. Mura "I polidrossialcanoati e le plastiche biodegradabili, dove ricerca scientifica e industria possono salvare il mondo" (CdL (14493) Chimica [l-270 - ordin. 2010]
2018	Università degli Studi di Roma "La Sapienza", Department of Chemistry	Supervisor of the Thesis in Chemistry by E. Marcioni "Cloramfenicolo nel miele: tecniche estrattive e validazione di un metodo analitico basato sulla microestrazione liquido-liquido dispersiva assistita da ultrasuoni" (CdL (14493) Chimica [l-270 - ordin. 2010]
2018	Università degli Studi di Roma "La Sapienza", Department of Chemistry	Supervisor of the Thesis in Chemistry by G. A. Caruso "Metodi analitici per la determinazione dei carotenoidi in matrici alimentari" (CdL (14493) Chimica [l-270 - ordin. 2010]
2018	Università degli Studi di Roma "La Sapienza", Department of Chemistry	Supervisor of the Thesis in Chemistry by A. De Bonis "Corona proteica: metodi analitici per la caratterizzazione" (CdL (14493) Chimica [l-270 - ordin. 2010]
2018	Università degli Studi di Roma "La Sapienza", Department of Chemistry	Supervisor of the Thesis in Chemistry by A. Nobili "Tecniche IMAC per l'arricchimento dei fosfopeptidi" (CdL (14493) Chimica [l-270 - ordin. 2010]

IV_D – Participation in Examination Committees

Year	Institution	Description
2018	Università degli Studi di Roma "La Sapienza", Department of Chemistry	Member of Examination Committees for Bachelor's Degree in Chemical Sciences and Master's Degree in Chemistry and Analytical Chemistry.

Part V – Society Memberships, Awards, and National Scientific Qualifications

Part V_A – Society Memberships

Year	Title
2012-	Membership to the Italian Chemical Society (Analytical Chemistry Division and Gruppo Interdivisionale di Scienza delle Separazioni); card number 18726

Part V_B - Awards

Year	Title
2019	Medal entitled "Gruppo Interdivisionale di Scienza delle Separazioni – Premio Giovane Ricercatore" awarded during the *Incontri di Scienza delle Separazioni*, Naples, 28-29 November 2019

2017	"Premio Giovane Ricercatore Chimica Analitica" awarded during the *XXVI Congresso Nazionale della Società Chimica Italiana*, Paestum (SA), 10-14 September 2017
2017	"Premio Giovane Ricercatore Bioanalitica" awarded during the *Giornate di Chimica Analitica in memoria del Prof. Francesco Dondi*, Ferrara, 10-11 July 2017
2016	Best poster award at *Settimo Convegno Giovani Le frontiere della chimica nel nuovo millennio*, Rome, 14-15 June 2016
2016	"Genzo Shimadzu Oral Award for the best oral communication" at *40th International Symposium on Capillary Chromatography (ISCC) and 13th GCxGC Symposium (GCxGC)*, Riva del Garda, 29 May-03 June 2016
2012	Best oral award at *Quinto Convegno Giovani La Chimica per lo Sviluppo*, Rome, 12-13 June 2012

Part V_C – National Scientific Qualifications

Year	Title
2023	National scientific habilitation to function as full professor in Italian Universities. Settore concorsuale 03/A1 - CHIMICA ANALITICACA
2018	National scientific habilitation to function as associate professor in Italian Universities. Settore concorsuale 03/A1 - CHIMICA ANALITICA

Part VI – Funding Information

Part VI_A – Grants as PI-principal investigator

Year	Title	Program	Grant value, notes
2023	Development of innovative in-tube solid-phase microextraction systems for online enrichment of peptides and proteomic analysis	Small research project. Funder: Università degli Studi di Roma "La Sapienza"	€ 3600 36 months
2021	Development of new materials for enrichment of peptides with post-translational modifications	Initial research project – Type 2. Funder: Università degli Studi di Roma "La Sapienza"	€ 2200 12 months
2020	Development of a Sample Preparation Workflow for Sulfopeptides, from Enrichment to Identification	Initial research project – Type 2. Funder: Università degli Studi di Roma "La Sapienza"	€ 3000 12 months
2017	Funding for Basic Activities Related to Research to finance basic activities undertaken by full-time researchers and associate professors working for Italian state universities	FFABR – MIUR	€ 3000 18 months
2017	Development of new materials for the enrichment of phosphopeptides in complex real matrices within the framework of shotgun phosphoproteomics	Medium research project. Funder: Università degli Studi di Roma "La Sapienza"	€ 11000 (+ fellowship € 23750) 36 months
2016	Development of innovative carbon	Initial research project.	€ 3435

	composite materials for phosphopeptide enrichment	Funder: Università degli Studi di Roma "La Sapienza"	12 months
2015	Development of new separation technologies based on polydopamine coating	Initial research project. Funder: Università degli Studi di Roma "La Sapienza"	€ 3000 12 months
2013	Peptidomic study of naturally occurring peptides in serum	Initial research project. Funder: Università degli Studi di Roma "La Sapienza"	€ 2000 12 months
2012	Shotgun proteomics study of platelet microparticles	Initial research project. Funder: Università degli Studi di Roma "La Sapienza"	€ 2000 12 months

Part VI_B – Participation to Grants

Year	Title	Program	Grant total value, notes
2022	Novel materials for selective extraction of peptides with post-translational modifications	Medium research project. Funder: Università degli Studi di Roma "La Sapienza"	€ 14000 (+ fellowship € 23890) PI: Chiara Cavaliere 18 months
2019	Untargeted analytical approach by high resolution mass spectrometry to study metabolites and new/unexpected compounds in Antarctica	Large research project. Funder: Università degli Studi di Roma "La Sapienza"	€ 40000 (+ fellowship € 23750) PI: Chiara Cavaliere 36 months
2018	Development of innovative and high performant analytical methods based on metabolomics and lipidomics for identification of new biomarkers in gut microbiota	Large research project. Funder: Università degli Studi di Roma "La Sapienza"	€ 31000 PI: Anna Laura Capriotti 36 months
2017	Valorization of Italian OLive products through INnovative analytical tools- VIOLIN	AGER	€ 1.008.000 PI: Luigi Mondello 36 + 12 months
2015	Identification and characterization of new bioactive peptides in milk and dairy products	Large research project. Funder: Università degli Studi di Roma "La Sapienza"	€ 30000 (+ fellowship € 23450) PI: Aldo Laganà 36 months
2014	Identification of bioactive food peptides by "omic" analytical methods	Large research project. Funder: Università degli Studi di Roma "La Sapienza"	€ 26.550 (+ fellowship € 23450) PI: Anna Laura Capriotti 18 months

2012	Valutazione della qualità e della sicurezza degli alimenti ittici Mediterranei tramite scienze "omiche"	Projects of national interest (Progetti di Ricerca di Interesse Nazionale - PRIN)	€ 93624 PI: Aldo Laganà 36 months

Part VII – Global Research Activity

Keywords	Brief Description
Shotgun proteomics Peptidomics Bioactive peptides Metaproteomics	The studies are based on shotgun proteomics: peptide samples (obtained by tryptic digestion or enriched native peptides) are separated by reversed phase nanoHPLC coupled to high resolution Orbitrap mass spectrometry with bioinformatic analysis by sequence database search (Mascot, Proteome Discoverer, MaxQuant software) or de-novo peptide identification (pNovo). Multidimensional off-line approaches were used for fractionation of complex peptide samples. The main topics include: the characterization or the differential analysis, by label-free quantitation, of proteins in complex matrices (biological fluids, cells, protein corona on vectors for gene delivery, model and non-model vegetables, food, environmental samples); development of new analytical workflows, including new materials, for the enrichment of post-translational modifications of proteins (protein phosphorylation, glycosylation, sulfation) in biological fluids; development of analytical methods for the investigation of middle sized bioactive peptides (either native or obtained by hydrolysis) in food or waste materials.
Short chain peptidomics Bioactive peptides Biomarker investigation	Development of analytical methods specific for short chain peptides, 2-4 amino acid long, which cannot be identified by shotgun proteomics approaches. Sample preparation specific for enrichment of short peptides were developed, as these analytes are very low abundance and are usually poorly investigated by conventional metabolomic studies as well. Along with sample preparation, chromatographic separation by UHPLC and detection by high resolution Orbitrap mass spectrometry of short peptides was also investigated, due to the wide range of polarity of these analytes, poor ionization efficiency and low abundance. Finally, sequence identification was considered, with the development of suspect screening approaches and workflows for spectra data mining and analyte confident identification, by using bioinformatic software (Compound Discoverer, MzMine and MMass). The main topics include the characterization of short peptides in food, as bioactive peptides, and biological fluids, as possible biomarkers of disease.
Lipidomics	Development of enrichment sample preparation protocols for the investigation of low abundance polar and neutral lipids in vegetables and biofluids. Samples are analysed by UHPLC coupled to high-resolution Orbitrap mass spectrometry and bioinformatics (Lipostar software).
Metabolomics Untargeted analysis	Development of analytical methods for the untargeted investigation of specific metabolite classes. The main aim of these studies is the

Phytochemicals	optimization of spectra acquisition methods and data mining of the acquired raw files, in order to improve the coverage of investigated metabolites and the identification confidence. The methods include separation by UHPLC coupled to high-resolution Orbitrap mass spectrometry. Data are then mined by bioinformatics (Compound Discoverer) using lists, manually created, containing metabolites potentially present in the sample (either known metabolites or created by combination of core structures and functional groups) and belonging to a analyte specific class. The described approaches are aimed at characterising biologically relevant compounds in biological matrices, including biofluids for biomarker discovery, and food and wastes for characterization of bioactive compounds.

Targeted analysis	Development and validation of analytical methods, including sample preparation protocols and preparation of new sorbent materials, for the investigation of small molecules in biofluids, food, and environmental samples by targeted analysis based on UHPLC coupled to triple quadrupole multiple reaction monitoring. The main targets are emerging contaminants, bioactive compounds, toxins in food and environmental samples (water, sediments).Recently, new sorbets were used to prepare online extraction systems for analyte clean up and analysis by LC-MS/MS.
Quantitative analysis	
Food analysis	
Environmental analysis	

Part VIII – Summary of Scientific Achievements

Product type	Number	Data Base	Start	End
Research articles [international]	96	Scopus	2010	2024
Review articles [international]	16	Scopus	2011	2024
Conference papers	2	Scopus	2018	2018
Editorial	1	Scopus	2019	2019
Book chapter	2	Scopus	2019	2019

Total Impact factor	543
Average Impact factor for publication	4.6
Total Citations (Scopus, 15/1/2025)	3820
Total Citations (Scopus, 15/1/2025) without self citations	3428
Average Citations per Product	32
Hirsch (H) index (Scopus, 15/1/2025)	36

Part IX – Activity in Journal Editorial Boards and Guest Editor

Year	Brief Description
October 2019-	Section Editorial Board of the international scientific journal *Molecules* for the Analytical Chemistry section
2019	Guest editor of the Topical Collection "Recent Trends in Solid-Phase Extraction for Environmental, Food and Biological Sample Preparation" with guest editors Anna Laura Capriotti, Giorgia La Barbera, and Susy Piovesana (Editorial by A.L. Capriotti, G. La Barbera, **S. Piovesana*** on *Chromatographia*, 2019, 82:1119–1120. DOI: 10.1007/s10337-019-03762-5
2020	Guest editor of the Special Issue "Application of Nanomaterials/Nanotechnology in Analytical Chemistry" with guest editors Chiara Cavaliere and Susy Piovesana on *Applied Sciences.*
2020	Guest editor of the Special Issue "Advancements in Analytical Techniques for Proteomics" with guest editors Susy Piovesana, Carmela Maria Montone e Andrea Cerrato on *Molecules.*
2020	Guest editor of the Special Issue "Application of New Methods for the Determination of Contaminants in Food and Environmental Quality and Safety" with guest editors Chiara Cavaliere and Susy Piovesana on *Applied Sciences.*
2021	Review Editor in the Editorial Board of *Environmental Analysis* (specialty section of *Frontiers in Analytical Science*).

Part X – Activity as Reviewer for Scientific Journals

Acta Biomaterialia (2019-); Analyst (2019-); Analytica Chimica Acta (2024-); Analytical Methods (2016-); Biomolecules (2019-); Current Organic Chemistry (2016-); Data in Brief (2019-); Expert Opinion on Drug Delivery (2016-); Food Analytical Methods (2019-); Food Chemistry (2018-); Food Research International (2018-); Foods (2019-); International Journal of Molecular Sciences (2019-); Journal of Chromatography A (2016-); Journal of Food Composition and Analysis (2019-); Journal of Food Science (2019-); Journal of Proteomics (2016-); Journal of the Science of Food and Agriculture (2016-); Microchemical Journal (2019-); Microchimica Acta (2019-); Molecules (2019-); Nanomedicine (2019-); RSC Advances (2016-); Separations (2019-); Talanta (2024-)

Part XI – Conferences

Part XI_A – Speaker at International Conferences

[1] **S. Piovesana**, C.M. Montone, A. Cerrato, C. Cavaliere, A. Laganà. "Sulfopeptide enrichment and identification by liquid chromatography-mass spectrometry" AMYC-Biomed 2021, 3-5 November 2021. Virtual conference.

[2] G. La Barbera, M. Antonelli, B. Benedetti, A. Cerrato, G. Cruciani, L. Goracci, C.M. Montone, **S. Piovesana**, A. Laganà. "Delving into the Polar Lipidome of Microalgae by Optimized Chromatographic Separation, High-Resolution Mass Spectrometry, and Comprehensive Identification with Lipostar" 48TH International Symposium on High-Performance Liquid Phase Separations and Related Techniques, Milan, 16-20 June 2019.

[3] **S. Piovesana**, C. Cavaliere, F. Ferraris, G. La Barbera, R. Zenezini Chiozzi, A. Laganà "Development of new magnetic materials in shotgun phosphoproteomics" MYCS - Merck Young Chemists Symposium, Rimini, 25-27 October 2016. ISBN: 978-88-86208-92-5

[4] **S. Piovesana**, A.L. Capriotti, V. Mancinelli, V. Trionfera, R. Zenezini Chiozzi, A. Laganà "Phosphopeptide selective enrichment by new affinity chromatography magnetic phases based on polydopamine and graphitized carbon black" 6th EuCheMS Chemistry Congress, Seville, 11-15 September 2016.

[5] **S. Piovesana**, A.L. Capriotti, F. Ferraris, A. Laganà "New materials for magnetic solid phase extraction and enrichment of phosphorylated peptides" 40th ISCC Symposium, Riva del Garda, 29 May -3 June 2016. **Genzo Shimadzu Oral Award as best oral communication.**

Part XI_B – Speaker at National Conferences

[1] A. Cerrato, A. Laganà, **S. Piovesana**, R. Tauler, A.L. Capriotti. "Elucidation of zwitterionic and positively charged metabolites in prostate cancer by dedicated untargeted metabolomics". XXX Congress of the Analytical Chemistry Division of the Italian Chemical Society (SCI), Vasto (CH), 17-21 September 2023.

[2] **S. Piovesana. Invited lecture** "New trends for the enrichment and liquid chromatography-mass spectrometry analysis of peptides with protein post-translational modifications", XXVII National Congress of the Italian Chemical Society "La chimica guida lo sviluppo sostenibile", 14-23 September 2021. Virtual conference.

[3] **S. Piovesana. Keynote lecture** "Challenges and New Developments in Shotgun Phosphoproteomics for Complex Real-World Samples" Incontri di Scienza delle Separazioni,

Naples, 28-29 November 2019. **Medal award "Gruppo Interdivisionale di Scienza delle Separazioni – Premio Giovane Ricercatore"**

[4] **S. Piovesana,** M. Antonelli, B. Benedetti, A. Cerrato, C.M. Montone, A. Laganà. "Unravelling the bioactivity potential of complex matrices: focusing on lipids and unusual amino acids in oils" XXVIII Congress of the Analytical Chemistry Division of the Italian Chemical Society (SCI), Bari, 22-26 September 2019.

[5] **S. Piovesana. Keynote lecture "**Separation and Enrichment of Peptides and Amino Acids: a Piece in the Puzzle of the Bioactivity of Protein Derivatives**"** XXVII Congress of the Analytical Chemistry Division of the Italian Chemical Society (SCI), Bologna, 16-20 September 2018.

[6] **S. Piovesana. Keynote lecture "**Cutting-edge developments in shotgun proteomics, peptidomics and shotgun phosphoproteomics in real matrices" XXVI National Congress of the Italian Chemical Society, Paestum (SA), 10-14 September 2017. **"Premio Giovane Ricercatore Chimica Analitica".**

[7] **S. Piovesana. Keynote lecture** "Shotgun Phosphoproteomics of Complex Real Samples by New Magnetic Materials" Giornate di chimica analitica in memoria del Prof. Francesco Dondi Recenti sviluppi in Scienze delle Separazioni e Bioanalitica, Ferrara, 10-11 July 2017. **"Premio Giovane Ricercatore Bioanalitica".**

[8] A.L. Capriotti, F. Ferraris, **S. Piovesana**, A. Laganà "Preparation of new composite materials for phosphopeptide enrichment in shotgun prosphoproteomics" XXVI Congress of the Analytical Chemistry Division of the Italian Chemical Society (SCI), Giardini Naxos, 18-22 September 2016.

[9] A.L. Capriotti, **S. Piovesana**, R. Zenezini Chiozzi, A. Laganà "Development of new composite magnetic phases for phosphopeptides isolation in shotgun phosphoproteomics" Bioanalitica 2016, Bologna, 4 July, 2016.

[10] **S. Piovesana**, A.L. Capriotti, F. Ferraris, R. Samperi, A. Laganà "Post-translational modifications: development of new materials for the enrichment of phosphopeptides" XXV Congress of the Analytical Chemistry Division of the Italian Chemical Society (SCI), Trieste, 13 – 17 September, 2015.

[11] C. Cavaliere, F. Ferraris, G. La Barbera, **S. Piovesana**, A. Puglisi, A. Laganà "Peptidomic and bioactivity study on the peptides isolated in commercial donkey milk" Bioanalitica 2015, Florence, 26 June, 2015.

[12] **S. Piovesana**, F. Ferraris, P. Foglia, G. La Barbera, R. Samperi, R. Zenezini Chiozzi, A. Laganà. "Studio dell'interfaccia nano-bio di liposomi mediante analisi proteomica shotgun" Incontri di Scienza delle Separazioni 2014, Rome, 12 December, 2014.

Part XI_C – Partecipation to Conferences

[1] XXVIII National Congress of the Italian Chemical Society, Milan, 26-30 August 2024.

[2] Giornate di Bioanalitica "One Health - nuove frontiere per la chimica bioanalitica", Bologna, 15-17 April, 2024.

Part XII – Complete List of Publications on Scientific International Journals

Part XIII_A – Scientific Papers and Review Articles

* indicates corresponding author. The IF is obtained by Clarivate JCR and is referred to the year of publication (when not yet available, 2023 was used). The number of citations is taken from SCOPUS database (15/01/2025).

[1] **S. Piovesana**, D.M. Scarpino Schietroma, L.G. Tulli, M.R. Monaco, M. Bella. Unsaturated beta-ketoesters as versatile electrophiles in organocatalysis. *Chemical Communications*, 2010, 46:5160-5162. DOI: 10.1039/c003296d; IF (year of publication) = 5.787; citations = 23.

[2] **S. Piovesana**, D.M. Scarpino Schietroma, M. Bella. Multiple catalysis with two chiral units: an additional dimension for asymmetric synthesis. *Angewandte Chemie International Edition*, 2011, 50:6216-6232. DOI: 10.1002/anie.201005955. IF (year of publication) = 13.455; citations = 150.

[3] A.L. Capriotti, G. Caruso, C. Cavaliere, **S. Piovesana**, R. Samperi, A. Laganà. Comparison of three different enrichment strategies for serum low molecular weight protein identification using shotgun proteomics approach. *Analytica Chimica Acta*, 2012, 740:58-65. DOI: 10.1016/j.aca.2012.06.033. IF (year of publication) = 4.384; citations = 39.

[4] A.L. Capriotti, C. Cavaliere, **S. Piovesana**, R. Samperi, A. Laganà. Multiclass screening method based on solvent extraction and liquid chromatography-tandem mass spectrometry for the determination of antimicrobials and mycotoxins in egg. *Journal of Chromatography A*, 2012, 1268:84-90. DOI: 10.1016/j.chroma.2012.10.040. IF (year of publication) = 4.612; citations = 82.

[5] A.L. Capriotti, C. Cavaliere, A. Laganà, **S. Piovesana**, R. Samperi. Recent trends in matrix solid-phase dispersion. *TrAC - Trends in Analytical Chemistry*, 2013, 43:53-66. DOI: 10.1016/j.trac.2012.09.021. IF (year of publication) = 6.612; citations = 92.

[6] A.L. Capriotti, G. Caruso, C. Cavaliere, **S. Piovesana**, R. Samperi, A. Laganà, Proteomic characterization of human platelet-derived microparticles. *Analytica Chimica Acta*, 2013, 776:57-63. DOI: 10.1016/j.aca.2013.03.023. IF (year of publication) = 4.517; citations = 44.

[7] **S. Piovesana**, R. Samperi, A. Laganà, M. Bella. Determination of enantioselectivity and enantiomeric excess by mass spectrometry in the absence of chiral chromatographic separation: An Overview. *Chemistry - A European Journal*, 2013, 19:11478-11494. DOI: 10.1002/chem.201300233. IF (year of publication) = 5.696; citations = 25.

[8] A.L. Capriotti, C. Cavaliere, P. Foglia, **S. Piovesana**, R. Samperi, S. Stampachiacchiere, A. Laganà. Proteomic platform for the identification of proteins in olive (*Olea europaea*) pulp. *Analytica Chimica Acta*, 2013, 800:36-42. DOI: 10.1016/j.aca.2013.09.014. IF (year of publication) = 4.517; citations = 14.

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Part XIII_B – Conference Proceedings and Editorials

[1] K. Sparnacci, D. Antonioli, V. Gianotti, M. Laus, A. Laganà, S**. Piovesana**. Multishell hybrid magnetic nanoparticles for phosphopeptide enrichment. *AIP Conference Proceedings* 2018, 1981: 020174. DOI: 10.1063/1.5046036

[2] A.L. Capriotti, G. La Barbera, **S. Piovesana***, *Chromatographia*, 2019, 82:1119–1120. DOI: 10.1007/s10337-019-03762-5. IF (year of publication) = 1.596; citations = 5.

Part XIII_C – Book Chapters

[1] Cerrato, A., Capriotti, A.L., Montone, C.M., Aita, S.E., Cannazza, G., Citti, C., **Piovesana, S.,** Aldo, L. (2021) Analytical Methodologies for Lipidomics in Hemp Plant. In: Hsu FF. (eds) Mass Spectrometry-Based Lipidomics. Methods in Molecular Biology, vol 2306, pp. 257-273. Humana, New York, NY. https://doi.org/10.1007/978-1-0716-1410-5_17. Citations = 5.

[2] Cerrato A., Aita S.E., Montone C.M., Capriotti A.L., **Piovesana S**., Laganà A. (2021) Chapter 4 - Methodologies for extraction and separation of short-chain bioactive peptides. In: Fidel Toldrá and Jianping Wu (eds) Biologically Active Peptides: From Basic Science to Applications for Human Health, pp. 75-86. Academic Press, https://doi.org/10.1016/C2019-0-02469-7. Citations = 1.

Part XIV – Patents

[1] **Method for the characterization of short peptides from industrial hemp.**
Inventors: Capriotti Anna Laura, Cavaliere Chiara, Cerrato Andrea, Montone Carmela Maria, Piovesana Susy, Laganà Aldo, Lammi Carmen, Arnoldi Anna.
Applicants: Università degli Studi di Roma La Sapienza, Università degli Studi di Milano.

- 2025, European Patent Application with patent number EP4482847.
- 2023, Patent Cooperation Treaty Application with patent number WO2023161197

Priority numbers: IT20220003347 20220223; WO2023EP54233 20230220

[2] **Method for the extraction of policosanols from industrial hemp and mixture thereof**
Inventors: Capriotti Anna Laura, Cavaliere Chiara, Cerrato Andrea, Laganà Aldo, Micalizzi Giuseppe, Mondello Luigi, Montone Carmela Maria, Piovesana Susy. Applicants: Chromaleont S R L, Sapienza Università di Roma.

- 2024, United States Patent and Trademark Office Pre-Granted Publication with patent number US20240336548.
- 2024, European Patent Application with patent number EP4377283.
- 2023, Patent Cooperation Treaty Application with patent number WO2023006593.

Priority numbers: IT20210020228 20210729; WO2022EP70579 20220722