

MARIA LUISA ASTOLFI
Curriculum Vitae

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Part I – General Information

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Part II – Education

Type	Year	Institution	Notes
University graduation	2005	Sapienza University of Rome	20/04/2005 - Master's degree in Chemistry (five-year – “V.O.”). Thesis title: “New analytical procedure for the chemical characterization of suspended particulate matter in the atmosphere”
PhD	2005-2008	Sapienza University of Rome	16/07/2009 - PhD in Analytical Chemistry of Real Systems (XXI cycle). Thesis title: “Chemical characterization of suspended particulate matter in the atmosphere: analytical problems and studies for the identification of emission sources”

Part III – Training courses

Type	Year	Institution	Notes
Pre-graduate studies	13/09/04 – 17/09/04	University of Tuscia, Viterbo	III National School “Soil and internal waters – Analytical methods for the control of chemical contamination”
Pre-graduate studies	2004	Province of Rome and T.E.R.R.E Cooperative	Course for “Expert technicians in solar energy systems” (150 hours)
Pre-doctorate studies and training	01/02/05 – 31/10/05	Demak	“Gestione della qualità in laboratorio, in conformità alla norma tecnica UNI – EN 9001-VISION 2000”, Chemistry Department, Sapienza University of Rome
Pre-doctorate studies and training	31/01/06 – 01/02/06	Perkin Elmer Italia S.p.a.	“Corso teorico e pratico della tecnica analitica ICP-MS: hardware, software e messa appunto di metodi analitici per Elan 9000 Perkin Elmer”, Istituto Superiore di Sanità, Rome
Pre-doctorate studies and training	09/01/06 – 31/03/06	Demak	“Training & Education Program - Project 1LxL – L.U.M.A. Laboratories Certification & Accreditation, in accordance with ISO 9001:2000 & ISO 17025 standards”, Chemistry Department, Sapienza University of Rome
Pre-doctorate studies and training	01/12/06 – 30/06/07	Institute of Atmospheric Pollution, CNR IIA, research area of Montelibretti, Rome.	“Fundamentals of air pollution”, based on 20 meetings, 90 minutes lecture and 30 minutes problem solving”, Institute of Atmospheric Pollution, CNR IIA, research area of Montelibretti, Rome
Pre-doctorate studies and training	31/01/07 – 03/07/07	Demak	“Programma di training, Follow up lo Standard ISO 9001:2000 nel laboratorio LUMA”, Chemistry Department, Sapienza University of Rome
Pre-doctorate studies and training	1/10/07 – 5/10/07	Sapienza University of Rome and Division of Analytical Chemistry of the Italian Chemical Society	National School of Analytical Chemistry for PhD Students (32 h), Villa Benedetta, Rome

Pre-doctorate studies and training	20/03/07 – 22/03/07	Varian, Inc.	Training course for “Plasma Spectroscopy Operators Course with Varian ICP-MS mass spectrometer”, Chemistry Department, Sapienza University of Rome
Pre-doctorate studies and training	24/10/07	F.K.V. S.r.l.	“Corso di addestramento dell’unità Milestone Ethos1”, Torre Boldone
Pre-doctorate studies and training	19/05/08 – 23/05/08	Parma University Campus and Italian Chemical Society, Division of Analytical Chemistry, Division of Mass Spectrometry	National School “Analytical Methodologies in Mass Spectrometry”, Parma University Campus
Pre-doctorate studies and training	18/06/08 – 20/06/08	S-IN Soluzioni Informatiche, Vicenza	“Design of Experiments – Basic Course”, arranged by Umetrics
Pre-doctorate studies and training	29/10/08 – 31/10/08	S-IN Soluzioni Informatiche, Vicenza	“Multivariate Analysis – Basic Course”, arranged by Umetrics
Post-doctorate studies and training	14/12/10 – 16/12/10	Bruker Chemical Analysis	“Corso Operatori ICPMS”, Chemistry Department, Sapienza University of Rome
Post-doctorate studies and training	10/05/12 – 11/05/12	FullTech Instruments	AFS Titan 8220 spectrometer usage course, Chemistry Department, Sapienza University of Rome
Post-doctorate studies and training	29/10/13	FKV S.R.L.	Milestone UltraWAVE usage course, Chemistry Department, Sapienza University of Rome
Post-doctorate studies and training	21-30/01/19	Sapienza University of Rome	Basic course of the statistical program “R” (18 h), Department of Environmental Biology, “Sapienza” University of Rome
Post-doctorate studies and training	09/10/20	LetPub	The educational webinar “An Editor’s Guide to Successful Peer Review”, Research Communications Manager, LetPub
Post-doctorate studies and training	15/12/21	Sapienza University of Rome	Webinar - Quid tutorial "Come scegliere e progettare una prova d'esame"
Post-doctorate studies and training	14/02/22	Sapienza University of Rome	Webinar (2h) - Quid tutorial "Pratiche didattiche per l'apprendimento attivo"
Post-doctorate studies and training	16/12/22	Sapienza University of Rome	Webinar - Quid tutorial "Buone prassi e linee guida per gli studenti con disabilità e DSA"
Post-doctorate studies and training	22/02/23	Sapienza University of Rome	Webinar – “JoVE Sapienza per la didattica - dedicato ai contenuti di scienze chimiche”
Post-doctorate studies and training	05/07/23	FKV	Webinar – “ICP-OES: vediamoci chiaro! Cos'è la risoluzione del monocromatore e come gestire le interferenze con ICP ottico”
Post-doctorate studies and training	24/05/24	Sapienza University of Rome	Webinar - "Research Data & Data Management Plan"
Post-doctorate studies and training	30/05/24	Sapienza University of Rome	Course of “Formazione generale salute e sicurezza sul lavoro per lavoratori ed equiparati”, Ufficio Speciale Prevenzione Protezione e Alta Vigilanza
Post-doctorate studies and training	13/11/24	FKV S.R.L.	Webinar - “Costruire un metodo in ICP-MS: risolviamo il dilemma degli isotopi”
Post-doctorate studies and training	06/03/25	Thermo Fisher Scientific Life Technologies	Webinar “Varioskan Lux Introduction”

Part IV – Appointments

IVA – Actual position

Start	End	Institution	Position
01/10/2020	30/09/2025	Sapienza University of Rome	Assistant Professor RTD-A - art. 24 c.3-a, L. 240/10 (03/CHEM-01, CHEM-01/A, competition notice n. 308/2019), Department of Chemistry.

IVB – Academic Appointments and Qualifications

Start	End	Institution	Position
28/06/2024	-	Sapienza University of Rome	Substitute member of the exam Committee for the admission to the PhD course in Chemical Sciences - 40th cycle (decree n. 1571/2024, prot. n. 0117521 of 06/28/2024).
2023/2024	-	Sapienza University of Rome	Committee member for the assignment of one “co.co.co.” contract for the design of a monitoring campaign and interpretation of results (competition notice n. ICE 233/2023, prot. n. 4521 del 12/12/23).
2023/2024	-	Sapienza University of Rome	Committee member for the assignment of research grant in category B - type II - SSD CHEM-01/A (competition notice n. AR-B 46/2023, prot. n. 2953 del 19/12/23).
2023	-	Sapienza University of Rome	Committee member for the assignment of junior scholarship (competition notice n. BS-J-61/2023 prot. n. 1146 of 06/04/23).
01/06/2023	31/05/2024	Sapienza University of Rome	Reference professor for two scientific attendees for experimental research in the field of diagnostics applied to the conservation of cultural heritage
21/04/23	21/04/26	Sapienza University of Rome	Scientific Responsible Framework Agreement between Sapienza University of Rome and the Colosseum Archaeological Park. Prot. 37881 of 26/04/23.
08/02/2023	08/02/2034	Ministry of University and Research (MUR)	National Scientific qualification as full professor (“ Professore di I fascia ”) in the Italian higher education system, in the call 2021/2023 (Ministerial Decree n. 553/2021 and 589/2021) for the disciplinary field of 03/CHEM-01 – Analytical Chemistry (validity 08/02/2023 - 08/02/2035)
01/06/2022	01/06/2033	Ministry of University and Research (MUR)	National Scientific qualification as associate (“ Professore di II fascia ”) in the Italian higher education system, in the call 2021/2023 (Ministerial Decree n. 553/2021 and 589/2021) for the disciplinary field of 03/CHEM-01 – Analytical Chemistry (validity 01/06/2022 - 01/06/2034)
2022	-	Sapienza University of Rome	Committee member for the assignment of junior scholarship (competition notice n. 19/2022, prot. n. 1994 of 29/08/22).
01/12/2021	30/12/2022	Sapienza University of Rome	Scientific Responsible for n.1 Research Fellow contract of category B, type II (CHEM-01/A). Research project title: “Caratterizzazione chimica elementare dei reflui ottenuti nel processo idrometallurgico per il trattamento delle schede elettroniche”
2021	-	Sapienza University of Rome	Committee member for the assignment of research grant in category B - type II - SSD CHEM-01/A (competition notice n. 36/2021, prot. n. 2175 del 20/09/2021).
15/12/2021	today	Sapienza University of Rome	Committee member - Departmental Equipment (D.D. n. 138 of 15.12.2021, prot. n. 3139).

01/12/2021	today	Sapienza University of Rome	Committee member - Teaching Observatory for Degree Class L-43.
01/01/2020	30/09/2020	Sapienza University of Rome	"Co.Co.Co." contract - Research title: "Ottimizzazione procedure analitiche e gestione qualità del dato" (competition notice ICE n. 384/2019).
01/07/2019	31/12/2019	Sapienza University of Rome	"Co.Co.Co." contract - Research title: "Supporto alla ricerca in campo analitico - analisi elementare e qualità del dato" (competition notice ICE n. 174/2019).
2018	-	Sapienza University of Rome	Acquisition of 24 university or academic training credits (CFU/CFA) in the anthropological-psychological-pedagogical disciplines and in teaching methodologies and technologies, in compliance with the provisions of Ministerial Decree 616 of 10 August 2017
01/09/2014	30/04/2019 (maternity 07/09/2015- 07/05/2016)	Sapienza University of Rome	Post-doctoral Fellow ("Assegno di Ricerca" art. 22 of Law n. 240/2010). Research project: "Valutazione impatto ambientale in aree industriali ed urbane", 03/CHEM-01, Analytical Chemistry (competition notice n. 12/2014).
01/01/2010	31/08/2014 (maternity 07/07/2012- 09/03/2013)	Sapienza University of Rome	Post-doctoral Fellow ("Assegno di Ricerca"). Research project: "Metodiche analitiche integrate per la determinazione di sostanze organiche e inorganiche del materiale particellare sospeso in atmosfera (PM)", 03/CHEM-01, Analytical Chemistry.
01/11/2008	31/12/2009	Sapienza University of Rome	Post-doctoral fellowship ("Borsa di studio per attività di ricerca post-laurea"). Research title: "Attribuzione delle sorgenti emissive del particolato atmosferico in siti inquinati mediante analisi di speciazione chimica elementare".
02/04/2007	02/10/2007	FILAS-Regione Lazio	Scholarship for Scientific Training Internship. Research title: "Assicurazione della qualità nell'ambito di misure chimico-analitiche, in accordo agli standard ISO 9001:2000 & ISO 17025", Department of Chemistry, Sapienza University of Rome (BURL n. 25 SO of 09/09/2006).
13/07/2005	-	Sapienza University of Rome	"Abilitazione all'esercizio della libera professione di Chimico"
01/11/2005	31/10/2008	Sapienza University of Rome	Representative of PhD students , Department of Chemistry, Sapienza University of Rome.
01/05/2005	31/10/2005	Sapienza University of Rome	"Co.Co.Co." contract - Research title: "Analisi degli elementi in traccia nel particolato atmosferico".

IVC – Other specific professional experiences characterized by research activities related to the scientific disciplinary group 03/CHEM-01 in addition to those shown in section IIIB – Academic Appointments

Year	Institution	Description
01/10/2004 – 31/07/2005	Arpa Lazio, Institute of Atmospheric Pollution CNR-IIA Rome, and Institute of Biometeorology (IBIMET) of the CNR of Bologna	Professional experience characterized by research activities in the project with the Lazio Region: "Progetto Polveri Fini".
01/06/2008 – 07/03/2011	Institute of Atmospheric Pollution CNR-IIA Rome	Professional experience characterized by research activities in the project "Valutazione dell'impatto ambientale del nuovo impianto di incenerimento/termovalorizzazione dei rifiuti in località Cassana (via Diana) attraverso analisi della concentrazione giornaliera di elementi e di idrocarburi policiclici aromatici (IPA) nel materiale particellare sospeso in atmosfera".

		<p>Reports: Perrino, C., Canepari, S., Astolfi, M.L., Guerriero, E., Mosca, S., 2009. Indagine ambientale presso la stazione di monitoraggio in località Cassana - Campagna giugno 2008. Technical report CNR/IIA/0000343 del 03/02/2009;</p> <p>Perrino, C., Canepari S., Astolfi, M.L., Guerriero, E., Mosca, S., Pietrodangelo, A., 2008. Indagine ambientale presso la stazione di monitoraggio in località Cassana - Campagna gennaio 2008. Technical report CNR/IIA/2008/9;</p> <p>Perrino C., Canepari S., Astolfi M.L., 2009. Indagine ambientale presso la stazione di monitoraggio in località Cassana - Campagna gennaio 2009. Technical report CNR/IIA/0003570 del 16/11/2009;</p> <p>Perrino, C., Canepari, S., Astolfi, M.L., Marcovecchio, F., Mosca S., 2010. Indagine ambientale presso la stazione di monitoraggio in località Cassana - Campagna giugno 2009. Technical report CNR/IIA/0000594 of 9/2/2010;</p> <p>Perrino, C., Canepari, S., Astolfi, M.L., Marcovecchio, F., Mosca S., 2010. Indagine ambientale presso la stazione di monitoraggio in località Cassana - Campagna gennaio 2010. Technical report CNR/IIA/0003470 of 14/9/2010;</p> <p>Perrino C., Canepari S., Astolfi M.L., Mercuri E., Torelli G.N., 2011. Indagine ambientale presso la stazione di monitoraggio in località Cassana – Campagna giugno 2010. Technical report CNR/IIA/1086 of 07.03.2011.</p>
24/11/2009 – 14/09/2010	Institute of Atmospheric Pollution CNR-IIA Rome and ENEL	Professional experience characterized by research activities in the project “Determinazione della composizione chimica e concentrazione di massa e del materiale particellare sospeso in atmosfera nell’area circostante la centrale ENEL “Federico II”.
		<p>Reports: Perrino, C., Canepari, S., Catrambone, M., Salzano, R., Dalla Torre, S., Sargolini, T., Astolfi M.L., Marconi E., 2010. Determinazione della composizione chimica e concentrazione di massa del materiale particellare sospeso in atmosfera nell’area circostante la Centrale ENEL Federico II Seconda campagna (marzo 2010). Technical report CNR/IIA/0003469 of 14/09/2010;</p> <p>Perrino, C., Canepari, S., Catrambone, M., Salzano, R., Dalla Torre, S., Sargolini, T., Astolfi M.L., Marconi E., 2010. Determinazione della composizione chimica e concentrazione di massa del materiale particellare sospeso in atmosfera nell’area circostante la Centrale ENEL Federico II. Technical report CNR/IIA/0000575 of 05/02/2010;</p> <p>Perrino, C., Canepari, S., Catrambone, M., Salzano, R., Astolfi, M.L., Marconi, E., 2010. Determinazione della composizione chimica di campioni provenienti dal parco carbone e di campioni di terreno prelevati nell’area circostante la centrale ENEL Federico II, Technical report CNR/IIA/0003468 of 14/09/2010.</p>
04/07/2013 – 10/07/2014	Institute of Atmospheric Pollution CNR-IIA Rome and ENI	Professional experience characterized by research activities in the project “Determinazione della composizione chimica e concentrazione di massa del materiale particellare sospeso in atmosfera all’interno della Raffineria di Gela”. C. Perrino, M. Rotatori, S. Canepari, P. Benedetti, M. Catrambone, S. Mosca, L. Tofful, S. Dalla Torre, E. Rantica, T. Sargolini, M.L. Astolfi , C. Farao, D. Frasca, M. Marcoccia, Technical report CNR/IIA/0002496 of 10/07/2014.
14/10/2013 – 23/12/2014	Institute of Atmospheric Pollution CNR-IIA Rome and Gruppo Hera	Professional experience characterized by research activities in the project “Attività di monitoraggio della qualità dell’aria nell’area circostante all’impianto di termovalorizzazione di rifiuti non pericolosi di Ferrara”

01/07/2014 – 30/09/2016	Institute of Atmospheric Pollution CNR-IIA Rome	Professional experience characterized by research activities in the project “Valutazione dell'impatto di microelementi ed elementi in traccia emessi della centrale elettrica A2A nell'area di Monfalcone (GO)”
30/07/2014 – 30/07/2015	ENEA	Professional experience characterized by research activities in the Program Agreement MSE-ENEA on Electric System Research Annual Implementation Plan 2014. Reports: RdS/PAR2014/041, Progetto C.1 “Risparmio di energia elettrica nei settori: civile, industriale e servizi”. Report “Caratterizzazione del refluo prodotto nel processo idrometallurgico per il recupero di elementi pregiati da schede elettroniche (RAEE) sviluppato da ENEA”. S. Canepari, M.L. Astolfi , E. Marconi, C. Farao. Accordo di Programma

IVD – Editorial activity

Start	End	Role	Title	Journal	IF-Quartile
05/08/23	30/04/25	Invited Guest Editor	Advances in Analytical Strategies to Study Cultural Heritage Samples, 2nd Edition	Molecules, MDPI	4.2 – Q1
01/22	08/22	Guest Editor	Contaminants in environmental matrices: occurrence, fate, and ecotoxicological aspects	Frontiers in Analytical Science, Frontiers	-
26/11/21	31/07/23	Guest Editor	Advances in Green Analytical Methods	Analytica, MDPI	Q3
07/21	04/23	Guest Editor	Advances in Analytical Strategies to Study Biological and Environmental Samples	Methods and Protocols, MDPI	2.3 – Q2
07/21	04/23	Guest Editor	Advances in Analytical Strategies to Study Cultural Heritage Samples	Molecules, MDPI	4.2 – Q1
07/21	to present	Editorial Board Member	-	Open Chemistry – De Gruyter (Scopus-WoS)	2.1 – Q3
07/21	to present	Editorial Board Member - Academic Editor	-	Plos One – Plos (Scopus – WoS)	2.9 – Q1
07/21	to present	Invited Editorial Board Member	-	Analytica – MDPI (Scopus – WoS)	Q3
07/21	to present	Editorial Board Member	-	Methods and Protocols – MDPI (Scopus – WoS)	2.3 – Q2
06/21	to present	Invited Editorial Board Member - Associate Editor	-	Frontiers in Analytical Science, section Environmental analysis - Frontiers	-
09/20	07/21	Invited Research Topic Editor	Progress in analytical methods and optimized approaches for the elemental analysis in environmental and biological monitoring	Frontiers in Environmental Science, Frontiers	3.3 – Q2

05/20	05/23	Guest Editor	Exposure assessment to environmental contaminants in children	International Journal of Environmental Research and Public Health, MDPI	Q2
11/19	04/21	Guest Editor	Recent Advances in Assessing Environmental and Occupational Exposure to Toxic Elements	International Journal of Environmental Research and Public Health, MDPI	Q2
2019	today	Referee	-	Indexed International Journals (Scopus)	-

IVE – Scientific and Organizing Committee member of Conference

Start	End	Role	Conference
24/06/2024	28/06/2024	Organizing committee member and chairman	International Conference “Symposium for Young Chemists: Innovation and Sustainability - SYNC 2024,”, Department of Chemistry, Sapienza University of Rome. https://sync2024rome.org/
20/06/2022	23/06/2022	Organizing committee member	International Conference “Symposium for Young Chemists: Innovation and Sustainability - SYNC 2022,”, Department of Chemistry, Sapienza University of Rome. https://www.chem.uniroma1.it/en/Young%20Researchers%20Conference
08/06/2022	-	Scientific committee member	National Conference “Esposizione Occupazionale a formaldeide: quale valutazione e gestione del rischio nel 2022”, Sapienza University of Rome. https://www.mcascientificevents.eu/convegno-nazionale-formaldeide/?utm_source=Newsletter&utm_medium=Mail&utm_campaign=Sapienza_Newsletter
03/02/2022	04/02/2022	Scientific committee member	International Conference “Green Conservation of Cultural Heritage 2022”, Accademia delle Belle Arti, Rome. https://www.greenconservationconference.com/

IVF – Oral Communications at National and International Conferences

Maria Luisa Astolfi is author of 98 contributions (48 oral communications and 50 poster) at National and International Conferences. Below is the list of oral Communications presented by Maria Luisa Astolfi.

Date	Conference	Communication title	Type
11/06/2024	“ICPMS FORUM: Conoscere, Condividere, Costruire insieme”, organized by Perkin Elmer, Istituto Nazionale di Archeologia e Storia dell'Arte, Rome	M.L. Astolfi. Potential of ICP-MS in biomonitoring studies	Invited lecture
28-30/06/2023	“Science for the Planet”, University of Molise, Campobasso	M.L. Astolfi , M. Papi, T. Merlet, M. Messi. I probiotici come promettente strumento profilattico per ridurre i livelli di elementi chimici tossici o potenzialmente tossici nelle api	Lecture
10/05/2023	Innovation Village 2023 “Tecnologie innovative per il riciclo di materie prime critiche da prodotti complessi a fine vita”, Napoli	M.L. Astolfi. Caratterizzazione elementare dei reflui ai fini della loro gestione ambientale	Lecture
8/06/2022	National Conference “Esposizione occupazionale a formaldeide: quale valutazione e gestione del rischio nel 2022”,	M.L. Astolfi , Pasquale Avino. Metodiche analitiche per la determinazione di formaldeide aerodispersa.	Lecture

18- 20/05/2022	Department of Public Health and Infectious Diseases, Sapienza University of Rome 10th National Conference on Atmospheric Particulate Matter - PM2022, Best Western Plus Tower Hotel, Bologna	M.L. Astolfi , S. Canepari, C. Protano, L. Massimi, P. Avino, M. Vitali, M. Manigrasso. Esposizione a nanoparticelle di rame in ambienti indoor.	Lecture
25- 26/11/2021	Conference 8th Mediterranean Meetings on Industrial Hygiene “Cancerogeni negli ambienti di lavoro e di vita: monitoraggio ambientale, monitoraggio biologico e valutazione del rischio”, Siracusa	M.L. Astolfi , C. Protano, A.M. Girelli, M. Petyx, S. Iavicoli, M. Vitali. Valutazione sperimentale dell’efficacia delle misure in atto per la mitigazione dell’esposizione a formaldeide nel comparto lavorativo sanitario e in altri scenari occupazionali.	Lecture
25- 26/11/2021	Conference 8th Mediterranean Meetings on Industrial Hygiene “Cancerogeni negli ambienti di lavoro e di vita: monitoraggio ambientale, monitoraggio biologico e valutazione del rischio”, Siracusa	M.L. Astolfi , M.E. Conti, M. Papi, S. Canepari. L’ape e i suoi prodotti per valutare l’inquinamento ambientale da metalli tossici.	Lecture
14- 23/09/2021	XXVII National Congress of the Italian Chemical Society (SCI2021) (online).	M.L. Astolfi , G. Vitiello, E. Marconi, 2021. “A rapid analytical method for the determination of 45 elements in extra-virgin olive oils”	Lecture
14- 16/10/2020	IX National Conference on Atmospheric Particulate Matter - PM2020, Hotel Tiziano e dei Congressi, Lecce.	M.L. Astolfi , G. Vitiello, M. Ristorini, M.A. Frezzini, L. Massimi, E. Marconi, M. Papi, M. Marcolini, G. Mele, S. Canepari, M.E. Conti, 2020. “Le api e i prodotti dell’alveare come bioindicatori della qualità dell’aria”	Lecture
16/01/2020	“Qualità dell’aria e salute della popolazione pediatrica della provincia reatina”, “Vicolo Primo” Municipal Theatre, Poggio Moiano (RI)	M.L. Astolfi . Levels of inorganic chemical elements in the urine of children in the Rieti province	Invited lecture
23/01/2020	“Qualità dell’aria e salute della popolazione pediatrica della provincia reatina”, Sala Consiliare, Rieti	M.L. Astolfi . Levels of inorganic chemical elements in the urine of children in the Rieti province	Invited lecture
25- 26/06/2019	VIII Young Researchers Conference “C’è futuro nella Ricerca!”, Chemistry Department, Sapienza University of Rome	M.L. Astolfi , E. Marconi, S. Canepari, 2019. Treatment of non-invasive biological matrix samples for screening determination of major and trace elements by inductively coupled plasma mass spectrometry,	Lecture
11/07/2017	“Il Laboratorio di Igienie come strumento per le scelte strategiche in Sanità Pubblica”, Department Department of Public Health and Infectious Disease, Sapienza University of Rome	S. Canepari, M.L. Astolfi . Particulate matter contamination of outdoor air	Invited lecture
08/06/2005	“Le nuove frontiere della chimica analitica – nuove normative e soluzioni applicate all’Ambiente”, organized by Varian S.p.A., Centro Congressi Frentani, Rome	M.L. Astolfi , S. Canepari, E. Cardarelli e S. Ghighi New analytical procedure for the chemical characterization of suspended particulate matter in the atmosphere	Invited lecture

Part V – Teaching experience

VA - Courses, lessons and tutoring activities

Year	Institution	Course
2020/2021; 2021/2022; 2022/2023; 2023/2024; 2024/2025	Sapienza University of Rome	Scheduled GOMP - Equilibri Chimici e Tecniche Strumentali di Analisi (CHEM-01/A) – 6 CFU (52 hours) - Technologies for Conservation and Restoration of Cultural Heritage L-43
2021/2022; 2022/2023	Sapienza University of Rome	Scheduled GOMP - Chimica Analitica III (CHEM-01/A) – 3 CFU (38 hours) - Industrial Chemistry LM-71
24/09/2021	Sapienza University of Rome	Invited teacher of “Metodi di monitoraggio e identificazione delle sorgenti per il particolato atmosferico” - “Corso Residenziale per Geniere della Protezione Ambientale e Climatica”, organized by Accademia Kronos, Department of Chemistry
22/06/2018 – 20/07/2018	Sapienza University of Rome	Teacher of “La qualità del dato analitico”- 1 CFU - II Level Master in Forensic Analytical Methodologies, Department of Chemistry (prot. n. 1369/2018 classif. III/5 del 16/05/2018)
12/02/2009 – 30/06/2009	Sapienza University of Rome	“Co.Co.Co.” contract for tutoring and supplementary, preparatory and recovery teaching activities (40 h) for students of Industrial Chemistry, Faculty of S.M.F.N.
07/11/2008 – 31/01/2009	Sapienza University of Rome	“Co.Co.Co.” contract for tutoring and supplementary, preparatory and recovery teaching activities (150 h) for students of Industrial Chemistry, Faculty of S.M.F.N.
12/05/2008 – 11/12/2008	Sapienza University of Rome	“Co.Co.Co.” contract for tutoring and supplementary, preparatory and recovery teaching activities (40 h) for students of Industrial Chemistry, Faculty of S.M.F.N.
31/01/2008 – 21/02/2008	Lazio Region and European Union	“Co.Co.Co.” contract for “Chimica Analitica Strumentale” (12 h) and “Total Quality Management” (25 h), course of “Tecnico Superiore per le Tecnologie Chimiche” (Det. N. D420 of 11/07/2007), “Il Faro” Association, Fiuggi (FR)
26/06/2007 – 31/10/2007	Sapienza University of Rome	“Co.Co.Co.” contract for tutoring and supplementary, preparatory and recovery teaching activities (150 h) for students of Industrial Chemistry, Faculty of S.M.F.N.
08/10/2007 – 20/11/2007	Lazio Region and European Union	“Co.Co.Co.” contract for “Chimica Analitica” (38 h), course of “Tecnico Superiore per le Tecnologie Chimiche” (Det. N. D456 of 12/02/2007), “Iris T&O – Tecnologie e Organizzazione”, Latina
14/09/2007 – 08/10/2007	Lazio Region and European Union	“Co.Co.Co.” contract for “Chimica di Base” (10 h), course of “Tecnico Superiore per le Tecnologie Chimiche” (Det. N. D456 of 12/02/2007), “Iris T&O – Tecnologie e Organizzazione”, Latina
11/07/2007 – 16/07/2007	Lazio Region and European Union	Committee member in the written tests and selection interviews of candidates for “Tecnico Superiore per le Tecnologie Chimiche” (Det. N. D456 of 12/02/2007), “Iris T&O – Tecnologie e Organizzazione”, Latina
01/03/2007 – 31/05/2007	Sapienza University of Rome	“Co.Co.Co.” contract for support teaching activities (40 h) for students of the course “Industrial Chemical Processes”, Industrial Environmental Chemistry, Faculty of S.M.F.N.

VB - Commitment to “Terza Missione” initiatives

Year	Institution	Description
21/09/2023	Sapienza University of Rome	Participation in the ERN (European Researchers' Night) week for schools with communication “L’ape, sentinella dell’inquinamento ambientale” – “Attività di Terza Missione”

29/04/2022	Sapienza University of Rome	Lecture “Analisi dell’acqua potabile” for students of “Percorsi per le competenze trasversali e l’orientamento (PCTO)” – “Attività di Terza Missione”
21/12/2022	Sapienza University of Rome	Christmas Seminars 2022, Department of Chemistry. Laboratory station for educational experiments for secondary school students – “Attività di Terza Missione”

VC - Supervisor and tutor of the research activity of foreign Erasmus+ students

Year	Institution	Description
2022	Sapienza University of Rome	Student from Ghent University, Belgium. Research activity title: “Elemental determination in rice samples from Italy”. Internship period: 01/02/2022 - 30/06/2022.
2022	Sapienza University of Rome	Student from Department of Chemistry, National Polytechnic Institute of Chemical Engineering and Technology (INP-ENSIACET), Toulouse, France. Research activity title: “Green tools to protect bees and hive products against chemicals”. Traineeship period: 02/05/2022 - 23/09/2022.
2023	Sapienza University of Rome	Student from Nationale Supérieure de Chimie de Rennes (ENSC), France. Research activity title: “Optimization and validation of a multielemental analytical method for the determination of the total and leachable content in herbal teas”. Internship period: 02/04/2023 – 28/07/2023.
2024	Sapienza University of Rome	Student from University of Patras, Greece. Research activity title: “Determination of the content of essential and toxic or potentially toxic metals in environmental, biological, and/or food samples”. Internship period: 04/11/2024 - 03/02/2025.
2025	Sapienza University of Rome	Two students from Nationale Supérieure de Chimie de Rennes (ENSC), France. Internship period: 02/05/2025 – 25/07/2025.

VD - Supervisor and tutor of doctoral and degree theses

Year	Institution	Description
04/11/2021 – 31/12/2024	Sapienza University of Rome	Supervisor and tutor of the PhD research project in Chemical Sciences, cycle XXXVII PON "Research and Innovation" 2014-2020 - Actions IV.4 "PhDs and research contracts on innovation topics" and Action IV.5 "PhDs on Green topics". Research project title: “Probiotics and medicinal plants as “green” tools for the protection of bees and hive products from chemical substances”
2021/2022	Sapienza University of Rome	Supervisor and tutor of the experimental degree thesis in Technologies for the Conservation and Restoration of Cultural Heritage (L-43) of 1 student, thesis title: "Nuovi formulati green per la rimozione di sostanze apolari" (master's degree date: 16/12/2022)
2021/2022	Sapienza University of Rome	Supervisor of two master's theses in Industrial Chemistry (LM-71): 1) thesis title: “Valorizzazione delle salamoie provenienti dagli impianti di dissalazione” (master's degree date: 19/10/2022). 2) thesis title: “Recupero di materiali contenuti nei telefoni cellulari a fine vita” (master's degree date: 19/10/2022).
2020-2022	Sapienza University of Rome	Co-supervisor of two master's theses in Industrial Chemistry (LM-71): 1) thesis title: “Studio di magneti provenienti da turbine eoliche ai fini della valorizzazione dei materiali in essi contenuti” (master's degree date: 15/12/2020). 2) thesis title: “Produzione idrotermale di adsorbenti composti per la rimozione di arsenico” (master's degree date: 14/02/2022).
2020-today	Sapienza University of Rome	Supervisor and tutor of 10 master's theses in Analytical Chemistry (LM-54), including one Erasmus+ and one abroad:

		1) thesis title: "Metodo per l'analisi elementare di capelli e unghie: prestazioni analitiche e qualità del dato nell'ambito di uno studio di biomonitoraggio umano" (master's degree date: 20/01/2022);
		2) thesis title: "Metodo analitico per il controllo del contenuto elementare del latte e delle formule per lattanti" (master's degree date: 24/05/2022);
		3) thesis title: "Studio del contenuto totale e bioaccessibile degli elementi negli inchiostri per tatuaggi" (master's degree date: 16/12/2022);
		4) thesis title abroad: "Qualità dell'aria e concentrazioni elementari in capelli e urine di studenti universitari italiani e cileni" (master's degree date: 25/01/2023);
		5) thesis title: "Development of an extraction method for the determination of the extractable organofluorine sum parameter via HR-CS-GFMAS" (master's degree date: 25/01/2023).
		6) thesis title: "Metodo multi-elementare per la valutazione della qualità e della tracciabilità dei migliori vini italiani" (master's degree date: 21/12/2023);
		7) thesis title: "Qualità del dato nel monitoraggio dell'esposizione umana a elementi tossici attraverso i capelli" (master's degree date: 23/01/2024);
		8) thesis title: "Metodo analitico per la determinazione del contenuto elementare in tisane a base di canapa" (master's degree date: 17/05/2024);
		9) thesis title: "Studio del contenuto elementare e della capacità antiossidante di tisane a base di erba" (master's degree date: 25/07/2024);
		10) thesis title: "Biomonitoraggio umano come utile strumento per valutare i livelli di esposizione in ambito lavorativo" (master's degree date: 20/03/2025)
2021-2023	Sapienza University of Rome	Supervisor and tutor of four theses in Chemistry (L-27): 1) thesis title: "Gli elementi chimici come utili strumenti per studiare la provenienza geografica dell'olio extravergine di oliva" (bachelor's degree date: 25/07/2023) 2) thesis title: "Il mercurio nelle matrici biologiche umane: vie di esposizione e metodi di analisi" (bachelor's degree date: 12/01/2023) 3) thesis title: "Gli elementi tossici ed essenziali nei tè e nelle tisane: rischi e benefici per la salute" (bachelor's degree date: 19/12/2022) 4) thesis title: "L'analisi elementare di api e prodotti dell'alveare come utile strumento per valutare la qualità ambientale" (bachelor's degree date: 13/01/2022)
2018/2019	Sapienza University of Rome	Co-supervisor and tutor of two master's theses in Chemistry (LM-54): 1) thesis title: "Ottimizzazione e validazione di una metodica analitica per la determinazione degli elementi nei prodotti dell'alveare" (master's degree date: 14/05/2019). 2) thesis title: "Inquinamento atmosferico nelle zone aeroportuali, tecniche di monitoraggio, analisi degli inquinanti" (master's degree date: 24/07/2020).
2018/2020	Sapienza University of Rome	Co-supervisor and tutor of master's theses in Hygiene and Healthcare Management, Pharmacy and Medicine, Pharmacy Faculty (LM-13) thesis title: "Sicurezza alimentare: stima dell'assunzione di elementi in traccia essenziali e potenzialmente tossici mediante formule per lattanti".
2008-2020	Sapienza University of Rome	Tutor of several theses – Chemistry (V.O.), Industrial Chemistry (V.O.), Analytical Chemistry (LM-54), Chemistry (L-27), Environmental Monitoring and Recovery (LM-75)

VE – Exam Committee member

Year	Institution	Description
2024 - today	Sapienza University of Rome	Exam committee member for "Metodi Analitici per la Valutazione del Rischio Chimico" (6 CFU, SSD: CHEM-01/A), Industrial Chemistry (LM-71)
2024 - today	Sapienza University of Rome	Exam committee member for "Valutazione e Gestione del Rischio Chimico" (6 CFU, SSD: CHEM-01/A), Industrial Chemistry (LM-71)
2024	Sapienza University of Rome	Exam committee member for "Monitoraggio della Qualità dell'Aria" (6 CFU, SSD: CHEM-01/B), Environmental Monitoring and Recovery (LM-75)
2024	Sapienza University of Rome	Exam committee member for "Fondamenti di Scienze Ambientali" (6 CFU, SSD: CHEM-01/B), Technologies for the Conservation and Restoration of Cultural Heritage (L-43)
2023 - today	Sapienza University of Rome	Exam committee member for "Metodi Chimici per il Monitoraggio Ambientale" (6 CFU, SSD: CHEM-01/B), Environmental Monitoring and Recovery (LM-75)
2023	Sapienza University of Rome	Exam committee member for "Chimica Analitica III con Laboratorio" (9 CFU, SSD: CHEM-01/A), Chemistry (L-27)
2023	Sapienza University of Rome	Exam committee member for "Chimica Analitica III" (6 CFU, SSD: CHEM-01/A), Industrial Chemistry (LM-71)
2023 - today	Sapienza University of Rome	Exam committee member for "Chimica Ambientale" (6 CFU, SSD: CHEM-01/B), Environmental Sciences (L-32)
2020 - today	Sapienza University of Rome	Exam committee President for "Laboratorio Chimico di Conservazione e Trattamento dei Materiali" (12 CFU, SSD: CHEM-01/A, CHEM-01/B), Technologies for the Conservation and Restoration of Cultural Heritage (L-43)
2020	Sapienza University of Rome	Exam committee member for "Gestione del Rischio Chimico" (6 CFU, SSD: CHEM-01/A), Industrial Chemistry (LM-71)
10/07/2018 - today	Sapienza University of Rome	Expert and exam committee member for "Metodi Chimici per l'Analisi Ambientale" (9 CFU, SSD: CHEM-01/A), Environmental Monitoring and Recovery (LM-75)

VF - Member of degree committee

Year	Institution	Description
2021, 2022	Sapienza University of Rome	Chemistry (L27 and LM-54)
2021, 2022, 2023, 2024	Sapienza University of Rome	Industrial Chemistry (L-27 and LM-71)
2022, 2023	Sapienza University of Rome	Master Course in Science and Technology for the Conservation of Cultural Heritage (LM-11); Bachelor's Degree in Technologies for the Conservation and Restoration of Cultural Heritage (L-43)

Part VI – Research Centre Affiliations, Society Memberships, Awards and Honors

Year	Title
20/09/2022	Prize contribution for researchers and research grant holders to strengthen their professional status and enhance the research system in Lazio - Policy Objective 4 "A more social Europe" - Specific Objective f. European Social Fund Plus (ESF+) Programme 2021-2027 (SIGEM Code 22009D).
18/06/2021 –to present	Affiliation to the Research Centre for Applied Sciences for the Protection of the Environment and Cultural Heritage (CIABC), Sapienza University of Rome (https://web.uniroma1.it/ciabc/it/persone).

08/02/2021 –to present	Member of the Italian Chemical Society - Division of Analytical Chemistry
03/03/2020 –31/12/2024	Member of the Italian Aerosol Society (IAS)

Part VII - Funding Information

Part VIIA – Research grants as PI-principal investigator or I-investigator

Year	Role	Title	Program	Grant value (€)
2023	PI	Multi-analytical approach for assessing the exposure of bees and/or model insects to natural and anthropogenic environmental contaminants	Sapienza grant “Ateneo 2023” RM123188F73F6255	
2022/ 2024	I	“Integrazione del monitoraggio ambientale e biologico per la valutazione dell'esposizione occupazionale ad agenti chimici e sua applicazione nel comparto della produzione di ceramiche artistiche”	INAIL-BRiC 2022-ID 52	
2022	I	Fungal interaction with metals (FUN METALS): transformation and mechanisms for biorecovery”	PRIN 2022 PNRR - Prot. P2022ENEWL- CUP B53D23032130001	
2022	I	New insights for the assessment of particulate matter toxicity by in-situ exposure of model/experimental organisms	“Ateneo 2022” RG1221816BFA9479	
2022	I	Innovative High Resolution Mass Spectrometry Based on Dual Fragmentation Process: a New Frontier for Structure Elucidation of Chemical Systems	“Ateneo 2022 - Grandi Attrezature” GA122181AEFB248	
2021	PI	Analytical methodologies for the determination of the total and bioavailable content of essential and toxic elements in various types of tea, infusions and herbal teas and for the recovery and reuse of their waste as supports for enzymatic immobilization	“Ateneo 2021” RM12117A5D872C39	
2021	I	Late Pleistocene and Early Holocene Foragers Along the Danube Corridor in the Balkans	“Ateneo 2021 – Scavi Archeologici” SA12117A8B018514	
2020	PI	Recupero di Materiali da Telefoni A Fine Vita PORTENT (recuPerO mateRiali da TelEfoni a fiNe viTa)	ENEA - Avviso Pubblico “Gruppi di ricerca 2020” POR FESR LAZIO 2014 – 2020 (codice progetto POR A0375E0075)	
2019	I	Removal of As from water using innovative BIO-adsorbents produced from by-products of the agro-industrial sector (BIOAS)	LIFE 2019 - EU Commission. Cod. LIFE19 ENV/IT/000512	
2018	I/PI (in the last year)	Valutazione sperimentale dell'efficacia delle misure in atto per la mitigazione dell'esposizione a formaldeide nel comparto lavorativo sanitario e negli altri scenari occupazionali e sviluppo di sensoristica ad elevata innovatività tecnologica per gestire il rischio formaldeide in ambito lavorativo	INAIL-BRiC 2018-ID 05	
2018	I	Emerging Landscapes: New jobs, new skills, new technologies and new organizational challenges in the Industry 4.0 revolution	“Ateneo 2018” RG11816432851FA6	

2017	I	“Sicurezza chimica degli alimenti e tutela della salute dei lattanti: applicazione di una metodologia analitica innovativa per la ricerca simultanea di 41 elementi nelle formule per lattanti e stima dei rischi nello scenario italiano”	“Ateneo 2017” - RP11715C819E4A20	
2016	I	“Ceppi batterici probiotici somministrati in gravidanza e allattamento come tutela del lattante dall'esposizione a elementi tossici inorganici a diffusione ambientale: studio in vitro sulla capacità di decontaminazione da parte di un probiotico "multistain" e monitoraggio biologico sul latte materno”	“Ateneo 2016” - RP116154F1A9B97A	

Part VIIB - Analysis and research activities within the framework of agreements with public or private institutions [SR-scientific responsible or I-investigator]

Start	End	Role	Title	Public or private institutions	Grant value (€)
11/10/23	12/07/24	SR	“Indagine ambientale sui rischi da agenti chimici, cancerogeni e mutageni presso il Servizio Banconote”. Prot. 1288571/23 of 25/07/23.	Banca D’Italia (C.F. 00997670583 – Partita I.V.A. 00950501007)	
03/10/23	26/02/24	SR	“Caratterizzazione chimico-fisica dell’acqua del pozzo interno al Tempio del Divo Romolo”. Prot. 2593/2023 of 03/10/23.	Parco Archeologico del Colosseo (P. IVA 14490011005 – C.F. 14490011005)	-
05/04/23	26/07/23	SR	“Caratterizzazione chimico-fisica di malta per bioedilizia (costituita da calce ed aggregato proveniente da scarti agricoli)”. Prot. n. 0001786 of 28/07/23.	Architettura Bioecologica di Gavino Cau (C.F. CAUGVN68A16E377V, P.IVA 02152270902 –	
18/09/21	31/12/21	SR	Sampling and annual verification analysis of mineral waters (ex art. 7 DM 10 February 2015), n. 18/2021 prot. n. 0002454 del 13/10/2021	Piazza Navona SRL, San Felice (PT), C.F. 06014941006, P.IVA IT06014941006	
18/09/21	31/12/21	SR	Sampling and annual verification analysis of mineral waters (ex art. 7 DM 10 February 2015), prot. n. 2462 del 13/10/2021	Fonte Santafiora S.P.A. Rome, C.F. 01609340516, P.IVA IT01609340516	
27/09/21	31/12/21	SR	Sampling and annual verification analysis of mineral waters (ex art. 7 DM 10 February 2015), prot n. 2607 del 28/10/2021	Sorgente Sant’Elena S.P.A., Chianciano Terme (SI) C.F. 00050730522, P.IVA IT10403940157	
01/10/20	31/12/21	SR	Sampling and annual verification analysis of mineral waters (ex art. 7 DM 10 February 2015), cod. 000004_21_nuovaterra	Nuova Terra Compagnia delle Acque Minerali e Termali SRL, Montecatini-Terme (PT) (C.F. 01464460474, P.IVA IT01464460474)	
01/10/20	31/12/21	SR	Sampling and annual verification analysis of mineral waters (ex art. 7 DM 10 February 2015), cod. 000004_21_piazzanavova	Piazza Navona SRL, San Felice (PT), C.F. 06014941006, P.IVA IT06014941006	
01/10/20	31/12/21	SR	Sampling and annual verification analysis of mineral waters (ex art. 7 DM 10 February 2015), cod. 000004_21_santafiora	Fonte Santafiora S.P.A. Rome, C.F. 01609340516, P.IVA IT01609340516	

01/10/20	31/12/21	SR	Sampling and annual verification analysis of mineral waters (ex art. 7 DM 10 February 2015), cod. 000004_21_santelena	Sorgente Sant'Elena S.P.A., Chianciano Terme (SI) C.F. 00050730522, P.IVA IT10403940157	
01/10/20	31/12/21	SR	Sampling and annual verification analysis of mineral waters (ex art. 7 DM 10 February 2015), cod. 000004_21_termechianciano20	Terme di Chianciano S.P.A., Chianciano Terme (SI) C.F. 01152750525, P.IVA IT01152750525	
2018	2020	I	“Valutazione della qualità dell’aria presso gli aeroporti “Leonardo da Vinci” di Fiumicino e “G.B. Pastine” di Ciampino”, n. 12333 del 24/7/2018.	Aeroporti di Roma (C.F. 13032990155, P.IVA 06572251004)	

Part VIII – Research Activities

Keywords	Brief Description
Analytical method	
Atomic spectroscopy analytical techniques	
Complex matrices	
Multi-elemental analysis	
Sample preparation	<p>The research activity has mainly focused on developing and optimizing analytical methods for the elemental analysis of complex environmental, biological, and food matrices using various techniques, including inductively coupled plasma - optical emission spectrometry (ICP-OES), inductively coupled plasma - mass spectrometry (ICP-MS), atomic fluorescence spectroscopy (CV/HG-AFS), and atomic absorption (GF-AAS and AMA). Environmental, biological, and food sample preparation can be very time-consuming and the main source of errors. Therefore, choosing the correct sample preparation procedure is a critical and necessary factor to ensure reliable results. The focus of the research activity has, therefore, also been on developing innovative and rapid methods for sample preparation for subsequent elemental analysis. The analytical methods developed have subsequently been applied to environmental monitoring and biomonitoring campaigns. Particular attention was paid to assessing the impact of chemical contaminants on human health, food and environmental quality (outdoor and indoor air quality), and occupational exposure. In this sense, the research activity has concerned the identification and study of particular biological indicators, capable of highlighting inflammatory processes and oxidative stress, which are at the basis of possible biological damage and can constitute a particularly useful tool in planning effective prevention policies. The combined use of environmental monitoring techniques, biomonitoring and statistical data processing can help to assess exposure to chemical contaminants and the possible effects on health, even in environments with apparently limited chemical risk.</p>

Part IX – National and International Collaborations

At national and international level, she has established numerous scientific collaborations which, in line with the indications of National Scientific qualification, are demonstrated by at least three publications:

Contacts	Institution	Publications (Notes)	Start	End
Silvia Canepari		10.1038/s41598-023-35180-x (first name and corresponding)	2019	to present
Lorenzo Massimi	Department of Environmental Biology, Sapienza University of Rome	10.1016/j.microc.2022.108283 (last name)		
		10.1016/j.chemosphere.2022.135871		
		10.1016/j.ecolind.2022.109061		
		10.1016/j.apr.2022.101417		
		10.1007/s11356-021-18072-3		
		10.3389/fchem.2021.769620 (first name and corresponding)		

Pasquale Avino	Department of Agriculture, Environment and Food, University of Molise	10.3390/molecules26164878 (first name and corresponding) 10.1016/j.atmosres.2021.105771 10.1016/j.foodchem.2021.130027 (first name and corresponding) 10.3390/molecules25184263 (first name and corresponding) 10.1016/j.envpol.2020.115271 10.1016/j.atmosres.2020.105060 10.3390/ molecules27227765 10.3390/separations8080126 (first name) 10.3390/ijerph18105073 (first name) 10.4315/JFP-21-126 10.3390/atmos11010006 10.1016/j.envpol.2019.113013 10.1016/j.scitotenv.2018.11.044 10.1016/j.jenvman.2023.119834 10.3303/CET23100077 10.3303/CET2293016 10.1016/j.jenvman.2021.114058 10.1002/9781119670186.ch10 10.1016/j.jenvman.2020.111164 10.3390/toxics10050267 10.3390/cancers13133167 10.3390/ijerph17239085	2019 to present
Francesca Pagnanelli Pietro Altomari Fabrizio Di Caprio	Department of Chemistry, Sapienza University		
Giovanna Tranfo Daniela Pigini	Department of Occupational and Environmental Medicine, Epidemiology and Hygiene, INAIL, Monte Porzio Catone, Rome		
Marcelo Enrique Conti	Department of Management, Sapienza University of Rome	10.1016/j.foodcont.2023.110226 (last name) 10.1038/s41598-023-35180-x (first name and corresponding) 10.1016/j.microc.2022.108283 (last name) 10.1016/j.chemosphere.2022.136261 (first name and corresponding) 10.1016/j.ecolind.2022.109061 10.1007/s11356-021-18072-3 10.3390/molecules26164878 (first name and corresponding) 10.3390/molecules25184263 (first name and corresponding) 10.1016/j.ecolind.2018.12.051 10.1016/j.jfca.2018.09.002 (last name) 10.1016/j.jbiotec.2024.07.001 10.3390/pr9030536 (first name and corresponding)	2018 to present
Anna Maria Girelli	Department of Chemistry, Sapienza University	10.1016/j.chemosphere.2019.125368 10.1016/j.chemosphere.2018.10.086 10.1515/chem-2023-1010366 (corresponding) 10.3390/ijerph181910118	2018 to present
Matteo Vitali Carmela Protano	Department of Public Health and Infectious		2016 to present

Diseases, Sapienza University of Rome	10.3390/separations8080126 (first name) 10.3390/ijerph18105073 (first name) 10.4315/JFP-21-126 10.1016/j.scitotenv.2020.144100 10.3390/ijerph17249225 (first name and corresponding) 10.1039/C9AY01871A (first name and corresponding) 10.3390/ijerph17061911 (first name and corresponding) 10.3390/atmos11010006 10.1007/s12011-019-01988-w 10.1016/j.microc.2019.104186 (first name and corresponding) 10.1016/j.envpol.2019.113013 10.1016/j.envint.2019.05.012 (first name and corresponding) 10.1016/j.scitotenv.2018.11.044 10.1016/j.aca.2018.07.037 (first name and corresponding) 10.1016/j.scitotenv.2017.11.090 10.7416/ai.2017.2180 10.1016/j.scitotenv.2016.03.073 10.1016/j.envres.2022.114630 10.1016/j.atmosres.2020.105060 10.3390/atmos11010006 10.1016/j.envpol.2019.06.116 10.1007/s11356-013-2298-1 10.4209/aaqr.2013.03.0081 e3sconf/20130120002 10.1007/s00216-010-3818-1 10.1016/j.atmosenv.2008.09.059 10.1016/j.talanta.2008.10.029 10.1016/j.atmosenv.2008.07.052 (last name) 10.1007/S10311-005-0029-7 (first name)	2005 to present
Cinzia Perrino	C.N.R. Institute of Atmospheric Pollution Research, Monterotondo St. (Rome)	

Part X – Summary of Scientific Achievements

Product type	Number	Database	Start	End
All publications (article, review, conference paper, book chapter, editorial)	92	Scopus	2006	2025
Article	84	Scopus	2006	2025
Review	1	Scopus	2006	2025
Conference Paper	4	Scopus	2006	2025
Book Chapter	1	Scopus	2006	2025
Editorial	1	Scopus	2006	2025
Patents	1	Espacenet	2006	2025
Proceedings	3	-	2006	2025

Book	1	-	2006	2025
Scientific interview	1	-	2006	2025

Total Citations	1873	Scopus	2006	2025
Hirsch (H) index	25	Scopus	2006	2025
H index in the last 10 years	22	Scopus	2015	2025

Part XI – Results achieved in technology transfer in terms of development of patents

S. Canepari, D. Ginese, R. Ferrante, **M.L. Astolfi**, A.M. Girelli, E. Marconi, "Annular contactor", priority number 102020000004138_27.02.2020. The device of the invention is a three-phase annular geometry contactor for liquid membranes, made in a single module. The proposed device can be used either to purify a mixture or to pre concentrate a species present in a dilute solution. The annular liquid membrane contactor of the invention was used to separate Cr(III) from Cr(VI) in aqueous solution.

https://www.uniroma1.it/sites/default/files/field_file_allegati/scheda_grafica_tt_338_astolfi_en.pdf

Part XII – Complete list of publications

Below is a list of all publications (* = corresponding author). The IF is relative to the year of publication (for more recent publications, if not yet available, the IF of the previous year compared to the year of publication is used), the number of citations from the Scopus database and the quartile of the journal are also reported.

Publication	Type	IF	Quartile
1. M. Gaeta, P. Pacheco, L. Aldega, M.L. Astolfi , E. Giannessi, C. Perinelli. Grapevine rootstocks in K- and Ca-rich volcanic soils: The effect of mineral assemblage on nutrient uptake efficiency. OENO One, Vine and Wine 59(1) (2025). doi: 10.20870/oeno-one.2025.59.1.8247	Article	2.2	Q1
2. V. Chiappini, C. Conti, M.L. Astolfi , A.M Girelli. Characteristic study of Candida rugosa lipase immobilized on lignocellulosic wastes: Effect of support material. Bioprocess and Biosystems Engineering 48 (2025) 103–120. doi: 10.1007/s00449-024-03096-z	Article	3.5	Q2
3. V. Secli, E. Michetti, F. Pacello, F. Iacobelli, M. Falconi, M. L. Astolfi , D. Visaggio, P. Visca, S. Ammendola, A. Battistoni. Investigation of Zur-regulated metal transport systems reveals an unexpected role of pyochelin in zinc homeostasis. MBio (2024) e0239524. doi: 10.1128/mbio.02395-24.	Article	4.8	Q1
4. L. Massimi, M.A. Frezzini, A. Amoroso, A.D. Di Giosa, L. Martino, C. Tiraboschi, M. Messi, M.L. Astolfi , C. Perrino, S. Canepari. Spatially resolved chemical data for PM10 and oxidative potential source apportionment in urban-industrial settings. Urban Climate 57 (2024) 102113. doi: 10.2139/ssrn.4806288	Article	6.0	Q1
5. M. Mercurio, F.H. Haghghi, F. Ubaldi, S. Cerra, M.L. Astolfi , R. Matassa, C. Battocchio, M. Marsotto, C. De Angelis, S. Della Monaca, P. Fattibene, F. Valeriani, V. Romano Spica, I. Fratoddi. Ag-decorated titania nanoparticles for antibacterial applications. ACS Applied Nano Materials 7(17) (2024) 21124–21140. doi: 10.1021/acsanm.4c04409.	Article	5.3	Q1
6. L.N. Puente De La Cruz, R. Giorgione, F. Marini, M.L. Astolfi* . Rice sample preparation method for ICP-MS and CV-AFS analysis: Elemental levels and estimated intakes. Food Chemistry 461 (2024) 140831. doi:10.1016/j.foodchem.2024.140831.	Article	8.5	Q1
7. M.L. Astolfi* , M.A. Frezzini, L. Massimi, M. Rapa, S. Canepari, M.E. Conti. Sphagnum moss and peat comparative study: metal release, binding	Article	3.107	Q1

properties and antioxidant activity. PLoS ONE 19(8) (2024) e0307210. doi:10.1371/journal.pone.0307210.			
8. V. Chiappini, D. Casbarra, M.L. Astolfi , A.M. Girelli. Investigation on solvent-free esterification of oleic acid by hemp tea waste immobilized Candida Rugosa lipase. Journal of Biotechnology 392 (2024) 118–127. doi:10.1016/j.jbiotec.2024.07.001	Article	4.1	Q2
9. F. Di Caprio, P. Altomari, M.L. Astolfi , F. Pagnanelli. Optimization of two-phase synthesis of Fe-hydrochar for arsenic removal from drinking water: effect of temperature and Fe concentration. Journal of Environmental Management 351 (2024) 119834. doi:10.1016/j.jenvman.2023.119834	Article	8.0	Q1
10. M.E. Conti, M. Rapa, C. Simone, M. Calabrese, G. Bosco, S. Canepari, M.L. Astolfi . From land to glass: an integrated approach for quality and traceability assessment of top Italian wines. Food Control 158 (2024) 110226. doi:10.1016/j.foodcont.2023.110226.	Article	5.6	Q1
11. O. Giampaoli, M. Messi, T. Merlet, F. Sciubba, S. Canepari, M. Spagnoli, M.L. Astolfi* . Landfill fire impact on bee health: beneficial effect of dietary supplementation with medicinal plants and probiotics in reducing oxidative stress and metal accumulation. Environmental Science and Pollution Research (2023) 1-17. doi:10.1007/s11356-023-31561-x. <i>in press</i>	Article	5.8	Q1
12. M.L. Astolfi . Editorial: Advances in analytical strategies to study cultural heritage samples. Molecules 28 (2023) 6423. doi:10.3390/molecules28176423.	Editorial	4.6	Q1
13. P. Altomari, F. Di Caprio, I. Falcone, J. Coletta, E. Moscardini, M.L. Astolfi , A. Brasile, F. Pagnanelli. Valorisation of olive pomace for the production of bio-composite adsorbents applied in as removal from drinking waters. Chemical Engineering Transactions 100 (2023) 457-462. doi:10.3303/CET23100077.	Article	0	Q3
14. M.P. Sammartino, A. Grendene, M.L. Astolfi* , S. Marcheggiani, C. Puccinelli, M. Vitali, A. Antonucci, G. Visco. Ancient spring waters still emerging and accessible in the Roman Forum area: chemical-physical and microbiological characterization. Open Chemistry (2023). doi:10.1515/chem-2023-1010366.	Article	2.1	Q3
15. A. Marchetti, G. Salvatori, M.L. Astolfi , J. Fradinho, M.A.M. Reis, D. Bolzonella, M. Villano. Evaluation of the acidogenic fermentation potential of food industry by-products. Biochemical Engineering Journal, 2023, 109029. doi:10.1016/j.bej.2023.109029.	Article	3.7	Q2
16. F. Pietrini, L. Passatore, S. Carloni, L. Massimi, M.L. Astolfi , C. Giusto, M. Zucchini. Bismuth exposure affects morpho-physiological performances and the ionomic profile in garden cress (<i>Lepidium sativum</i> L.) plants. Frontiers in Environmental Science 11 (2023) 1221573. doi:10.3389/fenvs.2023.1221573.	Article	3.3	Q2
17. M.L. Astolfi* , L. Massimi, M. Rapa, R.R. Plà, R.C. Jasan, M.B. Tudino, S. Canepari, M.E. Conti. A multi-analytical approach to studying the chemical composition of typical carbon sink samples. Scientific Reports 17 (2023) 7971. doi:10.1038/s41598-023-35180-x.	Article	3.8	Q1
18. M.E. Conti, M. Rapa, R. Plà, R. Jasan, M.B. Tudino, S. Canepari, L. Massimi, M.L. Astolfi . Elemental and chemometric analysis of baseline gradient contamination in <i>Usnea barbata</i> lichens from Tierra del Fuego (South Patagonia). Microchemical Journal 185 (2023) 108283. doi:10.1016/j.microc.2022.108283	Article	4.9	Q1
19. 14. C. Colantonio, P. Baldassarri, P. Avino, M.L. Astolfi , G. Visco. Visual and Physical Degradation of the black and white mosaic of a Roman Domus under Palazzo Valentini in Rome: A Preliminary Study. Molecules 27 (2022) 7765. doi:10.3390/ molecules27227765.	Article	4.2	Q2
20. S. Canepari, M.L. Astolfi , G. Drago, S. Ruggieri, E.E. Taormina, F. Cibella, C. Perrino. PM2.5 elemental composition in indoor residential	Article	7.6	Q1

environments and co-exposure effects on respiratory health in an industrial area. Environmental Research 216 (2023) 114630. doi:10.1016/j.envres.2022.114630.			
21. 16. M. Gaeta, L. Aldega, M.L. Astolfi , P. Pacheco, C. Perinelli. Base cations mobility in vineyard soils of the Colli Albani volcanic district (Central Italy). Journal of Soil Sciences and Plant Nutrition 22(4) (2022) 4392-4403. doi:10.1007/s42729-022-01039-9.	Article	3.9	Q1
22. M.L. Astolfi* , M.E. Conti, M. Messi, E. Marconi. Probiotics as a promising prophylactic tool to reduce levels of toxic or potentially toxic elements in bees. Chemosphere 308(1) (2022) 136261. doi:10.1016/j.chemosphere.2022.136261.	Article	8.8	Q1
23. M. Gaeta, L. Aldega, M.L. Astolfi , B. Bonechi, P. Pacheco, F. Tiberi. Soils developed on the Si-poor, alkali-rich pyroclastic rocks of the Colli Albani volcanic district (Central Italy): the effect of leucite, clinopyroxene and phlogopite on the base cations mobility. Applied Geochemistry 145 (2022) 105430. doi:10.1016/j.apgeochem.2022.105430.	Article	3.4	Q2
24. S. Visconti, M.L. Astolfi , A. Battistoni, S. Ammendola. Impairment of the Zn/Cd detoxification systems affects the ability of <i>Salmonella</i> to colonize <i>Arabidopsis thaliana</i> . Frontiers in Microbiology 13 (2022) 975725. doi:10.3389/fmicb.2022.975725.	Article	5.2	Q1
25. P.A.M. Mourão, F. Di Caprio, I.P.P. Cansado, J.E. Castanheiro, I. Falcone, M.L. Astolfi , P. Altamari, F. Pagnanelli. Granulation and activation of an arsenic adsorbent made of iron oxide doped hydrochar. Chemical Engineering Transactions 93 (2022) 91-96. doi:10.3303/CET2293016.	Article	-	Q3
26. L. Massimi, E. Pietrantonio, M.L. Astolfi , S. Canepari. Innovative experimental approach for spatial mapping of source-specific risk contributions of potentially toxic trace elements in PM10. Chemosphere 307 (2022) 135871. doi:10.1016/j.chemosphere.2022.135871.	Article	8.8	Q1
27. M.E. Conti, M.L. Astolfi , G. Mele, M. Ristorini, G. Vitiello, L. Massimi, S. Canepari, M.G. Finoia. Performance of bees and beehive products as indicators of elemental tracers of atmospheric pollution in sites of the Rome province (Italy). Ecological Indicators 140 (2022) 109061. doi:10.1016/j.ecolind.2022.109061.	Article	6.9	Q1
28. F. Buonauro, F. Borra, D. Pigini, E. Paci, M. Spagnoli, M.L. Astolfi , O. Giampaoli, F. Sciubba, A. Miccheli, S. Canepari, C. Ancona, G. Tranfo. Biomonitoring of exposure to urban pollutants and oxidative stress during the COVID-19 lockdown in Rome residents. Toxics 10(5) (2022) 267. doi:10.3390/toxics10050267.	Article	4.6	Q1
29. L. Massimi, M.L. Astolfi , S. Canepari. Simple and efficient method to detach intact PM10 from field filters: elements recovery assessment. Atmospheric Pollution Research 13 (5) (2022) 101417. doi:10.1016/j.apr.2022.101417.	Article	4.5	Q2
30. M.E. Conti, M.L. Astolfi , M.G. Finoia, L. Massimi, S. Canepari. Biomonitoring of element contamination in bees and beehive products in the Rome province (Italy). Environmental Science and Pollution Research 29 (2022) 36057–36074. doi:10.1007/s11356-021-18072-3.	Article	5.8	Q1
31. F. Di Caprio, A. Pellini, R. Zanoni, M.L. Astolfi , P. Altamari, F. Pagnanelli. Two-phase synthesis of Fe-loaded hydrochar for As removal: the distinct effects of initial pH, reaction time and Fe/hydrochar ratio. Journal of Environmental Management 302 (2022) 114058. doi:10.1016/j.jenvman.2021.114058.	Article	8.7	Q1
32. M.L. Astolfi* , F. Marini, M.A. Frezzini, L. Massimi, A.L. Capriotti, C.M. Montone, S. Canepari. Multi-element characterization of the Italian extra-virgin olive oils by chemometrics. Frontiers in Chemistry 9 (2021) 769620. doi:10.3389/fchem.2021.769620.	Article	5.221	Q1

33. A. Antonucci, C. Protano, M.L. Astolfi , V. Mattei, F. Santilli, S. Martellucci, M. Vitali. Exposure profile to traffic related pollution in pediatric age: a biomonitoring study. International Journal of Environmental Research and Public Health 18 (2021) 10118. doi:10.3390/ijerph181910118.	Article	4.614	Q2
34. M.L. Astolfi* , M.E. Conti, M. Ristorini, M.A. Frezzini, L. Massimi, S. Canepari. An analytical method for the biomonitoring of mercury in bees and beehive products by cold vapor atomic fluorescence spectrometry. Molecules 26 (2021) 4878. doi:10.3390/molecules26164878.	Article	4.927	Q1
35. M.L. Astolfi , F. Castellani, P. Avino, A. Antonucci, S. Canepari, C. Protano, M. Vitali. Reusable water bottles: release of inorganic elements, phthalates, and bisphenol A in a “real use” simulation experiment. Separations 8 (2021) 126. doi:10.3390/separations8080126.	Article	3.344	Q3
36. F. Buonauro, M.L. Astolfi , D. Pigini, G. Tranfo, S. Canepari, A. Pietrojusti, I. D’Alessandro, R. Sisto. Oxidative stress biomarkers in urine of metal carpentry workers can be diagnostic for occupational exposure to low level of welding fumes associated metals. Cancers 13 (2021) 3167. doi:10.3390/cancers13133167.	Article	6.575	Q1
37. L. Massimi, J. Wesseling, S. van Ratingen, I. Javed, M.A. Frezzini, M.L. Astolfi , S. Canepari, R. Vermeulen. Identification and spatial mapping of tracers of PM10 emission sources using a high spatial resolution distributed network in an urban setting. Atmospheric Research 262 (2021) 105771. doi:10.1016/j.atmosres.2021.105771.	Article	5.369	Q1
38. M.L. Astolfi , D. Marotta, V. Cammalleri, E. Marconi, A. Antonucci, P. Avino, S. Canepari, M. Vitali, C. Protano. Determination of 40 elements in powered infant formulas and related risk assessment. International Journal of Environmental Research and Public Health 18(10) (2021) 5073. doi:10.3390/ijerph18105073.	Article	4.614	Q2
39. M.L. Astolfi* , E. Marconi, G. Vitiello, L. Massimi. An optimized method for sample preparation and elemental analysis of extra-virgin olive oil by inductively coupled plasma mass spectrometry, Food Chemistry 360 (2021) 130027. doi:10.1016/j.foodchem.2021.130027.	Article	9.231	Q1
40. F. Castellani, L. Manzoli, C. Acuti Martellucci, M.E. Flacco, M.L. Astolfi , L. Fabiani, R. Mastrantonio, P. Avino, C. Protano, M. Vitali. Free-range eggs from a very polluted site in central Italy: levels of polychlorinated dibenz-p-dioxins/furans and polychlorinated biphenyls and estimated human dietary exposure. Journal of Food Protection 84(8) (2021) 1455-1462. doi:10.4315/JFP-21-126.	Article	2.745	Q2
41. M.L. Astolfi* , D. Ginese, R. Ferrante, E. Marconi, A.M. Girelli, S. Canepari. On-line separation and determination of trivalent and hexavalent chromium with a new liquid membrane annular contactor coupled to inductively coupled plasma optical emission spectrometry, Processes 9 (2021) 536. doi:10.3390/pr9030536.	Article	2.847	Q2
42. M. Vitali, F. Castellani, G. Fragassi, A. Mascitelli, C. Martellucci, G. Diletti, E. Scamosci, M.L. Astolfi , L. Fabiani, R. Mastrantonio, C. Protano, V.R. Spica, L. Manzoli. Environmental status of an Italian site highly polluted by illegal dumping of industrial wastes: The situation 15 years after the judicial intervention. Science of the Total Environment 762 (2021) 144100. doi:10.1016/j.scitotenv.2020.144100.	Article	10.753	Q1
43. A. Lai, M.L. Astolfi , V. Bertelli, V. Gatto Agostinelli, M. Zeppilli, M. Majone. Chromate fate and effect in bioelectrochemical systems for remediation of chlorinated solvents. New Biotechnology 60 (2021) 27–35. doi:10.1016/j.nbt.2020.06.006.	Article	6.490	Q1
44. A. Rubino, J. Almeida, C. Magro, P.G. Schiavi1, P. Guedes, N. Couto, E. P. Mateus, P. Altamari, M.L. Astolfi , R. Zanoni, A. B. Ribeiro, F. Pagnanelli.	Book chapter	-	-

Nanostructured TiO ₂ -Based Hydrogen Evolution Reaction (HER) Electrocatalysts: A Preliminary Feasibility Study in Electrodialytic Remediation with Hydrogen Recovery. In Ribeiro AB, Vara Prasad MN, editors, Electrokinetic Remediation for Environmental Security and Sustainability. Wiley (2021) 227-249. doi:10.1002/9781119670186.ch10.			
45. M.L. Astolfi* , M. Vitali, E. Marconi, S. Martellucci, V. Mattei, S. Canepari, C. Protano. Urinary mercury levels and predictors of exposure among a group of Italian children. International Journal of Environmental Research and Public Health 17(24) (2020) 9225. doi:10.3390/ijerph17249225.	Article	3.390	Q2
46. F. Buonauro, M.L. Astolfi , S. Canepari, M. Di Basilio, R. Gibilras, M. Mecchia, M. Papacchini, E. Paci, D. Pigini, G. Tranfo. Urinary Oxidative Stress Biomarkers in Workers of a Titanium Dioxide Based Pigment Production Plant. International Journal of Environmental Research and Public Health 17(23) (2020) 9085. doi:10.3390/ijerph17239085.	Article	3.390	Q2
47. M.L. Astolfi* , G. Pietris, C. Mazzei, E. Marconi, S. Canepari. Element levels and predictors of exposure in the hair of Ethiopian children. International Journal of Environmental Research and Public Health 17(22) (2020) 8652. doi:10.3390/ijerph17228652.	Article	3.390	Q2
48. M.L. Astolfi* , M.E. Conti, E. Marconi, L. Massimi, S. Canepari. Effectiveness of different sample treatments for elemental characterization of bees and beehive products. Molecules 25(18) (2020) 4263. doi:10.3390/molecules25184263.	Article	4.411	Q2
49. L. Massimi, M. Ristorini, G. Simonetti, M.A. Frezzini, M.L. Astolfi , S. Canepari. Spatial mapping and dimensional distribution of oxidative potential of particulate matter released by spatially disaggregated sources. Environmental Pollution 266 (2020) 115271. doi:10.1016/j.envpol.2020.115271.	Article	8.071	Q1
50. L. Capobianco, F. Di Caprio, P. Altimari, M.L. Astolfi , F. Pagnanelli. Production of an iron-coated adsorbent for arsenic removal by hydrothermal carbonization of olive pomace: Effect of the feedwater pH. Journal of Environmental Management 273 (2020) 111164. doi:10.1016/j.jenvman.2020.111164.	Article	6.789	Q1
51. M.L. Astolfi* , E. Marconi, L. Lorini, F. Valentino, F. Silva, B. Sommer Ferreira, S. Canepari, M. Majone. Elemental concentration and migratability in bioplastics derived from organic waste. Chemosphere 259 (2020) 127472. doi:10.1016/j.chemosphere.2020.127472.	Article	7.086	Q1
52. L. Massimi, M. Ristorini, M.L. Astolfi , C. Perrino, S. Canepari. High resolution spatial mapping of element concentrations in PM10: A powerful tool for localization of emission sources. Atmospheric Research 244 (2020) 105060. doi:10.1016/j.atmosres.2020.105060.	Article	5.369	Q1
53. M.L. Astolfi* , E. Marconi, C. Protano, S. Canepari. Comparative elemental analysis of dairy milk and plant-based milk alternatives. Food Control 116 (2020) 107327. doi:10.1016/j.foodcont.2020.107327.	Article	5.548	Q1
54. M.L. Astolfi* , C. Protano, E. Marconi, L. Massimi, M. Brunori, D. Piamonti, G. Migliara, M. Vitali, S. Canepari. A new rapid treatment of human hair for elemental determination by inductively coupled mass spectrometry, Analytical Methods 12 (2020) 1906–1918. doi:10.1039/C9AY01871A.	Article	2.896	Q2
55. M.L. Astolfi* , C. Protano, E. Marconi, L. Massimi, D. Piamonti, M. Brunori, M. Vitali, S. Canepari. Biomonitoring of mercury in hair among a group of Eritreans (Africa). International Journal of Environmental Research and Public Health 17 (2020) 1911. doi:10.3390/ijerph17061911.	Article	3.390	Q1
56. M. Ristorini, M.L. Astolfi , M.A. Frezzini, S. Canepari, L. Massimi. Evaluation of the efficiency of Arundo donax L. leaves as biomonitor for atmospheric element concentrations in an urban and industrial area of Central Italy. Atmosphere 11 (2020) 226. doi:10.3390/atmos11030226.	Article	2.686	Q3

57. M.A. Frezzini, L. Massimi, M.L. Astolfi , S. Canepari, A. Giuliano. Food waste materials as low-cost adsorbents for the removal of volatile organic compounds from wastewater. <i>Materials</i> 12(4) (2019) 4242. doi:10.3390/ma12244242.	Article	3.623	Q2
58. L. Massimi, S. Canepari, M. Ristorini, F. Buiarelli, M.L. Astolfi , G. Simonetti, D. Pomata, P. Di Filippo, C. Riccardi. Spatial distribution of levoglucosan and alternative biomass burning tracers in atmospheric aerosols, in an urban and industrial hot-spot of central Italy. <i>Atmospheric Research</i> 239 (2020) 104904. doi:10.1016/j.atmosres.2020.104904.	Article	5.369	Q1
59. M. Manigrasso, G. Simonetti, M.L. Astolfi , C. Perrino, S. Canepari, C. Protano, A. Antonucci, P. Avino, M. Vitali. Oxidative potential associated to urban aerosol deposited into the respiratory system and relevant elemental and ionic fraction contributions. <i>Atmosphere</i> 11 (2020) 6. doi:10.3390/atmos11010006.	Article	2.686	Q3
60. A.M. Girelli, M.L. Astolfi , F.R. Scuto. Agro-industrial wastes as potential carriers for enzyme immobilization: a review. <i>Chemosphere</i> 244 (2020) 125368. doi:10.1016/j.chemosphere.2019.125368.	Review	7.086	Q1
61. C. Protano, M.L. Astolfi , E. Marconi, A. Antonucci, S. Canepari; D. Piamonti, M. Brunori, M. Vitali. Occupational exposure assessment of major and trace elements in human scalp hair among a group of Eritrean workers. <i>Biological Trace Element Research</i> 197(1) (2020) 89-100. doi:10.1007/s12011-019-01988-w.	Article	3.738	Q3
62. M.L. Astolfi* , C. Protano, E. Marconi, D. Piamonti, L. Massimi, M. Brunori, M. Vitali, S. Canepari. Simple and rapid method for the determination of mercury in human hair by cold vapour generation atomic fluorescence spectrometry. <i>Microchemical Journal</i> 150 (2019) 104186. doi:10.1016/j.microc.2019.104186.	Article	3.594	Q1
63. S. Canepari, M.L. Astolfi , M. Catrambone, D. Frasca, M. Marcoccia, F. Marcovecchio, L. Massimi, E. Rantica, C. Perrino. A combined chemical/size fractionation approach to study winter/summer variations, ageing and source strength of atmospheric particles. <i>Environmental Pollution</i> 253 (2019) 19–28. doi:10.1016/j.envpol.2019.06.116.	Article	6.792	Q1
64. M. Vitali, A. Antonucci, M. Owczarek, M. Guidotti, M.L. Astolfi , M. Manigrasso, P. Avino, B. Bhattacharya, C. Protano. Air quality assessment in different environmental scenarios by the determination of typical heavy metals and Persistent Organic Pollutants in native lichen <i>Xanthoria parietina</i> . <i>Environmental Pollution</i> 254 (2019) 113013. doi:10.1016/j.envpol.2019.113013.	Article	6.792	Q1
65. M.L. Astolfi* , C. Protano, E. Schiavi, E. Marconi, D. Capobianco, L. Massimi, M. Ristorini, M.E. Baldassarre, N. Laforgia, M. Vitali, S. Canepari, P. Mastromarino. A prophylactic multi-strain probiotic treatment to reduce the absorption of toxic elements: in-vitro study and biomonitoring of breast milk and infant stools. <i>Environment International</i> 130 (2019) 104818. doi:10.1016/j.envint.2019.05.012.	Article	7.577	Q1
66. L. Massimi, M.E. Conti, G. Mele, M. Ristorini, M.L. Astolfi , S. Canepari. Lichen transplants as indicators of atmospheric element concentrations: a high spatial resolution comparison with PM10 samples in a polluted area (Central Italy). <i>Ecological Indicators</i> 101 (2019) 759–769. doi:10.1016/j.ecolind.2018.12.051.	Article	4.229	Q1
67. M. Manigrasso, C. Protano, M.L. Astolfi , L. Massimi, P. Avino, M. Vitali, S. Canepari. Evidences of copper nanoparticle exposure in indoor environments: long-term assessment, high-resolution field emission scanning electron microscopy evaluation, in silico respiratory dosimetry study and possible health implications. <i>Science of the Total Environment</i> 653 (2019) 1192–1203. doi:10.1016/j.scitotenv.2018.11.044.	Article	6.551	Q1

68. E. Viola, M.P. Donzello, S. Testani, G. Luccisano, M.L. Astolfi , C. Rizzoli, L. Cong, L. Mannina, C. Ercolani, K.M. Kadish. Tetra-2,3-pyrazinoporphyrazines with Externally Appended Pyridine Rings. 19. Pentanuclear Octa(2-pyridyl)tetrapyrazinoporphyrazines with Externally Pending Carboranthiolate Groups. Physicochemical Properties and Potentialities as Anticancer Drugs. <i>Inorganic Chemistry</i> 58(2) (2019) 1120–1133. doi:10.1021/acs.inorgchem.8b02269.	Article	4.825	Q1
69. A. Apriceno, M.L. Astolfi , A.M. Girelli, F.R. Scuto. A new Laccase-Mediator System facing the biodegradation 1 challenge: insight into the NSAIDs removal. <i>Chemosphere</i> 215 (2019) 535–542. doi:10.1016/j.chemosphere.2018.10.086.	Article	5.778	Q1
70. M.E. Conti, S. Canepari, M.G. Finoia, G. Mele, M.L. Astolfi . Characterization of Italian multifloral honeys on the basis of their mineral content and some typical quality parameters. <i>Journal of Food Composition and Analysis</i> 74 (2018) 102–113. doi:10.1016/j.jfca.2018.09.002.	Article	2.994	Q1
71. M.L. Astolfi* , E. Marconi, C. Protano, M. Vitali, E. Schiavi, P. Mastromarino, S. Canepari. Optimization and validation of a fast digestion method for the determination of major and trace elements in breast milk by ICP-MS. <i>Analytica Chimica Acta</i> 1040 (2018) 49–62. doi:10.1016/j.aca.2018.07.037.	Article	5.256	Q1
72. L. Massimi, A. Giuliano, M.L. Astolfi , R. Congedo, A. Masotti, S. Canepari. Efficiency evaluation of food waste materials for the removal of metals and metalloids from complex multi-element solutions, <i>Materials</i> , 11(3) (2018) 334. doi:10.3390/ma11030334.	Article	2.972	Q2
73. C. Protano, M. Vitali, S. Canepari, M.L. Astolfi , S. D'Onorio De Meo. Urinary reference ranges and exposure profile for lithium among an Italian paediatric population. <i>Science of the Total Environment</i> 619–620 (2018) 58–64. doi:10.1016/j.scitotenv.2017.11.090.	Article	5.589	Q1
74. S. Canepari, P. Castellano, M.L. Astolfi , S. Materazzi, R. Ferrante, D. Fiorini, R. Curini. Release of particles, organic compounds and metals from crumb rubber used in synthetic turf under chemical and physical stress. <i>Environmental Science and Pollution Research</i> 25 (2018) 1448–1459. doi:10.1007/s11356-017-0377-4.	Article	2.914	Q1
75. M.L. Astolfi* , P. Di Filippo, A. Gentili, S. Canepari. Semiautomatic sequential extraction of polycyclic aromatic hydrocarbons and elemental bio-accessible fraction by accelerated solvent extraction on a single particulate matter sample. <i>Talanta</i> 174 (2017) 838–844. doi:10.1016/j.talanta.2017.06.072.	Article	4.244	Q1
76. C. Protano, M.L. Astolfi , S. Canepari, R. Andreoli, A. Mutti, F. Valeriani, V. Romano Spica, A. Antonucci, V. Mattei, S. Martellucci, M. Vitali. Exposure to individual and multiple carcinogenic metals during paediatric age: an experience from an Italian urban scenario. <i>Annali di Igiene, Medicina Preventiva e di Comunità</i> 29(6) (2017) 494–503. doi:10.7416/ai.2017.2180.	Article	-	Q3
77. C. Di Dato, D. Gianfrilli, E. Greco, M.L. Astolfi , S. Canepari, A. Lenzi, A.M. Isidori, E. Giannetta. Profiling of selenium absorption and accumulation in healthy subjects after prolonged L-selenomethionine supplementation. <i>Journal of Endocrinological Investigation (JENI)</i> , 40 (11) (2017) 1183–1190. doi:10.1007/s40618-017-0663-5.	Article	3.166	Q2
78. C. Protano, M.L. Astolfi , S. Canepari, M. Vitali. Urinary levels of trace elements among primary school-aged children from Italy: The contribution of smoking habits of family members. <i>Science of the Total Environment</i> 557–558 (2016) 378–385. doi:10.1016/j.scitotenv.2016.03.073.	Article	4.900	Q1
79. S. Canepari, M.L. Astolfi , C. Farao, M. Maretto, D. Frasca, M. Marcoccia, C. Perrino. Seasonal variations in the chemical composition of particulate matter: a case study in the Po Valley. Part II: concentration and	Article	2.828	Q1

solubility of micro- and trace-elements. Environmental Science and Pollution Research 21 (2014) 4010-4022. doi:10.1007/s11356-013-2298-1.			
80. M.P. Donzello, G. De Mori, D. Futur, Z. Fu, C. Rizzoli, L. Mannina, E. Bodo, M.L. Astolfi , K. Kadish, C. Ercolani. Experimental and DFT/time-dependent DFT studies on neutral and one-electron-reduced quinoxaline and pyrazine precursors and their mononuclear (PdII, PtII) derivatives. European Journal of Inorganic Chemistry 22 (2014) 3572-3581. doi:10.1002/ejic.201402282.	Article	2.213	Q2
81. A. Campopiano, A. Cannizzaro, F. Angelosanto, M.L. Astolfi , D. Ramires, A. Olori, S. Canepari, S. Iavicoli. Dissolution of glass wool, rock wool and alkaline earth silicate wool: morphological and chemical changes in fibers. Regulatory Toxicology and Pharmacology 70 (1) (2014) 393-406 doi:10.1016/j.yrtph.2014.05.023.	Article	2.031	Q2
82. S. Canepari, F. Padella, M.L. Astolfi , E. Marconi, C. Perrino. Elemental Concentration in Atmospheric Particulate Matter: Estimation of Nanoparticle Contribution, Aerosol and Air Quality Research 13(6) (2013) 1619–1629. doi:10.4209/aaqr.2013.03.0081.	Article	2.094	Q2
83. S. Canepari, M.L. Astolfi , F. Marcovecchio, M. Maretto, C. Perrino. Seasonal variations in the concentration and solubility of elements in atmospheric particulate matter: a case study in Northern Italy. In proceeding of: International Conference on Heavy Metals in the Environment (ICHMET 2012) - E3S Web of Conferences, EDP Sciences, 1 (2013) 20002-p.1-20002-p.3. doi:10.1051/e3sconf/20130120002. Indexed in Scopus.	Conference paper	-	-
84. S. Canepari, E. Marconi, M.L. Astolfi , C. Perrino, C. Farao. Evaluation of the nanoparticles contribution to elemental concentration in airborne particulate matter. In proceeding of: International Conference on Heavy Metals in the Environment (ICHMET 2012) - E3S Web of Conferences, EDP Sciences, 1 (2013) 07004-p.1-07004-p.3, doi:10.1051/e3sconf/20130107004.	Conference paper	-	-
85. E. Marconi, S. Canepari, M.L. Astolfi , C. Perrino. Determination of Sb(III), Sb(V) and identification of Sb-containing nanoparticles in airborne particulate matter. Procedia Environmental Sciences 4 (2011) 209-217. doi:10.1016/j.proenv.2011.03.025.	Conference paper	-	-
86. S. Canepari, M.L. Astolfi , S. Moretti, R. Curini, 2010. Comparison of extracting solutions for elemental fractionation in airborne particulate matter. Talanta 82 (2010) 834-844. doi:10.1016/j.talanta.2010.05.068.	Article	3.722	Q1
87. S. Canepari, E. Marconi, M.L. Astolfi , C. Perrino. Relevance of Sb(III), Sb(V) and Sb-containing nano-particles in urban atmospheric particulate matter. Analytical and Bioanalytical Chemistry 397(6) (2010) 2533-2542. doi:10.1007/s00216-010-3818-1.	Article	3.841	Q2
88. S. Canepari, A. Pietrodangelo, C. Perrino, M.L. Astolfi , M.L. Marzo. Enhancement of source traceability of atmospheric PM by elemental chemical fractionation. Atmospheric Environment 43 (2009) 4754-4765. doi:10.1016/j.atmosenv.2008.09.059.	Article	3.139	Q1
89. S. Canepari, C. Perrino, M.L. Astolfi , M. Catrambone, D. Perret. Determination of soluble ions and elements in ambient air suspended particulate matter: inter-technique comparison of XRF, IC and ICP for sample-by-sample quality control. Talanta 77 (2009) 1821-1829. doi: 10.1016/j.talanta.2008.10.029.	Article	3.290	Q1
90. S. Canepari, C. Perrino, F. Olivieri, M.L. Astolfi . Characterisation of the traffic sources of PM through size-segregated sampling, sequential leaching and ICP analysis, Atmospheric Environment 42 (2008) 8161-8175. doi:10.1016/j.atmosenv.2008.07.052.	Article	2.890	Q1
91. M.L. Astolfi , S. Canepari, E. Cardarelli, S. Ghighi, M.L. Marzo. Chemical fractionation of elements in airborne particulate matter: primary results	Conference paper	-	-

on PM10 and PM2.5 samples in the Lazio Region (central Italy). Annali di Chimica, 96 (2006) 183-194. doi:10.1002/adic.200690018.			
92. M.L. Astolfi , S. Canepari, M. Catrambone, C. Perrino, A. Pietrodangelo. Improved characterisation of inorganic components in airborne particulate matter. Environmental Chemistry Letters 3 (2006) 186-191. doi:10.1007/S10311-005-0029-7.	Article	0.814	Q1

Part XIII – Proceedings peer-reviewed

N.	Proceeding
1	G. Buccheri, P. Andráš, M.L. Astolfi , S. Canepari, M. Ciucci, A. Marino, 2014. Heavy metal contamination in water at Libiola abandoned copper mine, Italy. Romanian Journal of Mineral Deposit, 87, 65-70. The Ninth International Symposium on economic geology, "Mineral Resources Odyssey" (Bucharest, Romania 30–31/05/2014). https://www.researchgate.net/profile/Lorint-Csaba/publication/281749164_Considerations_About_Economic_Outlook_of_Jiu_Valley_Hard_Coal_Deposit/links/55f747e308ae07629dc3ec6e/Considerations-About-Economic-Outlook-of-Jiu-Valley-Hard-Coal-Ddeposit.pdf
2	S. Canepari, E. Cardarelli, A. Pietrodangelo, M.L. Astolfi , M.L. Marzo, F. Olivieri. Element solubility and size distribution of airborne particulate matter in the Lazio region (Italy), proceeding of 6th International Conference on Urban Air Quality –UAQ 2007, section 2, 11-14 (Limassol, Cipro 27-29/03/2007), ISBN: 978-1-905313-46-4.
3	C. Perrino, S. Canepari, M. Catrambone, M.L. Astolfi , T. Sargolini, 2005. Inorganic constituents of urban air pollution in the Lazio Region (central Italy), proceeding of 5th International Conference on Urban Air Quality – UAQ 2005, Chemical Composition & Exposure, section 7, 29-32 (Valencia, Spain 29-31/03/2005), ISBN: 978-1-898543-92-5.

Part XIV – Book

Advances in Analytical Strategies to Study Cultural Heritage Samples. Edited by M.L. Astolfi, M.P. Sammartino, E. Dell'Aglio. October 2023. ISBN978-3-0365-8993-0 (Hardback); ISBN978-3-0365-8992-3 (PDF). Basel, Switzerland. <https://doi.org/10.3390/books978-3-0365-8992-3>

Part XV – Scientific interview in international journal

Scientific interview titled “New Testing Method Simplifies Elemental Analysis of EVOO Samples” by Paolo DeAndreis in Olive Oil Times magazine. <https://www.oliveoiltimes.com/world/testing-method-simplifies-elemental-analysis/93109>.

Part XVI – Other contributions to National and International conferences

Date	Conference	Communication title	Type
18-19/02/2025	CNR-IRET 2025: risultati e prospettive per la gestione integrata degli ecosistemi del futuro. Sala Convegni, Sede Centrale CNR.	V.G. Muzzini, V. Iori, V. Spinelli, F. Pinzari, E. Donati, M.L. Astolfi , A.M. Persiani, M. Mazzonna, A. Ceci. Qualitative X-ray fluorescence spectroscopy characterization of ground electronic waste.	Poster
5-7/02/2025	CYBO, Conference of Young Botanists, Genova.	V. Spinelli, F. Pinzari, V.G. Muzzini, E. Donati, V. Iori, M.L. Astolfi , A.M. Persiani, M. Mazzonna, A. Ceci. The talent of fungi: a study of fungal	Poster

23-25/09/2024	AMYC-BIOMED 2024, Rome.	interactions with gallium, germanium, indium and yttrium for bioremediation applications. M.L. Astolfi , R. Giorgione, V. Chiappini, A.M. Girelli, E. Enri. Determination of essential and toxic elements in herbal teas.	Poster
23-25/09/2024	AMYC-BIOMED 2024, Rome.	M. Messi , D. Pigini, T. Merlet, M.L. Astolfi . A multi-analytical approach to study oxidative stress in bees.	Oral
23-25/09/2024	AMYC-BIOMED 2024, Rome.	R. Giorgione , M.A. Leiva Guzman, D. Pigini, L. Massimi, M.L. Astolfi . Effect of air quality on oxidative stress and elemental levels in hair and urine of Italian and Chilean students.	Oral
18-20/09/2024.	ECCO XLII Meeting "Microbe & Microbiome Management for a Better Planet", Bari.	V. Spinelli , F. Pinzari, V. Giorgio Muzzini, E. Donati, V. Iori, M.L. Astolfi , A.M. Persiani, M. Mazzonna, A. Ceci. From culture collections to biorecovery of strategic elements: exploring fungal interactions with Germanium and Indium.	Poster
15-19/09/2024	[GSAC2024] 2nd Green and Sustainable Analytical Chemistry Conference, Chania-Crete, Greece.	V. Chiappini , D. Casbarra, M.L. Astolfi , A.M. Girelli Sustainable Biocatalysis: Exploiting Hemp Waste for Lipase Immobilization and Oleic Acid Esterification.	Poster
24-28/06/2024	SYNC2024, Symposium for Young Chemists: Innovation and Sustainability, Rome.	S. Monaco , G. Simonetti, F. Di Caprio, F. Pagnanelli, M.L. Astolfi , A. Brasiello, P. Altimari. Arsenic and sulfadiazine adsorption by Fe-hydrochar produced from olive pomace.	Oral
24-28/06/2024	SYNC2024, Symposium for Young Chemists: Innovation and Sustainability, Rome.	V. Chiappini , C. Conti, D. Casbarra, M.L. Astolfi , A.M. Girelli. Impact of Support Material on <i>Candida rugosa</i> Lipase Immobilization Performance.	Oral
24-28/06/2024	SYNC2024, Symposium for Young Chemists: Innovation and Sustainability, Rome.	R. Giorgione , M.A. Leiva Guzman, D. Pigini, L. Massimi, M.L. Astolfi . Effect of air quality on oxidative stress and elemental levels in hair and urine of Italian and Chilean students.	Oral
24-28/06/2024	SYNC2024, Symposium for Young Chemists: Innovation and Sustainability, Rome.	M. Messi , O. Giampaoli, T. Merlet, F. Sciubba, S. Canepari, M. Spagnoli, M.L. Astolfi . Evaluation of element accumulation and oxidative stress in bees due to a landfill waste fire event.	Oral
24-28/06/2024	SYNC2024, Symposium for Young Chemists: Innovation and Sustainability, Rome.	M.L. Astolfi , E. Enri, V. Chiappini, R. Giorgione, A.M. Girelli. Elemental content in hemp-based herbal teas by ICP-MS.	Poster
16-20/06/2024	11th International Conference on Environmental Management, Engineering, Planning and Economics (CEMEPE 2024) & SECOTOX Conference, Lefkada Island, Greece	G. D'Onofrio , F. Pietrini, L. Passatore, D. Marzi, L. Massimi, M.L. Astolfi , M. Zucchini. Experimental Approach for Evaluating the Ability of Hemp (<i>Cannabis sativa</i> L.) to Tolerate and Phytoextract Lithium from Environmental Matrices.	Oral
16-20/06/2024	11th International Conference on Environmental Management, Engineering, Planning and Economics	V. Chiappini , C. Conti, M.L. Astolfi , A.M. Girelli. Harnessing Waste Reuse: Lipase immobilization on lignocellulosic	Poster

16-20/06/2024	(CEMEPE 2024) & SECOTOX Conference, Lefkada Island, Greece 11th International Conference on Environmental Management, Engineering, Planning and Economics (CEMEPE 2024) & SECOTOX Conference, Lefkada Island, Greece	wastes for sustainable biocatalysis and circular economy enhancement. R. Giorgione , M.A. Leiva Guzman, L. Massimi, S. Canepari, M.L. Astolfi . Air quality and elemental concentrations in hair and urine of Italian and Chilean university students.	Oral
28-31/05/2024	PM2024 XI Convegno sul Particolato Atmosferico, Torino	M. De Rosa , F. Marini, M. L. Astolfi , A. M. Caccuri, S. Canepari, L. Massimi, O. Giampaoli, F. Sciubba, G. Tranfo, M. Spagnoli, per il gruppo BRIC ID52 (2022-2024). Indicatori di effetto da esposizioni a inquinanti aerodispersi in ambito lavorativo. M.A. Frezzini , S. Canepari, A. Amoroso, A. D. Di Giosa, L. Martino, C. Tiraboschi, M. Messi, M.L. Astolfi , C. Perrino, L. Massimi. Valutazione del contributo di sorgenti emissive al PM10 e al suo potenziale ossidativo nella Valle del Sacco (Lazio) mediante dati spaziali di caratterizzazione chimica delle polveri.	Poster
28-31/05/2024	PM2024 XI Convegno sul Particolato Atmosferico, Torino	M.A. Frezzini , S. Canepari, A. Amoroso, A. D. Di Giosa, L. Martino, C. Tiraboschi, M. Messi, M.L. Astolfi , C. Perrino, L. Massimi. Valutazione del contributo di sorgenti emissive al PM10 e al suo potenziale ossidativo nella Valle del Sacco (Lazio) mediante dati spaziali di caratterizzazione chimica delle polveri.	Oral
28-31/05/2024	PM2024 XI Convegno sul Particolato Atmosferico, Torino	R. Giorgione , M. A. Leiva Guzman, L. Massimi, S. Canepari, M. L. Astolfi . Qualità dell'aria e concentrazioni elementari in capelli e urine di studenti universitari italiani e cileni.	Oral
28-31/05/2024	PM2024 XI Convegno sul Particolato Atmosferico, Torino	M. Messi , M. A. Frezzini, O. Giampaoli, C. Tiraboschi, T. Merlet, L. Massimi, F. Sciubba, S. Canepari, M. Spagnoli, M.L. Astolfi . Potenzialità della focused PCA nell'elaborazione dei dati in studi di biomonitoraggio e monitoraggio della qualità dell'aria.	Poster
20-21/05/2024	Forum Nazionale della Biodiversità 2024. Palermo	E. Di Martino , A. Ceci, L. Massimi, M.L. Astolfi , A.M. Persiani, S. Canepari. Vehicular traffic as a source of pollution: chemical characterisation and analysis of the variation in Sb speciation.	Poster
16-17/05/2024	18th International Scientific Conference "The Vital Nature Sign", Kaunas, Lithuania	F. Pietrini , G. D'Onofrio, L. Passatore, D. Marzi, L. Massimi, M. L. Astolfi , V. Iannilli, M. Zacchini. Preliminary indications on the suitability of Cannabis sativa L. plants to tolerate and phytoaccumulate lithium: Implications for Phytotechnologies.	Oral
5-9/05/2024	SETAC Europe 34th Annual Meeting, Seville, Spain	Y. Soriano , M. Messi, A. Rico, L. Blanch, M.L. Astolfi , Y. Picó. The impact of rice cultivation systems in a Mediterranean wetland: Evaluation of the occurrence, behavior and fate of pesticides and their transformation products.	Poster
15-16/04/2024	Giornate di Bioanalitica 2024 - One Health: nuove frontiere per la chimica bioanalitica, Bologna	M. Messi , O. Giampaoli, T. Merlet, F. Sciubba, S. Canepari, M. Spagnoli, M.L. Astolfi . Landfill waste fire: oxidative stress and elements accumulation in bees,	Oral
28-30/06/2023	Science for the Planet, Università del Molise, Campobasso	G. Visco , M.L. Astolfi , P. Avino, M.P. Sammartino. Change of the sunlight	Poster

14-16/06/2023	39° Congresso Nazionale di Igiene Industriale. Arenzano (GE)	spectrum provoked by plastic can alters the environmental compartments? M. De Rosa, F. Marini, M.L. Astolfi , A.M. Caccuri, S. Canepari, O. Giampaoli, M. Gherardi, G. Tranfo, M. Spagnoli. Individuazione di indicatori di effetto da esposizioni miste a sostanze pericolose in differenti attività lavorative: un progetto di dottorato di ricerca in Scienze Chimiche.	Poster
20-23/06/2022	First Symposium for YouNg Chemists: Innovation and Sustainability (SYNC2022), presso il Dipartimento di Chimica, Sapienza Università di Roma	E. Dell'Aglio, M.L. Astolfi , M.P. Sammartino, M. Castracane, G. Visco, L. Campanella. Chemical-physical diagnostics propaedeutic to the conservative restoration of the Cippo Funerario of Quinto Cornelio Procliano.	Poster
20-23/06/2022	First Symposium for YouNg Chemists: Innovation and Sustainability (SYNC2022), presso il Dipartimento di Chimica, Sapienza Università di Roma	M. Messi , M. Papi, E. Marconi, T. Merlet, M.L. Astolfi . A green prophylactic treatment to reduce the absorption of toxic elements in bees.	Poster
20-23/06/2022	First Symposium for YouNg Chemists: Innovation and Sustainability (SYNC2022), presso il Dipartimento di Chimica, Sapienza Università di Roma	L.N. Puente De La Cruz, E. Marconi, M.L. Astolfi . A greener digestion method for the analysis of some elements in rice using ICP-MS.	Poster
20-23/06/2022	First Symposium for YouNg Chemists: Innovation and Sustainability (SYNC2022), presso il Dipartimento di Chimica, Sapienza Università di Roma	D. Albano, I. Francolini, A. Piozzi, M.L. Astolfi , L. Pietrelli. Characterization of shredded fractions from end-of-life photovoltaic panels to optimize glass and metal recovery.	Poster
18-20/05/2022	X Convegno Nazionale sul Particolato Atmosferico (PM2022), Best Western Plus Tower Hotel, Bologna	M.L. Astolfi , S. Canepari, E. Marconi, M. Brunori, D. Piamonti, A. Antonucci, M. Vitali, C. Protano. Qualità dell'aria e concentrazione elementare in capelli e urine.	Poster
05-06/11/2021	Online International Conference on Atmospheric and Earth Sciences Herald Meetings LLC, Washington D.C, USA	L. Massimi, M. Ristorini, G. Simonetti, M.A. Frezzini, M.L. Astolfi , S. Canepari. Spatial mapping of element concentrations in PM10: A powerful tool to identify spatial relationships between emission sources and oxidative potential of PM.	Oral
3-6/11/2021	54° Congresso Nazionale Società Italiana di Igiene, Medicina Preventiva e Sanità Pubblica (SItI), Lecce	C. Protano, V. Cammalleri, Rn Pocino, D. Marotta, A. Antonucci, F. Castellani, M. Petyx, S. Iavicoli, M.L. Astolfi , M. Vitali. "Scenari di esposizione occupazionale a formaldeide: revisione sistematica della letteratura".	Poster
14-23/09/2021	XXVII Congresso Nazionale della Società Chimica Italiana (SCI2021)	M.L. Astolfi , F. Sebastiani, F. Mancini, C. Mazzei, S. Canepari, G. Pietris, 2021. "Advancements in sample preparation for performing elemental analysis of human hair by inductively coupled plasma mass spectrometry"	Poster
22-24/06/2021	37° Congresso Nazionale di Igiene Industriale e Ambientale	F. Buonauro, M.L. Astolfi , D. Pigini, E. Paci, M. Di Basilio, M. Papacchini, R. Gibilras, S. Canepari, G. Tranfo, 2021. "Concentrazioni urinari di elementi metallici in lavoratori addetti alla produzione di pigmenti a base di biossido di titanio"	Oral

28-30/10/2019	Primo Workshop del progetto ShareScience, Sapienza Università di Roma	F. Valentino; L. Lorini; M. Villano; M. Petrangeli Papini; N. Amanat; M.L. Astolfi ; S. Canepari; G. Capuani; L. Chronopoulou; C. Palocci; A. Laganà; P. Foglia; C. Cavaliere; A.L. Capriotti; S. Ferrari; A. Martinelli; A. Miccheli; C. Riccardi; M. Majone, 2019. Dal rifiuto urbano alla plastica biodegradabile: il progetto europeo RES URBIS.	Oral
12–14/08/2019	International Conference on Neuroscience & Neurosurgery, Roma	M. Manigrasso , C. Protano, M.L. Astolfi , L. Massimi, P. Avino, M. Vitali, S. Canepari, 2019. Copper nanoparticle exposure in indoor environments: long-term assessment and possible health implications	Poster
20–24/05/2019	AquaConSoil 2019, Antwerp, Belgium	M. Rossi , N. Amanat, G. Arduini, M.L. Astolfi , I. Pettiti, L. Silvani, M. Petrangeli Papini, 2019. Can Biochar be used as a cost-effective sorbent for groundwater remediation?	Oral
17–20/10/2018	51° Congresso Nazionale SItI, I primi 40 anni del servizio sanitario nazionale: il contributo dell'igiene alla salute e all'equità, Riva del Garda Centro Congressi, TN	M.L. Astolfi , E. Marconi, S. Canepari, M. Vitali, C. Protano, 2018. Valutazione dei livelli di elementi essenziali e tossici in formule per lattanti e di proseguimento: sviluppo e applicazione di una metodica multielemento come strumento di tutela per la salute infantile	Oral
17–20/10/2018	51° Congresso Nazionale SItI, I primi 40 anni del servizio sanitario nazionale: il contributo dell'igiene alla salute e all'equità, Riva del Garda Centro Congressi, TN	C. Protano , V. Mattei, S. Martellucci, A. Antonucci, E. Marconi, M.L. Astolfi , S. Canepari, F. Valeriani, V. Romano Spica, M. Vitali, 2018. Divieto di fumo negli ambienti domestici quando ci sono i bambini? Una fotografia della popolazione nella provincia di Rieti	Oral
16–20/09/2018	XXVII Congresso della Divisione di Chimica Analitica della Società Chimica Italiana, Laboratorio delle Arti dell'Università di Bologna	M.L. Astolfi , E. Marconi, C. Protano, M. Vitali, S. Canepari, 2018. Fast method for the determination of major and trace elements in breast milk: optimization and validation,	Poster
16–20/09/2018	XXVII Congresso della Divisione di Chimica Analitica della Società Chimica Italiana, Laboratorio delle Arti dell'Università di Bologna	M.L. Astolfi , C. Protano, E. Marconi, 2018. Analysis of milk and nondairy beverages: method validation for determination of mercury by hydride generation atomic fluorescence spectroscopy and of mayor and trace element by inductively coupled plasma mass spectrometry	Poster
25–28/06/2018	7th European Bioremediation Conference & 11th ISEB Conference, Chania, Greece	M.M. Rossi , N. Amanat, A. Hady, E. Marconi, M.L. Astolfi , L. Silvani, M. Petrangeli Papini, 2018. Adsorption of chlorinated solvents and heavy metals onto low-cost materials (biochars) in groundwater remediation	Oral
25–28/06/2018	7th European Bioremediation Conference & 11th ISEB Conference, Chania, Greece	A. Lai , M.L. Astolfi , S. Canepari, M. Zeppilli, M. Majone, 2018. Chromium (VI) reduction under electro-assisted reductive dechlorination conditions by dechlorinating consortium, 7th European Bioremediation Conference & 11th ISEB	Oral

22-25/11/2017	50° Congresso Nazionale della Società Italiana di Igiene, Medicina Preventiva e Sanità Pubblica (SItI), Torino, Centro Congressi Lingotto	Conference (Chania, Greece, 25–28/06/2018) M.L. Astolfi , P. Mastromarino, E. Marconi, S. Canepari, E. Schiavi, M. Vitali, C. Protano, 2017. “Biomonitoraggio di 18 elementi potenzialmente tossici in campioni di latte materno a diversi stadi di lattazione”	Poster
17-20/05/2016	VII Convegno Nazionale sul Particolato Atmosferico - PM2016, Roma	S. Canepari, M.L. Astolfi , D. Frasca, M. Marcoccia, E. Rantica, C. Perrino, 2016. Variazioni stagionali della distribuzione dimensionale di elementi e ioni in Pianura Padana	Oral
6-11/09/2015	Conference European Aerosol Conference, EAC 2015, Milano	D. Frasca , M. Marcoccia, G. Simonetti, L. Tofful, M.L. Astolfi , S. Canepari, 2015. Influence of wood-fired domestic heating on indoor PM concentration and composition, Poster Session: Indoor and Working Place Aerosol	Poster
04-05/06/2015	ISS, Roma	M.L. Astolfi , D. Frasca, M. Marcoccia, L. Cofone, S. Canepari, 2015. Effetto del carbonato sulla misura dell'arsenico mediante tecniche di spettroscopia atomica”, ISTISAN Congressi 15/C3, Convegno Nazionale. Arsenico nelle catene alimentari.	Poster
25-27/06/2014	31° Congresso Nazionale AIDII, Napoli	A. Bacaloni, M.L. Astolfi , S. Insogna, 2014. Alluminio nel caffè: significativo contributo all'esposizione ambientale o falso problema ingigantito dai Media?	Poster
17-18/06/2014	Sesto Convegno Giovani Chimici, Dipartimento di Chimica, Sapienza Università di Roma, Roma	M.L. Astolfi , S. Canepari, C. Farao , D. Frasca, M. Marcoccia, G. Simonetti, 2014. Analisi di ioni ed elementi nel particolato atmosferico ad elevata risoluzione temporale,	Poster
20-23/05/2014	Sesto Convegno nazionale sul particolato atmosferico - PM2014, Genova	S. Canepari , C. Farao, G. Simonetti, M.L. Astolfi , C. Perrino, M. Marcoccia, D. Frasca, 2014. Analisi ad elevata risoluzione temporale delle concentrazioni elementari nel PM mediante campionamento PILS	Poster
20-23/05/2014	Sesto Convegno nazionale sul particolato atmosferico - PM2014, Genova	D. Frasca , M.L. Astolfi , C. Farao, M. Maretto, C. Perrino, M. Marcoccia, S. Canepari, 2014. Variazioni stagionali nella concentrazione e nella solubilità di microelementi nel particolato atmosferico	Poster
16-20/09/2012	The 9th IOHA International Scientific Conference “Growing the Seeds of Occupational Hygiene”, Kuala Lumpur	A. Cannizzaro , F. Angelosanto, A. Campopiano, A. Olori, D. Ramires, M.L. Astolfi , S. Canepari, 2012. Dissolution of synthetic vitreus fibers in a simulated physiological conditions	Poster
12-13/06/2012	Quinto Convegno Giovani “La chimica per lo sviluppo”, Dipartimento di Chimica, Sapienza Università di Roma, Roma)	M.L. Astolfi , S. Canepari, M. Maretto , C. Perrino, 2012. Variazioni stagionali ed effetto della distanza da sorgenti industriali sulla distribuzione dimensionale di ioni ed elementi nel PM,	Poster

16-18/05/2012	V Convegno Nazionale sul Particolato Atmosferico (PM2012), Università degli Studi di Perugia	Canepari , E. Marconi, M.L. Astolfi , C. Perrino, 2012. Stima del contributo elementare negli aggregati di nano particelle in atmosfera	Oral
16-18/05/2012	V Convegno Nazionale sul Particolato Atmosferico (PM2012), Università degli Studi di Perugia	M.L. Astolfi , S. Canepari, P. Di Filippo, 2012. Analisi di IPA, ioni inorganici ed elementi su un singolo campione di PM mediante estrazione sequenziale ASE	Poster
16-18/05/2012	V Convegno Nazionale sul Particolato Atmosferico (PM2012), Università degli Studi di Perugia	M.L. Astolfi , C. Farao, S. Canepari, C. Perrino, 2012. Efficienza estrattiva e selettività rispetto alle sorgenti emissive di diverse soluzioni estraenti per il particolato atmosferico	Poster
19-23/06/2011	7th International Symposium on Modern Principles for Air Monitoring and Biomonitoring, Airmon 2011, Niva course: Exposure to Formed and Engineered Nanoparticles: Is there any difference in health effects? Loen, Norway	P. Castellano, R. Ferrante, N. L'Episcopo, S. Canepari, M.L. Astolfi , P. Desiderio, E. Incocciati, 2011. Multiparametric approach as a tool for the evaluation of nanoparticle emissions from laser printers in the professional exposure assessment,	Oral
4-5/05/2011	Incontri di scienza delle separazioni. Il contributo della scienza delle separazioni alle problematiche ambientali, Torino	S. Canepari , E. Marconi, M.L. Astolfi , C. Perrino, 2011. Separazione e determinazione di Sb (III), Sb (V) e Sb nanoparticellare in campioni di particolato atmosferico mediante IC-ICP-MS,	Oral
18-20/05/2010	4° Convegno Nazionale sul Particolato Atmosferico PM2010, Università Ca' Foscari di Venezia	M.L. Astolfi , S. Moretti, S. Canepari, 2010. Efficienza delle metodiche di frazionamento chimico elementare e selettività rispetto alle sorgenti emissive del PM	Poster
24-26/03/2010	16° Convegno di Igiene Industriale "Le giornate di Corvara", AIDII, Corvara, Bolzano	A. Bacaloni , S. Canepari, M.L. Astolfi , P. Giansanti, R. Gubbiotti, 2010. La valutazione dell'esposizione a metalli pesanti aerodispersi in ambienti non industriali: quale criterio seguire?,	Oral
5-9/10/2009	Environment Including Global Changes, Palermo	S. Canepari , M.L. Astolfi , 2009. Tracciabilità delle sorgenti emissive del PM: selettività delle metodiche di frazionamento chimico elementare	Oral
17-18/09/2009	2° Incontri Mediterranei di Igiene industriale. Valori limite e valori di riferimento: il contributo dell'Igiene industriale, Lamezia Terme	S. Canepari , M.L. Astolfi , 2009. Strategie di riduzione dell'emissione di particolato atmosferico: ruolo della caratterizzazione chimica e tracciabilità delle sorgenti emissive	Oral
14-17/06/2009	"12th EuCheMS International Conference on Chemistry and the Environment", ICCE 2009), Università di Stoccolma, Svezia	S. Pappalardo, S. Canepari, C. Perrino, M.L. Astolfi , E. Marconi, 2009. Time-resolved measurements of water-soluble micro and trace elements in ambient air particulate matter,	Poster
14-17/06/2009	"12th EuCheMS International Conference on Chemistry and the Environment", ICCE 2009), Università di Stoccolma, Svezia	E. Marconi , M.L. Astolfi , S. Canepari, 2009. Dimensional distribution and environmental importance of antimony(III) and antimony(V) in PM	Oral

6-8/10/2008	3° Convegno Nazionale sul Particolato Atmosferico PM 2008 “Il Particolato Atmosferico: la conoscenza per l’informazione e le strategie d’intervento”, Bari	S. Canepari, C. Perrino, <u>S. Pappalardo</u> , M.L. Astolfi , 2008. Analisi elementare di campioni di PM10 ad elevata risoluzione temporale	Poster
6-8/10/2008	3° Convegno Nazionale sul Particolato Atmosferico PM 2008 “Il Particolato Atmosferico: la conoscenza per l’informazione e le strategie d’intervento”, Bari	E. Marconi, M.L. Astolfi , S. Canepari, 2008. Distribuzione dimensionale e rilevanza ambientale di antimonio(III) e antimonio(V) nel PM	Poster
6-8/10/2008	3° Convegno Nazionale sul Particolato Atmosferico PM 2008 “Il Particolato Atmosferico: la conoscenza per l’informazione e le strategie d’intervento”, Bari	E. Marconi , M.L. Astolfi , S. Canepari, 2008. Separazione e determinazione di antimonio(III) e antimonio(V) in campioni di PM mediante IC-ICP-MS. Atti del Convegno: XXI Convegno Nazionale della Divisione di Chimica Analitica della Società Chimica Italiana “Il ruolo della Chimica Analitica nella tutela della salute”, a cura di Napoli A., Tagarelli A., Ed. Klipper, (Dip. Di Chimica, Università della Calabria, Arcavata di Rende, CS 21-25/09/2008	Oral
18-19/06/2008	Terzo Convegno Giovani “La chimica sostenibile”, Dipartimento di Chimica, Sapienza Università di Roma, Roma	M.L. Astolfi , D. Ginese, A. Marrocco, S. Canepari, 2008. Analisi semiautomatica di Cr (III) e Cr (VI) mediante un sistema a flusso HFCLM-ICP-MS	Poster
3-5/12/2007	European NanOSH Conference – Nanotechnologies: A Critical Area in Occupational Safety and Health, Helsinki	P. Castellano, R. Ferrante, S. Canepari, M.L. Astolfi , 2007. Chemical and dimensional characterization of nanoparticles in the evaluation of professional exposure	Oral
16-20/09/2007	XX Congresso Nazionale di Chimica Analitica, “La Chimica Analitica per l’ambiente e gli alimenti”, S. Martino al Cimino, VT	M.L. Astolfi , D. Ginese, E. Cardarelli, S. Canepari, 2007. Sviluppo di un contattore a fibre cave coassiali e sua applicazione alla separazione e analisi di Cr (III) e Cr (VI) mediante accoppiamento con ICP-OES	Poster
16-20/09/2007	XX Congresso Nazionale di Chimica Analitica, “La Chimica Analitica per l’ambiente e gli alimenti”, S. Martino al Cimino, VT	Moretti, S. Canepari, E. Cardarelli, M.L. Astolfi , 2007. Confronto critico tra diverse soluzioni estraenti per il frazionamento chimico elementare del materiale particolare sospeso in atmosfera	Oral
5-11/08/2007	41st IUPAC World Chemistry Congress Chemistry Protecting Health, Natural Environment and Cultural Heritage Programme, Torino	S. Canepari, C. Perrino, M.L. Astolfi , M. Catrambone, F. Olivieri, S. Moretti, <u>A. Pietrodangelo</u> , 2007. Size distribution of ions and elements in urban and peri-urban areas: evidence of dust resuspension.	Oral
23-27/07/2007	Atmospheric Composition Change, Causes and Consequences – Local to Global, 2nd ACCENT Symposium, Urbino	A. Pietrodangelo, S. Canepari, C. Perrino, M.L. Astolfi , S. Moretti, 2007. Source apportionment by multivariate analysis of fine and coarse airborne particulate matter in the Lazio Region (Italy)	Oral
18-23/02/2007	“European Winter Conference on Plasma Spectrochemistry”, Taormina	S. Canepari, E. Cardarelli, R. Ferrante, D. Ginese, A. Amoroso, S. Ghighi, M.L. Astolfi , 2007. On-line analysis of Cr (III) and Cr (VI) by coupling ICP-OES and a hollow fiber liquid membrane annular contactor	Poster

06-08/03/2006	“International Work Shop”, combining and reporting analytical results. The role of (metrological) traceability and (measurement) uncertainty for comparing analytical results, organized by APAT – IUPAC, Roma	M.L. Astolfi , S. Canepari, E. Cardarelli, M. Catrambone, C. Perrino, A. Pietrodangelo, 2006. Determination of non – volatile ions and elements in airborne particulate matter: development of a sample – by – sample quality control scheme	Poster
10-15/09/2006	XXII Congresso Nazionale della Società Chimica Italiana SCI 2006, Firenze	M.L. Astolfi , S. Canepari, E. Cardarelli, C. Perrino, M. Catrambone, 2006. Analisi elementare e ionica su un singolo campione di PM: assicurazione e controllo di qualità	Poster
06-07/06/2006	Secondo Convegno Giovani La Chimica a “La Sapienza” tra passato, presente e futuro, Dipartimento di Chimica, Sapienza Università di Roma, Roma	M.L. Astolfi , S. Canepari, E. Cardarelli, S. Ghighi, 2006. Analisi elementare e ionica nel particolato atmosferico: assicurazione e controllo di qualità	Poster
06-07/06/2006	Secondo Convegno Giovani La Chimica a “La Sapienza” tra passato, presente e futuro, Dipartimento di Chimica, Sapienza Università di Roma, Roma	M.L. Astolfi , S. Canepari, E. Cardarelli, S. Ghighi, M.L. Marzo, F. Olivieri, 2006. Solubilità e distribuzione dimensionale di elementi in tracce nel materiale particellare sospeso in atmosfera	Poster
4-7/09/2005	10th EuCheMS-DCE International Conference on Chemistry and the Environment the Role of Chemistry in the Environment: our choice, our life - Research, Education and Professional, Rimini	M.L. Astolfi , S. Canepari, E. Cardarelli, S. Ghighi, M.L. Marzo, 2005. Chemical fractionation of metals in airborne particulate matter: first results related to PM2.5 and PM10 samples	Poster
05-06/05/2005	III Conferenza Organizzativa – Inquinamento da metalli pesanti: la biodisponibilità, Università degli Studi di Sassari – Dipartimento di Scienze Ambientali Agrarie e Biotehnologie Agro – Alimentari, Sassari	M.L. Astolfi , S. Canepari, E. Cardarelli, S. Ghighi, M.L. Marzo, 2005. Frazionamento dei metalli nel particolato atmosferico – Risultati preliminari su campioni di PM10 e di PM2.5,	Poster
23-27/10/2005	XII Hungarian-Italian Symposium on Spectrochemistry: Environmental Pollution and Human Health, Pécs, Hungarian	S. Canepari, E. Cardarelli, M. Catrambone, C. Perrino, A. Pietrodangelo, M.L. Astolfi , 2005. A microanalytical procedure for the chemical characterisation of the inorganic content of atmospheric particulate matter	Oral
15-18/12/2004	5th European Meeting on Environmental Chemistry- EMEC5, Bari	M.L. Astolfi , S. Canepari, E. Cardarelli, A. Febo, C. Perrino, A. Pietrodangelo, M. Strincone, 2004. Elemental and ionic analysis of urban particulate matter by a new sequential leaching approach: a first application to field campaigns	Poster

“Autorizzo il trattamento dei miei dati personali ai sensi del Dlgs 196 del 30 giugno 2003 e dell'art. 13 GDPR”.

Rome, 10/03/2025

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