

## CURRICULUM VITAE

### **Maria Luisa Astolfi**

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### **CURRENT POSITION**

1 October 2020 to present: Researcher in "Analytical Chemistry" at the Department of Chemistry, Sapienza University of Rome, Italy.

### **EDUCATION AND TRAINING**

- July 2019-September 2020: Assistant Professor of Analytical Chemistry, Department of Chemistry, Sapienza University of Rome, Italy.
- January 2010-April 2019: Postdoctoral Fellow, Department of Chemistry, Sapienza University of Rome, Italy.
- July 2009: PhD in Analytical Chemistry, Department of Chemistry, Sapienza University of Rome, Italy.
- November 2008-December 2009: Fellow, Department of Chemistry, Sapienza University of Rome, Italy.
- April 2007-October 2007: Scientific training internship, Department of Chemistry, Sapienza University of Rome, Italy.
- May 2005-October 2005: Assistant Professor, Department of Chemistry, Sapienza University of Rome, Italy.
- April 2005: Bachelor of Science in Chemistry, Department of Chemistry, Sapienza University of Rome, Italy.

## EDITORIAL BOARD MEMBER

- Plose One – eISSN 1932-6203 an Open Access Journal; indexed within Scopus, and many other databases. Impact Factor 3.240 (2020).
- Open Chemistry – ISSN: 2391-5420– Publisher: De Gruyter Open Access Journal; indexed within Scopus, and many other databases. Impact factor: 1.554.
- Analytica - ISSN 2673-4532 an Open Access Journal by MDPI.
- Methods and Protocols - ISSN 2409-9279 an Open Access Journal by MDPI; indexed within Scopus, and many other databases.
- Frontiers in Analytical Science - ISSN 2673-9283, Environmental analysis; indexed in: Google Scholar, CrossRef, CLOCKSS, OpenAIRE.

## GUEST EDITOR ACTIVITY

- Guest Editor, Special Issue on "*Advances in Green Analytical Methods*", Analytica, MDPI (11/2021 – 11/2022).
- Guest Editor, Special Issue on "*Advances in Analytical Strategies to Study Biological and Environmental Samples*", Methods and Protocols, MDPI (07/2021 – 04/2022).
- Guest Editor - Special Issue "*Advances in Analytical Strategies to Study Cultural Heritage Samples*", Molecules, MDPI (07/2021 – 05/2022).
- Guest Editor, Special Issue on "*Exposure assessment to environmental contaminants in children*", International Journal of Environmental Research and Public Health, MDPI (05/2020 – 01/2021).
- Guest Editor, Special Issue on "*Recent Advances in Assessing Environmental and Occupational Exposure to Toxic Elements*", International Journal of Environmental Research and Public Health, MDPI (11/2019 – 04/2021).
- Guest Editor, Topic Research on "*Progress in Analytical Methods and Optimized Approaches for Elemental Analysis in Environmental and Biological Monitoring*", Frontiers in Environmental Science (09/2020 – 07/2021).

## MEMBERSHIPS

- Individual member of the Italian Chemical Society (SCI), division of Analytical Chemistry and Chemistry of the Environment and Cultural Heritage.
- Italian Aerosol Society (IAS)

## REVIEWED MANUSCRIPTS FOR JOURNALS

- Analytica, MDPI
- Analytical Science Advances, Wiley-VCH

- Biological Trace Element Research, Springer Science+Business Media
- Environmental Research, Elsevier
- Environmental Science and Pollution Research, Springer
- Environments, MDPI
- Environmental Pollution, Elsevier
- Food Chemistry, Elsevier
- Foods, MDPI
- International Archives of Occupational and Environmental Health, Springer
- International Journal of Molecular Sciences, MDPI
- International Journal of Environmental and Public Health, MDPI
- Journal of the Brazilian Chemical Society, Brazilian Society of Chemistry
- Plose One
- Probiotics and Antimicrobial Proteins (PAAP), Springer
- Royal Society Open Science, Royal Society
- Science of the Total Environment, Elsevier
- Talanta, Elsevier
- Toxics, MDPI

## SCIENTIFIC RECORD

H-index: **18**

Total number of works: **63**

Total citation number: **1020**

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## SCIENTIFIC WORKS

### 1 BOOK CHAPTERS

A. Rubino; J. Almeida; C. Magro; P.G. Schiavi<sup>1</sup>; P. Guedes; N. Couto; E. P. Mateus; P. Altimari; **M.L. Astolfi**; R. Zanoni; A. B. Ribeiro; F. Pagnanelli. Nanostructured TiO<sub>2</sub>-Based Hydrogen Evolution Reaction (Her) Electrocatalysts: A Preliminary Feasibility Study In Electrolytic Remediation With Hydrogen Recovery. Book: Ribeiro A.B., Prasad, M.N.V. (Eds) Electrokinetic Remediation for Environmental Security and Sustainability. John Wiley & Sons, Ltd. DOI: 10.1002/9781119670186.ch10.

### 63 PEER-REVIEWED PUBLICATIONS

1. L. Massimi, **M.L. Astolfi**, S. Canepari. Simple and efficient method to detach intact pm10 from field filters: elements recovery assessment. Atmospheric Pollution Research. in press.

2. 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*, in press.
3. **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*, in press.
4. F. Di Caprio, A. Pellini, R. Zanoni, **M.L. Astolfi**, P. Altimari, 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*, in press.
5. 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.
6. **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.
7. **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.
8. F. Buonauro, **M.L. Astolfi**, D. Pignini, G. Tranfo, S. Canepari, A. Pietroiusti, 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.
9. L. Massimi, S. van Ratingen, J. Wesseling, I. Javed, M.A. Frezzini, **M.L. Astolfi**, R. Vermeulen, S. Canepari. Individuation and Spatial Mapping of Tracers of PM10 Emission Sources in Amersfoort (Netherlands). *Atmospheric Research* 262 (2021) 105771. DOI: 10.1016/j.atmosres.2021.105771.
10. **M.L. Astolfi**, D. Marotta, V. Cammalleri, E. Marconi, A. Antonucci, P. Avino, S. Canepari, M. Vitali, C. Protano. Determination of 40 elements in powdered infant formulas and related risk assessment. *International Journal of Environmental Research and Public* 18 (2021) 5073. DOI: 10.3390/ijerph18105073.
11. **M.L. Astolfi\***, E. Marconi, G. Vitiello, L. Massimi. An optimized approach 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.
12. 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 Dibenzo-p-Dioxins/Furans and Polychlorinated Biphenyls and estimated human dietary exposure. *Journal of Food Protection* (2021). DOI: 10.4315/JFP-21-126.

13. **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.
14. 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.
15. **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 (2020) 9225. DOI:10.3390/ijerph17249225.
16. F. Buonauro, **M.L. Astolfi**, S. Canepari, M. Di Basilio, R. Gibilras, M. Mecchia, M. Papacchini, E. Paci, D. Pigni, 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 (2020) 9085. DOI:10.3390/ijerph17239085.
17. **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 (2020) 8652. DOI:10.3390/ijerph17228652.
18. **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 (2020) 4263. DOI:10.3390/molecules25184263.
19. 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.
20. L. Capobianco, F. Di Caprio, P. Altimari, **M.L. Astolfi**, F. Pagnanelli, 2020. 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, Impact factor: 5.647. DOI: 10.1016/j.jenvman.2020.111164.
21. 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.
22. **M.L. Astolfi\***, E. Marconi, L. Lorini, F. Valentino, F. Silva, B. Sommer Ferreira, S. Canepari, M. Majone, 2020. Elemental concentration and migratability in bioplastics derived from organic waste. *Chemosphere* 259 (2020) 127472. DOI: 10.1016/j.chemosphere.2020.127472.
23. 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.
24. **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.
  25. **M.L. Astolfi\***, C. Protano, E. Marconi, L. Massimi, M. Brunori, D. Piamonti, G. Migliara, M. Vitali, S. Canepari. A new treatment of human hair for elemental determination by inductively coupled mass spectrometry, *Analytical Methods* 12 (2020) 1906–1918. DOI: 10.1039/C9AY01871A.
  26. **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.
  27. M. Ristorini, **M.L. Astolfi**, M.A. Frezzini, S. Canepari, L. Massimi. Evaluation of the efficiency of *Arundo donax* L. leaves as biomonitors for atmospheric element concentrations in an urban and industrial area of Central Italy. *Atmosphere* 11 (2020) 226. DOI: 10.3390/atmos11030226.
  28. 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. *Materials* 12 (2019) 4242. DOI:10.3390/ma12244242.
  29. 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. *Atmospheric Research* 239 (2020) 104904. DOI: org/10.1016/j.atmosres.2020.104904.
  30. 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. *Atmosphere* 11 (2020) 6. DOI:10.3390/atmos11010006.
  31. A.M. Girelli, **M.L. Astolfi**, F.R. Scuto. Agro-industrial wastes as potential carriers for enzyme immobilization: a review. *Chemosphere* 244 (2020) 125368. DOI: 10.1016/j.chemosphere.2019.125368.
  32. C. Protano, **M.L. Astolfi**, E. Marconi, A. Antonucci, S. Canepari; D. Piamonti, M. Brunori, M. Vitali. Exposure assessment via inductively coupled plasma mass spectrometry analysis of major and trace elements in human scalp hair among a group of Eritrean adults. *Biological Trace Element Research* 197(1) (2020) 89-100. DOI: 10.1007/s12011-019-01988-w.
  33. **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. *Microchemical Journal* 150 (2019) 104186. DOI: 10.1016/j.microc.2019.104186.
  34. S. Canepari, **M.L. Astolfi**, M. Catrambone, D. Frasca, M. Marcocchia, 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. *Environmental Pollution* 253 (2019) 19–28. DOI: 10.1016/j.envpol.2019.06.116.
35. 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 heavy metals, PAHs, PCDDs, PCDFs, PCBs and PBDEs in native lichen *Xanthoria Parietina*. *Environmental Pollution* 254 (2019) 113013. DOI: 10.1016/j.envpol.2019.113013.
  36. **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. *Environment International* 130 (2019) 104818. DOI: 10.1016/j.envint.2019.05.012.
  37. 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). *Ecological Indicators* 101 (2019) 759–769. DOI: 10.1016/j.ecolind.2018.12.051.
  38. 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. *Science of the Total Environment* 653 (2019) 1192–1203. DOI: 10.1016/j.scitotenv.2018.11.044.
  39. 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. Inorganic Chemistry* 58 (2) (2019) 1120–1133. DOI: 10.1021/acs.inorgchem.8b02269.
  40. 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. *Chemosphere* 215 (2019) 535–542. DOI: 10.1016/j.chemosphere.2018.10.086.
  41. 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. *Journal of Food Composition and Analysis* 74 (2018) 102–113. DOI: 10.1016/j.jfca.2018.09.002.
  42. **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. *Analytica Chimica Acta* 1040 (2018) 49–62. DOI: 10.1016/j.aca.2018.07.037.
  43. 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, *Materials*, 11(3) (2018) 334. DOI: 10.3390/ma11030334.

44. 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. *Science of the Total Environment* 619–620 (2018) 58–64. DOI: 10.1016/j.scitotenv.2017.11.090.
45. 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. *Environmental Science and Pollution Research* 25 (2018) 1448–1459. DOI: 10.1007/s11356-017-0377-4.
46. **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. *Talanta* 174 (2017) 838–844. DOI: 10.1016/j.talanta.2017.06.072.
47. 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. *Annali di Igiene, Medicina Preventiva e di Comunità* 29(6) (2017) 494–503, doi:10.7416/ai.2017.2180, ISSN: 112099135.
48. 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. *Journal of Endocrinological Investigation (JENI)*, 40 (11) (2017) 1183–1190. DOI: 10.1007/s40618-017-0663-5.
49. 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. *Science of the Total Environment* 557–558 (2016) 378–385. DOI:10.1016/j.scitotenv.2016.03.073. Impact factor: 6.551.
50. S. Canepari, **M.L. Astolfi**, C. Farao, M. Mareto, D. Frasca, M. Marcocchia, C. Perrino. Seasonal variations in the chemical composition of particulate matter: a case study in the Po Valley. Part II: concentration and solubility of micro- and trace-elements. *Environmental Science and Pollution Research* 21 (2014) 4010–4022. DOI: 10.1007/s11356-013-2298-1. Impact factor: 3.056.
51. 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/TDDFT Studies on the Neutral and One-electron Reduced Quinoxaline and Pyrazine Precursors and Their Mononuclear (PdII, PtII) Derivatives. *European Journal of Inorganic Chemistry* (2014) 3572–3581. DOI:10.1002/ejic.201402282. Impact factor: 2.529.
52. 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. Impact factor: 2.652.
53. 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 (2013) 1619–1629. Association for Aerosol Research, DOI: 10.4209/aaqr.2013.03.0081. Impact factor: 2.735.



54. 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.
55. 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. Indexed in Scopus.
56. 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. Indexed in Scopus.
57. 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. Impact factor: 5.339.
58. 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 (2010) 2533-2542. DOI:10.1007/s00216-010-3818-1. Impact factor: 3.637.
59. 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. Impact factor: 4.039.
60. 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. Impact factor: 5.339.
61. 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. Impact factor: 4.039.
62. **M.L. Astolfi**, S. Canepari, E. Cardarelli, S. Ghighi, M.L. Marzo. Chemical fractionation of elements in airborne particulate matter: primary results on PM10 and PM2.5 samples in the Lazio Region (central Italy). *Annali di Chimica*, 96 (2006) 183-194, ISSN: 0003-4592 Società Chimica Italiana. Impact factor: 0.67.
63. **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, ISSN: 1610-3653, DOI: 10.1007/S10311-005-0029-7. Impact factor: 5.922.

She is author of 29 poster contributions and of 32 oral communications at national and international congresses.