

## ***List of published papers***

- P1 On the effect of catalyst status in the quantitative determination of platinum in Pt-Sn/MgO materials, S. Recchia, D. Monticelli, A. Pozzi, L. Rampazzi, C. Dossi, *Fresenius Journal of Analytical Chemistry* 369 (2001), 403-406
- P2 A calibration curve at 2000 meters (a.s.l.): alpine valleys as field laboratories for teaching environmental monitoring to undergraduate students, C. Dossi, D. Monticelli, A. Pozzi, S. Recchia, L. Vezzoli, *Annali di Chimica*, 92 (2002), 407-416
- P3 Trace determination of Ni and Cd in standard matrixes for ISO textile leaching tests, A. Pozzi, D. Monticelli, S. Recchia, A. Farina, C. Greci, C. Dossi, *Annali di Chimica*, 92 (2002), 485-489
- P4 A new microwave-assisted approach to the chemical analysis of mortars, L. Rampazzi, D. Monticelli, R. Verga, L. Toniolo, *Annali di Chimica*, 93 (2003) 315-320
- P5 Ultra trace determination of Pt and Rh in wastewater and gullypot sediments from a low polluted area, A. Pozzi, S. Recchia, D. Monticelli, C. Dossi, L. Rampazzi, P. Curi, *Annali di Chimica*, 93 (2003), 181-186
- P6 The Marmolada glacier: an investigation of natural weathering and anthropic pressure through chemical analyses of melting water and ice, A. Viganò, C. Dossi, U. Mattana, S. Martin, D. Monticelli, A. Pozzi, *Geografia Fisica e Dinamica Quaternaria*, 26 (2003), 71-75
- P7 Copper speciation in glacial stream waters of Rutor glacier (Aosta Valley, Italy), D. Monticelli, C. M. G. van den Berg, A. Pozzi, C. Dossi, *Australian Journal of Chemistry* 57 (2004), 945-949
- P8 Analisi chimica di ghiaccio e acqua sulla Marmolada, C. Dossi, A. Viganò, S. Martin, D. Monticelli, A. Pozzi, U. Mattana, *Neve e Valanghe*, 52 (2004), 42-47
- P9 Lead and copper speciation in remote mountain lakes, A. Ploger, E. Fisher, H.P. Nirmaier, L.M. Laglera, D. Monticelli, C.M.G. van den Berg, *Limnology & Oceanography* 50 (2005), 995-1010
- P10 Differential pulse voltammetric determination of tin in the presence of noble metals, D. Monticelli, R. Psaro, A. Pozzi, C. Dossi, S. Recchia, *Analytical and Bioanalytical Chemistry* 383(1) (2005), 115-121
- P11 A chemometric approach to the investigation of major and minor ion chemistry in Lake Como (Lombardia, northern Italy), B. Giussani, C. Dossi, D. Monticelli, A. Pozzi, S. Recchia, *Annali di Chimica* 96 (5-6) (2006), 339-346
- P12 An investigation of water and ice chemistry in a fast-retreating glacier in the Dolomites (NE Italy): the Fradusta Glacier, C. Dossi, A. Viganò, S. Martin, D. Monticelli, A. Pozzi, *Geografia Fisica e Dinamica Quaternaria*, 29, 1 (2006), 113-119

- P13 La chimica analitica ambientale per lo studio interdisciplinare dell'ambiente montano, C. Dossi, A. Pozzi, S. Recchia, L. Rampazzi, B. Giussani, D. Monticelli, *SLM Sopra il livello del mare*, 26 (2006), 10-15 ISSN: 1592 792X
- P14 Fluid-controlled crustal metasomatism within a high-pressure subducted mélange (Mt. Hochwart, Eastern Italian Alps), S. Tumiati, G. Godard, S. Martin, U. Klötzli, D. Monticelli, *Lithos*, 94 (2007), 148-167
- P15 Release and speciation of uranium in low-ionic strength groundwaters at an abandoned uranium mine in Val Vedello (Orobic Alps – Italy) by Adsorptive Cathodic Stripping Voltammetry (AdCSV), C. Dossi, G. Carugati, A. Credaro, R. Gambillara, S. Martin, D. Monticelli, A. Pozzi, *International Journal of Environmental Analytical Chemistry*, 87 (5) (2007), 361-373
- P16 Optimization and validation of an automated voltammetric stripping technique for ultratrace metal analysis, D. Monticelli, E. Ciceri, C. Dossi, *Analytica Chimica Acta*, 594 (2007), 192-198
- P17 Determination of uranium content in water using cathodic stripping voltammetry and gamma-spectrometry, E. Andreotti, A. Credaro, C. Dossi, A. Giuliani, D. Monticelli, M. Pellicciari, S. Sangiorgio, *Journal of Radioanalytical and Nuclear Chemistry*, 277 (2008), 413-417
- P18 Three-way principal component analysis of chemical data from Lake Como watershed, B. Giussani, D. Monticelli, R. Gambillara, A. Pozzi, C. Dossi, *Microchemical Journal*, 88 (2008), 160 – 166
- P19 Environmental factors controlling the precipitation of Cu-bearing hydrotalcite-like compounds from mine waters. The case of the “*Eve verda*” spring (Aosta Valley, Italy), S. Tumiati, G. Godard, N. Masciocchi, S. Martin, D. Monticelli *European Journal of Mineralogy*, 20 (2008), 73 – 94
- P20 Contaminanti nel Lario. Dinamica degli elementi in traccia nel bacino comasco, C. Dossi, D. Monticelli, B. Giussani, *La Chimica e l'Industria*, 10 (2008), 101 – 105
- P21 Tree ring microanalysis by LA–ICP–MS for environmental monitoring: validation or refutation? Two case histories, D. Monticelli, A. Di Iorio, E. Ciceri, A. Castelletti, C. Dossi, *Microchimica Acta*, 164 (2009), 139 – 148
- P22 Role of laser ablation–inductively coupled plasma–mass spectrometry in cultural heritage research: A review, B. Giussani, D. Monticelli, L. Rampazzi, *Analytica Chimica Acta*, 635 (2009), 6 – 21
- P23 Design and performances of a cyclonic flux cell for laser ablation, D. Monticelli, E. L. Gurevich, R. Hergenröder, *Journal of Analytical Atomic Spectrometry*, 24 (2009), 328 – 335
- P24 Design and development of a low cost, high performance UV digester prototype: application to the determination of trace elements by stripping voltammetry, D. Monticelli, G. Carugati, A. Castelletti, S. Recchia, C. Dossi, *Microchemical Journal*, 95 (2010), 158 – 163

- P25 Assessment of accuracy and precision in speciation analysis by competitive ligand equilibration–cathodic stripping voltammetry (CLE–CSV) and application to Antarctic samples, D. Monticelli, C. Dossi, A. Castelletti, *Analytica Chimica Acta*, 675 (2010), 116 – 124
- P26 A novel Total reflection X Ray Fluorescence procedure for the direct determination of trace elements in petrochemical products, A. Cinosi, N. Andriollo, G. Pepponi, D. Monticelli, *Analytical and Bioanalytical Chemistry*, 399 (2011), 927 – 933
- P27 Interpreting complex trace element profiles in sediment cores from a multi-basin deep lake: the western branch of Lake Como, D. Monticelli, A. Pozzi, E. Ciceri, B. Giussani, *International Journal of Environmental Analytical Chemistry*, 91 (2011), 213 – 229
- P28 Dispersed copper oxide: a multifaceted tool in catalysis, N. Scotti, D. Monticelli, F. Zaccheria, *Inorganica Chimica Acta*, 280 (2012), 194 – 200
- P29 An electroanalytical approach to the understanding of copper exportation in glaciated catchments, D. Monticelli, A. Pozzi, A. Credaro, C. Dossi, *Electroanalysis*, 24 (2012), 807 – 812
- P30 Filling the Gap: Chemistry of 3,5-Bis(trifluoromethyl)-1H-pyrazoles, *Journal of Fluorine Chemistry*, A. Maspero, G.B. Giovenzana, D. Monticelli, S. Tagliapietra, G. Palmisano, A. Penoni, *Journal of Fluorine Chemistry*, 139 (2012), 53 – 57
- P31 Atmospheric pressure vapour phase decomposition: a proof of principle, A. Cinosi, N. Andriollo, F. Tibaldi, D. Monticelli, *Talanta*, 101 (2012), 148 – 150
- P32 Investigation of tectonically affected groundwater systems through a multidisciplinary approach, R. Gambillara, S. Terrana, B. Giussani, D. Monticelli, S. Roncoroni, S. Martin, *Applied Geochemistry*, 33 (2013), 13 – 24
- P33 Probing the binding site of Abl Tyrosine Kinase using in situ click chemistry, C. Peruzzotti, S. Borrelli, M. Ventura, R. Pantano, G. Fumagalli, M. Christodoulou, D. Monticelli, M. Luzzani, A. L. Fallacara, C. Tintori, M. Botta, D. Passarella, *ACS Medicinal Chemistry Letters*, 4 (2013), 274 – 277
- P34 Quantification of iron in seawater at the low picomolar range based on optimization of bromate ammonia dihydroxynaphthalene system by catalytic adsorptive cathodic stripping voltammetry, L. M. Laglera, J. Santos-Encheandia, S. Caprara, D. Monticelli, *Analytical Chemistry*, 85 (2013), 2486 – 2492
- P35 Miniaturization in voltammetry: ultratrace element analysis and speciation with twenty-fold sample size reduction, D. Monticelli, L. M. Laglera, S. Caprara, *Talanta*, 128 (2014), 273 – 277
- P36 Cathodic pseudopolarography: a new tool for the identification and quantification of cysteine, cystine and other low molecular weight thiols in seawater, L. M. Laglera, J. Downes, A. Tovar-Sánchez, D. Monticelli, *Analytica Chimica Acta*, 836 (2014), 24-33

- P37 Anodic Stripping Tin Titration: a novel method for the voltammetric determination of platinum at trace levels, B. Giussani, S. Roncoroni, A. Nemenyi, V. Dal Santo, D. Monticelli, S. Recchia, *Analytical Chemistry*, 86 (2014), 6654-6659
- P38 Lifetime Response of Contemporary Versus Resurrected *Daphnia galeata* Sars (Crustacea, Cladocera) to Cu(II) Chronic Exposure, R. Piscia, M. Colombini, B. Ponti, R. Bettinetti, D. Monticelli, V. Rossi, M. Manca, *Bulletin of Environmental Contamination and Toxicology*, 94 (2015), 46-51
- P39 Occupational exposure to arsenic and cadmium in thin-film solar cell production, A. Spinazzè, A. Cattaneo, D. Monticelli, S. Rovelli, S. Recchia, S. Fustinoni, D. M. Cavallo, *The Annals of Occupational Hygiene*, 59 (2015), 572-585
- P40 Ultrasensitive and fast voltammetric determination of iron in seawater by atmospheric oxygen catalysis in 500 µl samples, S. Caprara, L. M. Laglera, D. Monticelli, *Analytical Chemistry*, 87 (2015), 6357-6363
- P41 Voltammetric tools for trace element speciation in freshwaters: methodologies, outcomes and future perspectives, D. Monticelli, S. Caprara, *Environmental Chemistry*, 12 (2015), 683-705
- P42 Exploiting Chemistry to Improve Performance of Screen-Printed, Bismuth Film Electrodes (SP-BiFE), C. Dossi, D. Monticelli, A. Pozzi, S. Recchia, *Biosensors*, 6 (2016), 38
- P43 Towards a zero-blank, preconcentration-free voltammetric method for iron analysis at picomolar concentrations in unbuffered seawater, L. M. Laglera, S. Caprara, D. Monticelli, *Talanta*, 150 (2016), 449-454
- P44 Evaluation of the two-dimensional performances of low activity planar catalysts: development and validation of a true scanning reactor, M. Marelli, A. Nemenyi, V. Dal Santo, R. Psaro, L. Ostinelli, D. Monticelli, C. Dossi, S. Recchia, *ACS Combinatorial Science*, 18 (2016), 15-21
- P45 Understanding microwave vessel contamination by chloride species, S. Recchia, D. Spanu, D. Bianchi, C. Dossi, A. Pozzi, D. Monticelli, *Talanta*, 159 (2016), 29-33
- P46 A compilation of iron speciation data for open oceanic waters, S. Caprara, K. N. Buck, L. Gerringa, M. Rijkenberg, D. Monticelli, *Frontiers in Marine Science*, 3 (2016), 221
- P47 Efficient and ecofriendly route for the solvent-free synthesis of piperonal and aromatic aldehydes using Au/CeO<sub>2</sub> catalyst, C. Lucarelli, A. Lolli, A. Giugni, L. Grazia, S. Albonetti, D. Monticelli, A. Vaccari, *Applied catalysis B: Environmental*, 203 (2017), 314-323
- P48 Iron detection and speciation in natural waters by electrochemical techniques: A critical review, L. M. Laglera, D. Monticelli, *Current Opinion in Electrochemistry*, 3 (2017), 123-129
- P49 A viscous film sample chamber for laser ablation inductively coupled plasma – mass spectrometry, D. Monticelli, D. Civati, B. Giussani, C. Dossi, D. Spanu, S. Recchia, *Talanta*, 179C (2018), 100-106

- P50 Assessment of a colorimetric method for the measurement of low concentrations of peracetic acid and hydrogen peroxide in water, L. Domínguez-Henao, A. Turolla, D. Monticelli, M. Antonelli, *Talanta*, 183 (2018), 209-215
- P51 Determination of trace metals in spirits by total reflection X-ray fluorescence spectrometry, G. Siviero, A. Cinosi, D. Monticelli, L. Seralessandri, *Spectrochimica Acta Part B: Atomic Spectroscopy*, 144 (2018), 15-19
- P52 Trace element determination in soy sauce: A novel total reflection X-ray fluorescence procedure and comparison with inductively coupled plasma–mass spectrometry, D. Monticelli, . Cinosi, G. Siviero, L. Seralessandri, *Spectrochimica Acta Part B: Atomic Spectroscopy*, 146 (2018), 16-20
- P53 In vitro evaluation of the biosafety of hyaluronic acid PEG cross-linked with micromolecules of calcium hydroxyapatite in low concentration, N. Zerbinati, T. Lotti, D. Monticelli, R. Rauso, P. González-Isaza, E. D'este, A. Calligaro, S. Sommatis, C. Maccario, R. Mocchi, J. Lotti, U. Wollina, G. Tchernev, K. França, *Open Access Macedonian Journal of Medical Sciences*, 6 (2018), 15-19
- P54 In vitro evaluation of the sensitivity of a hyaluronic acid PEG cross-linked to bovine testes hyaluronidase, N. Zerbinati, T. Lotti, D. Monticelli, V. Martina, G. Cipolla, E. D'Este, A. Calligaro, R. Mocchi, C. Maccario, S. Sommatis, J. Lotti, U. Wollina, G. Tchernev, K. França, *Open Access Macedonian Journal of Medical Sciences*, 6 (2018), 20-24
- P55 From Batch to Flow Stripping Analysis with Screen-Printed Electrodes: A Possible Way to Decentralize Trace Inorganic Analysis, C. Dossi, D. Monticelli, A. Pozzi, S. Recchia, *Chemosensors*, 6 (2018), 37
- P56 How to efficiently produce ultrapure acids, D. Monticelli , A. Castelletti, D. Civati, S. Recchia, C. Dossi, *International Journal of Analytical Chemistry*, Volume 2019, Article ID 5180610, 5 pages
- P57 Fostering and understanding iron detection at the ultratrace level by adsorptive stripping voltammetry with catalytic enhancement, F. Sanvito, L. Pacileo, D. Monticelli, *Electroanalysis*, 31 (2019), 212-216
- P58 Trace elements and POPs in two commercial shark species from Djibouti: Implications for human exposure, G. Boldrocchi, D. Monticelli, Y. Moussa Omar, R. Bettinetti, *Science of The Total Environment*, 669 (2019), 637-648
- P59 Chemical Characterization of Hydrogels Crosslinked with Polyethylene Glycol for Soft Tissue Augmentation, D. Monticelli, V. Martina, R. Mocchi, R. Rauso, U. Zerbinati, G. Cipolla, N. Zerbinati, *Open Access Macedonian Journal of Medical Sciences*, 7 (2019), 1077-1081
- P60 Strategies for the characterization and optimization of adsorptive stripping voltammetry with catalytic enhancement for ultratrace element determination: The case of iron 2,3-

- dihydroxynaphthalene complex with catalytic enhancement by atmospheric oxygen, F. Sanvito, A. Maspero, D. Monticelli, *Electrochimica Acta* 321 (2019), 134653
- P61 Introducing Frontal Chromatography–Inductively Coupled Plasma-Mass Spectrometry as a Fast Method for Speciation Analysis: The Case of Inorganic Arsenic, D. Spanu, C. Dossi, D. Monticelli, L. Rampazzi, S. Recchia, *Analytical Chemistry* 91 (2019), 13810-13817
- P62 Trace element quantification in light fuels by total reflection X-ray fluorescence spectrometry, A. Cinosi, G. Siviero, D. Monticelli, R. Furian, *Spectrochimica Acta Part B: Atomic Spectroscopy* 164 (2020), 105749
- P63 Chemical and mechanical characterization of hyaluronic acid hydrogel cross-linked with polyethylene glycol and its use in dermatology, N. Zerbinati, C. Esposito, G. Cipolla, A. Calligaro, D. Monticelli, V. Martina, M. Golubovic, I. Binic, J. Sigova, A. L. Gallo, E. D'Este, M. Jafferany, M. Protasoni, M. Tirant, N. Van Thuong, F. Sangalli, R. Rauso, T. Lotti, *Dermatologic Therapy* 33 (2020), art. no. e13747
- P64 First concurrent assessment of elemental- and organic-contaminant loads in skin biopsies of whale sharks from Djibouti , G. Boldrocchi, D. Monticelli, L. Butti, M. Omar, R. Bettinetti, *Science of the Total Environment* 722 (2020), art. no. 137841
- P65 Fast iron speciation in seawater by catalytic Competitive Ligand Equilibration-Cathodic Stripping Voltammetry with tenfold sample size reduction, F. Sanvito, D. Monticelli, *Analytica Chimica Acta* 1113 (2020), 9-17
- P66 High-throughput, multi-batch system for the efficient microwave digestion of biological samples, D. Spanu, L. Butti, G. Boldrocchi, R. Bettinetti, D. Monticelli, *Analytical Sciences* 36 (2020), 889-892
- P67 The use of iron chemical analysis of podzols to date the Late Pleistocene–Holocene deglaciation history of the Central Italian Alps, A. Longhi, D. Monticelli, M. Guglielmin, *Journal of Quaternary Science* 35 (2020), 1021-1035
- P68 Biochar as an alternative sustainable platform for sensing applications: A review, D. Spanu, G. Binda, C. Dossi, D. Monticelli, *Microchemical Journal* 159 (2020), art. no. 105506
- P69 Exploiting Laser-Ablation ICP-MS for the Characterization of Salt-Derived Bismuth Films on Screen-Printed Electrodes: A Preliminary Investigation, C. Dossi, G. Binda, D. Monticelli, A. Pozzi, S. Recchia, D. Spanu, *Biosensors* 10 (2020), art. no. 119
- P70 INSIDE Project: Individual Air Pollution Exposure, Extracellular Vesicles Signaling and Hypertensive Disorder Development in Pregnancy, Ferrari L. et al., *International Journal of Environmental Research and Public Health* 17 (2020), art. no. 9046

- P71 One-minute highly selective Cr(VI) determination at ultra-trace levels: An ICP-MS method based on the on-line trapping of Cr(III), D. Spanu, D. Monticelli, G. Binda, C. Dossi, L. Rampazzi, S. Recchia, *Journal of Hazardous Materials* 412 (2021) art. no. 125280
- P72 The what, how, why, and when of dendrochemistry: (paleo)environmental information from the chemical analysis of tree rings, G. Binda, A. Di Iorio, D. Monticelli, *Science of the Total Environment* 758 (2021), art. no. 143672
- P73 Accumulation of Selected Trace Elements in Shads from Three Lakes: First Insights from Italian Pre-Alpine Area, G. Boldrocchi, D. Monticelli, M. Mazzoni, D. Spanu, R. Bettinetti, *Biological Trace Element Research* (2021) in press