

## ESTER MAROTTA – PUBLICATIONS LIST

### Publications in peer-reviewed journals

1. Francesco Tampieri, Agata Giardina, Franco Javier Bosi, Alice Pavanello, Ester Marotta, Barbara Zaniol, Gabriele Neretti, Cristina Paradisi. Removal of persistent organic pollutants from water using a newly developed atmospheric plasma reactor. *Plasma Process. Polym.*, DOI: 10.1002/ppap.201700207.
2. Franco Javier Bosi, Francesco Tampieri, Ester Marotta, Roberta Bertani, Daniele Pavarin, Cristina Paradisi. characterization and comparative evaluation of two atmospheric plasma sources for water treatment. *Plasma Process. Polym.* **2018**, 15, DOI: 10.1002/ppap.201700130.
3. E. Ceriani, E. Marotta, V. Shapoval, G. Favaro, C. Paradisi. Complete mineralization of organic pollutants in water by treatment with air non-thermal plasma. *Chem. Eng. J.* **2018**, 337, 567-575.
4. J. Madureira, E. Ceriani, N. Pinhão, E. Marotta, R. Melo, S. Cabo Verde, C. Paradisi, F.M.A. Margaça. Oxidation of clofibric acid in aqueous solution using a non-thermal plasma discharge or gamma radiation. *Chemosphere* **2017**, 187, 395-403.
5. Krishna, S. Ceriani, E., Marotta, E., Giardina, A., Špatenka, P., Paradisi, C. Products and mechanism of verapamil removal in water by air non-thermal plasma treatment, *Chem. Eng. J.* **2016**, 292, 35-41.
6. B. M. Cadorin, V. D. Tralli, E. Ceriani, L. O. Benetoli, E. Marotta, C. Ceretta, N. A. Debacher. Treatment of methyl orange by nitrogen non-thermal plasma in a corona reactor: The role of reactive nitrogen species. *J. Hazard. Mater.* **2015**, 300, 754-764.
7. M. Azzolini, A. Mattarei, M. La Spina, E. Marotta, M. Zoratti, C. Paradisi, L. Biasutto. Synthesis and evaluation as prodrugs of hydrophilic carbamate ester analogues of resveratrol. *Mol. Pharm.* **2015**, 12, 3441-3454.
8. V. Shapoval, E. Marotta. Investigation on plasma-driven methane dry reforming in a self-triggered spark reactor. *Plasma Process. Polym.* **2015**, 12, 808-816.
9. V. Shapoval, E. Marotta, C. Ceretta, N. Konjevic, M. Ivkovic, M. Schiorlin, C. Paradisi. Development and testing of a self-triggered spark reactor for plasma driven dry reforming of methane. *Plasma Process. Polym.* **2014**, 11, 787-797.
10. M. Schiorlin, E. Marotta, M. Dal Molin, C. Paradisi. Oxidation mechanisms of CF<sub>2</sub>Br<sub>2</sub> and CH<sub>2</sub>Br<sub>2</sub> induced by air nonthermal plasma. *Environ. Sci. Technol.* **2013**, 47, 542-548.
11. E. Marotta, E. Ceriani, M. Schiorlin, C. Ceretta, C. Paradisi. Comparison of the rates of phenol advanced oxidation in deionized and tap water within a dielectric barrier discharge reactor. *Water Res.* **2012**, 46, 6239-6246.
12. S. Otto, A. Cardinali, E. Marotta, C. Paradisi, G. Zanin. Effect of vegetative filter strips on herbicide runoff under various types of rainfall. *Chemosphere* **2012**, 88, 113-119.

13. A. Mattarei, N. Sassi, C. Durante, L. Biasutto, G. Sandonà, E. Marotta, S. Garbisa, A. Gennaro, C. Paradisi, M. Zoratti. Redox properties and cytotoxicity of synthetic isomeric mitochondriotropic derivatives of the natural polyphenol quercetin, *Eur. J. Org. Chem.* **2011**, 5577-5586.
14. M. Schiorlin, E. Marotta, H.-H. Kim, C. Paradisi, A. Ogata Determination of atomic oxygen in atmospheric plasma from oxygen isotope exchange, *Plasma Process. Polym.* **2011**, *8*, 859–866.
15. E. Marotta, M. Schiorlin, X. Ren, M. Rea, C. Paradisi. Advanced oxidation process for degradation of aqueous phenol in a dielectric barrier discharge reactor, *Plasma Process. Polym.* **2011**, *8*, 867–875.
16. E. Schievano, I. Menegazzo, E. Marotta, S. Mammi. Structure elucidation of the dye Acid Red 131: complete (1)H, (13)C and (15)N NMR data assignment. *Magn. Res. Chem.* **2011**, *49*, 523-528.
17. E. Marotta, E. Ceriani, V. Shapoval, M. Schiorlin, C. Ceretta, M. Rea, C. Paradisi. Characterization of plasma induced phenol advanced oxidation process in a DBD reactor. *Eur. Phys. J. - Appl. Phys.* **2011**, *55*, 13811.
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19. L. Biasutto, E. Marotta, S. Garbisa, M. Zoratti, C. Paradisi. Determination of quercetin and resveratrol in whole blood - Implications for bioavailability studies. *Molecules* **2010**, *15*(9), 6570-6579.
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23. M. Schiorlin, E. Marotta, M. Rea, C. Paradisi. A comparison of toluene removal in air at atmospheric conditions by different corona discharges. *Environ. Sci. Technol.* **2009**, *24*, 9386-9392.
24. L. Biasutto, E. Marotta, A. Bradaschia, M. Fallica, A. Mattarei, S. Garbisa, M. Zoratti, C. Paradisi. Soluble polyphenols: Synthesis and bioavailability of 3,4',5-tri( $\alpha$ -D-glucose-3-O-succinyl) resveratrol. *Bioorg. Med. Chem. Lett.* **2009**, *19*, 6721-6724.
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33. B. Zaniol, M. Schiorlin, E. Gazza, E. Marotta, X. Ren, M. Puiatti, M. Rea, P. Sonato, C. Paradisi. An emission spectroscopy study of atmospheric plasmas formed by DC and pulsed corona discharges in hydrocarbon contaminated air. *Int. J. Plasma Env. Sci. Technol.* **2008**, *2*, 65-71.
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41. L. Tušek-Božić, A. Višnjevac, E. Marotta, B. Kojić-Prodić. The inside and outside protonation of a 15-membered O 2N 2-macrocyclic. Synthesis and structural characterization of the protonated ligand salts. *Polyhedron* **2005**, *24*, 97-111.
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53. A. Lapolla, R. Flamini, T. Tonus, D. Fedele, A. Senesi, R. Reitano, E. Marotta, G. Pace, R. Seraglia, P. Traldi. An effective derivatization method for quantitative determination of glyoxal and methylglyoxal in plasma samples by gas chromatography/mass spectrometry. *Rapid Commun. Mass Spectrom.* **2003**, *17*, 876-878.
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56. E. Marotta, P. Traldi. On the photo-initiated isomerization of acetonitrile. *Rapid Commun. Mass Spectrom.* **2003**, *17*, 2846-2848.
57. E. Marotta, C. Paradisi. Isomerization and dissociation of  $C_2X_5^+$  and  $C_2X_4^+$  ions ( $X = Cl, F$ ) from chlorofluoroethanes in an ion trap mass spectrometer. *J. Mass. Spectrom.* **2002**, *37*, 1280-1286.
58. E. Marotta, A. M. Gioacchini, F. Tisato, A. Cagnolini, L. Uccelli, P. Traldi. Electrospray ionization in the characterization of *mer* and *fac* isomeric forms of  $[Re(N)Cl_2(POP)]$  (POP= bis[(2-diphenylphosphino)ethyl]ether). *Rapid Commun. Mass Spectrom.* **2001**, *15*, 2046-2049.
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## Book chapters

1. M. Schiorlin, C. Paradisi, R. Brandenburg, M. Schmidt, E. Marotta, A. Giardina, R. Basner. Pollutant degradation in gas streams by means of non-thermal plasmas in "Current Air Quality Issues", Edited by Farhad Nejadkoorki, InTech **2015**, pages 4-34, ISBN 978-953-51-2180-0.
2. E. Marotta, M. Schiorlin, M. Rea, C. Paradisi. Chemistry of organic pollutants in atmospheric plasmas. In *Industrial Plasma Technology*, edited by Y. Kawai, H. Ikegami, N. Sato, A. Matsuda, K. Uchino, M. Kuzuya, A. Mizuno, Wiley-VCH Verlag GmbH & Co. KGaA, Weinheim **2010**.
3. P. Traldi, E. Marotta. Some experiments and thoughts on atmospheric pressure photoionization. *Adv. Mass Spectrom.* **2004**, *16*, 275-293. Advances in Mass Spectrometry. Plenary and Keynote Lectures of the 16th International Mass Spectrometry Conference, Edinburgh, Scotland, AUG 31-SEP 05, 2003 Edited by: A. E. Ashcroft, G. Brenton, J. J. Monaghan, eBook ISBN: 9780080930541.

## Patents

1. A. Mattarei, L. Biasutto, M. Zoratti, C. Paradisi E. Marotta, S. Garbisa, M. Azzolini, A. Bradaschia, M. Carraro, N. Sassi. "Nuovi derivati del resveratrolo", Attestato di brevetto per invenzione industriale N. 0001416513, Roma, 19/06/2015.