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CURRICULUM VITAE

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CURRICULUM VITAE

- Nato a Moncalieri (TO) il 14/10/1974.

Posizione attuale (dal 1/9/2018): Professore ordinario presso il Dipartimento di Chimica dell'Università di Torino. Attività di ricerca: fotochimica delle acque naturali e dell'atmosfera, applicazione di metodi avanzati di ossidazione per il trattamento di acque contaminate. Docente di Chimica dei Sistemi Acquatici (6 CFU, LM – Chimica dell'Ambiente), Chimica dell'Ambiente (4 CFU, LM - Scienze dei Sistemi Naturali), Laboratorio di Chimica Analitica (LT - Chimica e Tecnologie Chimiche) e Fattori di Rischio Chimici (2 CFU, LT – Tecniche della Prevenzione nell'Ambiente e nei Luoghi di Lavoro).

Attività precedenti:

- Ottobre 2011-Agosto 2018: Professore associato, Dipartimento di Chimica, Università di Torino.
- Novembre 2002-Settembre 2011: Ricercatore presso il Dipartimento di Chimica Analitica dell'Università di Torino.
- Novembre 2001-Ottobre 2002: Assegno di Ricerca bandito dall'Università di Torino per lo svolgimento di una attività di ricerca dal titolo: "Trasformazioni indotte dalla luce di composti organici di interesse ambientale".
- Novembre 1998-Ottobre 2001: Dottorato di Ricerca in Scienze Chimiche, XIV ciclo, presso il Dipartimento di Chimica Analitica dell'Università di Torino. Tesi di dottorato dal titolo "Transformations of Aromatic Compounds in the Presence of Nitrate and Nitrite in Aqueous Systems", relatore Prof. Ezio Pelizzetti.
- Settembre-Ottobre 1998: Borsa di studio bandita dal Consorzio Interuniversitario Nazionale "La Chimica per l'Ambiente" per l'elaborazione di un progetto di ricerca sul tema: "Formazione e monitoraggio di composti tossici nell'aria cittadina".
- Esame di Stato per l'abilitazione alla professione di Chimico superato nella sessione invernale 1998/99 con la votazione di 92/100.
- Laurea in Chimica conseguita il giorno 7/7/1998 presso l'Università degli Studi di Torino. Voto di laurea: 110/110 con lode, menzione e dignità di stampa. Titolo della tesi sperimentale: "Trasformazioni del fenolo indotte dalla fotolisi UV di ioni nitrato e nitrito in soluzione acquosa", relatore Prof. Ezio Pelizzetti. Esami superati: 29. Media esami: 30/30. Numero di lodi: 18.

Premi e riconoscimenti

- Premio Nazionale "Federchimica - per un futuro intelligente", X edizione (1998), sezione laureandi.
- Premio "Optime" (Unione Industriale di Torino, edizione 1999).
- Medaglia dell'Università di Torino per la migliore tesi di laurea in Chimica, edizione 1999.
- Premio Nazionale "Federchimica - per un futuro intelligente", XII edizione (2000), sezione tesi di laurea.
- Premio per Tesi di Dottorato in Chimica dell'Ambiente (2002), bandito dal Consorzio Interuniversitario Nazionale "La Chimica per l'Ambiente" (INCA).
- Premio Giovane Ricercatore 2003 (Società Chimica Italiana, Divisione di Chimica Analitica).
- European Young Researcher of the Year Award 2003 (European Association of Chemistry and the Environment, ACE).
- Visiting professor presso il Laboratoire de Photochimie Moleculaire et Macromoleculaire, Université Blaise Pascal, Aubiere, Francia (Febbraio 2009, Febbraio 2011, Febbraio 2013, Febbraio 2015).
- Visiting Scientist, Swiss Federal Institute of Water Science and Technology (Eawag), Duebendorf, Swizerland, Febbraio 2017.

CURRICULUM VITAE

- Born in Moncalieri (Province of Torino, Italy) on 14 October 1974.

Present position (from 1 September 2019): Full Professor in the Department of Chemistry, University of Torino. Research interests: photochemistry of surface and atmospheric waters, heterogeneous photocatalysis and its applications in the environmental and cosmetic fields, application of advanced oxidation processes (Fenton reaction, sonochemistry) to soil remediation, chemical education. As of February 2019 the Scopus database reported 230 entries under his name, with h-index = 41 and around 6200 citations. He also authored two books, 16 book chapters and presented more than 100 congress communications. Teaching activity: Chemistry of Aquatic Systems, Environmental Chemistry, Laboratory of Analytical Chemistry, Chemical Risk Factors.

Previous activities

- October 2011 – August 2018: Associate Professor, Department of Chemistry, University of Torino.
- November 2002 – September 2011. University Lecturer in the Department of Analytical Chemistry, University of Torino.
- November 2001 – October 2002: Research scholarship given by the University of Torino on the issue: "Phototransformations of Organic Compounds Relevant to the Environment".
- November 1998 – October 2001. Ph. D. course in Chemistry in the Department of Analytical Chemistry, University of Torino. Ph. D. thesis: "Transformations of Aromatic Compounds in the Presence of Nitrate and Nitrite in Aqueous Systems", supervisor Prof. Ezio Pelizzetti.
- September – October 1998: Scholarship given by the Italian Interuniversity Consortium "Chemistry for the Environment" (INCA) for the writing of a research project entitled "Formation and Monitoring of Unknown and Toxic Compounds in Urban Air".
- M. Sc. Degree in Chemistry obtained on 7 July 1998 at the University of Torino. Mark: 110/110 with highest honours. Discussion of the thesis: "Transformations of Phenol Induced by the UV Photolysis of Nitrate and Nitrite in Aqueous Systems", supervisor Prof. Ezio Pelizzetti.

Awards/Acknowledgements

- Award Federchimica (= Italian Federation of Chemical Industries), 10th edition (1998), undergraduates.
- Prize "Optime" for the undergraduate curriculum (Industrial Union of Torino, 1999).
- University of Torino medal for the best M. Sc. Thesis in Chemistry, 1999.
- Award Federchimica, 12th edition (2000), M. Sc. Thesis section.
- Award for the best Ph. D. thesis in Environmental Chemistry (INCA consortium, 2002).
- Young Researcher Award 2003 (Analytical Chemistry Division – Italian Chemical Society).
- European Young Researcher of the Year Award 2003 (European Association of Chemistry and the Environment, ACE).
- Visiting Professor in the Laboratoire de Photochimie Moleculaire et Macromoleculaire, Université Blaise Pascal, Aubiere, France (February 2009, February 2011, February 2013, February 2015).
- Visiting Scientist, Swiss Federal Institute of Water Science and Technology (Eawag), Duebendorf, Swizerland, February 2017.
- Excellence in Review Awards 2017: *Environmental Science & Technology*, *Water Research*.
- From January 2017: Editorial advisory board member, *Environmental Science & Technology*.
- Listed among the *Top Italian Scientists* (*http://www.topitalianscientists.org/top_italian_scientists_VIA-Academy_Italian_Institution.aspx?Italian_Institution=Torino*).

Research projects and other activities

Dr. Davide Vione has been a member of the international scientific committee of the Congress "Pesticides 2008" (Marseille, 22-25 October 2008)**.** He has taken part in the following research projects: PNRA - Antarctica Project (sector 9: Chemistry of the Polar Environments), CNR - Agenzia 2000, PRIN 2003 (project 2003035534_001), PRIN 2007 (2007L8Y4NB, Area 02, project n. 36, "Dirigibile Italia: A platform for a multidisciplinary study of climate change in the Arctic region and its influence on temperate latitudes"), PRIN 20092C7KRC-ARCTICA, and the co-operation program between the University of Torino and the University of Calcutta (MIUR - India project).

He has been co-presenter of two financed regional projects (CIPE 2004, "Chemical and biological studies of atmospheric particulate matter as a risk factor for human health"; CIPE 2006, "Elaboration of a risk-assessment oriented monitoring system for the quality of drinking water").

He has been project coordinator within the Scientific and Technological Co-operation Agreement between Italy and Romania (EQUILIBRIAAS-PRO: "Environmental Quality Understanding Inferred by Laboratory Investigation of the Borne pollutants Released by Industrial and Agricultural Activities in a Small Part of Romania") and within the NATO "Science for Peace" program (Collaborative Linkage Grant no. 982287; "Pesticides and Nitrate Levels in Rainwater and Groundwater of Iasi – Romania"). He is coordinating two Lagrange research grants, “Unraveling the complex interaction between molecules and ecosystems in surface-water photochemistry” and “Assessment of pesticide persistence under sunlight”. Last but not least, he is coordinator of the project PHOTONIT ("Phototransformation and photonitration processes of aromatic compounds in surface waters: Environmental significance and impact on living organisms", PIIF-GA-2008-219350), within the FP7-PEOPLE Program (Marie Curie fellowship, beneficiary Dr. Pratap Reddy Maddigapu).

International collaborations

- Dr. Gilles Mailhot, Dr. Marcello Brigante, Institut de Chimie de Clermont Ferrand, Université Blaise Pascal, Aubière, France.
- Dr. Donald Dabdub, Department of Aerospace and Mechanical Engineering, University of California, Irvine, CA, USA.
- Dr. Alexandre Albinet, INERIS, Verneuil-en-Halatte, France.
- Prof. Romeo-Iulian Olariu and Dr. Cecilia Arsene, Department of Inorganic and Analytical Chemistry, "Al. I. Cuza" University of Iasi, Romania.
- Dr. Birgit Koehler, Prof. Lars J. Tranvik, Department of Ecology and Genetics, Limnology, University of Uppsala, Sweden.
- Dr. Silvio Canonica, Swiss Federal Institute of Environmental Science and Technology (Eawag), Duebendorf, Swizerland.
- Dr. Miguel A. Vicente, Department of Inorganic Chemistry, University of Salamanca, Spain.
- Prof. Ruben Sommaruga, Institute of ecology, University of Innsbruck, Austria.
- Prof. Tamar Kohn, EPLF, Lausanne, Switzerland.
- Prof. Sasho Gligorovski, Guangzhou Institute of Geochemistry, Chinese Academy of Sciences, China.
- Dr. Radharani Das, Haldja Institute of Technology, Haldja, India.
- Prof. Biljana Abramovic, Department of Chemistry, University of Novi Sad, Serbia.
- Prof. Khan M. G. Mostofa, Institute of Geochemistry, Chinese Academy of Sciences, P. R. China.

ARTICOLI SCIENTIFICI / SCIENTIFIC PAPERS (PEER-REVIEWED JOURNALS)

1) C. Minero, G. Mariella, V. Maurino, D. Vione, E. Pelizzetti. Photocatalytic Transformation of Organic Compounds in the Presence of Inorganic Ions. 2. Competitive Reactions of Phenol and Alcohols on a Titanium Dioxide-Fluoride System. *Langmuir* **2000**, *16*, 8694-8972.
2) D. Vione, V. Maurino, C. Minero, M. Vincenti, E. Pelizzetti. Formation of Nitrophenols upon UV Irradiation of Phenol and Nitrate in Aqueous Solutions and in TiO_2 Aqueous Suspensions. *Chemosphere* **2001***, 44*, 237-248.
3) D. Vione, V. Maurino, C. Minero, E. Pelizzetti. Phenol Photonitration upon UV Irradiation of Nitrite in Aqueous Solution I: Effects of Oxygen and 2-Propanol. *Chemosphere* **2001**, *45*, 893-902.
4) D. Vione, V. Maurino, C. Minero, E. Pelizzetti. Phenol Photonitration upon UV Irradiation of Nitrite in Aqueous Solution II: Effects of pH and TiO_2. *Chemosphere* **2001**, *45*, 903-910.
5) T. Picatonotto, D. Vione, M. E. Carlotti, M. Gallarate. Photocatalytic Activity of Inorganic Sunscreens. *J. Disp. Sci. Technol.* **2001**, *22*, 381-386.
6) D. Vione, V. Maurino, C. Minero, E. Pelizzetti. New Processes in the Environmental Chemistry of Nitrite: Nitration of Phenol upon Nitrite Photoinduced Oxidation. *Environ. Sci. Technol.* **2002**, *36*, 669-676.
7) D. Vione, V. Maurino, C. Minero, E. Pelizzetti. Phenol Photonitration. *Ann. Chim. (Rome)* **2002**, *92*, 919-929.
8) T. Picatonotto, D. Vione, M. E. Carlotti. Effect of Some Additives used in the Cosmetic Field on the Photocatalytic Activity of Rutile. *J. Disp. Sci. Technol.* **2002**, *23*, 845-852.
9) V. Rossatto, T. Picatonotto, D. Vione, M. E. Carlotti. Behavior of Some Rheological Modifiers Used in Cosmetics Under Photocatalytic Conditions. *J. Disp. Sci. Technol.* **2003**, *24*, 259-271.
10) D. Vione, V. Maurino, C. Minero, E. Pelizzetti. The Atmospheric Chemistry of Hydrogen Peroxide: a Review. *Ann. Chim. (Rome)* **2003**, *93*, 477-488.
11) D. Vione, V. Maurino, C. Minero, M. Vincenti, E. Pelizzetti. Aromatic Photonitration in Homogeneous and Heterogeneous Aqueous Systems. *Environ. Sci. Poll. Res.* **2003**, *10*, 321-324.
12) D. Vione, V. Maurino, C. Minero, D. Borghesi, M. Lucchiari, E. Pelizzetti. New Processes in the Environmental Chemistry of Nitrite 2. The Role of Hydrogen Peroxide. *Environ. Sci. Technol.* **2003**, *37*, 4635-4641.
13) D. Vione, T. Picatonotto, M. E. Carlotti. Photodegradation of Phenol and Salicylic Acid by Coated Rutile-Based Pigments: A New Approach for the Assessment of Sunscreen Treatment Efficiency. *J. Cosmet. Sci.* **2003**, *54*, 513-524.
14) B. Caccetta, G. Gallo, A. Regis, D. Vione, E. Roletto. Costruire i concetti di acido e di base. *CnS – La Chimica nella Scuola* **2003**, *Maggio-Giugno*, 81-91.
15) L. Pozzoli, S. Gilardoni, M. G. Perrone, G. De Gennaro, M. De Rienzo, D. Vione. Polycyclic Aromatic Hydrocarbons in the Atmosphere: Monitoring, Sources, Sinks and Fate. I: Monitoring and Sources. *Ann. Chim. (Rome)* **2004**, *94*, 17-32.
16) D. Vione, S. Barra, G. De Gennaro, M. De Rienzo, S. Gilardoni, M. G. Perrone, L. Pozzoli. Polycyclic Aromatic Hydrocarbons in the Atmosphere: Monitoring, Sources, Sinks and Fate. II: Sinks and Fate. *Ann. Chim. (Rome)* **2004**, *94*, 257-268.
17) D. Vione, V. Maurino, E. Pelizzetti, C. Minero. Phenol Photonitration and Photonitrosation upon Nitrite Photolysis in Basic Solution. *Intern. J. Environ. Anal. Chem.* **2004**, *84*, 493-504.
18) M. E. Carlotti, S. Sapino, D. Vione, E. Pelizzetti, M. Trotta. Photostability of Trolox in Water/Ethanol, Water, and Oramix CG 110 in the Absence and in the Presence of TiO_2. *J. Disp. Sci. Technol.* **2004**, *25*, 193-207.

19) D. Vione, V. Maurino, C. Minero, E. Pelizzetti. Phenol Nitration upon Oxidation of Nitrite by Mn(III,IV) (Hydr)oxides. *Chemosphere* **2004**, *55*, 941-949.
20) D. Vione, V. Maurino, C. Minero, M. Lucchiari, E. Pelizzetti. Nitration and Hydroxylation of Benzene in the Presence of Nitrite/Nitrous acid in Aqueous Solution. *Chemosphere* **2004**, *56*, 1049-1059.
21) D. Vione, F. Merlo, V. Maurino, C. Minero. Effect of Humic Acids on the Fenton Degradation of Phenol. *Environ. Chem. Lett.* **2004**, *2*, 129-133.
22) D. Vione, S. Belmondo, L. Carnino. A Kinetic Study of Phenol Nitration and Nitrosation with Nitrous Acid in the Dark. *Environ. Chem. Lett.* **2004**, *2*, 135-139.
23) M. A. J. Harrison, S. Barra, D. Borghesi, D. Vione, C. Arsene, R. I. Olariu. Nitrated Phenols in the Atmosphere: a Review. *Atmos. Environ.* **2005**, *39,* 231-248.
24) D. Vione, C. Minero, V. Maurino, M. E. Carlotti, T. Picatonotto, E. Pelizzetti. Degradation of Phenol and Benzoic Acid in the Presence of a TiO_2-Based Heterogeneous Photocatalyst. *Applied Catal. B: Environ.* **2005**, *58*, 79-88.
25) D. Vione, V. Maurino, C. Minero, E. Pelizzetti. Nitration and Photonitration of Naphthalene in Aqueous Systems. *Environ. Sci. Technol.* **2005**, *39*, 1101-1110.
26) M. E. Carlotti, S. Sapino, D. Vione, E. Pelizzetti, M. Trotta, L. Battaglia. Photostability and Stability over Time of Retinyl Palmitate in an O/W Emulsion and in SLN Introduced in the Emulsion. *J. Disp. Sci. Technol.* **2005**, *26*, 125-138.
27) D. Vione, M. E. Carlotti. Inhibition of the Photocatalytic Degradation of Benzoic and Salicylic Acid by Non-Toxic Aromatic Compounds. *J. Disp. Sci. Technol.* **2005**, *26*, 163-168.
28) M. E. Carlotti, S. Sapino, D. Vione, E. Pelizzetti, E. Ugazio, S. Morel. Study on the photostability of octyl-p-methoxy cinnamate in SLN. *J. Disp. Sci. Technol.* **2005**, *26*, 809-816.
29) S. Sapino, M. E. Carlotti, E. Pelizzetti, D. Vione, M. Trotta, L. Battaglia. Protective Effect of SLNs Encapsulation on the Photodegradation and Thermal Degradation of Retinyl Palmitate Introduced in Hydroxyethylcellulose Gel. *J. Drug Del. Sci. Technol.* **2005**, *15*, 159-165.
30) D. Vione, V. Maurino, C. Minero, P. Calza, E. Pelizzetti. Phenol Chlorination and Photochlorination in the Presence of Chloride Ions in Homogeneous Aqueous Solution. *Environ. Sci. Technol.* **2005**, *39,* 5066-5075.
31) D. Vione, V. Maurino, C. Minero, E. Pelizzetti. Aqueous Atmospheric Chemistry: Formation of 2,4-Dinitrophenol upon Nitration of 2-Nitrophenol and 4-Nitrophenol in Solution. *Environ. Sci. Technol.* **2005**, *39*, 7921-7931.
32) C. Minero, M. Lucchiari, D. Vione, V. Maurino. Fe(III)-Enhanced Sonochemical Degradation of Methylene Blue in Aqueous Solution. *Environ. Sci. Technol.* **2005**, *39*, 8936-8942.
33) D. Borghesi, D. Vione, V. Maurino, C. Minero. Transformations of Benzene Photoinduced by Nitrate Salts and Iron Oxide. *J. Atmos. Chem.* **2005**, *52*, 259-281.
34) D. Vione, V. Maurino, C. Minero, E. Pelizzetti, M. A. J. Harrison, R. I. Olariu, C. Arsene. Photochemical Reactions in the Tropospheric Aqueous Phase and on Particulate Matter. *Chem. Soc. Rev.* **2006**, *35*, 441-453.
35) D. Vione, G. Falletti, V. Maurino, C. Minero, E. Pelizzetti, M. Malandrino, R. Ajassa, R.I. Olariu, C. Arsene. Sources and Sinks of Hydroxyl Radicals upon Irradiation of Natural Water Samples. *Environ. Sci. Technol.* **2006**, *40*, 3775-3781.
36) C. Minero, V. Maurino, E. Pelizzetti, D. Vione. An Empirical, Quantitative Approach to Predict the Reactivity of Some Substituted Aromatic Compounds towards Reactive Radical Species ($Cl_2^{-\bullet}$, $Br_2^{-\bullet}$, $^{\bullet}NO_2$, $SO_3^{-\bullet}$, $SO_4^{-\bullet}$) in Aqueous Solution. *Environ. Sci. Pollut. Res.* **2006**, *13*, 212-214.
37) C. Minero, D. Vione. A Quantitative Evaluation of the Photocatalytic Performance of TiO_2 Slurries. *Applied Catal. B: Environ.* **2006,** *67*, 257-269.

38) B. L. Iurascu, I. Simiceaunu, D. Vione. Preparation and characterization of a new photocatalyst from synthetic Laponite clays. *Bul. Instit. Polit. Iasi* **2006**, *51*, 1-10.
39) S. Chiron, C. Minero, D. Vione. Photodegradation Processes of the Antiepileptic Drug Carbamazepine, Relevant to Estuarine Waters. *Environ. Sci. Technol.* **2006**, *40*, 5977-5983.
40) C. Minero, F. Bono, F. Rubertelli, D. Pavino, V. Maurino, E. Pelizzetti, D. Vione. On the Effect of pH in Aromatic Photonitration upon Nitrate Photolysis. *Chemosphere* **2007**, *66*, 650-656.
41) S. Chiron, C. Minero, D. Vione. Photodegradation of Xenobiotic Compounds Relevant to Estuarine Waters. *Ann. Chim. (Rome)* **2007**, *97*, 135-139.
42) C. Minero, S. Chiron, G. Falletti, V. Maurino, E. Pelizzetti, R. Ajassa, M. E. Carlotti, D. Vione. Photochemical Processes Involving Nitrite in Surface Water Samples. *Aquat. Sci.* **2007**, *69*, 71-85.
43) S.Sapino, M. E. Carlotti, R.Cavalli, M.Trotta, F.Trotta, D.Vione. Effect of Alkyl-γ-Cyclodextrins on the Stability of Retinol. *J. Incl. Phenom. Macrocycl. Chem.* **2007**, *57*, 451-455.
44) S. Chiron, C. Minero, D. Vione. Occurrence of 2,4-Dichlorophenol and of 2,4-Dichloro-6-nitrophenol in the Rhône River Delta (Southern France). *Environ. Sci. Technol.* **2007**, *41*, 3127-3133.
45) C. Minero, V, Maurino, E. Pelizzetti, D. Vione. Assessing the Steady-State [$^{\bullet}NO_2$] in Environmental Samples. Implications for Aromatic Photonitration Processes Induced by Nitrate and Nitrite. *Environ. Sci. Pollut. Res.* **2007**, *14*, 241-243.
46) D. Vione, C. Minero, A. Hamraoui, M. Privat. Modelling Photochemical Reactions in Atmospheric Water Droplets: An Assessment of the Importance of Surface Processes. *Atmos. Environ.* **2007**, *41*, 3303-3314.
47) C. Minero, V. Maurino, F. Bono, E. Pelizzetti, A. Marinoni, G. Mailhot, M. E. Carlotti, D. Vione. Effect of Selected Organic and Inorganic Snow and Cloud Components on the Photochemical Generation of Nitrate by Nitrite Irradiation. *Chemosphere* **2007**, *68*, 2111-2117.
48) C. Minero, V. Lauri, V. Maurino, E. Pelizzetti, D. Vione. A Model to Predict the Steady-State Concentration of Hydroxyl Radicals in the Surface Layer of Natural Waters. *Ann. Chim. (Rome)* **2007**, *97*, 685-698.
49) M. E. Carlotti, S. Sapino, D. Vione, C. Minero, E. Peira, M. Trotta. Study on the Photodegradation of Salicylic Acid in Different Vehicles in the Absence and in the Presence of TiO_2. *J. Disp. Sci. Technol.* **2007**, *28*, 805-818.
50) D. Vione, C. Minero, V. Maurino, E. Pelizzetti. Seasonal and Water Column Trends of the Relative Role of Nitrate and Nitrite as $^{\bullet}OH$ Sources in Surface Waters. *Ann. Chim. (Rome)* **2007**, *97*, 699-711.
51) C. Minero, V. Lauri, G. Falletti, V. Maurino, E. Pelizzetti, D. Vione. Spectrophotometric Characterisation of Surface Lakewater Samples: Implications for the Quantification of Nitrate and the Properties of Dissolved Organic Matter. *Ann. Chim. (Rome)* **2007**, *97*, 1107-1116.
52) D. Vione, C. Minero, F. Housari, S. Chiron. Photoinduced Transformation Processes of 2,4-Dichlorophenol and 2,6-Dichlorophenol on Nitrate Irradiation. *Chemosphere* **2007**, *69*, 1548-1554.
53) M. E. Carlotti, S. Sapino, D. Vione, C. Minero, M. Trotta, M. Gallarate. Photostability of Octyl-P-Methoxy Cinnamate on O/W Emulsions and in SLNs Vehicled in the Emulsions. *J. Disp. Sci. Technol.* **2007**, *28*, 1034-1043.
54) C. Minero, P. Pellizzari, V. Maurino, E. Pelizzetti, D. Vione. Enhancement of Dye Sonochemical Degradation by Some Inorganic Anions Present in Natural Waters. *Appl. Catal. B: Environ.* **2008**, *77*, 308-316.
55) S. Khanra, C. Minero, V. Maurino, E. Pelizzetti, B. K. Dutta, D. Vione. Phenol Transformation Induced by UVA Photolysis of the Complex $FeCl^{2+}$. *Environ. Chem. Lett.* **2008**, *6*, 29-34.
56) V. Maurino, D. Borghesi, D. Vione, C. Minero. Transformation of Phenolic Compounds upon UVA Irradiation of Anthraquinone-2-sulphonate. *Photochem. Photobiol. Sci.* **2008**, *7*, 321-327.

57) D. Vione, V. Maurino, S. Cucu Man, S. Khanra, C. Arsene, R. I. Olariu, C. Minero. Formation of Organobrominated Compounds in the Presence of Bromide under Simulated Atmospheric Aerosol Conditions. *ChemSusChem* **2008**, *1*, 197-204.
58) M. E. Carlotti, S. Sapino, E. Ugazio, E. Peira, D. Vione, C. Minero. Photostability of Ferulic Acid and its Antioxidant Activity against Linoleic Acid Peroxidation. *J. Disp. Sci. Technol.* **2008**, *29*, 629-640.
59) E. Ugazio, M. E. Carlotti, S. Sapino, M. Trotta, D. Vione, C. Minero. Photodegradation of Cinnamic Acid in Different Media. *J. Disp. Sci. Technol.* **2008**, *29*, 641-652.
60) M. E. Carlotti, S. Sapino, S. Marino, E. Ugazio, F. Trotta, D. Vione, D. Chirio, R. Cavalli. Influence of Hydroxypropyl-β-cyclodextrin on the Photostability and Antiradical Activity of Trolox. *J. Incl. Phenom. Macrocycl. Chem.* **2008**, *61*, 279-287.
61) S. Chiron, S. Barbati, S. Khanra, B. K. Dutta, M. Minella, C. Minero, V. Maurino, E. Pelizzetti, D. Vione. Bicarbonate-Enhanced Transformation of Phenol upon Irradiation of Hematite, Nitrate, and Nitrite. *Photochem. Photobiol. Sci.* **2009**, *8*, 91-100.
62) S. Chiron, L. Comoretto, E. Rinaldi, V. Maurino, C. Minero, D. Vione. Pesticide By-Products in the Rhône Delta (Southern France). The Case of 4-Chloro-2-methylphenol and of its Nitroderivative. *Chemosphere* **2009**, *74*, 599-604.
63) B. Iurascu, I. Siminiceanu, D. Vione, M. A. Vicente, A. Gil. Phenol Degradation in Water through a Heterogeneous Photo-Fenton Process Catalyzed by Fe-treated Laponite. *Wat. Res.* **2009**, *43*, 1313-1322.
64) D. Vione, J. Feitosa-Felizzola, C. Minero, S. Chiron. Phototransformation of Selected Human-used Macrolides in Surface Water: Kinetics, Model Predictions and Degradation Pathways. *Wat. Res.* **2009**, *43*, 1959-1967.
65) D. Vione, V. Maurino, C. Minero, M. Duncianu, R. I. Olariu, C. Arsene, M. Sarakha, G. Mailhot. Assessing the Transformation Kinetics of 2- and 4-Nitrophenol in the Atmospheric Aqueous Phase. Implications for the Distribution of both Nitroisomers in the Atmosphere. *Atmos. Environ.* **2009**, *43*, 2321-2327.
66) D. Vione, V. Lauri, C. Minero, V. Maurino, M. Malandrino, M. E. Carlotti, R. I. Olariu, C. Arsene. Photostability and Photolability of Dissolved Organic Matter upon Irradiation of Natural Water Samples under Simulated Sunlight. *Aquat. Sci.* **2009**, *71*, 34-45.
67) D. Vione, V. Maurino, C. Minero, M. E. Carlotti, S. Chiron, S. Barbati. Modelling the Occurrence and Reactivity of the Carbonate Radical in Surface Freshwater. *C. R. Chimie* **2009**, *12*, 865-871.
68) D. Vione, I. Casanova, C. Minero, M. Duncianu, R. I. Olariu, C. Arsene. Assessing the Potentiality of Surface Waters to Produce $^{\bullet}OH$ and $^{\bullet}NO_2$ Radicals. *Rev. Chim.* **2009**, *60*, 123-126.
69) D. Vione, B. Ravizzoli, E. Rinaldi, F. Pettinato, R. I. Olariu, C. Arsene. Studies Regarding Groundwater Quality at Rural Sites. 1. Estimation of the Anthropic Factor Impact by Complementary Chemical Analyses. *Rev. Chim.* **2009**, *60*, 237-240.
70) D. Vione, E. Rinaldi, C. Minero, V. Maurino, R. I. Olariu, C. Arsene. Studies Regarding Groundwater Quality at Rural Sites. 2. Photochemical Generation of $^{\bullet}OH$ and $^{\bullet}NO_2$ Radicals upon UVA Irradiation of Nitrate-Rich Groundwater. *Rev. Chim.* **2009**, *60*, 551-554.
71) M. E. Carlotti, E. Ugazio, L. Gastaldi, S. Sapino, D. Vione, I. Fenoglio, B. Fubini. Specific Effects of Single Antioxidants in the Lipid Peroxidation caused by Nano-titania used in Sunscreen Lotions. *J. Photochem. Photobiol. B: Biol.* **2009**, *96*, 130-135.
72) D. Vione, S. Khanra, S. Cucu Man, P. R. Maddigapu, R. Das, C. Arsene. R. I. Olariu, V. Maurino, C. Minero. Inhibition vs. Enhancement of the Nitrate-induced Phototransformation of Organic Substrates by the $^{\bullet}OH$ Scavengers Bicarbonate and Carbonate. *Wat. Res.* **2009**, 43, 4718-4728.
73) D. Vione, M. Minella, C. Minero, V. Maurino, P. Picco, A. Marchetto, G. Tartari. Photodegradation of Nitrite in Lake Waters: Role of Dissolved Organic Matter. *Environ. Chem.* **2009**, *6*, 407-415.

74) R. Das, B. K. Dutta, V. Maurino, D. Vione, C. Minero. Suppression of Inhibition of substrate Photodegradation by Scavengers of Hydroxyl Radicals: The Solvent-Cage Effect of Bromide on Nitrate Photolysis. *Environ. Chem. Lett.* **2009**, *7*, 337-342.
75) D. Vione, M. Ponzo, D. Bagnus, V. Maurino, C. Minero, M. E. Carlotti. Comparison of Different Probe Molecules for the Quantification of Hydroxyl Radicals in Aqueous Solution. *Environ. Chem. Lett.* **2010**, *8*, 95-100.
76) D. Vione, R. Das, F. Rubertelli, V. Maurino, C. Minero, S. Barbati, S. Chiron. Modelling the Occurrence and Reactivity of Hydroxyl Radicals in Surface Waters: Implications for the Fate of Selected Pesticides. *Intern. J. Environ. Anal. Chem.* **2010**, *90*, 258-273.
77) F. al Housari, D. Vione, S. Chiron, S. Barbati. Reactive Photoinduced Species in Estuarine Waters. Characterization of Hydroxyl Radical, Singlet Oxygen and Dissolved Organic Matter Triplet State in Natural Oxidation Process. *Photochem. Photobiol. Sci.* **2010**, *9*, 78-86.
78) P. R. Maddigapu, A. Bedini, C. Minero, V. Maurino, D. Vione, M. Brigante, G. Mailhot, M. Sarakha. The pH-Dependent Photochemistry of Anthraquinone-2-sulphonate. *Photochem. Photobiol. Sci.* **2010**, *9*, 323-330.
79) M. Brigante, T. Charbouillot, D. Vione, G. Mailhot. Photochemistry of 1-Nitronaphthalene: A Potential Source of Singlet Oxygen and Radical Species in Atmospheric Waters. *J. Phys. Chem. A* **2010**, *114*, 2830-2836.
80) D. Vione, D. Bagnus, V. Maurino, C. Minero. Quantification of Singlet Oxygen and Hydroxyl Radicals upon UV Irradiation of Surface Water. *Environ. Chem. Lett.* **2010**, *8*, 193-198.
81) C. Minero, V. Maurino, D. Borghesi, E. Pelizzetti, D. Vione. An Overview of Possible Processes Able to Account for the Occurrence of Nitro-PAHs in Antarctic Particulate Matter. *Microchem. J.*, **2010**, *96*, 213-217.
82) P. R. Maddigapu, D. Vione, B. Ravizzoli, C. Minero, V. Maurino, L. Comoretto, S. Chiron. Laboratory and Field Evidence of the Photonitration of 4-Chlorophenol to 2-Nitro-4-chlorophenol, and of the Associated Bicarbonate Effect. *Environ. Sci. Pollut. Res.* **2010**, *17*, 1063-1069.
83) S. Harimurti, P. N. Faizura, I. Fauzi, B. M. Ariff, S. Chakrabarti, D. Vione, B. K. Dutta. Degradation of Monoethanolamine in Aqueous Solution by Fenton's Reagent with Biological Post-treatment. *Water Air Soil Pollut.* **2010**, *211*, 273-286.
84) A. Albinet, C. Minero, D. Vione. Photochemical Generation of Reactive Species upon Irradiation of Rainwater: Negligible Photoactivity of Dissolved Organic Matter. *Sci. Tot. Environ.*, **2010**, *408*, 3367-3373.
85) M. E. Carlotti, E. Ugazio, S. Sapino, D. Vione, B. Fubini, S. Morel. Effect of Propylene Glycol and Ethanol on the UVB-Induced Peroxidation of Linoleic Acid and Lipids of Porcine Skin, in the Presence of Different TiO_2 Specimens. *J. Disp. Sci. Technol.* **2010**, *31*, 994-1003.
86) A. Albinet, C. Minero, D. Vione. Phototransformation Processes of 2,4-Dinitrophenol, Relevant to Atmospheric Water Droplets. *Chemosphere* **2010**, *80*, 753-758.
87) A. Albinet, C. Minero, D. Vione. UVA Irradiation Induces Direct Phototransformation of 2,4-Dinitrophenol in Surface Water Samples. *Chemosphere* **2010**, *80*, 759-763.
88) R. I. Olariu, D. Vione, N. Grinberg, C. Arsene. Sample Preparation for Trace Analysis by Chromatographic Methods. *J. Liq. Chromatogr. Relat. Technol.* **2010**, *33*, 1174-1207.
89) A. Hatipoglu, D. Vione, Y. Yalçin, C. Minero, Z. Çinar. Photo-oxidative Degradation of Toluene in Aqueous Media by Hydroxyl Radicals. *J. Photochem. Photobiol. A: Chem.* **2010**, *215*, 59-68.
90) P. Nissenson, D. Dabdub, R. Das, V. Maurino, C. Minero, D. Vione. Evidence of the Water-Cage Effect on the Photolysis of NO_3^- and $FeOH^{2+}$. Implications of This Effect and of H_2O_2 Surface Accumulation on Photochemistry at the Air-Water Interface of Atmospheric Droplets. *Atmos. Environ.* **2010**, *44*, 4859-4866.

91) B. K. Dutta, S. Harimurti, S. Chakrabarti, D. Vione. Degradation of Diethanolamine by Fenton's Reagent Combined with Biological Post-treatment. *Desal. Wat. Treat.* **2010**, *19*, 286-293.
92) P. R. Maddigapu, C. Minero, V. Maurino, D. Vione, M. Brigante, G. Mailhot. Enhancement by Anthraquinone-2-sulphonate of the Photonitration of Phenol by Nitrite: Implications for the Photoproduction of Nitrogen Dioxide by Coloured Dissolved Organic Matter in Surface Waters. *Chemosphere* **2010**, *81*, 1401-1406.
93) D. Vione, S. Khanra, R. Das, C. Minero, V. Maurino, M. Brigante, G. Mailhot. Effect of Dissolved Organic Compounds on the Photodegradation of the Herbicide MCPA in Aqueous Solution. *Wat. Res.* **2010**, *44*, 6053-6062.
94) P. R. Maddigapu, M. Minella, D. Vione, V. Maurino, C. Minero. Modeling Phototransformation Reactions in Surface Water Bodies: 2,4-Dichloro-6-Nitrophenol As a Case Study. *Environ. Sci. Technol.* **2011**, *45*, 209-214.
95) P. R. Maddigapu, C. Minero, V. Maurino, D. Vione, M. Brigante, T. Charbouillot, M. Sarakha, G. Mailhot. Photochemical and Photosensitised Reactions Involving 1-Nitronaphthalene and Nitrite in Aqueous Solution. *Photochem. Photobiol. Sci.* **2011**, *10*, 601-609.
96) B. Abramovic, D. Šojic, V. Despotovic, D. Vione, M. Pazzi, J. Csanàdi. A Comparative Study of the Activity of TiO_2 Wackherr and Degussa P25 in the Photocatalytic Degradation of Picloram. *Appl. Catal. B: Environ.* **2011**, *105*, 191-198.
97) M. E. Carlotti, E. Ugazio, S. Sapino, D. Vione, B. Fubini. Lipid Peroxidation Processes Photoinduced by Titanium Dioxide in Emulsion Systems, representative of Sunscreen Formulations. *J. Disp. Sci. Technol.* **2011**, *32*, 913-922.
98) V. Maurino, A. Bedini, D. Borghesi, D. Vione, C. Minero. Phenol Transformation Photosensitised by Quinoid Compounds. *Phys. Chem. Chem. Phys.* **2011**, *13*, 11213-11221.
99) K. M. G. Mostofa, F. Wu, C.-Q. Liu, D. Vione, T. Yoshioka, H. Sakugawa, E. Tanoue. Photochemical, Microbial and Metal Complexation Behavior of Fluorescent Dissolved Organic Matter in the Aquatic Environments. *Geochem. J.* **2011**, *45*, 235-254.
100) M. Minella, M. Rogora, D. Vione, V. Maurino, C. Minero. A model approach to assess the long-term trends of indirect photochemistry in lake water. The case of Lake Maggiore (NW Italy). *Sci. Total. Environ.* **2011**, *409*, 3463-3471.
101) M. Minella, F. Romeo, D. Vione, V. Maurino, C. Minero. Low to Negligible Photoactivity of Lake-Water Matter in the Size Range from 0.1 to 5 μm. *Chemosphere* **2011**, *83*, 1480-1485.
102) T. Charbouillot, M. Brigante, G. Mailhot, P. R. Maddigapu, C. Minero, D. Vione. Terephthalic Acid as Probe for $^{\bullet}OH$ Quantification in Natural Waters: Performance and Selectivity as a Function of Temperature, pH and Composition of Atmospherically Relevant Aqueous Media. *J. Photochem. Photobiol. A: Chem.* **2011**, *222*, 70-76.
103) C. Arsene, D. Vione, N. Grinberg, R. I. Olariu. GC×GC-MS Hyphenated Techniques for the Analysis of Volatile Organic Compounds in Air. *J. Liq. Chromatogr. Relat. Technol.* **2011**, *34*, 1077-1111.
104) R. I. Cernat, T. Mihaescu, M. Vornicu, D. Vione, R. I. Olariu, C. Arsene. Serum Trace Metal and Ceruloplasmin Variability in Individuals Treated for Pulmonary Tuberculosis. *Int. J. Tuberc. Lung Dis.* **2011**, *15*, 1239-1245.
105) D. Vione, B. Sur, B. K. Dutta, V. Maurino, C. Minero. On the Effect of 2-Propanol on Phenol Photonitration upon Nitrate Photolysis. *J. Photochem. Photobiol. A: Chem.* **2011**, *224*, 68-70.
106) B. Sur, M. Rolle, C. Minero, V. Maurino, D. Vione, M. Brigante, G. Mailhot. Formation of Hydroxyl Radicals by Irradiated 1-Nitronaphthalene (1NN): Oxidation of Hydroxyl Ions and Water by the 1NN Triplet State. *Photochem. Photobiol. Sci.* **2011**, *10*, 1817-1824.

107) D. Vione, P. R. Maddigapu, E. De Laurentiis, M. Minella, M. Pazzi, V. Maurino, C. Minero, S. Kouras, C. Richard. Modelling the Photochemical Fate of Ibuprofen in Surface Waters. *Wat. Res.* **2011**, *45*, 6725-6736.

108) B. Abramovic, S. Kler, D. Šojic, M. Lauševic, T. Radovic, D. Vione. Photocatalytic Degradation of Metoprolol Tartrate in Suspensions of Two TiO_2-Based Photocatalysts with Different Surface Area. Identification of Intermediates and Proposal of Degradation Pathways. *J. Haz. Mat.* **2011**, *198*, 123-132.

109) A. Bedini, V. Maurino, C. Minero, D. Vione. Theoretical and Experimental Evidence of the Photonitration Pathway of Phenol and 4-Chlorophenol: A Mechanistic Study of Environmental Significance. *Photochem. Photobiol. Sci.* **2012**, *11*, 418-424.

110) S. Loiselle, D. Vione, C. Minero, V. Maurino, A. Tognazzi, A. M. Dattilo, C. Rossi, L. Bracchini. Chemical and Optical Phototransformation of Dissolved Organic Matter. *Wat. Res.* **2012**, *46*, 3197-3207.

111) B. Sur, E. De Laurentiis, M. Minella, V. Maurino, C. Minero, D. Vione. Photochemical Transformation of Anionic 2-Nitro-4-chlorophenol in Surface Waters: Laboratory and Model Assessment of the Degradation Kinetics, and Comparison With Field Data. *Sci. Total Environ.* **2012**, *426*, 3197-3207.

112) E. De Laurentiis, M. Minella, V. Maurino, C. Minero, M. Brigante, G. Mailhot, D. Vione. Photochemical Production of Organic Matter Triplet States in Water Samples from Mountain Lakes, Located Below or Above the Treeline. *Chemosphere* **2012**, *88*, 1208-1213.

113) A. Bedini, E. De Laurentiis, B. Sur, V. Maurino, C. Minero, M. Brigante, G. Mailhot, D. Vione. Phototransformation of Anthraquinone-2-sulphonate in Aqueous Solution. *Photochem. Photobiol. Sci.* **2012**, *11*, 1445-1453.

114) E. De Laurentiis, S. Chiron, S. Kouras-Hadef, C. Richard. M. Minella, V. Maurino, C. Minero, D. Vione. Photochemical Fate of Carbamazepine in Surface Freshwaters: Laboratory Measures and Modeling. *Environ. Sci. Technol.* **2012**, *46*, 8164-8173.

115) P. Calza, D. Vione, A. Novelli, E. Pelizzetti, C. Minero. The Role of Nitrite and Nitrate Ions as Photosensitizers in the Phototransformation of Phenolic Compounds in Seawater. *Sci. Total Environ.* **2012**, *439*, 67-75.

116) E. De Laurentiis, M. Minella, V. Maurino, C. Minero, G. Mailhot, M. Sarakha, M. Brigante, D. Vione. Assessing the Occurrence of the Dibromide Radical ($Br_2^{-\bullet}$) in Natural Waters: Measures of Triplet-Sensitized Formation, Reactivity, and Modelling. *Sci. Total Environ.* **2012**, *439*, 299-306.

117) A. Massa, D. Vione, E. Ugazio, M. E. Carlotti. Effect of Reactive Species Photogenerated by the UV Irradiation of TiO_2 on the Peroxidation of Linoleic Acid. *J. Disp. Sci. Technol.* **2012**, *33*, 1615-1620.

118) F. Parizia, V. Maurino, C. Minero, D. Vione. Formate (Marker of Continental Particulate Matter) Undergoes Faster Phototransformation than the Biogenic Marine Marker Methanesulphonate Under Conditions Relevant to Atmospheric Aerosols. *Environ. Chem. Lett.* **2012**, *10*, 395-399.

119) A. Tognazzi, A. M. Dattilo, L. Bracchini, C. Rossi, D. Vione. Chemical Characterization of a New Estuarine Pollutant (2,4-Dichloro-6-Nitrophenol) and Assessment of the Acute Toxicity of its Quinoid Form for Artemia Salina. *Intern. J. Environ. Anal. Chem.* **2012**, *92*, 1679-1688.

120) M. Minella, M. P. Merlo, V. Maurino, C. Minero, D. Vione. Transformation of 2,4,6-Trimethylphenol and Furfuryl Alcohol, Photosensitised by Aldrich Humic Acids Subject to Different Filtration Procedures. *Chemosphere* **2013**, *90*, 306-311.

121) E. De Laurentiis, V. Maurino, C. Minero, D. Vione, G. Mailhot, M. Brigante. Could Triplet-Sensitised Transformation of Phenolic Compounds Represent a Source of Fulvic-Like Substances in Natural Waters? *Chemosphere* **2013**, *90*, 881-884.

122) S. Berto, M. Isaia, B. Sur, E. De Laurentiis, F. Barsotti, R. Buscaino, V. Maurino, C. Minero, D. Vione. UV-Vis Spectral Modifications of Water Samples Under Irradiation: Lake *vs*. Subterranean Water. *J. Photochem. Photobiol. A: Chem.* **2013**, *251*, 85-93.

123) M. Minella, E. De Laurentiis, O. Buhvestova, M. Haldna, K. Kangur, V. Maurino, C. Minero, D. Vione. Modelling Lake-Water Photochemistry: Three-Decade Assessment of the Steady-State Concentration of Photoactive Transients ($^{\bullet}OH$, $CO_3^{-\bullet}$ and $^3CDOM^*$) in the Surface Water of Polymictic Lake Peipsi (Estonia/Russia). *Chemosphere* **2013**, *90*, 2589-2596.

124) E. De Laurentiis, B. Sur, M. Pazzi, V. Maurino, C. Minero, G. Mailhot, M. Brigante, D. Vione. Phenol Transformation and Dimerisation, Photosensitised by the Triplet State of 1-Nitronaphthalene: A Possible Pathway to Humic-Like Substances (HULIS) in Atmospheric Waters. *Atmos. Environ.* **2013**, *70*, 318-327.

125) E. De Laurentiis, M. Minella, M. Bodrato, V. Maurino, C. Minero, D. Vione. Modelling the Photochemical Generation Kinetics of 2-Methyl-4-chlorophenol, an Intermediate of the Herbicide MCPA (2-Methyl-4-chlorophenoxyacetic Acid) in Surface Waters. *Aquat. Ecosys. Health Manag.* **2013**, *16*, 216-221.

126) R. I. Olariu, I. Barnes, I. Bejan, C. Arsene, D. Vione, B. Klotz, K. H. Becker. FT-IR Product Study of the Reactions of $^{\bullet}NO_3$ Radicals With *ortho*-, *meta*- and *para*-Cresol. *Environ. Sci. Technol*. **2013**, *47*, 7729-7738.

127) D. Vione, R. Caringella, E. De Laurentiis, M. Pazzi, C. Minero. Phototransformation of the Sunlight Filter Benzophenone-3 (2-Hydroxy-4-methoxybenzophenone) Under Conditions Relevant to Surface Waters. *Sci. Tot. Environ.* **2013**, *463-464*, 243-251.

128) E. De Laurentiis, M. Minella, M. Sarakha, A. Marrese, C. Minero, G. Mailhot, M. Brigante, D. Vione. Photochemical Processes Involving the UV Absorber Benzophenone-4 (2-Hydroxy-4-methoxybenzophenone-5-sulphonic acid) in Aqueous Solution: Reaction Pathways and Implications for Surface Waters. *Wat. Res.* **2013**, *47*, 5943-5953.

129) K. M. G. Mostofa, C. Q. Liu, D. Vione, K. Gao, H. Ogawa. Sources, Factors, Mechanisms and Possible Solutions to Pollutants in Marine Ecosystems. *Environ. Pollut.* **2013**, *182*, 461-478.

130) G. Ruggeri, G. Ghigo, V. Maurino, C. Minero, D. Vione. Photochemical Transformation of Ibuprofen Into Harmful 4-Isobutylacetophenone: Pathways, Kinetics, and Significance for Surface Waters. *Wat. Res.* **2013**, *47*, 6109-6121.

131) G. Marchetti, M. Minella, V. Maurino, C. Minero, D. Vione. Photochemical Transformation of Atrazine and Formation of Photointermediates Under Conditions Relevant to Sunlit Surface Waters: Laboratory Measures and Modeling. *Wat. Res.* **2013**, *47*, 6211-6222.

132) E. De Laurentiis, J. Socorro, D. Vione, E. Quivet, M. Brigante, G. Mailhot, H. Wortham, S. Gligorovski. Phototransformation of 4-Phenoxyphenol Sensitised by 4-Carboxybenzophenone: Evidence of New Photochemical Pathways in the Bulk Aqueous Phase and on the Surface of Aerosol Deliquescent Particles. *Atmos. Environ.* **2013**, *81*, 569-578.

133) K. M. G. Mostofa, C. Q. Liu, M. Minella, D. Vione. Balancing of Ocean Acidification by Superoxide Redox Chemistry? *Environ. Sci. Technol.* **2013**, *47*, 11380-11381.

134) C. Minero, M. Lucchiari, V. Maurino, D. Vione. A Quantitative Assessment of the Production of $^{\bullet}OH$ and Additional Oxidants in the Dark Fenton Reaction: Fenton Degradation of Aromatic Amines. *RSC Adv.* **2013**, *3*, 26443-26450.

135) E. De Laurentiis, S. Buoso, V. Maurino, C. Minero, D. Vione. Optical and Photochemical Characterisation of Chromophoric Dissolved Organic Matter from Lakes in Terra Nova Bay, Antartica. Evidence of Considerable Photoreactivity in an Extreme Environment. *Environ. Sci. Technol.* **2013**, *47*, 14089-14098.

136) M. Minella, V. Maurino, C. Minero, D. Vione. Modelling Photochemical Transformation of Emerging Organic Pollutants in Surface Waters: Effect of Water Level Fluctuations Following Outflow or Evaporation, Relevant to Arid and Semi-Arid Environments. *Intern. J. Environ. Anal. Chem.* **2013**, *93*, 1698-1717.

137) M. Brigante, M. Minella, G. Mailhot, V. Maurino, C. Minero, D. Vione. Formation and Reactivity of the Dichloride Radical ($Cl_2^{-\bullet}$) in Surface Waters: A Modelling Approach. *Chemosphere* **2014**, *95*, 464-469.
138) M. Bodrato, D. Vione. APEX (Aqueous Photochemistry of Environmentally-occurring Xenobiotics): A Free Software Tool to Predict the Kinetics of Photochemical Processes in Surface Waters. *Environ. Sci.: Processes Impacts* **2014**, *16*, 732-740.
139) D. Vione. A Test of the Potentialities of the APEX Software (Aqueous Photochemistry of Environmentally-occurring Xenobiotics). Modelling the Photochemical Persistence of the Herbicide Cycloxydim in Surface Waters, Based on Literature Kinetics Data. *Chemosphere* **2014**, *99*, 272-275.
140) E. De Laurentiis, C. Prasse, T. A. Ternes, M. Minella, V. Maurino, C. Minero, M. Sarakha, M. Brigante, D. Vione. Assessing the Photochemical Transformation Pathways of Acetaminophen Relevant to Surface Waters: Transformation Kinetics, Intermediates, and Modeling. *Wat. Res.* **2014**, *53*, 235-248.
141) M. Passananti, F. Temussi, M. R. Iesce, L. Previtera, G. Mailhot, D. Vione, M. Brigante. Photoenhanced Transformation of Nicotine in Aquatic Environments: Involvement of Naturally Occurring Radical Sources. *Wat. Res.* **2014**, *55*, 106-114.
142) M. Minella, G. Marchetti, E. De Laurentiis, M. Malandrino, V. Maurino, C. Minero, D. Vione, K. Hanna. Photo-Fenton Oxidation of Phenol with Magnetite as Iron Source. *Appl. Catal. B: Environ.* **2014**, *154-155*, 102-109.
143) E. De Laurentiis, M. Minella, V. Maurino, C. Minero, D. Vione. Effects of Climate Change on Surface-Water Photochemistry: A Review. *Environ. Sci. Pollut. Res.* **2014**, *21*, 11770-11780.
144) D. Vione, V. Maurino, C. Minero. Photosensitised Humic-Like Substances (HULIS) Formation Processes of Atmospheric Significance: A Review. *Environ. Sci. Pollut. Res.* **2014**, *21*, 11614-11622.
145) D. Vione, M. Minella, V. Maurino, C. Minero. Indirect Photochemistry in Sunlit Surface Waters: Photochemical Production of Reactive Transient Species. *Chem. Eur. J.* **2014**, *20*, 10590-10606.
146) A. Bianco, M. Minella, E. De Laurentiis, V. Maurino, C. Minero, D. Vione. Photochemical Generation of Photoactive Compounds with Fulvic-Like and Humic-Like Fluorescence in Aqueous Solution. *Chemosphere* **2014**, *111*, 529-536.
147) P. Calza, D. Vione, C. Minero. The Role of Humic and Fulvic Acids in the Phototransformation of Phenolic Compounds in Seawater. *Sci. Total Environ.* **2014**, *493*, 411-418.
148) P. Avetta, G. Marchetti, M. Minella, M. Pazzi, E. De Laurentiis, V. Maurino, C. Minero, D. Vione. Phototransformation Pathways of the Fungicide Dimethomorph ((E,Z) 4-[3-(4-Chlorophenyl)-3-(3,4-dimethoxyphenyl)-1-oxo-2-propenyl]morpholine), Relevant to Sunlit Surface Waters. *Sci. Total Environ.* **2014**, *500-501*, 351-360.
149) D. Fabbri, M. Minella, V. Maurino, C. Minero, D. Vione. Photochemical Transformation of Phenylurea Herbicides in Surface Waters: A Model Assessment of Persistence, and Implications for the Possible Generation of Hazardous Intermediates. *Chemosphere* **2015**, *119*, 601-607.
150) R. I. Olariu, D. Vione, N. Grinberg, C. Arsene. Applications of Liquid Chromatographic Techniques in the Chemical Characterization of Atmospheric Aerosols. *J. Liq. Chromat. Rel. Technol.* **2015**, *38*, 322-348.
151) I. Sandu, R. I. Olariu, I. G. Sandu, C. Stirbu, C. Pascu, V. Vasilache, D. Vione, C. Arsene. Investigation of the Dynamics and Kinetics Involved in Saline Aerosol Generation Under Air Erosion of Pure and Contaminated Halide Salts. *J. Aer. Sci.* **2015**, *81*, 100-109.
152) M. J. Mattle, D. Vione, T. Kohn. Conceptual Model and Experimental Framework to Determine the Contribution of Direct and Indirect Photoreactions to the Solar Disinfection of MS2, phiX174 and Adenovirus. *Environ. Sci. Technol.* **2015**, *49*, 334-342.
153) P. Avetta, A. Pensato, M. Minella, M. Malandrino, V. Maurino, C. Minero, K. Hanna, D. Vione. Activation of Persulfate by Irradiated Magnetite: Implications for the Degradation of Phenol under Heterogeneous Photo-Fenton-Like Conditions. *Environ. Sci. Technol.* **2015**, *49*, 1043-1050.

154) A. Bianco, D. Fabbri, M. Minella, M. Brigante, G. Mailhot, V. Maurino, C. Minero, D. Vione. New Insights Into the Environmental Photochemistry of 5-Chloro-2-(2,4-dichlorophenoxy)phenol (Triclosan): Reconsidering the Importance of Indirect Photoreactions. *Wat. Res.* **2015**, *72*, 271-280.
155) A. Marchisio, M. Minella, V. Maurino, C. Minero, D. Vione. Photogeneration of Reactive Transient Species Upon Irradiation of Natural Water Samples: Formation Quantum Yields in Different Spectral Intervals, and Implications for the Photochemistry of Surface Waters. *Wat. Res.* **2015**, *73*, 145-156.
156) E. De Laurentiis, M. Minella, S. Berto, V. Maurino, C. Minero, D. Vione. The Fate of Nitrogen upon Nitrite Irradiation: Formation of Dissolved *vs*. Gas-phase Species. *J. Photochem. Photobiol. A: Chem.* **2015**, *307-308*, 30-34.
157) P. Avetta, S. Berto, A. Bianco Prevot, M. Minella, E. Montoneri, D. Persico, D. Vione, M. C. Gonzalez, D. O. Martire, L. Carlos, A. Arques. Photoinduced Transformation of Waste-Derived Soluble Bio-based Substances. *Chem. Engineer. J.* **2015**, *274*, 247-255.
158) L. Demarchis, M. Minella, R. Nisticò, V. Maurino, C. Minero, D. Vione. Photo-Fenton Reaction in the Presence of Morphologically Controlled Hematite as Iron Source. *J. Photochem. Photobiol. A: Chem.* **2015**, *307-308*, 99-107.
159) K. M. G. Mostofa, C. Q. Liu, M. Minella, D. Vione. Biological Formation of Organic Substances from Particulate Organic Matter. *Can. Chem. Trans.* **2015**, *3*, 195-198.
160) M. Minella, E. De Laurentiis, V. Maurino, C. Minero, D. Vione. Dark Production of Hydroxyl Radicals by Aeration of Anoxic Lake Water. *Sci. Total Environ.* **2015**, *527-528*, 322-327.
161) D. Fabbri, M. Minella, V. Maurino, C. Minero, D. Vione. A Model Assessment of the Importance of Direct Photolysis in the Photo-fate of Cephalosporins in Surface Waters: Possible Formation of Toxic Intermediates. *Chemosphere* **2015**, *134*, 452-458.
162) J. Birkigt, T. Gilevska, B. Ricken, H. H. Richnow, D. Vione, P. F. X. Corvini, I. Nijenhuis, D. Cichocka. Carbon Stable Isotope Fractionation of Sulfamethoxazole during Biodegradation by *Microbacterium sp.* Strain BR1 and upon Direct Photolysis. *Environ. Sci. Technol.* **2015**, *49*, 6029-6036.
163) F. Barsotti, M. Brigante, M. Sarakha, V. Maurino, C. Minero, D. Vione. Photochemical Processes Induced by the Irradiation of 4-Hydroxybenzophenone in Different Solvents. *Photochem. Photobiol. Sci.* **2015**, *14*, 2087-2096.
164) S. Berto, E. Chiavazza, V. Ribotta, P. G. Daniele, C. Barolo, A. Giacomino, D. Vione, M. Malandrino. Charge-transfer Complexes of 2,3-Dichloro-5,6-dicyano-1,4-benzoquinone with Amino Molecules in Polar Solvents. *Spectrochim. Acta A: Mol. Biolmol. Spectrosc.* **2015**, *149*, 75-82.
165) S. J. Armaković, S. Armaković, N. L. Finčur, F. Šibul, D. Vione, P. Šetrajčić, B. F. Abramović. Influence of Electron Acceptors on the Kinetics of Metoprolol Photocatalytic Degradation in TiO_2 Suspension. A Combined Experimental and Theoretical Study. *RSC Adv.* **2015**, *5*, 54589-54604.
166) D. Vione, P. Calza, F. Galli, D. Fabbri, V. Santoro, C. Medana. The Role of Direct Photolysis and Indirect Photochemistry in the Environmental Fate of Ethylhexyl Methoxy Cinnamate (EHMC) in Surface Waters. *Sci. Total Environ.* **2015**, *537*, 58-68.
167) K. M. G. Mostofa, C. Q. Liu, D. Vione. Quantifying the Possible Short- and Long-term Impacts of Superoxide Redox Chemistry on Seawater pH. *Can. Chem. Trans.* **2015**, *3*, 285-290.
168) P. Calza, D. Vione, D. Fabbri, R. Aigotti, C. Medana. Imidazolium-Based Ionic Liquids in Water: Assessment of Photocatalytic and Photochemical Transformation. *Environ. Sci. Technol.* **2015**, *49*, 10951-10958.
169) S. Gligorovski, R. Strekowski, S. Barbati, D. Vione. Environmental Implications of Hydroxyl Radicals ($^{\bullet}$OH). *Chem. Rev.* **2015**, *115*, 13051-13092.
170) M. Minella, B. Leoni, N. Salmaso, L. Savoye, R. Sommaruga, D. Vione. Long-term Trends of Chemical and Modelled Photochemical Parameters in Four Alpine Lakes. *Sci. Total Environ.* **2016**, *541*, 247-256.

171) F. Barsotti, G. Ghigo, D. Vione. Computational Assessment of the Fluorescence Emission of Phenol Oligomers: A Possible Insight into the Fluorescence Properties of Humic-like Substances (HULIS). *J. Photochem. Photobiol. A: Chem.* **2016**, *315*, 87-93.

172) P. Calza, D. Vione, F. Galli, D. Fabbri, F. Dal Bello, C. Medana. Study of the Photochemical Transformation of 2-Ethylhexyl 4-(dimethylamino)benzoate (OD-PABA) under Conditions Relevant to Surface Waters. *Water Res.* **2016**, *88*, 235-244.

173) T. Kohn, M. J. Mattle, M. Minella, D. Vione. A Modeling Approach to Estimate the Solar Disinfection of Viral Indicator Organisms in Waste Stabilization Ponds and Surface Waters. *Water Res.* **2016**, *88*, 912-922.

174) D. Vione, E. De Laurentiis, S. Berto, C. Minero, A. Hatipoglu, Z. Cinar. Modeling the Photochemical Transformation of Nitrobenzene under Conditions Relevant to Sunlit surface Waters: Reaction Pathways and Formation of Intermediates. *Chemosphere* **2016**, *145*, 277-283.

175) S. Berto, E. De Laurentiis, T. Tota, E. Chiavazza, P. G. Daniele, M. Minella, M. Isaia, M. Brigante, D. Vione. Properties of the Humic-Like Material Arising from the Photo-Transformation of L-Tyrosine. *Sci. Total Environ.* **2016**, *545-546*, 434-444.

176) N. Barbero, D. Vione. Why Dyes Should Not Be Used to Test the Photocatalytic Activity of Seminconductor Oxides. *Environ. Sci. Technol.* **2016**, *50*, 2130-2131.

177) E. Chiavazza, S. Berto, A. Giacomino, M. Malandrino, C. Barolo, E. Prenesti, D. Vione, O. Abollino. Electrocatalysis in the Oxidation of Acetaminophen with an Electrochemically Activated Glassy Carbon Electrode. *Electrochim. Acta* **2016**, *192*, 139-147.

178) K. M. G. Mostofa, C. Q. Liu, W. D. Zhai, M. Minella, D. Vione, K. S. Gao, D. Minataka, T. Arakaki, T. Yoshioka, K. Hayakawa, E. Konohira, E. Tanoue, A. Akhand, A. Chanda, B. Wang, H. Sakugawa. Reviews and Syntheses: Ocean Acidification and its Potential Impacts on Marine Ecosystems. *Biogeosciences* **2016**, *13*, 1767-1786.

179) L. Carena, D. Vione. Photochemical Reaction of Peroxynitrite and Carbon Dioxide Could Account for up to 15% of Carbonate Radicals Generation in Surface Waters. *Environ. Chem. Lett.* **2016**, *14*, 183-187.

180) A. Bianco, D. Fabbri, M. Minella, M. Brigante, G. Mailhot, V. Maurino, C. Minero, D. Vione. Photochemical Transformation of Benzotriazole, Relevant to Sunlit Surface Waters: Assessing the Possible Role of Triplet-sensitised Processes. *Sci. Total Environ.* **2016**, *566-567*, 712-721.

181) S. Bertinetti, M. Minella, F. Barsotti, V. Maurino, C. Minero, E. Özensoy, D. Vione. A Methodology to Discriminate Between Hydroxyl Radical-induced Processes and Direct Charge-transfer Reactions in Heterogeneous Photocatalysis. *J. Adv. Oxid. Technol.* **2016**, *19*, 236-245.

182) M. Minella, V. Maurino, C. Minero, D. Vione. A Model Assessment of the Ability of Lake Water in Terra Nova Bay, Antarctica, to Induce the Photochemical Degradation of Emerging Contaminants. *Chemosphere* **2016**, *162*, 91-98.

183) M. Minella, E. Sappa, K. Hanna, F. Barsotti, V. Maurino, C. Minero, D. Vione. Considerable Fenton and Photo-Fenton Reactivity of Passivated Zero-Valent Iron. *RSC Adv.* **2016**, *6*, 86752-86761.

184) P. Avetta, D. Fabbri, M. Minella, M. Brigante, V. Maurino, C. Minero, M. Pazzi, D. Vione. Assessing the Phototransformation of Diclofenac, Clofibric Acid and Naproxen in Surface Waters: Model Predictions and Comparison with Field Data. *Water Res.* **2016**, *105*, 383-394.

185) M. Minella, G. A. Tartari, M. Rogora, M. Frigione, D. Vione, C. Minero, V. Maurino. Influence of Nitrogen Speciation on TDN Measurement in Fresh Waters by High Temperature Catalytic Oxidation and Persulfate Digestion. *Intern. J. Environ. Anal. Chem.* **2016**, *96*, 474-489.

186) L. Carena, M. Minella, F. Barsotti, M. Brigante, M. Milan, A. Ferrero, S. Berto, C. Minero, D. Vione. Phototransformation of the Herbicide Propanil in Paddy Field Water. *Environ. Sci. Technol*. **2017**, *51*, 2695-2704.

187) D. Fabbri, V. Maurino, M. Minella, C. Minero, D. Vione. Modelling the Photochemical Attenuation Pathways of the Fibrate Drug Gemfibrozil in Surface Waters. *Chemosphere* **2017**, *170*, 124-133.

188) L. Carena, D. Vione, A Model Study of the Photochemical Fate of As(III) in Paddy Water. *Molecules* **2017**, *22*, 445.

189) F. Barsotti, G. Ghigo, S. Berto, D. Vione. The Nature of the Light Absorption and Emission Transitions of 4-Hydroxybenzophenone in Different Solvents. A Combined Computational and Experimental Study. *Photochem. Photobiol. Sci.* **2017**, *16*, 527-538.

190) G. M. Lanzafame, M. Sarakha, D. Fabbri, D. Vione. Degradation of Methyl 2-Aminobenzoate (Methyl Anthranilate) by H_2O_2/UV: Effect of Inorganic Anions and Derived Radicals. *Molecules* **2017**, *22*, 619.

191) F. Barsotti, T. Bartels-Rausch, E. De Laurentiis, M. Ammann, M. Brigante, G. Mailhot, V. Maurino, C. Minero, D. Vione. Photochemical Formation of nitrite and Nitrous Acid (HONO) upon Irradiation of Nitrophenols in Aqueous Solution and in Viscous Secondary Organic Aerosol Proxy. *Environ. Sci. Technol.* **2017**, *51*, 7486-7495.

192) P. Calza, G. Noè, D. Fabbri, V. Santoro, C. Minero, D. Vione, C. Medana. Photoinduced Transformation of Pyridinium-Based Ionic Liquids, and Implications for Their Photochemical Transformation in Surface Waters. *Water Res.* **2017**, *122*, 194-206.

193) M. Minella, S. Giannakis, A. Mazzavillani, V. Maurino, C. Minero, D. Vione. Phototransformation of Acesulfame K in Surface Waters: Comparison of Two Techniques for the Measurement of the Second-Order Rate Constants of In direct Photodegradation, and Modelling of Photoreaction Kinetics. *Chemosphere* **2017**, *186*, 185-192.

194) D. Vione. Morphological Changes in Galaxies Caused by Relatively High-Velocity Collisions. *J. Particle Phys.* **2017**, *1*, 65-73.

195) P. R. Maddigapu, B. Sawant, S. Wanjari, M. D. Goel, D. Vione, R. S. Dhodapkar, S. Rayalu. Carbon Nanoparticles for Solar disinfection of Water. *J. Hazard. Mater.* **2018**, *343*, 157-165.

196) D. Vione, D. Fabbri, M. Minella, S. Canonica. Effects of the Antioxidant Moieties of Dissolved Organic Matter on Triplet-Sensitized Phototransformation Processes: Implications for the Photochemical Modeling of Sulfadiazine. *Water Res.* **2018**, *128*, 38-48.

197) B. Koehler, F. Barsotti, M. Minella, T. Landelius, C. Minero, L. J. Tranvik, D. Vione. Simulation of Photoreactive Transients and of Photochemical Transformation of Organic Pollutants in Sunlit Boreal Lakes Across 14 Degrees of Latitude: A Photochemical Mapping of Sweden. *Water Res.* **2018**, *129*, 94-104.

198) D. Vione, A. Encinas, D. Fabbri, P. Calza. A Model Assessment of the Potential of River Water to Induce the Photochemical Attenuation of Pharmaceuticals Downstream of a Wastewater Treatment Plant (Guadiana River, Badajoz, Spain). *Chemosphere* **2018**, *198*, 473-481.

199) S. Berto, L. Carena, E. Chiavazza, M. Marletti, A. Fin, A. Giacomino, M. Malandrino, C. Barolo, E. Prenesti, D. Vione. Off-line and real-time monitoring of aacetaminophen photodegradation by an electrochemical sensor. *Chemosphere* **2018**, *204*, 556-562.

200) G. Ghigo, S. Berto, M. Minella, D. Vione, E. Alladio, V. M. Nurchi, J. Lachowicz, P. G. Daniele. New Insights into the Protogenic and Spectroscopic Properties of commercial Tannic Acid: The Role of Gallic Acid Impurities. *New J. Chem.* **2018**, *42*, 7703-7712.

201) M. Mekic, M. Brigante, D. Vione, S. Gligorovski. Exploring the Ionic Strength Effects on the Photochemical Degradation of Pyruvic Acid in Atmospheric Deliquescent Aerosol Particles. *Atmos. Environ.* **2018**, *185*, 237-242.

202) L. Carena, M. Proto, M. Minella, G. Ghigo, C. Giovannoli, M. Brigante, G. Mailhot, V. Maurino, C. Minero, D. Vione. Evidence of an Important Role of Photochemistry in the Attenuation of the Secondary Contaminant 3,4-Dichloroaniline in Paddy Water. *Environ. Sci. Technol.* **2018**, *52*, 6334-6342.

203) D. Vione. A Model Assessment of the Role Played by the Carbonate ($CO_3^{\bullet-}$) and Dibromide ($Br_2^{\bullet-}$) Radicals in the Photodegradation of Glutathione in Sunlit Fresh- and Salt-Waters. *Chemosphere* **2018**, *209*, 401-410.

204) M. Minella, L. Rapa, L. Carena, M. Pazzi, V. Maurino, C. Minero, M. Brigante, D. Vione. An Experimental Methodology to Measure the Reaction Rate Constants of Processes Sensitised by the Triplet State of 4-Carboxybenzophenone as a Proxy of the Triplet States of Chromophoric Dissolved Organic Matter, Under Steady-State Irradiation Conditions. *Environ. Sci.: Processes Impacts* **2018**, *20*, 1007-1019.

205) L. Carena, D. Vione. Modelling the Photochemistry of Imazethapyr in Rice Paddy Water. *Sci. Total Environ.* **2018**, *644*, 1391-1398.

206) D. Vione, B. Koehler. Modelled Phototransformation Kinetics of the Antibiotic Sulfadiazine in Organic Matter- Rich Lakes. *Sci. Total Environ.* **2018**, *645*, 1465-1473.

207) S. berto, L. Carena, F. Valmacco, C. Barolo, E. Conca, D. Vione, R. Buscaino, M. Fiorito, C. Bussi, O. Abollino, M. Malandrino. Application of an Electro-Activated Glassy-Carbon Electrode to the Determination of Acetaminophen (Paracetamol) in Surface Waters. *Electrochim. Acta* **2018**, *284*, 279-286.

208) M. Minella, N. De Bellis, A. Gallo, M. Giagnorio, C. Minero, S. Bertinetti, R. Sethi, A. Tiraferri, D. Vione. Coupling of Nanofiltration and Thermal Fenton Reaction for the Abatement of Carbamazepine in Wastewater. *ACS Omega* **2018**, *3*, 9407-9418.

209) S. Berto, E. De Laurentiis, C. Scapuzzi, E. Chiavazza, I. Corazzari, F. Turci, M. Minella, R. Buscaino, P. G. Daniele, D. Vione. Phototransformation of L-Tryptophan and Formation of Humic Substances in Water. *Environ. Chem. Lett.* **2018**, *16*, 1035-1041.

210) E. A. Serna-Galvis, J. A. Troyon, S. Giannakis, R. A. Torres-Palma, C. Minero, D. Vione, C. Pulgarin. Photoinduced Disinfection in Sunlit Natural Waters: Measurement of the Second Order Inactivation Rate Constants Between *E. coli* and Photogenerated Transient Species. *Water Res.* **2018**, *147*, 242-253.

211) M. Mekic, G. Loisel, W. Zhou, B. Jiang, D. Vione, S. Gligorovski. Ionic-Strength Effects on the Reactive Uptake of Ozone on Aqueous Pyruvic Acid: Implications for Air-Sea Ozone Deposition. *Environ. Sci. Technol.* **2018**, *52*, 12306-12315.

212) F. Rezaei, D. Vione. Effect of pH on Zero Valent Iron Performance in Heterogeneous Fenton and Fenton-Like Processes: A Review. *Molecules* **2018**, *23*, 3127.

213) W. Zhou, M. Mekic, J. Liu, G. Loisel, B. Jin, D. Vione, S. Gligorovski. Ionic Strength Effects on the Photochemical Degradation of Acetosyringone in Atmospheric Deliquescent Aerosol Particles. *Atmos. Environ.* **2019**, *198*, 83-88.

214) S. Bertinetti, K. Hanna, M. Minella, C. Minero, D. Vione. Fenton-Type Processes Triggered by Titanomagnetite for the Degradation of Phenol as Model Pollutant. Desal. Water Treat., in press. DOI: 10.5004/dwt.2019.23803.

LIBRI / BOOKS

K. M. G. Mostofa, T. Yoshioka, M. A. Mottaleb, D. Vione. *Photobiogeochemistry of Organic Matter – Principles and Practices in Water Environment*s. Springer, Heildelber, 2013 (917 pp).

P. Calza, D. Vione (eds.). *Surface Water Photochemistry*. RSC Publishing, 2016.

CAPITOLI DI LIBRO / BOOK CHAPTERS

1) E. Pramauro, A. B. Prevot, M. Lucchiari, V. Maurino, C. Minero, E. Pelizzetti, D. Vione. Estrazione, concentrazione e abbattimento di inquinanti organici presenti nel sito ACNA. In: *Progetto Sisifo, Risultati 1° anno di attività (2001-2002)*. P. Canepa (Ed.), INCA, Venezia, 2002, pp. 129-149.
2) E. Pelizzetti, D. Vione, V. Maurino. Risanamento chimico: trattamenti ossidativi. In: Ricerca, sperimentazione e sviluppo di tecnologie di bonifica di siti contaminati. P. Canepa, F. Fava (Ed.), INCA, Venezia, 2003, pp. 117-141.
3) M. Lucchiari, C. Minero, D. Fabbri, E. Pramauro, A. B. Prevot, E. Pelizzetti, V. Maurino, D. Vione. Estrazione di inquinanti aromatici da suoli contaminati del sito ex-ACNA e sperimentazione di tecniche ossidative, fotocatalitiche e sonochimiche di abbattimento. In: *Progetto Sisifo, Risultati 2° anno di attività (2002-2003)*. P. Canepa (Ed.), INCA, Venezia, 2004, pp. 193-201.
4) D. Vione, V. Maurino, C. Minero, E. Pelizzetti. Reactions induced in natural waters by irradiation of nitrate and nitrite ions. In: *The Handbook of Environmental Chemistry Vol. 2-M (Environmental Photochemistry Part II)*. P. Boule, D. W. Bahnemann, P. K. J. Robertson (Ed.), Springer, Berlin, 2005, pp. 221-253.
5) D. Vione. Photochemical transformation processes of environmental significance. In: *Tomorrow's Chemistry Today. Concepts in Nanoscience, Organic Materials and Environmental Chemistry.* B. Pignataro (Ed.), Wiley-VCH, Heidelberg, 2008, pp. 429-465.
6) D. Vione, C. Minero, V. Maurino. Photochemical processes at the air-water interface of atmospheric droplets. In: *Photochemistry Research Progress*. A. Sanchez, S. J. Gutierrez (Eds.), Nova Science Publishers, NY, 2008, pp. 273-296.
7) D. Vione, C. Minero, V. Maurino. Photochemical transformation processes of organic pollutants in surface waters. In: *River Pollution Research Progress*. M. N. Gallo, M. H. Ferrari (Eds.), Nova Science Publishers, NY, 2009, pp. 157-200.
8) D. Vione, R. Das, F. Rubertelli, V. Maurino, C. Minero. Modelling of indirect phototransformation reactions in surface waters. In: *Ideas in Chemistry and Molecular Sciences.* B. Pignataro (Ed.), Wiley-VCH, Heidelberg, 2010, pp. 203-234.
9) D. Vione, C. Minero, V. Maurino. R. I. Olariu, C. Arsene, K. M. G. Mostofa. Photoinduced transformation processes in surface waters. In: *Photochemistry: UV/VIS Spectroscopy, Photochemical Reactions and Photosynthesis*, K. J. Maes, J. M. Willems (Eds.), Nova Science Publishers, NY, 2011, Chapter 9.
10) R. Das, C. Minero, V. Maurino, D. Vione. Bicarbonate-Enhanced Photocatalytic Degradation of Phenol: Competition with Excess Organic Matter. In: *Photochemistry: New Research*. A. B. Smith, M. A. Johnson (Eds.), Nova Science Publishers, NY, 2013, pp. 21-36.
11) C. Minero, V. Maurino, D. Vione. Photocatalytic Mechanisms and Reaction Pathways Drawn from Kinetic and Probe Molecules. In: *Photocatalysis and Water Purification: From Fundamentals to Recent Application*s. P. Pichat (Ed.), Wiley-VCH, Heidelberg, 2013, pp. 53-72.

12) D. Vione, S. Chiron. Phototransformation Processes of Emerging Contaminants in Surface Water. In: *Transformation Products of Emerging Contaminants in the Environment: Analysis, Processes, Occurrence, Effects and Risks*. D. A. Lambropoulou, L. M. L. Nollet (Eds.), Wiley-VCH, Heidelberg, 2014, pp. 89-122.
13) D. Vione. Photochemical Degradation of Pesticides in the Environment. In: *High Performance Liquid Chromatography in Pesticide Residue Analysis*. T. Tuzimski, J. Sherma (Eds.), CRC Press, 2015 (11th chapter).
14) D. Vione. Photochemical Reactions in Sunlit Surface Waters. In: *Applied Photochemistry. When Light Meets Molecules.* G. Bergamini, S. Silvi (Eds.), Springer, 2016, pp. 343-376.
15) D. Vione. Photochemical Reactions in Sunlit Surface Waters: Influence of Water Parameters, and Implications for the Phototransformation of Xenobiotic Compounds. *Photochemistry* 2017, **44**, 346-361.
16) P. Calza, D. Vione. Photodegradation of Drugs/Illicit Drugs in Water and Long Term Toxicity. In: *Light in Forensic Science: Issues and Applications*. G. Miolo, J. L. Stair, M. Zloh (Eds.), Environmental Society for Photobiology, 2018, pp. 371-396.

SOFTWARE

M. Bodrato, D. Vione. APEX (Aqueous Photochemistry of Environmentally-occurring Xenobiotics). It predicts half-life times and phototransformation kinetics of pollutants as a function of water chemistry and depth, including the photochemical formation of intermediates. APEX is available for free download at http://chimica.campusnet.unito.it/do/didattica.pl/Quest?corso=7a3d. It is based on the free software Octave; versions of Octave for Windows can be freely downloaded at http://sourceforge.net/projects/octave/files/Octave%20Windows%20binaries/.

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