

Elenco dettagliato, datato e firmato, delle pubblicazioni presentate:

- 1) **Brienza, M.***, Mahdi Ahmed, M., Escande, A., Plantard, G., Scrano, L., Chiron, S., Bufo, S.A., Goetz V. (2014). Relevance of a photo-Fenton like technology based on peroxymonosulphate for 17 β -estradiol removal from wastewater. Chemical Engineering Journal 257:191-199 (IF 13.723)
- 2) **Brienza, M.***, Mahdi Ahmed, M., Escande, A., Plantard, G., Scrano, L., Chiron, S., Bufo, S.A., Goetz, V. (2016). Use of solar advanced oxidation processes for wastewater treatment: follow-up on degradation products, acute toxicity, genotoxicity and estrogenicity. Chemosphere 148:473-480 (IF 7.086)
- 3) **Brienza M.**, Chiron S. (2017). Enantioselective reductive transformation of climbazole: A concept towards quantitative biodegradation assessment in anaerobic biological treatment processes. Water Research 116:203-210 (IF 11.236)
- 4) **Brienza M.**, Duwig C., Perez S., Chiron S. (2017). 4-nitroso-sulfamethoxazole generation in soil under denitrifying conditions: Field observations versus laboratory results. Journal of Hazardous Materials 334:185-192 (IF 10.588)
- 5) **Brienza M.***, Nir S., Plantard G., Goetz V., Chiron S. (2019). Combining micelle-clay sorption to solar photo-Fenton processes for domestic wastewater treatment. Environmental Science and Pollution Research International 26:18971-18978 (IF 4.223)
- 6) **Brienza M.**, Manasfi R., Chiron S. (2019). Relevance of N-nitrosation reactions for secondary amines in nitrate-rich wastewater under UV-C treatment. Water Research 162:22-29 (IF 11.236)
- 7) Manasfi R., Chiron S., Montemurro N., Perez S., **Brienza M.*** (2020). Biodegradation of fluoroquinolone antibiotics and the climbazole fungicide by Trichoderma species. Environmental Science and Pollution Research International 27:23331-23341 (IF 4.223)
- 8) **Brienza M.**, Manasfi R., Sauvetre A., Chiron S. (2020). Nitric oxide reactivity accounts for N-nitroso-ciprofloxacin formation under nitrate-reducing conditions. Water Research 185:116293 (IF 11.236)
- 9) Lelario, F., **Brienza, M.**, Bufo, S. A., Scrano, L. (2016). Effectiveness of different photo advanced oxidation degradation processes (AOPs) on the abatement of mepaniprim and its transformation products in water. Journal of Photochemistry and Photobiology. A, Chemistry 321:187-201 (IF 4.291)
- 10) Gallego, S., **Brienza, M.**, Béguet, J., Chiron, S., Martin-Laurent, F. (2021). Impact of repeated irrigation of lettuce cultures with municipal wastewater on soil bacterial community diversity and composition. Environmental Science and Pollution Research International Jun 12. doi: 10.1007/s11356-021-14734-4. Epub ahead of print. PMID: 34117546 (IF 4.223)
- 11) Ahmed M.M., **Brienza M.**, Goetz V., Chiron S. (2014) Solar photo-Fenton using peroxymonosulfate for organic micropollutants removal from domestic wastewater: Comparison with heterogeneous TiO₂ photocatalysis. Chemosphere 117:256-261 (IF 7.086)
- 12) Foti L., Coviello, D., Zuorro, A., Lelario, F., Bufo, S.A., Scrano, L., Sauvetre, A., Chiron, S., **Brienza M.*** Comparison of sunlight-AOPs for levofloxacin removal: kinetics, transformation products, and toxicity assay on Escherichia coli and Micrococcus flavus, Environmental Science and Pollution Research (2022); doi: 10.1007/s11356-022-19768-w (IF 4.223)

Potenza, 01/04/2022

In Fede

Maurice Brienza

ELENCO DELLE DODICI PUBBLICAZIONI SCIENTIFICHE

- 1- **"Identification of proteins in painting cross-sections by immunofluorescence"**, M. Vagnini, L. Pitzurra, L. Cartechini, C. Miliani, B.G. Brunetti, A. Sgamellotti, *Anal. Bioanal. Chem.* (2008) 392, pg. 57-64.
- 2- **"Near-FTIR spectroscopy for the non-invasive identification of natural polymers in easel paintings"**, M. Vagnini, L. Cartechini, C. Miliani, P. Rocchi, B.G. Brunetti, A. Sgamellotti, *Anal. Bioanal. Chem.* (2009) 395, pg. 2107-2118.
- 3- **"Immunodetection of Proteins in Ancient Paint Media"** L. Cartechini, M. Vagnini, M. Palmieri, L. Pitzurra, T. Mello, J. Mazurek, G. Chiari, *Acc.Chem.Res.* (2010), 43 (6): pg.867-876.
- 4- **"Development of an analytical protocol for a fast, sensitive and specific protein recognition in paintings by enzyme-linked immunosorbent assay (ELISA)"** M. Palmieri, M. Vagnini, L. Pitzurra, P. Rocchi, B. G. Brunetti & A. Sgamellotti, L. Cartechini, *Anal. Bioanal. Chem.* (2011) 399, pg. 3011-3023.
- 5- **"Tracing the biological origin of animal glues used in paintings through mitochondrial DNA analysis"** E. Albertini, L. Raggi, M. Vagnini, A. Sassolini, A. Achilli, G. Marconi, L. Cartechini, F. Veronesi, M. Falcinelli, B. G. Brunetti, C. Miliani, *Anal. Bioanal. Chem.* (2011) 399 (9): pg. 2987-95.
- 6- **"The Degradation Process of Lead Chromate in paintings by Vincent van Gogh studied by means of Spectromicroscopic methods. Part III: Synthesis, characterization and detection of different crystal forms of the chrome yellow pigment"** L. Monico, K. H. Janssens, C. Miliani, B. G. Brunetti, M. Vagnini, F. Vanmeert, G. Falkenberg, A. M. Abakumov, Y. Lu, H. Tian, J. Verbeeck, M. Radepon, M. Cotte, E. Hendriks, M. Geldof, L. Van der Loeff, J. Salvant, and M. Menu, *Anal.Chem.* (2013) 85 (2) pg. 851-859.
- 7- **"Identification of animal glue and hen-egg yolk in paintings by use of enzyme-linked immunosorbent assay (ELISA)"** M. Palmieri, M. Vagnini, L. Pitzurra, B. G. Brunetti, L. Cartechini, *Anal. Bioanal. Chem.* (2013), 405, pg.6365-6371.
- 8- **"Visible-induced luminescence imaging: a user-friendly method based on a system of interchangeable and tunable LED light sources"** A. Daveri, M. Vagnini, F. Nucera, M. Azzarelli, A. Romani, C. Clementi, *Microchemical Journal* (2016) 125: 130-141.

9-“ **Immunochemical Methods Applied to Art-Historical Materials: Identification and Localization of Proteins by ELISA and IFM**” L. Cartechini, M. Palmieri, M. Vagnini, L. Pitzurra, Top, Curr. Chem. (2016), 374 (5), 241-261.

10- “**Handheld new technology Raman and portable FT-IR spectrometers as complementary tools for the *in situ* identification of modern and contemporary art materials**” M. Vagnini, F. Gabrieli, A. Daveri, D. Sali, Spectrochimica Acta A (2017), 176, pg. 174-182.

11- “**New perspectives in the non-invasive, in situ identification of painting materials: The advanced MWIR hyperspectral imaging**” A. Daveri, S. Paziani, M. Marmion, H. Harju, A. Vidman, M. Azzarelli, M. Vagnini, Trends in Anal. Chem. (2018), 98, pg. 143-148.

12- “**Blackening of lead white: Study of model paintings**” M.Vagnini, R. Vivani, A. Sgamellotti, C. Miliani, J.Raman Spectr. 2020, 51 (7), pg. 1118.

Perugia, 25/03/2022

Dr. Manuela Vagnini

A handwritten signature in black ink, appearing to read 'Manuela Vagnini', with a stylized flourish at the end.

ELENCO DELLE PUBBLICAZIONI (Dr. Marco Zannotti)

1. Giovannetti, R.; D'Amato, C. A.; **Zannotti, M.**; Rommozzi, E.; Gunnella, R.; Minicucci, M.; Di Cicco, A., Visible light photoactivity of Polypropylene coated Nano-TiO₂ for dyes degradation in water. *Scientific Reports* **2015**, 5 (1), 17801.
2. **Zannotti, M.**; Wood, C. J.; Summers, G. H.; Stevens, L. A.; Hall, M. R.; Snape, C. E.; Giovannetti, R.; Gibson, E. A., Ni Mg Mixed Metal Oxides for p-Type Dye-Sensitized Solar Cells. *ACS Applied Materials & Interfaces* **2015**, 7 (44), 24556-24565.
3. Giovannetti, R.; Rommozzi, E.; **Zannotti, M.**; D'Amato, C. A.; Ferraro, S.; Cespi, M.; Bonacucina, G.; Minicucci, M.; Di Cicco, A., Exfoliation of graphite into graphene in aqueous solution: an application as graphene/TiO₂ nanocomposite to improve visible light photocatalytic activity. *RSC Advances* **2016**, 6 (95), 93048-93055.
4. **Zannotti, M.**; Giovannetti, R.; D'Amato, C. A.; Rommozzi, E., Spectroscopic studies of porphyrin functionalized multiwalled carbon nanotubes and their interaction with TiO₂ nanoparticles surface. *Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy* **2016**, 153, 22-29.
5. Giovannetti, R.; Rommozzi, E.; **Zannotti, M.**; D'Amato, C. A., Recent Advances in Graphene Based TiO₂ Nanocomposites (GTiO₂Ns) for Photocatalytic Degradation of Synthetic Dyes. *Catalysts* **2017**, 7 (10).
6. D'Amato, C. A.; Giovannetti, R.; **Zannotti, M.**; Rommozzi, E.; Minicucci, M.; Gunnella, R.; Di Cicco, A., Band Gap Implications on Nano-TiO₂ Surface Modification with Ascorbic Acid for Visible Light-Active Polypropylene Coated Photocatalyst. *Nanomaterials* **2018**, 8 (8).
7. D'Amato, C. A.; Giovannetti, R.; **Zannotti, M.**; Rommozzi, E.; Ferraro, S.; Seghetti, C.; Minicucci, M.; Gunnella, R.; Di Cicco, A., Enhancement of visible-light photoactivity by polypropylene coated plasmonic Au/TiO₂ for dye degradation in water solution. *Applied Surface Science* **2018**, 441, 575-587.
8. Rommozzi, E.; **Zannotti, M.**; Giovannetti, R.; D'Amato, C. A.; Ferraro, S.; Minicucci, M.; Gunnella, R.; Di Cicco, A., Reduced Graphene Oxide/TiO₂ Nanocomposite: From Synthesis to Characterization for Efficient Visible Light Photocatalytic Applications. *Catalysts* **2018**, 8 (12).
9. **Zannotti, M.**; Giovannetti, R.; Minofar, B.; Řeha, D.; Plačková, L.; D'Amato, C. A.; Rommozzi, E.; Dudko, H. V.; Kari, N.; Minicucci, M., Aggregation and metal-complexation behaviour of THPP porphyrin in ethanol/water solutions as function of pH. *Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy* **2018**, 193, 235-248.
10. **Zannotti, M.**; Benazzi, E.; Stevens, L. A.; Minicucci, M.; Bruce, L.; Snape, C. E.; Gibson, E. A.; Giovannetti, R., Reduced Graphene Oxide-NiO Photocathodes for p-Type Dye-Sensitized Solar Cells. *ACS Applied Energy Materials* **2019**, 2 (10), 7345-7353.
11. **Zannotti, M.**; Rossi, A.; Giovannetti, R., SERS Activity of Silver Nanosphere, Triangular Nanoplates, Hexagonal Nanoplates and Quasi-Spherical Nanoparticles: Effect of Shape and Morphology. *Coatings* **2020**, 10 (3).
12. **Zannotti, M.**; Vicomandi, V.; Rossi, A.; Minicucci, M.; Ferraro, S.; Petetta, L.; Giovannetti, R., Tuning of hydrogen peroxide etching during the synthesis of silver nanoparticles. An application of triangular nanoplates as plasmon sensors for Hg²⁺ in aqueous solution. *Journal of Molecular Liquids* **2020**, 309, 113238.



Elenco pubblicazioni

**Reported IF are relative to the year of publication*

1. **I.O. Zelano**, C. Cloquet, A. van der Ent, G. Echevarria, G. Gley, G. Landrot, S. Pollastri, F. Fraysse, E. Montargès-Pelletier *Coupling nickel chemical speciation and isotope ratios to decipher nickel dynamics in the Rinorea cf. bengalensis-soil system in Malaysian Borneo*, Plant and Soil (2020), 454 (1-2) 225-243. (IF=4.192)
2. **I.O. Zelano**, C. Cloquet, F. Fraysse, S. Dong, S. N. Janot, G. Echevarria, E. Montargès-Pelletier, *The influence of organic complexation on Ni Isotopic Fractionation and Ni recycling in the upper soil layers*, Chemical Geology (2018), 483, 47-55. (IF=3.69).
3. **I.O. Zelano**, M. Malandrino, A. Giacomino, S. Buoso, E. Conca, Y. Sivry, M.F. Benedetti, O. Abollino, *Element variability in lacustrine systems of Terra Nova Bay (Antarctica) and concentration evolution in surface waters*, Chemosphere (2017), 180, 343-355. (IF=4.427).
4. **I.O. Zelano**, Y. Sivry, C. Quantin, A. Gélabert, A. Maury, K., Phalyvong, K., and M.F. Benedetti, *An Isotopic Exchange Kinetic Model to assess the speciation of metal available pool in soil: the case of nickel*, Environmental Science & Technology (2016), 50 (23) 12848-12856. (IF=6.198).
5. **I.O. Zelano**, Y. Sivry, C. Quantin, A. Gélabert, M. Tharaud, S. Nowak, J. Garnier, M. Malandrino, M.F. Benedetti, *Study of Ni exchangeable pool speciation in ultramafic and mining environments with Isotopic Exchange Kinetic data and models*. Applied Geochemistry (2015), 64, 146-156. (IF=2.82).
6. **I.O. Zelano**, Y. Sivry, C. Quantin, A. Gélabert, M. Tharaud, D. Jouvin, E. Montargès-Pelletier, J. Garnier, R. Pichon, S. Nowak, O. Abollino and M.F. Benedetti. *Colloids and suspended particulate matters influence on Ni availability in surface waters of impacted ultramafic systems in Brazil*, Colloids and Surfaces A: Physicochemical and Engineering Aspects (2013) 435, 36-47. (IF=2.354).
7. Z. Ren, Y. Sivry, J. Dai, M. Tharaud, L. Cordier, **I.O. Zelano**, M.F. Benedetti, *Exploring Cd, Cu, Pb, and Zn dynamic speciation in mining and smelting-contaminated soils with stable isotopic exchange kinetics*, Applied Geochemistry (2015). (IF=2.82).
8. G. Ratié, D. Jouvin, J. Garnier, O. Rouxel, S. Miska, E. Guimarães, Lucieth Cruz Vieira, Y. Sivry, **I.O. Zelano**, E. Montargès-Pelletier, F. Thil, C. Quantin (2015) *Nickel isotope fractionation during tropical weathering of ultramafic rocks*. Chemical Geology (2015) 402, 68-76. (IF=3.82).
9. O. Abollino, M. Malandrino, **I.O. Zelano**, A. Giacomino, S. Buoso and E. Mentasti, *Characterization of the element content in lacustrine ecosystems in Terra Nova Bay, Antarctica*, Microchemical Journal (2012) 105, 142-151. (IF=2.212).
10. E. Montoneri, L. Tomasso, N. Colajanni, **I.O. Zelano**, F. Alberi, G. Cossa, R. Barberis, *Urban wastes to remediate industrial sites: a case of polycyclic aromatic hydrocarbons contamination and a new process*, Int. J. Environ. Sci. Technol (2013) 11, 251-262. (IF=1.794).

- 11.** O. Abollino, A. Giacomino, M. Ginepro, M. Malandrino, **I.O. Zelano**, *Analytical applications of a nanoparticle-based sensor for the determination of mercury*, *Electroanalysis* 4 (2012) 727,734. (IF=2.817).
- 12.** M.Malandrino, A.Giacomino, M. Karthic, **I.O. Zelano**, D. Fabbri, M. Ginepro, R. Fuoco, P. Bogani, O. Abollino, "*Inorganic markers profiling in wild type and genetically modified plants subjected to abiotic stresses*" *Microchemical Journal*, (2017), 134, 87-97. (IF=2.746).
- 13.** **I.O. Zelano** , *Availability and mobility of heavy metals in two antagonist ecosystems: Antarctica vs Brasil*", PhD manuscript, 19.09.2014.

Lausanne, 03.04.2022

