



## Publications from 2013

**R. Pilolli, N. Ditaranto, N.Cioffi, L.Sabbatini**

Non-destructive depth profile reconstruction of bio-engineered surfaces by parallel angle resolved x-ray photoelectron spectroscopy

**Analytical and Bioanalytical Chemistry 405 (2013) 713-724**

doi: 10.1007/s00216-012-6179-0

**M.D. Angione, M.Magliulo, S.Cotrone, A.Mallardi, D.Altamura, C.Giannini, N.Cioffi, L.Sabbatini, D.Gobeljic, G.Scamaricio, G. Palazzo, L. Torsi**

Volatile general anaesthetic sensing with organic field-effect transistors integrating phospholipids membranes

**Biosensors & Bioelectronics 40 (2013) 303-307**

doi: 10.1016/j.bios.2012.07.068

**I.van der Werf, C. D. Calvano, R. Laviano, A. Simonetti, L. Sabbatini**

Multi-technique chemical characterization of a 12/13<sup>th</sup> century painted crucifix

**Microchemical Journal 106 (2013) 87-94**

doi: 10.1016/j.microc.2012.05.011

**E. De Giglio, D. Cafagna, S. Cometa, A. Allegretta, A. Pedico, L.C. Giannossa, L. Sabbatini, M. Mattioli-Belmonte, R. Iatta**

An Innovative, easily fabricated, silver nanoparticles-based titanium implant coating development and characterization

**Analytical and Bioanalytical Chemistry 405 (2013) 805-816**

doi: 10.1007/s00216-012-6293-z

**M.Magliulo, A.Mallardi, R.Gristina, F.Ridi, L.Sabbatini, N.Cioffi, G.Palazzo, L.Torsi**

Part-per-trillion label-free electronic bio-analytical detection

**Analytical Chemistry 85 (2013) 3849-3857**

Doi: 10.1021/ac302702n

**Naseer Iqbal, Adeel Afzal, N.Cioffi, L.Sabbatini, L.Torsi**

NO<sub>x</sub> sensing one- and two-dimensional carbon nanostructures and nanohybrids: progress and perspectives

**Sensors & Actuators: B. Chemical 181 (2013) 9-21**

**L.C.Giannossa, S. Loperfido, M. Caggese, G. E. De Benedetto, R.Laviano, L. Sabbatini, A. Mangone**

A systematic characterization of fibulae from Italy:from chemical composition to microstructure and corrosion processes

**New J. Chem, 37 (2013) 1238 – 1251**

Doi: 10.1039/c2nj40362e

**I.D.van der Werf, A.Monno, R.Laviano, L.Sabbatini**

Il Bordon della Pinacoteca di Bari. Alla scoperta della tavolozza e della tecnica pittorica.

In "Paris Bordon in Puglia. Un restauro e due scoperte"; Clara Gelao Editor; Marsilio Publisher (Venezia-Italy); (2013) , p. 71-85 .

ISBN 978-88-317-1648-2

**Dumitru, Liviu; Manoli, Kyriaki; Magliulo, Maria; Sabbatini, Luigia; Palazzo, Gerardo; Torsi, Luisa**

Plain Poly(acrylic acid) Gated Organic Field-Effect Transistors on a Flexible Substrate

**ACS Appl. Mater. Interfaces, 5 (2013) 10819-10823**

DOI: dx.doi.org/10.1021/am403008b

**Georgiana Ileana Truică, Nicoletta Ditaranto, Maria Cristina Caggiani, Annarosa Mangone, Simona Carmen Litescu, Eugenia Dumitra Teodor, Luigia Sabbatini, Gabriel Lucian Radu**  
A multi-analytical approach to amber characterisation  
**CHEMICKÉ ZVESTI, 68 (2014) p. 15-21, ISSN: 0366-6352**  
**Chemical Papers DOI: 10.2478/s11696-013-0415-8**

**Rosa Pilolli, Nicoletta Ditaranto, Antonio Monopoli, Angelo Nacci, Francesco Palmisano, Luigia Sabbatini, Nicola Cioffi**  
Designing Functionalised Gold Surfaces and Nanostructures for Laser Desorption Ionisation Mass Spectrometry  
**VACUUM, 100 (2014) 78-83**  
**Doi: 10.1016/j.vacuum.2013.07.032**

**I.D. van der Werf; A. Aresta; G. I Truică; G. L. Radu; F. Palmisano; L. Sabbatini**  
A quasi non-destructive approach for amber geological provenance assessment based on Head Space Solid-Phase Micro Extraction Gas Chromatography - Mass Spectrometry  
**Talanta, 119 (2014) 435-439**  
**DOI:10.1016/j.talanta.2013.11.051**

**Ferri, Marcella; Dash, Mamoni; Cometa, Stefania; De Giglio, Elvira; Sabbatini, Luigia; Chiellini, Federica**  
Preparation and characterization of hybrid nanoparticles based on chitosan and poly(methacryloylglycylglycine).  
**J Nanopart Res (2014) 16:2422-2433**  
**DOI 10.1007/s11051-014-2422-2**

**F. Valentini, E. Ciambella, V. Conte, L. Sabbatini, N. Ditaranto, F. Cataldo, G. Palleschi, M. Bonchio, F. Giacalone, Z. Syrgiannis, and M. Prato**  
Highly Selective detection of Epinephrine at oxidized Single-Wall Carbon Nanohorns modified Screen Printed Electrodes (SPEs).  
**Biosensors and Bioelectronics, 59 (2014) 94-98**  
**DOI : 10.1016/j.bios.2014.02.065**

**Maria Chiara Sportelli, Maria Angela Nitti, Marco Valentini, Rosaria Anna Picca, Elisabetta Bonerba, Luigia Sabbatini, Giuseppina Tantillo, Nicola Cioffi, Antonio Valentini**  
Ion Beam Sputtering deposition and characterization of ZnO-fluoropolymer nano-antimicrobials  
**Science of Advanced Materials, 6 (2014) 1019-1025**

**Manoli, Kyriaki; Patrikoussakis, Marios; Magliulo, Maria; Dumitru, Liviu; Mulla, Mohammad Yusuf; Sabbatini, Luigia; Torsi, Luisa**  
Pulsed voltage driven organic field-effect transistors for high stability transient current measurements.  
**Organic Electronics 15 (2014) 2372–2380.**  
**DOI: 10.1016/j.orgel.2014.06.034**

**S. Cometa, L. Sabbatini**  
Introductory remarks in polymer and polymer surfaces  
in “**Polymer Surface Characterization**”, chap.1, pp. 1-37; **Luigia Sabbatini Ed., De Gruyter Publ., Germany, (2014)**  
**ISBN 978-3-11-027508-7**

**E. De Giglio, N. Ditaranto, L. Sabbatini**  
Polymer surface chemistry: characterization by XPS  
in “**Polymer Surface Characterization**”, chap.3, pp. 73-111; **Luigia Sabbatini Ed., De Gruyter Publ., Germany, (2014)**  
**ISBN 978-3-11-027508-7**

**Giulia Germinario, Inez Dorothé van der Werf, Rosa Maria Montes-Estellés, José Luis Regidor-Ros, Luigia Sabbatini,**  
Biocleaning of acrylic materials  
in **Emerge2014, Valencia (Spain), (22-24 September 2014)**, eds. M.V. Vivancos, M.T. Doménech, M. Sánchez Pons, J. Osca Pons, València (Spain), Editorial Universitat Politècnica de València, 2014 (ISBN: 978-84-9048-317-6), pp. 39-46.

**C.D. Calvano, I. D. van der Werf\*, F. Palmisano, L. Sabbatini,**  
Identification of lipid- and protein-based binders in paintings by direct on-plate wet chemistry and matrix assisted laser desorption ionization mass spectrometry  
**Analytical and Bioanalytical Chemistry, 407 (2015) 1015-1022**  
DOI 10.1007/s00216-014-8359-6

**Valentini F, Roscioli D, Carbone M, Conte V, Floris B, Bauer E, Ditaranto N, Sabbatini L, Caponetti E, Chillura Martino D**  
Graphene and Ionic Liquids new Gel paste electrodes for caffeic acid quantification  
**Sensors and Actuators: B. Chemical, 212 (2015) 248-255**

**C.D. Calvano\*, I. D. van der Werf, L. Sabbatini and F. Palmisano**  
On plate graphite supported sample processing for simultaneous lipid and protein identification by matrix assisted laser desorption ionization mass spectrometry  
**Talanta, 137 (2015) 161-166**  
DOI 10.1016/j.talanta.2015.01.030

**I.D. van der Werf\*, N. Ditaranto\*, R. A. Picca, M.C. Sportelli1, L. Sabbatini**  
Preventive conservation of stone monuments with bioactive nanocomposites  
**Heritage Science, 3:29 (2015) (pagg 1-9)**  
DOI: 10.1186/s40494-015-0060-3

**N. Ditaranto, I. D. van der Werf, R. A. Picca, M. C. Sportelli, L. C.Giannossa, E. Bonerba, G. Tantillo, Luigia Sabbatini**  
Characterization and behaviour of ZnO-based nanocomposites designed for the control of stone monuments biodeterioration  
**New Journal of Chemistry, 39 (2015) 6836-6843**  
DOI: 10.1039/C5NJ00527B

**Kyriaki Manoli, Maria Magliulo, Mohammad Yusuf Mulla, Mandeep Sing, Luigia Sabbatini, Gerardo Palazzo and Luisa Torsi\***  
Printable Bioelectronics To Investigate Functional Biological Interfaces  
**Angewandte Chemie Int.Ed., 54 (2015) 2-17**  
DOI International Edition: 10.1002/anie.201502615  
DOI German Edition: 10.1002/ange.201502615

**G. Germinario, I D van der Werf, L. Sabbatini**  
Pyrolysis gas chromatography mass spectrometry of two green phthalocyanine pigments and their identification in paint systems  
**Journal of Analytical and Applied Pyrolysis, 115 (2015) 175-183**  
DOI: 10.1016/j.jaap.2015.07.016

**Luigia Sabbatini**  
D. Thorburn Burns, R. Klaus Muller, Reiner Salzer, Gerhard Werner: Important figures of analytical chemistry from Germany in brief biographies. From the middle ages to the twentieth century; Book and Software in Review.  
**Analytical and Bioanalytical Chemistry, 407 (2015) 7517-7519**  
DOI 10.1007/s00216-015-8970-1

**I.D. van der Werf, D. Fico, G.E.De Benedetto, L.Sabbatini**  
The molecular composition of Sicilian Amber  
**Microchemical Journal, 125 (2016) 85-96**  
DOI: 10.1016/j.microc.2015.11.012

**Giulia Germinario, Inez Dorothé van der Werf\*, Luigia Sabbatini**  
Chemical characterisation of spray paints by a multi-analytical (Py/GC-MS, FTIR,  $\mu$ -Raman) approach  
**Microchemical Journal, 124 (2016) 929-939**  
DOI: 10.1016/j.microc.2015.04.016

**Nicoletta Ditaranto, Rosaria Anna Picca, Maria Chiara Sportelli, Luigia Sabbatini, Nicola Cioffi**  
Surface characterization of textiles modified by copper and zinc oxide nano-antimicrobials

**Surface Interface Analysis, 48 (2016) 505-508**  
**DOI 10.1002/sia.5951**

**Guglielmina Chimienti\*, Roberta Piredda, Gabriella Pepe, Inez Dorothé van der Werf, Luigia Sabbatini, Carmine Crecchio, Patrizia Ricciuti<sup>4</sup>, Anna Maria D'Erchia, Caterina Manzari, Graziano Pesole.**  
Profile of microbial communities on carbonate stones of the medieval church of San Leonardo di Siponto (Italy) by Illumina-based deep sequencing  
**Appl. Microbiol. Biotechnol, 100 (2016) 8537-8548**  
**DOI 10.1007/s00253-016-7656-8**

**Inez D. van der Werf\*, Alessandro Monno, Daniela Fico, Giulia Germinario, Giuseppe Egidio De Benedetto and Luigia Sabbatini**  
A multi-analytical approach for the assessment of the provenience of geological amber: the collection of the Earth Sciences Museum of Bari (Italy)  
**Special Issue: "Art and Cultural Heritage" (SI ACH) of Environmental Science and Pollution Research (ESPR), on-line (2016)**  
**DOI 10/1007s11356-016-696-z**

**Brevetto Europeo n.2157211 (domanda n. 08425536.3 del 01.08.2008)**  
**"Bioactive metal nanomaterials stabilized by bioactive agents and preparation process (NANO-2) a nome UNIVERSITA' DEGLI STUDI DI BARI**  
**Inventori: Nicola Cioffi, Nicoletta Ditaranto Luigia Sabbatini, Giuseppina Tantillo, Luisa Torsi, Pier Giorgio Zambonin**  
**(Ns. rif GG/jt 08545D53)**

**Cosima Damiana Calvano, Inez Dorothé van der Werf, Francesco Palmisano, Luigia Sabbatini**  
Revealing the composition of organic materials in polychrome works of art: the role of mass spectrometry-based techniques. - Review  
**Anal Bioanal Chem, 408 (2016) 6957-6981**  
**DOI 10.1007/s00216-016-9862-8**

**Giulia Germinario, Inez Dorothé van der Werf, Gerardo Palazzo, José Luis Regidor Ros, Rosa Maria Montes Estelles, Luigia Sabbatini**  
Bioremoval of marker pen inks by exploiting lipase hydrolysis  
**Progress in Organic Coatings, accepted (2017)**

**Inez Dorothé van der Werf, Cosima Damiana Calvano, Giulia Germinario, Tommaso R.I. Cataldi, Luigia Sabbatini**  
Chemical characterisation of medieval illuminated parchment scrolls  
**Microchem. J., 134 (2017) 146-153**