



Nicola Cioffi, Ph.D

Università degli Studi di Bari “Aldo Moro”
Dipartimento di Chimica
Via Orabona 4, I-70126
N. 4, via Orabona, Bari, 70126, Italy
Tel: +390805442020; Fax: +390805442026
Email: nicola.cioffi@uniba.it Skype: nicolacioffi-uniba

Biography:

Nicola Cioffi is Associate Professor at the University of Bari. He authored/coauthored about 150 papers, 4 international patents and about 270 conference communications. He was also author of more than 20 plenary/keynote/invited communications held at international conferences and several invited seminars.

N.C.’s research interests are in the fields of analytical chemistry, surface spectroscopy and nanomaterials for life sciences, including: antibacterial nanomaterials, sensors, bio-analysis, green chemistry, catalysis.

He has been member of several national and international conference committees, including two EMRS symposia. Member of the editorial boards of six international journals, he has co-edited special issues of *Molecules*, *Sensor Letters* and *Nanomaterials* journals.

He is an active member of several scientific societies, and he serves as referee about 50 international journals, being also project reviewer for Italian, Chinese (Research Grants Council), Romanian, and French (Agence Nationale de la Recherche) Institutions.

In the last five years, N.C. has been coordinating projects or research units in industrial research projects on nanoantimicrobials for food-packaging and textile industries, as well as projects on sensors, surface spectroscopy, and mass spectrometry applications of nanomaterials.

List of papers, book chapters, proceedings, editorials, patents

Papers on Journals with Impact Factor

- 93) “Decoration of Silicon Nanowires with Silver Nanoparticles for ultrasensitive Surface Enhanced Raman Scattering” C. D’Andrea, M.J. Lo Faro, G. Bertino, P.M. Ossi, F. Neri, S. Trusso, P. Musumeci, M. Galli, N. Cioffi, A. Irrera, F. Priolo, B. Fazio, *Nanotechnology*, accepted on June 22nd, in press.
- 92) “Recent advances in the synthesis and characterization of nano-antimicrobials” M.C. Sportelli, R.A. Picca, N. Cioffi, *Trends in Analytical Chemistry*, accepted on May 4th, in press, doi 10.1016/j.trac.2016.05.002.
- 91) “Effect of the gate metal work function on water-gated ZnO thin film transistors performance” M. Singh, Y. Mulla, M.V. Santacroce, M. Magliulo, C. Di Franco, K. Manoli, D. Altamura, C. Giannini, N. Cioffi, G. Palazzo, G. Scamarcio, L. Torsi, *Journal of Physics D: Applied Physics*, accepted on May 3rd, in press.
- 90) “Surface characterization of textiles modified by copper and zinc oxide nano-antimicrobials” N. Ditaranto, R.A. Picca, M.C. Sportelli, L. Sabbatini, N. Cioffi, *Surface and Interface Analysis*, accepted on January 11th, in press, DOI 10.1002/sia.5951.

- 89)** "Deposition of morphology-tailored PbS thin films by surfactants supported aerosol assisted chemical vapour deposition Materials Science in Semiconductor Processing", J. Akhtar, M. Dilsahd, S. Hameed, N. Haider, A. Afzal, N. Cioffi, M. Malik, *Materials Science in Semiconductor Processing* 46, pp 39-45, 2016.
- 88)** "Enhanced gas sensing properties of ZnO nanorods electrochemically doped by Au nanophases" E. Dilonardo, M. Penza, M. Alvisi, C. Di Franco, F. Palmisano, L. Torsi, N. Cioffi, *Beilstein Journal of Nanotechnology* 7, pp.22-31, 2016.
- 87)** "Electrophoretically Au NPs modified CNT-networks for tailored gas detection with enhanced sensitivity and selectivity", E. Dilonardo, M. Penza, M. Alvisi, C. Di Franco, R. Rossi, F. Palmisano, L. Torsi, N. Cioffi, *Sensors & Actuators B*, 223, pp. 417-428, 2016, <http://dx.doi.org/10.1016/j.snb.2015.09.112>.
- 86)** "Controlled Microwave Assisted Hydrothermal Synthesis of Magnetite Nanoparticles as Easily Transportable Magnetic Support for Catalysts" A. Rizzuti, M. Dassisti, P. Mastrorilli, M.C. Sportelli, N. Cioffi, R.A. Picca, E. Agostinelli, G. Varvaro, R. Caliandro, *Journal of Nanoparticle Research* 17(10), 408, 2015, DOI10.1007/s11051-015-3213-0.
- 85)** "Electrodeposited semiconductors at room temperature: an X-ray Absorption Spectroscopy study of Cu-, Zn-, S-bearing thin films" by F. Di Benedetto, S. Cinotti, F. D'Acquisto, F. Vizza, M. L. Foresti, A. Guerri, A. Lavacchi, G. Montegrossi, M. Romanelli, N. Cioffi, M. Innocenti, *Electrochimica Acta*, 179, 495-503, 2015, doi: 10.1016/j.electacta.2015.05.168.
- 84)** "Electrochemical deposition of gold on Indium zirconate (InZrO_x with In/Zr atomic ratio: 1.0) for high temperature automobile exhaust gas sensors" A. Afzal, M. Andersson, C. Di Franco, N. Ditaranto, N. Cioffi, G. Scamarcio, A. Lloyd-Spetz, L. Torsi, *Journal of Solid State Electrochemistry*, 19, 2859-2868, 2015.
- 83)** "Electrosynthesis and characterization of ZnO nanoparticles as inorganic component in organic thin-film transistor active layers", R.A. Picca, M.C. Sportelli, D. Hötger, K. Manoli, C. Kranz, B. Mizaikoff, L. Torsi, N. Cioffi, *Electrochimica Acta*, 178, 45-54, 2015.
- 82)** "Copper(II)-catalysed oxidative carbonylation of aminols and amines in water: a direct access to oxazolidinones, ureas and carbamates" M. Casiello, F. Iannone, P. Cotugno, A. Monopoli, N. Cioffi, F. Ciminale, A.M. Trzeciak, A. Nacci, *Journal of Molecular Catalysis A*, 407, 8-14, 2015.
- 81)** "Surface chemical and biological characterization of flax fabrics modified with silver nanoparticles for biomedical applications" F. Paladini, R.A. Picca, M.C. Sportelli, N. Cioffi, A. Sannino, M. Pollini, *Materials Science and Engineering C*, 52, 1-10, 2015.
- 80)** "Sn-deficiency in the electrodeposited ternary Cu_xSn_yS_z thin-films by ECALe" S. Caporali, A. Tolstoguzov, O.M.N.D. Teodoro, M. Innocenti, F. DiBenedetto, S. Cinotti, R.A. Picca, M.C. Sportelli, N. Cioffi, *Solar Energy Materials & Solar Cells*, 138, 9-16, 2015 DOI 10.1016/j.solmat.2015.02.029.
- 79)** "Au/In₂O₃ and Au/ZrO₂ composite nanoparticles via in situ sacrificial gold electrolysis" A. Afzal, C. Di Franco, E. Mesto, N. Ditaranto, N. Cioffi, F. Scordari, G. Scamarcio, L. Torsi, *Materials Express*, 5(3), 171-179, 2015. **Selected for the Journal's cover.**
- 78)** "The phospholipidomic signature of human blood microparticles and platelets: a comparative HILIC-ESI-MS investigation" I. Losito, E. Conte, T.R.I. Cataldi, N. Cioffi, F.M. Megli, F. Palmisano, *Lipids*, 50(1), 71-84, 2015, DOI 10.1007/s11745-014-3975-7.
- 77)** "Synthesis and Characterization of Hybrid Copper-Chitosan Nano-antimicrobials by Femtosecond Laser-Ablation in Liquids" by A. Ancona, M.C. Sportelli, A. Trapani, R.A. Picca, C. Palazzo, E. Bonerba, F. Mezzapesa, G. Tantillo, G. Trapani, N. Cioffi, *Materials Letters* 136, 397-400, 2014, ISSN: 0167-577X, doi: 10.1016/j.matlet.2014.08.083.
- 76)** "Reduction of Spectral Interferences Using Ultraclean Gold Nanowire Array in the LDI-MS Analysis of Peptides", L. Colaianni, S.C Kung, D.K. Taggart, R.A. Picca, J. Greaves, R.M. Penner, N. Cioffi, *Analytical and Bioanalytical Chemistry*, 406(19), 4571-4583, 2014, **invited contribution to the Journal's section ABC Highlights: Authored by Rising Stars and Top Experts**.
- 75)** "Mucoadhesive Properties and Interaction with P-glycoprotein (P-gp) of Thiolated-Chitosans and -Glycol Chitosans and Corresponding Parent Polymers: A Comparative Study", A. Trapani, C. Palazzo, M. Contino, M.G. Perrone, N. Cioffi, N. Ditaranto, N.A. Colabufo, M. Conese, G. Trapani, G. Puglisi, *Biomacromolecules* 15(3), 882-893, 2014.
- 74)** "Design of novel indium oxide supported gold nanocatalysts and their application in homocoupling of arylboronic acids" A. Monopoli, A. Afzal, C. Di Franco, N. Ditaranto, N. Cioffi, P. Cotugno, A. Nacci, L. Torsi *Journal of Molecular Catalysis A: Chemical* 386, 101-107, 2014.
- 73)** "Ion Beam Sputtering deposition and characterization of ZnO-fluoropolymer nano-antimicrobials" M.C. Sportelli, M.A. Nitti, M. Valentini, R.A. Picca, E. Bonerba, L. Sabbatini, G. Tantillo, N. Cioffi, A. Valentini, *Science of Advanced Materials*, 6, 1019-1025, 2014.
- 72)** "Designing functionalised gold surfaces and nanostructures for Laser Desorption Ionization Mass Spectrometry", R. Pilolli, N. Ditaranto, A. Monopoli, A. Nacci, F. Palmisano, L. Sabbatini, N. Cioffi, *Vacuum* 100, 78-83, 2014
- 71)** "Radiation detectors based on Multiwall Carbon Nanotubes deposited by a spray technique", D. Melisi, M. A. Nitti, M. Valentini, A. Valentini, N. Cioffi, N. Ditaranto, C. Di Franco, *Thin Solid Films*, 543, 2013, 19-22
- 70)** "A novel preservation technique applied to fiordilatte cheese" A. Conte, D. Longano, C. Costa, N. Ditaranto, A. Ancona, N. Cioffi, C. Scrocco, L. Sabbatini, F. Contò, M.A. Del Nobile, *Innovative Food Science and Emerging Technologies*, 19, 2013, 158-165.
- 69)** "Part-per-trillion label-free electronic bio-analytical detection", M. Magliulo, A. Mallardi, R. Gristina, F. Ridi, L. Sabbatini, N. Cioffi, G. Palazzo, L. Torsi, *Analytical Chemistry*, 85, 3849-3857, 2013.
- 68)** "NO_x sensing one- and two-dimensional carbon nanostructures and nanohybrids: progress and perspectives", N. Iqbal, A. Afzal, N. Cioffi, L. Sabbatini, L. Torsi, *Sensors & Actuators B*, 181, 9-21, 2013.
- 67)** "Systemic heparin delivery by the pulmonary route using chitosan and glycol chitosan nanoparticles", A. Trapani, S. Di Gioia, N. Ditaranto, N. Cioffi, F.M. Goycoolea, A. Carbone, M. Garcia-Fuentes, M. Conese, M.J. Alonso, *International Journal of Pharmaceutics*, 447, 115-123, 2013.

- 66)** "PE-CVD of hydrophilic -COOH functionalized coatings on electrolyte gated field-effect transistor electronic layers", M. Magliulo, B. R. Pistillo, M.Y. Mulla, S. Cotrone, N. Ditaranto, N. Cioffi, P. Favia, L. Torsi, *Plasma Processes and Polymers*, 10 (2), 102-109, 2013.
- 65)** "Volatile general anesthetic sensing with organic field-effect transistors integrating phospholipid membranes", M.D. Angione, M. Magliulo, S. Cotrone, A. Mallardi, D. Altamura, C. Giannini, N. Cioffi, L. Sabbatini, D. Gobeljic, G. Scamarcio, G. Palazzo, L. Torsi, *Biosensors & Bioelectronics*, 40 (1), 303-307, 2013.
- 64)** "Non-destructive depth profile reconstruction of bio-engineered surfaces by parallel angle resolved x-ray photoelectron spectroscopy" R. Pilolli, N. Ditaranto, N. Cioffi, L. Sabbatini, *Analytical and Bioanalytical Chemistry*, 405, 713-724, 2013.
- 63)** "Ullmann Homocoupling Catalyzed by Free Gold nanoparticles in Water and Ionic Liquid", A. Monopoli, P. Cotugno, G. Palazzo, N. Ditaranto, N. Cioffi, F. Ciminale, A. Nacci, *Advanced Synthesis & Catalysis* 354, 2012, 2777-2788.
- 62)** "Thermally annealed gold nanoparticles for surface assisted laser desorption mass spectrometry of low molecular weight analytes", R. Pilolli, N. Ditaranto, C. Di Franco, F. Palmisano, N. Cioffi, *Analytical and Bioanalytical Chemistry*, 404 (6-7), 2012, 1703-1711
- 61)** "NO_x Sensing with Semiconducting Metal Oxide Nanostructures: Progress and Perspectives" A. Afzal, N. Cioffi, L. Sabbatini, L. Torsi, *Sensors & Actuators B* 171-172, 2012, 25-42.
- 60)** "Interfacial electronic effects in functional bio-layers integrated into organic field-effect transistors" M.D. Angione, S. Cotrone, M. Magliulo, A. Mallardi, D. Altamura, C. Giannini, N. Cioffi, L. Sabbatini, E. Fratini, P. Baglioni, G. Scamarcio, G. Palazzo, L. Torsi, *Proceedings of the National Academy of Sciences of the United States of America* 109(17), 2012, 6429-6434.
- 59)** "Analytical characterization of laser-generated copper nanoparticles for antimicrobial composite food packaging", Daniela Longano, Nicoletta Ditaranto, Nicola Cioffi, Francesca Di Niso, Teresa Sibillano, Antonio Ancona, Amalia Conte, Matteo Alessandro Del Nobile, Luigia Sabbatini, Luisa Torsi, *Analytical and Bioanalytical Chemistry*, 403 (4), 2012, 1179-1186.
- 58)** "Pd-Nanoparticles catalyzed one-pot sequential Heck and Suzuki couplings of bromo-chloroarenes in ionic liquids and water", P. Cotugno, A. Monopoli, F. Ciminale, N. Cioffi, A. Nacci, *Organic and Biomolecular Chemistry*, 10, 2012, 808-813.
- 57)** "Gold Nanomaterials as a new tool for bio-analytical applications of Laser Desorption Ionization Mass Spectrometry", R. Pilolli, F. Palmisano, N. Cioffi, *Analytical and Bioanalytical Chemistry*, 402, 2012, 601-623, *invited contribution to the Journal's section dedicated to young investigators*.
- 56)** "Carbon based materials for electronic bio-sensing" M. D. Angione, R. Pilolli, S. Cotrone, M. Magliulo, A. Mallardi, G. Palazzo, L. Sabbatini, D. Fine, A. Dodabalapur, N. Cioffi, L. Torsi, *Materials Today*, 14(9), 2011, 424-433.
- 55)** "Virus-PEDOT Composite Films for Impedance-Based Biosensing", K. Donavan, J. Arter, R. Pilolli, N. Cioffi, G. Weiss, R.M. Penner, *Analytical Chemistry*, 83(7), 2011, 2420-2424.
- 54)** "Spectrochemical characterization of thin layers of lipoprotein self-assembled films on solid supports under oxidation process", A. Tache, S. Cotrone, S.C. Litescu, N. Cioffi, L. Torsi, L. Sabbatini, G.L. Radu, *Analytical Letters*, 44, 2011, 747-760.
- 53)** "Electrosynthesis and characterization of gold nanoparticles for electronic capacitance sensing of pollutants", N. Cioffi, L. Colaianni, E. Ieva, R. Pilolli, N. Ditaranto, M.D. Angione, S. Cotrone, K. Buchholt, A. Lloyd Spetz, L. Sabbatini, L. Torsi, *Electrochimica Acta*, 56, 2011, 3713-3720.
- 52)** "Synthesis and analytical characterization of copper-based nanocoatings for bioactive stone artworks treatment", N. Ditaranto, S. Loperfido, I. van der Werf, A. Mangone, N. Cioffi, L. Sabbatini, *Analytical and Bioanalytical Chemistry*, 399 (1), 2011, 473-481.
- 51)** "Palladium/zirconium oxide composite as highly recyclable nanocatalysts for C-C coupling reactions in water", A. Monopoli, A. Nacci, V. Calò, F. Ciminale, P. Cotugno, P. Azzone, L.C. Giannossa, A. Mangone, N. Cioffi, *Molecules*, 15(7), 2010, 4511-4525.
- 50)** "Laser Desorption Ionization-Mass Spectrometry detection of amino acids and peptides promoted by gold nanowires", L. Colaianni, S.C Kung, D.K. Taggart, V. De Giorgio, J. Greaves, R.M. Penner, N. Cioffi *Sensor Letters*, 8 (3), 2010, 539-544.
- 49)** "Glucose as clean and renewable reductant in the Pd-nanoparticles-Catalyzed Reductive Homocoupling of bromo- and chloro-aryls in water" A. Monopoli, V. Calò, F. Ciminale, P. Cotugno, C. Angelici, N. Cioffi, A. Nacci, *Journal of Organic Chemistry*, 75, 2010, 3908-3911.
- 48)** "A comparative study of chitosan and chitosan/cyclodextrin nanoparticles as oral carriers of small peptides" A. Trapani, A. Lopedota, M. Franco, N. Cioffi, E. Ieva, M. Garcia-Fuentes, M.J. Alonso, *European Journal of Pharmaceutics and Biopharmaceutics*, 75, 2010, 26-32.
- 47)** "An organic field effect transistor as a selective NO_x sensor operated at room temperature", F. Marinelli, A. Dell'Aquila, L. Torsi, J. Tey, G.P. Suranna, P. Mastrorilli, G. Romanazzi, C.F. Nobile, S.G. Mhaisalkar, N. Cioffi, F. Palmisano, *Sensors & Actuators B*, 140, 2009, 445-450.
- 46)** "Silver nano-fractals: electrochemical synthesis, XPS characterization and application in LDI-MS", N. Cioffi, L. Colaianni, R. Pilolli, C.D. Calvano, F. Palmisano, P.G. Zambonin, *Analytical and Bioanalytical Chemistry*, paper in forefront, 394 , 2009, 1375-1383. *Selected and highlighted as feature paper*.
- 45)** "Optical and electronic NO_x sensors for applications in mechatronics", C. Di Franco, A. Elia, V. Spagnolo, G. Scamarcio, P.M. Lugarà, E. Ieva, N. Cioffi, L. Torsi, G. Bruno, M. Losurdo, M.A. Garcia, S.D. Wolter, A. Brown, M. Ricco, *Sensors Journal*, 9, 2009, 3337-3356.
- 44)** "Contact Effects in Organic Thin-Film Transistor Sensors", L. Torsi, F. Marinelli, M.D. Angione, A. Dell'Aquila, N. Cioffi, E. De Giglio, L. Sabbatini, *Organic Electronics*, 10, 2009, 233-239.
- 43)** "Analytical characterization of chitosan nanoparticles for peptide drug delivery applications", E. Ieva, A. Trapani, N. Cioffi, N. Ditaranto, A. Monopoli, L. Sabbatini, *Analytical and Bioanalytical Chemistry*, 393, 2009, 207-215.

- 42) "Au nanoparticles as Gate Material for NO_x Field Effect Capacitive Gas Sensors", E. Ieva, K. Buchholt, L. Colaianni, N. Cioffi, L. Sabbatini, G.C. Capitani, A. Lloyd Spetz, P.O. Käll, L. Torsi, *Sensor Letters*, 6(4), 2008, 577-584.
- 41) "Core-shell gold nanoparticles as non-conventional matrix for MALDI-ToF-MS detection of amino acids: a preliminary study", N. Cioffi, F. De Palo, I.D. van der Werf, C.D. Calvano, F. Palmisano, P.G. Zambonin, *Sensor Letters*, 6(4), 2008, 654-661.
- 40) "Plasma treatment effects on Si and Si/dielectric film heterostructures", C. Di Franco, N. Cioffi, N. Ditaranto, M. S. Vitiello, M. Sibilano, L. Torsi, G. Scamarcio, *Journal of Materials Processing Technology*, 206, 2008, 462-466.
- 39) "Theoretical Analysis of a Palladium-Based One-Dimensional Metallo-Dielectric Photonic Band Gap Structure for Applications to H₂ sensors", M. A. Vincenti, S. Trevisi, M. De Sario, V. Petruzzelli, A. D'Orazio, F. Prudenzano, N. Cioffi, D. de Ceglia, M. Scalora, *Journal of Applied Physics*, 103, 2008, 645071-645076.
- 38) "Analytical investigations on poly(acrylic acid) coatings electrodeposited on titanium based implants: a versatile approach to biocompatibility enhancement", E. De Giglio, S. Cometa, N. Cioffi, L. Torsi, L. Sabbatini, *Analytical & Bioanalytical Chemistry*, 389, 2007, 2055-2063.
- 37) "Palladium-nanoparticles Catalyzed Hydrodehalogenation of Aryl Chlorides in Ionic Liquids" V. Calò, A. Nacci, A. Monopoli, A. Damascelli, V. Ferola, N. Cioffi, *Journal of Organometallic Chemistry*, 692, 2007, 4397-4401.
- 36) "Functionalized interfaces by plasma treatments on silicon and silicon dioxide substrates", C. Di Franco, N. Cioffi, N. Ditaranto, M. S. Vitiello, M. Sibilano, L. Torsi, G. Scamarcio, *Thin Solid Films*, 515, 2007, 7195-7202.
- 35) "Analytical characterisation of Pd/ZrO₂ composite nanoparticles employed in heterogeneous catalysis", N. Cioffi, M. Faticanti, N. Ditaranto, S. De Rossi, L. Traversa, A. Monopoli, A. Nacci, L. Torsi, L. Sabbatini, *Current Nanoscience*, 3(2), 2007, 121-127.
- 34) "Core-shell Pd nanoparticles embedded in SnO_x films. Synthesis, analytical characterization and perspective application in chemiresistor-type sensing devices" N. Cioffi, L. Traversa, N. Ditaranto, A. M. Taurino, M. Epifani, P. Siciliano, T. Bleve-Zacheo, L. Sabbatini, L. Torsi, P.G. Zambonin, *Microelectronics Journal*, 12, 2006, 1620-1628.
- 33) "Dual ion-beam sputtering deposition of palladium-fluoropolymer nano-composites", I. Farella, A. Valentini, N. Cioffi, L. Torsi, *Applied Physics A - Materials Science and Processing*, 80(4), 2005, 791-795.
- 32) "Copper nanoparticle/polymer composites with antifungal and bacteriostatic properties", N. Cioffi, L. Torsi, N. Ditaranto, G. Tantillo, L. Ghibelli, L. Sabbatini, T. Bleve-Zacheo, M. D'Alessio, P.G. Zambonin, E. Traversa, *Chemistry of Materials*, 17, 2005, 5255-5262. **WOS highly cited paper**.
- 31) "Synthesis, analytical characterization and bio-activity of Ag and Cu nanoparticles embedded in poly-vinyl-methyl-ketone films", N. Cioffi, N. Ditaranto, L. Torsi, R.A. Picca, E. De Giglio, L. Sabbatini, L. Novello, G. Tantillo, T. Bleve-Zacheo, P.G. Zambonin, *Analytical and Bioanalytical Chemistry*, 382, 2005, 1912-1918.
- 30) "Pd supported on tetragonal zirconia: electrosynthesis, characterization and catalytic activity toward CO oxidation and CH₄ combustion", M. Faticanti, N. Cioffi, S. De Rossi, N. Ditaranto, P. Porta, L. Sabbatini, T. Bleve-Zacheo, *Applied Catalysis B, Environmental*, 60, 2005, 73-82.
- 29) "Copper bronze catalyzed Heck reaction in ionic liquids", V. Calò, A. Nacci, A. Monopoli, E. Ieva, N. Cioffi, *Organic Letters*, 7(4), 2005, 617-620.
- 28) "Biocompatible channels for field-flow fractionation of biological samples. Correlation between surface characterization and operating performances", B. Roda, N. Cioffi, N. Ditaranto, A. Zattoni, S. Casolari, D. Melucci, P. Reschiglian, L. Sabbatini, A. Valentini, P. G. Zambonin, *Analytical and Bioanalytical Chemistry*, 381, 2005, 639-646.
- 27) "Analytical characterization of bioactive fluoropolymer ultra-thin coatings modified by copper nanoparticles", N. Cioffi, N. Ditaranto, L. Torsi, R. A. Picca, L. Sabbatini, A. Valentini, L. Novello, G. Tantillo, T. Bleve-Zacheo, P. G. Zambonin, *Analytical and Bioanalytical Chemistry*, 381, 2005, 607-616.
- 26) "Alkoxy-substituted polyterthiophene thin film transistors as alcohol sensors", L. Torsi, M.C. Tanese, N. Cioffi, M.C. Gallazzi, L. Sabbatini, P.G. Zambonin, *Sensors & Actuators B*, 98, 2004, 204-207.
- 25) "Heck Reaction Catalyzed by Nanosized Palladium on Chitosan in Ionic Liquids", V. Calò, A. Nacci, A. Monopoli, A. Fornaro, L. Sabbatini, N. Cioffi, N. Ditaranto, *Organometallics*, 23(22), 2004, 5154-5158.
- 24) "Antifungal activity of polymer based copper nanocomposite coatings", N. Cioffi, L. Torsi, N. Ditaranto, G. Tantillo, L. Ghibelli, L. Sabbatini, T. Bleve-Zacheo, M. D'Alessio, P.G. Zambonin, E. Traversa, *Applied Physics Letters*, 85 (12), 2004, 2417-2419. **-also selected for simultaneous publication on other publisher's initiatives such as: the October 1, 2004 issue of Virtual Journal of Biological Physics (<http://www.vjbio.org>) and on the October 11, 2004 issue of Virtual Journal of Nanoscale Science & Technology (<http://www.vjnano.org>)** -
- 23) "The swelling of vapor-sensitive fluoropolymers modified with metal nanoparticles: interpretation of the material-vapor interaction mechanism", N. Cioffi, L. Torsi, I. Farella, D. Altamura, A. Valentini, M. Quinto, L. Sabbatini and P.G. Zambonin, *Sensors & Actuators B*, 100, 2004, 9-16.
- 22) "Poly(phenyleneethynylene) polymers bearing glucose substituents as promising active layers in enantioselective chemiresistors", M.C. Tanese, L. Torsi, N. Cioffi, L. Zotti, D. Colangiuli, G.M. Farinola, F. Babudri, F. Naso, M.M. Giangregorio, L. Sabbatini, P.G. Zambonin, *Sensors & Actuators B*, 100, 2004, 17-21.
- 21) "Deposition and analytical characterization of fluoropolymers modified by palladium nanoparticles", N. Cioffi, L. Torsi, I. Farella, D. Altamura, A. Valentini, N. Ditaranto, L. Sabbatini, P.G. Zambonin and T. Bleve-Zacheo, *Thin Solid Films*, 449, 2004, 25-33.
- 20) "Simultaneous determination of ochratoxin A and cyclopiazonic, mycophenolic and tenuazonic acids in cornflakes by solid-phase microextraction coupled to high performance liquid chromatography", A. Aresta, N. Cioffi, F. Palmisano, C.G. Zambonin, *Journal of Agricultural and Food Chemistry*, 51, 2003, 5232-5237.

- 19)** "Side-Chain role in chemically sensing conducting polymer field-effect transistors", L. Torsi, M.C. Tanese, N. Cioffi, M.C. Gallazzi, L. Sabbatini, P.G. Zambonin, G. Raon, S.V. Meille, M.M. Giangregorio, *Journal of Physical Chemistry B*, 107(31), 2003, 7589-7594.
- 18)** "Ion-beam sputtered palladium-fluoropolymer nano-composites as active layers for organic vapours sensors", N. Cioffi, I. Farella, L. Torsi, A. Valentini, L. Sabbatini, P.G. Zambonin, *Sensors & Actuators B*, 93(1-3), 2003, 181-186.
- 17)** "Regioregular polythiophene field-effect transistors employed as chemical sensors", A. Tafuri, L. Torsi, N. Cioffi, M.C. Gallazzi, A. Sassella, L. Sabbatini, P.G. Zambonin, *Sensors & Actuators B*, 93(1-3), 2003, 257-262.
- 16)** "Characterization of soluble oligomers produced by electrochemical oxidation of o-phenylenediamine by Electrospray Ionization – Sequential Mass Spectrometry", I. Losito, N. Cioffi, M.P. Vitale, F. Palmisano, *Rapid Communications in Mass Spectrometry*, 17, 2003, 1169-1179.
- 15)** "Pd-nanoparticles catalyzed stereospecific synthesis of β -aryl cinnamic esters in ionic liquids", V. Caló, A. Nacci, A. Monopoli, S. Laera, N. Cioffi, *Journal of Organic Chemistry*, 68, 2003, 2929-2933.
- 14)** "Influence of bias voltage on the stability of CsI photocathodes exposed to air", M.A. Nitti, N. Cioffi, E. Nappi, B.K. Singh, A. Valentini, *Nuclear Instruments and Methods in Physics Research A*, 493, 2002, 16-24.
- 13)** "Effect of metal clusters on the swelling of gold-fluorocarbon-polymer composite films", A. Convertino, A. Valentini, A. Bassi, E.N.M. Cirillo, N. Cioffi, L. Torsi, *Applied Physics Letters*, 80(9), 2002, 1565-1567.
- 12)** "Study of phenol-like compounds antioxidative behaviour on low-density lipoprotein gold modified electrode", S.C. Litescu, N.Cioffi, L. Sabbatini, G.L. Radu, *Electroanalysis*, 14, 2002, 858-865.
- 11)** "Analysis of the surface chemical composition and morphological structure of vapor sensing gold-fluoropolymer nanocomposites", N. Cioffi, I. Losito, L. Torsi, I. Farella, A. Valentini, L. Sabbatini, P.G. Zambonin, T. Bleve-Zacheo, *Chemistry of Materials*, 14, 2002, 804-811.
- 10)** "Correlation between surface chemical composition and vapor sensing properties of gold-fluorocarbon nanocomposites", N. Cioffi, I. Farella, L. Torsi, A. Valentini, A. Tafuri, *Sensors & Actuators B*, 84, 2002, 49-54.
- 9)** "Spectroscopic investigation on polymer films obtained by oxidation of o-phenylenediamine on platinum electrodes at different pHs", I. Losito, E. De Giglio, N. Cioffi, C. Malitesta, *Journal of Materials Chemistry*, 11, 2001, 1812-1817.
- 8)** "Electrosynthesis and analytical characterisation of polypyrrole thin films modified with copper nanoparticles", N. Cioffi, L. Torsi, I. Losito, C. Di Franco, I. De Bari, L. Chiavarone, G. Scamarcio, V. Tsakova, L. Sabbatini, P.G. Zambonin, *Journal of Materials Chemistry*, 11(5), 2001, 1434-1440.
- 7)** "Nanostructured palladium-polypyrrole composites electrosynthesised from organic solvents", N. Cioffi, L. Torsi, I. Losito, L. Sabbatini, P.G. Zambonin, T. Bleve-Zacheo, *Electrochimica Acta*, 46, 2001, 4205-4211.
- 6)** "Organic thin film transistors: from active materials to novel applications", L. Torsi, N. Cioffi, C. Di Franco, L. Sabbatini, P.G. Zambonin, T. Bleve-Zacheo, *Solid-State Electronics*, 45(6), 2001, 1479-1485.
- 5)** "NTCDA organic thin-film-transistor as humidity sensor: weaknesses and strengths", L. Torsi, A. Dodabalapur, N. Cioffi, L. Sabbatini, P.G. Zambonin, *Sensors & Actuators B*, 77, 2001, 7-11.
- 4)** "An Electrospray Ionization-ion trap Mass Spectrometry (ESI-MS-MSⁿ) study of dehydroascorbic acid hydrolysis at neutral pH", N. Cioffi, I. Losito, R. Terzano, C.G. Zambonin, *Analyst*, 125(12), 2000, 2244-2248.
- 3)** "Electrosynthesis and characterisation of nanostructured palladium-polypyrrole composites", N. Cioffi, L. Torsi, L. Sabbatini, P.G. Zambonin, T. Bleve Zacheo, *Journal of ElectroAnalytical Chemistry*, 488(1), 2000, 42-47.

Editorials

- 2)** "Special Issue: Nano-Catalysts and Nano-Technologies for Green Organic Synthesis", A. Nacci, N. Cioffi, *Molecules* 16(2), 1452–1453 (2011).
- 1)** "Selected Peer-Reviewed Articles from the Symposium "O – Functional Organic and Inorganic Materials for Micro and Nano Bio-Sensing Systems" of the EMRS Spring Meeting 2007", N. Cioffi, E. Comini, E. Eickhoff, L. Torsi, *Sensor Letters* 6(4), 463–464 (2008).

Book Chapters

- 13)** "Recent trends in the electrochemical synthesis of zinc oxide nano-colloids" M.C. Sportelli, S. Scarabino, R.A. Picca, N. Cioffi, book chapter, "CRC Concise Encyclopedia of Nanotechnology, 1st Edition, B. I. Kharisov Ed. ISBN: 9781466580343, December 14, 2015.
- 12)** "Non-conventional routes to Silver nanoantimicrobials. Technological issues, Bioactivity, Applications", M. Pollini, F. Paladini, A. Sannino, RA Picca, MC Sportelli, N Cioffi, M Nitti, M Valentini, A Valentini, Chapter n.6, pages 87-106, in *Nanotechnology in Diagnosis, Treatment and Prophylaxis of Infectious Diseases*, K. Kon and M. Rai Eds., Elsevier Publisher, 2015, ISBN:978-0-12-801317-5.
- 11)** "Nano-antimicrobials based on metals", M.C. Sportelli, R.A. Picca, N. Cioffi, in "Novel antimicrobial agents and strategies", chapter 8, pages 181-218, Phoenix, Harris, Dennison, Eds., Wiley-VCH Verlag Publisher ISBN: 978-3-527-33638-8. 352, 2014.
- 10)** "Synthesis and antimicrobial activity of copper nanomaterials", D. Longano, N. Ditaranto, L. Sabbatini, L. Torsi, N. Cioffi in "Nano-antimicrobials. Progress and Prospects", Springer-Verlag Publisher, N. Cioffi, M. Rai Eds., 1st Edition, 504 pp, ISBN 978-3-642-24427-8, 2012. Chapter n.3 pp. 85-117, DOI 10.1007/978-3-642-24428-5_3
- 9)** "Silver nanoparticles as nanoantimicrobials: Bioactivity, Benefits and Bottlenecks", M. Rai, A. Yadav, N. Cioffi in

"Nano-antimicrobials. Progress and Prospects", Springer-Verlag Publisher, N. Cioffi, M. Rai Eds., 1st Edition, 504 pp, ISBN 978-3-642-24427-8, 2012. Chapter n.7 pp. 211-224, DOI 10.1007/978-3-642-24428-5_7

8) "Biosensors Based on Immobilization of Proteins in Supramolecular Assemblies for the Detection of Environmental Relevant Analytes" R. Pilolli, M.D. Angione, S. Cotrone, M. Maglìulo, G. Palazzo, N. Cioffi, L. Torsi, A. Mallardi, in "Biosensors and Environmental Health", Publisher: CRC Press SCIENCE PUBLISHERS U.S., Victor Preedy, Vinood Patel Eds., ISBN 978-1-57808-735-8, 2012, chapter 12, pages 209-229.

7) "Advanced NO_x Sensors for Mechatronic Applications", A. Elia, C. Di Franco, A. Afzal, N. Cioffi, L. Torsi, in "Mechatronics", ISBN: 978-953-307-373-6, InTech Publisher, published online August 2011, (<http://www.intechopen.com/articles/show/title/advanced-nox-sensors-for-mechatronic-applications>).

6) "Organic thin-film transistors for inorganic substance monitoring", L. Torsi, N. Cioffi, F. Marinelli, E. Ieva, L. Colaianni, A. Dell'Aquila, G.P. Suranna, P. Mastrorilli, S. Maisalkar, A. Lloyd Spetz, L. Sabbatini, *invited review chapter, in Organic electronics in sensors and Biotechnology*, Joseph and Ruth Shinar Eds, published by McGraw-Hill Companies Inc., (2009), pages 51-91, ISBN: 0071596755 / 9780071596756.

5) "Approaches to Synthesis and Characterization of Spherical & Anisotropic Copper Nanomaterials" N. Cioffi, N. Ditaranto, L. Torsi, L. Sabbatini, *invited review chapter*, pages 3-70, volume 1 "Metallic Nanomaterials", series of textbooks "Nanomaterials for the Life Sciences" C. Kumar ed. Wiley-VCH, ISBN 978-3-527-32151-3, 2009.

4) "Electrochemical synthesis of colloidal gold nanoparticles", E. Ieva, N. Cioffi, *invited review chapter, in Nanomaterials: New Research Developments*, E.I. Pertsov Ed., Nova Science Publishers Inc. 400 Oser Avenue, Hauppauge, NY, USA, 2008, chapter 6, pages 269-293, ISBN 978-1-60456-300-9.

3) "Electrochemically synthesised Pd- and Au- nanoparticles as sensing layers in NOx-sensitive field effect devices" K. Buchholt, E. Ieva, N. Cioffi, L. Colaianni, L.Torsi, Per-Olov Käll, A. Lloyd Spetz, in Series: Lecture Notes in Electrical Engineering, vol. 20, Smart Sensors and Sensing Technology, S.C. Mukhopadhyay, G.S. Gupta (eds), Springer, Berlin Heidelberg, Germany, pp.63-75, 2008. ISBN: 978-3-540-79589-6.

2) "Metal-fluoropolymer nanocomposite vapor sensors", N. Cioffi, I. Farella, L. Torsi, A. Valentini, *invited review chapter, Encyclopedia of Sensors, volume 6, pages 35-58. American Scientific Publishers*, Stevenson Ranch, California-USA, 2006. ISBN 1-58883-062-4.

Book Editorials

1) "Nano-antimicrobials, Progress and Prospects. Preface", N. Cioffi, M. Rai, pp. vii-ix, in "Nano-antimicrobials. Progress and Prospects", Springer-Verlag Publisher, N. Cioffi, M. Rai Eds., 1st Edition, 504 pp, ISBN 978-3-642-24427-8, 2012.

Papers on Journals & Proceedings (with doi, ISSN, or ISBN, without Impact Factor)

44) "Glutathione loaded solid lipid nanoparticles: preparation and in vitro evaluation as delivery systems of the antioxidant peptide to immunocompetent fish cells" A. Trapani, G. Tripodo, D. Mandracchia, N. Cioffi, N. Ditaranto, R. Cerezuela, M.A. Esteban, *Journal of Cellular Biotechnology* accepted on April 13th, in press.

43) "Laser Ablation Synthesis of Hybrid Cu/Ag Nanoparticles for prospective application as nanoantimicrobial agents for food packaging" R.A. Picca, A. Di Maria, L. Riháková, A. Volpe, M.C. Sportelli, P.M. Lugarà, A. Ancona, N. Cioffi, *MRS Advances*, available on CJO 2016 doi:10.1557/adv.2016.336.

42) "Fabricating energy devices with low environmental impacts" M. Innocenti, F. Di Benedetto, A. Lavacchi, N. Cioffi, R. Felici, L.A. Pardi, SPIE Newsroom-Nanotechnology, published online, 2016, doi: 10.1117/2.1201512.006249.

41) "Bio-functionalization of ZnO water gated thin-film transistors" M. Singh, M.Y. Mulla, K. Manoli, M. Maglìulo, N. Ditaranto, N. Cioffi, G. Palazzo, L. Torsi, M.V. Santacroce, C. Di Franco, G. Scamarcio, *Proceedings - 2015 6th IEEE International Workshop on Advances in Sensors and Interfaces, IWASI 2015*, 7184944, pp. 261-265

40) "Metal-decorated silicon nanowires as novel platform for laser-desorption-ionization mass spectrometry", R.A. Picca, M.J. Lo Faro, C.D. Calvano, B. Fazio, M.C. Sportelli, S. Trusso, P.M. Ossi, F. Neri, C. D'Andrea, A. Irrera, N. Cioffi, SPIE Newsroom-Nanotechnology, published online, 2015, doi: 10.1117/2.1201509.006086.

39) "Controlled electrochemical functionalization of MOx nanostructures by Au NPs for gas sensing application" E. Dilonardo, M. Penza, M. Alvisi, C. Di Franco, F. Palmisano, L. Torsi, N. Cioffi, *Proceedings of the MRS Spring Meeting 2015, Symposium TT, MRS Online Proceedings Library, Cambridge Journals Online, Mater. Res. Soc. Symp. Proc. Vol. 1805, 2015* doi: 10.1557/opr.2015.759.

38) "Enhancement of the gas sensing performance of carbon nanotube networked films based on their electrophoretic functionalization with gold nanoparticles" E. Dilonardo, M. Penza, M. Alvisi, C. Di Franco, D. Suriano, R. Rossi, F. Palmisano, L. Torsi, N. Cioffi, *Proceedings of the MRS Spring Meeting 2015, Symposium T, MRS Online Proceedings Library, Cambridge Journals Online, Mater. Res. Soc. Symp. Proc. Vol. 1786, 2015*, doi: 10.1557/opr.2015.776

37) "Surface Analytical Characterization of P3HT-Streptavidin Bilayers for Biosensing Applications" M.C. Sportelli, R.A. Picca, K. Manoli, M. Maglìulo, M. Re, E. Pesce, L. Tapfer, M.V. Santacroce, C. Di Franco, N. Cioffi, L. Torsi, *Proceedings of the MRS Spring Meeting 2015, Symposium II, MRS Online Proceedings Library, Cambridge Journals Online, Mater. Res. Soc. Symp. Proc. vol. 1795, 2015, mrss15-2137468* doi: 10.1557/opr.2015.646.

36) "Laser Ablation Synthesis in Solution of Nanoantimicrobials for Food Packaging Applications" M.C. Sportelli, A. Ancona, R.A. Picca, A. Trapani, A. Volpe, G. Trapani, N. Cioffi *Proceedings of the MRS Spring Meeting 2015, SymposiumRR, MRS Online Proceedings Library, Cambridge Journals Online, Mater. Res. Soc. Symp. Proc., vol. 1804, 2015, mrss15-2137468* doi:10.1557/opr.2015.611.

- 35)** "Electrophoretic deposition of Au NPs on CNTs networks for sensitive NO₂ detection" E. Dilonardo, M. Penza, M. Alvisi, C. Di Franco, D. Suriano, R. Rossi, F. Palmisano, L. Torsi, N. Cioffi *Journal of Sensors and Sensor Systems* doi:10.5194/jsss-3-1-2014, 2014, 3, 1-8.
- 34)** "Chitosan Nanoparticles for Topical Co-Administration of the Antioxidants Glutathione and Idebenone: Characterization and In Vitro Release", L. Montenegro, A. Trapani, P. Fini, D. Mandracchia, A. Latrofa, N. Cioffi, L. Chiarantini, G.G. Piccieri, Giovanni Puglisi, *British Journal of Pharmaceutical Research* 4(20), 2014, 2387-2406.
- 33)** "Electrosynthesized Polystyrene Sulphonate-Capped Zinc Oxide Nanoparticles as Electrode Modifiers for Sensing Devices" M.C. Sportelli, D. Hötger, R.A. Picca, K. Manoli, C. Kranz, B. Mizaikoff, L. Torsi, N. Cioffi, Proceedings of the MRS Spring Meeting 2014, Symposium K, MRS Online Proceedings Library, Cambridge Journals Online, ISSN: 1946-4274, 1675, mrss14-1675-k05-04 doi:10.1557/opl.2014.847.
- 32)** "Sviluppo ed applicazione di nanowire di silicio in spettrometria di massa con desorbimento ionizzazione laser" R.A. Picca, C.D. Calvano, M.C. Sportelli, C. D'Andrea, M.J. Lo Faro, B. Fazio, A. Irrera, N. Cioffi, *La Chimica e l'Industria*, 2014, 2, 51-54.
- 31)** "Advances in the definition of a drop-based functionalization protocol for CMOS-compatible MEMS biosensors" R. Pilolli, N. Ucciferri, V. Russino, N. Ditaranto, L. Tedeschi, N. Cioffi, C. Domenici, A. Nannini, F. Pieri in "Sensors: Proceedings of the First National Conference on Sensors, Rome 15-17 February, 2012" F. Baldini et al Eds, Lecture Notes in Electrical Engineering 162, 2014, pag. 145-148, ISBN: 978-1-4614-3859-5 (Print) 978-1-4614-3860-1 (Online).
- 30)** "Metal nanoantimicrobials for textile applications" L.C. Giannossa, D. Longano, N. Ditaranto, M.A. Nitti, F. Paladini, M. Pollini, M.K. Rai, A. Sannino, A. Valentini, N. Cioffi, *Nanotechnology reviews* vol 2(3), 2013, 307-331.
- 29)** "Synthesis and characterization of hybrid Copper-Chitosan nanoantimicrobials by femtosecond laser-ablation in liquids" A. Ancona, C. Palazzo, A. Trapani, T. Sibillano, F.P. Mezzapesa, R.A. Picca, M.C. Sportelli, E. Bonerba, G. Tantillo, G. Trapani, N. Cioffi, Proceedings of the IEEE Conference: Conference on Lasers and Electro-Optics Europe & International Quantum Electronics Conference (CLEO/Europe-IQEC) Location: Munich, GERMANY Date: MAY 12-16, 2013. Publisher: IEEE, 345 E 47TH ST, NEW YORK, NY 10017 USA, 2013, ISBN:978-1-4799-0594-2.
- 28)** "One- vs two-step preparation of antimicrobial coatings composed of laser ablated copper nanoparticles and poly-lactic acid", D. Longano, N. Ditaranto, N. Cioffi, F. Di Niso, T. Sibillano, F. P. Mezzapesa, A. Ancona, A. Conte, M.A. Del Nobile, L. Sabbatini, L. Torsi, Proceedings of the MRS Spring Meeting 2012, Symposium GG, MRS Online Proceedings Library, Cambridge Journals Online, ISSN: 1946-4274, Volume 1453, 2013, 6 pages, DOI:10.1557/opl.2012.1044.
- 27)** "Phage encapsulated Poly(3,4-ethylenedioxythiophene) (PEDOT) film biosensors" K.C. Donavan, J.A. Arter, R. Pilolli, N. Cioffi, G.A. Weiss, R.M. Penner, Abstracts of papers of the American Chemical Society Volume: 241, 2011, Meeting Abstract: 97-ANYL, Publisher: AMER CHEMICAL SOC, 1155 16TH ST, NW, WASHINGTON, DC 20036 USA; ISSN: 0065-7727.
- 26)** "Innovative electronic biosensors based on organic thin film transistors", M.D. Angione, S. Cotrone, S. M. Magliulo, N. Cioffi, G. Palazzo, L. Sabbatini, L. Torsi, D. Fine, G. Scamarcio, A. Mallardi, Proceedings of the Sensors, 2011 IEEE conference, Limerick 28-31 Oct. 2011, pages 1579-1580, ISSN: 1930-0395, Print ISBN: 978-1-4244-9290-9, doi: 10.1109/ICSENS.2011.6127167.
- 25)** "Core-Shell Gold Nanoparticles and Gold-Decorated Metal Oxides for Gas Sensing Applications", A. Afzal, A. Monopoli, C. Di Franco, N. Ditaranto, B. Mariano, N. Cioffi, A. Nacci, G. Scamarcio, L. Torsi, *Conference proceedings, 4th IEEE International Workshop on Advances in Sensors and Interfaces* 28-29 June 2011 - Borgo Egnazia Savelletri di Fasano, Brindisi, Italy. Pages 125-128. IEEE Catalog Number: CFP11IWI-USB ISBN: 978-1-4577-0622-6.
- 24)** "Optical sensor for nanoparticles", C. Ciminelli, C.M. Campanella, R. Pilolli, N. Cioffi, M.N. Armenise, *Proceedings of the 13th International Conference on Transparent Optical Networks ICTON 2011* KTH, Stockholm, Sweden, June 26-30, 2011, pages 1-4, ISSN : 2161-2056, E-ISBN : 978-1-4577-0880-0, Print ISBN: 978-1-4577-0881-7.
- 23)** "Field Effect Transistor Sensing devices employing lipid layers" S. Cotrone, M.D. Angione, M. Magliulo, N. Cioffi, R. Pilolli, G. Palazzo, L. Torsi, A. Mallardi, D. Fine, A. Dodabalapur, "Sensors and Microsystems" Conference Proceedings of the AISEM Conference, Messina 8-10 February 2010, G. Neri et al. (eds.), Sensors and Microsystems, Lecture Notes in Electrical Engineering 91, Springer Science+Business Media B.V. publisher, chapter 25, 2011 ISBN: 978-94-007-1323-9.
- 22)** "Nanoparticelle bioattive per imballaggio alimentare", D. Longano, M. Vezzoso, N. Ditaranto, N. Cioffi, L. Sabbatini, L. Torsi, *Rassegna dell'Imballaggio*, 2010, 11, 12-13.
- 21)** "Nanomateriali per LDI-MS. Sintesi e Caratterizzazione Spettroscopica", R. Pilolli, L. Colaianni, V. De Giorgio, N. Cioffi, *La Chimica e l'industria*, 2010, 10, 130-134.
- 20)** "Caratterizzazione XPS di compositi micro-strutturati per la rimozione di Cromo(VI) da comparti ambientali inquinati", N. Ditaranto, N. Cioffi, L. Sabbatini, G. Palazzo, F. Lopez, *La Chimica e l'industria*, 2010, 10, 124-126.
- 19)** "Nanomateriali per il food packaging", D. Longano, N. Ditaranto, N. Cioffi, L. Sabbatini, L. Torsi, *La Chimica e l'industria*, 2010, 10, 104-107.
- 18)** "Bioactive copper nanomaterials", D. Longano, N. Ditaranto, N. Cioffi, critical review, *La Chimica e l'industria* 2010, 6, 128-138.
- 17)** "Gold nanowires: deposition, characterization and application to the Mass Spectrometry detection of low-molecular weight analytes" L. Colaianni, S.C. Kung, D. Taggart, V. De Giorgio, J. Greaves, N.Cioffi, R.M. Penner, *Third IEEE International Workshop on Advances in Sensors and Interfaces*, 25-26 June 2009, Trani-Bari, Italy. Pages 20-24. IEEE catalog n. CFP09IWI-USB; ISBN 978-1-4244-4709-1.
- 16)** "Analisi XPS di film diamond like carbon depositati tramite Ion Beam Sputtering", M. A. Nitti, S. Cotrone, F. Rizzo, N. Ditaranto, N. Cioffi, L. Sabbatini, L. Torsi, A. Valentini, *La Chimica e l'Industria*, 2008, 10, 164-167.
- 15)** "Nano-frattali di Argento: Sintesi elettrochimica e caratterizzazione XPS", R. Pilolli, L. Colaianni, N. Cioffi, F. Palmisano, P.G. Zambonin, *La Chimica e l'Industria*, 2008, 9, 171-174.

- 14)** "A comparison between the use of Pd- and Au-nanoparticles as sensing layers in a field effect NO_x-sensitive sensor", K. Buchholt, E. Ieva, N. Cioffi, L. Colaianni, L.Torsi, Per-Olov Käll, A. Lloyd Spetz, in "*Proceedings of the 2nd International Conference on Sensing Technology*", 26-28 November, 2007, Palmerston North, New Zealand edited by S.C. Mukhopadhyay, C.H. Messom, G. Sen Gupta, L. De Silva, ISBN 978-0-473-12432-8, pages 87-92.
- 13)** "Ion Beam Sputtering deposition and spectroscopic characterization of fluoropolymer thin films with tunable branching degree "N. Cioffi, I. Farella, N. Ditaranto, M.A. Nitti, L. Torsi, A. Valentini, *Trattamenti e Finiture*, 7, 2007, 50-55.
- 12)** "Gold Nanoparticle Sensors For Environmental Pollutant Monitoring", E. Ieva, K. Buchholt, L. Colaianni, N. Cioffi, I. D. van der Werf, A. Lloyd Spetz, P.O. Käll, L. Torsi in "*The IEEE International Workshop on Advances in Sensors and Interfaces*", 26-27 June 2007, Bari, Italy. Pages 38-41. IEEE catalog n. 07EX1794; ISBN 1-4244-1244-7.
- 11)** "Plasma treatments of silicon substrates and silicon oxides", C. Di Franco, N. Cioffi, N. Ditaranto, G. Scamarcio, L. Torsi, *Trattamenti e Finiture*, 4, 2006, 30-35.
- 10)** "Copper and Silver Nanostructured composite materials" N. Cioffi , N. Ditaranto, L. Torsi, G. Tantillo, L. Sabbatini, P.G. Zambonin, *Trattamenti e Finiture*, 3, 2006, 40-44.
- 9)** "Palladium supported on tetragonal zirconia: electrosynthesis, analytical characterisation and application in the abatement of pollutant emission in the atmosphere" N. Cioffi, M. Faticanti, N. Ditaranto, L. Sabbatini, in "*V Mediterranean Basin Conference on Analytical Chemistry – Abstract Book*", 24-28 May 2005, Silvi Marina, Teramo, Italy; S. Caroli, D. Pino Eds., ISTISAN Congressi Proceedings Series, Volume 05/C3, Istituto Superiore di Sanità, Roma, Italy, 2005, page 109 – ISSN 0393-5620 –.
- 8)** "Core-shell metal nanoparticles. Electrosynthesis, analytical characterization and perspective application in advanced sensing devices", N. Cioffi, L. Torsi, N. Ditaranto, L. Traversa, T. Bleve-Zacheo, L. Sabbatini, P.G. Zambonin, in "*Advances in Sensors and Interfaces*", *Proceedings of the First International Workshop on Advances in Sensors and Interfaces*, 19-20 April 2005, Bari, Italy, D. De Venuto and B. Courtois Ed.s, Edizioni G. Laterza, Bari, 2005, pages 173-177 - ISBN 88-8231-323-9 -.
- 7)** "Synthesis analytical characterization and bio-activity of Ag- and Cu-containing nano-structured membranes" N. Cioffi, L. Torsi, N. Ditaranto, R.A. Picca, G. Tantillo, L. Sabbatini, P.G. Zambonin, *Journal of Applied Biomaterials and Biomechanics*, 2, 2004, 200.
- 6)** "High performance organic thin film transistor sensors", M.C. Tanese, D. Fine, A Dodabalapur, N. Cioffi, L. Torsi, in "*Organic Field Effect Transistors III*", *Proceedings of the SPIE (The International Society for Optical Engineering) 49th Annual Meeting*, 2-6 August 2004, Denver, Colorado, USA, A. Dodabalapur Ed., SPIE Proceedings Series, Volume 5522, Bellingham, Washington, USA, 2004, pages 22-26 –ISSN 0277-786X; ISBN 0-8194-5460-5 –.
- 5)** "Sensori di gas a transistori organici: una sfida aperta in chimica analitica", L. Torsi, M.C. Tanese, N. Cioffi, L. Sabbatini, P.G. Zambonin, *La Chimica e L'Industria*, 85, 2003, 52-55.
- 4)** "Organic thin film transistors for advanced chemical sensing", A. Tafuri, L. Torsi, N. Cioffi, M.C. Gallazzi, A. Sassella, L. Sabbatini, P.G. Zambonin, in Sensors for Environmental Control, P. Siciliano Ed., World Scientific Publishing Co. Pte. Ltd., Singapore, 2003, pages 119-125. *Proceedings of the International Workshop on New Developments on Sensors for Environmental Control*, Santa Cesarea Terme (Lecce), Italy, May 27th -29th, 2002 - ISBN 981-238-338-7 -.
- 3)** "Swelling of metal/teflon-like films as vapor-sensing mechanism", I. Farella, N. Cioffi, D. Altamura, A. Valentini, L.Torsi, in *Proceedings of the International Workshop: Detecting Environmental, Industrial & Bio-Medical Signals, October, 11-12, 2002, Bari (Italy)*, M. De Palma, M. Lugarà, S. Nuzzo, L. Torsi Eds., World Scientific Publishing Co. Pte. Ltd., Singapore, 2003, pages 93-104 - ISBN 981-238-676-9 -.
- 2)** "Sensors employing functionalized conducting polymer thin film transistors", M.C. Tanese, L. Torsi, N. Cioffi, L. Sabbatini, P.G. Zambonin, in *Proceedings of the International Workshop: Detecting Environmental, Industrial & Bio-Medical Signals, October, 11-12, 2002, Bari (Italy)*, M. De Palma, M. Lugarà, S. Nuzzo, L. Torsi Eds., World Scientific Publishing Co. Pte. Ltd., Singapore, 2003, pages 112-125 - ISBN 981-238-676-9 -.
- 1)** "Polycrystalline organic thin film transistors for advanced chemical sensing" L. Torsi, M. C. Tanese, N. Cioffi, L. Sabbatini and P.G. Zambonin, in "*Organic Field Effect Transistors II*", *Proceedings of the SPIE (The International Society for Optical Engineering) 48th Annual Meeting*, 3-8 August 2003, San Diego, California, USA; C.D. Dimitrakopoulos, A. Dodabalapur Eds., SPIE Proceedings Series, Volume 5217, Bellingham, Washington, USA, 2003, pages 167-175 – ISSN 0277-786X; ISBN 0-8194-5090-1-.

Patents

- IV)** "Method to realize electronic field-effect transistor sensors" L. Torsi, G. Palazzo, D. Angione, N. Cioffi, M. Magliulo, S. Cotrone, G. Scamarcio, L. Sabbatini, A. Mallardi Intern. Patent Application no. PCT/IT2011/000364 filed on October 2011.
- III)** "Field effect transistors based on multilayers of self-assembled biological systems covered by an organic semiconductor layer: processes for their realization and use as sensors" L. Torsi, G. Palazzo, D. Angione, N. Cioffi, M. Magliulo, S. Cotrone, G. Scamarcio, L. Sabbatini, A. Mallardi; European Patent. Application number No. EP 10425146.7 – European Patent application no. EP 10425146 filed on 03.05.2010 and Search Report submitted in November 2011;
- II)** "Bioactive metal nanomaterials stabilized by bioactive agents and preparation process" N. Cioffi, N. Ditaranto, L. Sabbatini, G. Tantillo, L. Torsi, P.G. Zambonin Application number: 08425536.3, date of filing 01.08.2008, European Patent number: 2157211B1, approved on September 2 2015.
- I)** "Nanomaterials for metal controlled release and process for their production" N. Cioffi, N. Ditaranto, L. Sabbatini, L. Torsi, P.G. Zambonin, Application number: 08425299.8, date of filing 29.04.2008, European Patent number: 2123797B1, approved on August 12 2015.