

## FRANCESCA ANNA SCARAMUZZO – PUBLICATION LIST

### PAPERS PUBLISHED ON PEER-REVIEWED JOURNALS (INDEXED ON SCOPUS)

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1. R. Petrucci, M. Pasquali, F.A. Scaramuzzo, A. Curulli, Recent Advances in Electrochemical Chitosan-Based Chemosensors and Biosensors: Applications in Food Safety, *Chemosensors* **2021**, 9, 254. (I.F. 3.398)
2. S. Cerra, T. Salamone, F. Sciubba, M. Marsotto, C. Battocchio, S. Nappini, F.A. Scaramuzzo, R. Li Voti, C. Sibilìa, R. Matassa, A.M. Beltrán, G. Familiari, I. Fratoddi, Study of the interaction mechanism between hydrophilic thiol capped gold nanoparticles and melamine in aqueous medium, *Coll. Surf. B* **2021**, 203, 111727. (I.F. 5.268)
3. I. Fratoddi, S. Cerra, T. Salamone, R. Fioravanti, F. Sciubba, E. Zampetti, A. Macagnano, A. Generosi, B. Paci, F.A. Scaramuzzo, R. Matassa, G. Familiari, Functionalized Gold Nanoparticles as an Active Layer for Mercury Vapor Detection at Room Temperature, *ACS Applied Nano Materials* **2021**, 4 (3), 2930 – 2940. (I.F. 5.097)
4. L. Angeloni, D. Passeri, F.A. Scaramuzzo, P.G. Schiavi, F. Pagnanelli, M. Rossi, Magnetic Force Microscopy Characterization of Core-Shell Cobalt-Oxide/Hydroxide Nanoparticles, *J. Magn. Magn. Mater.* **2020**, 516, 167299. (I.F. 2.993)
5. S. Cerra, R. Matassa, A.M. Beltrán, G. Familiari, C. Battocchio, I. Pis, F. Sciubba, F.A. Scaramuzzo, A. Del Giudice, I. Fratoddi, Insights about the interaction of methotrexate loaded hydrophilic gold nanoparticles: Spectroscopic, morphological and structural characterizations, *Mater. Sci. Eng. C* **2020**, 117, 111337. (I.F. 7.328)
6. E. Badetti, V. Lloveras, F.A. Scaramuzzo, K. Wurst, J. Veciana, J. Vidal-Gancedo, G. Licini, C. Zonta, Tris-pyridylmethylamine (TPMA) complexes functionalized with persistent nitronyl nitroxide organic radicals, *Dalton Trans.* **2020**, 49, 10011-10016. (I.F. 4.174)
7. G. Tarquini, A. Dell'Era, P.P. Prosini, F.A. Scaramuzzo, C. Lupi, M. Pasquali, Polysulfide solutions effects on Li-S batteries performances, *J. Electroanal. Chem.* **2020**, 870, 114239. (I.F. 3.807)
8. L. Chronopoulou, F.A. Scaramuzzo, R. Fioravanti, A. Di Nitto, S. Cerra, I. Fratoddi, C. Palocci, Noble metal nanoparticle-based networks as a new platform for lipase immobilization, *Int. J. Biol. Macromol.* **2020**, 146, 790-797. (I.F. 4.784)
9. A. Dell'Era, F.A. Scaramuzzo, M. Stoller, C. Lupi, M. Rossi, D. Passeri, M. Pasquali, Spinning Disk Reactor Technique for the Synthesis of Nanometric Sulfur TiO<sub>2</sub>Core–Shell Powder for Lithium Batteries, *Appl. Sci.* **2019**, 9, 1913. (I.F. 2.217)
10. F.A. Scaramuzzo, E. Badetti, G. Licini, C. Zonta, Extending Substrate Sensing Capabilities of Zinc tris(2-pyridylmethyl)amine based Stereodynamic Probe, *Chirality* **2019**, 31, 375-383. (I.F. 1.927)
11. A. Dell'Era, M. Pasquali, G. Tarquini, F.A. Scaramuzzo, P. De Gasperis, P.P. Prosini, A. Mezzi, R. Tuffi, L. Cafiero, Carbon Powder Material from an Innovative High Pressure Water Jet Recycling Process of Tires Used as Anode in Alkali Ion (Li, Na) Batteries, *Solid State Ionics* **2018**, 324, 20-27. (I.F. 2.751)
12. E. Badetti, N.A. Carmo dos Santos, F.A. Scaramuzzo, C. Bravin, K. Wurst, G. Licini, C. Zonta, Diastereoselective multi-component assemblies from dynamic covalent imine condensation and metal-coordination chemistry: mechanism and narcissistic stereochemistry self-sorting, *RSC Adv.* **2018**, 8, 19494-19498. (I.F. 3.108)
13. A. G. Marrani, A. C. Coico, D. Giacco, R. Zanoni, F.A. Scaramuzzo, R. Schrebler, D. Dini, M. Bonomo, E.A. Dalchiele, Integration of graphene onto silicon through electrochemical reduction of graphene oxide layers in non-aqueous medium, *Appl. Surf. Sci.* **2018**, 445, 404-414. (I.F. 4.439)
14. I. Fratoddi, M. Rapa, G. Testa, I. Venditti, F.A. Scaramuzzo, G. Vinci, Response Surface Methodology for the Optimization of Phenolic Compounds Extraction from Extra Virgin Olive Oil with Functionalized Gold Nanoparticles, *Microchem. J.* **2018**, 138, 430-437. (I.F. 3.034)
15. A. Dell'Era, M. Pasquali, E.M. Bauer, S. Vecchio Cipriotti, F.A. Scaramuzzo, C. Lupi, Synthesis, Characterization, and Electrochemical Behavior of LiMn<sub>x</sub>Fe<sub>(1-x)</sub>PO<sub>4</sub> Composites Obtained from Phenylphosphonate-Based Organic-Inorganic Hybrids, *Materials* **2018**, 11, 56, doi:10.3390/ma11010056. (I.F. 2.654)
16. F.A. Scaramuzzo\*, A. Dell'Era, G. Tarquini, R. Caminiti, P. Ballirano, M. Pasquali, Phase Transition of TiO<sub>2</sub> Nanotubes: an X-ray Study as a Function of Temperature, *J. Phys. Chem. C* **2017**, 121, 24871-24876. (I.F. 4.536)
17. I. Venditti, A. Carloni, L. Fontana, G. Testa, F.A. Scaramuzzo, R. Faccini, C. Mancini Terracciano, E. Solfaroli Camillocci, S. Morganti, A. Giordano, T. Scotognella, D. Rotili, V. Dini, F. Marini, I. Fratoddi, Y<sup>3+</sup> embedded in polymeric nanoparticles: Morphology, dimension and stability of composite colloidal system, *Colloids Surf. A* **2017**, 532, 125-131. (I.F. 2.714)
18. C. Bravin, E. Badetti, F.A. Scaramuzzo, G. Licini, C. Zonta, Triggering Self-Assembly and Disassembly of a Supramolecular Cage, *J. Am. Chem. Soc.* **2017**, 139, 6456-6460. (I.F. 13.858)
19. M. Reggente, D. Passeri, L. Angeloni, F.A. Scaramuzzo, M. Barteri, F. De Angelis, I. Persiconi, M.E. De Stefano, M. Rossi, Detection of stiff nanoparticles within cellular structures by contact resonance atomic force microscopy subsurface nanomechanical imaging, *Nanoscale* **2017**, 9, 5671-5676. (I.F. 7.367)
20. I. Venditti, L. Fontana, F.A. Scaramuzzo, M. V. Russo, C. Battocchio, L. Carlini, L. Gonon, V.H. Mareau, I. Fratoddi, Nanocomposite based on functionalized gold nanoparticles and sulfonated poly(ether ether ketone) membranes: synthesis and characterization, *Materials* **2017**, 10, 258, doi: 10.3390/ma10030258. (I.F. 2.654)
21. F.A. Scaramuzzo, E. Badetti, G. Licini, C. Zonta, Second-Generation Tris(2-pyridylmethyl)amine–Zinc Complexes as Probes for Enantiomeric Excess Determination of Amino Acids, *Eur. J. Org. Chem.* **2017**, 1438-1442. (I.F. 3.068)

22. F. De Angelis, G. Berardi, F.A. Scaramuzzo, M. Liberatore, M. Barteri, Internalization of Core-Shell Superparamagnetic Nanoparticles into Human Granulocytes, *Int. J. Nanotechnol.* **2016**, *13*, 659-666. (I.F. 0.502)
23. M. Natali, E. Badetti, E. Deponti, M. Gamberoni, F.A. Scaramuzzo, A. Sartorel, C. Zonta, Photoinduced hydrogen evolution with new tetradentate cobalt(II) complexes based on the TPMA ligand, *Dalton Trans.* **2016**, *45*, 14764-14773. (I.F. 4.177)
24. F.A. Scaramuzzo\*, A. Pozio, A. Masci, F. Mura, A. Dell'Era, A. Curulli, M. Pasquali, Efficient Photocurrent Generation using a Combined Ni-TiO<sub>2</sub> Nanotubes Anode, *J. Appl. Electrochem.* **2015**, *45*, 727-733. (I.F. 2.223)
25. M. Liberatore, M. Barteri, V. Megna, P. D'Elia, S. Rebonato, A. Latini, F. De Angelis, F.A. Scaramuzzo, M.E. De Stefano, N. Guadagno, S. Chondrogiannis, A.M. Maffione, D. Rubello, A. Pala, P.M. Colletti, Effect of External Magnetic Field on Intravenous <sup>99m</sup>Tc-labelled Aminosilane coated iron-oxide nanoparticles: demonstration in a rat model, *Clin. Nucl. Med.* **2015**, *40*, e104 – e110. (I.F. 4.278)
26. F.A. Scaramuzzo\*, M. Pasquali, F. Mura, A. Pozio, A. Dell'Era, A. Curulli, TiO<sub>2</sub> Nanotubes Photo-anode: an Innovative Cell Design, *Chem. Eng. Trans.* **2014**, *41*, 223-228. (I.F. 1.044)
27. D. Passeri, C. Dong, M. Reggente, L. Angeloni, M. Barteri, F.A. Scaramuzzo, F. De Angelis, F. Marinelli, F. Antonelli, F. Rinaldi, C. Marianecchi, M. Carafa, A. Sorbo, D. Sordi, I.W.C.E. Arends, M. Rossi, Magnetic Force Microscopy: Quantitative Issues in Biomaterials, *Biomatter* **2014**, *4*, e29507. (I.F. 2.317)
28. F.A. Scaramuzzo, G. Licini, C. Zonta, Determination of Amino Acids Enantiopurity and Absolute Configuration: Synergism between Configurationally Labile Metal-based Receptors and Dynamic Covalent Interactions, *Chem. Eur. J.* **2013**, *19*, 16809-16813. (I.F. 5.696)
29. F. Fabris, O. De Lucchi, I. Nardini, M. Crisma, A. Mazzanti, S.A. Mason, M.H. Lemee-Cailleau, F.A. Scaramuzzo, C. Zonta, (+)-syn-Benzotribooneol an Enantiopure C<sub>3</sub>-Symmetric Receptor for Water, *Org. Biomol. Chem.* **2012**, *10*, 2464-2469. (I.F. 3.559)
30. F.A. Scaramuzzo, A. González-Campo, C.C. Wu, A. Velders, V. Subramaniam, G. Doddi, P. Mencarelli, M. Barteri, J. Huskens, P. Jonkheijm, Pyrylium Monolayers as Amino-reactive Platform, *Chem. Commun.* **2010**, *46*, 4193-4195. (I.F. 5.787)
31. F.A. Scaramuzzo, R. Salvati, B. Paci, A. Generosi, V. Rossi-Albertini, A. Latini, M. Barteri, Nanoscale In Situ Morphological Study of Proteins Immobilized on Gold Thin Films, *J. Phys. Chem. B* **2009**, *113*, 15895-15899. (I.F. 3.95)
32. D. Coletti, F.A. Scaramuzzo, L.C. Montemiglio, A. Pristerà, L. Teodori, S. Adamo, M. Barteri, Culture of Skeletal Muscle Cells in Unprecedented Proximity to a Gold Surface, *J. Biomed. Mat. Res. A* **2009**, *91*, 370-377. (I.F. 2.816)

#### CONFERENCE PAPERS (INDEXED ON SCOPUS)

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1. L. Angeloni, D. Passeri, F.A. Scaramuzzo, D. Di Iorio, M. Barteri, D. Mantovani, M. Rossi, Measurement of the nonmagnetic coating thickness of core-shell magnetic nanoparticles by controlled magnetization magnetic force microscopy, *AIP Conf. Proc.* **2016**, *1749*, 020006; doi: 10.1063/1.4954489.
2. F.A. Scaramuzzo\*, M. Pasquali, F. Mura, A. Dell'Era, From Single to Multiple TiO<sub>2</sub> Nanotubes Layers: Analysis of the Parameters which Influence the Growth, *AIP Conf. Proc.* **2015**, *1667*, 020005, doi:10.1063/1.4922561.

#### EDITORIALS (INDEXED ON SCOPUS)

1. F.A. Scaramuzzo\*, A. González-Campo, A. Dell'Era, Cutting Edge Technologies by Silicon- And Silicon Oxide-Based Nanostructures, *Journal of Nanomaterials* **2021**, Article number 5478156.
2. M. Rossi, D. Passeri, F.A. Scaramuzzo, M. Vittori Antisari, Preface: NANOINNOVATION 2019, *AIP Conf. Proc.* **2020**, *2257*, 010001.

#### BOOK CHAPTERS

1. F. Marinello, F.A. Scaramuzzo, S. Dinarelli, D. Passeri, M. Rossi, Nanoscale characterization methods in plant disease management, chapter of the book *Nanotechnology-based Sustainable Alternatives for the Management of Plant Diseases*, Edited by G.M. Balestra, Elsevier **2021**, *Just accepted*.
2. F.A. Scaramuzzo, M. Barteri, P. Jonkheijm, J. Huskens, Stimuli-Responsive Monolayers, chapter of the book *Organic Nanomaterials*, Edited by T. Torres, G. Bottari, ISBN 978-1-118-01601-5 - John Wiley & Sons, Hoboken - New Jersey, **2013**, 347-368.

#### PATENT

1. P. Atanasio, F.A. Scaramuzzo, A. Capasso, M. Rossi, M. Pasquali, Elettrodi ibridi carbonio/materiale attivo per accumulatori agli ioni di litio (Hybrid Carbon/active material electrodes for lithium-ion accumulators), *submitted* to the Italian Patent and Trademark Office on 29<sup>th</sup> June 2021, n. 102021000017024, *under review*.

#### ORAL COMMUNICATIONS TO CONGRESSES AND SCHOOLS (SPEAKER)

1. F.A. Scaramuzzo, M. Fortunato, M. S. Sarto, M. Pasquali, Study of piezoelectric properties of TiO<sub>2</sub> nanotube arrays via Piezoresponse Force Microscopy (PFM), *XII Congresso Nazionale AICInG*, Reggio Calabria, 5-8- September 2021.
2. F.A. Scaramuzzo, M. Ottaviani, E. Gualtieri, A. Dell'Era, M. Pasquali, Advanced electrodes for Li-ion, Na-ion and Li-S batteries: from recycled materials to nanostructures, *First Italian Workshop on Energy Storage – IWES 2021*, online conference, 24-24 February 2021.
3. F.A. Scaramuzzo, Scanning Probe Microscopy Platforms: Morphology and Beyond, *NanoInnovation 2019*, Rome, 11-14 June 2019.
4. F.A. Scaramuzzo, M. Moreno, A. Santoni, F. Rondino, M. Ottaviani, L. Della Seta, P.P. Proisini, M. Pasquali, Electrochemical properties of Si-NWs with different morphologies used as anodes for Li-ion batteries, *NanoInnovation 2019*, Rome, 11-14 June 2019 (*invited*).

5. F.A. Scaramuzzo, C. Paoletti, S. Galli, P.P. Prosini, M. Pasquali, Synthesis of LiFePO<sub>4</sub> for Li/Li-ion Batteries: a Kilo-Lab Tale, *Eurasia Conference on Chemical Sciences - EuAsC2S-15*, Rome, 5-8 September 2018 (invited).
6. M. Pasquali, F.A. Scaramuzzo, A. Dell'Era, G. Tarquini, P. Ballirano, Phase Transition of TiO<sub>2</sub> Nanotube Arrays: an X-ray Study, *21st International Conference on Solid State Ionics - SSI 21*, Padova, 18-23 June 2017.
7. F.A. Scaramuzzo, Sintesi e Applicazioni di Nanotubi di Titania in forma di Arrays, *Workshop - I primi 5 anni del Laboratorio di Nanotecnologie e Nanoscienze del CNIS University of Rome "La Sapienza"*, 5 April 2017.
8. F.A. Scaramuzzo, M. Pasquali, F. Mura, A. Pozio, A. Dell'Era, A. Curulli, TiO<sub>2</sub> Nanotubes for Photoelectrocatalytic Water Splitting: an Innovative Cell Design, *10th European Symposium on Electrochemical Engineering*, Chia (CA), 28 September- 2 October 2014.
9. F.A. Scaramuzzo, M. Pasquali, F. Mura, A. Dell'Era, TiO<sub>2</sub> Nanotubes for renewable energy: tuning morphology to tune properties, *Nanoforum – X Edition*, Rome, 22-25 September 2014.
10. F.A. Scaramuzzo, Application of tripodal ligands in molecular recognition event, *2nd Summer Workshop on Supramolecular Functional Materials*, Bibione (VE), 22 – 24 May 2013.
11. F.A. Scaramuzzo, Tris-pyridine Ligands as a base for Multimetallic Supramolecular Architectures, *1st Training School for Young Researchers, CMST COST Action CM1005 Supramolecular Chemistry in Water*, Riccione, 16-19 April 2012.
12. F.A. Scaramuzzo, A. González-Campo, C.C. Wu, A. Velders, V. Subramaniam, G. Doddi, P. Mencarelli, M. Barteri, P. Jonkheijm, J. Huskens, Pyrylium Monolayer: a reactive platform for binding of amines, *XXXIII Convegno Nazionale della Divisione di Chimica Organica della SCI (Co.Di.C.O. 2010)*, S. Benedetto del Tronto (AP), 12-16 September 2010.
13. F.A. Scaramuzzo, A. González-Campo, P. Jonkheijm, P. Mencarelli, G. Doddi, J. Huskens, M. Barteri, Protein Immobilization on Silica Surface through Self Assembled Monolayers of New Pyrylium Salts Derivatives, *IX Convegno Nazionale sui Materiali Nanofasici*, Iglesias, 3 – 5 June 2009.
14. F.A. Scaramuzzo, D. Coletti, L.C. Montemiglio, M. Barteri, Culture of Skeletal Muscle Cells on Cysteamine Coated Gold Surfaces, *Workshop on Nanomaterial Production, Characterization and Industrial Applications*, Milan, 3 December 2008.

#### POSTER COMMUNICATIONS TO CONGRESSES AND SCHOOLS (PRESENTING AUTHOR)

1. F.A. Scaramuzzo, G. Licini, C. Zonta, Combining Dynamic Covalent Interactions with Metal Recognition for the Determination of Amino acids Enantiopurity and Absolute Configuration, *European Winter School on Physic Organic Chemistry (E-WISPOC 2013)*, Bressanone (Bolzano), 27 January – 1 February 2013 (Flash communication);
2. F.A. Scaramuzzo, G. Licini, C. Zonta, Dynamic Combinatorial Libraries for the Synthesis of New Multimetallic Tris(2-pyridylmethyl)amine Architectures, *European Winter School on Physic Organic Chemistry (E-WISPOC 2012)*, Bressanone (Bolzano), 29 January – 3 February 2012 (Flash communication);
3. F.A. Scaramuzzo, L. Dovico, G. Licini, C. Zonta, Towards New Functional Molecular Pincers, *X Congresso Nazionale di Chimica Supramolecolare*, Perugia, 25-28 September 2011;
4. F. Scaramuzzo, G. Licini, C. Zonta, Towards New Functional Organic Frameworks, *European Winter School on Physic Organic Chemistry (E-WISPOC 2011)*, Bressanone (Bolzano), 30 January – 4 February 2011;
5. G. Gasparini, G. Licini, M. Mba, F.A. Scaramuzzo, C. Zonta, K. Rissanen, M. Cametti, A. Dalla Cort, Anion Recognition Using Chiral Triphenolamines, *XXXIII Convegno Nazionale della Divisione di Chimica Organica della SCI - Co.Di.C.O. 2010*, S. Benedetto del Tronto (AP), 12-16 September 2010;
6. F.A. Scaramuzzo, M. Mba, G. Gasparini, C. Zonta, M. Cametti, K. Rissanen, G. Iadevaia, A. Dalla Cort, G. Licini, Anion Recognition Using Triphenolamines, *Giornate di Chimica Organica Fisica e Meccanicistica - COFEM 2010*, Rome, 2 - 4 September 2010;
7. M. Mba, F.A. Scaramuzzo, G. Gasparini, C. Zonta, K. Rissanen, M. Cametti, A. Dalla Cort, G. Licini, Anion Recognition Using Chiral Triphenolamines, *VIII SISOC – Spanish-Italian Symposium on Organic Chemistry*, Padova, 3-6 July 2010;
8. M. Barteri, G. Doddi, A. Gonzalez-Campo, P. Jonkheijm, J. Huskens, P. Mencarelli, F.A. Scaramuzzo, Monostrati di Sali di Pirilio come Piattaforma Reattiva per l'Immobilizzazione di Ammine, *Quarto Convegno Giovani Chimici – La Chimica nelle Nanoscienze e nelle Nanotecnologie*, Dipartimento di Chimica, Università La Sapienza, Roma, 18 – 19 June 2010;
9. F.A. Scaramuzzo, A. Gonzalez Campo, P. Jonkheijm, P. Mencarelli, G. Doddi, J. Huskens, M. Barteri, New Pyrylium Salts Derivatives as basis of Self Assembled Monolayers for Protein Immobilization on Gold and Silica, *Bionanotechnology II: from Biomolecular Assembly to Applications*, Robinson College, Cambridge, United Kingdom, 7 – 9 January 2009;
10. F.A. Scaramuzzo, A. Generosi, R. Salvati, A. Latini, B. Paci, V. Rossi Albertini, M. Barteri, Morphological Study of Acetylcholinesterase on Gold Films for Biosensor Applications, *2nd EuCheMS Chemistry Congress*, Torino, 16 – 20 September 2008;
11. Barteri, G. Doddi, P. Mencarelli, F.A. Scaramuzzo, Self Assembled Monolayers di Sali di Pirilio per la Funzionalizzazione di Superfici di Au e Si con Proteine, *Terzo Convegno Giovani Chimici – La Chimica Sostenibile*, Dipartimento di Chimica, Università La Sapienza, Roma, 18 – 19 June 2008 (Awarded as best poster presentation);
12. F.A. Scaramuzzo, D. Coletti, L.C. Montemiglio, M. Barteri, Growth and Differentiation of Muscle Cells on Cysteamine Coated Gold Surfaces, *Congresso Nazionale della Divisione di Chimica dei Sistemi Biologici della S.C.I.*, Montagnana (Padova), 8 – 9 November 2007.

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