UNIVERSITÀ DEGLI STUDI DI TRIESTE

Doctorate in Chemistry

Università Ca'Foscari Venezia

Publications of the PhD Students in 2019

Cycle 31

1. **Zanolla, D.**, Perissutti, B., Vioglio, P.C., Chierotti, M.R., Gigli, L., Demitri, N., Passerini, N., Albertini, B., Franceschinis, E., Keiser, J., Voinovich, D.
   Exploring mechanochemical parameters using a DoE approach: Crystal structure solution from synchrotron XRPD and characterization of a new praziquantel polymorph
   Eur. J. Pharm. Sci. **2019**, *140*, art. no. 105084. DOI: 10.1016/j.ejps.2019.105084

2. Albertini, B., Perissutti, B., Bertoni, S., **Zanolla, D**., Franceschinis, E., Voinovich, D., Lombardo, F., Keiser, J., Passerini, N.
   Combining mechanochemistry and spray congealing for new praziquantel pediatric formulations in schistosomiasis treatment
   Int. J. Molec. Sci. **2019**, *20*, art. no. 1233. DOI: 10.3390/ijms20051233

3. **E. Parisi**, A. M. Garcia, D. Marson, P. Posocco, S. Marchesan.
   Supramolecular Tripeptide Hydrogel Assembly with 5-Fluorouracil
   Gels **2019**, *5*, 5.

4. **C. Russo Spena**, **L. De Stefano**, G. Poli, C. Granchi, M. El Boustani, F. Ecca, G. Grassi, M. Grassi, V. Canzonieri, A. Giordano, T. Tuccinardi, I. Caligiuri, F. Rizzolio
   Virtual screening identifies a PIN1 inhibitor with possible antiovarian cancer effects
   Journal of Cellular Physiology **2019**, *234*, 15708-15716.

5. **A. Amati**, M. Natali, M. T. Indelli, E. Iengo, F. Würthner
   Photoinduced Energy- and Electron-Transfer Processes in a Side-to-Face Ru(II)Porphyrin/Perylene-bisimide Array
   ChemPhysChem **2019**, *20*, 2195-2203.

6. **A. Amati**, P. Cavigli, N. Demitri, M. Natali, M. T. Indelli, E, Iengo
   Sn(IV) Multiporphyrin Arrays as Tunable Photoactive Systems
   Inorg. Chem. **2019**, *58*, 4399-4411.

7. R. Toniolo, N. Dossi, R. Bortolomeazzi, **G. Bonazza**, S. Daniele
Talanta **2019**, *197*, 522–529.

8. Ambrosi, E.; **Cailotto, S.**; Campalani, C.; Branzi, L.; Raviola, C.; Ravelli, D.; Cattaruzza, E.; Trave, E.; Benedetti, A.; Selva, M.; Perosa, A.
Precursor-Dependent Photocatalytic Activity of Carbon Dots
Molecules **2019,** *25,* 101.

9. G. Albertin, S. Antoniutti, J. Castro, **F. Sibilla**
Z. Anorg. Allg. Chem. 2019, *645*, 638–644.

10. G. Albertin, S. Antoniutti, J. Castro, **F. Sibilla**
Dalton Trans. 2019, *48*, 3116–3131.

11. **T. Scattolin**, N. Pangerc, I. Lampronti, C. Tupini, R. Gambari, L. Marvelli, F. Rizzolio, N. Demitri, L. Canovese, F. Visentin
Palladium(0) olefin complexes bearing purine-based N-heterocyclic carbenes and 1,3,5-triaza-7-phosphaadamantane (PTA): Synthesis, characterization and antiproliferative activity toward human ovarian cancer cell lines
J. Organomet. Chem. **2019**, *899*, 120857.

12. **T. Scattolin**, G. Moro, F. Rizzolio, C. Santo, L. M. Moretto, F. Visentin
Improved Synthesis, Anticancer Activity and Electrochemical Characterization of Unusual Zwitterionic Palladium Compounds with a Ten-Term Coordinative Ring
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13. **T. Scattolin**, L. Canovese, N. Demitri, C. Santo, F. Visentin
The importance of the electronic and steric features of the ancillary ligands on the rate of cis–trans isomerization of olefins coordinated to palladium(0) centre. A study involving (Z)-1,2-ditosylethene as olefin model
Polyhedron **2019**, *173*, 114144.

14. **T. Scattolin**, S. Giust, P. Bergamini, I. Caligiuri, L. Canovese, N. Demitri, R. Gambari, I. Lampronti, F. Rizzolio, F. Visentin
Palladacyclopentadienyl complexes bearing purine-based N-heterocyclic carbenes: A new class of promising antiproliferative agents against human ovarian cancer
Appl. Organometal Chem. **2019**; e4902

15. **T. Scattolin**, I. Caligiuri, N. Mouawad, M. El Boustani, N. Demitri, F. Rizzolio, F. Visentin
Synthesis and in-depth studies on the anticancer activity of novelpalladacyclopentadienyl complexes stabilized by N-Heterocyclic carbene ligands
Eur. J. Med. Chem. **2019**, *179*, 325-334.

16. V. Beghetto, **L. Agostinis**, V. Gatto, R. Samiolo, A. Scrivanti
Sustainable use of 4-(4,6-dimethoxy-1,3,5-triazin-2-yl)-4-methylmorpholinium chloride as metal free tanning agent
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17. **G. Berton**, T. Lorenzetto, G. Borsato, P. Sgarbossa, C. Santo, F. Visentin, F. Fabris, A. Scarso
Triphenylene Based Metal-Pyridine Cages
Tetrahedron Lett. **2019**, *60*, 151202.

18. **A. Dall'Anese**, T. Montini, G. Balducci, P. Fornasiero, F. Felluga, B. Milani
Palladium-Catalyzed Ethylene/Methyl Acrylate Copolymerization: Moving from the Acenaphthene to the Phenanthrene Skeleton of α-Diimine Ligands
Organometallics **2019**, *38*, 3498-3511.

19. Ferretti, F.; Scharnagl, F. K.; **Dall'Anese, A.**; Jackstell, R.; Dagstir, S.; Beller, M.
Additive-free cobalt-catalysed hydrogenation of carbonates to methanol and alcohols
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20. F. Amato, **M. Cacioppo**, F. Arcudi, M. Prato, M. Mituo, E.G. Fernandes, M.N.P. Carreño, I. Pereyra, J.R. Bartoli
Nitrogen-Doped Carbon Nanodots/PMMA Nanocomposites for Solar Cells Applications.
Chem. Eng. Trans. **2019**, *74*, 1105-1110.

21. **R. Sole**, M. Bortoluzzi, A. Spannenberg, S. Tin, V. Beghetto, J.G. de Vries,
Synthesis, characterization and catalytic activity of novel ruthenium complexes bearing NNN click based ligands
Dalton Trans. **2019**, *48*, 13580-13588.

22. A. Scrivanti, **R. Sole**, M. Bortoluzzi, V. Beghetto, N. Bardella, A. Dolmella
Synthesis of new triazolyl-oxazoline chiral ligands and study of their coordination to Pd(II) metal centers
Inorg. Chim. Acta **2019**, *498*, 119-129.

23. **R. Sole**, L. Taddei, C. Franceschi, V. Beghetto
Efficient chemo-enzymatic transformation of animal biomass waste for eco-friendly leather production
Molecules **2019**, *24*, 2979.

24. Battistin M., Durini E., Dissette V., Bonetto A., Marcomini A., **Casagrande E.**, Brunetta A., Ziosi P., Molesini S., Gavioli R., Nicoli F., Manfredini S., Vertuani S., Baldisserotto A. Synthesis and Characterization of New Multifunctional Self-Boosted Filters for UV Protection: ZnO Complex with Dihydroxyphenyl Benzimidazole Carboxylic Acid *Molecules* **2019**, *24*, 4546. doi: 10.3390/molecules24244546.

25. **M. Kurbasic**, S. Semeraro, A. M. Garcia, S. Kralj, **E. Parisi**, **C. Deganutti**, R. De Zorzi, S. Marchesan
Microwave-Assisted Cyclization of Unprotected Dipeptides in Water to 2, 5-Piperazinediones and Self-Assembly Study of Products and Reagents
Synthesis **2019**, *51*, 2829-2838.

26. **E. B. Hemming**, A. F. Masters, T. Maschmeyer
The encapsulation of metal nanoparticles within porous liquids
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27. **Hemming, E. B.**; Masters, A. F.; Perosa, A.; Selva, M.; Maschmeyer, T.
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28. **A. Vidal**, F. Battistin, G. Balducci, N. Demitri, E. Iengo, E. Alessio
The rare example of stereoisomeric 2+2 metallacycles of porphyrins featuring chiral-at-metal octahedral ruthenium corners.
Inorg. Chem. **2019**, *58*, 7357-7367. DOI: 10.1021@acs.inorgchem.9b00487.

29. **A. Vidal**, F. Battistin, E. Iengo, B. Milani, E. Alessio
The insertion of ruthenium into porphyrins revisited and improved: proof of concept results with a Ru(II) mono-carbonyl compound, and the spectacular effect of propionic acid.
Eur. J. Inorg. Chem. **2019**, 2883-2890. DOI: 10.1002/ejic.201900428.

30. **C. Rosso**, M. G. Emma, A. Martinelli, M. Lombardo, A. Quintavalla, C. Trombini, Z. Syrgiannis, M. Prato.
A Recyclable Chiral 2-(Triphenylmethyl) pyrrolidine Organocatalyst Anchored to [60] Fullerene *Adv. Synth. Catal.* **2019**, *361*, 2936-2944.

31. **C. Rosso**, G. Filippini, P. G. Cozzi, A. Gualandi, M. Prato.
Highly Performing Iodoperfluoroalkylation of Alkenes Triggered by the Photochemical Activity of Perylene Diimides
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Visible-Light-Mediated Iodoperfluoroalkylation of Alkenes in Flow and Its Application to the Synthesis of a Key Fulvestrant Intermediate
Org. Lett. **2019**, *21*, 5341-5345.

33. **C. Rosso**, G. Filippini, M. Prato
Use of Nitrogen-Doped Carbon Nanodots for the Photocatalytic Fluoroalkylation of Organic Compounds
Chem. Eur. J. **2019**, *25*, 16032-16036.

34. **G. Mazzon**, M. Zahid, J.A. Heredia-Guerrero, E. Balliana, E. Zendri, A. Athanassiou, I.S. Bayer
Hydrophobic treatment of woven cotton fabrics with polyurethane modified aminosilicone emulsions
Applied Surface Science **2019**, *490*, 331-342. https://doi.org/10.1016/j.apsusc.2019.06.069.

35. M. Zahid, **G. Mazzon**, A. Athanassiou, I.S. Bayer
Environmentally benign non-wettable textile treatments: A review of recent state-of-the-art
Advances in Colloid and Interface Science **2019**, 270, 216-250.
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36. W. A. Thompson, A. Olivo, **D. Zanardo**, G. Cruciani, F. Menegazzo, M. Signoretto, M. M. Maroto-Valer
Systematic study of TiO2/ZnO mixed metal oxides for CO_2 photoreduction
RSC Adv. **2019**, *9*, 21660-21666.

37. **D. Zanardo**, E. Ghedini, F. Menegazzo, E. Cattaruzza, M. Manzoli, G. Cruciani, M. Signoretto
Titanium Dioxide-Based Nanocomposites for Enhanced Gas-Phase Photodehydrogenation.
Materials **2019**, *12*, 3093.

38. D. Toffoli, A. Ponzi, **E. Bernes**, M. de Simone, C. Grazioli, M. Coreno, M. Stredansky, A. Cossaro, G. Fronzoni
Correlation effects in B1s core-excited states of boronic-acid derivatives: An experimental and computational study
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39. S. Kralj, **F. Longobardo**, D. Iglesias, M. Bevilacqua, C. Tavagnacco, A. Criado, J. J. Delgado Jaen, D. Makovec, S. Marchesan, M. Melchionna, M. Prato, P. Fornasiero
Ex-Solution Synthesis of Sub-5-nm FeOx Nanoparticles on Mesoporous Hollow N,O-Doped Carbon Nanoshells for Electrocatalytic Oxygen Reduction
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40. **Calmanti, R.**, Amadio, E., Perosa, A., Selva, M.
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41. N. A. Sakthivel, M. Stener, L. Sementa, **M. Medves**, G. Ramakrishna, A. Fortunelli, A. G. Oliver, A. Dass
Crystal Structure of Au36-xAgx(SPh-tBu)24 Nanoalloy and the Role of Ag Doping in Excited State Coupling
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42. **D. Rigo**, G.Fiorani, A. Perosa, M. Selva
Acid-Catalyzed Reactions of Isopropenyl Esters and Renewable Diols: A 100% Carbon Efficient Transesterification/Acetalization Tandem Sequence, from Batch to Continuous Flow
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43. V. Iacuzzi, B. Posocco, **M. Zanchetta**, M. Montico, E. Marangon, A.S. Poetto, M. Buzzo, S. Gagno, A. Buonadonna, M. Guardascione, B. Casetta, G. Toffoli
Development and validation of LC-MS/MS method for imatinib and norimatinib monitoring by finger-prick DBS in gastrointestinal stromal tumor patients.
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44. M. Signoretto, **S. Taghavi**, E. Ghedini, F. Menegazz
Catalytic production of levulinic acid (LA) from actual biomass
Molecules **2019**, *24*, 2760-2780.

45. Bianchini E.; **Pietrobon L.**; Ronchin L.; Tortato C.; Vavasori A.
Trifluoroacetic acid promoted hydration of styrene catalyzed by sulfonic resins: Comparison of the reactivity of styrene, n-hexene and cyclohexene
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Redesigning an electrochemical MIP sensor for PFOS: practicalities and pitfalls,
Sensors **2019**, *19*, 4433-4446.

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Biosensors & Bioelectronics **2019**, *146*, 111758-111775.

48. T. Scattolin, **G. Moro**, F. Rizzolio, C. Santo, L. M. Moretto, F. Visentin
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Conductive imprinted polymers for the direct electrochemical detection of β-lactam antibiotics: the case of cefquinome,
Sensors and Actuators B **2019**, *297*, 126786-126795.

50. **G. Moro**, K. De Wael, L. M. Moretto
Challenges in the electrochemical (bio)sensing of nonelectroactive food and environmental contaminants,
Current Opinions in Electrochemistry **2019**, *16*, 57-65.