

Jimena S. TUNINETTI

PERSONAL DATA

Surname: Tuninetti

Name: Jimena Soledad

e-mail: jtuninetti@inifta.unlp.edu.ar

scholar: <https://scholar.google.com/citations?user=hF-ge9EAAAAAJ&hl=en>

ORCID: <https://orcid.org/0000-0002-9813-1265>

EDUCATION

Licenciatura en Química (equivalent to BS+MS in chemistry)

2008. Universidad Nacional de Río Cuarto (UNRC)

PhD in chemistry

2008-2013. Universidad Nacional de Río Cuarto (UNRC)

Thesis: "Development of synthetic pathways of monomers, polymers and nanostructures for the design of conductive and intelligent hydrogels"

Advisor: César Barbero

Post-PhD

2013-2016. Instituto de Investigaciones Fisicoquímicas Teóricas y Aplicadas (INIFTA)

Topic: "Development of high technological value anti-fog materials by modifying commercial substrates with highly hydrophilic polymer brushes"

Advisor: Omar Azzaroni

RESEARCH EXPERIENCE

Research Assistant (CIC-CONICET)

Advisor: Matías Rafti

Start: 08/2017

GRANTS

PICT-2018-03606 (Scientific and Technological Research Projects 2018)

Topic: "Development of highly functional materials based on Metal-Organic Frameworks for sensing, remediation, and controlled release of host molecules"

Principal investigator (PI): Jimena S. Tuninetti

2019-2020 (AR\$ 260000)

1. "MOF@ PEDOT COMPOSITE FILMS FOR IMPEDIMETRIC PESTICIDE SENSORS"

Sappia, Luciano D.; Tuninetti, Jimena S.; Ceolín, Marcelo; Knoll, Wolfgang; Rafti, Matías; Azzaroni, Omar. *Global Challenges*, 4,2(2020), 1900076.

DOI: 10.1002/gch2.201900076

2. "BSA-CAPPED GOLD NANOCCLUSERS AS POTENTIAL THERAGNOSTIC FOR SKIN DISEASES: PHOTOACTIVATION, SKIN PENETRATION, IN VITRO, AND IN VIVO TOXICITY"

Lillo, Cristian R.; Calienni, M. Natalia; Rivas Aiello; Prieto, M Jimena; Rodríguez, Damián; Tuninetti, Jimena; Toledo, Pamela ; del Valle Alonso, Silvia; Moya, Sergio; Gonzalez, Mónica; Montanari, Jorge; Soler-Illia, Galo J.A.A.. *Materials Science and Engineering: C*. (2020)110891.

DOI: 10.1016/j.msec.2020.110891

3. "METAL-ORGANIC FRAMEWORKS (MOFS): STRUCTURAL MULTIFUNCTIONALITY AND INTEGRATION INTO DIVERSE PLATFORMS"

Tuninetti, Jimena S.; Rafti, Matías; Fracaroli, Alejandro M.. *An. Asoc. Quim. Argentina*, 2, 105(2018), 69-91.

4. "SURFACTANTS AS MESOGENIC AGENTS IN LAYER-BY-LAYER ASSEMBLED POLYELECTROLYTE/SURFACTANT MULTILAYERS: NANOARCHITECTURED "SOFT" THIN FILMS DISPLAYING A TAILORED MESOSTRUCTURED"

Piccinini, Esteban; Tuninetti, Jimena S.; Otamendi, Joseba Irigoyen; Moya, Sergio E.; Ceolín, Marcelo; Battaglini, Fernando; Azzaroni, Omar. *Physical Chemistry Chemical Physics*, 20, 14(2018), 9298-9308.

DOI: 10.1039/C7CP08203G

5. "CYSTEAMINE-MODIFIED ZIF-8 COLLOIDAL BUILDING BLOCKS: DIRECT ASSEMBLY OF NANOPARTICULATE MOF FILMS ON GOLD SURFACES VIA THIOL CHEMISTRY"

Segovia, Gustavo M.; Tuninetti, Jimena S.; Moya, Sergio; Picco, Agustín S.; Ceolín, Marcelo R.; Azzaroni, Omar; Rafti, Matías. *Materials today chemistry*, 8(2018), 29-35.

DOI: 10.1016/j.mtchem.2018.02.002

6. "POLYELECTROLYTE CAPPING AS STRAIGHTFORWARD APPROACH TOWARD MANIPULATION OF DIFFUSIVE TRANSPORT IN MOF FILMS"

Allegretto, Juan A.; Tuninetti, Jimena S.; Lorenzo, Agustín; Ceolín, Marcelo; Azzaroni, Omar; Rafti, Matías. *Langmuir*, 34,1 (2018), 425 - 431.

DOI: 10.1021/acs.langmuir.7b03083

7. "FABRICATION OF UV RESPONSIVE MICELLES-CONTAINING MULTILAYERS AND THEIR INFLUENCE ON CELL ADHESION"

Zhang, Haolan; Wang, Danyu; Lin, Xue; Politakos, Nikolaos; Tuninetti, Jimena S.; Moya, Sergio Enrique; Gao, Changyou. *Science China Chemistry*, 61, 1(2018), 54-63.

DOI: 10.1007/s11426-017-9143-y

8. "METAL-ORGANIC FRAMEWORKS MEET POLYMER BRUSHES: ENHANCED CRYSTALLINE FILM GROWTH INDUCED BY MACROMOLECULAR PRIMERS"

Rafti, Matías; Allegretto, Juan A.; Segovia, Gustavo M.; Tuninetti, Jimena S.; Giussi, Juan M.; Bindini, Elisa; Azzaroni, Omar. *Materials Chemistry Frontiers*, 1, 11(2017), 2256-2260.

DOI: 10.1039/C7QM00235A

9. “THERMALLY-INDUCED SOFTENING OF PNIPAM-BASED NANOPILLAR ARRAYS”

Sanz, Belén; Von Bilderling, Catalina; Tuninetti, Jimena S.; Pietrasanta, Lía; Mijangos, Carmen; Longo, Gabriel S.; Azzaroni, Omar; Giussi, Juan M. *Soft Matter*, 13, 13(2017), 2453-2464.

DOI: 10.1039/C7SM00206H

10. “HYDROLYSIS OF AMMONIA-BORANE OVER Ni/ZIF-8 NANOCATALYST: HIGH EFFICIENCY, MECHANISM, AND CONTROLLED HYDROGEN RELEASE”

Wang, Changlong; Tuninetti, Jimena; Wang, Zhao; Zhang, Chen; Ciganda, Roberto; Salmon, Lionel; Moya, Sergio; Ruiz, Jaime; Astruc, Didier. *Journal of the American Chemical Society*, 139, 33(2017), 11610-11615.

DOI: 10.1021/jacs.7b06859

11. “REDOX SYNTHESIS AND HIGH CATALYTIC EFFICIENCY OF TRANSITION-METAL NANOPARTICLE-GRAPHENE OXIDE NANOCOMPOSITES”

Wang, Changlong; Ciganda, Roberto; Yate, Luis; Tuninetti, Jimena; Shalabaeva, Victoria; Salmon, Lionel; Moya, Sergio; Ruiz, Jaime; Astruc, Didier. *Journal of Materials Chemistry A*, 5 41 (2017), 21947 - 21954.

DOI: 10.1039/C7TA06182J

12. “MOLECULAR TRANSPORT PROPERTIES OF ZIF-8 THIN FILMS IN AQUEOUS ENVIRONMENTS: THE CRITICAL ROLE OF INTERGRAIN MESOPOROSITY AS DIFFUSIONAL PATHWAY”

Tuninetti, Jimena S.; Rafti, Matías; Andrieu-Brunsen, Annette; Azzaroni, Omar. *Microporous and Mesoporous Materials*, 220(2016), 253-257.

DOI: 10.1016/j.micromeso.2015.08.035

13. “NONCOVALENT FUNCTIONALIZATION OF SOLID-STATE NANOPORES VIA SELF-ASSEMBLY OF AMPHIPOLS”

Pérez Mitta, Gonzalo; Burr, Loïc; Tuninetti, Jimena S.; Trautmann, Christina; Toimil-Molares, María Eugenia; Azzaroni, Omar. *Nanoscale*, 8, 3(2016), 1470-1478.

DOI: 10.1039/C5NR08190D

14. “EARLY STAGES OF ZIF-8 FILM GROWTH: THE ENHANCEMENT EFFECT OF PRIMERS EXPOSING SULFONATE GROUPS AS SURFACE-CONFINED NUCLEATION AGENTS”

Tuninetti, Jimena S.; Rafti, Matías; Azzaroni, Omar. *RSC Advances*, 5, 90(2015), 73958-73962.

DOI: 10.1039/C5RA12789K

15. “pH-RESPONSIVE ION TRANSPORT IN POLYELECTROLYTE MULTILAYERS OF POLY (DIALYLDIMETHYLAMMONIUM CHLORIDE)(PDADMAC) AND POLY (4-STYRENESULFONIC ACID-CO-MALEIC ACID)(PSS-MA) BEARING STRONG-AND WEAK ANIONIC GROUPS”

Maza, Eliana; Tuninetti, Jimena S.; Politakos, Nikolaos; Knoll, Wolfgang; Moya, Sergio; Azzaroni, Omar. *Physical Chemistry Chemical Physics*, 17, 44(2015), 29935-29948.

DOI: 10.1039/c5cp03965g

16. “POLYDOPAMINE MEETS SOLID-STATE NANOPORES: A BIOINSPIRED INTEGRATIVE SURFACE CHEMISTRY APPROACH TO TAILOR THE FUNCTIONAL PROPERTIES OF NANOFUIDIC DIODES”

Pérez-Mitta, Gonzalo; Tuninetti, Jimena S.; Knoll, Wolfgang; Trautmann, Christina; Toimil-Molares, María Eugenia; Azzaroni, Omar. *Journal of the American Chemical Society*, 137, 18(2015), 6011-6017.

DOI: 10.1021/jacs.5b01638

17. "PHOTOLITHOGRAPHY OF POLYANILINE ON SOLID SUBSTRATES USING PHOTOASSISTED POLYMERIZATION OF ANILINE"

Morales, Gustavo M.; Tuninetti, Jimena; Miras, María C.; Barbero, César. *Molecular Crystals And Liquid Crystals*, 522 (2010), 89 - 96.

DOI: 10.1080/15421401003722617

18. "SCAVENING OF PHOTOGENERATED OXIDATIVE SPECIES BY ANTIMUSCARINIC DRUGS: ATROPINE AND DERIVATES"

Criado, Susana; Guardianelli, Carina; Tuninetti, Jimena; Molina, Patricia; García, Norman A.. *Re Report*, 7, 6 (2002), 385 - 394.

DOI: 10.1179/135100002125001162