

Curriculum Breve

Periodo 2015-2019

Nombre: Ricardo Faccio

Fecha de nacimiento: 21 de abril de 1979

Lugar de Nacimiento: Montevideo, Uruguay

Formación:

- Ingeniero Químico, Universidad de la República, 2003.
- Doctor en Química, Universidad de la República, 2007.

Posición Actual:

- Profesor Agregado de Física, Grado 4, Dedicación Total. Facultad de Química, Universidad de la República.
- Responsable del Área Física, DETEMA, Facultad de Química, desde 2019.
- Coordinador del Área Química del Programa de Desarrollo de Ciencias Básicas (PEDECIBA) desde el año 2017.
- Investigador Honorario del Programa de Desarrollo de Ciencias Básicas (PEDECIBA), Grado 4.
- Categorizedado Nivel II del Sistema Nacional de Investigaciones (SNI- ANII).

Premios:

- Premio “Joven investigador destacado por su trayectoria académica nacional e internacional”, reconocimiento de la Dirección para el Desarrollo de la Ciencia y el Conocimiento (D2C2-MEC), Ministerio de Educación y Cultura (MEC), Uruguay (año 2018)
- Premio “Roberto Caldeyro Barcia en Ciencias Químicas-PEDECIBA”, año 2013.

Docencia:

- Responsable de curso de Física 101, Facultad de Química UdelaR.
- Responsable de curso de Física 102, Facultad de Química UdelaR.
- Responsable de curso de Física del Estado Sólido, Facultad de Química UdelaR.
- Responsable de varios cursos de Posgrado vinculado a la Ciencia de Materiales y Nanotecnología.

Líneas de Investigación:

- Diseño, preparación y caracterización de materiales para energía.
- Simulación de propiedades electrónicas de nanomateriales, en particular nanomateriales de Carbono.
- Electrónica Molecular y Espintrónica

Identificadores:

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Tesis Dirigidas:

Doctorados Finalizados:

- Quím. Mariano Romero, Doctorado en Química 2016, Facultad de Química. UdelaR.

- Ing. Quím. Luciana Fernández-Werner, Doctorado en Química, 2009 2013, PEDECIBA-UdelaR.

Tesis de Maestría y Doctorado en progreso:

- MSc. Lucía Amy, Doctorado en Física 2019, PEDECIBA, UdelaR.
- Ing. Hernan Heffner, Doctorado en Tecnología de Materiales 2018, Universidad Nacional del Sur. Argentina.
- Lic. Julián Juan, Doctorado en Física 2018. Universidad Nacional del Sur. Argentina.
- Lic. Dominique Mombrú, Doctorado en Química 2017, Facultad de Química. UdelaR.
- Lic. Fernando Pignanelli, Doctorado en Química 2017, Facultad de Química. UdelaR.
- B.C. María Belén Estevez, Doctorado en Química 2017, Facultad de Química. UdelaR.
- Q.F. Elisa Melian, Doctorado en Química 2017, Facultad de Química. UdelaR.
- Lic. Benjamín Montenegro, Posgrado en Química 2016, Facultad de Química. UdelaR.
- Ing. Quím. Santiago Vázquez, Doctorado en Química 2013, Facultad de Química. UdelaR.
- Lic. Sebastián Piriz, Doctorado en Química 2011, Facultad de Química. UdelaR.

Producción Científica:

- 135 publicaciones Científicas en revistas arbitradas de Circulación Internacional.
- Más de 200 presentaciones en Congreso.
- Árbitro de más de 90 revistas arbitradas de Circulación Internacional, en más de 350 ocasiones.

Publicaciones de los últimos 5 años¹⁻⁹⁵

1. Rodríguez, K. L. S.; Quintero, J. J. M.; Medina Chanduví, H. H.; Rebaza, A. V. G.; Faccio, R.; Adeagbo, W. A.; Hergert, W.; Torres, C. E. R.; Errico, L. A., Ab-Initio Approach to the Stability and the Structural, Electronic and Magnetic Properties of the (001) ZnFe₂O₄ Surface Terminations. *Appl. Surf. Sci.* **2020**, *499*, 143859.
2. Veiga, S.; Romero, M.; Faccio, R.; Segobia, D.; Duarte, H.; Apesteguía, C.; Bussi, J., Hydrogen-Rich Gas Production by Steam and Oxidative Steam Reforming of Crude Glycerol over Ni-La-Me Mixed Oxide Catalysts (Me= Ce and/or Zr). *Catal. Today* **2019**. En prensa.
3. Teliz, E.; Diez, J.; Martínez, M.; Díaz, P.; Pignanelli, F.; Faccio, R.; Zinola, C. F.; Díaz, V., Structural Characterization and Electrochemical Performance of Zr_{1-x}Ti_xCr_{0.7}Mo_{0.3}Ni Alloys. *JOM* **2019**, *71*, 1952-1961.
4. Romero, M.; Faccio, R.; Pardo, H.; Montenegro, B.; Richard, D.; Martínez, J.; Mudarra Navarro, A. M.; Mombrú, A. W., Local Structure and Magnetic Properties of Mn³⁺-O-Fe³⁺ Superexchange Interaction in an Oxygen-Vacant Perovskite: Experimental and Theoretical Study. *J. Magn. Magn. Mater.* **2019**, *469*, 224-230.
5. Puentes, R.; Torres, J.; Faccio, R.; Bacchi, A.; Kremer, C., Lanthanide Coordination Polymers Based on Flexible Ligands Derived from Iminodiacetic Acid. *Polyhedron* **2019**, *170*, 683-689.
6. Pignanelli, F.; Romero, M.; Mombrú, D.; Téliz, E.; Díaz, V.; Castiglioni, J.; Zinola, F.; Faccio, R.; Mombrú, A. W., Insights of Cobalt Doping on Carbon-Coated LiFePO₄ Olivine Nanoparticles Prepared by Citric Acid Combustion Route as Cathodes for Lithium Batteries. *Ionics* **2019**.
7. Pignanelli, F.; Romero, M.; Esteves, M.; Fernández-Werner, L.; Faccio, R.; Mombrú, A. W., Lithium Titanate Nanotubes as Active Fillers for Lithium-Ion Polyacrylonitrile Solid Polymer Electrolytes. *Ionics* **2019**, *25*, 2607-2614.
8. Pignanelli, F.; Romero, M.; Castiglioni, J.; Faccio, R.; Mombrú, A. W., Novel Synergistic in Situ Synthesis of Lithium-Ion Poly(Ethylene Citrate)-TiO₂ Nanocomposites as Promising Fluorine-Free Solid Polymer Electrolytes for Lithium Batteries. *J. Phys. Chem. Solids* **2019**, *135*, 109082.

9. Musso, M.; Romero, M.; Faccio, R.; Bussi, J., Catalytic Assessment of a Ni-La-Sn Ternary Metallic System in Ethanol Steam Reforming and the Influence of the Sn/La Atomic Ratio in the Catalytic Performance. *Catal. Today* **2019**. En Prensa
10. Mombrú, D.; Romero, M.; Sandoval, M. G.; Faccio, R.; Mombrú, Á. W., Role of Surface Defects on the Adsorption of Poly(9-Vinylcarbazole) on TiO₂ Using the Monomer as a Donor:Acceptor Model. *Appl. Surf. Sci.* **2019**, *487*, 1104-1110.
11. Mombrú, D.; Romero, M.; Faccio, R.; Tumelero, M. A.; Mombrú, A. W., Extremely Large Magnetic-Field-Effects on the Impedance Response of TiO₂ Quantum Dots. *Scientific Reports* **2019**, *9*, 5322.
12. Mombrú, D.; Romero, M.; Faccio, R.; Mombrú, Á. W., Electronic and Optical Properties of Sulfur and Nitrogen Doped Graphene Quantum Dots: A Theoretical Study. *Physica E: Low-dimensional Systems and Nanostructures* **2019**, *113*, 130-136.
13. Mombrú, D.; Romero, M.; Faccio, R.; Mombrú, Á. W., Thermoelectric Properties and Thermal Stability of Conducting Polymer Nanocomposites: A Review. In *Advanced Thermoelectric Materials*, 2019.
14. Mombrú, D.; Romero, M.; Faccio, R.; Mombrú, A. W., Transition from Positive to Negative Electrical Resistance Response under Humidity Conditions for PEDOT:PSS-MoS₂ Nanocomposite Thin Films. *J Mater Sci Mater Electron* **2019**, *30*, 5959-5964.
15. Machado, I.; Faccio, R.; Pistón, M., Characterization of the Effects Involved in Ultrasound-Assisted Extraction of Trace Elements from Artichoke Leaves and Soybean Seeds. *Ultrason. Sonochem.* **2019**, *59*, 104752.
16. Irazoqui, M.; Romero, M.; Paulsen, E.; Barrios, S.; Pérez, N.; Faccio, R.; Lema, P., Effect of Power Ultrasound on Quality of Fresh-Cut Lettuce (Cv. Vera) Packaged in Passive Modified Atmosphere. *Food Bioprod. Process.* **2019**, *117*, 138-148.
17. Ibañez, C. M.; Camargo, A.; Mantero, C.; Faccio, R.; Malanga, A.; Rabinovich, M., Effectiveness of Micronizing Zinc Borate to Improve Its Fungicidal Properties. *2019* **2019**, *14*, 16.
18. Esteves, M.; Fernández-Werner, L.; Pignatelli, F.; Montenegro, B.; Belluzzi, M.; Pistón, M.; Chialanza, M. R.; Faccio, R.; Mombrú, Á. W., Synthesis, Characterization and Simulation of Lithium Titanate Nanotubes for Dye Sensitized Solar Cells. *Ceram. Int.* **2019**, *45*, 708-717.
19. Darriba, G. N.; Faccio, R.; Rentería, M., Electric Field Gradient Study on Pure and Cd-Doped In(111) Surfaces: Correlation between Experiments at the Atomic Scale and First-Principles Calculations. *Physical Review B* **2019**, *99*, 195435.
20. Zimmermann, L. M., et al., Toward Heterogeneously Catalyzed Detoxification of Phosphotriesters: Insights from Kinetics and Theoretical Calculations. *The Journal of Physical Chemistry C* **2018**, *122*, 25530-25538.
21. Zimet, P.; Mombrú, Á. W.; Faccio, R.; Brugnini, G.; Miraballes, I.; Rufo, C.; Pardo, H., Optimization and Characterization of Nisin-Loaded Alginate-Chitosan Nanoparticles with Antimicrobial Activity in Lean Beef. *LWT - Food Sci. Technol.* **2018**, *91*, 107-116.
22. Teliz, E.; Diez, J.; Faccio, R.; Ruiz, F.; Zinola, F.; Díaz, V., Molybdenum Incorporation on Ab₂ Alloys-Part I Metallurgical and Electrochemical Characterization: Electrocatalytic Behavior. *J. Alloys Compd.* **2018**, *744*, 583-590.
23. Teliz, E.; Diez, J.; Faccio, R.; German, E.; Zinola, F.; Díaz, V., Molybdenum Incorporation on Ab₂ Alloys-Part II. On the Synergetic Effects of Laves and Non-Laves Phases. *J. Alloys Compd.* **2018**, *737*, 530-535.
24. Teliz, E.; Díaz, V.; Pignatelli, F.; Faccio, R.; Zinola, C. F., Thermodynamic Analysis of Ab₂ Hydrides: ZrCr_{1-x}Ti_xNi_{0.3} Alloys. **2018**, *165*, A3389-A3396.
25. Romero, M.; Faccio, R.; Montenegro, B.; Tumelero, M. A.; Plá Cid, C. C.; Pasa, A. A.; Mombrú, A. W., Role of Conducting Polyaniline Interphase on the Low Field Magnetoresistance for LSMO-PANI Nanocomposites. *J. Magn. Magn. Mater.* **2018**, *466*, 446-451.

26. Rodríguez Chialanza, M.; Keuchkerian, R.; Maia, L. J. Q.; Carvalho, J. F.; Suescun, L.; Faccio, R.; Fornaro, L., Development of Oxyfluoroborate Glass Ceramics Doped with Er³⁺ and Yb³⁺. *J Mater Sci Mater Electron* **2018**, *29*, 5472-5479.
27. Richard, D.; Romero, M.; Faccio, R., Experimental and Theoretical Study on the Structural, Electrical and Optical Properties of Tantalum-Doped ZnO Nanoparticles Prepared Via Sol-Gel Acetate Route. *Ceram. Int.* **2018**, *44*, 703-711.
28. Pignanelli, F.; Romero, M.; Faccio, R.; Fernández-Werner, L.; Mombrú, A. W., Enhancement of Lithium-Ion Transport in Poly(Acrylonitrile) with Hydrogen Titanate Nanotube Fillers as Solid Polymer Electrolytes for Lithium-Ion Battery Applications. *The Journal of Physical Chemistry C* **2018**, *122*, 1492-1499.
29. Pignanelli, F.; Fernández-Werner, L.; Romero, M.; Mombrú, D.; Tumelero, M. A.; Pasa, A. A.; Germán, E.; Faccio, R.; Mombrú, Á. W., Hydrogen Titanate Nanotubes for Dye Sensitized Solar Cells Applications: Experimental and Theoretical Study. *Mater. Res. Bull.* **2018**, *106*, 40-48.
30. Pelegrini, S.; Tumelero, M. A.; Brandt, I. S.; Della Pace, R. D.; Faccio, R.; Pasa, A. A., Electrodeposited Cu₂O Doped with Cl: Electrical and Optical Properties. *J. Appl. Phys.* **2018**, *123*.
31. Mombrú, D.; Romero, M.; Pardo, H.; Faccio, R.; Mombrú, Á. W., P- and N-Type Doping with Strontium and Cerium in the Biphasic La_{1.55}Nd_{0.45}CuO₄ System. *Mater. Res. Bull.* **2018**, *97*, 136-141.
32. Mombrú, D.; Romero, M.; Faccio, R.; Mombrú, A. W. J. J. o. M. S. M. i. E., Polyaniline Intercalated with MoS₂ Nanosheets: Structural, Electric and Thermoelectric Properties. **2018**, *29*, 17445-17453.
33. Mombrú, D.; Romero, M.; Faccio, R.; Mombrú, A. W., Curvature and Vacancies in Graphene Quantum Dots. *Appl. Surf. Sci.* **2018**, *462*, 540-548.
34. Mombrú, D.; Romero, M.; Faccio, R.; Mombrú, A. W., Raman Microscopy Insights on the out-of-Plane Electrical Transport of Carbon Nanotube-Doped PEDOT:PSS Electrodes for Solar Cell Applications. *J. Phys. Chem. B* **2018**, *122*, 2694-2701.
35. Mombrú, D.; Faccio, R.; Mombrú, Á. W., Possible Doping of Single-Layer MoS₂ with Pt: A DFT Study. *Appl. Surf. Sci.* **2018**, *462*, 409-416.
36. Mombrú, D.; Faccio, R.; Mombrú, A. W., First Row Transition Metal Atoms Embedded in Multivacancies in a Rippled Graphene System. *Appl. Surf. Sci.* **2018**, *435*, 102-107.
37. Mombrú, D.; Faccio, R.; Mombrú, A. W., Sulfur Doping in Multivacancy Graphene Systems. *Appl. Surf. Sci.* **2018**, *459*, 336-344.
38. Mombrú, D.; Faccio, R.; Mombrú, A. W., Emulating Porphyrins with a Rippled Multivacancy Graphene System. *Appl. Surf. Sci.* **2018**, *436*, 1173-1180.
39. Mombrú, D.; Faccio, R.; Mombrú, A. W., Possible Causes for Rippling in a Multivacancy Graphene System. *Int. J. Quantum Chem* **2018**, *118*.
40. Melian, M. E.; Munguía, A. B.; Faccio, R.; Palma, S.; Domínguez, L., The Impact of Solid Dispersion on Formulation, Using Confocal Micro Raman Spectroscopy as Tool to Probe Distribution of Components. *J. Pharm. Innov.* **2018**, *13*, 58-68.
41. González FÁ, A.; López-Corral, I.; Faccio, R.; Juan, A.; Di Nezio, M. S., Surface Enhancement Raman Spectroscopy and Density Functional Theory Study of Silver Nanoparticles Synthesized with D-Glucose. **2018**, *49*, 1756-1764.
42. German, E.; Faccio, R.; Mombrú, A. W., Comparison of Standard DFT and Hubbard-DFT Methods in Structural and Electronic Properties of TiO₂ Polymorphs and H-Titanate Ultrathin Sheets for DSSC Application. *Appl. Surf. Sci.* **2018**, *428*, 118-123.
43. Fernández-Werner, L.; González, E. A.; Faccio, R.; Mombrú, Á. W., TiO₂(B) and Anatase Angstrom-Scale Wires: A Theoretical Study. *J. Phys. Chem. C* **2018**, *122*, 3363-3370.
44. Esteves, M.; Fernández-Werner, L.; Pignanelli, F.; Montenegro, B.; Belluzzi, M.; Pistón, M.; Chialanza, M. R.; Faccio, R.; Mombrú, Á. W., Synthesis, Characterization and Simulation of Lithium Titanate Nanotubes for Dye Sensitized Solar Cells. *Ceram. Int.* **2018**.

45. Brandt, I. S.; Tumelero, M. A.; Martins, C. A.; Plá Cid, C. C.; Faccio, R.; Pasa, A. A., Defects Controlling Electrical and Optical Properties of Electrodeposited Bi Doped Cu₂O. *J. Appl. Phys.* **2018**, *123*.
46. Veiga, S.; Faccio, R.; Segobia, D.; Apesteguía, C.; Bussi, J., Hydrogen Production by Crude Glycerol Steam Reforming over Ni–La–Ti Mixed Oxide Catalysts. *Int. J. Hydrogen Energy* **2017**, *42*, 30525-30534.
47. Romero, M.; Faccio, R.; Tumelero, M. A.; Pasa, A. A.; Mombru, A. W., The Structural and Organic Magnetoresistance Response of Poly(9-Vinyl Carbazole) Using Low Applied Magnetic Fields and Magnetic Nanoparticle Addition. *Journal of Materials Chemistry C* **2017**, *5*, 3779-3787.
48. Puentes, R., et al., Lanthanide Coordination Polymers with N-Methyliminodipropionic Acid: Synthesis, Crystal Structures and Luminescence. *Inorg. Chim. Acta* **2017**, *462*, 308-314.
49. Piriz, S.; Fernandez-Werner, L.; Pardo, H.; Jasen, P.; Faccio, R.; Mombru, A. W., Mechanical Properties and Electronic Structure of Edge-Doped Graphene Nanoribbons with F, O, and Cl Atoms. *PCCP* **2017**, *19*, 21474-21480.
50. Pignanelli, F.; Romero, M.; Faccio, R.; Mombrú, Á. W., Experimental and Theoretical Study of Ionic Pair Dissociation in a Lithium Ion–Linear Polyethylenimine–Polyacrylonitrile Blend for Solid Polymer Electrolytes. *J. Phys. Chem. B* **2017**.
51. Orazi, V.; Bechthold, P.; Jasen, P. V.; Faccio, R.; Pronsato, M. E.; González, E. A., Dft Study of Methanol Adsorption on Ptco(111). *Appl. Surf. Sci.* **2017**, *420*, 383-389.
52. Mombrú, D.; Romero, M.; Faccio, R.; Mombrú, Á. W., Effect of Graphene-Oxide on the Microstructure and Charge Carrier Transport of Polyaniline Nanocomposites under Low Applied Electric Fields. *J. Appl. Phys.* **2017**, *121*, 045109.
53. Mombrú, D.; Romero, M.; Faccio, R.; Mombrú, Á. W., Electronic Structure of Edge-Modified Graphene Quantum Dots Interacting with Polyaniline: Vibrational and Optical Properties. *The Journal of Physical Chemistry C* **2017**, *121*, 16576-16583.
54. Mombrú, D.; Romero, M.; Faccio, R.; Mombrú, A. W., Raman and Impedance Spectroscopy under Applied Dc Bias Insights on the Electrical Transport for Donor:Acceptor Nanocomposites Based on Poly(Vinyl Carbazole) and TiO₂ Quantum Dots. *J. Phys. Chem. C* **2017**, *121*, 23383-23391.
55. Mombrú, D.; Romero, M.; Faccio, R.; Mombrú, A. W., Microstructure Evolution, Thermal Stability and Fractal Behavior of Water Vapor Flow Assisted in Situ Growth Poly(Vinylcarbazole)-Titania Quantum Dots Nanocomposites. *J. Phys. Chem. Solids* **2017**, *111*, 199-206.
56. Mombrú, D.; Romero, M.; Faccio, R.; Mombrú, A. W., From Positive to Negative Magnetoresistance Behavior at Low Applied Magnetic Fields for Polyaniline:Titania Quantum Dot Nanocomposites. *J. Appl. Phys.* **2017**, *121*, 245106.
57. Mombrú, D.; Romero, M.; Faccio, R.; Castiglioni, J.; Mombrú, A. W., In Situ Growth of Ceramic Quantum Dots in Polyaniline Host Via Water Vapor Flow Diffusion as Potential Electrode Materials for Energy Applications. *J. Solid State Chem.* **2017**, *250*, 60-67.
58. German, E.; Faccio, R.; Mombrú, Á. W., Theoretical Study of New Potential Semiconductor Surfaces Performance for Dye Sensitized Solar Cell Usage: TiO₂-B (001), (100) and H₂Ti₃O₇ (100). *Appl. Surf. Sci.* **2017**, *426*, 1182-1189.
59. German, E.; Faccio, R.; Mombrú, A. W., A Dft + U Study on Structural, Electronic, Vibrational and Thermodynamic Properties of TiO₂ Polymorphs and Hydrogen Titanate: Tuning the Hubbard ' U -Term'. *Journal of Physics Communications* **2017**, *1*, 055006.
60. Fernández-Werner, L.; Pignanelli, F.; Montenegro, B.; Romero, M.; Pardo, H.; Faccio, R.; Mombrú, Á. W., Characterization of Titanate Nanotubes for Energy Applications. *Journal of Energy Storage* **2017**, *12*, 66-77.
61. Faccio, R.; Saenz-Méndez, P.; Kieninger, M.; Ventura, O. N., Using Density Functional Theory to Increase the Accuracy of Experimental Crystal Structures: The Case of Potassium Peroxocarbonate. *J. Mol. Struct.* **2017**, *1146*, 1-4.

62. De León, M. A.; Rodríguez, M.; Marchetti, S. G.; Sapag, K.; Faccio, R.; Sergio, M.; Bussi, J., Raw Montmorillonite Modified with Iron for Photo-Fenton Processes: Influence of Iron Content on Textural, Structural and Catalytic Properties. *Journal of Environmental Chemical Engineering* **2017**, *5*, 4742-4750.
63. Bussi, J.; Musso, M.; Quevedo, A.; Faccio, R.; Romero, M., Structural and Catalytic Stability Assessment of Ni-La-Sn Ternary Mixed Oxides for Hydrogen Production by Steam Reforming of Ethanol. *Catal. Today* **2017**, *296*, 154-162.
64. Brandt, I. S.; Tumelero, M. A.; Lima, E.; da Silva, D. L.; Zysler, R. D.; Faccio, R.; Pasa, A. A., Enhanced Defect-Mediated Ferromagnetism in Cu₂O by Co Doping. *J. Magn. Mater.* **2017**, *441*, 374-386.
65. Vázquez, S.; Suescun, L.; Faccio, R., Effect of Cu Doping on Ba_{0.5}Sr_{0.5}Fe_{1-x}Cu_xO_{3-Δ} Perovskites for Solid Oxide Fuel Cells: A First-Principles Study. *J. Power Sources* **2016**, *311*, 13-20.
66. Tumelero, M. A.; Faccio, R.; Pasa, A. A., Unraveling the Native Conduction of Trichalcogenides and Its Ideal Band Alignment for New Photovoltaic Interfaces. *J. Phys. Chem. C* **2016**, *120*, 1390-1399.
67. Tumelero, M. A.; Faccio, R.; Pasa, A. A., The Role of Interstitial Native Defects in the Topological Insulator Bi₂Se₃. *Journal of Physics Condensed Matter* **2016**, *28*.
68. Tumelero, M. A.; Benetti, L. C.; Isoppo, E.; Faccio, R.; Zangari, G.; Pasa, A. A., Electrodeposition and Ab Initio Studies of Metastable Orthorhombic Bi₂Se₃: A Novel Semiconductor with Bandgap for Photovoltaic Applications. *J. Phys. Chem. C* **2016**, *120*, 11797-11806.
69. Sierra, J. A.; Vanoni, C. R.; Tumelero, M. A.; Plá Cid, C. C.; Faccio, R.; Franceschini, D. F.; Creczynski-Pasa, T. B.; Pasa, A. A., Biogenic Approaches Using Citrus Extracts for the Synthesis of Metal Nanoparticles: The Role of Flavonoids in Gold Reduction and Stabilization. *New J. Chem.* **2016**, *40*, 1420-1429.
70. Santi, E.; Facchin, G.; Faccio, R.; Barroso, R. P.; Costa-Filho, A. J.; Borthagaray, G.; Torre, M. H., Antimicrobial Evaluation of New Metallic Complexes with Xylitol Active against *P. Aeruginosa* and *C. Albicans*: Mic Determination, Post-Agent Effect and Zn-Uptake. *J. Inorg. Biochem.* **2016**, *155*, 67-75.
71. Romero, M.; Faccio, R.; Vázquez, S.; Mombrú, Á. W., Enhancement of Lithium Conductivity and Evidence of Lithium Dissociation for Li₁₀-PMMA Nanocomposite Electrolyte. *Mater. Lett.* **2016**, *172*, 1-5.
72. Romero, M.; Faccio, R.; Vázquez, S.; Davyt, S.; Mombrú, Á. W., Experimental and Theoretical Raman Study on the Structure and Microstructure of Li_{0.30}La_{0.57}TiO₃ Electrolyte Prepared by the Sol-Gel Method in Acetic Medium. *Ceram. Int.* **2016**, *42*, 15414-15422.
73. Romero, M.; Faccio, R.; Pardo, H.; Tumelero, M. A.; Campos Plá Cid, C.; Pasa, A. A.; Mombrú, Á. W., Microstructure, Interparticle Interactions and Magnetotransport of Manganite-Polyaniline Nanocomposites. *Mater. Chem. Phys.* **2016**, *171*, 178-184.
74. Romero, M.; Faccio, R.; Mombrú, Á. W., Novel Fluorine-Free 2,2'-Bis(4,5-Dimethylimidazole) Additive for Lithium-Ion Poly(Methyl Methacrylate) Solid Polymer Electrolytes. *RSC Advances* **2016**, *6*, 67150-67156.
75. Mombrú, D.; Romero, M.; Faccio, R.; Mombrú, A. W., Tuning Electrical Transport Mechanism of Polyaniline-Graphene Oxide Quantum Dots Nanocomposites for Potential Electronic Device Applications. *J. Phys. Chem. C* **2016**, *120*, 25117-25123.
76. López-Corral, I.; Piriz, S.; Faccio, R.; Juan, A.; Avena, M., A Van Der Waals DFT Study of Pth₂ Systems Absorbed on Pristine and Defective Graphene. *Appl. Surf. Sci.* **2016**, *382*, 80-87.
77. Zoldan, V. C.; Faccio, R.; Pasa, A. A., N and P Type Character of Single Molecule Diodes. *Scientific Reports* **2015**, *5*.
78. Vázquez, S.; Davyt, S.; Basbus, J. F.; Soldati, A. L.; Amaya, A.; Serquis, A.; Faccio, R.; Suescun, L., Synthesis and Characterization of La_{0.6}Sr_{0.4}Fe_{0.8}Cu_{0.2}O_{3-Δ} Oxide as Cathode for Intermediate Temperature Solid Oxide Fuel Cells. *J. Solid State Chem.* **2015**, *228*, 208-213.

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