

Publicaciones 2019

• **"Measuring magnetocaloric effect in a phase separated system"** (artículo con referato)

D. Goijman, A.G. Leyva and M. Quintero

Mater. Res. Express **6**(2) (2019) 026106/1-9 [[abstract](#),[doi](#)]

• **"N-haloacetyl phenothiazines and derivatives: Preparation, characterization and structure-activity relationship for antifungal activity"** (artículo con referato)

Gabriela P. Sarmiento, M. Florencia Martini, Roxana G. Vitale, Lucas E. Fabian, Javier Afeltra, Daniel Vega, Graciela Y. Moltrasio and Albertina G. Moglioni

Arabian Journal of Chemistry **12**(1) (2019) 21-32 [[abstract](#),[doi](#)]

• **"Studying ReRAM devices at Low Earth Orbits using the LabOSat platform"** (artículo con referato)

M. Barella, G. Sanca, F. Gomez Marlasca, W. Román Acevedo, D. Rubi, M.A. García Inza, P. Levy and F. Golmar

Radiat. Phys. Chem. **154** (2019) 85-90 [[abstract](#),[doi](#)]

• **"Kinetic and equilibrium adsorption of two post-harvest fungicides onto copper-exchanged montmorillonite: synergic and antagonistic effects of both fungicides' presence"** (artículo con referato)

Martina Gamba, Juan M. Lázaro-Martínez, Melisa S. Olivelli, Florencia Yarza, Daniel Vega, Gustavo Curutchet and Rosa M. Torres Sánchez

Environ. Sci. Pollut. Res. **26**(3) (2019) 2421-2434 [[abstract](#),[doi](#)]

• **"Adaptive threshold in TiO₂-based synapses"** (artículo con referato)

N. Ghenzi, M. Barella, D. Rubi and C. Acha

J. Phys. D: Appl. Phys. **52**(12) (2019) 125401/1-7 [[abstract](#),[doi](#)]

• **"One step synthesis of high efficiency nickel/mesoporous TiO₂ hybrid catalyst for hydrogen evolution reaction"** (artículo con referato)

Esteban A. Franceschini, Melisa J. Gomez and Gabriela I. Lacconi

Journal of Energy Chemistry **29** (2019) 79-87 [[abstract](#),[doi](#)]

• **"Pressure responsive gating in nanochannels coated by semiflexible polymer brushes"** (artículo con referato)

K. Speyer and C. Pastorino

Soft Matter **15**(5) (2019) 937-946 [[abstract](#),[doi](#)]

• **"Microscopic Electrochemical Control of Ag Nanoparticles into Mesoporous TiO₂ Thin Films"** (artículo con referato)

M.M. Linares Moreau, E.D. Martínez, M.C. Fuertes, A. Zelcer, F. Golmar, P.N. Granell, P.E. Levy, G.J.A.A. Soler Illia and L.P. Granja

J. Phys. Chem. C **123**(6) (2019) 3579-3587 [[abstract](#),[doi](#)]

• **"Ionic Mobility within Functionalized Silica Nanopores"** (artículo con referato)

M. Dolores Elola and Javier Rodriguez

J. Phys. Chem. C **123**(6) (2019) 3622-3633 [[abstract](#),[doi](#)]

• **"Photocatalytic reduction of Cr(VI) on hematite nanoparticles in the presence of oxalate and citrate"** (artículo con referato)

Imme Kretschmer, Alejandro M. Senn, J. Martín Meichtry, Graciela Custo, Emilia B. Halac, Ralf Dillert, Detlef W. Bahnemann and Marta I. Litter

Appl. Catal. B-Environ. **242** (2019) 218-226 [[abstract](#),[doi](#)]

•"**Oxygen-Vacancy Dynamics and Entanglement with Polaron Hopping at the Reduced CeO₂(111) Surface**" (artículo con referato)

Dawei Zhang, Zhong-Kang Han, Gustavo E. Murgida, M. Verónica Ganduglia-Pirovano and Yi Gao

Phys. Rev. Lett. **122**(9) (2019) 096101/1-6 [abstract,doi]

•"**Co,N-doped mesoporous carbons cobalt derived from coordination polymer as supercapacitors**" (artículo con referato)

Ana Katherine Díaz-Duran, Gonzalo Montiel, Federico A. Viva and Federico Roncaroli
Electrochim. Acta **299** (2019) 987-998 [abstract,doi]

•"**Luminescent Lanthanide Metal Organic Frameworks as Chemosensing Platforms towards Agrochemicals and Cations**" (artículo con referato)

Germán E. Gomez, María dos Santos Afonso, Héctor A. Baldoni, Federico Roncaroli and Galo J.A.A. Soler-Illia

Sensors **19**(5) (2019) 10.3390/s19051260 [abstract,doi]

•"**Bimodal mesoporous hard carbons from stabilized resorcinol-formaldehyde resin and silica template with enhanced adsorption capacity**" (artículo con referato)

Eduardo Fuentes-Quezada, Ezequiel de la Llave, Emilia Halac, Matías Jobbágy, Federico A. Viva, Mariano M. Bruno and Horacio R. Corti

Chem. Eng. J. **360** (2019) 631-644 [abstract,doi]

•"**Retained austenite phase detected by Mössbauer spectroscopy in ASTM A335 P91 steel submitted to continuous cooling cycles**" (artículo con referato)

Jorge I. Besoky, Claudio A. Danon and Cinthia P. Ramos

J. Mater. Res. Technol. **8**(2) (2019) 1888-1896 [abstract,doi]

•"**Iron-based nanoparticles prepared from yerba mate extract. Synthesis, characterization and use on chromium removal**" (artículo con referato)

Fabiana E. García, Alejandro M. Senn, Jorge M. Meichtry, Thomas B. Scott, Huw Pullin, Ana G. Leyva, Emilia B. Halac, Cinthia P. Ramos, Joaquín Sacanell, M. Mizrahi, et al.

J. Environ. Manag. **235** (2019) 1-8 [abstract,doi]

•"**Thermal, spectroscopic and structural analysis of a thermosalient phase transformation in tapentadol hydrochloride**" (artículo con referato)

P. Gaztañaga, R. Baggio, E. Halac and D.R. Vega

Acta Cryst. B **75**(2) (2019) 183-191 [abstract,doi]

•"**Magnetostriction reveals orthorhombic distortion in tetragonal Gd compounds**" (artículo con referato)

D. Betancourth, V.F. Correa, Jorge I. Facio, J. Fernández, V. Vildosola, R. Lora-Serrano, J.M. Cadogan, A.A. Aligia, Pablo S. Cornaglia and D.J. García

Phys. Rev. B **99**(13) (2019) 134406/1-10 [abstract,doi]

•"**Maximum Electrical Conductivity of Associated Lithium Salts in Solvents for Lithium-Air Batteries**" (artículo con referato)

Gabriela Horwitz, Cristian Rodríguez, Matias Factorovich and Horacio R. Corti

J. Phys. Chem. C **123**(19) (2019) 12081-12087 [abstract,doi]

•" **μ -Benzene-1,2,4,5-tetracarboxylato- $\kappa^2O^1:O^4$)bis-[aqua-bis-2-(aminomethyl)pyridine- κ^2N,N'] nickel (II)] decahydrate: Structure and Magnetic Properties**" (artículo con referato)

Ana María Atria, José Parada, Ricardo Baggio, Octavio Peña and Yanko Moreno

J. Chil. Chem. Soc., **64**, Nº2 (2019) 4484-4487 [abstract,doi]

•"**A simple graphical method to pinpoint local pseudosymmetries in $Z' > 1$ cases**" (artículo con referato)

R. Baggio

Acta Cryst. C **75**(7) (2019) 837-850 [abstract,doi]

•"**Crystal structure and pseudosymmetry analysis of the triclinic prodrug cloxazolam ($Z' = 4$)**" (artículo con referato)

M.S. Garraza, M.E. Gimenez, D.R. Vega and R. Baggio

Acta Cryst. C **75**(7) (2019) 851-858 [[abstract](#),[doi](#)]

•"**Halide-Mediated Modification of Magnetism and Electronic Structure of α -Co(II) Hydroxides: Synthesis, Characterization, and DFT+U Simulations**" (artículo con referato)

Víctor Oestreicher, Diego Hunt, Ramón Torres-Cavanillas, Gonzalo Abellán, Damián A. Scherlis and Matías Jobbágy

Inorg. Chem. **58**(14) (2019) 9414-9424 [[abstract](#),[doi](#)]

•"**Carrier conduction mechanisms of mesoporous titania thin films assessed by impedance spectroscopy**" (artículo con referato)

M. Dolores Perez, Fernando D. González, Natalia B. Correa Guerrero and Federico A. Viva

Micropor. Mesopor. Mat. **283** (2019) 31-38 [[abstract](#),[doi](#)]

•"**Nanostructured $La_{0.5}Ba_{0.5}CoO_3$ as cathode for solid oxide fuel cells**" (artículo con referato)

Augusto E. Mejía Gómez, Diego G. Lamas, Ana Gabriela Leyva and Joaquín Sacanell

Ceram. Int. **45**(11) (2019) 14182-14187 [[abstract](#),[doi](#)]

•"**Glass transition of LiCl aqueous solutions confined in mesoporous silica**" (artículo con referato)

M. Paula Longinotti, Violeta Fuentes-Landete, Thomas Loerting and Horacio R. Corti

J. Chem. Phys. **151**(6) (2019) 064509/1- [[abstract](#),[doi](#)]

•"**Characterization of an ASTM A335 P91 ferritic-martensitic steel after continuous cooling cycles at moderate rates**" (artículo con referato)

Denise Alejandra Carrizo, Jorge Ignacio Besoky, María Luppó, Claudio Danon and Cinthia Paula Ramos

J. Mater. Res. Technol. **8**(1) (2019) 923-934 [[abstract](#),[doi](#)]

•"**Destructive quantum interference in transport through molecules with electron-electron and electron-vibration interactions**" (artículo con referato)

P. Roura-Bas, F. Güller, L. Tosi and A.A. Aligia

J. Phys.: Condens. Matter **31**(46) (2019) 465602/1-10 [[abstract](#),[doi](#)]

•"**Structural characterization of a hybrid terpyridine-pyrazine ligand and its one-dimensional Zn^{II} coordination polymer: a computational approach to conventional and nonconventional intermolecular interactions**" (artículo con referato)

J. Granifo, R. Gaviño, S. Suárez and R. Baggio

Acta Cryst. C **75**(9) (2019) 1299-1309 [[abstract](#),[doi](#)]

•"**Magnetism and anomalous apparently inverse Jahn-Teller effect in Sr_2CrO_4** " (artículo con referato)

Justin Jeanneau, Pierre Toulemonde, Gyorgy Remenyi, André Sulpice, Claire V. Colin, Vivian Nassif, Emmanuelle Suard, Frederic Gay, Ruben Weht and Manuel Núñez-Regueiro

Europhys. Lett. **127**(2) (2019) 27002/1-6 [[abstract](#),[doi](#)]

•"**Application of surface science techniques to study a gilded Egyptian funerary mask: A multi-analytical approach**" (artículo con referato)

Famarz Saha Gard, Maria Belén Daizo, Diego Maximiliano Santos, Emilia Betty

Halac, Eleonora Freire, María Reinoso, Patricia Beatriz Bozzano, Silvia Adriana

Dominguez and Ricardo Jesús Montero

Surf. Interface Anal. **51**(10) (2019) 1001-1017 [[abstract](#),[doi](#)]

•"**Generalization of the Wall theorem to out-of-equilibrium conditions**" (artículo con referato)

Ignacio Urrutia, Iván E. Paganini and Claudio Pastorino

J. Chem. Phys. **151**(13) (2019) 131101/1-6 [[abstract](#),[doi](#)]

• **"Eutectic $Sb_{7.4}Te_{92.6}$ thin film for non-volatile phase-change memories"** (artículo con referato)

Claudio Barbon, Vitaliy Bilovol, Emiliano Javier Di Liscia and Bibiana Arcondo
Microelectronics International **36**(4) (2019) 171-175 [[abstract](#),[doi](#)]

• **"High durability fuel cell cathodes obtained from cobalt metal organic frameworks"** (artículo con referato)

Ana Katherine Díaz-Duran, Federico A. Viva and Federico Roncaroli
Electrochim. Acta **320** (2019) 134623/1-8 [[abstract](#),[doi](#)]

• **"Oxygen vacancy dynamics in redox-based interfaces: tailoring the memristive response"** (artículo con referato)

Cristian Ferreyra, Wilson Román Acevedo, Ralph Gay, Diego Rubi and María José Sánchez
J. Phys. D: Appl. Phys. **53**(1) (2019) 015302/1-10 [[abstract](#),[doi](#)]

• **"Temperature-Programmed Reduction and Dispersive X-Ray Absorption Spectroscopy Studies of CeO_2 -Based Nanopowders for Intermediate-Temperature Solid-Oxide Fuel Cell Anodes"** (artículo con referato)

Marina S. Bellora, Joaquín Sacanell, Cristián Huck-Iriart, Analía L. Soldati, Susana A. Larrondo and Diego G. Lamas

Materials Sciences and Applications **10**(10) (2019) 631-642 [[abstract](#),[doi](#)]

• **"Methane catalytic combustion over CeO_2 - ZrO_2 - Sc_2O_3 mixed oxides"** (artículo con referato)

Lucía M. Toscani, Pablo A. Curyk, M. Genoveva Zimicz, Emilia B. Halac, Martín. E. Saleta, Diego G. Lamas and Susana A. Larrondo

Appl. Catal. A: General **587** (2019) 117235/1-9 [[abstract](#),[doi](#)]

• **"Influence of the Pre-Treatments and Process Temperature on the Adhesion of TiN Films Deposited by PBII&D Over Nitrated Austenitic Stainless Steel"** (artículo con referato)

Laura Silvia Vaca, Juan Pablo Quintana, María Agustina Guitar, Daniel Vega, Sonia Patricia Brühl and Adriana Márquez

Mat. Res. Vol.22 N°5 (2019) e20190282/1-9 [[abstract](#),[doi](#)]

• **"Effect of swelling agent in the synthesis of porous nanocrystalline nickel-zirconia-ceria composite"** (artículo con referato)

V.R.S. Cassimiro, R.C. Monteiro, R. Bacani, L.M. Toscani, D.G. Lamas, S.A. Larrondo and M.C.A. Fantini

Ceram. Int. **45**(16) (2019) 19617-19626 [[abstract](#),[doi](#)]

• **"Mechanochemical synthesis and characterization of nanocrystalline $Ni_{1-x}Co_xFe_2O_4$ ($0 \leq x \leq 1$) ferrites"** (artículo con referato)

Jhon A. Castrillón Arango, Adrián A. Cristóbal, Cinthia P. Ramos, Paula G. Bercoff and Pablo M. Botta

J. Alloy. Compd. **811** (2019) 152044/1-9 [[abstract](#),[doi](#)]

• **"Polymorphic forms of bendamustine hydrochloride: crystal structure, thermal properties and stability at ambient conditions"** (artículo con referato)

Pablo Gaztañaga, Ricardo Baggio and Daniel Roberto Vega

Acta Cryst. B **75**(6) (2019) 933-941 [[abstract](#),[doi](#)]

• **"Mortuary Pottery and Sacred Landscapes in Complex Hunter-gatherers in the Paraná Basin, South America"** (artículo con referato)

Daniel Loponte, Flavia Ottalagano, Maricel Pérez, Laura Malec, Cinthia Ramos, Patricia Bozzano, Manuel Iribarren, Rodolfo Pérez, Graciela Leiva, Silvia Domínguez, et al.

Cambridge Archaeological Journal (2019) 1-23, en prensa [[abstract](#),[doi](#)]

• **"Photocatalytic activity of TiO_2 films prepared by cathodic arc deposition:**

Dependence on thickness and reuse of the photocatalysts" (artículo con referato)

A. Kleiman, J.M. Meichtry, D. Vega, M.I. Litter and A. Márquez

Surf. Coat. Tech. (2019), en prensa [[abstract](#),[doi](#)]

• **"Preferential Adsorption in Ethane/Carbon Dioxide Fluid Mixtures Confined within Silica Nanopores"** (artículo con referato)

M. Dolores Elola and Javier Rodriguez

J. Phys. Chem. C (2019) 1-12, en prensa [[abstract](#),[doi](#)]

• **"Crystal structure, cobalt and iron speciation and oxygen non-stoichiometry of $\text{La}_{0.6}\text{Sr}_{0.4}\text{Co}_{1-y}\text{Fe}_y\text{O}_{3-\delta}$ nanorods for IT-SOFC cathodes"** (artículo con referato)

Augusto E. Mejía Gómez, Joaquín Sacanell, Cristián Huck-Iriart, Cinthia P. Ramos, Analía L. Soldati, Santiago J.A. Figueroa, Manfredo H. Tabacniks, Márcia C.A. Fantini, Aldo F. Craievich and Diego G. Lamas

J. Alloy. Compd. **817**(153250/1-8) (2020), en prensa [[abstract](#),[doi](#)]

• **"Selective activation of memristive interfaces in TaO_x -based devices by controlling oxygen vacancies dynamics at the nanoscale"** (artículo con referato)

Cristian Ferreyra, María José Sanchez, Myriam Aguirre, Carlos Enrique Acha, Silvina Bengió, Jerome Lecourt, Ulrike Lüders and Diego Rubi

Aceptado para su publicación en Nanotechnology (2019) 1-23 [[abstract](#),[doi](#)]

• **"The colors of San José pottery from Yocavil Valley, Argentine northwest. Strategy for the characterization of archaeological pigments using non-destructive techniques"** (artículo con referato)

Eugenia Tomasini, Valeria Palamarczuk, María Mercedes Zalduendo, Emilia Beatriz Halac, José Manuel Porto López and María Cecilia Fuertes

Aceptado para su publicación en Journal of Archaeological Science: Reports (2019)

• **"Synthesis of coal fly ash zeolite for the catalytic wet peroxide oxidation of Orange II"** (acta de conferencia)

Herney Ramírez, María Margarita Guerra Núñez, Anamaria Barrera Bogoya, Daniel Fernando Blanco Gomez, Cinthia Ramos, Carla di Luca, Natalia Inchaurredo and Patricia Haure
Proc. of the "3ª Conferencia Iberoamericana de Tecnologías Avanzadas de Oxidación" (III CIPOA) and "2ª Conferencia de Colombia sobre Procesos de Oxidación Avanzada" (II CCPAOX), Guatapé (Antioquia), Colombia, November 14-17, 2017. Resp. ed.: Philippe Garrigues.

Environ. Sci. Pollut. Res. **26**(5) (2019) 4277-4287 [[abstract](#),[doi](#)]

• **"Thermal cycling memory in phase separated manganites"** (acta de conferencia)

Bernardo Sievers, Mariano Quintero and Joaquín Sacanell

Proc. of the "XXIII Latin American Symposium on Solid State Physics" (SLAFES23), San Carlos de Bariloche, Río Negro, Argentina, April 10-13, 2018. Ed. by Pablo G. Bolcatto, Eduardo A. Jagla, Gladys L. Nieva, César R. Proetto, Dina Tobia and Cecilia I. Ventura

Mater. Today Proc. **14**(1) (2019) 84-87 [[abstract](#),[doi](#)]

• **"Bipolar Resistive Switching on TiO_2/Au by Conducting Atomic Force Microscopy"** (acta de conferencia)

M. Linares Moreau, M. Barella, L. López Mir, N. Ghenzi, F. Golmar, L.P. Granja, C. Ocal and P. Levy

Proc. of the "XXIII Latin American Symposium on Solid State Physics" (SLAFES23), San Carlos de Bariloche, Río Negro, Argentina, April 10-13, 2018. Ed. by Pablo G. Bolcatto, Eduardo A. Jagla, Gladys L. Nieva, César R. Proetto, Dina Tobia and Cecilia I. Ventura

Mater. Today Proc. **14**(1) (2019) 100-103 [[abstract](#),[doi](#)]

• **"Magnetocaloric Effect in $\text{La}_{0.88}\text{Sr}_{0.12}\text{MnO}_3$ films"** (acta de conferencia)

S. Passanante, D. Goijman, M. Linares Moreau, A.G. Leyva, C. Albornoz, D. Rubi, C. Ferreyra, D. Vega, L. Granja and M. Quintero

Proc. of the "XXIII Latin American Symposium on Solid State Physics" (SLAFES23), San Carlos de Bariloche, Río Negro, Argentina, April 10-13, 2018. Ed. by Pablo G. Bolcatto, Eduardo A. Jagla, Gladys L. Nieva, César R. Proetto, Dina Tobia and Cecilia I. Ventura

Mater. Today Proc. **14**(1) (2019) 104-108 [[abstract](#),[doi](#)]

• **"Platinum-Based Cathode Catalyst Systems for Direct Methanol Fuel Cells"** (capítulo de libro)

Federico A. Viva

Capítulo 9 del libro "Direct Methanol Fuel Cell Technology", First Edition, Elsevier, Amsterdam, Netherlands (2019), 516 pp, en prensa [[abstract](#),[url](#)]

• **"Novel phases at domain walls"** (capítulo de libro)

S. Farokhipoor, C. Magen, D. Rubi and B. Noheda

Capítulo del libro "Domain Walls: From Fundamental Properties to Nanotechnology Concepts", In production, Oxford University Press (2019), en prensa

• **"Matter and Molecules"** (autoría de libro)

Roberto J. Fernandez-Prini, Ernesto Marceca and Horacio Roberto Corti

First Edition, Cognella, San Diego, CA, USA (2020), 360 pp [[abstract](#),[url](#)]