

Mónica Burriel - List of Publications – February 2022

Articles in peer-reviewed journals

1. K. Maas, C. Wulles, J. M. Caicedo, B. Ballesteros, V. Lafarge, J. Santiso*, and **M. Burriel***, [*Role of \$pO_2\$ and film microstructure on the memristive properties of \$La_2NiO_{4+\delta}/LaNiO_{3-\delta}\$ bilayers*](#), **J. Mater. Chem. A**, (2022), DOI: 10.1039/d1ta10296f
2. A. Stangl*, A. Riaz, L. Rapenne, J. M. Caicedo, J. de Dios Sirvent, F. Baiutti, C. Jiménez, A. Tarancón, M. Mermoux, **M. Burriel***, [*Tailored nano-columnar \$La_2NiO_4\$ cathodes for improved electrode performance*](#), **J. Mater. Chem. A**, 10, 2528 (2022)
3. B. Meunier*, E. Martinez, R. Rodriguez-Lamas, D. Pla, **M. Burriel**, C. Jimenez, Y. Yamashita, O. Renault*, [*Unraveling the Resistive Switching Mechanisms in \$LaMnO_{3+\delta}\$ -Based Memristive Devices by Operando Hard X-ray Photoemission Measurements*](#), **ACS Appl. Electron. Mater.** 3, 12, 5555 (2021)
4. R. Rodriguez-Lamas, C. Pirovano, A. Stangl, D. Pla, R. Jónsson, L. Rapenne, E. Sarigiannidou, N. Nuns, H. Roussel, O. Chaix-Pluchery, M. Boudard, C. Jiménez, R.-N. Vannier, **M. Burriel***, [*Epitaxial \$LaMnO_3\$ films with remarkably fast oxygen transport properties at low temperature*](#), **J. Mater. Chem. A**, 9, 12721 (2021)
5. J. Resende, A. Sekkat, V.-H Nguyen, T. Chatin, C. Jiménez, **M. Burriel**, D. Bellet* and D. Muñoz-Rojas*, [*Planar and Transparent Memristive devices based on Titanium Oxide coated Silver Nanowire Networks with Tunable Switching Voltage*](#), **Small**, 2007344, 1–8 (2021). **Inside Back Cover**
6. A. Stangl, D. Muñoz-Rojas, **M. Burriel***, [*In situ and operando characterisation techniques for solid oxide electrochemical cells: recent advances*](#), **Journal of Physics: Energy**, 3, 012001 (2021) invited topical review
7. K. Maas, E. Villepreux, D. Cooper, E. Salas-Colera, J. Rubio-Zuazo, German R. Castro, O. Renault, C. Jiménez, H. Roussel, X. Mescot, Q. Rafhay, M. Boudard and **M. Burriel***, [*Tuning Memristivity by Varying the Oxygen Content in a Mixed Ionic–Electronic Conductor*](#), **Adv. Funct. Mater.** 30 (17), 1909942 (2020). Article **highlighted** in the **ESRF Highlights 2020** annual booklet.
8. K. Maas, E. Villepreux, D. Cooper, C. Jiménez, H. Roussel, L. Rapenne, X. Mescot, Q. Rafhay, M. Boudard and **M. Burriel***, [*Using a mixed ionic electronic conductor to build an analog memristive device with neuromorphic programming capabilities*](#), **J. Mater. Chem. C**, 8, 464 (2020). **Back Cover**
9. B. Meunier, E. Martinez, R. Rodriguez-Lamas, D. Pla, **M. Burriel**, M. Boudard, C. Jiménez, J.-P. Rueff, O. Renault, [*Resistive switching in a \$LaMnO_{3+\delta}/TiN\$ memory cell investigated by operando hard X-ray photoelectron spectroscopy*](#), **J. Appl. Phys.** 126, 225302 (2019)
10. S. Bagdzevicius*, M. Boudard, J.M. Caicedo, L. Rapenne, X. Mescot, R. Rodríguez-Lamas, F. Robaut, J. Santiso and **M. Burriel***, [*Superposition of Interface and Volume Type Resistive Switching in perovskite nanoionic devices*](#), **J. Mater. Chem. C**, 7, 7580 (2019)

11. B. Meunier*, D. Pla, R. Rodriguez-Lamas, M. Boudard, O. Chaix-Pluchery, E. Martinez, N. Chevalier, C. Jiménez, **M. Burriel***, O. Renault, *Microscopic mechanisms of local interfacial resistive switching in $\text{LaMnO}_{3+\delta}$* , **ACS Applied Electronic Materials** 7, 7580 (2019) <https://pubs.acs.org/doi/10.1021/acsaelm.9b00030>
12. M. Aono, C. Baeumer, P. Bartlett, S. Brivio, G. Burr, **M. Burriel**, *et al.*, *Valence change ReRAMs (VCM) - Experiments and modelling: general discussion*, **Faraday Discuss.** 213, 259-286 (2019)
13. S. Bagdzevicius*, M. Boudard*, J.M. Caicedo, X. Mescot, R. Rodríguez-Lamas, J. Santiso and **M. Burriel***, *Bipolar “table with legs” resistive switching in epitaxial perovskite heterostructures*, **Solid State Ionics**, 334, 29-35 (2019)
14. R. Rodriguez-Lamas, D. Pla, O. Chaix-Pluchery, B. Meunier, F. Wilhelm, A. Rogalev, L. Rapenne, X. Mescot, Q. Rafhay, H. Roussel, M. Boudard, C. Jiménez and **M. Burriel***, *Integration of $\text{LaMnO}_{3+\delta}$ films on platinized silicon substrates for resistive switching applications by PI-MOCVD*, **Beilstein J. Nanotechnol.**, 10, 389–398 (2019)
15. F. Chiabrera, I. Garbayo, D. Pla, **M. Burriel**, F. Wilhelm, A. Rogalev, M. Núñez, A. Morata, and A. Tarancón*, *Unraveling bulk and grain boundary electrical properties in $\text{La}_{0.8}\text{Sr}_{0.2}\text{Mn}_{1-y}\text{O}_{3+\delta}$ thin films*, **APL Mater.** 7, 013205 (2019)
16. A. Saranya, A. Morata, D. Pla, **M. Burriel**, F. Chiabrera, I. Garbayo, A. Hornés, J.A. Kilner, A. Tarancón*, *Unveiling the outstanding oxygen mass transport properties of Mn-rich perovskites in grain boundary-dominated $\text{La}_{0.8}\text{Sr}_{0.2}(\text{Mn}_{1-x}\text{Co}_x)_{0.85}\text{O}_{3+\delta}$ nanostructures*, **Chem. Mater.**, 30 (16), 5621–5629 (2018)
17. D. Pla, C. Jiménez and **M. Burriel***, *Engineering of Functional Manganites Grown by MOCVD for Miniaturized Devices*, **Adv. Mater. Interfaces**, 4, 1600974 (2017), invited Research news to the Special Issue on Perovskites and Related Structures. **Back Cover**
18. S. Bagdzevicius, K. Maas, M. Boudard and **M. Burriel***, *Interface-type resistive switching in perovskite materials*, **J. Electroceram.**, 39 (1-4), 157-184 (2017) invited article to the Special Theme Issue: Resistive Switching: Oxide Materials, Mechanisms, Devices and Operations. **Front Cover**
19. R. K. Sharma, S.-K. Cheah, **M. Burriel**, L. Dessemond, J.-M. Bassat, and E. Djurado, *Design of $\text{La}_{2-x}\text{Pr}_x\text{NiO}_{4+\delta}$ SOFC cathodes: a compromise between electrochemical performance and thermodynamic stability*, **J. Mater. Chem. A**, 5 (3), 1120–1132 (2017)
20. K.-T Wu, H. Téllez, J. Druce, **M. Burriel**, F. Yang, D. W McComb, T. Ishihara, J. A. Kilner, S. J. Skinner, *Surface chemistry and restructuring in thin-film $\text{La}_{n+1}\text{Ni}_n\text{O}_{3n+1}$ ($n = 1, 2$ and 3) Ruddlesden–Popper oxides*, **J. Mater. Chem. A**, 5 (19), 9003–9013 (2017)
21. O. Çelikbilek, D. Jauffrès, E. Siebert, L. Dessemond, **M. Burriel**, C.L. Martin, E. Djurado*, *Rational design of hierarchically nanostructured electrodes for solid oxide fuel cells*, **J. Power Sources**. 333, 72–82 (2016)
22. R.K. Sharma, **M. Burriel**, L. Dessemond, J.-M. Bassat, E. Djurado*, *$\text{La}_{n+1}\text{Ni}_n\text{O}_{3n+1}$ ($n = 2$ and 3) phases and composites for solid oxide fuel cell cathodes: Facile synthesis and electrochemical properties*, **J. Power Sources** 325, 337–345 (2016)

23. **M. Burriel**^{*}, H. Téllez, R.J. Chater, R. Castaing, P. Veber, M. Zaghrioui, T. Ishihara, J.A. Kilner, J.-M. Bassat, [Influence of Crystal Orientation and Annealing on the Oxygen Diffusion and Surface Exchange of \$\text{La}_2\text{NiO}_{4+\delta}\$](#) , **J. Phys. Chem. C** 120, 17927–17938 (2016)
24. R.K. Sharma, **M. Burriel**, L. Dessemond, V. Martin, J.-M. Bassat, E. Djurado^{*}, [An innovative architectural design to enhance the electrochemical performance of \$\text{La}_2\text{NiO}_{4+\delta}\$ cathodes for solid oxide fuel cell applications](#), **J. Power Sources**. 316, 17–28 (2016)
25. E. Djurado^{*}, A. Salaün, G. Mignardi, A. Rolle, **M. Burriel**, S. Daviero-Minaud, R.N. Vannier, [Electrostatic spray deposition of \$\text{Ca}_3\text{Co}_4\text{O}_{9+\delta}\$ layers to be used as cathode materials for IT-SOFC](#), **Solid State Ionics**. 286, 102–110 (2016)
26. R.K. Sharma, **M. Burriel**, L. Dessemond, J.M. Bassat, E. Djurado^{*}, [Design of interfaces in efficient \$\text{Ln}_2\text{NiO}_{4+\delta}\$ \(\$\text{Ln} = \text{La}, \text{Pr}\$ \) cathodes for SOFC applications](#), **J. Mater. Chem. A**, 4, 12451–12462 (2016)
27. O. Celikbilek, D. Jauffres, L. Dessemond, **M. Burriel**, C. L. Martin, and E. Djurado, [A Coupled Experimental/Numerical Approach for Tuning High-Performing SOFC-Cathode](#), **ECS Trans.**, 72 (7), 81–92 (2016)
28. R. K. Sharma, O. Celikbilek, **M. Burriel**, L. Dessemond, J.-M. Bassat, and E. Djurado, [Electrochemical Performance and Chemical Stability of Architecturally Designed \$\text{La}_{2-x}\text{Pr}_x\text{NiO}_{4+\delta}\$ IT-SOFC Cathodes](#), **ECS Trans.** 72 (33), 1–8 (2016)
29. R. K. Sharma, **M. Burriel** and E. Djurado^{*}, [\$\text{La}_4\text{Ni}_3\text{O}_{10-\delta}\$ as an efficient solid oxide fuel cell cathode: electrochemical properties versus microstructure](#), **J. Mater. Chem. A** 3, 23833–23843 (2015)
30. Y. Chen[#], H. Téllez[#], **M. Burriel**[#], F. Yang, N. Tsvetkov, Z. Cai, D. W. McComb, J. A. Kilner^{*}, and B. Yildiz^{*}, [Segregated chemistry and structure on \(001\) and \(100\) surfaces of \$\(\text{La}_{1-x}\text{Sr}_x\)_2\text{CoO}_4\$ override the crystal anisotropy in oxygen exchange kinetics](#), **Chem. Mater.** 27 (15), 5436–5450 (2015) ([#] these three authors contributed equally)
31. A.M. Saranya, D. Pla, A. Morata, A. Cavallaro, J. Canales-Vázquez, J.A. Kilner, **M. Burriel**^{*} and A. Tarancón^{*}, [Engineering Mixed Ionic Electronic Conduction in \$\text{La}_{0.8}\text{Sr}_{0.2}\text{MnO}_{3+\delta}\$ Nanostructures through Fast Grain Boundary Oxygen Diffusivity](#), **Adv. Energy Mater.** 5 (11), 1500377 (2015). **Work featured in the back cover.**
32. T. Inprasit, S. Wongkasemjit, S. J. Skinner, **M. Burriel** and P. Limthongkul^{*}, [Effect of Sr substituted \$\text{La}_{2-x}\text{Sr}_x\text{NiO}_{4+\delta}\$ \(\$x = 0, 0.2, 0.4, 0.6, \text{ and } 0.8\$ \) on oxygen stoichiometry and oxygen transport properties](#), **RSC Adv.** 5 (4), 2486–2492 (2015)
33. A. Tarancón, A. Morata, D. Pla, A.M.Saranya, F.Chibrera, I. Garbayo, A. Cavallaro, J. Canales-Vázquez, J.A.Kilner and **M. Burriel**, [Grain boundary engineering to improve ionic conduction in thin films for micro-SOFCs](#), **ECS Transactions** 69 (16), 11–16 (2015)
34. K.-T. Wu, H. Téllez, J. Druce, **M. Burriel**, T. Ishihara, J.A. Kilner and S. Skinner, [Surface composition of layered Ruddlesden-Popper \$\text{La}_{n+1}\text{Ni}_n\text{O}_{3n+1}\$ \(\$n = 1, 2 \text{ and } 3\$ \) epitaxial films](#), **ECS Transactions** 66 (2), 89–93 (2015)

35. **M. Burriel***, S. Wilkins, J. P. Hill, M. A. Muñoz-Márquez, H. H. Brongersma, J. A. Kilner, M. P. Ryan, and S. J. Skinner, [*Absence of Ni on the outer surface of Sr doped La₂NiO₄ single crystals*](#), **Energy Environ. Sci.** 7, 1, 311-316 (2014)
36. J. A. Kilner and **M. Burriel**, [*Materials for Intermediate-Temperature Solid-Oxide Fuel Cells*](#), **Annu. Rev. Mater. Res.** 44-1 (2014) invited review
37. J. Druce*, H. Téllez*, **M. Burriel**, M. D. Sharp, L. J. Fawcett, S. N. Cook, D. S. McPhail, T. Ishihara, H. H. Brongersma, and J. A. Kilner, [*Surface Termination and Subsurface Restructuring of Perovskite-based Solid Oxide Electrode Materials*](#), **Energy Environ. Sci.** 7, 3593-3599 (2014)
38. F. Yang, Y. Chen, Z. Cai, N. Tsvetkov, **M. Burriel**, H. Tellez, B. Yildiz, J. A. Kilner, D.B. Williams and D.W. McComb, [*High Resolution Electron Microscopy Characterization of \(La_{0.5}Sr_{0.5}\)₂CoO₄ Thin Film Cathode Materials*](#). **Microsc. Microanal.** 20 (Suppl. 3), 1912-1913 (2014)
39. H. Téllez*, A. Aguadero, J. W. Druce, **M. Burriel**, J. A. Kilner, D. S. McPhail, S. Fearn, T. Ishihara, [*New Perspectives in Surface Analysis of Energy Materials by combined Time-of-Flight Secondary Ion Mass Spectrometry \(ToF-SIMS\) and High Sensitivity Low-Energy Ion Scattering \(HS-LEIS\)*](#), **J. Anal. Atom. Spec.** 29 (8), 1361-1370 (2014)
40. J.M. Bassat*, **M. Burriel***, O. Wahyudi, R. Castaing, M. Ceretti, P. Veber, I. Weill, A. Villesuzanne, J.C. Grenier, W. Paulus, and J.A. Kilner, [*Anisotropic oxygen diffusion properties in Pr₂NiO_{4+δ} and Nd₂NiO_{4+δ} single crystals*](#), **J. Phys. Chem. C.** 117 (50), 26466–26472 (2013)
41. J. Zapata, **M. Burriel***, P. García, J. A. Kilner and J. Santiso*, [*Anisotropic ¹⁸O tracer diffusion in epitaxial films of GdBaCo₂O_{5+δ} cathode material with different orientations*](#), **J. Mater. Chem. A** 1, 7408-7414 (2013)
42. N. Ortiz-Vitoriano, I. Ruiz de Larramendi, S.N. Cook, **M. Burriel**, A. Aguadero, J.A. Kilner and T. Rojo*, [*The Formation of Performance Enhancing Pseudo-Composites in the Highly Active La_{1-x}Ca_xFe_{0.8}Ni_{0.2}O_{3-δ} System for IT-SOFC Application*](#), **Adv. Funct. Mater.** 23 (41), 5131-5139 (2013)
43. J.A. Kilner, H. Tellez Lozano, **M. Burriel**, S. Cook, and J. Druce, [*The Application Of Ion Beam Analysis To Mass Transport Studies In Mixed Electronic Ionic Conducting Electrodes*](#), **ECS Transactions** 57 (1), 1701-1708 (2013)
44. J. M. Bassat, **M. Burriel**, M. Ceretti, P. Veber, J.C. Grenier, W. Paulus and J.A. Kilner, [*Highlights on the anisotropic oxygen transport properties of nickelates with K₂NiF₄-type structure: links with the electrochemical properties of the corresponding IT-SOFC's cathodes*](#), **ECS Transactions** 57 (1), 1753-1760 (2013)
45. V. B. Vert, J. M. Serra, J. A. Kilner, **M. Burriel***, [*Enhanced oxygen diffusion in low barium-containing La_{0.2175}Pr_{0.2175}Ba_{0.145}Sr_{0.4}Fe_{0.8}Co_{0.2}O_{3-δ} intermediate temperature solid oxide fuel cell cathodes*](#), **J. Power Sources** 213, 270-274 (2012)
46. **M. Burriel***, J. Peña-Martínez, R.J. Chater, S. Fearn, A.V. Berenov, S.J. Skinner, J.A. Kilner, [*Anisotropic Oxygen Ion Diffusion in Layered PrBaCo₂O_{5+δ}*](#), **Chem. Mater.** 24 (3), 613–621 (2012)

47. C. Niedrig*, S. Taufall, **M. Burriel**, W. Menesklou, S.F. Wagner, S. Baumann and E. Ivers-Tiffée, [*Thermal Stability of the Cubic Phase in \$Ba_{0.5}Sr_{0.5}Co_{0.8}Fe_{0.2}O_{3-\delta}\$ \(BSCF\)*](#), **Solid State Ionics** 197 (1), 25-31 (2011).
48. J. Santiso* and **M. Burriel**, [*Deposition and characterisation of epitaxial oxide thin films for SOFCs*](#), **J. Solid State Electrochem.** 15 (5), 985-1006 (2011), invited review.
49. **M. Burriel***, M. Casas-Cabanas, J. Zapata, H. Tan, J. Verbeeck, C. Solís, J. Roqueta, S.J. Skinner, J.A. Kilner, G. Van Tendeloo and J. Santiso, [*Influence of the microstructure on the high temperature transport properties of \$GdBaCo_2O_{5.5+\delta}\$ epitaxial films*](#), **Chem. Mater.** 22 (19), 5512–5520 (2010).
50. A. Cavallaro, **M. Burriel**, J. Roqueta, A. Apostolidis, A. Bernardi, A. Tarancón, R. Srinivasan, S. N. Cook, H.L. Fraser, J.A. Kilner, D.W. McComb, J. Santiso*, [*Electronic nature of the enhanced conductivity in YSZ-STO multilayers deposited by PLD*](#), **Solid State Ionics** 181 [13-14], 592-601 (2010), Solid State Ionics 2010 Best Paper Award
51. **M. Burriel***, C. Niedrig, S.F. Wagner, W. Menesklou, J. Santiso and E. Ivers-Tiffée, [*BSCF epitaxial thin films: Electrical transport and oxygen surface exchange*](#), **Solid State Ionics** 181 [13-14], 602-608 (2010).
52. A. Tarancón*, **M. Burriel***, J. Santiso, S.J. Skinner and J.A. Kilner*, [*Advances in layered oxide cathodes for intermediate temperature solid oxide fuel cells*](#), **J. Mater. Chem.** 20, 3799-3813 (2010) invited review
53. **M. Burriel**, J. Santiso, M. Rossell, G. Van Tendeloo, A. Figueras and G. Garcia*, [*Enhancing Total Conductivity of \$La_2NiO_{4+\delta}\$ Epitaxial Thin Films by Reducing Thickness*](#), **J. Phys. Chem. C** 112 [29], 10982-10987 (2008)
54. G. Garcia*, **M. Burriel**, J. Santiso and N. Bonanos, [*Electrical conductivity and oxygen exchange kinetics of \$La_2NiO_{4+\delta}\$ thin films grown by Chemical Vapour Deposition*](#), **J. Electrochem. Soc.** 155 [3], 28-32 (2008).
55. **M. Burriel**, G. Garcia, J. Santiso*, J. A. Kilner, R. J. Chater and S. J. Skinner, [*Anisotropic oxygen diffusion properties in epitaxial thin films of \$La_2NiO_{4+\delta}\$*](#) , **J. Mater. Chem.** 18, 416-422 (2008). **Work selected as “hot article”**
56. **M. Burriel**, G. Garcia, M. Rossell, A. Figueras, G. Van Tendeloo, J. Santiso*, [*Enhanced high-temperature electronic transport properties in nanostructured epitaxial thin films of the \$La_{n+1}Ni_nO_{3n+1}\$ Ruddlesden-Popper series \(\$n = 1, 2, 3, \infty\$ \)*](#), **Chem. Mater.** 19 [16], 4056-4062 (2007).
57. A.N. Hansson*, **M. Burriel**, G. Garcia, S. Linderoth, M.A.J. Somers, [*Oxidation of Fe-22Cr Coated with \$Co_3O_4\$: Microstructure Evolution and the Effect of Growth Stresses*](#), **Oxid. Met.** 68 [1-2], 23-36 (2007).
58. **M. Burriel**, G. Garcia*, J. Santiso, A. N. Hansson, S. Linderoth, A. Figueras, [*\$Co_3O_4\$ protective coatings prepared by pulsed injection metal-organic chemical vapour deposition*](#), **Thin Solid Films** 473, 98-103 (2005).
59. **M. Burriel**, G. Garcia*, J. Santiso, A. Abrutis, Z. Saltyte and A. Figueras, [*Growth kinetics, composition and morphology of \$Co_3O_4\$ thin films prepared by the Pulsed Liquid Injection MOCVD*](#), **Chem. Vapor Depos.** 11, 106-111 (2005).

Editorials

60. **M. Burriel**, R. Dittmann, A. Tarancón, D.S. Mebane, *Special Issue for the E-MRS Spring Meeting Symposium R on Solid State Ionics*, **Solid State Ionics**, 334, 87 (2019)
61. R. A. De Souza, K. Amezawa, **M. Burriel**, W. Chueh, and E. M. Kelder, *Special Issue for the E-MRS Spring Meeting Symposium D on Solid State Ionics*, **Solid State Ionics**, 299, 1 (2017)

Books and book chapters

1. S. Bagdzevicius, K. Maas, M. Boudard, **M. Burriel**, *Interface-Type Resistive Switching in Perovskite Materials*. In: Rupp J., Ielmini D., Valov I. (eds) Resistive Switching: Oxide Materials, Mechanisms, Devices and Operations. Electronic Materials: Science & Technology. Springer, Cham, (2022) Print ISBN: 978-3-030-42423-7, Online ISBN: 978-3-030-42424-4; pp. 235–287
2. **M. Burriel López**, *Epitaxial Thin Films of Lanthanum Nickel Oxides. Deposition by P-MOCVD, Structural Characterization and High Temperature Transport Properties*, Verlag Dr. Müller (2008) ISBN 978-3-8364-7497-9

Conference proceedings

1. J. M. Bassat, **M. Burriel**, R. Castaing, O. Wahyudi, P. Veber, I. Weill, M. Zaghrioui, M. Cerreti, A. Villesuzanne, W. Paulus, J. C. Grenier and J. A. Kilner, “**Anisotropy of the oxygen diffusion in $\text{Ln}_2\text{NiO}_{4+\delta}$ (Ln=La, Nd, Pr) single crystals**”, *Proceedings of the 10th European SOFC Forum*, Lucerne, Switzerland, 2012.
2. J. A. Kilner, **M. Burriel**, S. Cook, H. Tellez, M. Sharp and J. Druce, “**LEIS of Oxide Air Electrode Surfaces**”, *Proceedings of the 10th European SOFC Forum*, Lucerne, Switzerland, 2012.
3. **M. Burriel**, S. Wilkins, J. Hill, M. Ryan, S.J. Skinner and J.A. Kilner, “**Study of the surface structure of Sr doped La_2NiO_4 single crystal**”, *Proceedings of the 9th European SOFC Forum*, Lucerne, Switzerland, 2010.
4. **M. Burriel**, M. Casas-Cabanas, J. Zapata, H. Tan, J. Verbeeck, C. Solís, J. Roqueta, S.J. Skinner, J.A. Kilner, G. Van Tendeloo and J. Santiso, “**Microstructure and Transport Properties of $\text{GdBaCo}_2\text{O}_{5+\delta}$ Epitaxial Thin Films**”, *Proceedings of the 9th European SOFC Forum*, Lucerne, Switzerland, 2010.
5. **M. Burriel**, G. Garcia, J. Santiso, J. A. Kilner, R. J. Chater and S. J. Skinner, **Oxygen Transport in Epitaxial Thin Films of $\text{La}_2\text{NiO}_{4+\delta}$** , *Proceedings of the 7th European SOFC Forum*, Lucerne, Switzerland, 2006.
6. **M. Burriel**, G. Garcia, M.D. Rossell, and J. Santiso, **Propiedades de transporte a alta temperatura de capas delgadas de niquelatos de lantano preparadas mediante MOCVD**, *Proceedings of the 2nd National Congress of Fuel Cells*, CONAPPICE, Madrid, Spain, 2006.
7. **M. Burriel**, C. Solís, G. Garcia, M. D. Rossell, M. Casas-Cabanas, G. Van Tendeloo, S. J. Skinner, J. A. Kilner, J. Santiso, **Influencia de la microestructura en el transporte**

electrónico de películas delgadas de conductores mixtos de estructura laminar,
Proceedings of the 3rd National Congress of Fuel Cells, CONAPPICE, Zaragoza, Spain,
2008.

Others

1. K. Maas, E. Villepreux, D. Cooper, E. Salas-Colera, J. Rubio-Zuazo, German R. Castro, O. Renault, C. Jiménez, H. Roussel, X. Mescot, Q. Rafhay, M. Boudard and **M. Burriel***, *Oxygen Content: A key parameter to tune the memristivity in lanthanum nickelate-based memory devices, ESRF Highlights 2020 annual booklet*