

**Submitted revised version and currently under review**

- A. Fluri, A. Marcolongo, V. Roddatis, A. Wokaun, D. Pergolesi, N. Marzari, T. Lippert, *Enhanced Proton Conductivity in Y doped BaZrO<sub>3</sub> via Strain Engineering*
- A. Fluri, M. Karlsson, M. Wolff, T. Lippert, D. Pergolesi, *Anisotropic proton and oxygen ion conductivity in epitaxial Ba<sub>2</sub>In<sub>2</sub>O<sub>5</sub> thin films*

**Peer-reviewed publications****2017**

1. E. Gilardi, E. Fabbri, L. Bi, J.L.M. Rupp, T. Lippert, D. Pergolesi, E. Traversa, *Effect of dopant-host ionic radii mismatch on acceptor doped barium zirconate microstructure and proton conductivity*, (2017) **J. Phys. Chem. C**, 121, 9739–9747
2. M. Pichler, J. Szlachetko, I. E. Castelli, N. Marzari, M. Döbeli, S. Ninova, U. Aschauer, A. Wokaun, D. Pergolesi, T. Lippert, *Determination of conduction and valence band electronic structure of LaTiO<sub>x</sub>N<sub>y</sub> thin film*, (2017) **ChemSusChem**, 10, 2099-2106
3. M. Pichler, W. Si, F. Haydous, H. Téllez, J. Druce, E. Fabbri, M. El Kazzi, M. Döbeli, S. Ninova, U. Aschauer, A. Wokaun, D. Pergolesi, T. Lippert, *Oxynitride thin films as model systems for photocatalysis*, Invited Feature Article, (2017) **Advanced Functional Materials**, 1605690
4. W. Si, D. Pergolesi, F. Haydous, A. Fluri, A. Wokaun, T. Lippert, *Investigating the behavior of various cocatalysts on LaTaON<sub>2</sub> photoanode for visible light water splitting*, (2017) **Phys.Chem.Chem.Phys.**, 19, 656-662

**2016**

5. A. Fluri, D. Pergolesi, V. Roddatis, A. Wokaun, T. Lippert, *In situ stress observation in oxide films and how tensile stress influences oxygen ion conduction*, (2016) **Nature Communications**, 7:10692
6. S. E. Temmel, E. Fabbri, D. Pergolesi, T. Lippert, T. J. Schmidt, *Investigating the Role of Strain toward the Oxygen Reduction Activity on Model Thin Film Pt Catalysts*, (2016) **ACS Catalysis**, 6, 7566–7576
7. S. E. Temmel, E. Fabbri, D. Pergolesi, T. Lippert, T. J. Schmidt, *Tuning the Surface Electrochemistry by Strained Epitaxial Pt Thin Film Model Electrodes Prepared by Pulsed Laser Deposition*, (2016) **Adv. Mater. Interfaces**, 1600222-32
8. L. Mazzei, M. Wolff, D. Pergolesi, J. A. Dura, L. Börjesson, P. Gutfreund, M. Bettinelli, T. Lippert, M. Karlsson, *Structure and Conductivity of Epitaxial Thin Films of In-Doped BaZrO<sub>3</sub>- Based Proton Conductors*, (2016) **J. Phys. Chem. C**, 120, 28415–28422
9. M. Pichler, D. Pergolesi, S. Landsmann, V. Chawla, J. Michler, M. Döbeli, A. Wokaun, T. Lippert, *TiN-buffered substrates for photoelectrochemical measurements of oxynitride thin films*, (2016) **Appl. Surf. Sci.**, 369, 67-75

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10. J. Chen, D. Stender, M. Pichler, M. Döbeli, D. Pergolesi, C. W. Schneider, A. Wokaun, T. Lippert, *Tracing the plasma interactions for pulsed reactive crossed-beam laser ablation*, (2015) **J. Appl. Phys.**, 118, 165306-6
11. F. Aguesse, V. Roddatis, J. Roqueta, P. García, D. Pergolesi, J. Santiso, J. A. Kilner, *Microstructure and ionic conductivity of LLTO thin films: influence of different substrates and excess lithium in the target*, (2015) **Solid State Ionics**, 272, 1-8
12. D. Pergolesi, V. Roddatis, E. Fabbri, T. Lippert, E. Traversa, J. A. Kilner, *Probing the bulk ionic conductivity by thin film hetero-epitaxial engineering*. (2015) **Sci. Technol. Adv. Mater.**, 16(1) 015001
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14. E. Fabbri, A. Magrasó, D. Pergolesi, *Low temperature solid oxide fuel cells based on proton conducting electrolytes*, (2014) **MRS Bulletin**, 39(09), 792-797 (invited)
15. J. Szlachetko, M. Pichler, D. Pergolesi, J. Sa, T. Lippert, *Determination of conduction and valence band electronic structure of La<sub>2</sub>Ti<sub>2</sub>O<sub>7</sub> thin film*, (2014) **RCS Advances**, 4, 11420–11422

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16. N. H. Perry, D. Pergolesi, K. Sasaki, S. R. Bishop, H. L. Tuller, *Influence of Donor Doping on Cathode Performance: (La, Sr)(Ti, Fe) O<sub>3-δ</sub> Case Study*, (2013) **ECS Transactions** 57(1), 1719-1723
17. D. Pergolesi, M. Fronzi, E. Fabbri, A. Tebano, E. Traversa, *Growth mechanisms of ceria- and zirconia-based epitaxial thin films and hetero-structures grown by pulsed laser deposition*, (2013) **Mater. Renew. Sustain. Energy**, 2(6)

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