Accepted Manuscript

Title: On the manufacturing of low temperature activated $Sr_{0.9}La_{0.1}TiO_{3-\delta}-Ce_{1-x}Gd_xO_{2-\delta}$ anodes for solid oxide fuel cell

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PII: S0955-2219(17)30520-4

DOI: http://dx.doi.org/doi:10.1016/j.jeurceramsoc.2017.07.035

Reference: JECS 11392

To appear in: Journal of the European Ceramic Society

Received date: 18-4-2017 Revised date: 28-7-2017 Accepted date: 29-7-2017

Please cite this article as: Gondolini Angela, Mercadelli Elisa, Constantin Guillaume, Dessemond Laurent, Yurkiv Vitaliy, Costa Rémi, Sanson Alessandra.On the manufacturing of low temperature activated Sr0.9La0.1TiO3-δ-Ce1-xGdxO2-δ anodes for solid oxide fuel cell. *Journal of The European Ceramic Society* http://dx.doi.org/10.1016/j.jeurceramsoc.2017.07.035

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ACCEPTED MANUSCRIPT

On the manufacturing of low temperature activated $Sr_{0.9}La_{0.1}TiO_{3-\delta}$ - $Ce_{1-x}Gd_xO_{2-\delta}$ anodes for solid oxide fuel cell

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Abstract

Lanthanum doped strontium titanate – gadolinium doped cerium oxide (LST-GDC) anodic layers are sintered in air and further reduced *in-situ* at low temperature (750°C) avoiding usually performed pre-reduction treatment at high temperature. The influence of various milling techniques and of powders with different specific surface area, on the microstructures of screen-printed anodes, is investigated. The combination of milling and sonication processes is efficient in reducing aggregation of the anode powders. The anode performance is improved when a planetary milling step is involved in the preparation of the screen printing inks. The

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