

## Production Scientifique de l'équipe : IES (2009 - 2014)

### Articles dans des revues internationales avec comité de lecture répertoriées dans les bases de données internationales

#### LEPMI-2623

Preparation, sintering and leaching of optimized uranium thorium dioxides

Nina Hingant, Nicolas Clavier, Nicolas Dacheux, Nicole Barre, S. Hubert, Saïd Obbade, F. Taborda et Francis Abraham

*Journal of Nuclear Materials*, **385**(2), (2009), pp. 400-406 [\[DOI : 10.1016/j.jnucmat.2008.12.011\]](#)

#### LEPMI-2475

Rate limiting steps of the porous  $\text{La}_{0.6}\text{Sr}_{0.4}\text{Co}_{0.8}\text{Fe}_{0.2}\text{O}_{3-d}$  electrode material

Nicolas Grunbaum, Laurent Dessemond, Jacques Fouletier, Fernando Prado, Liliana V. Mogni et Alberto Caneiro

*Solid State Ionics*, **180**(28-31), (2009), pp. 1448-1452 [\[DOI : 10.1016/j.ssi.2009.09.005\]](#)

#### LEPMI-00455

Silicon Chemical Vapor Deposition on macro and submicron powders in a fluidized bed

Loïc Cadoret, Nicolas Reuge, S. Pannala, Madhava Syamlal, Cécile Rossignol, Jeannette Dexpert-Ghys, Carole Coufort et Brigitte Caussat

*Powder Technology*, **190**(1-2), (2009), pp. 185-191 [\[DOI : 10.1016/j.powtec.2008.04.083\]](#)

#### LEPMI-2476

On the use of NiO as sintering additive for  $\text{BaCe}_{0.9}\text{Y}_{0.1}\text{O}_{3-a}$

Rémi Costa, Nicolas Grunbaum, Marie-Hélène Berger, Laurent Dessemond et Alain Thorel

*Solid State Ionics*, **180**(11-13), (2009), pp. 891-895 [\[DOI : 10.1016/j.ssi.2009.02.018\]](#)

#### LEPMI-02125

Electrical and structural investigations of perovskite structure reactively sputter deposited coatings

Mohammad Arab Pour Yazdi, Pascal Briois, Alain Billard et Samuel Georges

*Solid State Ionics*, **180**(23-25), (2009), pp. 1246-1251 [\[DOI : 10.1016/j.ssi.2009.07.008\]](#)

#### LEPMI-02124

Direct methane solid oxide fuel cell working by gradual internal steam reforming: Analysis of operation

Jean-Marie Klein, Marc Hénault, Claude Roux, Yann Bultel et Samuel Georges

*Journal of Power Sources*, **193**(1), (2009), pp. 331-337 [\[DOI : 10.1016/j.jpowsour.2008.11.122\]](#)

#### LEPMI-01911

ESD and ALD Depositions of  $\text{Ta}_2\text{O}_5$  Thin Films Investigated as Barriers to Copper Diffusion for Advanced Metallization

Amélie Lintanf-Salaün, Arnaud Mantoux, Elisabeth Blanquet et Elisabeth Djurado

*Journal of the Electrochemical Society*, **156**(5), (2009), pp. H311-H315 [\[DOI : 10.1149/1.3086781\]](#)

### **LEPMI-01772**

The synthesis and sintering behaviour of  $\text{BaZr}_{0.9}\text{Y}_{0.1}\text{O}_{3-\delta}$  powders prepared by spray pyrolysis

Paul A. Stuart, Toshiyuki Unno, Renata Ayres-Rocha, Elisabeth Djurado et Stephen J. Skinner

*Journal of the European Ceramic Society*, **29**(4), (2009), pp. 697-702 [\[DOI : 10.1016/j.jeurceramsoc.2008.07.004\]](#)

### **LEPMI-01179**

Synthesis, crystal structure, infrared and electrical conductivity of the layered rubidium uranate  $\text{Rb}_4\text{U}_5\text{O}_{17}$

S. Saad, Saïd Obbade, C. Renard et Francis Abraham

*Journal of Alloys and Compounds*, **474**(1-2), (2009), pp. 68-72 [\[DOI : 10.1016/j.jallcom.2008.06.125\]](#)

### **LEPMI-2622**

Channels occupancy and distortion in new lithium uranyl phosphates with three-dimensional open-frameworks

C. Renard, Saïd Obbade et Francis Abraham

*Journal of Solid State Chemistry*, **182**(6), (2009), pp. 1377-1386 [\[DOI : 10.1016/j.jssc.2009.02.024\]](#)

### **LEPMI-01178**

New open-framework in the uranyl vanadates  $A_3(\text{UO}_2)_7(\text{VO}_4)_5\text{O}$  ( $A=\text{Li}, \text{Ag}$ ) with intergrowth structure between  $A(\text{UO}_2)_4(\text{VO}_4)_3$  and  $A_2(\text{UO}_2)_3(\text{VO}_4)_2\text{O}$

Saïd Obbade, C. Renard et Francis Abraham

*Journal of Solid State Chemistry*, **182**(3), (2009), pp. 413-420 [\[DOI : 10.1016/j.jssc.2008.10.019\]](#)

### **LEPMI-02052**

Physicochemical Origins of Electrochemical Promotion of LSM/YSZ

Virginie Roche, Abdelkader Hadjar, Jean-Pierre Deloume, Thierry Pagnier, Renaud Revel, Claude Roux, Elisabeth Siebert et Philippe Vernoux

*Catalysis Today*, **146**(3-4), (2009), pp. 266-273 [\[DOI : 10.1016/j.cattod.2009.03.031\]](#)

### **LEPMI-02011**

Fabrication by Electrostatic Spray Deposition and structural investigation of ultra thin and dense zirconia films.

Amélie Lintanf et Elisabeth Djurado

*Thin Solid Films*, **517**(24), (2009), pp. 6784-6786 [\[DOI : 10.1016/j.tsf.2009.05.047\]](#)

### **LEPMI-02010**

Electrochemical characterization of nanostructured zirconias

Samir Boulfrad, Elisabeth Djurado et Jacques Fouletier

*Solid State Ionics*, **180**(14-16), (2009), pp. 978-983 [\[DOI : 10.1016/j.ssi.2009.04.014\]](#)

### **LEPMI-02008**

Influence of electro spraying parameters on the microstructure of  $\text{La}_{0.6}\text{Sr}_{0.4}\text{Co}_{0.2}\text{Fe}_{0.8}\text{O}_{3-6}$  films for SOFCs

Daniel Marinha, Cécile Rossignol et Elisabeth Djurado

*Journal of Solid State Chemistry*, **182**, (2009), pp. 1742-1748 [DOI :

[10.1016/j.jssc.2009.04.018](https://doi.org/10.1016/j.jssc.2009.04.018)]

### **LEPMI-02012**

Influence of green state processes on the sintering behaviour and the subsequent optical properties of spark plasma sintered alumina

Yann Aman, Vincent Garnier et Elisabeth Djurado

*Journal of the European Ceramic Society*, **29**(16), (2009), pp. 3363-3370 [DOI :

[10.1016/j.jeurceramsoc.2009.07.014](https://doi.org/10.1016/j.jeurceramsoc.2009.07.014)]

### **LEPMI-01935**

Atomic layer deposition of tantalum oxide thin films for their use as diffusion barriers in interconnect technologies

Amélie Lintanf-Salaün, Arnaud Mantoux, Elisabeth Djurado et Elisabeth Blanquet

*Microelectronic Engineering*, **87**(5), (2010), pp. 373-378 [DOI : [10.1016/j.mee.2009.06.015](https://doi.org/10.1016/j.mee.2009.06.015)]

### **LEPMI-2281**

Synthesis, crystal structure and infrared spectroscopy of a new non-centrosymmetric mixed-anion phosphate  $\text{Na}_4\text{Mg}_3(\text{PO}_4)_2(\text{P}_2\text{O}_7)$

Rachid Essehli, Brahim El Bali, Saïd Benmokhtar, Hartmut Fuess, Ingrid Svoboda et Saïd Obbade

*Journal of Alloys and Compounds*, **493**(1-2), (2010), pp. 654 -660 [DOI :

[10.1016/j.jallcom.2009.12.181](https://doi.org/10.1016/j.jallcom.2009.12.181)]

### **LEPMI-2268**

Nanopowder synthesis of the SOFC cathode material  $\text{Nd}_2\text{NiO}_{4+\delta}$  by ultrasonic spray pyrolysis

David Mesguich, Jean-Marc Bassat, Cyril Aymonier et Elisabeth Djurado

*Solid State Ionics*, **181**(21-22), (2010), pp. 1015 -1023 [DOI : [10.1016/j.ssi.2010.05.041](https://doi.org/10.1016/j.ssi.2010.05.041)]

### **LEPMI-2303**

X-Ray Diffraction and  $\mu$ -Raman Investigation of the Monoclinic-Orthorhombic Phase Transition in  $\text{Th}_{1-x}\text{U}_x(\text{C}_2\text{O}_4)_2 \cdot 2\text{H}_2\text{O}$  Solid Solutions

Nicolas Clavier, Nina Hingant, Murielle Rivenet, Saïd Obbade, Nicolas Dacheux, Nicole Barre et Francis Abraham

*Inorganic Chemistry*, **49**(4), (2010), pp. 1921 -1931 [DOI : [10.1021/jc902343r](https://doi.org/10.1021/jc902343r)]

### **LEPMI-2288**

4-Benzyl-6-bromo-2-(4-methoxyphenyl)-4H-imidazo[4,5-b]pyridine monohydrate

Y. Ouzidan, Y. Kandri Rodi, Saïd Obbade, El Mokhtar Essassi et Seik Weng Ng

*Acta Crystallographica Section E*, **66**, (2010), pp. O947 -U3269 [DOI :

[10.1107/S1600536810010391](https://doi.org/10.1107/S1600536810010391)]

### **LEPMI-2308**

A Screening Design Approach for the Understanding of Spark Plasma Sintering Parameters: A Case of Translucent Polycrystalline Undoped Alumina

Yann Aman, Vincent Garnier et Elisabeth Djurado  
*International Journal of Applied Ceramic Technology*, **7**(5), (2010), pp. 574 -586 [\[DOI : 10.1111/j.1744-7402.2009.02448.x\]](https://doi.org/10.1111/j.1744-7402.2009.02448.x)

#### **LEPMI-2287**

4-Benzyl-6-bromo-2-phenyl-4H-imidazo[4,5-b]pyridine  
Y. Ouzidan, Saïd Obbade, F. Capet, El Mokhtar Essassi et Seik Weng Ng  
*Acta Crystallographica Section E*, **66**, (2010), pp. O946 -U3260 [\[DOI : 10.1107/S160053681001038X\]](https://doi.org/10.1107/S160053681001038X)

#### **LEPMI-2314**

Comparison of Structural and Electrical Properties of Barium Zirconate Pellets and Thin Films  
Mohammad Arab Pour Yazdi, Pascal Briois, Samuel Georges, Aliaksandr L. Shaula, Albano A. Cavaleiro et Alain Billard  
*Journal of the Electrochemical Society*, **157**(11), (2010), pp. B1582 -B1587 [\[DOI : 10.1149/1.3482032\]](https://doi.org/10.1149/1.3482032)

#### **LEPMI-2213**

Tests for the use of La<sub>2</sub>Mo<sub>2</sub>O<sub>9</sub>-based oxides as multipurpose SOFC core materials  
Julien Jacquens, David Farrusseng, Samuel Georges, Jean-Paul Viricelle, C. Gaudillère, Gwenaël Corbel et Philippe Lacorre  
*Fuel Cells*, **10**(3), (2010), pp. 433 -439 [\[DOI : 10.1002/fuce.200900099\]](https://doi.org/10.1002/fuce.200900099)

#### **LEPMI-2274**

Chemical vapor deposition of silicon nanodots on TiO<sub>2</sub> submicronic powders in vibrated fluidized bed  
Loïc Cadoret, Cécile Rossignol, Jeannette Dexpert-Ghys et Brigitte Caussat  
*Materials Science and Engineering: B: Advanced Functional Solid-State Materials*, **170**(1-3), (2010), pp. 41 -50 [\[DOI : 10.1016/j.mseb.2010.02.024\]](https://doi.org/10.1016/j.mseb.2010.02.024)

#### **LEPMI-02009**

Thermal ageing of nanostructured tetragonal zirconia ceramics: characterization of interfaces  
Renata Ayres-Rocha, Eliana N. S. Muccillo, Laurent Dessemond et Elisabeth Djurado  
*Journal of the European Ceramic Society*, **30**(2), (2010), pp. 227-231 [\[DOI : 10.1016/j.jeurceramsoc.2009.05.004\]](https://doi.org/10.1016/j.jeurceramsoc.2009.05.004)

#### **LEPMI-2284**

SOFC fuelled by methane without coking: optimization of electrochemical performance  
Jean-Marie Klein, Samuel Georges et Yann Bultel  
*Journal of Applied Electrochemistry*, **40**(5), (2010), pp. 943 -954 [\[DOI : 10.1007/s10800-010-0099-5\]](https://doi.org/10.1007/s10800-010-0099-5)

#### **LEPMI-2235**

Fluorescent organic nanocrystal confined in sol-gel matrix for bio-imaging  
Cécile Philippot, Fabien Dubois, Maria Bacia, Elisabeth Djurado et Alain Ibanez  
*Journal of Sol-Gel Science and Technology*, **57**(3), (2011), pp. 253 -257 [\[DOI : 10.1007/s10971-010-2175-z\]](https://doi.org/10.1007/s10971-010-2175-z)

### LEPMI-2250

Elaboration of thin and dense CGO films adherent to YSZ by electrostatic spray deposition for IT-SOFC applications

Cécile Rossignol, Benjamin Roman, Guilherme David Benetti et Elisabeth Djurado  
*New Journal of Chemistry*, **35**(3), (2011), pp. 716 -723 [\[DOI : 10.1039/c0nj00570c\]](https://doi.org/10.1039/c0nj00570c)

### LEPMI-2239

Vortex pinning in bulk-processed Y-Ba-Cu-O with ZrO<sub>2</sub> nano-particles: Optimum pinning center size

N. Moutalbi, A. Ouerghi, Elisabeth Djurado, J. G. Noudem et A. M'chirgui  
*Physica C: Superconductivity and its Applications*, **471**(3-4), (2011), pp. 97 -103 [\[DOI : 10.1016/j.physc.2010.12.012\]](https://doi.org/10.1016/j.physc.2010.12.012)

### LEPMI-2182

Spark Plasma Sintering Kinetics of Pure alpha-Alumina

Yann Aman, Vincent Garnier et Elisabeth Djurado  
*Journal of the American Ceramic Society*, **94**(9), (2011), pp. 2825 -2833 [\[DOI : 10.1111/j.1551-2916.2011.04424.x\]](https://doi.org/10.1111/j.1551-2916.2011.04424.x)

### LEPMI-2232

Structure characterization of spark plasma sintered alumina by positron annihilation lifetime spectroscopy

Nikolay Djourelou, Yann Aman, Kalin Berovski, Patrick Nedelec, Nicolas Charvin, Vincent Garnier et Elisabeth Djurado  
*physica status solidi (a)*, **208**(4), (2011), pp. 795 -802 [\[DOI : 10.1002/pssa.201026474\]](https://doi.org/10.1002/pssa.201026474)

### LEPMI-2160

Reducibility of La<sub>2</sub>Mo<sub>2</sub>O<sub>9</sub> based ceramics versus porosity

Meenal Goel, Elisabeth Djurado et Samuel Georges  
*Solid State Ionics*, **204**, (2011), pp. 97 -103 [\[DOI : 10.1016/j.ssi.2011.10.001\]](https://doi.org/10.1016/j.ssi.2011.10.001)

### LEPMI-2224

Performance of (La,Sr)(Co,Fe)O<sub>3-x</sub> double-layer cathode films for intermediate temperature solid oxide fuel cell

Daniel Marinha, Jan Hayd, Laurent Dessemond, Ellen Ivers-Tiffée et Elisabeth Djurado  
*Journal of Power Sources*, **196**(11), (2011), pp. 5084 -5090 [\[DOI : 10.1016/j.jpowsour.2011.01.063\]](https://doi.org/10.1016/j.jpowsour.2011.01.063)

### LEPMI-2200

From (1)(infinity)[UO<sub>2</sub>](<sub>2</sub>)O(MoO<sub>4</sub>)(<sub>4</sub>)](6-) to (1)(infinity)[(UO<sub>2</sub>)(<sub>2</sub>)(MoO<sub>4</sub>)(<sub>3</sub>)(MoO<sub>5</sub>)](6-(-) infinite chains in A(6)U<sub>2</sub>Mo<sub>4</sub>O<sub>21</sub> (A=Na, K, Rb, Cs) compounds: Synthesis and crystal structure of Cs<sub>6</sub>[(UO<sub>2</sub>)(<sub>2</sub>)(MoO<sub>4</sub>)(<sub>3</sub>)(MoO<sub>5</sub>)]

Saïd Yagoubi, Saïd Obbade, S. Saad et Francis Abraham  
*Journal of Solid State Chemistry*, **184**(5), (2011), pp. 971 -981 [\[DOI : 10.1016/j.jssc.2011.01.010\]](https://doi.org/10.1016/j.jssc.2011.01.010)

### LEPMI-2225

Preliminary studies of the new Ce-doped La/Sr chromo-manganite series as potential SOFC anode or SOEC cathode materials

Elisa Lay, Gilles Gauthier et Laurent Dessemond

*Solid State Ionics*, **189**(1), (2011), pp. 91 -99 [\[DOI : 10.1016/j.ssi.2011.02.004\]](https://doi.org/10.1016/j.ssi.2011.02.004)

### **LEPMI-2238**

Oxido-reduction properties of La(0.7)Sr(0.3)Co(0.8)Fe(0.2)O(3-delta) perovskite oxide catalyst

Elisabeth Siebert, Claude Roux, Antoinette Boréave, François Gaillard et Philippe Vernoux  
*Solid State Ionics*, **183**(1), (2011), pp. 40 -47 [\[DOI : 10.1016/j.ssi.2010.11.012\]](https://doi.org/10.1016/j.ssi.2010.11.012)

### **LEPMI-2155**

Microstructural 3D Reconstruction and Performance Evaluation of LSCF Cathodes Obtained by Electrostatic Spray Deposition

Daniel Marinha, Laurent Dessemond, J. Scott Cronin, James R. Wilson, Scott A. Barnett et Elisabeth Djurado

*Chemistry of Materials*, **23**(24), (2011), pp. 5340 -5348 [\[DOI : 10.1021/cm2016998\]](https://doi.org/10.1021/cm2016998)

### **LEPMI-2168**

Sintering and conductivity of BaCe(0.9)Y(0.1)O(2.95) synthesized by the sol-gel method  
Agnès Princivalle, Guilhem Martin, Céline Viazzi, Christian Guizard, Nicolas Grunbaum et Laurent Dessemond

*Journal of Power Sources*, **196**(22), (2011), pp. 9238 -9245 [\[DOI : 10.1016/j.jpowsour.2011.07.048\]](https://doi.org/10.1016/j.jpowsour.2011.07.048)

### **LEPMI-2175**

New NO(x) sensors based on hematite doped with alkaline and alkaline-earth elements  
Jean-Marc Tulliani, Chiara Baroni, Christian Lopez et Laurent Dessemond

*Journal of the European Ceramic Society*, **31**(13), (2011), pp. 2357 -2364 [\[DOI : 10.1016/j.jeurceramsoc.2011.05.031\]](https://doi.org/10.1016/j.jeurceramsoc.2011.05.031)

### **LEPMI-2151**

Electrical Characterization of Thin Films by an Original Micro-Electrode Calibration Method

Nicolas Bailly, Elisabeth Djurado et Samuel Georges

*Electrochemical and Solid-State Letters*, **15**(4), (2012), pp. F16 -F18 [\[DOI : 10.1149/2.029204esl\]](https://doi.org/10.1149/2.029204esl)

### **LEPMI-1306**

Direct ethanol solid oxide fuel cell operating in gradual internal reforming  
Shayenne D. Nóbrega, M. V. Galesco, Kelly Girona, D. Z. de Florio, Marlu César Steil, Samuel Georges et Fabio Coral Fonseca

*Journal of Power Sources*, **213**, (2012), pp. 156-159 [\[DOI : 10.1016/j.jpowsour.2012.03.104\]](https://doi.org/10.1016/j.jpowsour.2012.03.104)

### **LEPMI-1152**

Electrical properties of BaCe<sub>0.8</sub>Zr<sub>0.1</sub>Y<sub>0.1</sub>O<sub>3</sub> (-) (alpha) ceramics and thin films designed by reactive magnetron sputtering: Effect of the electrochemical cell configuration  
Samuel Georges, Lei Yu, Mohammad Arab Pour Yazdi, Rémi Costa, Pascal Briois et Alain Billard

*Solid State Ionics*, **229**, (2012), pp. 1-8 [\[DOI : 10.1016/j.ssi.2012.10.002\]](https://doi.org/10.1016/j.ssi.2012.10.002)

### **LEPMI-2328**

Effect of Ce-Doping on the Electrical and Electrocatalytical Behavior of La/Sr Chromo-Manganite Perovskite as New SOFC Anode

Elisa Lay, Messaoud Benamira, Caroline Pirovano, Gilles Gauthier et Laurent Dessemond  
*Fuel Cells*, **12**(2), (2012), pp. 265 -274 [\[DOI : 10.1002/fuce.201100070\]](https://doi.org/10.1002/fuce.201100070)

### **LEPMI-1730**

Pressure-less spark plasma sintering effect on non-conventional necking process during the initial stage of sintering of copper and alumina

Yann Aman, Vincent Garnier et Elisabeth Djurado  
*Journal of Materials Science*, **47**(15), (2012), pp. 5766-5773 [\[DOI : 10.1007/s10853-012-6469-0\]](https://doi.org/10.1007/s10853-012-6469-0)

### **LEPMI-1321**

Elaboration and electrical characterization of electrosprayed YSZ thin films for intermediate temperature-solid oxide fuel cells (IT-SOFC)

Nicolas Bailly, Samuel Georges et Elisabeth Djurado  
*Solid State Ionics*, **222**, (2012), pp. 1-7 [\[DOI : 10.1016/j.ssi.2012.06.020\]](https://doi.org/10.1016/j.ssi.2012.06.020)

### **LEPMI-2154**

Electrochemical investigation of oxygen reduction reaction on  $\text{La}_{0.6}\text{Sr}_{0.4}\text{Co}_{0.2}\text{Fe}_{0.8}\text{O}_{3-d}$  cathodes deposited by Electrostatic Spray Deposition

Daniel Marinha, Laurent Dessemond et Elisabeth Djurado  
*Journal of Power Sources*, **197**, (2012), pp. 80 -87 [\[DOI : 10.1016/j.jpowsour.2011.09.049\]](https://doi.org/10.1016/j.jpowsour.2011.09.049)

### **LEPMI-2152**

$[\text{La}(\text{UO}(2))\text{V}(2)\text{O}(7)][(\text{UO}(2))(\text{VO}(4))]$  the first lanthanum uranyl-vanadate with structure built from two types of sheets based upon the uranophane anion-topology

Alexandre Mer, Saïd Obbade, Murielle Rivenet, C. Renard et Francis Abraham  
*Journal of Solid State Chemistry*, **185**, (2012), pp. 180 -186 [\[DOI : 10.1016/j.jssc.2011.10.042\]](https://doi.org/10.1016/j.jssc.2011.10.042)

### **LEPMI-3273**

Blocking Effect of ZnO in YSZ/ZnO Composites

Raphael F. Marcomini, Dulcina Pinatti Ferreira De Souza, Michel Kleitz, Laurent Dessemond et César Steil  
*ECS Journal of Solid State Science and Technology*, **1**(6), (2012), pp. N127-N134 [\[DOI : 10.1149/2.004301jss\]](https://doi.org/10.1149/2.004301jss)

### **LEPMI-2883**

Comprehensive Review of Current Developments in IT-SOFCs

Daniel Marinha, Laurent Dessemond et Elisabeth Djurado  
*Current Inorganic Chemistry*, **3**(1), (2013), pp. 2-22 [\[DOI : 10.2174/1877944111303010003\]](https://doi.org/10.2174/1877944111303010003)

### **LEPMI-2721**

Ageing effect on electrical properties of the oxyapatite/ $\text{Nd}_2\text{NiO}_4$  interface

Sami Chefi, Messoud Kahlaoui, Abdwaheb Inoubli, Adel Madani et Abdelkader Hammou  
*Ceramics International*, **39**(4), (2013), pp. 4507-4512 [\[DOI : 10.1016/j.ceramint.2012.11.046\]](https://doi.org/10.1016/j.ceramint.2012.11.046)

### **LEPMI-2704**

Low temperature synthesis of ultrafine non vermicular alpha-alumina from aerosol

decomposition of aluminum nitrates salts

Yann Aman, Cécile Rossignol, Vincent Garnier et Elisabeth Djurado

*Journal of the European Ceramic Society*, **33**(10), (2013), pp. 1917-1928 [\[DOI : 10.1016/j.jeurceramsoc.2013.01.035\]](https://doi.org/10.1016/j.jeurceramsoc.2013.01.035)

### **LEPMI-2690**

Efficiency of a dense thin CGO buffer layer for solid oxide fuel cell operating at intermediate temperature

Guillaume Constantin, Cécile Rossignol, Pascal Briois, Alain Billard, Laurent Dessemond et Elisabeth Djurado

*Solid State Ionics*, **249**, (2013), pp. 98-104 [\[DOI : 10.1016/j.ssi.2013.07.004\]](https://doi.org/10.1016/j.ssi.2013.07.004)

### **LEPMI-2726**

Molten salt flux synthesis and crystal structure of a new open-framework uranyl phosphate Cs-3(UO<sub>2</sub>)<sub>2</sub>(PO<sub>4</sub>)O-2: Spectroscopic characterization and cationic mobility studies

Saïd Yagoubi, C. Renard, Francis Abraham et Saïd Obbade

*Journal of Solid State Chemistry*, **200**, (2013), pp. 13-21 [\[DOI : 10.1016/j.jssc.2013.01.013\]](https://doi.org/10.1016/j.jssc.2013.01.013)

### **LEPMI-2669**

Thin films of La<sub>0.7</sub>Sr<sub>0.3</sub>MnO<sub>3</sub>-delta dip-coated on Fe-Cr alloys for SOFC metallic interconnect

Leandro da Conceicao, Laurent Dessemond, Elisabeth Djurado et Mariana M. V. M. Souza

*International Journal of Hydrogen Energy*, **38**(35), (2013), pp. 15335-15347 [\[DOI : 10.1016/j.ijhydene.2013.09.048\]](https://doi.org/10.1016/j.ijhydene.2013.09.048)

### **LEPMI-2697**

Electrochemical and Raman study of La<sub>0.7</sub>Sr<sub>0.3</sub>Co<sub>0.8</sub>Fe<sub>0.2</sub>O<sub>3</sub> (-) (delta) reduction

Elisabeth Siebert, Antoinette Boréave, François Gaillard et Thierry Pagnier

*Solid State Ionics*, **247**, (2013), pp. 30-40 [\[DOI : 10.1016/j.ssi.2013.05.006\]](https://doi.org/10.1016/j.ssi.2013.05.006)

### **LEPMI-2692**

La<sub>0.7</sub>Sr<sub>0.3</sub>MnO<sub>3</sub>-coated SS444 alloy by dip-coating process for metallic interconnect supported Solid Oxide Fuel Cells

Leandro da Conceicao, Laurent Dessemond, Elisabeth Djurado et Mariana M. V. M. Souza

*Journal of Power Sources*, **241**, (2013), pp. 159-167 [\[DOI : 10.1016/j.jpowsour.2013.04.082\]](https://doi.org/10.1016/j.jpowsour.2013.04.082)

### **LEPMI-2481**

Ba-Doped Iron Oxide as a New Material for NO<sub>2</sub> Detection

Christian Lopez, Chiara Baroni et Jean-Marc Tulliani

*Materials*, **6**(10), (2013), pp. 4801-4816 [\[DOI : 10.3390/ma6104801\]](https://doi.org/10.3390/ma6104801)

### **LEPMI-2664**

Microstructural and electrical characterizations of tungsten-doped La<sub>2</sub>Mo<sub>2</sub>O<sub>9</sub> prepared by spray pyrolysis

Laura Baqué, Jésus Vega-Castillo, Samuel Georges, Alberto Caneiro et Elisabeth Djurado

*Ionics*, **19**(12), (2013), pp. 1761-1774 [\[DOI : 10.1007/s11581-013-0912-3\]](https://doi.org/10.1007/s11581-013-0912-3)

### **LEPMI-2731**

Interface stability of thin, dense CGO film coating on YSZ for solid oxide fuel cells



Guillaume Constantin, Cécile Rossignol, Jean-Paul Barnes et Elisabeth Djurado  
*Solid State Ionics*, **235**, (2013), pp. 36-41 [\[DOI : 10.1016/j.ssi.2013.01.015\]](https://doi.org/10.1016/j.ssi.2013.01.015)

#### **LEPMI-1276**

Characterization of PCFC-Electrolytes Deposited by Reactive Magnetron Sputtering;  
Comparison with Ceramic Bulk Samples

Mohammad Arab Pour Yazdi, Pascal Briois, Samuel Georges, Rémi Costa et Alain Billard  
*Fuel Cells*, **13**(4), (2013), pp. 549-555 [\[DOI : 10.1002/fuce.201200170\]](https://doi.org/10.1002/fuce.201200170)

#### **LEPMI-969**

Label-free impedimetric thrombin sensor based on poly(pyrrole-nitrilotriacetic acid)-  
aptamer film

Hui Xu, Karine Gorgy, Chantal Gondran, Alan Le Goff, Nicolas Spinelli, Christian Lopez,  
Eric Defrancq et Serge Cosnier

*Biosensors and Bioelectronics*, **41**, (2013), pp. 90-95 [\[DOI : 10.1016/j.bios.2012.07.044\]](https://doi.org/10.1016/j.bios.2012.07.044)

#### **LEPMI-826**

Synthesis and sintering of Gd-doped CeO<sub>2</sub> nanopowders prepared by ultrasonic spray  
pyrolysis

Celso Goulart et Elisabeth Djurado

*Journal of the European Ceramic Society*, **33**(4), (2013), pp. 769-778 [\[DOI : 10.1016/j.jeurceramsoc.2012.09.029\]](https://doi.org/10.1016/j.jeurceramsoc.2012.09.029)

#### **LEPMI-1141**

Ba-substituted LSCM anodes for solid oxide fuel cells

Elisa Lay, Laurent Dessemond et Gilles Gauthier

*Journal of Power Sources*, **221**, (2013), pp. 149-156 [\[DOI : 10.1016/j.jpowsour.2012.07.126\]](https://doi.org/10.1016/j.jpowsour.2012.07.126)

#### **LEPMI-2710**

Pre-coating of LSCM perovskite with metal catalyst for scalable high performance anodes

Samir Boulfrad, Mark Cassidy, Elisabeth Djurado, John T. S. Irvine et Ghassan Jabbour

*International Journal of Hydrogen Energy*, **38**(22), (2013), pp. 9519-9524 [\[DOI : 10.1016/j.ijhydene.2012.12.001\]](https://doi.org/10.1016/j.ijhydene.2012.12.001)

#### **LEPMI-2714**

Micro modelling of solid oxide electrolysis cell: From performance to durability

Elisa Lay-Grindler, Jérôme Laurencin, Gérard Delette, Jérôme Aicart, Marie Petitjean et  
Laurent Dessemond

*International Journal of Hydrogen Energy*, **38**(17), (2013), pp. 6917-6929 [\[DOI : 10.1016/j.ijhydene.2013.03.162\]](https://doi.org/10.1016/j.ijhydene.2013.03.162)

#### **LEPMI-1098**

Influence of crystallinity and particle size on the electrochemical properties of spray  
pyrolyzed Nd<sub>2</sub>NiO<sub>4</sub>+delta powders

David Mesguich, Jean-Marc Bassat, Cyril Aymonier, Anne-Lise Brüll, Laurent Dessemond  
et Elisabeth Djurado

*Electrochimica Acta*, **87**, (2013), pp. 330-335 [\[DOI : 10.1016/j.electacta.2012.07.134\]](https://doi.org/10.1016/j.electacta.2012.07.134)

#### **LEPMI-818**

Structure, sintering and electrical properties of new ionic conductor Ag<sub>4</sub>Co<sub>7</sub>(AsO<sub>4</sub>)<sub>6</sub>

R. Marzouki, A. Guesmi, Samuel Georges, M. F. Zid et A. Driss  
*Journal of Alloys and Compounds*, **586**, (2014), pp. 74-79 [\[DOI : 10.1016/j.jallcom.2013.09.213\]](#)

#### **LEPMI-2884**

Coral Microstructure of Graded CGO/LSCF Oxygen Electrode by Electrostatic Spray Deposition for Energy (IT-SOFC, SOEC)  
Jaroslaw Sar, Frédéric Charlot, Amélia Almeida, Laurent Dessemond et Elisabeth Djurado  
*Fuel Cells, In Press*, (2014), [\[DOI : 10.1002/fuce.201300146\]](#)

#### **LEPMI-2775**

A Fuel-Flexible Solid Oxide Fuel Cell Operating in Gradual Internal Reforming  
Shayenne D. Nóbrega, Patrick Gélin, Samuel Georges, Marlu César Steil, Bruno L. Augusto, Fabio B. Noronha et Fabio Coral Fonseca  
*Journal of the Electrochemical Society*, **161**(3), (2014), pp. F354-F359 [\[DOI : doi:10.1149/2.107403jes\]](#)