

2014 - ACL-435

Highly dispersed Pt/C catalysts prepared by the Charge Enhanced Dry Impregnation method

Chongjiang Cao, Guang Yang, [Laetitia Dubau](#), [Frédéric Maillard](#), Stéphanie Lambert, Jean-Paul Pirard et Nathalie Job

Applied Catalysis B: Environmental, **150-151**, (2014), pp. 101-106 [\[DOI : 10.1016/j.apcatb.2013.12.004\]](#)

2014 - ACL-436

Photocatalytic paper based on sol-gel titania nanoparticles immobilized on porous silica for VOC abatement

Souheila Adjimi, [Nicolas Sergent](#), Jean-Claude Roux, Françoise Delpech, M. Pera-Titus, K. Chhor, A. Kanaev et [Pierre-Xavier Thivel](#)

Applied Catalysis B: Environmental, **154-155**, (2014), pp. 123-133 [\[DOI : 10.1016/j.apcatb.2014.02.011\]](#)

2014 - ACL-437

Atomic-scale structure and composition of Pt₃Co/C nanocrystallites during real PEMFC operation: A STEM-EELS study

Miguel Lopez-Haro, [Laetitia Dubau](#), Laure Guétaz, Pascale Bayle-Guillemaud, [Marian Chatenet](#), Johan André, Nicolas Caqué, Elisabeth Rossinot et [Frédéric Maillard](#)

Applied Catalysis B: Environmental, **152-153**, (2014), pp. 300-308 [\[DOI : 10.1016/j.apcatb.2014.01.034\]](#)

2014 - ACL-438

The role of water in the degradation of Pt₃Co/C nanoparticles: an Identical Location Transmission Electron Microscopy study in Polymer Electrolyte Environment

Flávio Nikkuni, Benoît Vion-Dury, [Laetitia Dubau](#), [Frédéric Maillard](#), Edson Ticianelli et [Marian Chatenet](#)

Applied Catalysis B: Environmental, **156-157**, (2014), pp. 301-306 [\[DOI : 10.1016/j.apcatb.2014.03.029\]](#)

2014 - ACL-439

Boosting the electrochemical properties of diamond electrodes using carbon nanotube scaffolds

Clément Hébert, Jean-Paul Mazellier, Emmanuel Scorsone, [Michel Mermoux](#) et Philippe Bergonzo

Carbon, **71**, (2014), pp. 27-33 [\[DOI : 10.1016/j.carbon.2013.12.083\]](#)

2014 - ACL-440

Photocatalytic oxidation of ethanol using paper-based nano-TiO₂ immobilized on porous silica: a modelling study

Souheila Adjimi, Jean-Claude Roux, [Nicolas Sergent](#), Françoise Delpech, [Pierre-Xavier Thivel](#) et M. Pera-Titus

Chemical Engineering Journal, **In Press**, (2014), [\[DOI : 10.1016/j.cej.2014.04.013\]](#)

2014 - ACL-441

Dimethoxymethane (DMM) electrooxidation on carbon-supported Pt-based nanosized catalysts for PEMFC

Gwenaëlle Kéranguéven, [Eric Sibert](#), Françoise Hahn et Jean-Michel Léger
Comptes Rendus Chimie, In Press, (2014), [\[DOI : 10.1016/j.crci.2013.12.010\]](https://doi.org/10.1016/j.crci.2013.12.010)

2014 - ACL-442

NiMnOx/C: A Non-noble Ethanol-Tolerant Catalyst for Oxygen Reduction in Alkaline Exchange Membrane DEFC

Amanda Garcia, José Linares, [Marian Chatenet](#) et Edson Ticianelli

Electrocatalysis, **5**(1), (2014), pp. 41-49 [\[DOI : 10.1007/s12678-013-0162-1\]](https://doi.org/10.1007/s12678-013-0162-1)

2014 - ACL-443

Accelerated Stress Tests of Pt/HSAC Electrocatalysts: an Identical-Location Transmission Electron Microscopy Study on the Influence of Intermediate Characterizations

[Luis Castanheira](#), [Laetitia Dubau](#) et [Frédéric Maillard](#)

Electrocatalysis, **5**(2), (2014), pp. 125-135 [\[DOI : 10.1007/s12678-013-0173-y\]](https://doi.org/10.1007/s12678-013-0173-y)

2014 - ACL-444

Electrooxidation of NaBH₄ in Alkaline Medium on Well-defined Pt Nanoparticles Deposited onto Flat Glassy Carbon Substrate: Evaluation of the Effects of Pt Nanoparticle Size, Inter-Particle Distance, and Loading

[Pierre-Yves Olu](#), Caio Barros, Nathalie Job et [Marian Chatenet](#)

Electrocatalysis, In Press, (2014), [\[DOI : 10.1007/s12678-014-0195-0\]](https://doi.org/10.1007/s12678-014-0195-0)

2014 - ACL-445

Influence of the surface morphology of smooth platinum electrodes for the sodium borohydride oxidation reaction

[Pierre-Yves Olu](#), Bruno Gilles, Nathalie Job et [Marian Chatenet](#)

Electrochemistry Communications, **43**, (2014), pp. 47-50 [\[DOI : 10.1016/j.elecom.2014.02.018\]](https://doi.org/10.1016/j.elecom.2014.02.018)

2014 - ACL-446

Mechanisms of the initial steps in the Pd electro-deposition onto Au(111)

[Eric Sibert](#), Liang Wang, Maurizio De Santis et [Yvonne Soldo-Olivier](#)

Electrochimica Acta, In Press, (2014), [\[DOI : 10.1016/j.electacta.2014.04.168\]](https://doi.org/10.1016/j.electacta.2014.04.168)

2014 - ACL-447

An algorithm for diagnosis of proton exchange membrane fuel cells by electrochemical impedance spectroscopy

[Sylvain Tant](#), Sébastien Rosini, [Pierre-Xavier Thivel](#), [Florence Druart](#), André Rakotondrainibe, Thierry Geneston et [Yann Bultel](#)

Electrochimica Acta, in Press, (2014), [\[DOI : 10.1016/j.electacta.2014.04.108\]](https://doi.org/10.1016/j.electacta.2014.04.108)

2014 - ACL-448

Proton conducting membranes prepared by radiation grafting of styrene and various comonomers

Kaewta Jetsrisuparb, Sandor Balog, [Corine Bas](#), [Lara Perrin](#), Alexander Wokaun et Lorenz Gubler

European Polymer Journal, **53**, (2014), pp. 75-89 [\[DOI : 10.1016/j.eurpolymj.2014.01.021\]](https://doi.org/10.1016/j.eurpolymj.2014.01.021)

2014 - ACL-449

PEMFC Performances Using Photocatalytic Hydrogen with a Dead-Ended Anode

[Julien Rodriguez](#), E. Puzenat, Renaud Mosdale et [Pierre-Xavier Thivel](#)

Fuel Cells, In Press, (2014), [\[DOI : 10.1002/fuce.201300210\]](https://doi.org/10.1002/fuce.201300210)

2014 - ACL-450

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), [\[DOI : 10.1002/fuce.201300146\]](https://doi.org/10.1002/fuce.201300146)

2014 - ACL-451

Using the Multiple SEA Method to Synthesize Pt/Carbon Xerogel Electrocatalysts for PEMFC Applications

Anthony Zubiaur, [Marian Chatenet](#), [Frédéric Maillard](#), Stéphanie Lambert, Jean-Paul Pirard et Nathalie Job

Fuel Cells, In Press, (2014), [\[DOI : 10.1002/fuce.201300208\]](https://doi.org/10.1002/fuce.201300208)

2014 - ACL-452

Lithium recovery from aqueous solution by sorption/desorption

[Julien Lemaire](#), [Lenka Švecová](#), Fanny Lagallarde, Richard Laucournet et [Pierre-Xavier Thivel](#)

Hydrometallurgy, **143**, (2014), pp. 1-11 [\[DOI : 10.1016/j.hydromet.2013.11.006\]](https://doi.org/10.1016/j.hydromet.2013.11.006)

2014 - ACL-453

Sonochemical removal of naphthol blue black azo dye: influence of parameters and effect of mineral ions

Sadou Dalhatou, Christian Pétrier, Samuel Laminsi et [Stéphane Baup](#)

International Journal of Environmental Science and Technology, **Accepted**, (2014), [\[DOI : 10.1007/s13762-013-0432-8\]](https://doi.org/10.1007/s13762-013-0432-8)

2014 - ACL-454

Correlation between hydrogen storage properties and textures induced in magnesium through ECAP and cold rolling

Alberto Moreira Jorge Jr., Gisele de Lima, Maria Triques, Walter Botta, Claudio Kiminami, [Ricardo Nogueira](#), Alain Yavari et Terence Langdon

International Journal of Hydrogen Energy, **30**(8), (2014), pp. 3810-3821 [\[DOI : 10.1016/j.ijhydene.2013.12.154\]](https://doi.org/10.1016/j.ijhydene.2013.12.154)

2014 - ACL-455

An experimental analysis of PEMFC stack assembly using strain gage sensors

[Christophe Carral](#), [Nicolas Charvin](#), Hélène Trouvé et [Patrice Mélé](#)

International Journal of Hydrogen Energy, **39**, (2014), pp. 4493-4501 [\[DOI: 10.1016/j.ijhydene.2014.01.033\]](#)

2014 - ACL-456

A numerical analysis of PEMFC stack assembly through a 3D finite element model

Christophe Carral et [Patrice Mélé](#)

International Journal of Hydrogen Energy, **39**, (2014), pp. 4516-4530 [\[DOI: 10.1016/j.ijhydene.2014.01.036\]](#)

2014 - ACL-457

Understanding the formation of pinholes in PFSA membranes with the essential work of fracture (EWF)

Eddy Moukheiber, [Corine Bas](#) et [Lionel Flandin](#)

International Journal of Hydrogen Energy, **39**(6), (2014), pp. 2717-2723 [\[DOI: 10.1016/j.ijhydene.2013.03.031\]](#)

2014 - ACL-458

Polyethersulfone containing sulfonimide groups as proton exchange membrane fuel cells

Luca Assumma, [Cristina Iojoiu](#), Gulsen Albayrak Ari, [Laure Cointeaux](#) et [Jean-Yves Sanchez](#)

International Journal of Hydrogen Energy, **39**(6), (2014), pp. 2740-2750 [\[DOI: 10.1016/j.ijhydene.2013.07.090\]](#)

2014 - ACL-459

Diagnostic tools for PEMFCs: from conception to implementation

Catherine Cadet, Samir Jemei, [Florence Druart](#) et Daniel Hissel

International Journal of Hydrogen Energy, **Accepted**, (2014), [\[DOI: 10.1016/j.ijhydene.2014.04.163\]](#)

2014 - ACL-460

Corrosion resistance of Fe-based amorphous alloys

Walter Botta, J. Berger, Claudio Kiminami, [Virginie Roche](#), [Ricardo Nogueira](#) et C. Bolfarini

Journal of Alloys and Compounds, **586**, (2014), pp. S105-S110 [\[DOI: 10.1016/j.jallcom.2012.12.130\]](#)

2014 - ACL-461

Structure, sintering and electrical properties of new ionic conductor $\text{Ag}_4\text{Co}_7(\text{AsO}_4)_6$

R. Marzouki, A. Guesmi, [Samuel Georges](#), M. Zid et A. Driss

Journal of Alloys and Compounds, **586**, (2014), pp. 74-79 [\[DOI: 10.1016/j.jallcom.2013.09.213\]](#)

2014 - ACL-462

Fracture phenomena in micro- and nano-layered polycarbonate/poly (vinylidene fluoride-co-hexafluoropropylene) films under electric field for high energy density capacitors

Zheng Zhou, Matthew Mackey, Kehzen Yin, Lei Zhu, Donald Schuele, [Lionel Flandin](#) et

Eric Baer

Journal of Applied Polymer Science, **131**(4), (2014), [\[DOI : 10.1002/app.39877\]](https://doi.org/10.1002/app.39877)

2014 - ACL-463

Continuously regenerating Diesel Particulate Filters based on ionically conducting ceramics

Emil Obeid, Leonardo Lizarraga, Michalis Tsampas, [Anne Cordier](#), Antoinette Boréave, [Marlu César Steil](#), Gilbert Blanchard, Karine Pajot et Philippe Vernoux

Journal of Catalysis, **309**, (2014), pp. 87-96 [\[DOI : 10.1016/j.jcat.2013.09.004\]](https://doi.org/10.1016/j.jcat.2013.09.004)

2014 - ACL-464

Impact of the solute exclusion on the bed longitudinal diffusion coefficient and particle intra-tortuosity determined by ISEC

Véronique Wernert, [Renaud Bouchet](#) et Renaud Denoyel

Journal of Chromatography A, **1325**, (2014), pp. 179-185 [\[DOI : 10.1016/j.chroma.2013.12.029\]](https://doi.org/10.1016/j.chroma.2013.12.029)

2014 - ACL-465

Transport of selenium oxyanions through TiO₂porous media: Column experiments and multi-scale modeling

K. Nsir, [Lenka Švecová](#), Michel Sardin et Marie-Odile Simonnot

Journal of Contaminant Hydrology, **160**, (2014), pp. 30-41 [\[DOI : 10.1016/j.jconhyd.2014.02.004\]](https://doi.org/10.1016/j.jconhyd.2014.02.004)

2014 - ACL-466

Germanium content and strain in Si_{1-x}Ge_x alloys characterized by Raman spectroscopy

[Denis Rouchon](#), [Michel Mermoux](#), Denis Bertin et Jean-Michel Hartmann

Journal of Crystal Growth, **392**, (2014), pp. 66-73 [\[DOI : 10.1016/j.jcrysgro.2014.01.019\]](https://doi.org/10.1016/j.jcrysgro.2014.01.019)

2014 - ACL-467

The Effect of Structural Isomerism on Carbon Dioxide Sorption and Plasticization at the Interface of a Glassy Polymer Membrane

[Sylvie Neyertz](#) et [David Brown](#)

Journal of Membrane Science, **460**, (2014), pp. 213-228 [\[DOI : 10.1016/j.memsci.2014.03.002\]](https://doi.org/10.1016/j.memsci.2014.03.002)

2014 - ACL-468

Reversibility of Pt-Skin and Pt-Skeleton Nanostructures in Acidic Media

Julien Durst, Miguel Lopez-Haro, [Laetitia Dubau](#), [Marian Chatenet](#), [Yvonne Soldo-Olivier](#), Laure Guétaz, Pascale Bayle-Guillemaud et [Frédéric Maillard](#)

Journal of Physical Chemistry Letters, **5**(3), (2014), pp. 434-439 [\[DOI : 10.1021/jz4025707\]](https://doi.org/10.1021/jz4025707)

2014 - ACL-469

A non-conventional fluorinated separator in high-voltage graphite/LiNi_{0.4}Mn_{1.6}O₄ cells

C. Arbizzani, F. Colo, F. De Giorgio, M. Guidotti, Marina Mastragostino, [Fannie Alloin](#), Marco Bolloli, Yannick Molmeret et [Jean-Yves Sanchez](#)

Journal of Power Sources, **246**, (2014), pp. 299-304 [\[DOI : 10.1016/j.jpowsour.2013.07.095\]](#)

2014 - ACL-470

A numerical model for a soluble lead-acid flow battery comprising a three-dimensional honeycomb-shaped positive electrode

Alexandre Oury, Angel Kirchev et Yann Bultel

Journal of Power Sources, **246**, (2014), pp. 703-718 [\[DOI : 10.1016/j.jpowsour.2013.07.101\]](#)

2014 - ACL-471

Cycling of soluble lead flow cells comprising a honeycomb-shaped positive electrode

Alexandre Oury, Angel Kirchev et Yann Bultel

Journal of Power Sources, **In Press**, (2014), [\[DOI : 10.1016/j.jpowsour.2014.04.058\]](#)

2014 - ACL-472

A Fuel-Flexible Solid Oxide Fuel Cell Operating in Gradual Internal Reforming

Shayenne Nóbrega, Patrick Gélin, Samuel Georges, Marlu César Steil, Bruno Augusto, Fabio Noronha et Fabio Fonseca

Journal of the Electrochemical Society, **161**(3), (2014), pp. F354-F359 [\[DOI : doi:10.1149/2.107403jes\]](#)

2014 - ACL-473

Electrodeposition of heterogeneous Mn-Bi thin films from a sulfate-nitrate bath : nucleation mechanism and morphology

Salem Boudinar, Nassima Benbrahim, Baya Benfedda, Abdelaziz Kadri, Eric Chaînet et Lamia Hamadou

Journal of the Electrochemical Society, **161**(5), (2014), pp. D227-D234 [\[DOI : 10.1149/2.046405jes\]](#)

2014 - ACL-474

Photo-Cross-Linked Diblock Copolymer Micelles: Quantitative Study of Photochemical Efficiency, Micelles Morphologies and their Thermal Behavior

Dao Lê, Livie Liénafa, Trang Phan, Damien Deleruyelle, Renaud Bouchet, Sébastien Maria, Denis Bertin et Didier Gignes

Macromolecules, **47**(1), (2014), pp. 2420-2429 [\[DOI : 10.1021/ma5000656\]](#)

2014 - ACL-475

Charge Transport in Nanostructured PS–PEO–PS Triblock Copolymer Electrolytes

Renaud Bouchet, Trang Phan, Emmanuel Beaudoin, Didier Devaux, Patrick Davidson, Denis Bertin et Renaud Denoyel

Macromolecules, **47**(8), (2014), pp. 2659-2668 [\[DOI : 10.1021/ma500420w\]](#)

2014 - ACL-476

Carboxylated nanodiamonds are neither cytotoxic nor genotoxic on liver, kidney, intestine and lung human cell lines

V. Paget, J. Sergent, R. Grall, S. Altmeyer-Morel, Hugues Girard, Tristan Petit, C. Gesset, Michel Mermoux, Philippe Bergonzo, Jean-Charles Arnault et Sylvie

Chevillard

Nanotoxicology, **In Press**, (2014), [\[DOI : 10.3109/17435390.2013.855828\]](https://doi.org/10.3109/17435390.2013.855828)

2014 - ACL-477

Interfacial polarization and layer thickness effect on electrical insulation in multilayered polysulfone/poly(vinylidene fluoride) films

Jung-Kai Tseng, Saide Tang, Zheng Zhou, Matthew Mackey, Joel Carr, Richard Mu, [Lionel Flandin](#), Donald Schuele, Eric Baer et Lei Zhu

Polymer, **55**(1), (2014), pp. 8-14 [\[DOI : 10.1016/j.polymer.2013.11.042\]](https://doi.org/10.1016/j.polymer.2013.11.042)

2014 - ACL-478

Oxygen transport in amino-functionalized polyhedral oligomeric silsesquioxanes (POSS)

[Sylvie Neyertz](#), Praveena Gopalan, P. Brachet, A. Kristiansen, F. Männle et [David Brown](#)

Soft Materials, **12**(1), (2014), pp. 113-123 [\[DOI : 10.1080/1539445X.2013.781037\]](https://doi.org/10.1080/1539445X.2013.781037)

2014 - ACL-479

Chemical degradation of the encapsulation system in flexible ;panel as revealed by infrared and Raman microscopies

[Emilie Planes](#), Bernard Yrieix, [Corine Bas](#) et [Lionel Flandin](#)

Solar Energy Materials and Solar Cells, **122**, (2014), pp. 15-23 [\[DOI : 10.1016/j.solmat.2013.10.033\]](https://doi.org/10.1016/j.solmat.2013.10.033)

2014 - ACL-480

Structural properties of ultraviolet cured polysilazane gas barrier layers on polymer substrates

Arnaud Morlier, Stéphane Cros, Jean-Paul Garandet et [Nicole Albérola](#)

Thin Solid Films, **550**, (2014), pp. 85-89 [\[DOI : 10.1016/j.tsf.2013.10.140\]](https://doi.org/10.1016/j.tsf.2013.10.140)

2014 - ACL-481

A review of PEM fuel cell durability: materials degradation, local heterogeneities of aging and possible mitigation strategies

[Laetitia Dubau](#), [Luis Castanheira](#), [Frédéric Maillard](#), [Marian Chatenet](#), Olivier Lottin, Gaël Maranzana, Jérôme Dillet, Adrien Lamibrac, Jean-Christophe Perrin, Eddy Moukheiber, [Assma Elkaddouri](#), [Gilles De Moor](#), [Corine Bas](#), [Lionel Flandin](#) et Nicolas Caqué

Wiley Interdisciplinary Reviews: Energy and Environment, **In press**, (2014), [\[DOI : 10.1002/wene.113\]](https://doi.org/10.1002/wene.113)