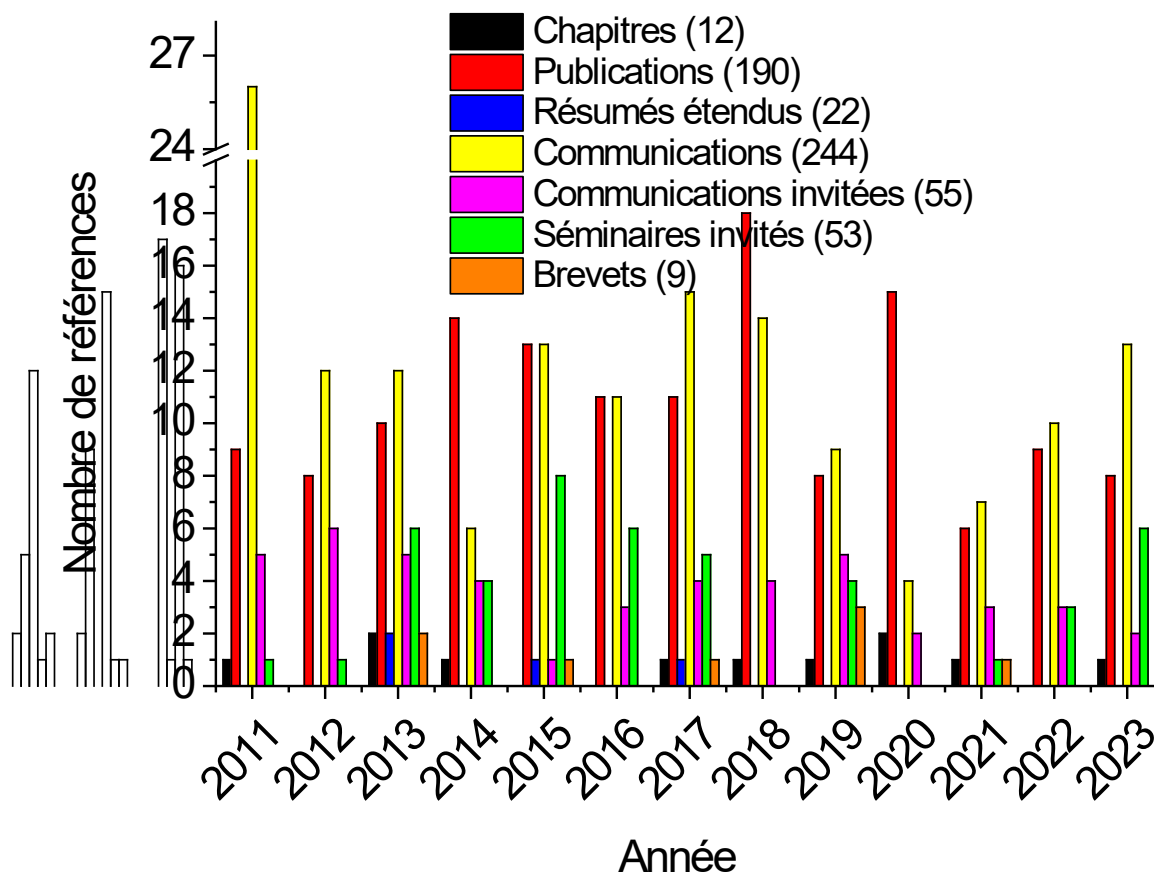


## Bibliography for Marian Chatenet on July 27<sup>th</sup> 2023 (Scopus)

- « h-factor » = 56
- Total citations : 9093
- ORCID : 0000-0002-9673-4775 ([orcid.org/0000-0002-9673-4775](https://orcid.org/0000-0002-9673-4775))



- 12 book chapters
- 190 publications in peer-reviewed journals
- 9 patents
- 22 extended abstracts (16 reviewed on full text and 6 on abstract)
- 234 communications in international conference with acts (53 invited)
- 10 communications in national conference with acts (2 invited)
- 54 invited seminars

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- CI-70** J. Rooke, C. Matos, R. Sescousse, T. Budtova, S. Berthon-Fabry, R. Mosdale, M. Chatenet, F. Maillard, Elaboration and Characterizations of Platinum Nanoparticles Supported on Cellulose-Based Carbon Aerogel, **oral com.**, 218<sup>th</sup> *ECS Meeting of the Electrochemical Society*, **Las Vegas** (2010) abstract #906
- CI-71** M. Chatenet, M. B. Molina Concha, R. B. de Lima, F. H. B. Lima <sup>2</sup>, E. A. Ticianelli, Mechanism of the Borohydride Oxidation Reaction on gold in alkaline medium, **oral com.**, *International Symposium on Electrocatalysis - Molecular Level Approach to Modern Applications*, **Kloster Irsee** (2010) abstract #2
- CI-72** J. Durst, L. Dubau, F. Maillard, **M. Chatenet**, J. André, E. Rossinot, Influence of PEMFC operating conditions on the durability of Pt<sub>3</sub>Co/C electrocatalysts, **affiche**, 60<sup>th</sup> *Annual Meeting of the ISE*, **Nice** (2010) abstract #1269
- CI-73** L. Dubau, F. Maillard, **M. Chatenet**, J. André, E. Rossinot, Degradation mechanisms of Pt<sub>3</sub>Co/C electrocatalysts in a 16 cells PEMFC stack, **affiche**, 60<sup>th</sup> *Annual Meeting of the ISE*, **Nice** (2010) abstract #1647
- CI-74** J. F. Rivera Zambrano, B. Molina Concha, **M. Chatenet**, N. Sergent, E. Ticianelli, F. H. B. Lima, R. B. de Lima, In situ spectroscopic studies of the mechanism of borohydride oxidation reaction on gold electrode, **oral com.**, 60<sup>th</sup> *Annual Meeting of the ISE*, **Nice** (2010) abstract #1658
- CI-75** A. C. Garcia, E. A. Ticianelli, **M. Chatenet**, Kinetics of oxygen reduction in presence of sodium borohydride in alkaline electrolyte, **oral com.**, 60<sup>th</sup> *Annual Meeting of the ISE*, **Nice** (2010) abstract #912
- CI-76** N. Caqué, M. Paris, **M. Chatenet**, E. Rossinot, R. Bousquet, E. Claude, Aging analysis of a PEMFC stack using uncoated metallic bipolar plates, **oral com.**, 60<sup>th</sup> *Annual Meeting of the ISE*, **Nice** (2010) abstract #2331
- CI-77** L. Dubau, F. Maillard, **M. Chatenet**, J. André, E. Rossinot, Nanoscale compositional changes and modification of the surface reactivity of Pt<sub>3</sub>Co/C electrocatalysts during PEMFC operation, **oral com. invited**, 60<sup>th</sup> *Annual Meeting of the ISE*, **Nice** (2010) abstract #1642
- CI-78** F. Maillard, L. Dubau, J. Durst, **M. Chatenet**, L. Guétaz, Surface reactivity, catalytic activity and durability of Pt<sub>3</sub>Co/C nanoparticles in PEMFCs, **oral com.**, *International Symposium on Portable Fuel Cells*, **Changxing** (2010)
- CI-79** N. Caqué, M. Paris, **M. Chatenet**, E. Rossinot, R. Bousquet, E. Claude, Characterisation of uncoated stainless steel for Proton Exchange Membrane Fuel Cell bipolar plates application, **oral com.**, *Fundamentals and Developments of Fuel Cells Conference*, **Grenoble** (2011) abstract #S1-O4
- CI-80** N. Job, F. Maillard, J.-P. Pirard, S. Berthon-Fabry, **M. Chatenet**, Pt/carbon xerogel catalysts

for PEM Fuel Cells, **oral com.**, *Fundamentals and Developments of Fuel Cells Conference, Grenoble* (2011) abstract #S2-O2

- CI-81** L. Dubau, J. Durst, F. Maillard, **M. Chatenet**, J. André, E. Rossinot, Degradation Mechanisms and Modification of the Electrocatalytic Activity for the ORR of Pt<sub>3</sub>Co/C nanoparticles during PEMFC operation, **oral com.**, *Fundamentals and Developments of Fuel Cells Conference, Grenoble* (2011) abstract #S8-O3
- CI-82** M. Ouattara-Brigaudet, S. Berthon-Fabry, C. Beauger, **M. Chatenet**, M. Sennour, P. Achard, Comparison of platinum deposit methods on carbon aerogels used in Proton Exchange Membrane Fuel Cells (PEMFC), **affiche**, *Fundamentals and Developments of Fuel Cells Conference, Grenoble* (2011) abstract #S2-P6
- CI-83** Y. Bultel, **M. Chatenet**, J.-P. Yonnet, D. Riu, F. Meunier, P. Paris, X. Oster, L. Antoni, M. Dupont, Hychain mini-trans: training activities, **affiche**, *Fundamentals and Developments of Fuel Cells Conference, Grenoble* (2011) abstract #S5-P11.
- CI-84** E. Rossinot, J. André, A. Montaut, M. Frotey, F. Maillard, **M. Chatenet**, L. Dubau, J. Durst, G. De Moor, C. Bas, L. Flandin, T. Martin, Feedback from the MDM project: investigations in MEA degradation mechanisms, **affiche**, *Fundamentals and Developments of Fuel Cells Conference, Grenoble* (2011) abstract # S6-P5.
- CI-85** B. Vion-Dury, **M. Chatenet**, L. Guétaz, F. Maillard, F.H.B. Lima, A study about the corrosion of carbon in PEMFC catalysts by DEMS, TEM and electrochemistry, **affiche**, *Fundamentals and Developments of Fuel Cells Conference, Grenoble* (2011) abstract # S8-P8.
- CI-86** L. Dubau, J. Durst, F. Maillard, **M. Chatenet**, J. André, E. Rossinot, Influence of PEMFC operating conditions on the durability of Pt<sub>3</sub>Co/C electrocatalysts, **affiche**, *Fundamentals and Developments of Fuel Cells Conference, Grenoble* (2011) abstract # S8-P13.
- CI-87** L. Dubau, J. Durst, F. Maillard, **M. Chatenet**, J. André, E. Rossinot, Durability of Pt<sub>3</sub>Co/C-based cathodes in a 16 cells PEMFC stack: macro / microstructural changes and degradation mechanisms, **affiche (Prix du meilleur poster étudiant)**. *Fundamentals and Developments of Fuel Cells Conference, Grenoble* (2011) abstract # S8-P14.
- CI-88** **M. Chatenet**, L'électrocatalyse des piles à combustible basse température - des limitations des PEMFC aux promesses des DBFC, **oral com. invited (keynote) – conférence thématique du thème 5. Journées d'électrochimie, Grenoble** (2011).
- CI-89** B. Molina Concha, M. Chatenet, F. B. H. Lima, E. A. Ticianelli, Electrocatalysis in low-temperature fuel cells: PEMFC vs. DBFC, **oral com. invited (plenary)**. *XVIII SIBEE-Simposio Brasileiro de Electroquímica e Eletroanalítica, Bento Gonçalves, Brazil* (2011).
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- CI-91** L. Dubau, J. Durst, F. Maillard, M. Chatenet, J. André, E. Rossinot, Heterogeneities of aging within a PEMFC MEA, **poster**. *62<sup>nd</sup> Annual Meeting of the ISE, Niigata* (2011) abstract # isel10985.
- CI-92** J. Durst, L. Dubau, F. Maillard, **M. Chatenet**, L. Guetaz, E. Rossinot, Voltammetric dealloying of Pt<sub>3</sub>Co C electrocatalysts: effect of the nanostructure on the catalyst performance, **poster**. *62<sup>nd</sup> Annual Meeting of the ISE, Niigata* (2011) abstract # ise1108992.

- CI-93** L. Dubau, J. Durst, L. Guétaz, F. Maillard, **M. Chatenet**, J. André, E. Rossinot, Formation of "hollow" Pt nanoparticles during PEMFC operation, **oral com.** *62<sup>nd</sup> Annual Meeting of the ISE, Niigata* (2011) abstract # ise110888.
- CI-94** B. Vion-Dury, **M. Chatenet**, V. Vivier, Presentation of an Electrochemical Dry Cell Based on Nafion for Kinetic Studies of Pt/C Nanoparticles for PEMFC, **poster**. *220<sup>th</sup> ECS Meeting of the Electrochemical Society, Boston* (2011) abstract # 949.
- CI-95** J. Durst, L. Dubau, F. Maillard, **M. Chatenet**, L. Guétaz, E. Rossinot, From Pt<sub>3</sub>Co/C to Pt-Hollow Electrocatalysts: Investigations through Several Accelerated Aging Protocols, **poster**. *220<sup>th</sup> ECS Meeting of the Electrochemical Society, Boston* (2011) abstract # 954.
- CI-96** M. B. Molina Concha, K. S. Freitas, M. Chatenet, F. H. B. Lima, E. A. Ticianelli, Mechanism of the Borohydride Oxidation Reaction on platinum electrodes in alkaline medium – is platinum a faradaic inefficient BOR catalyst?, **oral com. invited (keynote)**. *220<sup>th</sup> ECS Meeting of the Electrochemical Society, Boston* (2011) abstract # 1013.
- CI-97** B. Vion-Dury, M. Chatenet, L. Guétaz, Determination of Aging Markers Adapted to the Study of Pt/C Nanoparticles for PEMFC, **oral com.** *220<sup>th</sup> ECS Meeting of the Electrochemical Society, Boston* (2011) abstract # 1060.
- CI-98** L. Dubau, J. Durst, F. Maillard, **M. Chatenet**, J. André, E. Rossinot, Do PEMFC Cathode Catalyst Layers Age Homogeneously upon on Site Stack Operation?, **oral com.** *220<sup>th</sup> ECS Meeting of the Electrochemical Society, Boston* (2011) abstract # 1123.
- CI-99** L. Dubau, J. Durst, L. Guétaz, F. Maillard, **M. Chatenet**, J. André, E. Rossinot, From Pt<sub>3</sub>Co/C to Pt-Rich Hollow Particles: How Does Co Segregation Proceed during Real PEMFC Aging?, **oral com.** *220<sup>th</sup> ECS Meeting of the Electrochemical Society, Boston* (2011) abstract # 1197.
- CI-100** A. Garcia, F. Barros de Lima, E. Ticianelli, **M. Chatenet**, Evaluation of Oxygen Reduction Reaction in the Presence of Sodium Borohydride in Alkaline Electrolyte, **oral com.**, *220<sup>th</sup> ECS Meeting of the Electrochemical Society, Boston* (2011) abstract # 1558.
- CI-101** L. Dubau, J. Durst, F. Maillard, **M. Chatenet**, O. Lottin, G. Maranzana, E. Moukheiber, C. Bas, G. De-Moor, L. Flandin, J. André and E. Rossinot, Heterogeneities of performances and degradation of PEMFC MEA, **oral com. invited**, *2<sup>nd</sup> international workshop on degradation issues of fuel cells, Thessaloniki* (2011).
- CI-102** L. Dubau, J. Durst, F. Maillard, **M. Chatenet**, L. Guétaz, J. André, E. Rossinot, Formation of "hollow" Pt nanoparticles in real PEMFC conditions and its consequences on the ORR activity, *2<sup>nd</sup> international workshop on degradation issues of fuel cells, Thessaloniki* (2011).
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- CI-104** L. Dubau, J. Durst, F. Maillard, **M. Chatenet**, L. Guétaz, J. André, E. Rossinot, Highly dispersed Pt<sub>3</sub>Co/C nanoparticles: correlation between the fine nanostructure and the ORR activity, **oral com.**, *Electrocatalysis: Present and Future (an ELCAT meeting), Alicante* (2011).
- CI-105** O. Lottin, N. Carême, J. Dillet, A. Lamibrac, G. Maranzana, J. André, N. Caqué, E. Rossinot, A. Montaut, S. Moutin, E. Moukeiber, C. Bas, G. De-Moor, L. Flandin, L. Dubau, J. Durst, F. Maillard, **M. Chatenet**, Diagnostic of membrane electrode assembly



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- CI-106** F. Maillard, L. Dubau, J. Durst, **M. Chatenet**, L. Guétaz, J. André, E. Rossinot, Kirkendall effect-induced formation of Pt “hollow” particles from Pt<sub>3</sub>Co/C nanoparticles in real PEMFC conditions, **oral com. invited**, ACS meeting, **San Diego** (2012) abstract # 201
- CI-107** F. Maillard, L. Dubau, J. Durst, **M. Chatenet**, J. André, E. Rossinot, Durability of bimetallic alloys in PEMC: advances and controversies, **oral com. invited**, *63<sup>rd</sup> Annual Meeting of the ISE*, **Prague** (2012) abstract p. 59
- CI-108** J. Durst, F. Maillard, **M. Chatenet**, Effect of Cations on Fuel-cell Related Reactions in Acidic Media, **oral com.**, *63<sup>rd</sup> Annual Meeting of the ISE*, **Prague** (2012) abstract # Ise120250, p. 59
- CI-109** L. Dubau, J. Durst, F. Maillard, **M. Chatenet**, L. Guétaz, J. André, N. Caqué, E. Rossinot, Durability of Pt<sub>3</sub>Co/C cathode electrocatalyst during long-term real PEMFC operation, **oral com. invited**, *International Workshop on Characterization and quantification of MEA degradation processes*, **Grenoble** (2012) abstract p. 9
- CI-110** O. Lottin, N. Carême, J. Dillet, A. Lamibrac, G. Maranzana, J. Durst, L. Dubau, F. Maillard, M. Chatenet, L. Flandin, C. Bas, G. De Moor, A. El-Kaddouri, E. Moukheiber, A. Montaut, S. Moutin, P. Rival, N. Caqué, E. Rossinot, Multidisciplinary approach of MEA degradations in commercial PEMFC systems, **oral com.**, *International Workshop on Characterization and quantification of MEA degradation processes*, **Grenoble** (2012) abstract p. 12
- CI-111** M. B. Molina Concha, **M. Chatenet**, F. H. B. Lima, E. A. Ticianelli, Study of NH<sub>3</sub>BH<sub>3</sub> oxidation reaction on gold electrodes by in situ Fourier Transform InfraRed Spectroscopy and Differential Electrochemical Mass Spectrometry, **oral com. invited (keynote)**, ABAF 13, Brno (2012) abstract # 14
- CI-112** P.-Y. Olu, M. Rouhet, **M. Chatenet**, A. Bonnefont, E. Savinova, Study of the BH<sub>4</sub><sup>-</sup> electrooxidation mechanism on Pt catalyst using rotating ring-disk electrode (RRDE), **oral com.**, ABAF 13, Brno (2012) abstract # 16
- CI-113** A. Lamibrac, J. Durst, D. Spornjak, G. Maranzana, J. Dillet, S. Didierjean, O. Lottin, F. Maillard, L. Dubau, **M. Chatenet**, R. Mukundan, R. Borup, Internal Currents, CO<sub>2</sub> Emissions and Decrease of the Pt Electrochemical Surface Area during Fuel Cell Start-Up and Shut-Down, **oral com.**, PRiME ECS meeting, Hawaii (2012) abstract # 1343
- CI-114** J. Durst, A. Lamibrac, L. Dubau, F. Maillard, **M. Chatenet**, J. Dillet, G. Maranzana, O. Lottin, Relation between Local Loss of Performances in a Segmented PEMFC and Local Degradations of the Pt/C Cathode Catalyst, **oral com.**, PRiME ECS meeting, Hawaii (2012) abstract # 1345
- CI-115** M. B. Molina Concha, **M. Chatenet**, F. H. B. Lima, E. A. Ticianelli, Study of NH<sub>3</sub>BH<sub>3</sub> electrooxidation reaction on gold electrodes by *in situ* Fourier Transform InfraRed Spectroscopy and on-line Differential Electrochemical Mass Spectrometry, **oral com. invited**, International Symposium on Electrocatalysis: New Concepts and Approaches, Salinas do Maragogi – Brazil (2012) abstract # FUE-01
- CI-116** F. Maillard, L. Dubau, J. Durst, **M. Chatenet**, M. Lopez-Haro, L. Guétaz, P. Bayle-Guillemaud, J. André, N. Caqué, E. Rossinot, Formation of Pt Hollow Nanoparticles in PEMFC Through the Nanoscale Kirkendall Effect, **oral com. invited**, International Symposium on Electrocatalysis: New Concepts and Approaches, Salinas do Maragogi – Brazil (2012) abstract # STR-03

- CI-117 A. Garcia, J. J. Linares, E. Ticianelli, C. Cremers, **M. Chatenet**, Ethanol tolerant manganese oxide electrocatalysts for the oxygen reduction reaction in alkaline medium, **oral com. invited**, 223<sup>rd</sup> ECS Meeting of the Electrochemical Society, Toronto (2013) abstract # 2633.
- CI-118 A. Bach Delpuech, C. Cremers, K. Pinkwart, J. Tübke, **M. Chatenet**, Ethanol oxidation reaction (EOR) on Pt/C and Pt-Rh/C electrocatalysts: DEMS study, **poster**, 2<sup>nd</sup> International Conference on Materials for Energy: EnMat II, Karlsruhe (2013) abstract # 1.01-09.
- CI-119 A. Zubiaur, **M. Chatenet**, F. Maillard, S. Lambert, J.-P. Pirard, N. Job, The multiple SEA method: a method to synthesize Pt/carbon xerogel catalysts for Proton Exchange Membrane Fuel Cells (PEMFC), **oral com.**, Fundamentals and Developments of Fuel Cells Conference, Karlsruhe (2013) P032
- CI-120 L. Dubau, L. Castanheira, **M. Chatenet**, F. R. Nikkuni, E. A. Ticianelli, F. Maillard “Instability of carbon-supported Pt nanoparticles in model PEMFC environment: effect of intermediate characterizations, gas atmosphere and electrolyte”, **oral com. invited**, 59<sup>th</sup> International Conference of analytical sciences and spectroscopy, June 25-28<sup>th</sup> 2013, Mont-Tremblant, Canada
- CI-121 F. R. Nikkuni, Edson A. Ticianelli, L. Dubau, **M. Chatenet**, Identical Location Transmission Electron Microscopy in Polymer Electrolyte Environment – Application to the degradation of Pt/C and Pt<sub>3</sub>Co/C electrocatalysts under accelerated aging tests, **oral com.**, 224<sup>th</sup> ECS Meeting of the Electrochemical Society, San Francisco (2013) abstract # 1556.
- CI-122 L. Dubau, M. Lopez-Haro, J. Durst, L. Castanheira, **M. Chatenet**, P. Bayle-Guillemaud, L. Guetaz, F. Maillard, Pt-Based Nanoparticles and Carbon to the Test of PEMFC Operation, **oral com. invited (keynote)**, 224<sup>th</sup> ECS Meeting of the Electrochemical Society, San Francisco (2013) abstract # 1443.
- CI-123 J. Durst, M. Lopez-Haro, P. Bayle-Guillemaud, L. Guetaz, Y. Soldo-Olivier, **M. Chatenet**, F. Maillard, Probing structural changes of Pt<sub>3</sub>Co nanocatalysts by EELS and ex/in situ XAS measurement, **oral com.**, 224<sup>th</sup> ECS Meeting of the Electrochemical Society, San Francisco (2013) abstract # 1396.
- CI-124 **M. Chatenet**, B. Molina Concha, C. Ribeiro, P.-Y. Olu, Electrocatalysis of direct borohydride fuel cells – from the limitations to the promises, **oral com. invited**, 7<sup>th</sup> Bishop’s Lodge Workshop: Materials for Energy Conversion, Santa Fee (2013) abstract# 21.
- CI-125 **M. Chatenet**, Electrocatalysis of direct borohydride fuel cells – from the limitations to the promises, **oral com. invited**, 2<sup>nd</sup> lectures in electrochemistry, Alicante (2013) abstract# 8.
- CI-126 A. Bach Delpuech, C. Cremers, K. Pinkwart, J. Tübke, **M. Chatenet**, DEMS study of the ethanol oxidation reaction (EOR) on Pt/C and Pt<sub>3</sub>Rh<sub>1</sub>/C electrocatalysts at room temperature, **poster**, Arbeitsgemeinschaft Elektrochemischer Forschungsinstitutionen seminar, Bochum (2013).
- CI-127 L. Dubau, M. Lopez-Haro, L. Guetaz, P. Bayle-Guillemaud, **M. Chatenet**, F. Maillard, Pt “hollow” nanoparticles: toward the promising design of active and stable ORR electrocatalysts, **oral com.**, Fifth European Fuel Cell Technology & Applications Conference, Roma (2013) abstract # EFC13252.
- CI-128 A. Zubiaur, **M. Chatenet**, F. Maillard, S. D. Lambert, J.-P. Pirard, N. Job, Synthesis of Pt/Carbon Xerogel Electrocatalysts for PEM Fuel Cells by the Multiple SEA Method, **poster**, Journée scientifique GEPROC 2013 Procédés et Matériaux durables, Université de Liège, (15 novembre 2013)

- CI-129** A. Bach Delpeuch, C. Cremers, M. Chatenet, J. Tübke, DEMS study: Ethanol and acetaldehyde stripping on Pt/C electrocatalyst at room temperature, **oral com.**, *15<sup>th</sup> Topical Meeting of the International Society of Electrochemistry, Niagara falls* (2014) p. 54.
- CI-130** F. Maillard, L. Dubau, **M. Chatenet**, J. Durst, M. Lopez-Haro, L. Guétaz, P. Bayle-Guillemaud, Making Pt more active for the oxygen reduction reaction via “hollow” nanostructures, **oral com. invited**, *6<sup>th</sup> ElecNano, Paris* (2014).
- CI-131** L. Dubau, M. Lopez-Haro, J. Durst, L. Guétaz, P. Bayle-Guillemaud, **M. Chatenet**, F. Maillard, Beyond Conventional Electrocatalysts: “Hollow” Nanoparticles for Improved and Sustainable Oxygen Reduction Reaction Activity, **oral com. Invited (keynote)**, *15<sup>th</sup> International Conference Advanced Batteries, Accumulators and Fuel Cells, Brno* (2014).
- CI-132** F. Maillard, L. Dubau, **M. Chatenet**, J. Durst, M. Lopez-Haro, L. Guétaz, P. Bayle-Guillemaud, Making Pt more active for the oxygen reduction reaction via “hollow” nanostructures, **oral com. invited**, *65<sup>th</sup> Annual Meeting of the International Society of Electrochemistry, Lausanne* (2014) abstract #140263.
- CI-133** P.-Y. Olu, A. Bonnefont, E. R. Savinova, **M. Chatenet**, Towards a borohydride oxidation reaction mechanism on Pt and Au surface – an experimental and modelling study, **oral com. invited (keynote)**, *65<sup>th</sup> Annual Meeting of the International Society of Electrochemistry, Lausanne* (2014) abstract #140263.
- CI-134** A. Bach Delpeuch, C. Cremers, M. Chatenet, J. Tübke, Effect of the presence of adsorbates on the initiation of the ethanol oxidation reaction on Pt/C and Pt-based Rh and Sn bi- and trimetallic electrocatalysts: A DEMS Study, **oral com.**, *GDCh Electrochemistry 2014, Mainz* (2014).
- CI-135** S. Berthon-Fabry, L. Dubau, Y. Ahmad, K. Guerin, M. Chatenet, Fluorinated Pt/carbon aerogels as electrocatalysts with improved corrosion-resistance for Proton Exchange Membrane Fuel Cell, **oral com.**, *6<sup>th</sup> international conference on Fundamental and Development of Fuel Cells 2015, Toulouse* (2015) abstract #36.
- CI-136** L. Testut, G. Lainé, S. Berthon-Fabry, L. Guetaz, G. Cognard, M. Chatenet, F. Maillard, S. Cavaliere, D. Jones, C. Beauger, Doped (Nb, Ta and V) titanium oxide as catalyst support for proton exchange membrane fuel cell (PEMFC) cathode, **oral com.**, *6<sup>th</sup> international conference on Fundamental and Development of Fuel Cells 2015, Toulouse* (2015) abstract #67.
- CI-137** L. Dubau, L. Castanheira, **M. Chatenet**, F. Maillard, J. Dillet, G. Maranzana, S. Abbou, O. Lottin, G. De Moor, A. El Kaddouri, C. Bas, L. Flandin, E. Rossinot, N. Caqué, Heterogeneities of Ageing in a PEMFC Stack: Links Between Membrane Pinholes, Carbon Corrosion and End-of-Life, **oral com.**, *227<sup>th</sup> ECS Meeting of the Electrochemical Society, Chicago* (2015) abstract #1541.
- CI-138** S. Pylypko, **M. Chatenet**, M. Cretin, U. Demirci, Synthesis and Characterization of Sodium Octahydrotriborate NaB<sub>3</sub>H<sub>8</sub>, a Potential Fuel for Direct Liquid-Fed Fuel Cell, **oral com.**, *ECS Conference on Electrochemical Energy Conversion & Storage with SOFC–XIV, Glasgow* (2015) abstract #51757.
- CI-139** D. C. Oliveira, **M. Chatenet**, M. H. B. Lima, High Performance of Carbon-Supported Nickel-Platinum Nanocatalysts for Hydrazine Electrooxidation in Alkaline Electrolyte, **oral com.**, *ECS Conference on Electrochemical Energy Conversion & Storage with SOFC–XIV, Glasgow* (2015) abstract #53871.
- CI-140** P.-Y. Olu, A. Bonnefont, M. Rouhet, S. Bozdech, E. R. Savinova, N. Job, **M. Chatenet**, Dual role of hydroxide adsorption for borohydride electrooxidation reaction on Platinum,

- oral com.**, *17<sup>th</sup> Topical Meeting of the International Society of Electrochemistry, Saint Malo* (2015) abstract #Mon s1c17:50.
- CI-141** S. Pylypko, **M. Chatenet**, M. Cretin, U. Demirci, Synthesis and characterization of sodium octahydrotriborate NaB<sub>3</sub>H<sub>8</sub>, a potential fuel for direct liquid-fed fuel cell, **oral com.**, *5<sup>th</sup> European PEFC and H<sub>2</sub> Forum, Lucern* (2015) abstract #B1305.
- CI-142** M. Chatenet, L. Dubau, J. Durst, L. Castanheira, F. Maillard, A. Lamibrac, J. Dillet, G. Maranzana, O. Lottin, A. El Kaddouri, G. De Moor, C. Bas, L. Flandin, E. Rossinot, and N. Caqué, Various Scales of Aging Heterogeneities upon PEMFC Operation: A Link Between Local MEA Materials Degradation and the Cell Performance, **oral com. invited (plenary)**, *228<sup>th</sup> ECS Meeting of the Electrochemical Society, Phoenix* (2015) abstract #1305.
- CI-143** M. Chatenet, P. Y. Olu, A. Bonnefont, N. Job, E. R. Savinova, Experimental and Modelling Insights into the Borohydride Electrooxidation Reaction Mechanism at Platinum Electrodes, **oral com.**, *228<sup>th</sup> ECS Meeting of the Electrochemical Society, Phoenix* (2015) abstract # 1237.
- CI-144** A. Zadick, **M. Chatenet**, L. Dubau, A. Serov, P. Atanassov, U. Demirci, Instability of Commercial Pt/C and Pd/C Electrocatalysts in Alkaline Media, **oral com.**, *228<sup>th</sup> ECS Meeting of the Electrochemical Society, Phoenix* (2015) abstract #1382.
- CI-145** D. C. de Oliveira, W. J. Paschoalino, **M. Chatenet**, E. A. Ticianelli, F. H. B. de Lima, Borohydride Electro-Oxidation on Ni-Based Electrocatalysts: Investigation of Electrocatalytic Activity and Hydrolysis Process, **oral com.**, *228<sup>th</sup> ECS Meeting of the Electrochemical Society, Phoenix* (2015) abstract #1234.
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- CI-166** F. Labbé, Y. Ahmad, K. Guerin, B. Molina Concha, **M. Chatenet**, R. Metkemeijer, S. Berthon-Fabry, Carbonaceous materials coated with tin dioxide nanoparticles as catalyst supports for proton exchange membrane fuel cells, *5<sup>th</sup> International Conference on Multifunctional, Hybrid and Nanomaterials*, **oral com., Lisbon, Portugal** (2017) abstract SYM4.44
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- CI-170** R. M. E. Hjelm, Y. Garsany, R. W. Atkinson III, R. O. Stroman, K. Swider-Lyons, C. Lafforgue, **M. Chatenet**, Sodium borohydride oxidation on Pt and/or Pd-based electrodes in hydrogen peroxide direct borohydride fuel cells, *232<sup>nd</sup> ECS of the Electrochemical Society*, **oral com., National Harbor, USA** (2017) abstract 1614
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- CI-176** R. Chattot, T. Asset, F. Micoud, C. Nayoze-Coynel, L. Dubau, F. Maillard, **M. Chatenet**, Platinum-based PEMFC electrodes – can electrodes with low Pt loading be durable?, *233<sup>rd</sup> meeting of the Electrochemical Society*, **oral com. invited (keynote - tutorial), Seattle, USA** (2018) abstract I01-1587
- CI-177** C. Lafforgue, **M. Chatenet**, R. W. Atkinson III, K. Swider-Lyons, H. Miller, D. R. Dekel, Investigation of Pd and Pd-CeO<sub>2</sub> Based Carbon-Supported Electrocatalysts for the Electrooxidation of Borohydride in Direct Borohydride Fuel Cell, *233<sup>rd</sup> meeting of the Electrochemical Society*, **oral com., Seattle, USA** (2018) abstract I04-1727
- CI-178** T. Asset, Y. Ahmad, F. Labbé, N. Batisse, M. Dubois, K. Guerin, S. Berthon-Fabry, R. Metkemeijer, L. Dubau, F. Maillard, **M. Chatenet**, Electrochemical Stability of Pt Nanoparticles Supported on a Wide Library of Carbon Supports, Either Used Bare, or Modified By Fluorination or Tin Oxide Deposits, *233<sup>rd</sup> meeting of the Electrochemical Society*, **oral com., Seattle, USA** (2018) abstract I04-1733
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- CI-180** C. Lafforgue, L. Dubau, F. Maillard, **M. Chatenet**, Instability and Degradation Mechanism of Platinum-Group Metal (PGM)-Based Carbon Supported Electrocatalysts in Alkaline Medium, *233<sup>rd</sup> meeting of the Electrochemical Society*, **poster, Seattle, USA** (2018) abstract Z01-2539
- CI-181** D.A. Finkelstein, P. Bonin, **M. Chatenet**, Dichromate Flow Batteries - A Breakthrough Grid-Level Energy Storage Technology, *IRES*, **poster, Dusseldorf, Allemagne** (2018) abstract 266
- CI-182** J. André, N. Caqué, E. Rossinot, E. Claude, **M. Chatenet**, L. Dubau, F. Maillard, L. Flandin, C. Bas, G. De Moor, O. Lottin, G. Maranzana, Axane commitment for a sustainable, reliable, and field proven power source through partnership with laboratories and design efforts, *IHTEC*, **oral com., Alanya, Turquie** (2018) abstract #135
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- CI-184** **M. Chatenet**, When heterogeneous catalysis drives innovation in fuel cell electrocatalysis, *PREPA12*, **oral com. invited (plenary), Louvain la Neuve, Belgique** (2018) abstract IL01
- CI-185** C. Niether S. Faure, A. Bordet, J. Deseure, J. Carrey, B. Chaudret, A. Rouet, **M. Chatenet**, Magnetic heating of FeC core Ni shell nanoparticles as an efficient means to enhance alkaline water electrolysis, *International Symposium on Electrocatalysis*, **oral com. invited, Szczyrk, Pologne** (2018) abstract p. 11
- CI-186** A.G. Oshchepkov, A. Bonnefont, G. Braesch, **M. Chatenet**, E.R. Savinova, The Influence of Surface State on the Electrocatalytic Activity of Ni in Alkaline Media, *International Symposium on Electrocatalysis*, **oral com., Szczyrk, Pologne** (2018) abstract p. 118
- CI-187** V. L. Oliveira, Y. Soldo-Olivier, E. A. Ticianelli, **M. Chatenet**, Eric Sibert, Tuning borohydride electro-oxidation using Pd layers on Pt(111), *14<sup>th</sup> International Fischer Symposium*, **oral com., Kloster Seon, Allemagne** (2018)

- CI-188** R. M. E. Hjelm, R. W. Atkinson III, Y. Garsany, R. O. Stroman, K. Swider-Lyons, C. Lafforgue, **M. Chatenet**, Sodium Borohydride Oxidation on Varied Anode Compositions in a Hydrogen Peroxide-Direct Borohydride Fuel Cell, *Aimes ECS meeting 2018*, **oral com., Cancun, Mexico** (2018) abstract 113113
- CI-189** C. Lafforgue, L. Dubau, F. Maillard, **M. Chatenet**, Is catalyst durability granted in alkaline fuel cell?, *3<sup>rd</sup> International Fuel Cells Workshop - Israel Hosted by the Israeli Fuel Cells Consortium (in the framework of INREP)*, **oral com. Invited (keynote)**, Tel Aviv, Israel (2018) abstract Oct-31, 14:00
- CI-190** G. Braesch, C. Lafforgue, E. Savinova, A. Bonnefont, G. Maranzana, **M. Chatenet**, Pros and cons of direct borohydride fuel cells: an electrocatalysis and electrocatalysts prospect, *Fundamentals & Development of Fuel Cells (FDFC 2019)*, **oral com. Invited (keynote)**, Nantes (2019)
- CI-191** M. Trégaro, F. Maillard, C. Geantet, **M. Chatenet**, Anode electrocatalysts for the electrochemical purification and compression of hydrogen, *Fundamentals & Development of Fuel Cells (FDFC 2019)*, **oral com., Nantes** (2019)
- CI-192** C. Lafforgue, F. Maillard, L. Dubau, **M. Chatenet**, Shedding light on the degradation mechanism of PGM based carbon-supported electrocatalysts in alkaline media, *Fundamentals & Development of Fuel Cells (FDFC 2019)*, **oral com., Nantes** (2019)
- CI-193** V. Gatard, C. Niether, S. Faure, A. Bordet, J. Deseure, J. Carrey, B. Chaudret, A. Rouet, **M. Chatenet**, Alkaline water electrolysis enhanced by an alternative magnetic field: promises and bottlenecks, *25<sup>th</sup> Topical ISE Meeting of the International Society of electrochemistry*, **oral com. Invited, Toledo, Spain** (2019) Mon-s2-9:20
- CI-194** S. Ould Amara, **M. Chatenet**, S. Didierjean, J. Dillet, G. Maranzana, Operating Heterogeneities Along a Direct Borohydride Fuel Cell, *25<sup>th</sup> Topical ISE Meeting of the International Society of electrochemistry*, **oral com. Toledo, Spain** (2019) Mon-s2-11:40
- CI-195** G. Cognard, F. Claudel, L. Sola-Hernandez, G. Ozouf, C. Beauger, **M. Chatenet**, L. Dubau, F. Maillard, Benefits and Limitations of Metal-Oxide Supports in Proton-exchange Membrane Fuel Cells and Water Electrolyzers, *235<sup>th</sup> Meeting of the Electrochemical Society*, **oral com. Invited (keynote)**, Dallas, USA (2019) abstract L04-1972
- CI-196** C. Lafforgue, F. Maillard, L. Dubau, **M. Chatenet**, Degradation of PGM-based Carbon Supported Electrocatalysts in Alkaline Media Studied by in situ Fourier Transform Infrared Spectroscopy, *70<sup>th</sup> Annual Meeting of the International Society of Electrochemistry*, **oral com. Invited, Durban, South Africa** (2019) abstract S3-TU-15:40
- CI-197** G. Braesch, A. G. Oshchepkov, A. Bonnefont, E. R. Savinova, **M. Chatenet**, Controlling the State of Surface of Nickel to Maintain Optimal Borohydride Oxidation Reaction Performances, *70<sup>th</sup> Annual Meeting of the International Society of Electrochemistry*, **oral com., Durban, South Africa** (2019) abstract S3-TU-16:40
- CI-198** **M. Chatenet**, Durability of carbon-supported nanostructured electrocatalysts in alkaline environments: more noble is not necessarily more stable! *Insights into Gas Diffusion Electrodes: From Fundamentals to Industrial Applications*, **oral com. Invited (plenary)**, Magdeburg, Allemagne (2019)
- CI-199** V. Caldeira, L. Dubau, J. Thiel, **M. Chatenet**, Improving Zinc Porous Electrode Architecture for Secondary Alkaline Battery, *Batteries Event 2019*, **oral com., Nice** (2019) abstract # Wednesday october 23<sup>rd</sup>, 11:45
- CI-200** A. G. Oshchepkov, G. Braesch, G. Rostamikia, G. Maranzana, A. Bonnefont, M. J. Janik, **M. Chatenet**, E. R. Savinova, Borohydride Electrooxidation (BOR) on Nickel: Towards

Understanding of the Reaction Mechanism, *71<sup>th</sup> Annual Meeting of the International Society of Electrochemistry*, **oral com. Invited, Belgrade, Serbia** (2020) abstract 18-2020-09-04-11:35

- CI-201** G. Braesch, A.G. Oshchepkov, A. Bonnefont, G. Maranzana, Z. Wang, S. Sankarasubramanian, V. Ramani, P.G. Santori, F. Jaouen, E.R. Savinova, **M. Chatenet**, High-Performance Direct Borohydride Fuel Cells using Non-PGM electrocatalysts, *238<sup>th</sup> Meeting of the Electrochemical Society - PRiME 2020 meeting*, **oral com., Hawaii, USA** (2020) abstract I01E-2386
- CI-202** C. Lafforgue, F. Vandenberghe, R. Riase, M. Trégaro, M. Heitzmann, P. Schott, J.-F. Blachot, F. Micoud, **M. Chatenet**, Benchmarking carbon-supported Pt-based oxygen reduction reaction electrocatalysts for PEMFC cathodes, *238<sup>th</sup> Meeting of the Electrochemical Society - PRiME 2020 meeting*, **oral com. Invited (keynote), Hawaii, USA** (2020) abstract I01D-2319
- CI-203** H. Doan, T. Morais, **M. Chatenet**, Surface Poisoning Induced By PGM-Based Catalyst Degradation in Alkaline Media and Self-Recovery By "CO-like" Stripping, *238<sup>th</sup> Meeting of the Electrochemical Society - PRiME 2020 meeting*, **oral com., Hawaii, USA** (2020) abstract I01E-2380
- CI-204** S. Touhami, L. Dubau, J. Mainka, **M. Chatenet**, J. Dillet, O. Lottin, Anode Monitoring by ElectroChemical Impedance Spectroscopy in Polymer Electrolyte Membrane Fuel Cells, *Modval 17*, **oral com., EPFL, Sion, Suisse** (2021) abstract #
- CI-205** G. Braesch, V. Martin, R. Chattot, A. Oshchepkov, A. Bonnefont, E. R. Savinova, **M. Chatenet**, Unveiling sodium borohydride oxidation mechanism on palladium electrodes by several *in situ* coupled techniques, *Italian Virtual Workshop on Fuel Cells 2021 (IVWFC 2021)*, **oral com. Invited (keynote), Visio** (2021) abstract WedMarch17-14:00-14:30
- CI-206** G. Braesch, A. G. Oshchepkov, A. Bonnefont, G. Maranzana, G. Rostamikia, M. J. Janik, E. R. Savinova, **M. Chatenet**, Electrodeposited Ni-Based Electrodes for High-Performance Borohydride Oxidation Reaction, *239<sup>th</sup> Meeting of the Electrochemical Society - 18<sup>th</sup> International Meeting on Chemical Sensors*, **oral com. Invited, Chicago, Visio** (2021) abstract L06-1916
- CI-207** R. Chattot, I. Martens, G. Braesch, E. Sibert, L. Dubau, F. Maillard, **M. Chatenet**, J. Drnec, Revealing Nanocatalysts Electrochemical Adsorption Trends from Synchrotron X-Ray Diffraction, *239<sup>th</sup> Meeting of the Electrochemical Society - 18<sup>th</sup> International Meeting on Chemical Sensors*, **oral com., Chicago, Visio** (2021).
- CI-208** H. Doan, C. Lafforgue, **M. Chatenet**, Durability studies of platinum group metal-based carbon-supported nanoparticles in alkaline environments, *Current Trends in Electrochemistry*, **oral com. Invited, Paris, France** (7 - 9 July 2021).
- CI-209** F. Vandenberghe, P. Schott, F. Micoud, A. Morin, **M. Chatenet**, Coupling Experiment and Modelling to Characterize and Predict Performances of PEMFC, *240<sup>th</sup> Meeting of the Electrochemical Society*, **oral com., Orlando, Visio** (2021) abstract 150697
- CI-210** R. Sgarbi, H. Doan, **M. Chatenet**, Tailoring the metallic and oxide sites of Pd/C and Ni/C catalyst for optimum Hydrogen Oxidation Reaction (HOR) and durability in alkaline media, *240<sup>th</sup> Meeting of the Electrochemical Society*, **oral com., Orlando, Visio** (2021) abstract 152056
- CI-211** H. Doan, R. Sgarbi, N. Borchtchoukova, Y. Wijsboom, G. Finkelshtain, **M. Chatenet**, Comparing different nanoparticles' protecting layers that can slow down the degradation of



- Pd-Ni based catalyst during Hydrogen Oxidation Reaction (HOR) in alkaline media, *240<sup>th</sup> Meeting of the Electrochemical Society*, **oral com., Orlando, Visio** (2021) abstract 151763
- CI-212** H. Doan, R. Sgarbi, **M. Chatenet**, Hydrogen Oxidation Reaction (HOR) on Carbon-Capped Pd/C in Alkaline Media, *241<sup>st</sup> Meeting of the Electrochemical Society*, **oral com. Invited, Vancouver** (2022) abstract L05-2049
- CI-213** R. Sgarbi, H. Doan, **M. Chatenet**, Carbon-Capped Monometallic and Bimetallic Catalysts for Hydrogen Oxidation Reaction (HOR) and Their Positive Features on Durability in Alkaline Conditions, *241<sup>st</sup> Meeting of the Electrochemical Society*, **oral com., Vancouver** (2022) abstract L01-1902
- CI-214** H. Doan, R. Sgarbi, **M. Chatenet**, The Behavior of Carbon-Coated Nanoparticles in Oxidizing and Reducing Gas Environment in Environment TEM (E-TEM) Mode, *241<sup>st</sup> Meeting of the Electrochemical Society*, **oral com., Vancouver** (2022) abstract L05-2081
- CI-215** A. E. Illoul, V. Caldeira, **M. Chatenet**, L. Dubau, Approaches Towards Improving Zinc-Nickel Batteries Performance, *241<sup>st</sup> Meeting of the Electrochemical Society*, **oral com., Vancouver** (2022) abstract A01-0021
- CI-216** P. Schott, F. Micoud, A. Morin, **M. Chatenet**, Modeling of platinum oxides formation and re-reduction: a performance model for O<sub>2</sub> reduction reaction, *18<sup>th</sup> Symposium on Modeling and Experimental Validation of Electrochemical Energy Technologies*, **oral com., Hohenkammer, Germany** (March 2022)
- CI-217** P. Schott, F. Micoud, A. Morin, **M. Chatenet**, Modeling of platinum oxides formation and re-reduction: a performance model for O<sub>2</sub> reduction reaction, *18<sup>th</sup> Symposium on Modeling and Experimental Validation of Electrochemical Energy Technologies*, **oral com., Hohenkammer, Germany** (March 2022)
- CI-218** R. Riase, **M. Chatenet**, J. Durst, C. Lafforgue, Benchmarking Oxygen reduction reaction catalysts using a gas diffusion electrode, *2022 Fuel Cells Gordon Research Conference*, **Poster, Bryant University, USA** (August 2022)
- CI-219** F. Vandenberghe, **M. Chatenet**, F. Micoud, A. Morin, P. Schott, Coupling Experiments and Modeling: Towards a Better Understanding of PEMFC Operation, *32<sup>nd</sup> Topical Meeting of the International Society of Electrochemistry*, **oral com., Stockholm, Sweden** (19 - 22 June 2022) (Tue s2)15:15
- CI-220** A. Bukowski, F. Deschamps, J.-F. Vanhumbek, J. Deseure, **M. Chatenet**, Etude de l'influence des hydroxydes de nickel sur les performances en HER pour l'électrolyse alcaline de l'eau, *Journées d'Electrochimie 2021 (organisées en 2022)*, **Poster, Mons, Belgique** (2022) P2-09
- CI-221** F. Dubelley, L. Svecova, M. Robert, F. Guillet, C. Bas, L. Dubau, C. Iojoiu, **M. Chatenet**, Recycling process of Membrane Electrode Assembly of PEMFC, *Electrolyzer and Fuel Cell Recycling Workshop*, **oral com. Invited, Washington DC, USA** (8<sup>th</sup> sept. 2022)
- CI-222** L. Magnier, C. Pascal, V. Roche, E. Sibert, I. Shchedrina, R. Bousquet, V. Parry, **M. Chatenet**, Highly-active oxygen evolution electrodes based on activated industrial Ni-Fe alloys, *35<sup>th</sup> Topical Meeting of the International Society of Electrochemistry*, **oral com., Gold Coast, Australia** (7-11<sup>th</sup> May 2023) ise230018
- CI-223** M. Tempelaere, M. Zimmermann, **M. Chatenet**, Study and optimization of vertically aligned carbon nanotube composites and catalysts for fuel cell applications, *European Fuel Cell Forum EFCF2023*, **oral com., Lucerne, Switzerland** (4-7 July 2023) B0205
- CI-224** L. Magnier, G. Cossard, C. Pascal, V. Roche, E. Sibert, I. Shchedrina, R. Bousquet, V. Parry, **M. Chatenet**, Activation of industrial Ni-Fe alloys for alkaline oxygen evolution,



74th Annual Meeting of the International Society of Electrochemistry, **oral com. Invited (keynote)**, Lyon, France (3-8 september 2023) ise230536

- CI-225** Q. Labarde, L. Dubau, F. Micoud, **M. Chatenet**, Carbon-capped PtNi-alloy cathodic electrocatalysts for PEMFC, *74th Annual Meeting of the International Society of Electrochemistry*, **oral com., Lyon, France** (3-8 september 2023) ise230991
- CI-226** F. Guillet, **M. Chatenet**, F. Druart, L. Svecova, L. Dubau, Is electrochemical leaching of PEMFC platinum-based catalysts feasible?, *74th Annual Meeting of the International Society of Electrochemistry*, **oral com., Lyon, France** (3-8 september 2023) ise232813
- CI-227** C. Roiron, R. Riase, V. Martin, K. Kumar, R. Chattot, **M. Chatenet**, M. Sultana Ripa, S. Brimaud, L. Pierinet, J. Drnec, F. Maillard, L. Dubau, Preferentially-shaped PtNi/C ORR nanocatalysts – Challenges towards their integration in MEA, *74th Annual Meeting of the International Society of Electrochemistry*, **oral com. Invited (keynote)**, Lyon, France (3-8 september 2023) **isexxx**
- CI-228** R. Riase, J. Dillet, J. Durst, L. Dubau, G. Maranzana, **M. Chatenet**, Degradation study of Pt<sub>3</sub>Co catalytic layers in 25 cm<sup>2</sup> Proton Exchange Membrane Fuel Cell setup – A segmented cell and material study, *74th Annual Meeting of the International Society of Electrochemistry*, **oral com., Lyon, France** (3-8 september 2023) ise232584
- CI-229** R. Sgarbi, H. Doan, Q. Labarde, **M. Chatenet**, One-Pot Synthesis of Tailored Carbon-Coated Metal Nanoparticles for Durable Alkaline Hydrogen Oxidation Reaction Electrocatalysis, *74th Annual Meeting of the International Society of Electrochemistry*, **oral com., Lyon, France** (3-8 september 2023) ise231080
- CI-230** T. Faverge, A. Bonnefont, **M. Chatenet**, C. Coutanceau, Hydrogen as a Byproduct from the Electrocatalytic Conversion of Glucose into Value Added Compounds, *74th Annual Meeting of the International Society of Electrochemistry*, **oral com., Lyon, France** (3-8 september 2023) ise230294

### **Hall 27/07/2023**

- CI-231** T. Faverge, A. Bonnefont, **M. Chatenet**, C. Coutanceau, Electrocatalytic Conversion of Glucose into Hydrogen and Value-Added Compounds on Gold and Nickel Catalysts, *244th Meeting of the Electrochemical Society*, **oral com., Gothenburg, Sweden** (8-12 october 2023) F04-1421
- CI-232** C. Bas, F. Dubelley, M. Crouillere, L. Dubau, **M. Chatenet**, S. Touhami, O. Lottin, A. El Kaddouri, J. Dillet, J. Mainka, C. Nayoze-Coynel, S. Rosini, Y. Bultel, Mechanism of Ionomer Degradation as a Consequence of Defective Anode PEMFC, *244th Meeting of the Electrochemical Society*, **oral com., Gothenburg, Sweden** (8-12 october 2023) I01C-1918
- CI-233** R. Sgarbi, H. Doan, N. Bibent, S. Amigues, F. Jaouen, **M. Chatenet**, Improved Activity and Durability of Carbon-Coated Pd and PdNi Anode Catalysts in AEMFC, *244th Meeting of the Electrochemical Society*, **oral com., Gothenburg, Sweden** (8-12 october 2023) I01E-2029
- CI-234** R. Sgarbi, H. Doan, N. Bibent, S. Amigues, F. Jaouen, **M. Chatenet**, The Positive Effects of Carbon-Coating Layers on Protecting the Nanoparticle Towards Poisoning Ions or Gases, *244th Meeting of the Electrochemical Society*, **oral com., Gothenburg, Sweden** (8-12 october 2023) I01E-2030

### **Communications in national conferences**

- CN-1** M. Chatenet, M. Arousseau, R. Durand, Deux utilisations non classiques de l'électrode disque-anneau (EDAT) : mesure de coefficient de diffusion et étude de réaction sur

nanoparticules, **affiche**, *Société chimique de France*, **Grenoble** (1999)

- CN-2** C. Lebouin, Y. Soldo-Olivier, P. Millet, **M. Chatenet**, R. Faure, Dépôt en sous potentiel de palladium sur monocristaux de platine : étude du système Pd-H en basse dimensionnalité, **oral com.**, *Electrochimie dans les nanosciences – Société chimique de France*, **Paris** (2006) CO18
- CN-3** E. Guilminot, A. Corcella, F. Maillard, **M. Chatenet**, L'ultramicroélectrode à cavité : un outil performant pour la caractérisation d'électrocatalyseur nanoparticules de Pt/C de piles à combustible basse température, **oral com.**, *Electrochimie dans les nanosciences – Société chimique de France*, **Paris** (2006) A14
- CN-4** M. Boinet, D. Marlot, A. Proust, J. C. Lenain, J. Bernard, **M. Chatenet**, F. Dalard, S. maximovitch, G. Denuault, R. Nogueira, F. Huet, Coupling of Acoustic Emission and Electrochemical Techniques, **oral com.**, *EMCR*, **Paris** (2006)
- CN-5** M. B. Molina-Concha, M. Chatenet, J.-P. Diard, Etude du mécanisme d'électrooxydation de borohydrure sur électrode tournante d'or, **oral com. et affiche**, *XX<sup>ème</sup> forum sur les impédances électrochimiques*, **Paris** (2007) communication matinale #8
- CN-6** F. Maillard, **M. Chatenet**, Electrocatlyse et vieillissement des matériaux dans une PEMFC, **oral com. invited**, *Journées thématiques de la société française de thermique - Piles à combustible à membrane PEMFC, Modélisation et retour d'expérience*, **Grenoble** (2008)
- CN-7** G. Parrou, M. Chatenet, J.-P. Diard, Etude de l'électrooxydation de NaBH<sub>4</sub> sur électrode à disque tournant d'or par spectroscopie d'impédance électrochimique – Vers un mécanisme à plusieurs étapes (E) successives, **oral com. et affiche**, *XXI<sup>ème</sup> forum sur les impédances électrochimiques*, **Paris** (2008) communication matinale #2
- CN-8** G. Parrou, M. B. Molina-Concha, M. Chatenet, J. P. Diard, Etude du mécanisme d'électrooxydation de borohydrure sur électrode tournante d'or par spectroscopie d'impédance électrochimique, **affiche**, *Journées de printemps de la Société chimique de France - section Rhône-Alpes*, **Grenoble** (2008)
- CN-9** M. B. Molina-Concha, **M. Chatenet**, Electrooxydation du borohydrure de sodium sur électrodes de Pt, Ag et alliages Pt-Ag en milieu alcalin, **affiche**, *Journées de printemps de la Société chimique de France - section Rhône-Alpes*, **Grenoble** (2008)
- CN-10** M. Chatenet, Apport des matériaux fluorés à la filière hydrogène : catalyseurs et électrodes de PEMFC, *Journée thématique du Réseau Français du Fluor, sur l'Apport des matériaux fluorés à la filière Hydrogène*, **oral com. Invited**, **Le Mans** (3 octobre 2022)

#### Invited seminars

- SI-1** M. Chatenet, Electrocatalysis applied to fuel cells, *University of Minnesota*, **Minneapolis** (2003)
- SI-2** M. Chatenet, Les piles à combustible basse température, *Séminaire annuel des enseignants de physique-chimie du secondaire*, **Grenoble** (2004)
- SI-3** M. Chatenet, The electrocatalysis of oxygen electroreduction: from the basics to the industrial processes, *VINCI School 2006: Electrocatalysis, Materials in Energy Saving, Sensing, Electrosynthesis and Environmental Issues*, **Milano** (2006)
- SI-4** M. Chatenet, L'hydrogène de poche : quelle pile à combustible au quotidien ?, *Conférence midi-science, Université Joseph Fourier*, **Grenoble** (2007)
- SI-5** M. Chatenet, La pile à combustible : mythe ou réalité ? Quelle pile à combustible dans notre quotidien ?, *Réunion des anciens cadres supérieurs et dirigeants de Rhône-Poulenc agrochimie*, **Chazay d'Azergues** (2007)

- SI-6** M. Chatenet, L'ultramicroélectrode à cavité (UMEC) en électrocatalyse – principe, exemples et difficultés expérimentales, *Workshop UMEC*, **Paris** (2007)
- SI-7** M. Chatenet, M. B. Molina-Concha, G. Parrour, J.-P. Diard, Contribution à la caractérisation du mécanisme et de la cinétique d'électrooxydation de l'anion borohydrure en milieu alcalin, *Journées Toulousaines d'électrochimie*, **Toulouse** (2008)
- SI-8** M. Chatenet, Pt redistribution within PEMFC MEAs upon ageing – causes and consequences on the PEMFC performance, *Universidade de São Paulo*, **São Carlos** (2008)
- SI-9** M. Chatenet, First insights into the mechanism of the Borohydride Oxidation Reaction (BOR) on gold from Electrochemical Impedance Spectroscopy (EIS), *Universidade de São Paulo*, **São Carlos** (2009)
- SI-10** L. Dubau, J. Durst, E. Guilminot, F. Maillard, M. Chatenet, Dégradation des couches actives de PEMFC à base de nanoparticules de Pt ou PtCo supportées sur carbone de grande aire spécifique, *Laboratoire d'Énergétique et de Mécanique Théorique et Appliquée (LEMTA)*, **Nancy** (2011)
- SI-11** M. Chatenet, B. Molina Concha, L. Dubau, E. Guilminot, J. Durst, F. Maillard, Electrocatalysis in low-temperature fuel cells; from the limitations of PEMFC to the promises of DBFC, *University of Southampton*, **Southampton** (2012)
- SI-12** B. Vion-Dury, J. Durst, E. Guilminot, F. Maillard, M. Chatenet, L'ultramicroélectrode à cavité en électrocatalyse – forces et faiblesses vis-à-vis des outils de caractérisation classiques d'électrocatalyseurs de PEMFC, *Ecole thématique « Electrochimie pour les microréacteur, microcapteur, microbatteries »*, **Autrans** (2013)
- SI-13** M. Chatenet, Les piles à combustible basse température : rêve ou cauchemar ? (des problèmes à leur solutions), Conférences de la Fédération de Chimie de Marseille, **Marseille** (2013)
- SI-14** M. Chatenet, Study of  $\text{NH}_3\text{BH}_3$  electrooxidation reaction on gold electrodes by in situ Fourier Transform InfraRed Spectroscopy and on-line Differential Electrochemical Mass Spectrometry, *Institut National Polytechnique de Lorraine*, **Nancy** (2013)
- SI-15** M. Chatenet, Les piles à combustible basse température pour le véhicule électrifié : rêve inaccessible ? *Réunion des anciens cadres supérieurs et dirigeants de Rhône-Poulenc agrochimie*, **Chazay d'Azergues** (2013)
- SI-16** M. Chatenet, Non-covalent interaction of cations with metal/carbon and oxide/carbon surfaces – application to oxygen reactions in aqueous Li-air batteries), *Universidade de São Paulo*, **São Carlos** (2013)
- SI-17** M. Chatenet, Les piles à combustible basse température pour le véhicule électrique, *Réunion de l'ADEPT*, **Talloires** (2013)
- SI-18** M. Chatenet, Electrocatalysis of the borohydride oxidation reaction at Pt electrodes in alkaline medium, *Université de Strasbourg*, **Strasbourg** (2014)
- SI-19** M. Chatenet, Electrocatalysis of Pt/MO<sub>x</sub> (M = Ti, W) materials in PEMFC environment, Saint Gobain CREE, **Cavaillon** (2014)
- SI-20** M. Chatenet, Direct Alkaline Fuel Cells: an alternative to H<sub>2</sub>-fed PEMFC? Promises and hurdles, BEST seminar, **Grenoble** (2014)
- SI-21** M. Chatenet, Behavior of platinum and gold electrodes towards the borohydride oxidation reaction in alkaline medium, 1<sup>st</sup> *TEC seminar of the Technische Universität München*, **Brixen Im Thale** (2014).

- SI-22** M. Chatenet, Heterogeneities of aging upon PEMFC degradation – Why identical location transmission electron microscopy in polymer electrolyte environment is worth a study, *2<sup>nd</sup> TEC seminar of the Technische Universität Munchen*, **Brixen Im Thale, Austria** (2015).
- SI-23** M. Chatenet, Electrocatalysis at LEPMI, Team of interfacial electrochemistry, *Institut for Energy (IFE)*, **Kjeller, Norway** (2015).
- SI-24** M. Chatenet, Electrocatalysis at LEPMI, Team of interfacial electrochemistry, *SINTEF - NTNU*, **Trondheim, Norway** (2015).
- SI-25** M. Chatenet, Identical-location transmission electron microscopy, a tool to understand PEMFC electrocatalysts degradations, *séminaire IRCE Lyon*, **Lyon** (2015).
- SI-26** F. R. Nikkuni, J. Durst, L. Castanheira, E. A. Ticianelli, L. Dubau, F. Maillard, M. Chatenet, Identical-location transmission electron microscopy, a tool to understand PEMFC electrocatalysts degradations, *University of New Mexico*, **Albuquerque, USA** (2015).
- SI-27** P.-Y. Olu, A. Bonnefont, N. Job, E. Savinova, M. Chatenet, Experimental and modelling insights into the borohydride electrooxidation reaction mechanism at platinum electrodes, *Los Alamos National Laboratory*, **Los Alamos, USA** (2015).
- SI-28** L. Dubau, M. Chatenet, F. Maillard, Instability of carbon-supported Pt-based nanoparticles in model and real proton-exchange membrane fuel cell environment, *PC-Kolloquium Universität Ulm*, **Ulm, Allemagne** (2015).
- SI-29** M. Chatenet, Les piles à combustible dans le contexte du développement durable, *Conférence « Olympiades de Chimie »*, Mercredi 16 Décembre 2015, **Grenoble** (2015).
- SI-30** M. Chatenet, Les piles à combustible dans le contexte du développement durable, *Journées nationales des cordées de la réussite Collèges-Lycées - Grandes Écoles - Universités – Entreprises, Cordée « GRENOBLE SCIENCES »*, Jeudi 4 février 2016, **Grenoble** (2016).
- SI-31** M. Chatenet, Durability issues in low-temperature fuel cells: from systems operated on the field to model accelerated stress-test, *3<sup>rd</sup> TEC seminar of the Technische Universität Munchen*, **Brixen Im Thale, Austria** (2016).
- SI-32** M. Chatenet, Les piles à combustible dans le contexte du développement durable, *Séminaire IUF, section Grenoble*, **Grenoble** (8 Juin 2016).
- SI-33** M. Chatenet, Les piles à combustible dans le contexte du développement durable, *Journée Scientifique de l'ARC Energies*, **Lyon** (27 Juin 2016).
- SI-34** J. Durst, L. Castanheira, L. Dubau, F. Maillard, M. Chatenet, Durability issues in low-temperature fuel cells: from systems operated on the field to model accelerated stress-test, *Univ. Shinshu*, **Nagano, Japon** (15 Septembre 2016).
- SI-35** M. Chatenet, Influence of the (nano)structuration of PtM/C electrocatalysts on their activity, selectivity and durability, *Journée Scientifique de l'IFPEN*, **Lyon** (2 Décembre 2016).
- SI-36** L. Dubau, F. Maillard, M. Chatenet, Méthodes et outils utilisés pour élucider les mécanismes de dégradation d'électrocatalyseurs de PEMFC, *40 ans plateforme CMTC*, **Grenoble** (22 mai 2017)
- SI-37** M. Chatenet, Insights into on-the-field PEMFC degradation: linking cell performance to local materials degradation, *Laplace & SAFRAN*, **Toulouse** (10 juillet 2017)
- SI-38** M. Chatenet, Electrocatalysis in gas diffusion electrodes, *Freie Universität Berlin*, **Berlin** (24 juillet 2017)
- SI-39** C. Lafforgue, A. Zadick, L. Dubau, M. Chatenet, Degradation mechanisms of metal-based carbon-supported electrocatalysts for alkaline fuel cells, *Helmholtz Zentrum Berlin*, **Berlin** (25 juillet 2017)

- SI-40** M. Chatenet, Borohydride oxidation reaction (BOR) efficiency and mechanism at gold and platinum electrodes, *Naval Research Laboratory, Washington DC, USA* (25 aout 2017)
- SI-41** C. Lafforgue, G. Braesch, L. Dubau, F. Maillard, M. Chatenet, Durability of carbon-supported electrocatalysts in alkaline electrolytes for fuel cell applications, Atelier « Electrochimie à Montpellier », Labex CheMISyst, **Montpellier** (20 juin 2019)
- SI-42** C. Lafforgue, A. Zadick, L. Dubau, F. Maillard, M. Chatenet, Alkaline durability of carbon-supported electrocatalysts: More noble is not necessarily more stable! *3<sup>rd</sup> TEC seminar of the Technische Universität Munchen, Monte Isola, Italy* (26-29 August 2019)
- SI-43** M. Chatenet, Electrocatalysts' durability in alkaline medium: is more noble more stable? *University of British Columbia, Vancouver, Canada* (18 October 2019)
- SI-44** M. Chatenet, Can we split water with stainless steel electrodes? *Queens University, Kingston, Canada* (21 October 2019)
- SI-45** M. Chatenet, L'hydrogène décarboné, notre futur carburant ?. *INP'partners, Grenoble* (25 November 2021)
- SI-46** M. Chatenet, L'hydrogène décarboné, notre futur carburant ? De la production à l'utilisation de H<sub>2</sub>. *Réunion des anciens cadres supérieurs et dirigeants de Rhône-Poulenc agrochimie, Dardilly* (25 March 2022)
- SI-47** M. Chatenet, Low-temperature hydrogen technologies - highlights on LEPMI's input. *French American workshop at GIANT, Grenoble* (30 June 2022)
- SI-48** M. Chatenet, Nickel: a versatile catalytic material for alkaline environments. *Department Seminar, Center for Clean Energy Engineering, University of Connecticut, Storrs, USA* (22 July 2022)
- SI-49** M. Chatenet, Advantages and drawbacks of (alkaline) direct borohydride fuel cells. *EPFL Valais/Wallis in Sion, Sion, Suisse* (16 January 2023)
- SI-50** R. Riase, C. Lafforgue, F. Vandenberghe, F. Micoud, A. Morin, M. Arenz, J. Durst, M. Chatenet, Benchmarking carbon-supported Pt-based Oxygen Reduction Reaction (ORR) electrocatalysts for PEMFC cathodes. *ICPEES – Université de Strasbourg, Strasbourg* (23 January 2023)
- SI-51** M. Chatenet, Part I: Efficient oxygen evolution on stainless steel electrodes; Part II: Benchmarking carbon-supported Pt-based Oxygen Reduction Reaction (ORR) electrocatalysts for PEMFC cathodes. *University of Auckland, Aucland, New Zealand* (12 May 2023)
- SI-52** M. Chatenet, Benchmarking Pt-based Oxygen Reduction Reaction (ORR) electrocatalysts for PEMFC cathodes. *University of New South Wales, Sydney, Australia* (16 May 2023)
- SI-53** M. Chatenet, Part I: Efficient oxygen evolution on stainless steel electrodes; Part II: Benchmarking carbon-supported Pt-based Oxygen Reduction Reaction (ORR) electrocatalysts for PEMFC cathodes. *University of Sydney, Sydney, Australia* (17 May 2023)
- SI-54** M. Chatenet, Highly active alkaline oxygen evolution electrodes based on industrial nickel-iron alloys. *Karlsruhe Institute of Technology, Karlsruhe, Germany* (5 July 2023)



