

1. Electrolyte Based on Easily Synthesized, Low Cost Triphenolate–Borohydride Salt for High Performance Mg(TFSI)₂-Glyme Rechargeable Magnesium Batteries
S. Hebié, H. P. K. Ngo, J.-C. Leprêtre, C. Ijoiu, L. Cointeaux, R. Berthelot, F. Alloin
ACS Applied Materials & Interfaces, **9** (2017) 28377-28385 [DOI : [10.1021/acsmami.7b06022](https://doi.org/10.1021/acsmami.7b06022)]
2. Beyond Strain and Ligand Effects: Microstrain-Induced Enhancement of the Oxygen Reduction Reaction Kinetics on Various PtNi/C Nanostructures
R. Chattot, T. Asset, P. Bordet, J. Drnec, L. Dubau, F. Maillard
ACS Catalysis, **7** (2017) 398-408 [DOI : [10.1021/acscatal.6b02356](https://doi.org/10.1021/acscatal.6b02356)]
3. NiO_x-Pt/C nanocomposites: Highly active electrocatalysts for the electrochemical oxidation of hydrazine
D. C. de Oliveira, W. Silva, M. Chatenet, F. H. B. Lima
Applied Catalysis B: Environmental, **201** (2017) 22-28 [DOI : [10.1016/j.apcatb.2016.08.007](https://doi.org/10.1016/j.apcatb.2016.08.007)]
4. Benefits and limitations of Pt nanoparticles supported on highly porous antimony-doped tin dioxide aerogel as alternative cathode material for proton-exchange membrane fuel cells
G. Cognard, G. Ozouf, C. Beauger, G. Berthomé, D. Riassetto, L. Dubau, R. Chattot, M. Chatenet, F. Maillard
Applied Catalysis B: Environmental, **201** (2017) 381-390 [DOI : [10.1016/j.apcatb.2016.08.010](https://doi.org/10.1016/j.apcatb.2016.08.010)]
5. Optimizing ionic conduction of poly(oxyethylene) electrolytes through controlling the cross-link density
A. Thiam, C. Antonelli, C. Ijoiu, F. Alloin, J.-Y. Sanchez
Electrochimica Acta, **240** (2017) 307-315 [DOI : [10.1016/j.electacta.2017.04.046](https://doi.org/10.1016/j.electacta.2017.04.046)]
6. Influence of morphology and crystalline structure of TiO₂ nanotubes on their electrochemical properties and apatite-forming ability
F. Hilario, V. Roche, R. P. Nogueira, A. Moreira Jorge Junior
Electrochimica Acta, **245** (2017) 337-349 [DOI : [10.1016/j.electacta.2017.05.160](https://doi.org/10.1016/j.electacta.2017.05.160)]
7. Molybdenum effect on the Sulfide Stress Corrosion of a super martensitic stainless steel in sour environment highlighted by Electrochemical Impedance Spectroscopy
M. Monnot, V. Roche, R. Estevez, M. Mantel, R. P. Nogueira
Electrochimica Acta, **252** (2017) 58-66 [DOI : [10.1016/j.electacta.2017.08.165](https://doi.org/10.1016/j.electacta.2017.08.165)]
8. Compatibility of C₆₀ grafted polystyrene/P3OT: Towards the extrusion of photoactive materials
A. Nourdine, L. Perrin, C. Carrot, E. Baer, L. Flandin, N. D. Albérola
European Polymer Journal, **96** (2017) 1-9 [DOI : [10.1016/j.eurpolymj.2017.09.001](https://doi.org/10.1016/j.eurpolymj.2017.09.001)]
9. Impedance and Raman Spectroscopy Study of Effect of H₂S on Ni-YSZ SOFC Anodes
H. H. Mai Thi, N. Rosman, N. Sergent, T. Pagnier
Fuel Cells, **17** (2017) 367-377 [DOI : [10.1002/fuce.201600182](https://doi.org/10.1002/fuce.201600182)]
10. Two-dimensional model of low-pressure PEM electrolyser: Two-phase flow regime, electrochemical modelling and experimental validation
F. Aubras, J. Deseure, J.-J. A. Kadjo, I. Dedigama, J. Majasan, B. Grondin-Perez, J.-P. Chabriat, D. J. L. Brett
International Journal of Hydrogen Energy, **42** (2017) 26203-26216 [DOI : [10.1016/j.ijhydene.2017.08.211](https://doi.org/10.1016/j.ijhydene.2017.08.211)]
11. Environmental assessment of proton exchange membrane fuel cell platinum catalyst recycling
L. Duclos, M. Lupsea, G. Mandil, L. Švecová, P.-X. Thivel, V. Laforest
Journal of Cleaner Production, **142** (2017) 2618-2628 [DOI : [10.1016/j.jclepro.2016.10.197](https://doi.org/10.1016/j.jclepro.2016.10.197)]
12. Design of La_{2-x}Pr_xNiO_{4+d} SOFC cathodes: a compromise between electrochemical performance and thermodynamic stability
R. K. Sharma, S. K. Cheah, M. Burriel, L. Dessemond, J.-M. Bassat, E. Djurado
Journal of Materials Chemistry A, **5** (2017) 1120-1132 [DOI : [10.1039/C6TA08011A](https://doi.org/10.1039/C6TA08011A)]
13. Light assisted rechargeable batteries: a proof of concept with BODIPY derivatives acting as a combined photosensitizer and electrical storage unit
T. Godet-Bar, J.-C. Leprêtre, P. Poizot, F. Massuyeau, E. Faulques, A. Christen, F. Minassian, J.-F. Poisson, F. Loiseau, F. Lafolet
Journal of Materials Chemistry A, **5** (2017) 1902-1905 [DOI : [10.1039/C6TA10177A](https://doi.org/10.1039/C6TA10177A)]

14. Surface exchange polarization vs. gas concentration polarization in permeation through mixed ionic-electronic membranes
M. C. Steil, J. Fouletier, P.-M. Geffroy
Journal of Membrane Science, **541** (2017) 457-464 [DOI : [10.1016/j.memsci.2017.07.028](https://doi.org/10.1016/j.memsci.2017.07.028)]
15. Controlling the shape change and dendritic growth in Zn negative electrodes for application in Zn/Ni batteries
V. Caldeira, R. Rouget, F. Fourgeot, J. Thiel, F. Lacoste, **L. Dubau, M. Chatenet**
Journal of Power Sources, **350** (2017) 109-116 [DOI : [10.1016/j.jpowsour.2017.03.069](https://doi.org/10.1016/j.jpowsour.2017.03.069)]
16. Nickel-based electrocatalysts for ammonia borane oxidation: enabling materials for carbon-free-fuel direct liquid alkaline fuel cell technology
A. Zadick, L. Dubau, K. Artyushkova, A. Serov, **P. Atanassov, M. Chatenet**
Nano Energy, **37** (2017) 248-259 [DOI : [10.1016/j.nanoen.2017.05.035](https://doi.org/10.1016/j.nanoen.2017.05.035)]
17. Atomic-Scale Snapshots of the Formation and Growth of Hollow PtNi/C Nanocatalysts
R. Chattot, T. Asset, J. Drnec, P. Bordet, J. Nelayah, **L. Dubau, F. Maillard**
Nano Letters, **17** (2017) 2447-2453 [DOI : [10.1021/acs.nanolett.7b00119](https://doi.org/10.1021/acs.nanolett.7b00119)]
18. Direct observation of lithium polysulfides in lithium–sulfur batteries using *operando* X-ray diffraction
J. Conder, **R. Bouchet**, S. Trabesinger, C. Marino, L. Gubler, C. Villevieille
Nature Energy, **2** (2017) 17069 [DOI : [10.1038/nenergy.2017.69](https://doi.org/10.1038/nenergy.2017.69)]
19. Multiscale characterization of a lithium/sulfur battery by coupling *operando* X-ray tomography and spatially-resolved diffraction
G. Tonin, G. Vaughan, **R. Bouchet, F. Alloin**, M. Di Michiel, L. Boutafa, J.-F. Colin, C. Barchasz
Scientific Reports, **7** (2017) 2755 [DOI : [10.1038/s41598-017-03004-4](https://doi.org/10.1038/s41598-017-03004-4)]
20. Remarkable impact of grains boundaries on the chemical delithiation kinetics of LiFePO₄
M. Lachal, R. Bouchet, A. Boulaineau, S. Surblé, **C. Rossignol, F. Alloin, S. Obbade**
Solid State Ionics, **300** (2017) 187-194 [DOI : [10.1016/j.ssi.2016.12.010](https://doi.org/10.1016/j.ssi.2016.12.010)]
21. Effect of porosity on the electrical conductivity of LAMOX materials
H. El Khal, A. Cordier, N. Batis, **E. Siebert, S. Georges, M. C. Steil**
Solid State Ionics, **304** (2017) 75-84 [DOI : [10.1016/j.ssi.2017.03.028](https://doi.org/10.1016/j.ssi.2017.03.028)]
23. Extrusion of a nano-ordered active layer for organic photovoltaic cells
A. Nourdine, L. Flandin, N. D. Albérola, L. Perrin, E. Planes, A. Hiltner, E. Baer
Sustainable Energy & Fuels, **1** (2017) 2016-2027 [DOI : [10.1039/C7SE00340D](https://doi.org/10.1039/C7SE00340D)]
24. Controlling Microstructure–Transport Interplay in Highly Phase-Separated Perfluorosulfonated Aromatic Multiblock Ionomers via Molecular Architecture Design
H.-D. Nguyen, L. Assumma, P. Judeinstein, R. Mercier, L. Porcar, J. Jestin, **C. Iojoiu**, S. Lyonnard
ACS Applied Materials & Interfaces, **9** (2017) 1671-1683 [DOI : [10.1021/acsami.6b12764](https://doi.org/10.1021/acsami.6b12764)]
25. Elucidating the Mechanisms Driving the Aging of Porous Hollow PtNi/C Nanoparticles by Means of CO_{ads} Stripping
T. Asset, R. Chattot, J. Drnec, P. Bordet, N. Job, **F. Maillard, L. Dubau**
ACS Applied Materials & Interfaces, **9** (2017) 25298-25307 [DOI : [10.1021/acsami.7b05782](https://doi.org/10.1021/acsami.7b05782)]
26. Implementing Structural Disorder as a Promising Direction for Improving the Stability of PtNi/C Nanoparticles
L. Dubau, J. Nelayah, **T. Asset, R. Chattot, F. Maillard**
ACS Catalysis, **7** (2017) 3072-3081 [DOI : [10.1021/acscatal.7b00410](https://doi.org/10.1021/acscatal.7b00410)]
27. Utilization of Torrefied Coffee Grounds as Reinforcing Agent To Produce High-Quality Biodegradable PBAT Composites for Food Packaging Applications
H. Moustafa, C. Guizani, C. Dupont, V. Martin, M. Jeguirim, A. Dufresne
ACS Sustainable Chemistry & Engineering, **5** (2017) 1906-1916 [DOI : [10.1021/acssuschemeng.6b02633](https://doi.org/10.1021/acssuschemeng.6b02633)]
28. Temperature-dependence of oxygen reduction activity on Pt/C and PtCr/C electrocatalysts synthesized from microwave-heated diethylene glycol method

- N. E. Sahin, T. W. Napporn, [L. Dubau](#), F. Kadirgan, J.-M. Léger, K. B. Kokoh
Applied Catalysis B: Environmental, **203** (2017) 72-84 [DOI : [10.1016/j.apcatb.2016.09.026](https://doi.org/10.1016/j.apcatb.2016.09.026)]
29. Durable direct ethanol anode-supported solid oxide fuel cell
[M. C. Steil](#), S. D. Nóbrega, [S. Georges](#), P. Gélin, S. Uhlenbruck, F. C. Fonseca
Applied Energy, **199** (2017) 180-186 [DOI : [10.1016/j.apenergy.2017.04.086](https://doi.org/10.1016/j.apenergy.2017.04.086)]
30. Sulfide stress corrosion study of a super martensitic stainless steel in H₂S sour environments: Metallic sulfides formation and hydrogen embrittlement
M. Monnot, [R. P. Nogueira](#), [V. Roche](#), G. Berthomé, E. Chauveau, R. Estevez, M. Mantel
Applied Surface Science, **394** (2017) 132-141 [DOI : [10.1016/j.apsusc.2016.10.072](https://doi.org/10.1016/j.apsusc.2016.10.072)]
31. Effect of Atomic Vacancies on the Structure and the Electrocatalytic Activity of Pt-rich/C Nanoparticles: A Combined Experimental and Density Functional Theory Study
O. Le Bacq, A. Pasturel, [R. Chattot](#), B. Previdello, J. Nelayah, [T. Asset](#), [L. Dubau](#), [F. Maillard](#)
ChemCatChem, **9** (2017) 2324-2338 [DOI : [10.1002/cctc.201601672](https://doi.org/10.1002/cctc.201601672)]
32. Insights into the mechanism of electrocatalysis of the oxygen reduction reaction by a porphyrinic metal organic framework
[M. Lions](#), J.-B. Tommasino, [R. Chattot](#), B. Abeykoon, N. Guillou, T. Devic, A. Demessence, L. Cardenas, [F. Maillard](#), A. Fateeva
Chemical Communications, **53** (2017) 6496-6499 [DOI : [10.1039/C7CC02113E](https://doi.org/10.1039/C7CC02113E)]
33. Pt Nanoparticles Supported on Niobium-Doped Tin Dioxide: Impact of the Support Morphology on Pt Utilization and Electrocatalytic Activity
[G. Cognard](#), G. Ozouf, C. Beauger, I. Jiménez-Morales, S. Cavaliere, D. J. Jones, J. Rozière, [M. Chatenet](#), [F. Maillard](#)
Electrocatalysis, **8** (2017) 51-58 [DOI : [10.1007/s12678-016-0340-z](https://doi.org/10.1007/s12678-016-0340-z)]
34. Stability of carbon-supported palladium nanoparticles in alkaline media: A case study of graphitized and more amorphous supports
S. A. Kabir, [A. Zadick](#), [P. Atanassov](#), [L. Dubau](#), [M. Chatenet](#)
Electrochemistry Communications, **78** (2017) 33-37 [DOI : [10.1016/j.elecom.2017.03.017](https://doi.org/10.1016/j.elecom.2017.03.017)]
35. Chemical modification of N-methylphenothiazine to lead to interesting and potential organic material for lithium battery
[R. Guilmot](#), [F. Alloin](#), F. Molton, [J.-C. Leprêtre](#)
Electrochimica Acta, **232** (2017) 182-191 [DOI : [10.1016/j.electacta.2017.02.143](https://doi.org/10.1016/j.electacta.2017.02.143)]
36. New approach to design solid block copolymer electrolytes for 40 °C lithium metal battery operation
[A. Lassagne](#), E. Beaudoin, A. Ferrand, T. N. T. Phan, P. Davidson, [C. Iojoiu](#), [R. Bouchet](#)
Electrochimica Acta, **238** (2017) 21-29 [DOI : [10.1016/j.electacta.2017.03.221](https://doi.org/10.1016/j.electacta.2017.03.221)]
37. Degradation mechanism of La_{0.6}Sr_{0.4}Co_{0.2}Fe_{0.8}O_{3-d}/Gd_{0.1}Ce_{0.9}O_{2-d} composite electrode operated under solid oxide electrolysis and fuel cell conditions
M. Hubert, J. Laurencin, D. Ferreira Sanchez, S. Pylypko, M. Morales, A. Morata, B. Morel, D. Montinaro, F. Lefebvre-Joud, [E. Siebert](#)
Electrochimica Acta, **241** (2017) 459-476 [DOI : [10.1016/j.electacta.2017.05.011](https://doi.org/10.1016/j.electacta.2017.05.011)]
38. Electrochemical impedance spectroscopy of a Li–S battery: Part 1. Influence of the electrode and electrolyte compositions on the impedance of symmetric cells
J. Conder, C. Villevieille, S. Trabesinger, P. Novák, L. Gubler, [R. Bouchet](#)
Electrochimica Acta, **244** (2017) 61-68 [DOI : [10.1016/j.electacta.2017.05.041](https://doi.org/10.1016/j.electacta.2017.05.041)]
39. Sodium polymer electrolytes composed of sulfonated polysulfone and macromolecular/molecular solvents for Na-batteries
C. Martinez-Cisneros, [C. Antonelli](#), B. Levenfeld, A. Várez, [J.-Y. Sanchez](#)
Electrochimica Acta, **245** (2017) 807-813 [DOI : [10.1016/j.electacta.2017.05.175](https://doi.org/10.1016/j.electacta.2017.05.175)]
40. Insights into the stability of Pt nanoparticles supported on antimony-doped tin oxide in different potential ranges
[G. Cognard](#), G. Ozouf, C. Beauger, M. Lopez-Haro, [M. Chatenet](#), [F. Maillard](#)
Electrochimica Acta, **245** (2017) 993-1004 [DOI : [10.1016/j.electacta.2017.05.178](https://doi.org/10.1016/j.electacta.2017.05.178)]

- 41.** Foreword
V. Di Noto, [J.-Y. Sanchez](#), A. Várez Álvarez
Electrochimica Acta, **245** (2017) 1075-1076 [DOI : [10.1016/j.electacta.2017.07.144](https://doi.org/10.1016/j.electacta.2017.07.144)]
- 42.** Influence of sintering temperature on morphology and electrochemical performance of LSCF/GDC composite films as efficient cathode for SOFC
Ö. Çelikbilek, [E. Siebert](#), D. Jauffrè, C. L. Martin, [E. Djurado](#)
Electrochimica Acta, **246** (2017) 1248-1258 [DOI : [10.1016/j.electacta.2017.06.070](https://doi.org/10.1016/j.electacta.2017.06.070)]
- 43.** Application of the transmission line model for porous electrodes to analyse the impedance response of TiO₂ nanotubes in physiological environment
[F. Hilario](#), [V. Roche](#), [A. Moreira Jorge Junior](#), [R. P. Nogueira](#)
Electrochimica Acta, **253** (2017) 599-608 [DOI : [10.1016/j.electacta.2017.09.045](https://doi.org/10.1016/j.electacta.2017.09.045)]
- 44.** Electrochemical impedance spectroscopy of a Li–S battery: Part 2. Influence of separator chemistry on the lithium electrode/electrolyte interface
J. Conder, C. Villevieille, S. Trabesinger, P. Novák, L. Gubler, [R. Bouchet](#)
Electrochimica Acta, **255** (2017) 379-390 [DOI : [10.1016/j.electacta.2017.09.148](https://doi.org/10.1016/j.electacta.2017.09.148)]
- 45.** The hydrothermal degradation of PET in laminated multilayer
[F. Dubellec](#), [E. Planes](#), [C. Bas](#), E. Pons, B. Yrieix, [L. Flandin](#)
European Polymer Journal, **87** (2017) 1-13 [DOI : [10.1016/j.eurpolymj.2016.12.004](https://doi.org/10.1016/j.eurpolymj.2016.12.004)]
- 46.** Further Ahead with Electrochemical Energy Technology
C. Turpin, N. Yousfi-Steiner, [Y. Bultel](#), D. Hissel
Fuel Cells, **17** (2017) 124-124 [DOI : [10.1002/fuce.201770022](https://doi.org/10.1002/fuce.201770022)]
- 47.** PHM-oriented Degradation Indicators for Batteries and Fuel Cells
D. Zhang, C. Cadet, N. Yousfi-Steiner, [F. Druart](#), C. Bérenguer
Fuel Cells, **17** (2017) 268-276 [DOI : [10.1002/fuce.201600075](https://doi.org/10.1002/fuce.201600075)]
- 48.** Transmission electron microscopy characterization of protective La_{0.7}Sr_{0.3}MnO_{3-d} coatings prepared by electrostatic spray deposition on ferritic alloy
L. da Conceição, S. Lay, F. Robaut, G. Renou, E. N. S. Muccillo, [E. Djurado](#)
Functional Materials Letters, **10** (2017) 1750012-1750017 [DOI : [10.1142/S1793604717500126](https://doi.org/10.1142/S1793604717500126)]
- 49.** Development of Dithienosilole-Pyridalthiadiazole-Based Copolymer as an Electron Donor in Organic Photovoltaic Cells
[Z. El-Moussawi](#), [H. Medlej](#), [A. Nourdine](#), S. Berson, J. Toufaily, T. Hamieh, [L. Flandin](#)
IEEE Transactions on Nanotechnology, **16** (2017) 574-581 [DOI : [10.1109/TNANO.2017.2678022](https://doi.org/10.1109/TNANO.2017.2678022)]
- 50.** Synthesis and Structural, Electrical, and Magnetic Properties of New Iron-Aluminum Alluaudite Phases β -Na₂Ni₂M(PO₄)₃ (M = Fe and Al)
[D. Harbaoui](#), [M. M. S. Sanad](#), [C. Rossignol](#), E. K. Hlil, N. Amdouni, [S. Obbade](#)
Inorganic Chemistry, **56** (2017) 13051-13061 [DOI : [10.1021/acs.inorgchem.7b01880](https://doi.org/10.1021/acs.inorgchem.7b01880)]
- 51.** Hydrogen storage properties of 2Mg–Fe mixtures processed by hot extrusion at different temperatures
G. F. de Lima, M.M. Miglioli, M. R. M. Triques, [V. Roche](#), C. S. Kiminami, [W. J. Botta](#), [A. Moreira Jorge Junior](#)
International Journal of Hydrogen Energy, **42** (2017) 11493-11500 [DOI : [10.1016/j.ijhydene.2017.02.213](https://doi.org/10.1016/j.ijhydene.2017.02.213)]
- 52.** Effect of cold rolling on the structure and hydrogen properties of AZ91 and AM60D magnesium alloys processed by ECAP
[A. Moreira Jorge Jr.](#), E. Prokofiev, M. R. M. Triques, [V. Roche](#), [W. J. Botta](#), C. S. Kiminami, G. I. Raab, R. Z. Valiev, T. G. Langdon
International Journal of Hydrogen Energy, **42** (2017) 21822-21831 [DOI : [10.1016/j.ijhydene.2017.07.118](https://doi.org/10.1016/j.ijhydene.2017.07.118)]
- 53.** Four-way coupled Eulerian–Lagrangian Direct Numerical Simulations in a vertical laminar channel flow
[J. Schillings](#), [O. Doche](#), M. Tano Retamales, [F. Bauer](#), [J. Deseure](#), S. F. Tardu
International Journal of Multiphase Flow, **89** (2017) 92-107 [DOI : [10.1016/j.ijmultiphaseflow.2016.10.006](https://doi.org/10.1016/j.ijmultiphaseflow.2016.10.006)]

54. Analysis of the influence of the injection molding process on the crystallization kinetics of a HDPE
J. Giboz, T. Copponnex, **P. Mélé**
Journal of Applied Polymer Science, **134** (2017) 44239- [DOI : [10.1002/app.44239](https://doi.org/10.1002/app.44239)]
55. Further investigation of the equivalence of staircase and linear scan voltammograms. I- Sampling conditions for reversible reactions involving soluble species
C. Montella
Journal of Electroanalytical Chemistry, **796** (2017) 96-107 [DOI : [10.1016/j.jelechem.2017.04.048](https://doi.org/10.1016/j.jelechem.2017.04.048)]
56. Further investigation of the equivalence of staircase and linear scan voltammograms. II - Effects of electron transfer kinetics, Ohmic drop and double-layer charging
C. Montella
Journal of Electroanalytical Chemistry, **799** (2017) 194-205 [DOI : [10.1016/j.jelechem.2017.05.055](https://doi.org/10.1016/j.jelechem.2017.05.055)]
57. Effect of composite electrode thickness on the electrochemical performances of all-solid-state li-ion batteries
A. Kubanska, L. Castro, **R. Bouchet**, L. Tortet, M. Dollé
Journal of Electroceramics, **38** (2017) 189-196 [DOI : [10.1007/s10832-017-0088-8](https://doi.org/10.1007/s10832-017-0088-8)]
58. Modeling of thermo-mechanical stresses in Li-ion battery
O. Valentin, **P.-X. Thivel**, T. Kareemulla, F. Cadiou, **Y. Bultel**
Journal of Energy Storage, **13** (2017) 184-192 [DOI : [10.1016/j.est.2017.07.018](https://doi.org/10.1016/j.est.2017.07.018)]
59. A-site order-disorder in the $\text{NdBaMn}_{2}\text{O}_{5+d}$ SOFC electrode material monitored *in situ* by neutron diffraction under hydrogen flow
F. Tonus, M. Bahout, V. Dorcet, **R. K. Sharma**, **E. Djurado**, S. Paofai, R. I. Smith, S. J. Skinner
Journal of Materials Chemistry A, **5** (2017) 11078-11085 [DOI : [10.1039/C7TA01439B](https://doi.org/10.1039/C7TA01439B)]
60. Functionally graded and homogeneous composites of $\text{La}_2\text{NiO}_{4+d}$ and $\text{La}_{n+1}\text{Ni}_n\text{O}_{3n+1}$ ($n = 2$ and 3) solid oxide fuel cell cathodes
R. K. Sharma, **E. Djurado**
Journal of Materials Chemistry A, **5** (2017) 22277-22287 [DOI : [10.1039/C7TA06245A](https://doi.org/10.1039/C7TA06245A)]
61. All at once: How electrochemistry can be used to design and access multiple compositions in a single sample
V. Ruffo, A. Crisci, **M. Chatenet**, G. A. Camara
Journal of Materials Chemistry A, **5** (2017) 22641-22647 [DOI : [10.1039/C7TA05036D](https://doi.org/10.1039/C7TA05036D)]
62. Determining the rate-limiting step during oxygen semi-permeation of $\text{CaTi}_{0.9}\text{Fe}_{0.1}\text{O}_{3-d}$ oxygen transport membranes
C. Salles, **J. Fouletier**, D. Marinha, **M. C. Steil**
Journal of Membrane Science, **527** (2017) 191-197 [DOI : [10.1016/j.memsci.2016.11.083](https://doi.org/10.1016/j.memsci.2016.11.083)]
63. Ultrafast Hydro-Micromechanical Synthesis of Calcium Zincate: Structural and Morphological Characterizations
V. Caldeira, L. J. Jouffret, J. Thiel, F. Lacoste, **S. Obbade**, **L. Dubau**, **M. Chatenet**
Journal of Nanomaterials, Article ID **7369397** (2017) [DOI : [10.1155/2017/7369397](https://doi.org/10.1155/2017/7369397)]
64. Elaboration and Crystal Structure Change of Cerium-Based Lanthanide Oxides
F.-S. Meng, D.-Y. Chen, Y.-Q. Lin, D.-M. Han, M.-L. Kang, **S. Obbade**
Journal of Nuclear and Radiochemistry, **39** (2017) 145-150 [DOI : [10.7538/hhx.2017.39.02.0145](https://doi.org/10.7538/hhx.2017.39.02.0145)]
65. Micro-Raman analysis of the fuel-cladding interface in a high burnup PWR fuel rod
C. Ciszak, **M. Mermoux**, S. Miro, G. Gutierrez, F. Leprete, I. Popa, K. Hanifi, I. Zacharie-Aubrun, L. Fayette, S. Chevalier
Journal of Nuclear Materials, **495** (2017) 392-404 [DOI : [10.1016/j.jnucmat.2017.08.038](https://doi.org/10.1016/j.jnucmat.2017.08.038)]
66. Water Vapor Sorption Properties of Polyethylene Terephthalate over a Wide Range of Humidity and Temperature
F. Dubellec, **E. Planes**, **C. Bas**, E. Pons, B. Yrieix, **L. Flandin**
Journal of Physical Chemistry B, **121** (2017) 1953-1962 [DOI : [10.1021/acs.jpccb.6b11700](https://doi.org/10.1021/acs.jpccb.6b11700)]

67. Dissociation Equilibrium and Charge Carrier Formation in AgI–AgPO₃ Glasses
C. B. Bragatto, A. C. M. Rodrigues, [J.-L. Souquet](#)
Journal of Physical Chemistry C, **121** (2017) 13507-13514 [\[DOI : 10.1021/acs.jpcc.7b02477\]](#)
68. Dimensional instabilities of polyester and polyolefin films as origin of delamination in laminated multilayer
[F. Dubelley](#), [E. Planes](#), [C. Bas](#), E. Pons, B. Yrieix, [L. Flandin](#)
Journal of Polymer Science Part B: Polymer Physics, **55** (2017) 309-319 [\[DOI : 10.1002/polb.24274\]](#)
69. Characterization of electrical conduction and nature of charge carriers in mixed and ionic conductors
P.-M. Geffroy, [A. Pons](#), E. Béchade, O. Masson, [J. Fouletier](#)
Journal of Power Sources, **360** (2017) 70-79 [\[DOI : 10.1016/j.jpowsour.2017.06.003\]](#)
70. Lithium salts based on a series of new anilinyl-perfluorosulfonamide salts and their polymer electrolytes
[A. Thiam](#), [C. Ilojou](#), [J.-C. Leprêtre](#), [J.-Y. Sanchez](#)
Journal of Power Sources, **364** (2017) 138-147 [\[DOI : 10.1016/j.jpowsour.2017.07.104\]](#)
71. Effects of Biphenyl Polymerization on Lithium Deposition in Commercial Graphite/NMC Lithium-Ion Pouch-Cells during Calendar Aging at High Temperature
[B. Pilipili Matadi](#), S. Geniès, A. Delaille, T. Waldmann, M. Kasper, M. Wohlfahrt-Mehrens, F. Aguesse, E. Bekaert, I. Jiménez-Gordon, L. Daniel, [X. Fleury](#), M. Bardet, J.-F. Martin, [Y. Bultel](#)
Journal of the Electrochemical Society, **164** (2017) A1089-A1097 [\[DOI : 10.1149/2.0631706ies\]](#)
72. Irreversible Capacity Loss of Li-Ion Batteries Cycled at Low Temperature Due to an Untypical Layer Hindering Li Diffusion into Graphite Electrode
[B. Pilipili Matadi](#), S. Geniès, A. Delaille, C. Chabrol, E. De Vito, M. Bardet, J.-F. Martin, L. Daniel, [Y. Bultel](#)
Journal of the Electrochemical Society, **164** (2017) A2374-A2389 [\[DOI : 10.1149/2.0491712jes\]](#)
73. Palladium Electrodeposition onto Pt(100): Two-Layer Underpotential Deposition
B. Previdello, [E. Sibert](#), M. Maret, [Y. Soldo-Olivier](#)
Langmuir, **33** (2017) 2087-2095 [\[DOI : 10.1021/acs.langmuir.6b03968\]](#)
74. Synergy between molybdenum and nitrogen on the pitting corrosion and passive film resistance of austenitic stainless steels as a pH-dependent effect
[C. Loable](#), I. N. Viçosa, T. J. Mesquita, M. Mantel, [R. P. Nogueira](#), G. Berthomé, E. Chauveau, [V. Roche](#)
Materials Chemistry and Physics, **186** (2017) 237-245 [\[DOI : 10.1016/j.matchemphys.2016.10.049\]](#)
75. Modeling the dynamic percolation of carbon nanotubes and revisiting critical exponents
[M. Badard](#), A. Combescis, A. Allais, [L. Flandin](#)
Materials Chemistry and Physics, **191** (2017) 89-95 [\[DOI : 10.1016/j.matchemphys.2017.01.043\]](#)
76. Synthesis and Structural Characterization of Calcium Titanate by Spray Pyrolysis Method
S. Lanfredi, F. Storti, L. P. M. Simões, [E. Djurado](#), M. A. L. Nobre
Materials Letters, **201** (2017) 148-151 [\[DOI : 10.1016/j.matlet.2017.05.001\]](#)
77. Highly active nanostructured palladium-ceria electrocatalysts for the hydrogen oxidation reaction in alkaline medium
H. A. Miller, F. Vizza, M. Marelli, [A. Zadick](#), [L. Dubau](#), [M. Chatenet](#), S. Geiger, S. Cherevko, H. Doan, R. K. Pavlicek, S. Mukerjee, D. R. Dekel
Nano Energy, **33** (2017) 293-305 [\[DOI : 10.1016/j.nanoen.2017.01.051\]](#)
78. High-Temperature Oxidation of Zircaloy-4 in Air Studied with Labeled Oxygen and Raman Imaging
[A. Kasperski](#), M. Guérain, [M. Mermoux](#), F. Jomard
Oxidation of Metals, **87** (2017) 501-513 [\[DOI : 10.1007/s11085-017-9713-9\]](#)
79. Single Crystal and Sintered Alumina Corrosion in Liquid Sodium
J.-L. Courouau, [M. C. Steil](#), [J. Fouletier](#), F. Rouillard, V. Lorentz, P. Bonnaillie, A. Muccioli, J. Unger, S. Tricoit, M. Tabarant
Oxidation of Metals, **87** (2017) 789-800 [\[DOI : 10.1007/s11085-017-9743-3\]](#)
80. The role of association of ions in ionic liquid/molecular solvent mixtures on metal extraction
J.-M. Andanson, [N. Papaiconomou](#), P.-A. Cable, M. Traïkia, [I. Billard](#), P. Husson
Physical Chemistry Chemical Physics, **19** (2017) 28834-28840 [\[DOI : 10.1039/C7CP05886A\]](#)

81. Block copolyimide membranes for pure- and mixed-gas separation
[R. Heck](#), M. S. Qahtani, G. Yahaya, [I. Tanis](#), [D. Brown](#), A. Bahamdan, A. Ameen, M. M. Vaidya, J.-P. R. Ballaguet, R. H. Alhajry, E. Espuche, R. Mercier
Separation and Purification Technology, **173** (2017) 183-192 [\[DOI : 10.1016/j.seppur.2016.09.024\]](#)
82. Separation of cerium(III) from lanthanum(III), neodymium(III) and praseodymium(III) by oxidation and liquid-liquid extraction using ionic liquids
[M. Gras](#), [N. Papaiconomou](#), [E. Chaînet](#), [F. Tedjar](#), [I. Billard](#)
Separation and Purification Technology, **178** (2017) 169-177 [\[DOI : 10.1016/j.seppur.2017.01.035\]](#)
83. New polysiloxane bearing imidazolium iodide side chain as electrolyte for photoelectrochemical cell
[A. K. Bharwal](#), N. A. Nguyen, [C. Iojoiu](#), C. Henrist, [F. Alloin](#)
Solid State Ionics, **307** (2017) 6-13 [\[DOI : 10.1016/j.ssi.2017.05.004\]](#)
84. Extraction of uranium(VI) from nitric acid solutions using *N,N*-dihexyloctanamide in ionic liquids: Solvent extraction and spectroscopic studies
D. R. Prabhu, P. K. Mohapatra, D. R. Raut, P. Pathak, [I. Billard](#)
Solvent Extraction and Ion Exchange, **35** (2017) 423-438 [\[DOI : 10.1080/07366299.2017.1377423\]](#)
85. Optimization and control of dynamic percolation in nanostructured silicon oils
[M. Badard](#), A. Combessis, A. Allais, [L. Flandin](#)
The European Physical Journal Applied Physics, **79** (2017) 10401 [\[DOI : 10.1051/epjap/2017160470\]](#)
86. 2D and 3D fault basis for fuel cell diagnosis by external magnetic field measurements
[L. Ifrek](#), G. Cauffet, O. Chadebec, [Y. Bultel](#), S. Rosini, L. Rouveyre
The European Physical Journal Applied Physics, **79** (2017) 20901 [\[DOI : 10.1051/epjap/2017160468\]](#)
87. Restricted lithium ion dynamics in PEO-based block copolymer electrolytes measured by high-field nuclear magnetic resonance relaxation
T. V. Huynh, [R. J. Messinger](#), V. Sarou-Kanian, F. Fayon, [R. Bouchet](#), M. Deschamps
The Journal of Chemical Physics, **147** (2017) 134902 [\[DOI : 10.1063/1.4993614\]](#)