Dominic Rochefort

List of Publications by Year
in descending order

71 papers	2,272 citations	236925 25 h-index	223800 46 g-index
72 all docs	72 docs citations	72 times ranked	3551 citing authors

#	Article	IF	Citations
1	A comparative study on the influence of the polymeric host for the operation of all-solid-state batteries at different temperatures. Journal of Power Sources, 2022, 535, 231382.	7.8	2
2	Diphenoquinones Redux. Journal of Organic Chemistry, 2022, 87, 7673-7695.	3.2	1
3	Cross-Linked Polyacrylonitrile-Based Elastomer Used as Gel Polymer Electrolyte in Li-Ion Battery. ACS Applied Energy Materials, 2020, 3, 1099-1110.	5.1	49
4	Electrochemistry and transport properties of electrolytes modified with ferrocene redox-active ionic liquid additives. Canadian Journal of Chemistry, 2020, 98, 554-563.	1.1	4
5	Exploiting Materials to Their Full Potential, a Li-Ion Battery Electrode Formulation Optimization Study. ACS Applied Energy Materials, 2020, 3, 2935-2948.	5.1	23
6	Melt-processed electrode for lithium ion battery. Journal of Power Sources, 2020, 454, 227884.	7.8	17
7	Solid-State NMR and Electrochemical Dilatometry Study of Charge Storage in Supercapacitor with Redox Ionic Liquid Electrolyte. ECS Meeting Abstracts, 2020, MA2020-01, 6-6.	0.0	0
8	Impact of Water on the Properties of Litfsi-Acetonitrile Superconcentrated Electrolytes. ECS Meeting Abstracts, 2020, MA2020-01, 556-556.	0.0	0
9	On the Relevance of Reporting Water Content in Highly Concentrated Electrolytes: The LiTFSI-Acetonitrile Case. Journal of the Electrochemical Society, 2020, 167, 120536.	2.9	7
10	Interfacial Forces across Ionic Liquid Solutions: Effects of Ion Concentration and Water Domains. Langmuir, 2019, 35, 15585-15591.	3.5	7
11	Polyacrylonitrile-based rubber (HNBR) as a new potential elastomeric binder for lithium-ion battery electrodes. Journal of Power Sources, 2019, 440, 227111.	7.8	20
12	Enabling new electrochemical methods with redox-active ionic liquids. Current Opinion in Electrochemistry, 2019, 15, 125-132.	4.8	14
13	Electron transfer properties of a redox polyelectrolyte based on ferrocenated imidazolium. Electrochimica Acta, 2019, 305, 155-163.	5.2	5
14	Solid-state NMR and electrochemical dilatometry study of charge storage in supercapacitor with redox ionic liquid electrolyte. Energy Storage Materials, 2019, 20, 80-88.	18.0	19
15	Application of a Commercially-Available Fluorine-Free Thermoplastic Elastomer as a Binder for High-Power Li-Ion Battery Electrodes. Journal of the Electrochemical Society, 2019, 166, A1140-A1146.	2.9	5
16	Designs of Experiments for Beginnersâ€"A Quick Start Guide for Application to Electrode Formulation. Batteries, 2019, 5, 72.	4.5	30
17	Influence of the Formulation on the Microstructure and Thus Performance of Li-Ion Batteries. ECS Meeting Abstracts, 2019, , .	0.0	0
18	A Solvent-Free Approach to Lithium-Ion Battery Electrodes Using Melt-Processable Elastomeric Binders. ECS Meeting Abstracts, 2019, , .	0.0	0

#	Article	IF	Citations
19	(Invited) Dry Process for the Preparation of Porous Composite Electrodes for Battery Application. ECS Meeting Abstracts, 2019, , .	0.0	0
20	Melt-Processing of Electrodes for Lithium-Ion Batteries: A New Solvent-Free Approach. ECS Meeting Abstracts, 2019, , .	0.0	0
21	Melt-Process for the Preparation of Porous Composite Electrodes for Battery Application. ECS Meeting Abstracts, 2019, , .	0.0	0
22	An Artificial Lithium Protective Layer that Enables the Use of Acetonitrileâ€Based Electrolytes in Lithium Metal Batteries. Angewandte Chemie - International Edition, 2018, 57, 5072-5075.	13.8	97
23	An Artificial Lithium Protective Layer that Enables the Use of Acetonitrileâ€Based Electrolytes in Lithium Metal Batteries. Angewandte Chemie, 2018, 130, 5166-5169.	2.0	15
24	Crosslinker free thermally induced crosslinking of hydrogenated nitrile butadiene rubber. Journal of Polymer Science Part A, 2018, 56, 1825-1833.	2.3	15
25	Enhancing thermoelectrochemical properties by tethering ferrocene to the anion or cation of ionic liquids: altered thermodynamics and solubility. Physical Chemistry Chemical Physics, 2017, 19, 24255-24263.	2.8	17
26	Air-Stable, Self-Bleaching Electrochromic Device Based on Viologen- and Ferrocene-Containing Triflimide Redox Ionic Liquids. ACS Applied Materials & Interfaces, 2017, 9, 28726-28736.	8.0	97
27	Electroactive ionic liquids based on 2,5-ditert-butyl-1,4-dimethoxybenzene and triflimide anion as redox shuttle for Li4Ti5O12/LiFePO4 lithium-ion batteries. Journal of Power Sources, 2017, 372, 212-220.	7.8	12
28	Electrochemical and physicochemical properties of redox ionic liquids using electroactive anions: influence of alkylimidazolium chain length. Electrochimica Acta, 2016, 200, 283-289.	5.2	15
29	ARC Study of LiFePO₄with Different Morphologies Prepared via Three Synthetic Routes. Journal of the Electrochemical Society, 2016, 163, A1311-A1316.	2.9	19
30	Thermal Stability of High Voltage Li1-xMn1.5Ni0.5O4Cathode Material Synthesized via a Sol-Gel Method. Journal of the Electrochemical Society, 2016, 163, A947-A952.	2.9	7
31	Electrochemical and Transport Properties of Ions in Mixtures of Electroactive Ionic Liquid and Propylene Carbonate with a Lithium Salt for Lithium-Ion Batteries. Journal of Physical Chemistry C, 2016, 120, 5315-5325.	3.1	19
32	Redox-active electrolyte supercapacitors using electroactive ionic liquids. Electrochemistry Communications, 2016, 66, 42-45.	4.7	85
33	Development of prototypes of bioactive packaging materials based on immobilized bacteriophages for control of growth of bacterial pathogens in foods. International Journal of Food Microbiology, 2016, 217, 49-58.	4.7	108
34	Redox Shuttles for Lithium-Ion Batteries at Concentrations up to 1 M Using an Electroactive Ionic Liquid Based on 2,5-di-tert-butyl-1,4-dimethoxybenzene. Journal of the Electrochemical Society, 2015, 162, A1432-A1438.	2.9	16
35	Electrolyte-Gated WO₃ Transistors: Electrochemistry, Structure, and Device Performance. Journal of Physical Chemistry C, 2015, 119, 21732-21738.	3.1	42
36	Synthesis and characterization of an electroactive ionic liquid based on the ferrocenylsulfonyl(trifluoromethylsulfonyl)imide anion. Electrochimica Acta, 2015, 162, 36-44.	5.2	23

#	Article	IF	Citations
37	Conductivity and Electrochemistry of Ferrocenyl-Imidazolium Redox Ionic Liquids with Different Alkyl Chain Lengths. Journal of the Electrochemical Society, 2014, 161, H161-H165.	2.9	19
38	Electrochemistry of ruthenium dioxide composite electrodes in diethylmethylammonium-triflate protic ionic liquid and its mixtures with acetonitrile. Electrochimica Acta, 2014, 147, 96-103.	5.2	21
39	Electrochemical functionalization of glassy carbon electrode by reduction of diazonium cations in protic ionic liquid. Electrochimica Acta, 2013, 106, 378-385.	5.2	31
40	Electroactive imidazolium salts based on 1,4-dimethoxybenzene redox groups: synthesis and electrochemical characterisation. RSC Advances, 2013, 3, 12035.	3.6	18
41	Electrochemical and Spectroelectrochemical Evidence of Redox Transitions Involving Protons in Thin MnO₂Electrodes in Protic Ionic Liquids. Journal of Physical Chemistry C, 2013, 117, 20397-20405.	3.1	23
42	Fast and effective paper based sensor for self-diagnosis of bacterial vaginosis. Analytica Chimica Acta, 2013, 800, 87-94.	5.4	12
43	Hydrogen absorption by a palladium electrode from a protic ionic liquid at temperatures exceeding 100Â°C. Electrochemistry Communications, 2013, 34, 102-104.	4.7	14
44	Electrochemical characterisation of a lithium-ion battery electrolyte based on mixtures of carbonates with a ferrocene-functionalised imidazolium electroactive ionic liquid. Physical Chemistry Chemical Physics, 2013, 15, 7713.	2.8	53
45	Mesomorphic and ion conducting properties of dialkyl(1,4-phenylene)diimidazolium salts. Soft Matter, 2012, 8, 10914.	2.7	24
46	Characterisation and applications of microcapsules obtained by interfacial polycondensation. Journal of Microencapsulation, 2012, 29, 636-649.	2.8	53
47	Printing of Polymer Microcapsules for Enzyme Immobilization on Paper Substrate. Biomacromolecules, 2011, 12, 2008-2015.	5.4	43
48	Activity, stability and inhibition of a bioactive paper prepared by large-scale coating of laccase microcapsules. Chemical Engineering Science, 2011, 66, 5313-5320.	3.8	23
49	Synthesis, Characterization of Nanostructured Rhodium Films and their Electrochemical Behavior towards Carbon Monoxide Oxidation. Electrocatalysis, 2011, 2, 114-122.	3.0	6
50	Activity, conformation and thermal stability of laccase and glucose oxidase in poly(ethyleneimine) microcapsules for immobilization in paper. Process Biochemistry, 2011, 46, 993-1000.	3.7	57
51	Pyridinium-based protic ionic liquids as electrolytes for RuO2 electrochemical capacitors. Journal of Power Sources, 2010, 195, 5114-5121.	7.8	59
52	Comparison of emulsion and vibration nozzle methods for microencapsulation of laccase and glucose oxidase by interfacial reticulation of poly(ethyleneimine). Journal of Microencapsulation, 2010, 27, 703-713.	2.8	25
53	Carbon Monoxide Oxidation on Nanostructured Pt Thin Films Synthesized by Pulsed Laser Deposition: Insights into the Morphology Effects. Laser Chemistry, 2010, 2010, 1-7.	0.5	1
54	Confocal microscopy study of polymer microcapsules for enzyme immobilisation in paper substrates. Journal of Applied Polymer Science, 2009, 111, 1-10.	2.6	34

#	Article	IF	Citations
55	Origin and effect of impurities in protic ionic liquids based on 2-methylpyridine and trifluoroacetic acid for applications in electrochemistry. Electrochimica Acta, 2009, 54, 7422-7428.	5.2	14
56	Development of an enzymatic microreactor based on microencapsulated laccase with off-line capillary electrophoresis for measurement of oxidation reactions. Journal of Chromatography A, 2009, 1216, 8270-8276.	3.7	18
57	Influence of the Conductivity and Viscosity of Protic Ionic Liquids Electrolytes on the Pseudocapacitance of RuO₂ Electrodes. Journal of Physical Chemistry C, 2009, 113, 1632-1639.	3.1	55
58	Physical immobilization of laccase on an electrode by means of poly(ethyleneimine) microcapsules. Journal of Electroanalytical Chemistry, 2008, 617, 53-63.	3.8	45
59	Electrode passivation by reaction products of the electrochemical and enzymatic oxidation of p-phenylenediamine. Electrochimica Acta, 2008, 53, 5272-5279.	5.2	38
60	A high-throughput search for direct methanol fuel cell anode electrocatalysts of type PtxBiyPbz. Applied Surface Science, 2007, 254, 653-661.	6.1	26
61	High throughput screening of electrocatalysts for fuel cell applications. Review of Scientific Instruments, 2006, 77, 054104.	1.3	59
62	Pseudocapacitive behaviour of RuO2 in a proton exchange ionic liquid. Electrochemistry Communications, 2006, 8, 1539-1543.	4.7	119
63	Surface composition of ordered intermetallic compounds PtBi and PtPb. Surface Science, 2006, 600, 2670-2680.	1.9	78
64	Surface modification of co-evaporated thin films upon oxygen and air exposure. Surface Science, 2005, 595, 73-86.	1.9	3
65	Modification to the composition of nanocrystalline RuO2 through reactive milling under O2. Journal of Alloys and Compounds, 2005, 400, 257-264.	5.5	11
66	Electron transfer mediator systems for bleaching of paper pulp. Green Chemistry, 2004, 6, 14.	9.0	114
67	Targetting redox polymers as mediators for laccase oxygen reduction in a membrane-less biofuel cell. Electrochemistry Communications, 2004, 6, 237-241.	4.7	150
68	Effect of Graphite on the Electrochemical Properties of Ballmilled RuO[sub 2]. Journal of the Electrochemical Society, 2004, 151, A1141.	2.9	4
69	XPS investigations of thermally prepared RuO2 electrodes in reductive conditions. Electrochimica Acta, 2003, 48, 4245-4252.	5.2	175
70	Oxidation of lignin model compounds by organic and transition metal-based electron transfer mediators. Chemical Communications, 2002, , 1182-1183.	4.1	39
71	Electrochemical Oxidation of Transition Metal-Based Mediators for Pulp Delignification. Journal of the Electrochemical Society, 2002, 149, D15.	2.9	16