Mickael DollÃ©

List of Publications by Year
in descending order

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		186265	114465
116	4,110	28	63
papers	citations	h-index	g-index

118	118	118	5437
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	On the Origin of the Extra Electrochemical Capacity Displayed by MO/Li Cells at Low Potential. Journal of the Electrochemical Society, 2002, 149, A627.	2.9	1,152
2	Dendrite short-circuit and fuse effect on Li/polymer/Li cells. Electrochimica Acta, 2006, 51, 5334-5340.	5.2	479
3	Live Scanning Electron Microscope Observations of Dendritic Growth in Lithium/Polymer Cells. Electrochemical and Solid-State Letters, 2002, 5, A286.	2.2	226
4	Development of Reliable Three-Electrode Impedance Measurements in Plastic Li-Ion Batteries. Journal of the Electrochemical Society, 2001, 148, A851.	2.9	142
5	A New Approach to Develop Safe Allâ€Inorganic Monolithic Liâ€Ion Batteries. Advanced Energy Materials, 2011, 1, 179-183.	19.5	139
6	Metal Oxides as Negative Electrode Materials in Li-Ion Cells. Electrochemical and Solid-State Letters, 2002, 5, A115.	2.2	123
7	Synthesis of nanosized zirconium carbide by a solâ€“gel route. Journal of the European Ceramic Society, 2007, 27, 2061-2067.	5.7	105
8	The Stone Age Revisited: Building a Monolithic Inorganic Lithiumâ€Ion Battery. Advanced Functional Materials, 2012, 22, 2140-2147.	14.9	100
9	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
10	Structural evolution of zirconium carbide under ion irradiation. Journal of Nuclear Materials, 2008, 373, 123-129.	2.7	86
11	Microstructure and mechanical properties of high niobium containing TiAl alloys elaborated by spark plasma sintering. Intermetallics, 2010, 18, 2312-2321.	3.9	60
12	Synthesis by Spark Plasma Sintering: A new way to obtain electrode materials for lithium ion batteries. Journal of Power Sources, 2011, 196, 2274-2278.	7.8	54
13	A Reversible Lithium Intercalation Process in an ReO[sub 3]-Type Structure PNb[sub 9]O[sub 25]. Journal of the Electrochemical Society, 2002, 149, A391.	2.9	52
14	The Impact of Absorbed Solvent on the Performance of Solid Polymer Electrolytes for Use in Solid-State Lithium Batteries. IScience, 2020, 23, 101597.	4.1	51
15	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
16	Challenges in Solvent-Free Methods for Manufacturing Electrodes and Electrolytes for Lithium-Based Batteries. Polymers, 2021, 13, 323.	4.5	48
17	A comparative study of ZnS powders sintering by Hot Uniaxial Pressing (HUP) and Spark Plasma Sintering (SPS). Optical Materials, 2011, 33, 706-712.	3.6	45
18	Elaboration of controlled size Li1.5Al0.5Ge1.5(PO4)3 crystallites from glass-ceramics. Solid State Ionics, 2014, 266, 44-50.	2.7	43

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19	Structural behaviour of nearly stoichiometric ZrC under ion irradiation. Nuclear Instruments & Methods in Physics Research B, 2008, 266, 2801-2805.	1.4	42
20	Impedance study of the LiÂ°/electrolyte interface upon cycling. Solid State Ionics, 2000, 135, 213-221.	2.7	40
21	Solid Fluoride Electrolytes and Their Composite with Carbon: Issues and Challenges for Rechargeable Solid State Fluoride-Ion Batteries. Journal of Physical Chemistry C, 2017, 121, 24962-24970.	3.1	40
22	A Critical Review for an Accurate Electrochemical Stability Window Measurement of Solid Polymer and Composite Electrolytes. Materials, 2021, 14, 3840.	2.9	39
23	Layered Manganese Oxide Intergrowth Electrodes for Rechargeable Lithium Batteries. 2. Substitution with Al. Chemistry of Materials, 2005, 17, 1044-1054.	6.7	36
24	Improved Li-Battery Electrolytes by Heterogeneous Doping of Nonaqueous Li-Salt Solutions. Electrochemical and Solid-State Letters, 2004, 7, A432.	2.2	34
25	Enhanced lithium storage and chemical diffusion in metal-LiF nanocomposites: Experimental and theoretical results. Physical Review B, 2007, 76, .	3.2	32
26	Layered Manganese Oxide Intergrowth Electrodes for Rechargeable Lithium Batteries. 1. Substitution with Co or Ni. Chemistry of Materials, 2005, 17, 1036-1043.	6.7	31
27	Designs of Experiments for Beginnersâ€"A Quick Start Guide for Application to Electrode Formulation. Batteries, 2019, 5, 72.	4.5	30
28	Structural characterizations of Asâ€"Seâ€"Te glasses. Journal of Alloys and Compounds, 2011, 509, 831-836.	5.5	29
29	Assessing the Electrochemical Stability Window of NASICON-Type Solid Electrolytes. Frontiers in Energy Research, 2021, 9, .	2.3	29
30	All-solid-state cells with Li4Ti5O12/carbon nanotube composite electrodes prepared by infiltration with argyrodite sulfide-based solid electrolytes via liquid-phase processing. Journal of Power Sources, 2019, 417, 125-131.	7.8	27
31	Spark Plasma Sintering: An Easy Way to Make Infrared Transparent Glassâ€"Ceramics. Journal of the American Ceramic Society, 2010, 93, 2495-2498.	3.8	25
32	Nanostructured BiMnO3+Î´ obtained at ambient pressure: analysis of its multiferroicity. Journal of Materials Chemistry, 2012, 22, 9928.	6.7	25
33	Electrochemical performances of vitreous materials in the system Li2Oâ€"V2O5â€"P2O5 as electrode for lithium batteries. Solid State Ionics, 2013, 237, 22-27.	2.7	23
34	LiFePO4 synthesized via melt synthesis using low-cost iron precursors. Journal of Solid State Electrochemistry, 2016, 20, 1821-1829.	2.5	23
35	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
36	Water content in solid polymer electrolytes: the lost knowledge. Chemical Communications, 2020, 56, 10167-10170.	4.1	22

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37	High-sensitivity piezoelectric perovskites for magnetoelectric composites. Science and Technology of Advanced Materials, 2015, 16, 016001.	6.1	21
38	Thermophysical properties of titanium and vanadium nitrides: Thermodynamically self-consistent approach coupled with density functional theory. Journal of Alloys and Compounds, 2016, 662, 240-251.	5.5	21
39	Use of Solid-State NMR Spectroscopy for the Characterization of Molecular Structure and Dynamics in Solid Polymer and Hybrid Electrolytes. Polymers, 2021, 13, 1207.	4.5	21
40	Lithium insertion chemistry of phosphate phases with the lipscombite structure. Journal of Power Sources, 2005, 144, 208-213.	7.8	20
41	Control of the LiFePO4 electrochemical properties using low-cost iron precursor in a melt process. Journal of Solid State Electrochemistry, 2016, 20, 3481-3490.	2.5	20
42	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
43	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
44	Effect of composite electrode thickness on the electrochemical performances of all-solid-state li-ion batteries. Journal of Electroceramics, 2017, 38, 189-196.	2.0	19
45	Toward More Sustainable Rechargeable Aqueous Batteries Using Plasma-Treated Cellulose-Based Li-Ion Electrodes. ACS Sustainable Chemistry and Engineering, 2020, 8, 4728-4733.	6.7	19
46	LiFePO4 spray drying scale-up and carbon-cage for improved cyclability. Journal of Power Sources, 2020, 462, 228103.	7.8	19
47	Effect of Li⁺ Affinity on Ionic Conductivities in Melt-Blended Nitrile Rubber/Polyether. ACS Applied Polymer Materials, 2020, 2, 4943-4951.	4.4	18
48	Melt-processed electrode for lithium ion battery. Journal of Power Sources, 2020, 454, 227884.	7.8	17
49	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
50	Crosslinker free thermally induced crosslinking of hydrogenated nitrile butadiene rubber. Journal of Polymer Science Part A, 2018, 56, 1825-1833.	2.3	15
51	All-solid-state silver batteries assembled by Spark Plasma Sintering. Solid State Ionics, 2012, 207, 57-63.	2.7	13
52	Electrical properties of ferroelectric BiMnO₃â€“PbTiO₃under tailored synthesis and ceramic processing. Phase Transitions, 2013, 86, 681-694.	1.3	13
53	Investigation of layered intergrowth LixMyMn1?yO2+z (M=Ni, Co, Al) compounds as positive electrodes for Li-ion batteries. Solid State Ionics, 2004, 175, 225-228.	2.7	12
54	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

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55	On the Importance of Li Metal Morphology on the Cycling of Lithium Metal Polymer Cells. Journal of the Electrochemical Society, 2021, 168, 040505.	2.9	12
56	Defect thermodynamic and transport properties of nanocrystalline Gd-doped ceria. Ionics, 2008, 14, 33-36.	2.4	11
57	Nanopowders of ferroic oxides for magnetoelectric composites. Journal of Nanoparticle Research, 2011, 13, 4189-4200.	1.9	11
58	Extrusion of Polymer Blend Electrolytes for Solid-State Lithium Batteries: A Study of Polar Functional Groups. ACS Applied Polymer Materials, 2021, 3, 6694-6704.	4.4	11
59	Ionic diffusion mastering using crystal-chemistry parameters: Ï„-Cu1/2Ag1/2V2O5 structure determination and comparison with refined Î´-AgxV2O5 and Îµ-CuxV2O5 ones. Journal of Solid State Chemistry, 2009, 182, 1481-1491.	2.9	10
60	Eco-friendly process toward collector- and binder-free, high-energy density electrodes for lithium-ion batteries. Journal of Solid State Electrochemistry, 2017, 21, 1407-1416.	2.5	10
61	Decoupling the effects of pressure and current in spark plasma sintering: Synthesis of CU0.9V2O5. Solid State Ionics, 2013, 236, 5-10.	2.7	8
62	Important Variation in Vibrational Properties of LiFePO4 and FePO4 Induced by Magnetism. Scientific Reports, 2016, 6, 33033.	3.3	8
63	Fe 3+ reduction during meltâ€synthesis of LiFePO 4. Canadian Journal of Chemical Engineering, 2019, 97, 2196-2210.	1.7	8
64	Synthesis and characterization of LiFe1â^'Mn PO4 (xÂ=Â0.25, 0.50, 0.75) lithium ion battery cathode synthesized via a melting process. Journal of Energy Storage, 2020, 27, 101116.	8.1	8
65	Liâ€Ðriven Copper Extrusion/Reâ€injection in Various Cuâ€based Oxides and Sulfides. Israel Journal of Chemistry, 2008, 48, 235-249.	2.3	7
66	Thermal and Electrochemical Properties of Solid Polymer Electrolytes Prepared via Lithium Salt-Catalyzed Epoxide Ring Opening Polymerization. Applied Sciences (Switzerland), 2021, 11, 1561.	2.5	7
67	Structural stability of ZnAl2O4 spinel irradiated by low energy particles. Nuclear Instruments & Methods in Physics Research B, 2006, 250, 119-122.	1.4	6
68	Strain analysis by inversion of coherent Bragg X-ray diffraction intensity: the illumination problem. Journal of Modern Optics, 2010, 57, 816-825.	1.3	6
69	Reaction kinetics during synthesis of CuxV2O5 and AgyV2O5 by spark plasma sintering. Solid State Ionics, 2011, 182, 24-31.	2.7	6
70	PEDOT assisted CNT self-supported electrodes for high energy and power density. Electrochimica Acta, 2020, 349, 136418.	5.2	6
71	Ultrasound assisted wet media milling synthesis of nanofiber-cage LiFePO4/C. Ultrasonics Sonochemistry, 2020, 68, 105177.	8.2	6
72	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

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73	Meltâ€synthesis of LiFePO₄ over a metallic bath. Canadian Journal of Chemical Engineering, 2019, 97, 2287-2298.	1.7	5
74	Experimental and thermodynamic study of Liâ€O and Li 2 Oâ€P 2 O 5 systems. Canadian Journal of Chemical Engineering, 2019, 97, 2234-2241.	1.7	4
75	Piloting melt synthesis and manufacturing processes to produce câ€lifepo₄: preface. Canadian Journal of Chemical Engineering, 2019, 97, 2189-2195.	1.7	4
76	Chemical speciation and mapping of the Si in Si doped LFP ingot with synchrotron radiation technique. Canadian Journal of Chemical Engineering, 2019, 97, 2211-2217.	1.7	4
77	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
78	Rapidly synthesis of nanocrystalline MgIn2O4 spinel using combustion and solid state chemistry. Solid State Sciences, 2011, 13, 42-48.	3.2	3
79	Synthesis, Structure, and Electrochemical Properties of LiFeV₂O₇. Chemistry of Materials, 2017, 29, 9292-9299.	6.7	3
80	The composite structure of mixed Ï„-(Ag, Cu) V2O5 bronzesâ€"Evidence for T dependant guest-species ordering and mobility. Journal of Solid State Chemistry, 2013, 199, 84-89.	2.9	2
81	On the limitation of density functional theory (DFT) for the treatment of the anharmonicity in FCC metals. Solid State Communications, 2016, 247, 78-81.	1.9	2
82	Visualization of the secondary phase in LiFePO4 ingots with advanced mapping techniques. Canadian Journal of Chemical Engineering, 2019, 97, 2218-2223.	1.7	2
83	Understanding the Light-Triggered Process of a Photo-Rechargeable Battery via Fluorescence Studies of Its Constitutional Photo- and Electroactive Components. Journal of Physical Chemistry C, 2022, 126, 2634-2641.	3.1	2
84	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
85	Influence of Microstructural Parameters on the Sintering of Transition Metal Carbides. Advances in Science and Technology, 2006, 45, 629-632.	0.2	1
86	Reactivity between CuxV2O5 and AgyV2O5 bronzes studied by spark plasma sintering. Solid State Ionics, 2009, 180, 1569-1574.	2.7	1
87	Special proceedings of the Symposium A: â€œAdvances in energy storage systems: lithium batteries, supercapacitors and beyondâ€, during ICMAT 2015, June 28â€"July 3, Singapore. Journal of Solid State Electrochemistry, 2016, 20, 1819-1820.	2.5	1
88	Blend of Polymers As New Solid Electrolytes for Lithium-Ion Batteries. ECS Meeting Abstracts, 2020, MA2020-02, 896-896.	0.0	1
89	Hydrogen Depolarized Anodes with Liquid Anolyte: Proof of Concept. Electrocatalysis, 0, , 1.	3.0	1
90	Recent Developments in Polymeric Composites for Solid-State Batteries. ACS Symposium Series, 0, , 167-200.	0.5	1

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91	Microstuctural Characterization of the Radiation Effects in ZrC, a Potential Material for Next Generation Nuclear Plants. Materials Research Society Symposia Proceedings, 2007, 1043, 1.	0.1	0
92	Pulseâ€assisted fluidization of nanoparticles: Case of lithium iron phosphate material. Canadian Journal of Chemical Engineering, 2021, 99, 1824-1835.	1.7	0
93	Influence of Lithium Sulfate on the Kinetics of Hydrogen Oxidation in H2so4. ECS Meeting Abstracts, 2021, MA2021-01, 1867-1867.	0.0	0
94	Assessing Electrochemical Stability Windows of Li1+XAlxM2-X(PO4)3 (M=Ge,Ti) Nasicon Solid Electrolytes for Their Application in All Solid-State Lithium Batteries. ECS Meeting Abstracts, 2021, MA2021-01, 16-16.	0.0	0
95	A Photophysical Study of Electronic Transfer from Battery Active Materials to an Organic Dye: Towards Developing an Operating Photobattery. ECS Meeting Abstracts, 2021, MA2021-01, 41-41.	0.0	0
96	Assembling an All-Solid-State Ceramic Battery: Assessment of Chemical and Thermal Compatibility of Solid Ceramic Electrolytes and Active Material Using High Temperature X-Ray Diffraction. ECS Meeting Abstracts, 2021, MA2021-01, 325-325.	0.0	0
97	Greener Rechargeable Lithium-Ion Batteries Using Plasma Processes at Atmospheric Pressure. ECS Meeting Abstracts, 2021, MA2021-01, 853-853.	0.0	0
98	On the Electrochemical Properties of New Materials in the Li2o-Fe2O3-V2O5 Ternary System. ECS Meeting Abstracts, 2018, , .	0.0	0
99	Influence of the Formulation on the Microstructure and Thus Performance of Li-Ion Batteries. ECS Meeting Abstracts, 2019, , .	0.0	0
100	A Solvent-Free Approach to Lithium-Ion Battery Electrodes Using Melt-Processable Elastomeric Binders. ECS Meeting Abstracts, 2019, , .	0.0	0
101	(Invited) Dry Process for the Preparation of Porous Composite Electrodes for Battery Application. ECS Meeting Abstracts, 2019, , .	0.0	0
102	Melt-Processing of Electrodes for Lithium-Ion Batteries: A New Solvent-Free Approach. ECS Meeting Abstracts, 2019, , .	0.0	0
103	Melt-Process for the Preparation of Porous Composite Electrodes for Battery Application. ECS Meeting Abstracts, 2019, , .	0.0	0
104	Study of the Lithium/Polymer Interface and Conductive Deposits on Lithium Metal Used for Lithium Metal Polymer Batteries.. ECS Meeting Abstracts, 2020, MA2020-01, 403-403.	0.0	0
105	Fluorescence and Electrochemistry to Study the Electronic Transfer from an Organic Dye to Battery Active Materials: Towards Developing an Operating Photobattery. ECS Meeting Abstracts, 2020, MA2020-01, 578-578.	0.0	0
106	Influence of Lithium Sulfate on the Kinetics of Hydrogen Oxidation in H2so4. ECS Meeting Abstracts, 2020, MA2020-01, 2655-2655.	0.0	0
107	Gel Polymer Electrolyte Made of an Amorphous Polyacrylonitrile-Based Elastomer. ECS Meeting Abstracts, 2020, MA2020-01, 253-253.	0.0	0
108	Characterization of Gel Polymer Electrolytes Based on Poly (Ionic Liquid)-Glyme Mixtures for Lithium Metal Batteries. ECS Meeting Abstracts, 2020, MA2020-01, 251-251.	0.0	0

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109	A Study on Processing Parameters Affecting Solid Polymer Electrolytes Performances. ECS Meeting Abstracts, 2020, MA2020-01, 2925-2925.	0.0	0
110	Assembling an All-Solid-State Ceramic Battery: Assessment of Chemical and Thermal Compatibility of Solid Ceramic Electrolytes and Active Material Using High Temperature X-Ray Diffraction. ECS Meeting Abstracts, 2020, MA2020-01, 309-309.	0.0	0
111	Hydrogen Depolarised Anode: Proof of Concept and Operational Overpotential Determination. ECS Meeting Abstracts, 2020, MA2020-01, 1260-1260.	0.0	0
112	Using Experiment and First-Principles to Assess Electrochemical Windows of Common Solid Electrolytes for Their Application in All Solid-State Lithium Batteries.. ECS Meeting Abstracts, 2020, MA2020-01, 557-557.	0.0	0
113	Designs of Experiments to Optimize Li-Ion Batteries. ECS Meeting Abstracts, 2020, MA2020-01, 254-254.	0.0	0
114	Quantification and Effect of Residual Water in Solid Polymer Electrolytes. ECS Meeting Abstracts, 2020, MA2020-02, 897-897.	0.0	0
115	Effect of Lithium Sulfate on the Catalytic Activity of Pt for Hydrogen Oxidation Reaction. Journal of the Electrochemical Society, 2022, 169, 024515.	2.9	0
116	Exploring Charged Defects and Dopability Limits of Solid Electrolytes, a Computational Study. ECS Meeting Abstracts, 2022, MA2022-01, 151-151.	0.0	0