Patrick C Howlett

List of Publications by Year
in descending order

199	13,311	34493	28425
papers	citations	54 h-index	109 g-index

207	207	207	12512
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Unveiling the Impact of the Cations and Anions in Ionic Liquid/Glyme Hybrid Electrolytes for Naâ€“O₂ Batteries. ACS Applied Materials & Interfaces, 2022, 14, 4022-4034.	4.0	9
2	Interphase control for high performance lithium metal batteries using ether aided ionic liquid electrolyte. Energy and Environmental Science, 2022, 15, 1907-1919.	15.6	62
3	Ion Transport in Li-Doped Triethyl(methyl)phosphonium Tetrafluoroborate (Li-[P₁₂₂₂][BF₄]) Impregnated with PVDF Nanoparticles. Journal of Physical Chemistry C, 2022, 126, 3839-3852.	1.5	9
4	High-Performance Cycling of Na Metal Anodes in Phosphonium and Pyrrolidinium Fluoro(sulfonyl)imide Based Ionic Liquid Electrolytes. ACS Applied Materials & Interfaces, 2022, 14, 15784-15798.	4.0	24
5	Morphological Evolution and Solidâ€“Electrolyte Interphase Formation on LiNi_{0.6}Mn_{0.2}Co_{0.2}O₂ Cathodes Using Highly Concentrated Ionic Liquid Electrolytes. ACS Applied Materials & Interfaces, 2022, 14, 13196-13205.	4.0	9
6	Fast Charge and High Stability of Solidâ€State Graphite Organic Ionic Plastic Crystal Composite Anodes. Batteries and Supercaps, 2022, 5, .	2.4	5
7	Stable and Efficient Lithium Metal Anode Cycling through Understanding the Effects of Electrolyte Composition and Electrode Preconditioning. Chemistry of Materials, 2022, 34, 165-177.	3.2	22
8	Tunable multi-doped carbon nanofiber air cathodes based on a poly(ionic liquid) for sodium oxygen batteries with diglyme/ionic liquid-based hybrid electrolytes. Journal of Materials Chemistry A, 2022, 10, 11742-11754.	5.2	6
9	Sustainable Freeâ€Standing Electrode from Biomass Waste for Sodiumâ€Ion Batteries. ChemElectroChem, 2022, 9, .	1.7	10
10	Cover Picture: Fast Charge and High Stability of Solidâ€State Graphite Organic Ionic Plastic Crystal Composite Anodes (Batteries & Supercaps 7/2022). Batteries and Supercaps, 2022, 5, .	2.4	1
11	Ultra-stable all-solid-state sodium metal batteries enabled by perfluoropolyether-based electrolytes. Nature Materials, 2022, 21, 1057-1065.	13.3	92
12	Unravelling the Role of Speciation in Glyme:Ionic Liquid Hybrid Electrolytes for Naâ€“O₂ Batteries. Batteries and Supercaps, 2021, 4, 513-521.	2.4	8
13	SEI Formation on Sodium Metal Electrodes in Superconcentrated Ionic Liquid Electrolytes and the Effect of Additive Water. ACS Applied Materials & Interfaces, 2021, 13, 5706-5720.	4.0	34
14	Functional Binders Based on Polymeric Ionic Liquids for Sodium Oxygen Batteries Using Ionic Liquid Electrolytes. ACS Applied Energy Materials, 2021, 4, 434-444.	2.5	11
15	Phase behavior and electrochemical properties of solid lithium electrolytes based on N-ethyl-N-methylpyrrolidinium bis(fluorosulfonyl)imide and PVdF composites. Solid State Ionics, 2021, 363, 115588.	1.3	7
16	Iron-Based, Symmetric, Non-Aqueous Redox Flow Battery. ECS Meeting Abstracts, 2021, MA2021-01, 2098-2098.	0.0	0
17	Understanding the Role of Separator and Electrolyte Compatibility on Lithium Metal Anode Performance Using Ionic Liquid-Based Electrolytes. ACS Applied Energy Materials, 2021, 4, 6310-6323.	2.5	12
18	Highly conductive ionogel electrolytes based on N-ethyl-N-methylpyrrolidinium bis(fluorosulfonyl)imide FSI and NaFSI mixtures and their applications in sodium batteries. JPhys Materials, 2021, 4, 044005.	1.8	12

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19	Tuning the Formation and Structure of the Silicon Electrode/Ionic Liquid Electrolyte Interphase in Superconcentrated Ionic Liquids. ACS Applied Materials & Interfaces, 2021, 13, 28281-28294.	4.0	21
20	Stabilisation of the superoxide anion in bis(fluorosulfonyl)imide (FSI) ionic liquid by small chain length phosphonium cations: Voltammetric, DFT modelling and spectroscopic perspectives. Electrochemistry Communications, 2021, 127, 107029.	2.3	4
21	Anion-Derived Solid-Electrolyte Interphase Enables Long Life Na-Ion Batteries Using Superconcentrated Ionic Liquid Electrolytes. ACS Energy Letters, 2021, 6, 2481-2490.	8.8	52
22	Improving Cycle Life through Fast Formation Using a Superconcentrated Phosphonium Based Ionic Liquid Electrolyte for Anode-Free and Lithium Metal Batteries. ACS Applied Energy Materials, 2021, 4, 6399-6407.	2.5	16
23	Lithium Borate Ester Salts for Electrolyte Application in Nextâ€Generation High Voltage Lithium Batteries. Advanced Energy Materials, 2021, 11, 2101422.	10.2	34
24	Anion effects on the properties of OIPC/PVDF composites. Materials Advances, 2021, 2, 1683-1694.	2.6	17
25	Application of super-concentrated phosphonium based ionic liquid electrolyte for anode-free lithium metal batteries. Sustainable Energy and Fuels, 2021, 5, 4141-4152.	2.5	11
26	(Invited) Tuning the Formation and Structure of the Silicon Electrode/Electrolyte Interphase in Superconcentrated Ionic Liquids. ECS Meeting Abstracts, 2021, MA2021-02, 224-224.	0.0	0
27	Nanofiber-reinforced polymer electrolytes toward room temperature solid-state lithium batteries. Journal of Power Sources, 2020, 448, 227424.	4.0	34
28	Towards high rate Li metal anodes: enhanced performance at high current density in a superconcentrated ionic liquid. Journal of Materials Chemistry A, 2020, 8, 3574-3579.	5.2	25
29	Ion interactions and dynamics in pseudohalide based ionic liquid electrolytes containing sodium solutes. Journal of Molecular Liquids, 2020, 303, 112597.	2.3	4
30	Solid (cyanomethyl)trimethylammonium salts for electrochemically stable electrolytes for lithium metal batteries. Journal of Materials Chemistry A, 2020, 8, 14721-14735.	5.2	9
31	Stable performance of an all-solid-state Li metal cell coupled with a high-voltage NCA cathode and ultra-high lithium content poly(ionic liquid)s-based polymer electrolyte. Journal of Solid State Electrochemistry, 2020, 24, 2479-2485.	1.2	13
32	High Current Cycling in a Superconcentrated Ionic Liquid Electrolyte to Promote Uniform Li Morphology and a Uniform LiF-Rich Solid Electrolyte Interphase. ACS Applied Materials & Interfaces, 2020, 12, 42236-42247.	4.0	23
33	Enhanced ion transport in an ether aided super concentrated ionic liquid electrolyte for long-life practical lithium metal battery applications. Journal of Materials Chemistry A, 2020, 8, 18826-18839.	5.2	40
34	Engineering high-energy-density sodium battery anodes for improved cycling with superconcentrated ionic-liquid electrolytes. Nature Materials, 2020, 19, 1096-1101.	13.3	156
35	An investigation of commercial carbon air cathode structure in ionic liquid based sodium oxygen batteries. Scientific Reports, 2020, 10, 7123.	1.6	17
36	Formation of a corrosion-resistant coating on zinc by a duplex plasma electrolytic oxidation and conversion surface treatment. Surface and Coatings Technology, 2020, 395, 125918.	2.2	7

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37	Polymerized Ionic Liquid Block Copolymer Electrolytes for All-Solid-State Lithium-Metal Batteries. Journal of the Electrochemical Society, 2020, 167, 070525.	1.3	22
38	Lithium Sulfonate Functionalization of Carbon Cathodes as a Substitute for Lithium Nitrate in the Electrolyte of Lithiumâ€“Sulfur Batteries. Advanced Functional Materials, 2020, 30, 2002485.	7.8	16
39	A safe Liâ€“Se battery in an ionic liquid-based electrolyte operating at 25â€“70 Â°C by using a N,S,O tri-doped mesoporous carbon host material. Sustainable Energy and Fuels, 2020, 4, 2322-2332.	2.5	15
40	Stable High-Temperature Cycling of Na Metal Batteries on Na₃V₂(PO₄)₃ and Na₂FeP₂O₇ Cathodes in NaFSI-Rich Organic Ionic Plastic Crystal Electrolytes. Journal of Physical Chemistry Letters, 2020, 11, 2092-2100.	2.1	27
41	Highly Homogeneous Sodium Superoxide Growth in Naâ€“O₂ Batteries Enabled by a Hybrid Electrolyte. ACS Energy Letters, 2020, 5, 903-909.	8.8	16
42	The influence of interfacial interactions on the conductivity and phase behaviour of organic ionic plastic crystal/polymer nanoparticle composite electrolytes. Journal of Materials Chemistry A, 2020, 8, 5350-5362.	5.2	26
43	Toward Highâ€Energyâ€Density Lithium Metal Batteries: Opportunities and Challenges for Solid Organic Electrolytes. Advanced Materials, 2020, 32, e1905219.	11.1	154
44	Macrophase-Separated Organic Ionic Plastic Crystals/PAMPS-Based Ionomer Electrolyte: A New Design Perspective for Flexible and Highly Conductive Solid-State Electrolytes. ACS Omega, 2020, 5, 2931-2938.	1.6	4
45	Structuring PEDOT Hollow Nanosphere Electrodes for High Specific Energy Li-Metal | Polymer Thin-Film Batteries. ACS Applied Nano Materials, 2020, 3, 3820-3828.	2.4	5
46	A novel proton conducting ionogel electrolyte based on poly(ionic liquids) and protic ionic liquid. Electrochimica Acta, 2020, 346, 136224.	2.6	24
47	Editorsâ€™ Choiceâ€”Understanding the Superior Cycling Performance of Si Anode in Highly Concentrated Phosphonium-Based Ionic Liquid Electrolyte. Journal of the Electrochemical Society, 2020, 167, 120520.	1.3	23
48	Electrochemical Formation in Super-Concentrated Phosphonium Based Ionic Liquid Electrolyte Using Symmetric Li-Metal Coin Cells. Journal of the Electrochemical Society, 2020, 167, 120526.	1.3	16
49	New Solid-State Electrolytes Based on Organic Ionic Plastic Crystals. ECS Meeting Abstracts, 2020, MA2020-02, 803-803.	0.0	0
50	Controlling the Threeâ€Phase Boundary in Naâ€“Oxygen Batteries: The Synergy of Carbon Nanofibers and Ionic Liquid. ChemSusChem, 2019, 12, 4054-4063.	3.6	12
51	Poly(ionic liquid)s/Electrospun Nanofiber Composite Polymer Electrolytes for High Energy Density and Safe Li Metal Batteries. ACS Applied Energy Materials, 2019, 2, 6237-6245.	2.5	63
52	High Coulombic Efficiency Naâ€“O₂ Batteries Enabled by a Bilayer Ionogel/Ionic Liquid. Journal of Physical Chemistry Letters, 2019, 10, 7050-7055.	2.1	11
53	Tuning Sodium Interfacial Chemistry with Mixed-Anion Ionic Liquid Electrolytes. ACS Applied Materials & Interfaces, 2019, 11, 43093-43106.	4.0	36
54	Toward Practical Li Metal Batteries: Importance of Separator Compatibility Using Ionic Liquid Electrolytes. ACS Applied Energy Materials, 2019, 2, 6655-6663.	2.5	29

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55	Poly(Ionic Liquid)s-in-Salt Electrolytes with Co-coordination-Assisted Lithium-Ion Transport for Safe Batteries. Joule, 2019, 3, 2687-2702.	11.7	108
56	UV-Cross-Linked Ionogels for All-Solid-State Rechargeable Sodium Batteries. ACS Applied Energy Materials, 2019, 2, 6960-6966.	2.5	25
57	Supported Ionic Liquid Gel Membrane Electrolytes for a Safe and Flexible Sodium Metal Battery. ACS Sustainable Chemistry and Engineering, 2019, 7, 3722-3726.	3.2	56
58	Sustainable, Dendrite Free Lithiumâ€Metal Electrode Cycling Achieved with Polymer Composite Electrolytes Based on a Poly(Ionic Liquid) Host. Batteries and Supercaps, 2019, 2, 229-239.	2.4	35
59	Water as an Effective Additive for Highâ€Energyâ€Density Na Metal Batteries? Studies in a Superconcentrated Ionic Liquid Electrolyte. ChemSusChem, 2019, 12, 1700-1711.	3.6	36
60	Artificial SEI Transplantation: A Pathway to Enabling Lithium Metal Cycling in Water-Containing Electrolytes. ACS Applied Energy Materials, 2019, 2, 8912-8918.	2.5	6
61	Enabling High Lithium Conductivity in Polymerized Ionic Liquid Block Copolymer Electrolytes. Batteries and Supercaps, 2019, 2, 132-138.	2.4	28
62	Extreme properties of double networked ionogel electrolytes for flexible and durable energy storage devices. Energy Storage Materials, 2019, 19, 197-205.	9.5	54
63	Si Anode in High-Salt Concentration Ionic Liquid Electrolytes Based on Pyrrolidinium and Phosphonium Systems for High-Energy Li-Ion Batteries. ECS Meeting Abstracts, 2019, , .	0.0	0
64	Probing the Interactions and Dynamics in an Ionic Liquid â€“ Organic Solvent Hybrid Electrolyte System for Potential Application in Li-S Batteries. ECS Meeting Abstracts, 2019, , .	0.0	0
65	(Keynote) Ionic Liquids, Mixed Electrolytes and Their Iongels for Stable Na Metal Devices. ECS Meeting Abstracts, 2019, , .	0.0	0
66	Electrolyte Solvent Mixtures for a Symmetric, Non-Aqueous Redox Flow Battery Based on [Fe(bpy)3][Fsi]2. ECS Meeting Abstracts, 2019, , .	0.0	0
67	A Fundamental Understanding of Sulphur Speciation in Ionic Liquids By in-Situ UV-Vis Method. ECS Meeting Abstracts, 2019, , .	0.0	0
68	(Invited) Ionic Liquid Electrolytes and Ionogel Composites That Enable High Capacity Anodes for Lithium and Sodium Batteries. ECS Meeting Abstracts, 2019, , .	0.0	0
69	Surprising Enhancement in the Ion Transport Properties and Sodium Metal Cycling in a Water Tolerant Ionic Liquid Electrolyte. ECS Meeting Abstracts, 2019, , .	0.0	0
70	Lubricin Antiadhesive Coatings Exhibit Sizeâ€Selective Transport Properties that Inhibit Biofouling of Electrode Surfaces with Minimal Loss in Electrochemical Activity. Advanced Materials Interfaces, 2018, 5, 1701296.	1.9	31
71	Beneficial effect of added water on sodium metal cycling in super concentrated ionic liquid sodium electrolytes. Journal of Power Sources, 2018, 379, 344-349.	4.0	29
72	The effect of cation chemistry on physicochemical behaviour of superconcentrated NaFSI based ionic liquid electrolytes and the implications for Na battery performance. Electrochimica Acta, 2018, 268, 94-100.	2.6	31

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73	The influence of the size and symmetry of cations and anions on the physicochemical behavior of organic ionic plastic crystal electrolytes mixed with sodium salts. Physical Chemistry Chemical Physics, 2018, 20, 4721-4731.	1.3	26
74	Spectroscopic Characterization of the SEI Layer Formed on Lithium Metal Electrodes in Phosphonium Bis(fluorosulfonyl)imide Ionic Liquid Electrolytes. ACS Applied Materials & Interfaces, 2018, 10, 6719-6729.	4.0	77
75	The influence of anion chemistry on the ionic conductivity and molecular dynamics in protic organic ionic plastic crystals. Physical Chemistry Chemical Physics, 2018, 20, 4579-4586.	1.3	7
76	An ionic liquid based sodium metal-hybrid supercapacitor-battery. Sustainable Energy and Fuels, 2018, 2, 763-771.	2.5	20
77	Ionic Liquids and Organic Ionic Plastic Crystals: Advanced Electrolytes for Safer High Performance Sodium Energy Storage Technologies. Advanced Energy Materials, 2018, 8, 1703491.	10.2	109
78	Towards thermally stable high performance lithium-ion batteries: the combination of a phosphonium cation ionic liquid and a 3D porous molybdenum disulfide/graphene electrode. Chemical Communications, 2018, 54, 5338-5341.	2.2	10
79	Passivation behaviour of aluminium current collector in ionic liquid alkyl carbonate (hybrid) electrolytes. Npj Materials Degradation, 2018, 2, .	2.6	37
80	Na-Ion Solvation and High Transference Number in Superconcentrated Ionic Liquid Electrolytes: A Theoretical Approach. Journal of Physical Chemistry C, 2018, 122, 105-114.	1.5	74
81	The anion effect in ternary electrolyte systems using poly(diallyldimethylammonium) and phosphonium-based ionic liquid with high lithium salt concentration. Solid State Ionics, 2018, 327, 83-92.	1.3	27
82	Stable cycling of NaFePO4 cathodes in high salt concentration ionic liquid electrolytes. Journal of Power Sources, 2018, 406, 70-80.	4.0	28
83	High Zn Concentration Pyrrolidinium-Dicyanamide-Based Ionic Liquid Electrolytes for Zn²⁺/Zn⁰ Electrochemistry in a Flow Environment. ACS Applied Energy Materials, 2018, 1, 4580-4590.	2.5	16
84	Elucidating the Impact of Sodium Salt Concentration on the Cathodeâ€“Electrolyte Interface of Naâ€“Air Batteries. Journal of Physical Chemistry C, 2018, 122, 15276-15286.	1.5	25
85	Water-tolerant lithium metal cycling in high lithium concentration phosphonium-based ionic liquid electrolytes. Sustainable Energy and Fuels, 2018, 2, 2276-2283.	2.5	27
86	Ternary lithium-salt organic ionic plastic crystal polymer composite electrolytes for high voltage, all-solid-state batteries. Energy Storage Materials, 2018, 15, 407-414.	9.5	45
87	Improved Li-Ion Transport by DME Chelation in a Novel Ionic Liquid-Based Hybrid Electrolyte for Liâ€“S Battery Application. Journal of Physical Chemistry C, 2018, 122, 14373-14382.	1.5	33
88	Influence of Electrospun Poly(vinylidene difluoride) Nanofiber Matrix on the Ion Dynamics of a Protic Organic Ionic Plastic Crystal. Journal of Physical Chemistry C, 2018, 122, 14546-14553.	1.5	10
89	(Keynote) Ionic Liquid Electrolytes and Ionogel Composites that Enable High Capacity Anodes for Lithium and Sodium Batteries. ECS Meeting Abstracts, 2018, , .	0.0	0
90	(Keynote) Solid State Organic Ionic Plastic Crystals and Composite Materials for Energy Storage. ECS Meeting Abstracts, 2018, , .	0.0	0

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91	Towards Higher Energy Density Redoxâ€Flow Batteries: Imidazolium Ionic Liquid for Zn Electrochemistry in Flow Environment. ChemElectroChem, 2017, 4, 1051-1058.	1.7	17
92	Small quaternary alkyl phosphonium bis(fluorosulfonyl)imide ionic liquid electrolytes for sodium-ion batteries with P2- and O3-Na2/3[Fe2/3Mn1/3]O2 cathode material. Journal of Power Sources, 2017, 349, 45-51.	4.0	40
93	Phosphonium plastic crystal salt alloyed with a sodium salt as a solid-state electrolyte for sodium devices: phase behaviour and electrochemical performance. Journal of Materials Chemistry A, 2017, 5, 5770-5780.	5.2	40
94	Extensive Sodium Metal Plating and Stripping in a Highly Concentrated Inorganicâ^'Organic Ionic Liquid Electrolyte through Surface Pretreatment. ChemElectroChem, 2017, 4, 986-991.	1.7	25
95	Organic Ionic Plastic Crystalâ€Based Composite Electrolyte with Surface Enhanced Ion Transport and Its Use in Allâ€Solidâ€State Lithium Batteries. Advanced Materials Technologies, 2017, 2, 1700046.	3.0	49
96	Conformational Dynamics in an Organic Ionic Plastic Crystal. Journal of Physical Chemistry B, 2017, 121, 5439-5446.	1.2	38
97	Highly reversible oxygen to superoxide redox reaction in a sodium-containing ionic liquid. Electrochemistry Communications, 2017, 74, 14-18.	2.3	24
98	Extensive Sodium Metal Plating and Stripping in a Highly Concentrated Inorganicâ^'Organic Ionic Liquid Electrolyte through Surface Pretreatment. ChemElectroChem, 2017, 4, 976-976.	1.7	2
99	Solidâ€State Lithium Conductors for Lithium Metal Batteries Based on Electrospun Nanofiber/Plastic Crystal Composites. ChemSusChem, 2017, 10, 3135-3145.	3.6	58
100	Investigating discharge performance and Mg interphase properties of an Ionic Liquid electrolyte based Mg-air battery. Electrochimica Acta, 2017, 235, 270-279.	2.6	27
101	N-ethyl-N-methylpyrrolidinium bis(fluorosulfonyl)imide-electrospun polyvinylidene fluoride composite electrolytes: characterization and lithium cell studies. Physical Chemistry Chemical Physics, 2017, 19, 2225-2234.	1.3	61
102	Comparison of the physicochemical and electrochemical behaviour of mixed anion phosphonium based OIPCs electrolytes for sodium batteries. Solid State Ionics, 2017, 312, 44-52.	1.3	25
103	Understanding of the Electrogenerated Bulk Electrolyte Species in Sodium-Containing Ionic Liquid Electrolytes During the Oxygen Reduction Reaction. Journal of Physical Chemistry C, 2017, 121, 23307-23316.	1.5	17
104	Role of Li Concentration and the SEI Layer in Enabling High Performance Li Metal Electrodes Using a Phosphonium Bis(fluorosulfonyl)imide Ionic Liquid. Journal of Physical Chemistry C, 2017, 121, 21087-21095.	1.5	87
105	Preparation and characterization of gel polymer electrolytes using poly(ionic liquids) and high lithium salt concentration ionic liquids. Journal of Materials Chemistry A, 2017, 5, 23844-23852.	5.2	109
106	Interphase engineering of reactive metal surfaces using ionic liquids and deep eutectic solventsâ€"from corrosion control to next-generation batteries. Npj Materials Degradation, 2017, 1, .	2.6	16
107	Effect of secondary phase on thermal behaviour and solid-state ion conduction in lithium doped N-ethyl-N-methylpyrrolidinium tetrafluoroborate organic ionic plastic crystal. Journal of Materials Chemistry A, 2017, 5, 24909-24919.	5.2	28
108	High-Capacity Retention of Si Anodes Using a Mixed Lithium/Phosphonium Bis(fluorosulfonyl)imide Ionic Liquid Electrolyte. ACS Energy Letters, 2017, 2, 1804-1809.	8.8	38

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109	Mixed Phase Solidâ€State Plastic Crystal Electrolytes Based on a Phosphonium Cation for Sodium Devices. Advanced Energy Materials, 2017, 7, 1601272.	10.2	46
110	Stable Deep Doping of Vaporâ€Phase Polymerized Poly(3,4â€ethylenedioxythiophene)/Ionic Liquid Supercapacitors. ChemSusChem, 2016, 9, 2112-2121.	3.6	30
111	In-Situ-Activated N-Doped Mesoporous Carbon from a Protic Salt and Its Performance in Supercapacitors. ACS Applied Materials & Interfaces, 2016, 8, 35243-35252.	4.0	37
112	In Situ MRI of Operating Solid-State Lithium Metal Cells Based on Ionic Plastic Crystal Electrolytes. Chemistry of Materials, 2016, 28, 2844-2851.	3.2	54
113	Combined Nano- and Macrotribology Studies of Titania Lubrication Using the Oil-Ionic Liquid Mixtures. ACS Sustainable Chemistry and Engineering, 2016, 4, 5005-5012.	3.2	35
114	A comparative AFM study of the interfacial nanostructure in imidazolium or pyrrolidinium ionic liquid electrolytes for zinc electrochemical systems. Physical Chemistry Chemical Physics, 2016, 18, 29337-29347.	1.3	24
115	Ionic liquids and their solid-state analogues as materials for energy generation and storage. Nature Reviews Materials, 2016, 1, .	23.3	511
116	Electrochemistry of the tris(2,2â€˜-bipyridine) complex of iron(II) in ionic liquids and aprotic molecular solvents. Electrochimica Acta, 2016, 220, 347-353.	2.6	30
117	Protic organic ionic plastic crystals based on a difunctional cation and the triflate anion: a new solid-state proton conductor. Chemical Communications, 2016, 52, 14097-14100.	2.2	17
118	Enhancement of ion dynamics in organic ionic plastic crystal/PVDF composite electrolytes prepared by co-electrospinning. Journal of Materials Chemistry A, 2016, 4, 9873-9880.	5.2	49
119	Novel Na⁺ Ion Diffusion Mechanism in Mixed Organicâ€“Inorganic Ionic Liquid Electrolyte Leading to High Na⁺ Transference Number and Stable, High Rate Electrochemical Cycling of Sodium Cells.. Journal of Physical Chemistry C, 2016, 120, 4276-4286.	1.5	209
120	Addition of low concentrations of an ionic liquid to a base oil reduces friction over multiple length scales: a combined nano- and macrotribology investigation. Physical Chemistry Chemical Physics, 2016, 18, 6541-6547.	1.3	46
121	Film formation in trihexyl(tetradecyl)phosphonium diphenylphosphate ([P6,6,6,14][dpp]) ionic liquid on AA5083 aluminium alloy. Surface and Coatings Technology, 2016, 303, 385-395.	2.2	9
122	Reduction of oxygen in a trialkoxy ammonium-based ionic liquid and the role of water. Electrochimica Acta, 2016, 196, 727-734.	2.6	8
123	Rechargeable Zn/PEDOT Battery with an Imidazoliumâ€Based Ionic Liquid as the Electrolyte. ChemElectroChem, 2015, 2, 2071-2078.	1.7	41
124	Electrochemical and physicochemical properties of small phosphonium cation ionic liquid electrolytes with high lithium salt content. Physical Chemistry Chemical Physics, 2015, 17, 8706-8713.	1.3	123
125	Physical properties of high Li-ion content N-propyl-N-methylpyrrolidinium bis(fluorosulfonyl)imide based ionic liquid electrolytes. Physical Chemistry Chemical Physics, 2015, 17, 4656-4663.	1.3	159
126	Ionic transport through a composite structure of N-ethyl-N-methylpyrrolidinium tetrafluoroborate organic ionic plastic crystals reinforced with polymer nanofibres. Journal of Materials Chemistry A, 2015, 3, 6038-6052.	5.2	47

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127	Electrochemistry of tris(2,2â€²-bipyridyl) cobalt(II) in ionic liquids and aprotic molecular solvents on glassy carbon and platinum electrodes. Electrochimica Acta, 2015, 180, 419-426.	2.6	24
128	Ionic Liquid Adsorption and Nanotribology at the Silicaâ€“Oil Interface: Hundred-Fold Dilution in Oil Lubricates as Effectively as the Pure Ionic Liquid. Journal of Physical Chemistry Letters, 2014, 5, 4095-4099.	2.1	48
129	Roles of Additives in the Trihexyl(tetradecyl) Phosphonium Chloride Ionic Liquid Electrolyte for Primary Mg-Air Cells. Journal of the Electrochemical Society, 2014, 161, A974-A980.	1.3	17
130	Energy applications of ionic liquids. Energy and Environmental Science, 2014, 7, 232-250.	15.6	1,455
131	Electrochemical etching of AA5083 aluminium alloy in trihexyl(tetradecyl)phosphonium bis(trifluoromethylsulfonyl)amide ionic liquid. Corrosion Science, 2014, 80, 120-127.	3.0	17
132	Insights into the reversible oxygen reduction reaction in a series of phosphonium-based ionic liquids. Physical Chemistry Chemical Physics, 2014, 16, 25062-25070.	1.3	27
133	An organic ionic plastic crystal electrolyte for rate capability and stability of ambient temperature lithium batteries. Energy and Environmental Science, 2014, 7, 3352-3361.	15.6	122
134	Structure and dynamics in an organic ionic plastic crystal, N-ethyl-N-methyl pyrrolidinium bis(trifluoromethanesulfonyl) amide, mixed with a sodium salt. Journal of Materials Chemistry A, 2014, 2, 3993-4003.	5.2	56
135	Zn Electrochemistry in 1â€Ethylâ€3â€Methylimidazolium and Nâ€Butylâ€Nâ€Methylpyrrolidinium Dicyanamides: Promising New Rechargeable Zn Battery Electrolytes. ChemElectroChem, 2014, 1, 1688-1697.	1.7	49
136	Influence of Zn²⁺and Water on the Transport Properties of a Pyrrolidinium Dicyanamide Ionic Liquid. Journal of Physical Chemistry B, 2014, 118, 4895-4905.	1.2	62
137	Enhanced performance of phosphonium based ionic liquids towards 4 electrons oxygen reduction reaction upon addition of a weak proton source. Electrochemistry Communications, 2014, 38, 24-27.	2.3	41
138	Ball milling: a green mechanochemical approach for synthesis of nitrogen doped carbon nanoparticles. Nanoscale, 2013, 5, 7970.	2.8	149
139	Ionic Liquids as Antiwear Additives in Base Oils: Influence of Structure on Miscibility and Antiwear Performance for Steel on Aluminum. ACS Applied Materials & Interfaces, 2013, 5, 11544-11553.	4.0	154
140	Properties of sodium-based ionic liquid electrolytes for sodium secondary battery applications. Electrochimica Acta, 2013, 114, 766-771.	2.6	119
141	Fast Charge/Discharge of Li Metal Batteries Using an Ionic Liquid Electrolyte. Journal of the Electrochemical Society, 2013, 160, A1629-A1637.	1.3	208
142	Thin and flexible solid-state organic ionic plastic crystalâ€“polymer nanofibre composite electrolytes for device applications. Physical Chemistry Chemical Physics, 2013, 15, 13784.	1.3	47
143	Molecular insights: structure and dynamics of a Li ion doped organic ionic plastic crystal. Physical Chemistry Chemical Physics, 2013, 15, 19570.	1.3	11
144	Electrochemical, Transport, and Spectroscopic Properties of 1-Ethyl-3-methylimidazolium Ionic Liquid Electrolytes Containing Zinc Dicyanamide. Journal of Physical Chemistry C, 2013, 117, 2662-2669.	1.5	69

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145	Discharge behaviour and interfacial properties of a magnesium battery incorporating trihexyl(tetradecyl)phosphonium based ionic liquid electrolytes. Electrochimica Acta, 2013, 87, 701-708.	2.6	44
146	A review of ionic liquid surface film formation on Mg and its alloys for improved corrosion performance. Electrochimica Acta, 2013, 110, 501-510.	2.6	82
147	Bi-Functional Water/Oxygen Electrocatalyst Based on PdO-RuO₂Composites. Journal of the Electrochemical Society, 2013, 160, H74-H79.	1.3	19
148	Redox Chemistry of the Superoxide Ion in a Phosphonium-Based Ionic Liquid in the Presence of Water. Journal of Physical Chemistry Letters, 2013, 4, 1834-1837.	2.1	43
149	Nanoporous transition metal oxynitrides as catalysts for the oxygen reduction reaction. Electrochimica Acta, 2013, 103, 151-160.	2.6	22
150	Lithium electrochemistry and cycling behaviour of ionic liquids using cyano based anions. Energy and Environmental Science, 2013, 6, 979.	15.6	146
151	In Situ, Real-Time Visualization of Electrochemistry Using Magnetic Resonance Imaging. Journal of Physical Chemistry Letters, 2013, 4, 3019-3023.	2.1	46
152	A Review of Ionic Liquid Lubricants. Lubricants, 2013, 1, 3-21.	1.2	510
153	Anodising AZ31 in a Phosphonium Ionic Liquid: Corrosion Protection through Composite Film Deposition. Journal of the Electrochemical Society, 2012, 159, C539-C545.	1.3	16
154	Bi-functional oxygen electrocatalysts based on Palladium oxide-Ruthenium oxide composites. Materials Research Society Symposia Proceedings, 2012, 1491, 13.	0.1	1
155	The Influence of Water and Metal Ions on the Transport Properties of Trihexyl(tetradecyl)phosphonium Chloride. Australian Journal of Chemistry, 2012, 65, 1542.	0.5	10
156	Structure and Transport Properties of a Plastic Crystal Ion Conductor: Diethyl(methyl)(isobutyl)phosphonium Hexafluorophosphate. Journal of the American Chemical Society, 2012, 134, 9688-9697.	6.6	154
157	A comparison of phosphorus and fluorine containing IL lubricants for steel on aluminium. Physical Chemistry Chemical Physics, 2012, 14, 8224.	1.3	89
158	Critical evaluation of reference systems for voltammetric measurements in ionic liquids. Electrochimica Acta, 2012, 82, 60-68.	2.6	39
159	Conversion coatings of Mg-alloy AZ91D using trihexyl(tetradecyl) phosphonium bis(trifluoromethanesulfonyl)amide ionic liquid. Science China Chemistry, 2012, 55, 1598-1607.	4.2	17
160	Oxygen Reduction Reaction Activity of La-Based Perovskite Oxides in Alkaline Medium: A Thin-Film Rotating Ring-Disk Electrode Study. Journal of Physical Chemistry C, 2012, 116, 5827-5834.	1.5	253
161	Optimising organic ionic plastic crystal electrolyte for all solid-state and higher than ambient temperature lithium batteries. Journal of Solid State Electrochemistry, 2012, 16, 1841-1848.	1.2	59
162	Ionic liquid effects on the redox potential of ferrocene. Electrochemistry Communications, 2012, 16, 84-87.	2.3	40

#	Article	IF	Citations
163	Passive film formation in dilute ionic liquid solutions on magnesium Alloy AZ31. Electrochemistry Communications, 2012, 19, 90-92.	2.3	18
164	Ionic liquids and organic ionic plastic crystals utilizing small phosphonium cations. Journal of Materials Chemistry, 2011, 21, 7640.	6.7	99
165	Lithium doped N,N-dimethyl pyrrolidinium tetrafluoroborate organic ionic plastic crystal electrolytes for solid state lithium batteries. Journal of Materials Chemistry, 2011, 21, 10171.	6.7	69
166	Double Layer Structure of Ionic Liquids at the Au(111) Electrode Interface: An Atomic Force Microscopy Investigation. Journal of Physical Chemistry C, 2011, 115, 6855-6863.	1.5	336
167	Corrosion inhibition of 7000 series aluminium alloys with cerium diphenyl phosphate. Journal of Alloys and Compounds, 2011, 509, 1683-1690.	2.8	102
168	On the use of organic ionic plastic crystals in all solid-state lithium metal batteries. Solid State Ionics, 2011, 204-205, 73-79.	1.3	51
169	The potential for ionic liquid electrolytes to stabilise the magnesium interface for magnesium/air batteries. Electrochimica Acta, 2011, 58, 583-588.	2.6	66
170	Electrochemical reactivity of trihexyl(tetradecyl)phosphonium bis(2,4,4-trimethylpentyl)phosphinate ionic liquid on glassy carbon and AZ31 magnesium alloy. Electrochimica Acta, 2011, 56, 5328-5334.	2.6	18
171	Transition in Wear Performance for Ionic Liquid Lubricants under Increasing Load. Tribology Letters, 2010, 40, 279-284.	1.2	49
172	Characterization of the Magnesium Alloy AZ31 Surface in the Ionic Liquid Trihexyl(tetradecyl)phosphonium Bis(trifluoromethanesulfonyl)amide. Journal of the Electrochemical Society, 2010, 157, C392.	1.3	31
173	Potentiostatic Control of Ionic Liquid Surface Film Formation on ZE41 Magnesium Alloy. ACS Applied Materials & Interfaces, 2010, 2, 1317-1323.	4.0	38
174	Ionic liquids and reactions at the electrochemical interface. Physical Chemistry Chemical Physics, 2010, 12, 1659.	1.3	155
175	Proton transport in choline dihydrogen phosphate/H3PO4 mixtures. Physical Chemistry Chemical Physics, 2010, 12, 11291.	1.3	55
176	Organic ionic plastic crystals: recent advances. Journal of Materials Chemistry, 2010, 20, 2056.	6.7	247
177	Phosphonium ionic liquids as lubricants for aluminium-steel. WIT Transactions on Engineering Sciences, 2010, , .	0.0	15
178	Liâ€Metal Symmetrical Cell Studies Using Ionic Organic Plastic Crystal Electrolyte. Advanced Engineering Materials, 2009, 11, 1044-1048.	1.6	69
179	Polyterthiophene/CNT composite as a cathode material for lithium batteries employing an ionic liquid electrolyte. Electrochimica Acta, 2009, 54, 6844-6849.	2.6	41
180	New Insights into the Fundamental Chemical Nature of Ionic Liquid Film Formation on Magnesium Alloy Surfaces. ACS Applied Materials & Interfaces, 2009, 1, 1045-1052.	4.0	80

#	Article	IF	Citations
181	Corrosion of magnesium alloy ZE41 â€“ The role of microstructural features. Corrosion Science, 2009, 51, 387-394.	3.0	162
182	Synthesis and physical property characterisation of phosphonium ionic liquids based on P(O)2(OR)2â¯ and P(O)2(R)2â¯ anions with potential application for corrosion mitigation of magnesium alloys. Electrochimica Acta, 2008, 54, 254-260.	2.6	89
183	An Electrochemical Impedance Study of Ionic Liquid Film Formation and Aqueous Corrosion of Magnesium Alloy ZE41. Israel Journal of Chemistry, 2008, 48, 313-318.	1.0	17
184	A Potential Novel Rapid Screening NMR Approach to Boundary Film Formation at Solid Interfaces in Contact with Ionic Liquids. Journal of Physical Chemistry C, 2008, 112, 13801-13804.	1.5	26
185	An Investigation of a Phosphinate-Based Ionic Liquid for Corrosion Protection of Magnesium Alloy AZ31. Australian Journal of Chemistry, 2007, 60, 43.	0.5	44
186	N-Methyl-N-Alkylpyrrolidinium Bis(perfluoroethylsulfonyl)amide ([NPf2]â€“) and Tris(trifluoromethanesulfonyl)methide ([CTf3]â€“) Salts: Synthesis and Characterization. Australian Journal of Chemistry, 2007, 60, 57.	0.5	21
187	Ionic Liquids in Electrochemical Devices and Processes: Managing Interfacial Electrochemistry. Accounts of Chemical Research, 2007, 40, 1165-1173.	7.6	660
188	Exploring corrosion protection of Mg via ionic liquid pretreatment. Surface and Coatings Technology, 2007, 201, 4496-4504.	2.2	79
189	N-methyl-N-alkylpyrrolidinium nonafluoro-1-butanesulfonate salts: Ionic liquid properties and plastic crystal behaviour. Green Chemistry, 2006, 8, 256.	4.6	38
190	Characterization of the Lithium Surface in N-Methyl-N-alkylpyrrolidinium Bis(trifluoromethanesulfonyl)amide Room-Temperature Ionic Liquid Electrolytes. Journal of the Electrochemical Society, 2006, 153, A595.	1.3	325
191	Electrochemistry at Negative Potentials in Bis(trifluoromethanesulfonyl)amide Ionic Liquids. Zeitschrift Fur Physikalische Chemie, 2006, 220, 1483-1498.	1.4	200
192	A new Lewis-base ionic liquid comprising a mono-charged diamine structure: A highly stable electrolyte for lithium electrochemistry. Electrochemistry Communications, 2006, 8, 445-449.	2.3	55
193	An Ionic Liquid Surface Treatment for Corrosion Protection of Magnesium Alloy AZ31. Electrochemical and Solid-State Letters, 2006, 9, B52.	2.2	83
194	Rapid I?/I3? Diffusion in a Molecular-Plastic-Crystal Electrolyte for Potential Application in Solid-State Photoelectrochemical Cells. Angewandte Chemie - International Edition, 2005, 44, 313-316.	7.2	59
195	The Zwitterion Effect in Ionic Liquids: Towards Practical Rechargeable Lithium-Metal Batteries. Advanced Materials, 2005, 17, 2497-2501.	11.1	189
196	The Zwitterion Effect in Ionic Liquids: Towards Practical Rechargeable Lithium-Metal Batteries.. ChemInform, 2005, 36, no.	0.1	0
197	The zwitterion effect in high-conductivity polyelectrolyte materials. Nature Materials, 2004, 3, 29-32.	13.3	276
198	Electrochemical synthesis of polypyrrole in ionic liquids. Polymer, 2004, 45, 1447-1453.	1.8	191

#	Article	IF	Citations
199	High Lithium Metal Cycling Efficiency in a Room-Temperature Ionic Liquid. Electrochemical and Solid-State Letters, 2004, 7, A97.	2.2	454