Doug MacFarlane

List of Publications by Year in descending order

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| | | 764 | 1489 |
|-----------------|-----------------------|---------------------|-------------------------|
| 799 | 65,517 | 119 | 219 |
| papers | citations | h-index | g-index |
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| 871 all docs | 871 docs citations | 871 times ranked | 41378 citing authors |
| | | | |

| # | Article | IF | CITATIONS |
|----|--|------|-----------|
| 1 | Ionic-liquid materials for the electrochemical challenges of the future. Nature Materials, 2009, 8, 621-629. | 13.3 | 4,067 |
| 2 | Energy applications of ionic liquids. Energy and Environmental Science, 2014, 7, 232-250. | 15.6 | 1,455 |
| 3 | Use of Ionic Liquids for pi -Conjugated Polymer Electrochemical Devices. Science, 2002, 297, 983-987. | 6.0 | 1,155 |
| 4 | Challenges and prospects in the catalysis of electroreduction of nitrogen to ammonia. Nature Catalysis, 2019, 2, 290-296. | 16.1 | 1,056 |
| 5 | Pyrrolidinium Imides:Â A New Family of Molten Salts and Conductive Plastic Crystal Phases. Journal of Physical Chemistry B, 1999, 103, 4164-4170. | 1.2 | 1,021 |
| 6 | Vitrification as an approach to cryopreservation. Cryobiology, 1984, 21, 407-426. | 0.3 | 994 |
| 7 | Introduction: Ionic Liquids. Chemical Reviews, 2017, 117, 6633-6635. | 23.0 | 855 |
| 8 | A Roadmap to the Ammonia Economy. Joule, 2020, 4, 1186-1205. | 11.7 | 782 |
| 9 | Ionic Liquids in Electrochemical Devices and Processes: Managing Interfacial Electrochemistry. Accounts of Chemical Research, 2007, 40, 1165-1173. | 7.6 | 660 |
| 10 | On the concept of ionicity in ionic liquids. Physical Chemistry Chemical Physics, 2009, 11, 4962. | 1.3 | 645 |
| 11 | Lithium-doped plastic crystal electrolytes exhibiting fast ion conduction for secondary batteries. Nature, 1999, 402, 792-794. | 13.7 | 570 |
| 12 | Ionic Liquids—An Overview. Australian Journal of Chemistry, 2004, 57, 113. | 0.5 | 550 |
| 13 | Hierarchical Mesoporous SnO ₂ Nanosheets on Carbon Cloth: A Robust and Flexible Electrocatalyst for CO ₂ Reduction with High Efficiency and Selectivity. Angewandte Chemie - International Edition, 2017, 56, 505-509. | 7.2 | 526 |
| 14 | Ionic liquids and their solid-state analogues as materials for energy generation and storage. Nature Reviews Materials, 2016, 1, . | 23.3 | 511 |
| 15 | A Review of Ionic Liquid Lubricants. Lubricants, 2013, 1, 3-21. | 1.2 | 510 |
| 16 | Electro-synthesis of ammonia from nitrogen at ambient temperature and pressure in ionic liquids. Energy and Environmental Science, 2017, 10, 2516-2520. | 15.6 | 497 |
| 17 | Single-Boron Catalysts for Nitrogen Reduction Reaction. Journal of the American Chemical Society, 2019, 141, 2884-2888. | 6.6 | 497 |
| 18 | High Rates of Oxygen Reduction over a Vapor Phase–Polymerized PEDOT Electrode. Science, 2008, 321, 671-674. | 6.0 | 493 |

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| # | Article | IF | CITATIONS |
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| 19 | Room-Temperature Molten Salts Based on the Quaternary Ammonium Ion. Journal of Physical Chemistry B, 1998, 102, 8858-8864. | 1.2 | 481 |
| 20 | Low viscosity ionic liquids based on organic salts of the dicyanamide anion. Chemical Communications, 2001, , 1430-1431. | 2.2 | 466 |
| 21 | High Lithium Metal Cycling Efficiency in a Room-Temperature Ionic Liquid. Electrochemical and Solid-State Letters, 2004, 7, A97. | 2.2 | 454 |
| 22 | Ionic liquids for energy, materials, and medicine. Chemical Communications, 2014, 50, 9228-9250. | 2.2 | 447 |
| 23 | Ionic liquids based on imidazolium, ammonium and pyrrolidinium salts of the dicyanamide anion. Green Chemistry, 2002, 4, 444-448. | 4.6 | 441 |
| 24 | Phosphonium-Based Ionic Liquids: An Overview. Australian Journal of Chemistry, 2009, 62, 309. | 0.5 | 441 |
| 25 | Protein solubilising and stabilising ionic liquids. Chemical Communications, 2005, , 4804. | 2.2 | 427 |
| 26 | Porous nitrogen-doped hollow carbon spheres derived from polyaniline for high performance supercapacitors. Journal of Materials Chemistry A, 2014, 2, 5352-5357. | 5.2 | 403 |
| 27 | Lewis base ionic liquids. Chemical Communications, 2006, , 1905. | 2.2 | 399 |
| 28 | Promising prospects for 2D d ² –d ⁴ M ₃ C ₂ transition metal carbides (MXenes) in N ₂ capture and conversion into ammonia. Energy and Environmental Science, 2016, 9, 2545-2549. | 15.6 | 395 |
| 29 | Extraction of lignin from lignocellulose at atmospheric pressure using alkylbenzenesulfonate ionic liquid. Green Chemistry, 2009, 11, 339. | 4.6 | 390 |
| 30 | Electrochemical performance of polyaniline nanofibres and polyaniline/multi-walled carbon nanotube composite as an electrode material for aqueous redox supercapacitors. Journal of Power Sources, 2007, 171, 1062-1068. | 4.0 | 378 |
| 31 | High conductivity molten salts based on the imide ion. Electrochimica Acta, 2000, 45, 1271-1278. | 2.6 | 375 |
| 32 | lonic Liquids—Progress on the Fundamental Issues. Australian Journal of Chemistry, 2007, 60, 3. | 0.5 | 372 |
| 33 | Understanding of Electrochemical Mechanisms for CO ₂ Capture and Conversion into Hydrocarbon Fuels in Transition-Metal Carbides (MXenes). ACS Nano, 2017, 11, 10825-10833. | 7.3 | 359 |
| 34 | Plastic Crystal Electrolyte Materials: New Perspectives on Solid State Ionics. Advanced Materials, 2001, 13, 957-966. | 11.1 | 340 |
| 35 | Solubility and Stability of Cytochromecin Hydrated Ionic Liquids:Â Effect of Oxo Acid Residues and Kosmotropicity. Biomacromolecules, 2007, 8, 2080-2086. | 2.6 | 338 |
| 36 | Bioactives from fruit processing wastes: Green approaches to valuable chemicals. Food Chemistry, 2017, 225, 10-22. | 4.2 | 338 |

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| 37 | 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 |
| 38 | Crystalline vs. Ionic Liquid Salt Forms of Active Pharmaceutical Ingredients: A Position Paper. Pharmaceutical Research, 2010, 27, 521-526. | 1.7 | 307 |
| 39 | Thermal Degradation of Ionic Liquids at Elevated Temperatures. Australian Journal of Chemistry, 2004, 57, 145. | 0.5 | 301 |
| 40 | Nanostructured photoelectrochemical solar cell for nitrogen reduction using plasmon-enhanced black silicon. Nature Communications, 2016, 7, 11335. | 5.8 | 294 |
| 41 | Nitrogen reduction to ammonia at high efficiency and rates based on a phosphonium proton shuttle. Science, 2021, 372, 1187-1191. | 6.0 | 289 |
| 42 | Artificial photosynthesis as a frontier technology for energy sustainability. Energy and Environmental Science, 2013, 6, 1074. | 15.6 | 284 |
| 43 | Cyto-toxicity and biocompatibility of a family of choline phosphate ionic liquids designed for pharmaceutical applications. Green Chemistry, 2010, 12, 507. | 4.6 | 277 |
| 44 | The zwitterion effect in high-conductivity polyelectrolyte materials. Nature Materials, 2004, 3, 29-32. | 13.3 | 276 |
| 45 | Use of Ionic Liquids as Electrolytes in Electromechanical Actuator Systems Based on Inherently Conducting Polymers. Chemistry of Materials, 2003, 15, 2392-2398. | 3.2 | 274 |
| 46 | Energy and environment policy case for a global project on artificial photosynthesis. Energy and Environmental Science, 2013, 6, 695. | 15.6 | 264 |
| 47 | Identification and elimination of false positives in electrochemical nitrogen reduction studies. Nature Communications, 2020, 11, 5546. | 5.8 | 264 |
| 48 | Towards a better Sn: Efficient electrocatalytic reduction of CO 2 to formate by Sn/SnS 2 derived from SnS 2 nanosheets. Nano Energy, 2017, 31, 270-277. | 8.2 | 261 |
| 49 | MoS ₂ Polymorphic Engineering Enhances Selectivity in the Electrochemical Reduction of Nitrogen to Ammonia. ACS Energy Letters, 2019, 4, 430-435. | 8.8 | 261 |
| 50 | Electrochemistry of Room Temperature Protic Ionic Liquids. Journal of Physical Chemistry B, 2008, 112, 6923-6936. | 1.2 | 254 |
| 51 | Conversion of dinitrogen to ammonia on Ru atoms supported on boron sheets: a DFT study. Journal of Materials Chemistry A, 2019, 7, 4771-4776. | 5.2 | 251 |
| 52 | Organic ionic plastic crystals: recent advances. Journal of Materials Chemistry, 2010, 20, 2056. | 6.7 | 247 |
| 53 | Liquids intermediate between "molecular―and "ionic―liquids: Liquid Ion Pairs?. Chemical Communications, 2007, , 3817. | 2.2 | 231 |
| 54 | lonicity and proton transfer in protic ionic liquids. Physical Chemistry Chemical Physics, 2010, 12, 10341. | 1.3 | 229 |

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| 55 | Investigation of ionic liquids as electrolytes for carbon nanotube electrodes. Electrochemistry Communications, 2004, 6, 22-27. | 2.3 | 228 |
| 56 | High Seebeck coefficient redox ionic liquid electrolytes for thermal energy harvesting. Energy and Environmental Science, 2013, 6, 2639. | 15.6 | 228 |
| 57 | Thermal degradation of cyano containing ionic liquids. Green Chemistry, 2006, 8, 691. | 4.6 | 224 |
| 58 | Thermo-electrochemical cells for waste heat harvesting – progress and perspectives. Chemical Communications, 2017, 53, 6288-6302. | 2.2 | 218 |
| 59 | Longâ€Term Structural and Chemical Stability of DNA in Hydrated Ionic Liquids. Angewandte Chemie - International Edition, 2010, 49, 1631-1633. | 7.2 | 209 |
| 60 | Novel Na ⁺ Ion Diffusion Mechanism in Mixed Organic–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 |
| 61 | Fast Charge/Discharge of Li Metal Batteries Using an Ionic Liquid Electrolyte. Journal of the Electrochemical Society, 2013, 160, A1629-A1637. | 1.3 | 208 |
| 62 | High Capacity, Safety, and Enhanced Cyclability of Lithium Metal Battery Using a V ₂ O ₅ Nanomaterial Cathode and Room Temperature Ionic Liquid Electrolyte. Chemistry of Materials, 2008, 20, 7044-7051. | 3.2 | 205 |
| 63 | Rational Electrode–Electrolyte Design for Efficient Ammonia Electrosynthesis under Ambient Conditions. ACS Energy Letters, 2018, 3, 1219-1224. | 8.8 | 204 |
| 64 | Electrochemistry at Negative Potentials in Bis(trifluoromethanesulfonyl)amide Ionic Liquids. Zeitschrift Fur Physikalische Chemie, 2006, 220, 1483-1498. | 1.4 | 200 |
| 65 | Direct electro-deposition of graphene from aqueous suspensions. Physical Chemistry Chemical Physics, 2011, 13, 9187. | 1.3 | 197 |
| 66 | Ambient Temperature Plastic Crystal Electrolyte for Efficient, All-Solid-State Dye-Sensitized Solar Cell. Journal of the American Chemical Society, 2004, 126, 13590-13591. | 6.6 | 196 |
| 67 | Hierarchical Porous Plasmonic Metamaterials for Reproducible Ultrasensitive Surfaceâ€Enhanced Raman Spectroscopy. Advanced Materials, 2015, 27, 1090-1096. | 11.1 | 193 |
| 68 | Sugars Exert a Major Influence on the Vitrification Properties of Ethylene Glycol-Based Solutions and Have Low Toxicity to Embryos and Oocytes. Cryobiology, 1999, 38, 119-130. | 0.3 | 192 |
| 69 | Electrochemical synthesis of polypyrrole in ionic liquids. Polymer, 2004, 45, 1447-1453. | 1.8 | 191 |
| 70 | Ion diffusion in molten salt mixtures. Electrochimica Acta, 2000, 45, 1279-1284. | 2.6 | 190 |
| 71 | The Zwitterion Effect in Ionic Liquids: Towards Practical Rechargeable Lithium-Metal Batteries. Advanced Materials, 2005, 17, 2497-2501. | 11.1 | 189 |
| 72 | Steric Modification of a Cobalt Phthalocyanine/Graphene Catalyst To Give Enhanced and Stable Electrochemical CO ₂ Reduction to CO. ACS Energy Letters, 2019, 4, 666-672. | 8.8 | 183 |

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|----|---|------|-----------|
| 73 | Rapid, clean, and mild O-acetylation of alcohols and carbohydrates in an ionic liquid. Chemical Communications, 2002, , 714-715. | 2.2 | 181 |
| 74 | Room temperature CO2 reduction to solid carbon species on liquid metals featuring atomically thin ceria interfaces. Nature Communications, 2019, 10, 865. | 5.8 | 179 |
| 75 | Feasibility of N ₂ Binding and Reduction to Ammonia on Feâ€Deposited MoS ₂ 2D Sheets: A DFT Study. Chemistry - A European Journal, 2017, 23, 8275-8279. | 1.7 | 173 |
| 76 | On the components of the dielectric constants of ionic liquids: ionic polarization?. Physical Chemistry Chemical Physics, 2009, 11, 2452. | 1.3 | 171 |
| 77 | Electrodeposited PEDOT-on-plastic cathodes for dye-sensitized solar cells. Chemical Communications, 2010, 46, 5367. | 2.2 | 171 |
| 78 | Electroreduction of Nitrates, Nitrites, and Gaseous Nitrogen Oxides: A Potential Source of Ammonia in Dinitrogen Reduction Studies. ACS Energy Letters, 2020, 5, 2095-2097. | 8.8 | 170 |
| 79 | Unexpected improvement in stability and utility of cytochrome c by solution in biocompatible ionic liquids. Biotechnology and Bioengineering, 2006, 94, 1209-1213. | 1.7 | 169 |
| 80 | High Power Density Electrochemical Thermocells for Inexpensively Harvesting Lowâ€Grade Thermal Energy. Advanced Materials, 2017, 29, 1605652. | 11.1 | 166 |
| 81 | Unlocking the Electrocatalytic Activity of Antimony for CO ₂ Reduction by Twoâ€Dimensional Engineering of the Bulk Material. Angewandte Chemie - International Edition, 2017, 56, 14718-14722. | 7.2 | 164 |
| 82 | Ion-Pair Binding Energies of Ionic Liquids: Can DFT Compete with Ab Initio-Based Methods?. Journal of Physical Chemistry A, 2009, 113, 7064-7072. | 1.1 | 163 |
| 83 | Carbon Quantum Dots/Cu ₂ O Heterostructures for Solarâ€Lightâ€Driven Conversion of CO ₂ to Methanol. Advanced Energy Materials, 2015, 5, 1401077. | 10.2 | 163 |
| 84 | Renewable fuels from concentrated solar power: towards practical artificial photosynthesis. Energy and Environmental Science, 2015, 8, 2791-2796. | 15.6 | 162 |
| 85 | Seebeck coefficients in ionic liquids –prospects for thermo-electrochemical cells. Chemical Communications, 2011, 47, 6260. | 2.2 | 160 |
| 86 | 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 |
| 87 | Dissolution of feather keratin in ionic liquids. Green Chemistry, 2013, 15, 525. | 4.6 | 158 |
| 88 | N-methyl-N-alkylpyrrolidinium tetrafluoroborate salts: ionic solvents and solid electrolytes. Electrochimica Acta, 2001, 46, 1753-1757. | 2.6 | 156 |
| 89 | The effect of anion fluorination in ionic liquids—physical properties of a range of bis(methanesulfonyl)amide salts. New Journal of Chemistry, 2003, 27, 1504-1510. | 1.4 | 156 |
| 90 | Dissolution and regeneration of wool keratin in ionic liquids. Green Chemistry, 2014, 16, 2857-2864. | 4.6 | 156 |

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| 91 | Polyethylenimine promoted electrocatalytic reduction of CO ₂ to CO in aqueous medium by graphene-supported amorphous molybdenum sulphide. Energy and Environmental Science, 2016, 9, 216-223. | 15.6 | 156 |
| 92 | lonic liquids and reactions at the electrochemical interface. Physical Chemistry Chemical Physics, 2010, 12, 1659. | 1.3 | 155 |
| 93 | 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 |
| 94 | lonic 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 |
| 95 | Low overpotential water oxidation to hydrogen peroxide on a MnOx catalyst. Energy and Environmental Science, 2012, 5, 9496. | 15.6 | 152 |
| 96 | MnO ₂ /MnCo ₂ O ₄ /Ni heterostructure with quadruple hierarchy: a bifunctional electrode architecture for overall urea oxidation. Journal of Materials Chemistry A, 2017, 5, 7825-7832. | 5.2 | 152 |
| 97 | Solid state actuators based on polypyrrole and polymer-in-ionic liquid electrolytes. Electrochimica Acta, 2003, 48, 2355-2359. | 2.6 | 150 |
| 98 | Transport properties in a family of dialkylimidazolium ionic liquids. Physical Chemistry Chemical Physics, 2004, 6, 1758-1765. | 1.3 | 148 |
| 99 | Novel halogen-free chelated orthoborate–phosphonium ionic liquids: synthesis and tribophysical properties. Physical Chemistry Chemical Physics, 2011, 13, 12865. | 1.3 | 147 |
| 100 | Co ₃ O ₄ nanoneedle arrays as a multifunctional "super-reservoir―electrode for long cycle life Li–S batteries. Journal of Materials Chemistry A, 2017, 5, 250-257. | 5.2 | 147 |
| 101 | Lithium electrochemistry and cycling behaviour of ionic liquids using cyano based anions. Energy and Environmental Science, 2013, 6, 979. | 15.6 | 146 |
| 102 | The effect of nano-particle TiO2 fillers on structure and transport in polymer electrolytes. Solid State Ionics, 2002, 147, 203-211. | 1.3 | 140 |
| 103 | Energyâ€Efficient Nitrogen Reduction to Ammonia at Low Overpotential in Aqueous Electrolyte under Ambient Conditions. ChemSusChem, 2018, 11, 3416-3422. | 3.6 | 140 |
| 104 | Lithium doped N-methyl-N-ethylpyrrolidinium bis(trifluoromethanesulfonyl)amide fast-ion conducting plastic crystals. Journal of Materials Chemistry, 2000, 10, 2259-2265. | 6.7 | 139 |
| 105 | Fast ion conduction in molecular plastic crystals. Solid State Ionics, 2003, 161, 105-112. | 1.3 | 139 |
| 106 | Recent advances in the nanoengineering of electrocatalysts for CO ₂ reduction. Nanoscale, 2018, 10, 6235-6260. | 2.8 | 139 |
| 107 | N-Methyl-N-alkylpyrrolidinium Hexafluorophosphate Salts:  Novel Molten Salts and Plastic Crystal Phases. Chemistry of Materials, 2001, 13, 558-564. | 3.2 | 137 |
| 108 | High current density, efficient cycling of Zn2+ in 1-ethyl-3-methylimidazolium dicyanamide ionic liquid: The effect of Zn2+ salt and water concentration. Electrochemistry Communications, 2012, 18, 119-122. | 2.3 | 136 |

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| 109 | Hierarchical Mesoporous SnO ₂ Nanosheets on Carbon Cloth: A Robust and Flexible Electrocatalyst for CO ₂ Reduction with High Efficiency and Selectivity. Angewandte Chemie, 2017, 129, 520-524. | 1.6 | 136 |
| 110 | A Biodegradable Thin-Film Magnesium Primary Battery Using Silk Fibroin–Ionic Liquid Polymer Electrolyte. ACS Energy Letters, 2017, 2, 831-836. | 8.8 | 134 |
| 111 | Nature of Hydrogen Bonding in Charged Hydrogen-Bonded Complexes and Imidazolium-Based Ionic Liquids. Journal of Physical Chemistry B, 2011, 115, 14659-14667. | 1.2 | 132 |
| 112 | Protic ionic liquids based on the dimeric and oligomeric anions: [(AcO)xHxâ^'1]â^'. Physical Chemistry Chemical Physics, 2008, 10, 2972. | 1.3 | 129 |
| 113 | Protic pharmaceuticalionic liquids and solids: Aspects of protonics. Faraday Discussions, 2012, 154, 335-352. | 1.6 | 129 |
| 114 | The influence of the monomer and the ionic liquid on the electrochemical preparation of polythiophene. Polymer, 2005, 46, 2047-2058. | 1.8 | 128 |
| 115 | Ionic liquid electrolytes as a platform for rechargeable metal–air batteries: a perspective. Physical Chemistry Chemical Physics, 2014, 16, 18658-18674. | 1.3 | 128 |
| 116 | A DFT study of planar vs. corrugated graphene-like carbon nitride (g-C ₃ N ₄) and its role in the catalytic performance of CO ₂ conversion. Physical Chemistry Chemical Physics, 2016, 18, 18507-18514. | 1.3 | 125 |
| 117 | Energy efficient electrochemical reduction of CO ₂ to CO using a three-dimensional porphyrin/graphene hydrogel. Energy and Environmental Science, 2019, 12, 747-755. | 15.6 | 125 |
| 118 | Physical trends and structural features in organic salts of the thiocyanate anion. Journal of Materials Chemistry, 2002, 12, 3475-3480. | 6.7 | 124 |
| 119 | Toward protic ionic liquid and organic ionic plastic crystal electrolytes for fuel cells. Electrochimica Acta, 2012, 84, 213-222. | 2.6 | 123 |
| 120 | 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 |
| 121 | Synergistic Corrosion Inhibition of Mild Steel in Aqueous Chloride Solutions by an Imidazolinium Carboxylate Salt. ACS Sustainable Chemistry and Engineering, 2016, 4, 1746-1755. | 3.2 | 123 |
| 122 | Lithium ion mobility in poly(vinyl alcohol) based polymer electrolytes as determined by 7Li NMR spectroscopy. Electrochimica Acta, 1998, 43, 1465-1469. | 2.6 | 122 |
| 123 | Electrodeposited MnO _x Films from Ionic Liquid for Electrocatalytic Water Oxidation. Advanced Energy Materials, 2012, 2, 1013-1021. | 10.2 | 122 |
| 124 | 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 |
| 125 | Microscopic Interactions in Nanocomposite Electrolytes. Macromolecules, 2001, 34, 4549-4555. | 2.2 | 121 |
| 126 | Ionic Liquid Mixtures—Variations in Physical Properties and Their Origins in Molecular Structure. Journal of Physical Chemistry B, 2012, 116, 8251-8258. | 1.2 | 121 |

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| 127 | Structural studies of ambient temperature plastic crystal ion conductors. Journal of Physics Condensed Matter, 2001, 13, 8257-8267. | 0.7 | 120 |
| 128 | Acid–Organic base swollen polymer membranes. Electrochimica Acta, 2001, 46, 1703-1708. | 2.6 | 120 |
| 129 | Exploring an Anti-Crystal Engineering Approach to the Preparation of Pharmaceutically Active Ionic Liquids. Crystal Growth and Design, 2009, 9, 1137-1145. | 1.4 | 120 |
| 130 | Liquid forms of pharmaceutical co-crystals: exploring the boundaries of salt formation. Chemical Communications, 2011, 47, 2267-2269. | 2.2 | 120 |
| 131 | Structural analysis of low melting organic salts: perspectives on ionic liquids. Physical Chemistry Chemical Physics, 2010, 12, 9144. | 1.3 | 119 |
| 132 | Properties of sodium-based ionic liquid electrolytes for sodium secondary battery applications. Electrochimica Acta, 2013, 114, 766-771. | 2.6 | 119 |
| 133 | Ionic liquids and ultrasound in combination: synergies and challenges. Chemical Society Reviews, 2014, 43, 8132-8149. | 18.7 | 118 |
| 134 | Long lifetime photoluminescence in N, S co-doped carbon quantum dots from an ionic liquid and their applications in ultrasensitive detection of pesticides. Carbon, 2016, 104, 33-39. | 5.4 | 117 |
| 135 | Intrinsically stable in situ generated electrocatalyst for long-term oxidation of acidic water at up to 80 °C. Nature Catalysis, 2019, 2, 457-465. | 16.1 | 117 |
| 136 | Crystallization in fluoride glasses. Journal of Non-Crystalline Solids, 1984, 64, 351-362. | 1.5 | 115 |
| 137 | Vitrification Properties of Solutions of Ethylene Glycol in Saline Containing PVP, Ficoll, or Dextran. Cryobiology, 1997, 35, 219-229. | 0.3 | 112 |
| 138 | Building a tool to overcome barriers in research-implementation spaces: The Conservation Evidence database. Biological Conservation, 2019, 238, 108199. | 1.9 | 112 |
| 139 | Methanesulfonate and p-toluenesulfonate salts of the N-methyl-N-alkylpyrrolidinium and quaternary ammonium cations: novel low cost ionic liquids. Green Chemistry, 2002, 4, 223-229. | 4.6 | 109 |
| 140 | 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 |
| 141 | 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 |
| 142 | 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 |
| 143 | Simultaneous membrane transport of two active pharmaceutical ingredients by charge assisted hydrogen bond complex formation. Chemical Science, 2014, 5, 3449. | 3.7 | 106 |
| 144 | Conducting Polymer Composite Materials for Hydrogen Generation. Advanced Materials, 2010, 22, 1727-1730. | 11.1 | 105 |

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| 145 | Conductivity in amorphous polyether nanocomposite materials. Solid State Ionics, 1999, 126, 269-276. | 1.3 | 103 |
| 146 | Extraction and recovery of azo dyes into an ionic liquid. Talanta, 2006, 69, 1059-1062. | 2.9 | 103 |
| 147 | Transport Properties in Ionic Liquids and Ionic Liquid Mixtures:  The Challenges of NMR Pulsed Field Gradient Diffusion Measurements. Journal of Physical Chemistry B, 2007, 111, 9018-9024. | 1.2 | 102 |
| 148 | Importance of dispersion forces for prediction of thermodynamic and transport properties of some common ionic liquids. Physical Chemistry Chemical Physics, 2014, 16, 7209-7221. | 1.3 | 102 |
| 149 | Mg Cathode Materials and Electrolytes for Rechargeable Mg Batteries: A Review. Batteries and Supercaps, 2019, 2, 115-127. | 2.4 | 102 |
| 150 | Organic Ionic Plastic Crystals as Solid-State Electrolytes. Trends in Chemistry, 2019, 1, 126-140. | 4.4 | 102 |
| 151 | Ionic Liquids in Biomass Processing. Topics in Current Chemistry, 2009, 290, 311-339. | 4.0 | 101 |
| 152 | Understanding the Effect of the C2 Proton in Promoting Low Viscosities and High Conductivities in Imidazolium-Based Ionic Liquids: Part I. Weakly Coordinating Anions. Journal of Physical Chemistry B, 2011, 115, 14688-14697. | 1.2 | 101 |
| 153 | Synthesis and properties of ambient temperature molten salts based on the quaternary ammonium ion. Ionics, 1997, 3, 356-362. | 1.2 | 100 |
| 154 | Engineering Surface Amine Modifiers of Ultrasmall Gold Nanoparticles Supported on Reduced Graphene Oxide for Improved Electrochemical CO ₂ Reduction. Advanced Energy Materials, 2018, 8, 1801400. | 10.2 | 100 |
| 155 | Organic ionic plastic crystal electrolytes; a new class of electrolyte for high efficiency solid state dye-sensitized solar cells. Energy and Environmental Science, 2011, 4, 2234. | 15.6 | 99 |
| 156 | Ionic liquids and organic ionic plastic crystals utilizing small phosphonium cations. Journal of Materials Chemistry, 2011, 21, 7640. | 6.7 | 99 |
| 157 | Biocompatible Ionic Liquid–Biopolymer Electrolyte-Enabled Thin and Compact Magnesium–Air Batteries. ACS Applied Materials & Interfaces, 2014, 6, 21110-21117. | 4.0 | 99 |
| 158 | Assessment of Kohn–Sham density functional theory and MÃ,ller–Plesset perturbation theory for ionic liquids. Physical Chemistry Chemical Physics, 2013, 15, 13664. | 1.3 | 98 |
| 159 | Choline-Based Ionic Liquids-Enhanced Biodegradation of Azo Dyes. Environmental Science & Technology, 2012, 46, 4902-4908. | 4.6 | 96 |
| 160 | Curcumin loaded poly(2-hydroxyethyl methacrylate) nanoparticles from gelled ionic liquid – In vitro cytotoxicity and anti-cancer activity in SKOV-3 cells. European Journal of Pharmaceutical Sciences, 2014, 51, 34-44. | 1.9 | 96 |
| 161 | New dimensions in salt–solvent mixtures: a 4th evolution of ionic liquids. Faraday Discussions, 2017, 206, 9-28. | 1.6 | 96 |
| 162 | Structure-property relationships in plasticized solid polymer electrolytes. Electrochimica Acta, 1995, 40, 2131-2136. | 2.6 | 95 |

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| 163 | Enhancement of ion dynamics in PMMA-based gels with addition of TiO2 nano-particles. Electrochimica Acta, 2003, 48, 2099-2103. | 2.6 | 95 |
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