

David W Rooney

List of Publications by Year in descending order

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164
papers

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26630

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168
all docs

168
docs citations

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times ranked

10335
citing authors

#	ARTICLE	IF	CITATIONS
1	Strategies for mitigation of climate change: a review. Environmental Chemistry Letters, 2020, 18, 2069-2094.	16.2	532
2	Recent advances in carbon capture storage and utilisation technologies: a review. Environmental Chemistry Letters, 2021, 19, 797-849.	16.2	363
3	3D nitrogen-doped graphene foam with encapsulated germanium/nitrogen-doped graphene yolk-shell nanoarchitecture for high-performance flexible Li-ion battery. Nature Communications, 2017, 8, 13949.	12.8	342
4	Strategies to achieve a carbon neutral society: a review. Environmental Chemistry Letters, 2022, 20, 2277-2310.	16.2	336
5	Facile Synthesis of Anatase TiO ₂ Quantum Dot/Graphene Nanosheet Composites with Enhanced Electrochemical Performance for Lithium Ion Batteries. Advanced Materials, 2014, 26, 2084-2088.	21.0	281
6	Conversion of biomass to biofuels and life cycle assessment: a review. Environmental Chemistry Letters, 2021, 19, 4075-4118.	16.2	263
7	Advanced materials and technologies for supercapacitors used in energy conversion and storage: a review. Environmental Chemistry Letters, 2021, 19, 375-439.	16.2	255
8	An investigation of the radiochemical stability of ionic liquids. Green Chemistry, 2002, 4, 152-158.	9.0	248
9	Prediction of Ionic Liquid Properties. I. Volumetric Properties as a Function of Temperature at 0.1 MPa. Journal of Chemical & Engineering Data, 2008, 53, 716-726.	1.9	233
10	Hydrogen production, storage, utilisation and environmental impacts: a review. Environmental Chemistry Letters, 2022, 20, 153-188.	16.2	218
11	Highly selective and efficient hydrogenation of carboxylic acids to alcohols using titania supported Pt catalysts. Chemical Communications, 2010, 46, 6279.	4.1	184
12	Insight on water remediation application using magnetic nanomaterials and biosorbents. Coordination Chemistry Reviews, 2020, 403, 213096.	18.8	183
13	Heat Capacities of Ionic Liquids as a Function of Temperature at 0.1 MPa. Measurement and Prediction. Journal of Chemical & Engineering Data, 2008, 53, 2148-2153.	1.9	173
14	Gas Hydrate Inhibition: A Review of the Role of Ionic Liquids. Industrial & Engineering Chemistry Research, 2014, 53, 17855-17868.	3.7	171
15	Thermal Conductivities of Ionic Liquids over the Temperature Range from 293 K to 353 K. Journal of Chemical & Engineering Data, 2007, 52, 1819-1823.	1.9	167
16	Biochar for agronomy, animal farming, anaerobic digestion, composting, water treatment, soil remediation, construction, energy storage, and carbon sequestration: a review. Environmental Chemistry Letters, 2022, 20, 2385-2485.	16.2	162
17	Tuning the defects of the triple conducting oxide BaCo _{0.4} Fe _{0.4} Zr _{0.1} Y _{0.1} O _{3-δ} perovskite toward enhanced cathode activity of protonic ceramic fuel cells. Journal of Materials Chemistry A, 2019, 7, 18365-18372.	10.3	142
18	Prediction of Ionic Liquid Properties. II. Volumetric Properties as a Function of Temperature and Pressure. Journal of Chemical & Engineering Data, 2008, 53, 2133-2143.	1.9	139

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19	CoO nanoparticles embedded in three-dimensional nitrogen/sulfur co-doped carbon nanofiber networks as a bifunctional catalyst for oxygen reduction/evolution reactions. <i>Carbon</i> , 2016, 106, 84-92.	10.3	134
20	An experimental study of gas transport and separation properties of ionic liquids supported on nanofiltration membranes. <i>Journal of Membrane Science</i> , 2006, 280, 948-956.	8.2	123
21	Thermophysical Properties of Amino Acid-Based Ionic Liquids. <i>Journal of Chemical & Engineering Data</i> , 2010, 55, 1505-1515.	1.9	118
22	Effect of precursor on the performance of alumina for the dehydration of methanol to dimethyl ether. <i>Applied Catalysis B: Environmental</i> , 2012, 127, 307-315.	20.2	114
23	Renewable cellulosic nanocomposites for food packaging to avoid fossil fuel plastic pollution: a review. <i>Environmental Chemistry Letters</i> , 2021, 19, 613-641.	16.2	111
24	Thermophysical Properties of Ionic Liquids. <i>Topics in Current Chemistry</i> , 2009, 290, 185-212.	4.0	109
25	Evaluation of Gas Solubility Prediction in Ionic Liquids using COSMOthermX. <i>Journal of Chemical & Engineering Data</i> , 2009, 54, 2005-2022.	1.9	98
26	Removal of phthalates from aqueous solution by semiconductor photocatalysis: A review. <i>Journal of Hazardous Materials</i> , 2021, 402, 123461.	12.4	95
27	Three-dimensional graphene-Co ₃ O ₄ cathodes for rechargeable Li-O ₂ batteries. <i>Journal of Materials Chemistry A</i> , 2015, 3, 1504-1510.	10.3	93
28	The production and application of carbon nanomaterials from high alkali silicate herbaceous biomass. <i>Scientific Reports</i> , 2020, 10, 2563.	3.3	93
29	Accounting for clean, fast and high yielding reactions under microwave conditions. <i>Green Chemistry</i> , 2010, 12, 1340.	9.0	90
30	Production and characterisation of activated carbon and carbon nanotubes from potato peel waste and their application in heavy metal removal. <i>Environmental Science and Pollution Research</i> , 2019, 26, 37228-37241.	5.3	90
31	Techno-economic evaluation of biogas production from food waste via anaerobic digestion. <i>Scientific Reports</i> , 2020, 10, 15719.	3.3	87
32	A simply effective double-coating cathode with MnO ₂ nanosheets/graphene as functionalized interlayer for high performance lithium-sulfur batteries. <i>Electrochimica Acta</i> , 2016, 207, 198-206.	5.2	85
33	Activity and deactivation studies for direct dimethyl ether synthesis using CuO-ZnO-Al ₂ O ₃ with NH ₄ ZSM-5, HZSM-5 or γ -Al ₂ O ₃ . <i>Chemical Engineering Journal</i> , 2012, 203, 201-211.	12.7	84
34	Industrial biochar systems for atmospheric carbon removal: a review. <i>Environmental Chemistry Letters</i> , 2021, 19, 3023-3055.	16.2	79
35	In situ preparation of 3D graphene aerogels@hierarchical Fe ₃ O ₄ nanoclusters as high rate and long cycle anode materials for lithium ion batteries. <i>Chemical Communications</i> , 2015, 51, 1597-1600.	4.1	76
36	Heterogeneously catalysed selective hydrogenation reactions in ionic liquids. <i>Green Chemistry</i> , 2003, 5, 448.	9.0	75

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37	Critical challenges in biohydrogen production processes from the organic feedstocks. Biomass Conversion and Biorefinery, 2023, 13, 8383-8401.	4.6	75
38	Structural and magnetic properties of Ni ^{1-x} Zn ^x Fe ₂ O ₄ (x=0, 0.5 and 1) nanopowders prepared by sol-gel method. Journal of Magnetism and Magnetic Materials, 2013, 348, 44-50.	2.3	74
39	Marked enantioselectivity enhancements for Diels-Alder reactions in ionic liquids catalysed by platinum diphosphine complexes. Green Chemistry, 2004, 6, 63-67.	9.0	72
40	Rheological and heat transfer behaviour of the ionic liquid, [C ₄ mim][NTf ₂]. International Journal of Heat and Fluid Flow, 2008, 29, 149-155.	2.4	72
41	Circular economy approach of enhanced bifunctional catalytic system of CaO/CeO ₂ for biodiesel production from waste loquat seed oil with life cycle assessment study. Energy Conversion and Management, 2021, 236, 114040.	9.2	72
42	Investigation into the effect of Fe-site substitution on the performance of Sr ₂ Fe _{1.5} Mo _{0.5} O ₆ anodes for SOFCs. Journal of Materials Chemistry A, 2014, 2, 17628-17634.	10.3	70
43	Upcycling brewer's spent grain waste into activated carbon and carbon nanotubes for energy and other applications via two-stage activation. Journal of Chemical Technology and Biotechnology, 2020, 95, 183-195.	3.2	69
44	A bimetallic catalyst on a dual component support for low temperature total methane oxidation. Applied Catalysis B: Environmental, 2016, 187, 408-418.	20.2	68
45	Reusing, recycling and up-cycling of biomass: A review of practical and kinetic modelling approaches. Fuel Processing Technology, 2019, 192, 179-202.	7.2	66
46	Bioethanol and biodiesel: Bibliometric mapping, policies and future needs. Renewable and Sustainable Energy Reviews, 2021, 152, 111677.	16.4	65
47	Viscous Behavior of Imidazolium-Based Ionic Liquids. Industrial & Engineering Chemistry Research, 2013, 52, 16774-16785.	3.7	64
48	An In Situ Ionic-Liquid-Assisted Synthetic Approach to Iron Fluoride/Graphene Hybrid Nanostructures as Superior Cathode Materials for Lithium Ion Batteries. ACS Applied Materials & Interfaces, 2013, 5, 5057-5063.	8.0	64
49	Doubly dual nature of ammonium-based ionic liquids for methane hydrates probed by rocking-rig assembly. RSC Advances, 2016, 6, 23827-23836.	3.6	64
50	Understanding the Flash Sintering of Rare-Earth-Doped Ceria for Solid Oxide Fuel Cell. Journal of the American Ceramic Society, 2015, 98, 1717-1723.	3.8	63
51	Enhanced catalytic activity of Ni on γ -Al ₂ O ₃ and ZSM-5 on addition of ceria zirconia for the partial oxidation of methane. Applied Catalysis B: Environmental, 2017, 212, 68-79.	20.2	62
52	A catalytic and mechanistic study of the Friedel-Crafts benzylation of anisole using zeolites in ionic liquids. Journal of Catalysis, 2004, 227, 44-52.	6.2	61
53	An experimental study of engine characteristics and tailpipe emissions from modern DI diesel engine fuelled with methanol/diesel blends. Fuel Processing Technology, 2021, 220, 106901.	7.2	61
54	Chloroindate(iii) ionic liquids: recyclable media for Friedel-Crafts acylation reactions. Chemical Communications, 2005, , 903-905.	4.1	60

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55	Facile Synthesis of Hierarchical Porous Three-Dimensional Free-Standing MnCo ₂ O ₄ Cathodes for Long-Life Li–O ₂ Batteries. ACS Applied Materials & Interfaces, 2017, 9, 12355-12365.	8.0	60
56	Role of flower-like ultrathin Co ₃ O ₄ nanosheets in water splitting and non-aqueous Li–O ₂ batteries. Nanoscale, 2018, 10, 10221-10231.	5.6	60
57	Interfacial tensions of imidazolium-based ionic liquids with water and n-alkanes. Fluid Phase Equilibria, 2010, 294, 139-147.	2.5	59
58	Utilisation of ionic liquid solvents for the synthesis of Lily-of-the-Valley fragrance { ² -Lilial [®] ; 3-(4-t-butylphenyl)-2-methylpropanal}. Journal of Molecular Catalysis A, 2005, 231, 61-66.	4.8	57
59	Theoretical and experimental correlations of gas dissolution, diffusion, and thermodynamic properties in determination of gas permeability and selectivity in supported ionic liquid membranes. Advances in Colloid and Interface Science, 2011, 164, 45-55.	14.7	56
60	High pressure CO ₂ absorption studies on imidazolium-based ionic liquids: Experimental and simulation approaches. Fluid Phase Equilibria, 2013, 351, 74-86.	2.5	56
61	Thermal Investigation and Kinetic Modeling of Lignocellulosic Biomass Combustion for Energy Production and Other Applications. Industrial & Engineering Chemistry Research, 2017, 56, 12119-12130.	3.7	56
62	Assessment of the energy recovery potential of waste Photovoltaic (PV) modules. Scientific Reports, 2019, 9, 5267.	3.3	56
63	High performance cobalt-free Cu _{1.4} Mn _{1.6} O ₄ spinel oxide as an intermediate temperature solid oxide fuel cell cathode. Journal of Power Sources, 2016, 315, 140-144.	7.8	53
64	3D free-standing hierarchical CuCo ₂ O ₄ nanowire cathodes for rechargeable lithium–oxygen batteries. Chemical Communications, 2017, 53, 8711-8714.	4.1	51
65	Design of an automated solar concentrator for the pyrolysis of scrap rubber. Energy Conversion and Management, 2015, 101, 118-125.	9.2	50
66	MoS ₂ -based nanocomposites: synthesis, structure, and applications in water remediation and energy storage: a review. Environmental Chemistry Letters, 2021, 19, 3645-3681.	16.2	48
67	Polymer-supported phosphoramidites: highly efficient and recyclable catalysts for asymmetric hydrogenation of dimethylitaconate and dehydroamino acids and esters. Tetrahedron: Asymmetry, 2003, 14, 1517-1527.	1.8	47
68	Investigation into the effect of molybdenum-site substitution on the performance of Sr ₂ Fe _{1.5} Mo _{0.5} O ₆ perovskites for intermediate temperature solid oxide fuel cells. Journal of Power Sources, 2014, 272, 759-765.	7.8	47
69	A Facile Green Synthetic Route for the Preparation of Highly Active ³ -Al ₂ O ₃ from Aluminum Foil Waste. Scientific Reports, 2017, 7, 3593.	3.3	47
70	Deactivation and regeneration of ruthenium on silica in the liquid-phase hydrogenation of butan-2-one. Journal of Catalysis, 2009, 265, 80-88.	6.2	44
71	A new family of barium-doped Sr ₂ Fe _{1.5} Mo _{0.5} O ₆ perovskites for application in intermediate temperature solid oxide fuel cells. Journal of Power Sources, 2014, 268, 176-182.	7.8	44
72	Surface hydrophobicity and acidity effect on alumina catalyst in catalytic methanol dehydration reaction. Journal of Chemical Technology and Biotechnology, 2017, 92, 2952-2962.	3.2	43

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73	Physicochemical characterization of miscanthus and its application in heavy metals removal from wastewaters. <i>Environmental Progress and Sustainable Energy</i> , 2018, 37, 1058-1067.	2.3	41
74	Biogas reforming using renewable wind energy and induction heating. <i>Catalysis Today</i> , 2015, 242, 129-138.	4.4	40
75	An effective three-dimensional ordered mesoporous CuCo ₂ O ₄ as electrocatalyst for Li-O ₂ batteries. <i>Solid State Ionics</i> , 2016, 289, 17-22.	2.7	39
76	Insights on magnetic spinel ferrites for targeted drug delivery and hyperthermia applications. <i>Nanotechnology Reviews</i> , 2022, 11, 372-413.	5.8	39
77	Silver-Modified γ-Al ₂ O ₃ Catalyst for DME Production. <i>Journal of Physical Chemistry C</i> , 2017, 121, 25018-25032.	3.1	38
78	Supported ionic liquid membranes in nanopore structure for gas separation and transport studies. <i>Desalination</i> , 2006, 199, 535-537.	8.2	36
79	A highly active and synergistic Pt/Mo ₂ C/Al ₂ O ₃ catalyst for water-gas shift reaction. <i>Molecular Catalysis</i> , 2018, 455, 38-47.	2.0	36
80	Self-templated fabrication of micro/nano structured iron fluoride for high-performance lithium-ion batteries. <i>Journal of Power Sources</i> , 2018, 396, 371-378.	7.8	36
81	One-Pot Multistep Synthetic Strategies for the Production of Fenpropimorph Using an Ionic Liquid Solvent. <i>Organic Process Research and Development</i> , 2006, 10, 94-102.	2.7	34
82	Flash-Sintering and Characterization of La _{0.8} Sr _{0.2} Ga _{0.8} Mg _{0.2} O _{3-δ} Electrolytes for Solid Oxide Fuel Cells. <i>Electrochimica Acta</i> , 2016, 196, 487-495.	5.2	34
83	Three-Dimensional Double-Walled Ultrathin Graphite Tube Conductive Scaffold with Encapsulated Germanium Nanoparticles as a High-Areal-Capacity and Cycle-Stable Anode for Lithium-Ion Batteries. <i>ACS Nano</i> , 2019, 13, 7536-7544.	14.6	34
84	Structure of the methanol synthesis catalyst determined by in situ HERFD XAS and EXAFS. <i>Catalysis Science and Technology</i> , 2012, 2, 373-378.	4.1	33
85	Are Alkyl Sulfate-Based Protic and Aprotic Ionic Liquids Stable with Water and Alcohols? A Thermodynamic Approach. <i>Journal of Physical Chemistry B</i> , 2013, 117, 1938-1949.	2.6	33
86	Type 3 Porous Liquids for the Separation of Ethane and Ethene. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 932-936.	8.0	32
87	Robust partial least squares regression: Part I, algorithmic developments. <i>Journal of Chemometrics</i> , 2008, 22, 1-13.	1.3	31
88	Facile synthesis of nanocrystalline LiFePO ₄ /graphene composite as cathode material for high power lithium ion batteries. <i>Electrochimica Acta</i> , 2014, 130, 594-599.	5.2	31
89	Physicochemical Characterization and Kinetic Modeling Concerning Combustion of Waste Berry Pomace. <i>ACS Sustainable Chemistry and Engineering</i> , 2020, 8, 17573-17586.	6.7	31
90	In situ synthesis of LiV ₃ O ₈ nanorods on graphene as high rate-performance cathode materials for rechargeable lithium batteries. <i>Chemical Communications</i> , 2013, 49, 9143.	4.1	30

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91	Acid-catalyzed hydrolysis of cellulose and cellulosic waste using a microwave reactor system. RSC Advances, 2011, 1, 839.	3.6	29
92	One-dimensional porous La _{0.5} Sr _{0.5} CoO _{2.91} nanotubes as a highly efficient electrocatalyst for rechargeable lithium-oxygen batteries. Electrochimica Acta, 2015, 165, 78-84.	5.2	29
93	Batch to continuous photocatalytic degradation of phenol using TiO ₂ and Au-Pd nanoparticles supported on TiO ₂ . Journal of Environmental Chemical Engineering, 2018, 6, 6382-6389.	6.7	29
94	Dilute phosphoric acid-catalysed hydrolysis of municipal bio-waste wood shavings using autoclave parr reactor system. Bioresource Technology, 2011, 102, 9076-9082.	9.6	28
95	Mild temperature palladium-catalyzed ammoxidation of ethanol to acetonitrile. Applied Catalysis A: General, 2015, 506, 261-267.	4.3	28
96	Three-dimensional porous carbon nanofiber networks decorated with cobalt-based nanoparticles: A robust electrocatalyst for efficient water oxidation. Carbon, 2015, 94, 680-686.	10.3	28
97	Engineered magnetic oxides nanoparticles as efficient adsorbents for wastewater remediation: a review. Environmental Chemistry Letters, 2022, 20, 519-562.	16.2	28
98	An effective three-dimensional ordered mesoporous ZnCo ₂ O ₄ as electrocatalyst for Li-O ₂ batteries. Materials Letters, 2015, 158, 84-87.	2.6	27
99	A study of fluid properties and microfiltration characteristics of room temperature ionic liquids [C ₁₀ -min][NTf ₂] and N8881[NTf ₂] and their polar solvent mixtures. Separation and Purification Technology, 2006, 51, 185-192.	7.9	26
100	Application of halohydrocarbons for the re-dispersion of gold particles. Catalysis Science and Technology, 2014, 4, 729.	4.1	26
101	Enhancing Liquid-Phase Olefin/Paraffin Separations Using Novel Silver-Based Ionic Liquids. Journal of Chemical & Engineering Data, 2015, 60, 28-36.	1.9	26
102	Ultradispersed Nanoarchitecture of LiV ₃ O ₈ Nanoparticle/Reduced Graphene Oxide with High-Capacity and Long-Life Lithium-Ion Battery Cathodes. Scientific Reports, 2016, 6, 19843.	3.3	26
103	Integrating life cycle assessment and characterisation techniques: A case study of biodiesel production utilising waste Prunus Armeniaca seeds (PAS) and a novel catalyst. Journal of Environmental Management, 2022, 304, 114319.	7.8	26
104	Kinetic Study of the Metal Triflate Catalyzed Benzoylation of Anisole in an Ionic Liquid. Industrial & Engineering Chemistry Research, 2006, 45, 6640-6647.	3.7	25
105	Evaluation and mechanistic investigation of a AuPd alloy catalyst for the hydrocarbon selective catalytic reduction (HC-SCR) of NO _x . Applied Catalysis B: Environmental, 2014, 147, 864-870.	20.2	25
106	Synthesis of Pr _{0.6} Sr _{0.4} FeO _{3-x} Ce _{0.9} Pr _{0.1} O _{2-y} cobalt-free composite cathodes by a one-pot method for intermediate-temperature solid oxide fuel cells. International Journal of Hydrogen Energy, 2016, 41, 4005-4015.	7.1	25
107	Liquid-Liquid Equilibria of Ionic Liquids/Water/Acetic Acid Mixtures. Journal of Chemical & Engineering Data, 2017, 62, 653-664.	1.9	25
108	Investigation of Sc doped Sr ₂ Fe _{1.5} Mo _{0.5} O ₆ as a cathode material for intermediate temperature solid oxide fuel cells. Journal of Power Sources, 2017, 343, 237-245.	7.8	25

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109	Characterisation of Robust Combustion Catalyst from Aluminium Foil Waste. <i>ChemistrySelect</i> , 2018, 3, 1545-1550.	1.5	23
110	Yolk-Shell Germanium@Polypyrrole Architecture with Precision Expansion Void Control for Lithium Ion Batteries. <i>IScience</i> , 2018, 9, 521-531.	4.1	22
111	Top-down synthesis of iron fluoride/reduced graphene nanocomposite for high performance lithium-ion battery. <i>Electrochimica Acta</i> , 2019, 313, 497-504.	5.2	22
112	Comparison of mass transfer effects in the heterogeneously catalysed hydrogenation of phenyl acetylene in heptane and an ionic liquid. <i>Chemical Engineering Science</i> , 2006, 61, 6995-7006.	3.8	21
113	Surface modification of LiV ₃ O ₈ nanosheets via layer-by-layer self-assembly for high-performance rechargeable lithium batteries. <i>Journal of Power Sources</i> , 2014, 257, 319-324.	7.8	21
114	A design strategy of large grain lithium-rich layered oxides for lithium-ion batteries cathode. <i>Electrochimica Acta</i> , 2015, 160, 131-138.	5.2	21
115	Role of Ca, Cr, Ga and Gd promotor over lanthana/zirconia-supported Ni catalyst towards H ₂ -rich syngas production through dry reforming of methane. <i>Energy Science and Engineering</i> , 2022, 10, 866-880.	4.0	21
116	Investigation of the performance of biocompatible gas hydrate inhibitors via combined experimental and DFT methods. <i>Journal of Chemical Thermodynamics</i> , 2017, 111, 7-19.	2.0	20
117	Synthesis of 3-(4-tert-butylphenyl)-2-propen-1-one, a precursor to Lial [®] , via an aldol condensation in an ionic liquid. <i>Green Chemistry</i> , 2005, 7, 224-229.	9.0	19
118	Palladium-catalyzed liquid-phase hydrogenation/hydrogenolysis of disulfides. <i>Journal of Catalysis</i> , 2007, 249, 93-101.	6.2	19
119	Friedel-Crafts Benzoylation of Anisole in Ionic Liquids: Catalysis, Separation, and Recycle Studies. <i>Organic Process Research and Development</i> , 2008, 12, 1156-1163.	2.7	19
120	Development of a QSPR correlation for the parachor of 1,3-dialkyl imidazolium based ionic liquids. <i>Fluid Phase Equilibria</i> , 2009, 283, 31-37.	2.5	19
121	Enzymatic catalysis and electrostatic process intensification for processing of natural oils. <i>Chemical Engineering Journal</i> , 2008, 135, 25-32.	12.7	18
122	Batch and continuous biogas production from grass silage liquor. <i>Bioresource Technology</i> , 2011, 102, 10922-10928.	9.6	18
123	Evaluation of strontium-site-deficient Sr ₂ Fe _{1.4} Co _{0.1} Mo _{0.5} O ₆ -based perovskite oxides as intermediate temperature solid oxide fuel cell cathodes. <i>International Journal of Hydrogen Energy</i> , 2016, 41, 9538-9546.	7.1	18
124	Achieving high specific capacity of lithium-ion battery cathodes by modification with $\text{O}^{\bullet-}$ radicals and oxygen-containing functional groups. <i>Journal of Materials Chemistry A</i> , 2017, 5, 24636-24644.	10.3	17
125	Anchored monodispersed silicon and sulfur nanoparticles on graphene for high-performance lithiated silicon-sulfur battery. <i>Energy Storage Materials</i> , 2019, 23, 284-291.	18.0	17
126	Sandwich nanoarchitecture of Li ₃ O ₈ /graphene multilayer nanomembranes via layer-by-layer self-assembly for long-cycle-life lithium-ion battery cathodes. <i>Journal of Materials Chemistry A</i> , 2015, 3, 13717-13723.	10.3	16

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127	Enhanced durability of O_2 batteries employing vertically standing Ti nanowire array supported cathodes. <i>Journal of Materials Chemistry A</i> , 2016, 4, 4009-4014.	10.3	16
128	Cross-validatory framework for optimal parameter estimation of KPCA and KPLS models. <i>Chemometrics and Intelligent Laboratory Systems</i> , 2017, 167, 196-207.	3.5	16
129	Upcycling food waste digestate for energy and heavy metal remediation applications. <i>Resources Conservation & Recycling X</i> , 2019, 3, 100015.	4.2	16
130	Co-tape casting fabrication, field assistant sintering and evaluation of a coke resistant $\text{La}_{0.2}\text{Sr}_{0.7}\text{TiO}_3\text{-Ni/YSZ}$ functional gradient anode supported solid oxide fuel cell. <i>International Journal of Hydrogen Energy</i> , 2015, 40, 12790-12797.	7.1	15
131	Selective hydration of dihydromyrcene in ionic liquids. <i>Green Chemistry</i> , 2010, 12, 628.	9.0	14
132	Phase Equilibria of Binary and Ternary Systems Containing ILLs, Dodecane, and Cyclohexanecarboxylic Acid. <i>Separation Science and Technology</i> , 2012, 47, 312-324.	2.5	14
133	Hydrolysis characteristics and kinetics of waste hay biomass as a potential energy crop for fermentable sugars production using autoclave parr reactor system. <i>Industrial Crops and Products</i> , 2013, 44, 1-10.	5.2	14
134	Self-cleaning perovskite type catalysts for the dry reforming of methane. <i>Chinese Journal of Catalysis</i> , 2014, 35, 1337-1346.	14.0	14
135	Hollow germanium nanocrystals on reduced graphene oxide for superior stable lithium-ion half cell and germanium (lithiated)-sulfur battery. <i>Energy Storage Materials</i> , 2020, 26, 414-422.	18.0	14
136	Influence of trace substances on methanation catalysts used in dynamic biogas upgrading. <i>Bioresource Technology</i> , 2015, 178, 319-322.	9.6	13
137	Characterization and kinetic modeling for pyrolytic conversion of cotton stalks. <i>Energy Science and Engineering</i> , 2021, 9, 1908-1918.	4.0	13
138	Pyrolysis Kinetic Modeling of a Poly(ethylene-co-vinyl acetate) Encapsulant Found in Waste Photovoltaic Modules. <i>Industrial & Engineering Chemistry Research</i> , 2021, 60, 13492-13504.	3.7	13
139	Hierarchical graphene-scaffolded mesoporous germanium dioxide nanostructure for high-performance flexible lithium-ion batteries. <i>Energy Storage Materials</i> , 2020, 29, 198-206.	18.0	12
140	Fabrication and evaluation of $\text{NiO/Y}_2\text{O}_3$ -stabilized- ZrO_2 hollow fibers for anode-supported micro-tubular solid oxide fuel cells. <i>Ceramics International</i> , 2016, 42, 8559-8564.	4.8	11
141	Co_9S_8 activated N/S co-doped carbon tubes in situ grown on carbon nanofibers for efficient oxygen reduction. <i>RSC Advances</i> , 2017, 7, 34763-34769.	3.6	11
142	Adsorptive removal of some Cl-VOC's as dangerous environmental pollutants using feather-like $\beta\text{-Al}_2\text{O}_3$ derived from aluminium waste with life cycle analysis. <i>Chemosphere</i> , 2022, 295, 133795.	8.2	11
143	Fungal-derived selenium nanoparticles and their potential applications in electroless silver coatings for preventing pin-tract infections. <i>International Journal of Energy Production and Management</i> , 2022, 9, rbac013.	3.7	11
144	Moving from Batch to Continuous Operation for the Liquid Phase Dehydrogenation of Tetrahydrocarbazole. <i>Organic Process Research and Development</i> , 2014, 18, 392-401.	2.7	10

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145	Preparation and characterization of Pr _{0.6} Sr _{0.4} FeO ₃ ~â€“Ce _{0.9} Pr _{0.1} O ₂ ~” nanofiber structured composite cathode for IT-SOFCs. <i>Ceramics International</i> , 2016, 42, 9311-9314.	4.8	10
146	Robust partial least squares regression: Part II, new algorithm and benchmark studies. <i>Journal of Chemometrics</i> , 2008, 22, 14-22.	1.3	9
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