

# Yuyan Shao

## List of Publications by Year in descending order

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154  
papers

38,570  
citations

4388

86  
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6996

154  
g-index

158  
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158  
docs citations

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times ranked

33616  
citing authors

#	ARTICLE	IF	CITATIONS
1	Graphene Based Electrochemical Sensors and Biosensors: A Review. <i>Electroanalysis</i> , 2010, 22, 1027-1036.	2.9	2,779
2	Reversible aqueous zinc/manganese oxide energy storage from conversion reactions. <i>Nature Energy</i> , 2016, 1, .	39.5	2,186
3	Nitrogen-Doped Graphene and Its Application in Electrochemical Biosensing. <i>ACS Nano</i> , 2010, 4, 1790-1798.	14.6	1,977
4	Dendrite-Free Lithium Deposition via Self-Healing Electrostatic Shield Mechanism. <i>Journal of the American Chemical Society</i> , 2013, 135, 4450-4456.	13.7	1,736
5	Single Atomic Iron Catalysts for Oxygen Reduction in Acidic Media: Particle Size Control and Thermal Activation. <i>Journal of the American Chemical Society</i> , 2017, 139, 14143-14149.	13.7	1,215
6	Water-Lubricated Intercalation in $V_2O_5 \cdot nH_2O$ for High-Capacity and High-Rate Aqueous Rechargeable Zinc Batteries. <i>Advanced Materials</i> , 2018, 30, 1703725.	21.0	1,084
7	Nitrogen-doped graphene and its electrochemical applications. <i>Journal of Materials Chemistry</i> , 2010, 20, 7491.	6.7	1,040
8	Understanding and approaches for the durability issues of Pt-based catalysts for PEM fuel cell. <i>Journal of Power Sources</i> , 2007, 171, 558-566.	7.8	1,037
9	Nanostructured carbon for energy storage and conversion. <i>Nano Energy</i> , 2012, 1, 195-220.	16.0	895
10	Nitrogen-Coordinated Single Cobalt Atom Catalysts for Oxygen Reduction in Proton Exchange Membrane Fuel Cells. <i>Advanced Materials</i> , 2018, 30, 1706758.	21.0	788
11	Facile and controllable electrochemical reduction of graphene oxide and its applications. <i>Journal of Materials Chemistry</i> , 2010, 20, 743-748.	6.7	787
12	Nitrogen-doped carbon nanostructures and their composites as catalytic materials for proton exchange membrane fuel cell. <i>Applied Catalysis B: Environmental</i> , 2008, 79, 89-99.	20.2	710
13	Manipulating Adsorption-Insertion Mechanisms in Nanostructured Carbon Materials for High-Efficiency Sodium Ion Storage. <i>Advanced Energy Materials</i> , 2017, 7, 1700403.	19.5	662
14	Carbon-Based Metal-Free ORR Electrocatalysts for Fuel Cells: Past, Present, and Future. <i>Advanced Materials</i> , 2019, 31, e1804799.	21.0	649
15	Novel catalyst support materials for PEM fuel cells: current status and future prospects. <i>Journal of Materials Chemistry</i> , 2009, 19, 46-59.	6.7	618
16	Enhanced activity and stability of Pt catalysts on functionalized graphene sheets for electrocatalytic oxygen reduction. <i>Electrochemistry Communications</i> , 2009, 11, 954-957.	4.7	615
17	Materials Science and Materials Chemistry for Large Scale Electrochemical Energy Storage: From Transportation to Electrical Grid. <i>Advanced Functional Materials</i> , 2013, 23, 929-946.	14.9	590
18	Failure Mechanism for Fast-Charged Lithium Metal Batteries with Liquid Electrolytes. <i>Advanced Energy Materials</i> , 2015, 5, 1400993.	19.5	540

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19	Oxygen electrocatalysts for water electrolyzers and reversible fuel cells: status and perspective. <i>Energy and Environmental Science</i> , 2012, 5, 9331.	30.8	489
20	Graphene-based electrochemical energy conversion and storage: fuel cells, supercapacitors and lithium ion batteries. <i>Physical Chemistry Chemical Physics</i> , 2011, 13, 15384.	2.8	488
21	Proton exchange membrane fuel cell from low temperature to high temperature: Material challenges. <i>Journal of Power Sources</i> , 2007, 167, 235-242.	7.8	482
22	Making Li-Air Batteries Rechargeable: Material Challenges. <i>Advanced Functional Materials</i> , 2013, 23, 987-1004.	14.9	477
23	Electrocatalysts for Nonaqueous Lithium-Air Batteries: Status, Challenges, and Perspective. <i>ACS Catalysis</i> , 2012, 2, 844-857.	11.2	443
24	Performance enhancement and degradation mechanism identification of a single-atom Co-N-C catalyst for proton exchange membrane fuel cells. <i>Nature Catalysis</i> , 2020, 3, 1044-1054.	34.4	443
25	Controlling SEI Formation on SnSb-Porous Carbon Nanofibers for Improved Na Ion Storage. <i>Advanced Materials</i> , 2014, 26, 2901-2908.	21.0	441
26	PGM-Free Cathode Catalysts for PEM Fuel Cells: A Mini-Review on Stability Challenges. <i>Advanced Materials</i> , 2019, 31, e1807615.	21.0	430
27	Bismuth Nanoparticle Decorating Graphite Felt as a High-Performance Electrode for an All-Vanadium Redox Flow Battery. <i>Nano Letters</i> , 2013, 13, 1330-1335.	9.1	392
28	Stabilization of Electrocatalytic Metal Nanoparticles at Metal-Metal Oxide-Graphene Triple Junction Points. <i>Journal of the American Chemical Society</i> , 2011, 133, 2541-2547.	13.7	391
29	Durability Study of Pt-C and Pt-CNTs Catalysts under Simulated PEM Fuel Cell Conditions. <i>Journal of the Electrochemical Society</i> , 2006, 153, A1093.	2.9	384
30	Effect of carbon black support corrosion on the durability of Pt/C catalyst. <i>Journal of Power Sources</i> , 2007, 171, 331-339.	7.8	383
31	Highly durable graphene nanoplatelets supported Pt nanocatalysts for oxygen reduction. <i>Journal of Power Sources</i> , 2010, 195, 4600-4605.	7.8	378
32	Graphene Decorated with PtAu Alloy Nanoparticles: Facile Synthesis and Promising Application for Formic Acid Oxidation. <i>Chemistry of Materials</i> , 2011, 23, 1079-1081.	6.7	366
33	3D printing technologies for electrochemical energy storage. <i>Nano Energy</i> , 2017, 40, 418-431.	16.0	351
34	Constraint of DNA on Functionalized Graphene Improves its Biostability and Specificity. <i>Small</i> , 2010, 6, 1205-1209.	10.0	342
35	Hard carbon nanoparticles as high-capacity, high-stability anodic materials for Na-ion batteries. <i>Nano Energy</i> , 2016, 19, 279-288.	16.0	341
36	Non-encapsulation approach for high-performance Li-S batteries through controlled nucleation and growth. <i>Nature Energy</i> , 2017, 2, 813-820.	39.5	326

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37	Engineering nanostructures of PGM-free oxygen-reduction catalysts using metal-organic frameworks. <i>Nano Energy</i> , 2017, 31, 331-350.	16.0	317
38	Nitrogen-doped mesoporous carbon for energy storage in vanadium redox flow batteries. <i>Journal of Power Sources</i> , 2010, 195, 4375-4379.	7.8	306
39	Functionalized Graphene Oxide as a Nanocarrier in a Multienzyme Labeling Amplification Strategy for Ultrasensitive Electrochemical Immunoassay of Phosphorylated p53 (S392). <i>Analytical Chemistry</i> , 2011, 83, 746-752.	6.5	305
40	Joint Charge Storage for High-Rate Aqueous Zinc-Manganese Dioxide Batteries. <i>Advanced Materials</i> , 2019, 31, e1900567.	21.0	299
41	Electrostatic Self-Assembly of a Pt-around-Au Nanocomposite with High Activity towards Formic Acid Oxidation. <i>Angewandte Chemie - International Edition</i> , 2010, 49, 2211-2214.	13.8	295
42	Comparative investigation of the resistance to electrochemical oxidation of carbon black and carbon nanotubes in aqueous sulfuric acid solution. <i>Electrochimica Acta</i> , 2006, 51, 5853-5857.	5.2	294
43	Polyelectrolyte-Induced Reduction of Exfoliated Graphite Oxide: A Facile Route to Synthesis of Soluble Graphene Nanosheets. <i>ACS Nano</i> , 2011, 5, 1785-1791.	14.6	293
44	Manipulating surface reactions in lithium-sulphur batteries using hybrid anode structures. <i>Nature Communications</i> , 2014, 5, 3015.	12.8	290
45	Design strategies for nonaqueous multivalent-ion and monovalent-ion battery anodes. <i>Nature Reviews Materials</i> , 2020, 5, 276-294.	48.7	284
46	Probing the Failure Mechanism of SnO <sub>2</sub> Nanowires for Sodium-Ion Batteries. <i>Nano Letters</i> , 2013, 13, 5203-5211.	9.1	270
47	A Highly Reversible Zn Anode with Intrinsically Safe Organic Electrolyte for Long-Cycle-Life Batteries. <i>Advanced Materials</i> , 2019, 31, e1900668.	21.0	259
48	Highly Reversible Mg Insertion in Nanostructured Bi for Mg Ion Batteries. <i>Nano Letters</i> , 2014, 14, 255-260.	9.1	257
49	Surface-Driven Sodium Ion Energy Storage in Nanocellular Carbon Foams. <i>Nano Letters</i> , 2013, 13, 3909-3914.	9.1	245
50	Self assembly of acetylcholinesterase on a gold nanoparticles-graphene nanosheet hybrid for organophosphate pesticide detection using polyelectrolyte as a linker. <i>Journal of Materials Chemistry</i> , 2011, 21, 5319.	6.7	219
51	Stabilizing Zinc Anode Reactions by Polyethylene Oxide Polymer in Mild Aqueous Electrolytes. <i>Advanced Functional Materials</i> , 2020, 30, 2003932.	14.9	210
52	Oxygen Evolution Reaction in Alkaline Environment: Material Challenges and Solutions. <i>Advanced Functional Materials</i> , 2022, 32, .	14.9	209
53	Iron-Free Cathode Catalysts for Proton-Exchange-Membrane Fuel Cells: Cobalt Catalysts and the Peroxide Mitigation Approach. <i>Advanced Materials</i> , 2019, 31, e1805126.	21.0	208
54	Controlling Solid-Liquid Conversion Reactions for a Highly Reversible Aqueous Zinc-Iodine Battery. <i>ACS Energy Letters</i> , 2017, 2, 2674-2680.	17.4	207

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55	Low-PGM and PGM-Free Catalysts for Proton Exchange Membrane Fuel Cells: Stability Challenges and Material Solutions. <i>Advanced Materials</i> , 2021, 33, e1908232.	21.0	201
56	A facile approach using MgCl <sub>2</sub> to formulate high performance Mg <sup>2+</sup> electrolytes for rechargeable Mg batteries. <i>Journal of Materials Chemistry A</i> , 2014, 2, 3430.	10.3	197
57	Sparingly Solvating Electrolytes for High Energy Density Lithium-Sulfur Batteries. <i>ACS Energy Letters</i> , 2016, 1, 503-509.	17.4	190
58	Recent progress in nanostructured electrocatalysts for PEM fuel cells. <i>Journal of Materials Chemistry A</i> , 2013, 1, 4631.	10.3	172
59	Coordination Chemistry in magnesium battery electrolytes: how ligands affect their performance. <i>Scientific Reports</i> , 2013, 3, 3130.	3.3	157
60	Carbon nanotubes decorated with Pt nanoparticles via electrostatic self-assembly: a highly active oxygen reduction electrocatalyst. <i>Journal of Materials Chemistry</i> , 2010, 20, 2826.	6.7	153
61	High performance batteries based on hybrid magnesium and lithium chemistry. <i>Chemical Communications</i> , 2014, 50, 9644-9646.	4.1	153
62	Stable Li Metal Anode with Solvent-Coordinated Nonflammable Electrolyte for Safe Li Metal Batteries. <i>ACS Energy Letters</i> , 2019, 4, 483-488.	17.4	148
63	Advanced catalyst supports for PEM fuel cell cathodes. <i>Nano Energy</i> , 2016, 29, 314-322.	16.0	146
64	Nitrogen-doped graphitized carbon shell encapsulated NiFe nanoparticles: A highly durable oxygen evolution catalyst. <i>Nano Energy</i> , 2017, 39, 245-252.	16.0	143
65	Addressing Passivation in Lithium-Sulfur Battery Under Lean Electrolyte Condition. <i>Advanced Functional Materials</i> , 2018, 28, 1707234.	14.9	143
66	On the Way Toward Understanding Solution Chemistry of Lithium Polysulfides for High Energy Li-S Redox Flow Batteries. <i>Advanced Energy Materials</i> , 2015, 5, 1500113.	19.5	142
67	Design of graphene sheets-supported Pt catalyst layer in PEM fuel cells. <i>Electrochemistry Communications</i> , 2011, 13, 258-261.	4.7	135
68	Reversible ketone hydrogenation and dehydrogenation for aqueous organic redox flow batteries. <i>Science</i> , 2021, 372, 836-840.	12.6	135
69	Facile synthesis of PtAu alloy nanoparticles with high activity for formic acid oxidation. <i>Journal of Power Sources</i> , 2010, 195, 1103-1106.	7.8	133
70	Investigation of Further Improvement of Platinum Catalyst Durability with Highly Graphitized Carbon Nanotubes Support. <i>Journal of Physical Chemistry C</i> , 2008, 112, 5784-5789.	3.1	130
71	Electrochemical impedance studies on carbon supported PtRuNi and PtRu anode catalysts in acid medium for direct methanol fuel cell. <i>Journal of Power Sources</i> , 2007, 165, 9-15.	7.8	127
72	Highly active electrolytes for rechargeable Mg batteries based on a [Mg <sub>2</sub> ( <sup>1/4</sup> -Cl) <sub>2</sub> ] <sup>2+</sup> cation complex in dimethoxyethane. <i>Physical Chemistry Chemical Physics</i> , 2015, 17, 13307-13314.	2.8	126

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73	Improving Lithium-Sulfur Battery Performance under Lean Electrolyte through Nanoscale Confinement in Soft Swellable Gels. <i>Nano Letters</i> , 2017, 17, 3061-3067.	9.1	122
74	Nanocomposite polymer electrolyte for rechargeable magnesium batteries. <i>Nano Energy</i> , 2015, 12, 750-759.	16.0	121
75	Effects of Cesium Cations in Lithium Deposition via Self-Healing Electrostatic Shield Mechanism. <i>Journal of Physical Chemistry C</i> , 2014, 118, 4043-4049.	3.1	117
76	Multi-walled carbon nanotubes based Pt electrodes prepared with in situ ion exchange method for oxygen reduction. <i>Journal of Power Sources</i> , 2006, 161, 47-53.	7.8	114
77	Graphene-Polypyrrole Nanocomposite as a Highly Efficient and Low Cost Electrically Switched Ion Exchanger for Removing $\text{ClO}_4^-$ from Wastewater. <i>ACS Applied Materials &amp; Interfaces</i> , 2011, 3, 3633-3637.	8.0	109
78	Electrocatalytic valorisation of biomass derived chemicals. <i>Catalysis Science and Technology</i> , 2018, 8, 3216-3232.	4.1	105
79	Self-assembly of Pt nanoparticles on highly graphitized carbon nanotubes as an excellent oxygen-reduction catalyst. <i>Applied Catalysis B: Environmental</i> , 2011, 102, 372-377.	20.2	104
80	Electrocatalytic Hydrogen Evolution in Neutral pH Solutions: Dual-Phase Synergy. <i>ACS Catalysis</i> , 2019, 9, 8712-8718.	11.2	103
81	$\text{Li}_x\text{NiO}/\text{Ni}$ Heterostructure with Strong Basic Lattice Oxygen Enables Electrocatalytic Hydrogen Evolution with Pt-like Activity. <i>Journal of the American Chemical Society</i> , 2020, 142, 12613-12619.	13.7	103
82	The corrosion of PEM fuel cell catalyst supports and its implications for developing durable catalysts. <i>Electrochimica Acta</i> , 2009, 54, 3109-3114.	5.2	100
83	Durability studies on performance degradation of Pt/C catalysts of proton exchange membrane fuel cell. <i>International Journal of Hydrogen Energy</i> , 2009, 34, 4387-4394.	7.1	96
84	Ta-TiO <sub>x</sub> nanoparticles as radical scavengers to improve the durability of Fe-N-C oxygen reduction catalysts. <i>Nature Energy</i> , 2022, 7, 281-289.	39.5	93
85	Formation of Reversible Solid Electrolyte Interface on Graphite Surface from Concentrated Electrolytes. <i>Nano Letters</i> , 2017, 17, 1602-1609.	9.1	91
86	Interface Promoted Reversible Mg Insertion in Nanostructured Tin-Antimony Alloys. <i>Advanced Materials</i> , 2015, 27, 6598-6605.	21.0	88
87	Stabilization of platinum nanoparticle electrocatalysts for oxygen reduction using poly(diallyldimethylammonium chloride). <i>Journal of Materials Chemistry</i> , 2009, 19, 7995.	6.7	87
88	Realizing the Full Potential of Insertion Anodes for Mg-Ion Batteries Through the Nanostructuring of Sn. <i>Nano Letters</i> , 2015, 15, 1177-1182.	9.1	87
89	Atomistic Conversion Reaction Mechanism of $\text{WO}_3$ in Secondary Ion Batteries of Li, Na, and Ca. <i>Angewandte Chemie - International Edition</i> , 2016, 55, 6244-6247.	13.8	86
90	Electrocatalysts by atomic layer deposition for fuel cell applications. <i>Nano Energy</i> , 2016, 29, 220-242.	16.0	79

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91	Noncovalently functionalized graphitic mesoporous carbon as a stable support of Pt nanoparticles for oxygen reduction. <i>Journal of Power Sources</i> , 2010, 195, 1805-1811.	7.8	78
92	Nanostructured Electrocatalysts for PEM Fuel Cells and Redox Flow Batteries: A Selected Review. <i>ACS Catalysis</i> , 2015, 5, 7288-7298.	11.2	78
93	Electrochemically stable cathode current collectors for rechargeable magnesium batteries. <i>Journal of Materials Chemistry A</i> , 2014, 2, 2473-2477.	10.3	77
94	Ammonium Additives to Dissolve Lithium Sulfide through Hydrogen Binding for High-Energy Lithium-Sulfur Batteries. <i>ACS Applied Materials &amp; Interfaces</i> , 2017, 9, 4290-4295.	8.0	74
95	Facile Synthesis of Chevrel Phase Nanocubes and Their Applications for Multivalent Energy Storage. <i>Chemistry of Materials</i> , 2014, 26, 4904-4907.	6.7	73
96	Role of Manganese Deposition on Graphite in the Capacity Fading of Lithium Ion Batteries. <i>ACS Applied Materials &amp; Interfaces</i> , 2016, 8, 14244-14251.	8.0	71
97	The influence of the electrochemical stressing (potential step and potential-static holding) on the degradation of polymer electrolyte membrane fuel cell electrocatalysts. <i>Journal of Power Sources</i> , 2008, 185, 280-286.	7.8	67
98	Rationally-designed configuration of directly-coated Ni <sub>3</sub> S <sub>2</sub> /Ni electrode by RGO providing superior sodium storage. <i>Carbon</i> , 2018, 133, 14-22.	10.3	67
99	Restricting the Solubility of Polysulfides in Li-S Batteries Via Electrolyte Salt Selection. <i>Advanced Energy Materials</i> , 2016, 6, 1600160.	19.5	66
100	Molecular Storage of Mg Ions with Vanadium Oxide Nanoclusters. <i>Advanced Functional Materials</i> , 2016, 26, 3446-3453.	14.9	65
101	High performance Li-ion sulfur batteries enabled by intercalation chemistry. <i>Chemical Communications</i> , 2015, 51, 13454-13457.	4.1	55
102	Tailored Reaction Route by Micropore Confinement for Li-S Batteries Operating under Lean Electrolyte Conditions. <i>Advanced Energy Materials</i> , 2018, 8, 1800590.	19.5	55
103	A fundamental study on the [(1/4-Cl) <sub>3</sub> Mg <sub>2</sub> (THF) <sub>6</sub> ] <sup>+</sup> dimer electrolytes for rechargeable Mg batteries. <i>Chemical Communications</i> , 2015, 51, 2312-2315.	4.1	53
104	Effects of MEA preparation on the performance of a direct methanol fuel cell. <i>Journal of Power Sources</i> , 2006, 160, 1035-1040.	7.8	51
105	Molecular-confinement of polysulfides within mesoscale electrodes for the practical application of lithium sulfur batteries. <i>Nano Energy</i> , 2015, 13, 267-274.	16.0	50
106	Low-cost and durable catalyst support for fuel cells: Graphite submicronparticles. <i>Journal of Power Sources</i> , 2010, 195, 457-460.	7.8	49
107	Electrochemical durability investigation of single-walled and multi-walled carbon nanotubes under potentiostatic conditions. <i>Journal of Power Sources</i> , 2008, 176, 128-131.	7.8	46
108	Pt/Tin Oxide/Carbon Nanocomposites as Promising Oxygen Reduction Electrocatalyst with Improved Stability and Activity. <i>Electrochimica Acta</i> , 2014, 117, 413-419.	5.2	44

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109	Reversible Electrochemical Interface of Mg Metal and Conventional Electrolyte Enabled by Intermediate Adsorption. <i>ACS Energy Letters</i> , 2020, 5, 200-206.	17.4	44
110	Layer-by-layer assembled hybrid film of carbon nanotubes/iron oxide nanocrystals for reagentless electrochemical detection of H <sub>2</sub> O <sub>2</sub> . <i>Sensors and Actuators B: Chemical</i> , 2009, 138, 182-188.	7.8	39
111	Revealing the Dynamics of Platinum Nanoparticle Catalysts on Carbon in Oxygen and Water Using Environmental TEM. <i>ACS Catalysis</i> , 2017, 7, 7658-7664.	11.2	38
112	<sup>25</sup> Mg NMR and computational modeling studies of the solvation structures and molecular dynamics in magnesium based liquid electrolytes. <i>Nano Energy</i> , 2018, 46, 436-446.	16.0	37
113	Electrochemical investigation of polyhalide ion oxidation/reduction on carbon nanotube electrodes for redox flow batteries. <i>Electrochemistry Communications</i> , 2009, 11, 2064-2067.	4.7	36
114	Degradation of the Ionic Pathway in a PEM Fuel Cell Cathode. <i>Journal of Physical Chemistry C</i> , 2011, 115, 22633-22639.	3.1	36
115	Polarization Losses under Accelerated Stress Test Using Multiwalled Carbon Nanotube Supported Pt Catalyst in PEM Fuel Cells. <i>Journal of the Electrochemical Society</i> , 2011, 158, B297.	2.9	33
116	Multifunctional Pd-Sn electrocatalysts enabled by in situ formed SnO <sub>x</sub> and TiC triple junctions. <i>Nano Energy</i> , 2018, 53, 940-948.	16.0	33
117	A new hybrid redox flow battery with multiple redox couples. <i>Journal of Power Sources</i> , 2012, 216, 99-103.	7.8	32
118	Platinum Deposition on Multiwalled Carbon Nanotubes by Ion-Exchange Method as Electrocatalysts for Oxygen Reduction. <i>Journal of the Electrochemical Society</i> , 2007, 154, B687.	2.9	30
119	Non-kinetic losses caused by electrochemical carbon corrosion in PEM fuel cells. <i>International Journal of Hydrogen Energy</i> , 2012, 37, 8451-8458.	7.1	30
120	Hierarchically structured materials for lithium batteries. <i>Nanotechnology</i> , 2013, 24, 424004.	2.6	30
121	Permeabilities of methanol, ethanol and dimethyl ether in new composite membranes: A comparison with Nafion membranes. <i>Journal of Membrane Science</i> , 2007, 289, 51-57.	8.2	29
122	In Situ Deposition of Highly Dispersed Pt Nanoparticles on Carbon Black Electrode for Oxygen Reduction. <i>Journal of the Electrochemical Society</i> , 2006, 153, A1261.	2.9	28
123	H <sup>+</sup> diffusion and electrochemical stability of Li <sub>1+x+y</sub> Al <sub>x</sub> Ti <sub>2</sub> Si <sub>y</sub> P <sub>3</sub> O <sub>12</sub> glass in aqueous Li/air battery electrolytes. <i>Journal of Power Sources</i> , 2012, 214, 292-297.	7.8	27
124	A lithium-sulfur battery with a solution-mediated pathway operating under lean electrolyte conditions. <i>Nano Energy</i> , 2020, 76, 105041.	16.0	25
125	Decomposition pathways and mitigation strategies for highly-stable hydroxyphenazine flow battery anolytes. <i>Journal of Materials Chemistry A</i> , 2021, 9, 21918-21928.	10.3	25
126	Prelude: The renaissance of electrocatalysis. <i>Nano Energy</i> , 2016, 29, 1-3.	16.0	21



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127	Atomistic Conversion Reaction Mechanism of WO <sub>3</sub> in Secondary Ion Batteries of Li, Na, and Ca. <i>Angewandte Chemie</i> , 2016, 128, 6352-6355.	2.0	21
128	Enhancement in kinetics of the oxygen reduction on a silver catalyst by introduction of interlaces and defect-rich facets. <i>Journal of Materials Chemistry A</i> , 2017, 5, 15390-15394.	10.3	21
129	Machine Learning Coupled Multi-scale Modeling for Redox Flow Batteries. <i>Advanced Theory and Simulations</i> , 2020, 3, 1900167.	2.8	21
130	TEM study of fivefold twined gold nanocrystal formation mechanism. <i>Materials Letters</i> , 2014, 116, 299-303.	2.6	19
131	Minimizing Polysulfide Shuttle Effect in Lithium-Ion Sulfur Batteries by Anode Surface Passivation. <i>ACS Applied Materials &amp; Interfaces</i> , 2018, 10, 21965-21972.	8.0	18
132	An Electrochemical Hydrogen-Looping System for Low-Cost CO <sub>2</sub> Capture from Seawater. <i>ACS Energy Letters</i> , 2022, 7, 1947-1952.	17.4	17
133	Electrocatalysts development for hydrogen oxidation reaction in alkaline media: From mechanism understanding to materials design. <i>Chinese Journal of Catalysis</i> , 2021, 42, 2094-2104.	14.0	15
134	Durability studies of unsupported Pt cathodic catalyst with working time of direct methanol fuel cells. <i>Journal of Power Sources</i> , 2008, 185, 1066-1072.	7.8	14
135	The Durability Dependence of Pt/CNT Electrocatalysts on the Nanostructures of Carbon Nanotubes: Hollow- and Bamboo-CNTs. <i>Journal of Nanoscience and Nanotechnology</i> , 2009, 9, 5811-5815.	0.9	13
136	Continuous Fly-Through High-Temperature Synthesis of Nanocatalysts. <i>Nano Letters</i> , 2021, 21, 4517-4523.	9.1	13
137	Advancing Electrolyte Solution Chemistry and Interfacial Electrochemistry of Divalent Metal Batteries. <i>ChemElectroChem</i> , 2021, 8, 3013-3029.	3.4	13
138	Role of Polysulfide Anions in Solid-Electrolyte Interphase Formation at the Lithium Metal Surface in Li-S Batteries. <i>Journal of Physical Chemistry Letters</i> , 2021, 12, 9360-9367.	4.6	13
139	Pt/Carbon Nanofiber Nanocomposites as Electrocatalysts for Direct Methanol Fuel Cells: Prominent Effects of Carbon Nanofiber Nanostructures. <i>Journal of Nanoscience and Nanotechnology</i> , 2009, 9, 2316-2323.	0.9	11
140	In situ ion exchange preparation of Pt/carbon nanotubes electrode: Effect of two-step oxidation of carbon nanotubes. <i>Journal of Power Sources</i> , 2011, 196, 9955-9960.	7.8	11
141	High electrochemical activity of Pt/C cathode modified with NH <sub>4</sub> HCO <sub>3</sub> for direct methanol fuel cell. <i>Journal of Solid State Electrochemistry</i> , 2010, 14, 633-636.	2.5	6
142	Electrochemical study of highly durable cathode with Pt supported on ITO-CNT composite for proton exchange membrane fuel cells. <i>Journal of Industrial and Engineering Chemistry</i> , 2016, 42, 81-86.	5.8	6
143	Lean Electrolyte Batteries: Addressing Passivation in Lithium-Sulfur Battery Under Lean Electrolyte Condition ( <i>Adv. Funct. Mater.</i> 38/2018). <i>Advanced Functional Materials</i> , 2018, 28, 1870275.	14.9	5
144	Advancing Materials Electrochemistry for Chemical Transformation. <i>Advanced Materials</i> , 2019, 31, e1903622.	21.0	5

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145	Mapping Localized Peroxyl Radical Generation on a PEM Fuel Cell Catalyst Using Integrated Scanning Electrochemical Cell Microspectroscopy. <i>Frontiers in Chemistry</i> , 2020, 8, 572563.	3.6	5
146	Tuning proton transfer and catalytic properties in triple junction nanostructured catalyts. <i>Nano Energy</i> , 2021, 86, 106046.	16.0	5
147	Renewable Ammonia as an Energy Fuel for Ocean Exploration and Transportation. <i>Marine Technology Society Journal</i> , 2020, 54, 126-136.	0.4	5
148	LiMnPO <sub>4</sub> ·Li <sub>3</sub> V <sub>2</sub> (PO <sub>4</sub> ) <sub>3</sub> composite cathode material derived from Mn(VO <sub>3</sub> ) <sub>2</sub> nanosheet precursor. <i>Journal of Alloys and Compounds</i> , 2017, 695, 1813-1820.	5.5	4
149	In-Situ S/TEM Probing of the Behavior of Nanoparticles Under Chemical and Electrochemical Reactions in the System Involving Solid, Liquid and Gas. <i>Microscopy and Microanalysis</i> , 2018, 24, 1876-1877.	0.4	4
150	Fast test for the durability of PEM fuel cell catalysts. <i>ECS Transactions</i> , 2008, 16, 361-366.	0.5	3
151	An Electrochemically Activated Nanofilm for Sustainable Mg Anode with Fast Charge Transfer Kinetics. <i>Journal of the Electrochemical Society</i> , 2021, 168, 120519.	2.9	2
152	Real-time Observation of Sintering Process of Carbon Supported Platinum Nanoparticles in Oxygen and Water through Environment TEM. <i>Microscopy and Microanalysis</i> , 2017, 23, 2048-2049.	0.4	0
153	(Invited) Catalysts for Low-Temperature Electrochemical Hydrogen Production and Hydrogenation Reactions. <i>ECS Meeting Abstracts</i> , 2021, MA2021-02, 1277-1277.	0.0	0
154	(Invited) Atomically Dispersed M-N-C Catalysts for Oxygen Reduction Reactions: Understanding Degradation and Improving Durability. <i>ECS Meeting Abstracts</i> , 2022, MA2022-01, 630-630.	0.0	0