

Minghao Yu

List of Publications by Year in descending order

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papers

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11608

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27345

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113
all docs

113
docs citations

113
times ranked

18913
citing authors

#	ARTICLE	IF	CITATIONS
1	Hydrogenated TiO ₂ Nanotube Arrays for Supercapacitors. Nano Letters, 2012, 12, 1690-1696.	4.5	1,226
2	Flexible solid-state supercapacitors: design, fabrication and applications. Energy and Environmental Science, 2014, 7, 2160.	15.6	1,156
3	Amorphous nickel hydroxide nanospheres with ultrahigh capacitance and energy density as electrochemical pseudocapacitor materials. Nature Communications, 2013, 4, 1894.	5.8	1,041
4	H ₂ TiO ₂ @MnO ₂ //H ₂ TiO ₂ @C Core-Shell Nanowires for High Performance and Flexible Asymmetric Supercapacitors. Advanced Materials, 2013, 25, 267-272.	11.1	894
5	Oxygen-Deficient Hematite Nanorods as High-Performance and Novel Negative Electrodes for Flexible Asymmetric Supercapacitors. Advanced Materials, 2014, 26, 3148-3155.	11.1	838
6	High Energy Density Asymmetric Quasi-Solid-State Supercapacitor Based on Porous Vanadium Nitride Nanowire Anode. Nano Letters, 2013, 13, 2628-2633.	4.5	691
7	Polyaniline and Polypyrrole Pseudocapacitor Electrodes with Excellent Cycling Stability. Nano Letters, 2014, 14, 2522-2527.	4.5	688
8	Solid-State Supercapacitor Based on Activated Carbon Cloths Exhibits Excellent Rate Capability. Advanced Materials, 2014, 26, 2676-2682.	11.1	660
9	Stabilized TiN Nanowire Arrays for High-Performance and Flexible Supercapacitors. Nano Letters, 2012, 12, 5376-5381.	4.5	627
10	Achieving Ultrahigh Energy Density and Long Durability in a Flexible Rechargeable Quasi-Solid-State Zn-MnO ₂ Battery. Advanced Materials, 2017, 29, 1700274.	11.1	572
11	Nitrogen-Doped Co ₃ O ₄ Mesoporous Nanowire Arrays as an Additive-Free Air-Cathode for Flexible Solid-State Zinc-Air Batteries. Advanced Materials, 2017, 29, 1602868.	11.1	428
12	Oxygen vacancies promoting photoelectrochemical performance of In ₂ O ₃ nanocubes. Scientific Reports, 2013, 3, 1021.	1.6	427
13	Advanced Ti-Doped Fe ₂ O ₃ @PEDOT Core/Shell Anode for High-Energy Asymmetric Supercapacitors. Advanced Energy Materials, 2015, 5, 1402176.	10.2	416
14	Flexible Zn-Ion Batteries: Recent Progresses and Challenges. Small, 2019, 15, e1804760.	5.2	412
15	A Novel Exfoliation Strategy to Significantly Boost the Energy Storage Capability of Commercial Carbon Cloth. Advanced Materials, 2015, 27, 3572-3578.	11.1	384
16	Two-dimensional materials for miniaturized energy storage devices: from individual devices to smart integrated systems. Chemical Society Reviews, 2018, 47, 7426-7451.	18.7	384
17	Oxygen vacancies enhancing capacitive properties of MnO ₂ nanorods for wearable asymmetric supercapacitors. Nano Energy, 2014, 8, 255-263.	8.2	381
18	Iron-Based Supercapacitor Electrodes: Advances and Challenges. Advanced Energy Materials, 2016, 6, 1601053.	10.2	358

#	ARTICLE	IF	CITATIONS
19	An Ultrastable and High-Performance Flexible Fiber-Shaped Ni-Zn Battery based on a Ni-NiO Heterostructured Nanosheet Cathode. <i>Advanced Materials</i> , 2017, 29, 1702698.	11.1	314
20	A New Benchmark Capacitance for Supercapacitor Anodes by Mixed-Valence Sulfur-Doped $V_{0.6}O_{1.3}$. <i>Advanced Materials</i> , 2014, 26, 5869-5875.	11.1	305
21	Boosting the Energy Density of Carbon-Based Aqueous Supercapacitors by Optimizing the Surface Charge. <i>Angewandte Chemie - International Edition</i> , 2017, 56, 5454-5459.	7.2	292
22	Scalable self-growth of Ni@NiO core-shell electrode with ultrahigh capacitance and super-long cyclic stability for supercapacitors. <i>NPG Asia Materials</i> , 2014, 6, e129-e129.	3.8	284
23	3D MnO ₂ -graphene composites with large areal capacitance for high-performance asymmetric supercapacitors. <i>Nanoscale</i> , 2013, 5, 6790.	2.8	258
24	Carbon materials for ion-intercalation involved rechargeable battery technologies. <i>Chemical Society Reviews</i> , 2021, 50, 2388-2443.	18.7	255
25	Multiscale Pore Network Boosts Capacitance of Carbon Electrodes for Ultrafast Charging. <i>Nano Letters</i> , 2017, 17, 3097-3104.	4.5	251
26	A High-Rate Two-Dimensional Polyarylimide Covalent Organic Framework Anode for Aqueous Zn-Ion Energy Storage Devices. <i>Journal of the American Chemical Society</i> , 2020, 142, 19570-19578.	6.6	232
27	Dual-Doped Molybdenum Trioxide Nanowires: A Bifunctional Anode for Fiber-Shaped Asymmetric Supercapacitors and Microbial Fuel Cells. <i>Angewandte Chemie - International Edition</i> , 2016, 55, 6762-6766.	7.2	230
28	Extracting oxygen anions from ZnMn ₂ O ₄ : Robust cathode for flexible all-solid-state Zn-ion batteries. <i>Energy Storage Materials</i> , 2019, 21, 154-161.	9.5	221
29	Flexible Ultrafast Aqueous Rechargeable Ni//Bi Battery Based on Highly Durable Single-Crystalline Bismuth Nanostructured Anode. <i>Advanced Materials</i> , 2016, 28, 9188-9195.	11.1	220
30	Improving the Cycling Stability of Metal-Nitride Supercapacitor Electrodes with a Thin Carbon Shell. <i>Advanced Energy Materials</i> , 2014, 4, 1300994.	10.2	217
31	New Insights into the Operating Voltage of Aqueous Supercapacitors. <i>Chemistry - A European Journal</i> , 2018, 24, 3639-3649.	1.7	211
32	Controllable synthesis of porous nickel-cobalt oxide nanosheets for supercapacitors. <i>Journal of Materials Chemistry</i> , 2012, 22, 13357.	6.7	207
33	Valence-Optimized Vanadium Oxide Supercapacitor Electrodes Exhibit Ultrahigh Capacitance and Super-Long Cyclic Durability of 100 000 Cycles. <i>Advanced Functional Materials</i> , 2015, 25, 3534-3540.	7.8	200
34	TiO ₂ @C core-shell nanowires for high-performance and flexible solid-state supercapacitors. <i>Journal of Materials Chemistry C</i> , 2013, 1, 225-229.	2.7	192
35	A Crystalline, 2D Polyarylimide Cathode for Ultrastable and Ultrafast Li Storage. <i>Advanced Materials</i> , 2019, 31, e1901478.	11.1	192
36	Binder-free Fe ₂ N nanoparticles on carbon textile with high power density as novel anode for high-performance flexible lithium ion batteries. <i>Nano Energy</i> , 2015, 11, 348-355.	8.2	180

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37	Holey Tungsten Oxynitride Nanowires: Novel Anodes Efficiently Integrate Microbial Chemical Energy Conversion and Electrochemical Energy Storage. <i>Advanced Materials</i> , 2015, 27, 3085-3091.	11.1	177
38	Thin-Film Electrode-Based Supercapacitors. <i>Joule</i> , 2019, 3, 338-360.	11.7	171
39	Engineering Thin MoS ₂ Nanosheets on TiN Nanorods: Advanced Electrochemical Capacitor Electrode and Hydrogen Evolution Electrocatalyst. <i>ACS Energy Letters</i> , 2017, 2, 1862-1868.	8.8	167
40	Building Three-Dimensional Graphene Frameworks for Energy Storage and Catalysis. <i>Advanced Functional Materials</i> , 2015, 25, 324-330.	7.8	156
41	Amorphous Cobalt Hydroxide with Superior Pseudocapacitive Performance. <i>ACS Applied Materials & Interfaces</i> , 2014, 6, 745-749.	4.0	155
42	Recent progress in the development of anodes for asymmetric supercapacitors. <i>Journal of Materials Chemistry A</i> , 2016, 4, 4634-4658.	5.2	154
43	Two-Dimensional Carbon-Rich Conjugated Frameworks for Electrochemical Energy Applications. <i>Journal of the American Chemical Society</i> , 2020, 142, 12903-12915.	6.6	154
44	Water Surface Assisted Synthesis of Large-Scale Carbon Nanotube Film for High-Performance and Stretchable Supercapacitors. <i>Advanced Materials</i> , 2014, 26, 4724-4729.	11.1	148
45	Recent Smart Methods for Achieving High-Energy Asymmetric Supercapacitors. <i>Small Methods</i> , 2018, 2, 1700230.	4.6	147
46	A Confinement Strategy for Stabilizing ZIF-Derived Bifunctional Catalysts as a Benchmark Cathode of Flexible All-Solid-State Zinc-Air Batteries. <i>Advanced Materials</i> , 2018, 30, e1805268.	11.1	147
47	Facile synthesis of titanium nitride nanowires on carbon fabric for flexible and high-rate lithium ion batteries. <i>Journal of Materials Chemistry A</i> , 2014, 2, 10825-10829.	5.2	145
48	Three dimensional architectures: design, assembly and application in electrochemical capacitors. <i>Journal of Materials Chemistry A</i> , 2015, 3, 15792-15823.	5.2	135
49	Manganese dioxide nanorod arrays on carbon fabric for flexible solid-state supercapacitors. <i>Journal of Power Sources</i> , 2013, 239, 64-71.	4.0	121
50	Self-Activating, Capacitive Anion Intercalation Enables High-Power Graphite Cathodes. <i>Advanced Materials</i> , 2018, 30, e1800533.	11.1	121
51	An electrodeposited lanthanide MOF thin film as a luminescent sensor for carbonate detection in aqueous solution. <i>Journal of Materials Chemistry C</i> , 2014, 2, 8683-8690.	2.7	119
52	Titanium dioxide@polypyrrole core-shell nanowires for all solid-state flexible supercapacitors. <i>Nanoscale</i> , 2013, 5, 10806.	2.8	115
53	Titanium dioxide@titanium nitride nanowires on carbon cloth with remarkable rate capability for flexible lithium-ion batteries. <i>Journal of Power Sources</i> , 2014, 272, 946-953.	4.0	114
54	Flexible in-plane micro-supercapacitors: Progresses and challenges in fabrication and applications. <i>Energy Storage Materials</i> , 2020, 28, 160-187.	9.5	113

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55	Improving the photoelectrochemical and photocatalytic performance of CdO nanorods with CdS decoration. <i>CrystEngComm</i> , 2013, 15, 4212.	1.3	110
56	Oxygen Defect Modulated Titanium Niobium Oxide on Graphene Arrays: An Open Door for High Performance 1.4 V Symmetric Supercapacitor in Acidic Aqueous Electrolyte. <i>Advanced Functional Materials</i> , 2018, 28, 1805618.	7.8	110
57	Interlayer Engineering of MoO_3 Modulates Selective Hydronium Intercalation in Neutral Aqueous Electrolyte. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 896-903.	7.2	108
58	Sulphur-doped Co_3O_4 nanowires as an advanced negative electrode for high-energy asymmetric supercapacitors. <i>Journal of Materials Chemistry A</i> , 2016, 4, 10779-10785.	5.2	101
59	Promoted oxygen reduction kinetics on nitrogen-doped hierarchically porous carbon by engineering proton-feeding centers. <i>Energy and Environmental Science</i> , 2020, 13, 2849-2855.	15.6	101
60	Interlayer gap widened H_2O phase molybdenum trioxide as high-rate anodes for dual-ion-intercalation energy storage devices. <i>Nature Communications</i> , 2020, 11, 1348.	5.8	100
61	A Stimulus-Responsive Zinc-Iodine Battery with Smart Overcharge Self-Protection Function. <i>Advanced Materials</i> , 2020, 32, e2000287.	11.1	97
62	Bifunctional Iron-Nickel Nitride Nanoparticles as Flexible and Robust Electrode for Overall Water Splitting. <i>Electrochimica Acta</i> , 2017, 247, 666-673.	2.6	92
63	Designing Carbon Based Supercapacitors with High Energy Density: A Summary of Recent Progress. <i>Chemistry - A European Journal</i> , 2018, 24, 7312-7329.	1.7	86
64	Enhanced photoactivity and stability of carbon and nitrogen co-treated ZnO nanorod arrays for photoelectrochemical water splitting. <i>Journal of Materials Chemistry</i> , 2012, 22, 14272.	6.7	85
65	Controllable Synthesis of $\text{Zn}_x\text{Cd}_{1-x}\text{S}$ @ZnO Core-Shell Nanorods with Enhanced Photocatalytic Activity. <i>Langmuir</i> , 2012, 28, 10558-10564.	1.6	83
66	Recent advances and challenges of stretchable supercapacitors based on carbon materials. <i>Science China Materials</i> , 2016, 59, 475-494.	3.5	83
67	Ultrathin two-dimensional conjugated metal-organic framework single-crystalline nanosheets enabled by surfactant-assisted synthesis. <i>Chemical Science</i> , 2020, 11, 7665-7671.	3.7	82
68	Controllable synthesis of hierarchical ZnO nanodisks for highly photocatalytic activity. <i>CrystEngComm</i> , 2012, 14, 1850.	1.3	75
69	Dual-Redox-Sites Enable Two-Dimensional Conjugated Metal-Organic Frameworks with Large Pseudocapacitance and Wide Potential Window. <i>Journal of the American Chemical Society</i> , 2021, 143, 10168-10176.	6.6	75
70	Surface modulation of NiCo_2O_4 nanowire arrays with significantly enhanced reactivity for ultrahigh-energy supercapacitors. <i>Chemical Engineering Journal</i> , 2018, 352, 996-1003.	6.6	74
71	Hydrogen production from solar driven glucose oxidation over $\text{Ni}(\text{OH})_2$ functionalized electroreduced- TiO_2 nanowire arrays. <i>Green Chemistry</i> , 2013, 15, 2434.	4.6	72
72	Doped Molybdenum Trioxide Nanowires: A Bifunctional Anode for Fiber-Shaped Asymmetric Supercapacitors and Microbial Fuel Cells. <i>Angewandte Chemie</i> , 2016, 128, 6874-6878.	1.6	70

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73	Materials and technologies for multifunctional, flexible or integrated supercapacitors and batteries. <i>Materials Today</i> , 2021, 48, 176-197.	8.3	66
74	Surface engineering of carbon fiber paper for efficient capacitive energy storage. <i>Journal of Materials Chemistry A</i> , 2016, 4, 18639-18645.	5.2	63
75	Hierarchical CeO ₂ nanospheres as highly-efficient adsorbents for dye removal. <i>New Journal of Chemistry</i> , 2013, 37, 585.	1.4	62
76	Facile synthesis of large-area CeO ₂ /ZnO nanotube arrays for enhanced photocatalytic hydrogen evolution. <i>Journal of Power Sources</i> , 2014, 247, 545-550.	4.0	60
77	Boosting the Energy Density of Carbon-Based Aqueous Supercapacitors by Optimizing the Surface Charge. <i>Angewandte Chemie</i> , 2017, 129, 5546-5551.	1.6	60
78	Interfacial Covalent Bonds Regulated Electron-Deficient 2D Black Phosphorus for Electrocatalytic Oxygen Reactions. <i>Advanced Materials</i> , 2021, 33, e2008752.	11.1	56
79	Redox-Active Metaphosphate-Like Terminals Enable High-Capacity MXene Anodes for Ultrafast Na-Ion Storage. <i>Advanced Materials</i> , 2022, 34, e2108682.	11.1	52
80	Amino functionalization optimizes potential distribution: A facile pathway towards high-energy carbon-based aqueous supercapacitors. <i>Nano Energy</i> , 2019, 65, 103987.	8.2	50
81	Porous Pr(OH) ₃ Nanostructures as High-Efficiency Adsorbents for Dye Removal. <i>Langmuir</i> , 2012, 28, 11078-11085.	1.6	49
82	Porous MoO ₂ nanowires as stable and high-rate negative electrodes for electrochemical capacitors. <i>Chemical Communications</i> , 2017, 53, 3929-3932.	2.2	48
83	On-Chip Integration of a Covalent Organic Framework-Based Catalyst into a Miniaturized Zn-Air Battery with High Energy Density. <i>ACS Energy Letters</i> , 2021, 6, 2491-2498.	8.8	46
84	Monolithic three-dimensional graphene frameworks derived from inexpensive graphite paper as advanced anodes for microbial fuel cells. <i>Journal of Materials Chemistry A</i> , 2016, 4, 6342-6349.	5.2	45
85	Conductive membranes of EVA filled with carbon black and carbon nanotubes for flexible energy-storage devices. <i>Journal of Materials Chemistry A</i> , 2013, 1, 505-509.	5.2	41
86	Band transport by large Fröhlich polarons in MXenes. <i>Nature Physics</i> , 2022, 18, 544-550.	6.5	40
87	Vertical bismuth oxide nanosheets with enhanced crystallinity: promising stable anodes for rechargeable alkaline batteries. <i>Journal of Materials Chemistry A</i> , 2017, 5, 25539-25544.	5.2	35
88	Improving the Lithium-Storage Properties of Self-Grown Nickel Oxide: A Back-Up from TiO ₂ Nanoparticles. <i>ChemElectroChem</i> , 2015, 2, 1243-1248.	1.7	34
89	Nitrogen doped graphene paper as a highly conductive, and light-weight substrate for flexible supercapacitors. <i>RSC Advances</i> , 2014, 4, 51878-51883.	1.7	33
90	A Nonaqueous Na-Ion Hybrid Micro-Supercapacitor with Wide Potential Window and Ultrahigh Areal Energy Density. <i>Batteries and Supercaps</i> , 2019, 2, 918-923.	2.4	30

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91	Tb(ⁱⁱⁱ) postsynthetic functional coordination polymer coatings on ZnO micronanoarrays and their application in small molecule sensing. <i>Journal of Materials Chemistry C</i> , 2016, 4, 8466-8472.	2.7	27
92	One step cathodically electrodeposited [Tb ₂ (BDC) ₃ (H ₂ O) ₄] _n thin film as a luminescent probe for Cu ²⁺ detection. <i>RSC Advances</i> , 2014, 4, 58178-58183.	1.7	26
93	Scalable Manufacturing of MXene Films: Moving toward Industrialization. <i>Matter</i> , 2020, 3, 335-336.	5.0	21
94	Constructing Hydrophobic Interface with Close-Packed Coordination Supramolecular Network for Long-Cycling and Dendrite-Free Zn-Metal Batteries. <i>Small</i> , 2022, 18, e2107971.	5.2	21
95	Functional Electrolytes: Game Changers for Smart Electrochemical Energy Storage Devices. <i>Small Science</i> , 2022, 2, 2100080.	5.8	16
96	3D V ₃ O ₇ ·H ₂ O/Partially Exfoliated Carbon Nanotube Composites with Significantly Improved Lithium Storage Ability. <i>Particle and Particle Systems Characterization</i> , 2016, 33, 531-537.	1.2	15
97	Layered electrode materials for non-aqueous multivalent metal batteries. <i>Journal of Materials Chemistry A</i> , 2021, 9, 19317-19345.	5.2	15
98	Understanding the Role of Topotactic Anion Exchange in the Robust Cu Ion Storage of CuS ^x Se ^x . <i>ACS Energy Letters</i> , 2022, 7, 1835-1841.	8.8	13
99	Co ₃ O ₄ @Co Nanoparticles Embedded Porous N-Rich Carbon Matrix for Efficient Oxygen Reduction. <i>Particle and Particle Systems Characterization</i> , 2017, 34, 1700074.	1.2	11
100	Interlayer Engineering of Î±-MoO ₃ Modulates Selective Hydronium Intercalation in Neutral Aqueous Electrolyte. <i>Angewandte Chemie</i> , 2021, 133, 909-916.	1.6	9
101	Structure engineering of van der Waals layered transition metal-containing compounds for aqueous energy storage. <i>Materials Chemistry Frontiers</i> , 2021, 5, 2996-3020.	3.2	4
102	Coupling electrode-redox electrolyte within carbon nanotube arrays for supercapacitors with suppressed self-discharge. <i>Sustainable Materials and Technologies</i> , 2021, 28, e00284.	1.7	3
103	Frontispiece: New Insights into the Operating Voltage of Aqueous Supercapacitors. <i>Chemistry - A European Journal</i> , 2018, 24, .	1.7	1
104	Facile assembly of layer-interlocked graphene heterostructures as flexible electrodes for Li-ion batteries. <i>Faraday Discussions</i> , 2021, 227, 321-331.	1.6	1
105	Semiconductor Nanowires and Nanowire Heterostructures for Supercapacitors. , 2013, , .		0
106	Manganese dioxide nanorod arrays on carbon fabric for flexible solid-state supercapacitors. , 2013, , .		0
107	Frontispiece: Boosting the Energy Density of Carbon-Based Aqueous Supercapacitors by Optimizing the Surface Charge. <i>Angewandte Chemie - International Edition</i> , 2017, 56, .	7.2	0
108	Frontispiz: Boosting the Energy Density of Carbon-Based Aqueous Supercapacitors by Optimizing the Surface Charge. <i>Angewandte Chemie</i> , 2017, 129, .	1.6	0

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109	Frontispiece: Designing Carbon Based Supercapacitors with High Energy Density: A Summary of Recent Progress. Chemistry - A European Journal, 2018, 24, .	1.7	0