

# Renbing Wu

## List of Publications by Year in descending order

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87  
papers

10,132  
citations

26610

56  
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49868

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docs citations

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9481  
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#	ARTICLE	IF	CITATIONS
1	In Situ Formation of Hollow Hybrids Composed of Cobalt Sulfides Embedded within Porous Carbon Polyhedra/Carbon Nanotubes for High-Performance Lithium-Ion Batteries. <i>Advanced Materials</i> , 2015, 27, 3038-3044.	11.1	620
2	Ultrafine Co Nanoparticles Encapsulated in Carbon-Nanotubes-Grafted Graphene Sheets as Advanced Electrocatalysts for the Hydrogen Evolution Reaction. <i>Advanced Materials</i> , 2018, 30, e1802011.	11.1	453
3	Zeolitic Imidazolate Framework-Derived High Symmetric Porous $\text{Co}_3\text{O}_4$ Hollow Dodecahedra with Highly Enhanced Lithium Storage Capability. <i>Small</i> , 2014, 10, 1932-1938.	5.2	442
4	Recent progress in synthesis, properties and potential applications of SiC nanomaterials. <i>Progress in Materials Science</i> , 2015, 72, 1-60.	16.0	415
5	Porous Spinel $\text{Zn}_x\text{Co}_3\text{O}_4$ Hollow Polyhedra Templated for High-Rate Lithium-Ion Batteries. <i>ACS Nano</i> , 2014, 8, 6297-6303.	7.3	392
6	MOF-templated formation of porous CuO hollow octahedra for lithium-ion battery anode materials. <i>Journal of Materials Chemistry A</i> , 2013, 1, 11126.	5.2	361
7	A flexible electromagnetic wave-electricity harvester. <i>Nature Communications</i> , 2021, 12, 834.	5.8	269
8	Electromagnetic absorption materials: Current progress and new frontiers. <i>Progress in Materials Science</i> , 2022, 127, 100946.	16.0	262
9	Oriented Transformation of Co-LDH into 2D/3D ZIF-67 to Achieve Co-N-C Hybrids for Efficient Overall Water Splitting. <i>Advanced Energy Materials</i> , 2019, 9, 1803918.	10.2	260
10	General Synthesis of Dual Carbon-Confined Metal Sulfides Quantum Dots Toward High-Performance Anodes for Sodium-Ion Batteries. <i>Advanced Functional Materials</i> , 2017, 27, 1702046.	7.8	259
11	An Electrical Switch-Driven Flexible Electromagnetic Absorber. <i>Advanced Functional Materials</i> , 2020, 30, 1907251.	7.8	234
12	In Situ Formation of Cobalt Nitrides/Graphitic Carbon Composites as Efficient Bifunctional Electrocatalysts for Overall Water Splitting. <i>ACS Applied Materials &amp; Interfaces</i> , 2018, 10, 7134-7144.	4.0	227
13	Ultrathinning Nickel Sulfide with Modulated Electron Density for Efficient Water Splitting. <i>Advanced Energy Materials</i> , 2020, 10, 2001963.	10.2	224
14	Metal-organic framework-derived nanocomposites for electrocatalytic hydrogen evolution reaction. <i>Progress in Materials Science</i> , 2020, 108, 100618.	16.0	220
15	Rational construction of graphene oxide with MOF-derived porous NiFe@C nanocubes for high-performance microwave attenuation. <i>Nano Research</i> , 2016, 9, 3671-3682.	5.8	219
16	Boronization-Induced Ultrathin 2D Nanosheets with Abundant Crystalline-Amorphous Phase Boundary Supported on Nickel Foam toward Efficient Water Splitting. <i>Advanced Energy Materials</i> , 2020, 10, 1902714.	10.2	218
17	Rational Construction of Nitrogen-Doped Hierarchical Dual-Carbon for Advanced Potassium-Ion Hybrid Capacitors. <i>Advanced Energy Materials</i> , 2020, 10, 1904045.	10.2	197
18	B-doping-induced amorphization of LDH for large-current-density hydrogen evolution reaction. <i>Applied Catalysis B: Environmental</i> , 2020, 261, 118240.	10.8	191

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19	Molten-salt-mediated synthesis of SiC nanowires for microwave absorption applications. CrystEngComm, 2013, 15, 570-576.	1.3	182
20	Atomically Dispersed Co@Pyridinic N for Superior Oxygen Reduction Reaction. Advanced Energy Materials, 2020, 10, 2002592.	10.2	168
21	Structure stability of metal-organic framework MIL-53 (Al) in aqueous solutions. International Journal of Hydrogen Energy, 2013, 38, 16710-16715.	3.8	153
22	Construction of hybrid hollow architectures by in-situ rooting ultrafine ZnS nanorods within porous carbon polyhedra for enhanced lithium storage properties. Chemical Engineering Journal, 2017, 326, 680-690.	6.6	147
23	MOFs-derived copper sulfides embedded within porous carbon octahedra for electrochemical capacitor applications. Chemical Communications, 2015, 51, 3109-3112.	2.2	145
24	Co/CoP Heterojunction on Hierarchically Ordered Porous Carbon as a Highly Efficient Electrocatalyst for Hydrogen and Oxygen Evolution. Advanced Energy Materials, 2021, 11, 2102134.	10.2	138
25	In-situ growth of SiC nanowire arrays on carbon fibers and their microwave absorption properties. Journal of Alloys and Compounds, 2016, 687, 833-838.	2.8	137
26	Electroless Plating of Highly Efficient Bifunctional Boride-Based Electrodes toward Practical Overall Water Splitting. Advanced Energy Materials, 2018, 8, 1801372.	10.2	127
27	Ultrathin Prussian blue analogue nanosheet arrays with open bimetal centers for efficient overall water splitting. Nano Energy, 2020, 68, 104371.	8.2	123
28	Porous cobalt phosphide/graphitic carbon polyhedral hybrid composites for efficient oxygen evolution reactions. Journal of Materials Chemistry A, 2016, 4, 13742-13745.	5.2	117
29	Embedding ZnSe nanodots in nitrogen-doped hollow carbon architectures for superior lithium storage. Nano Research, 2018, 11, 966-978.	5.8	114
30	Iron-Doping-Induced Phase Transformation in Dual-Carbon-Confined Cobalt Diselenide Enabling Superior Lithium Storage. ACS Nano, 2019, 13, 6113-6124.	7.3	108
31	Two-dimensional dual carbon-coupled defective nickel quantum dots towards highly efficient overall water splitting. Applied Catalysis B: Environmental, 2019, 250, 213-223.	10.8	101
32	Vacancy Occupation-Driven Polymorphic Transformation in Cobalt Ditelluride for Boosted Oxygen Evolution Reaction. ACS Nano, 2020, 14, 6968-6979.	7.3	100
33	Fabrication of practical catalytic electrodes using insulating and eco-friendly substrates for overall water splitting. Energy and Environmental Science, 2020, 13, 102-110.	15.6	98
34	Tuning the morphologies of SiC nanowires via the control of growth temperature, and their photoluminescence properties. Nanotechnology, 2008, 19, 335602.	1.3	95
35	Highly dispersed Au nanoparticles immobilized on Zr-based metal-organic frameworks as heterostructured catalyst for CO oxidation. Journal of Materials Chemistry A, 2013, 1, 14294.	5.2	95
36	Phase-Transited Lysozyme-Driven Formation of Self-Supported Co <sub>3</sub> O <sub>4</sub> @C Nanomeshes for Overall Water Splitting. Advanced Science, 2019, 6, 1900272.	5.6	95

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37	Heterostructured CoFe@C@MnO <sub>2</sub> nanocubes for efficient microwave absorption. Chemical Engineering Journal, 2020, 382, 123039.	6.6	94
38	Twinned SiC Zigzag Nanoneedles. Journal of Physical Chemistry C, 2007, 111, 6233-6237.	1.5	92
39	Catalyzing overall water splitting at an ultralow cell voltage of 1.42 V via coupled Co-doped NiO nanosheets with carbon. Applied Catalysis B: Environmental, 2019, 252, 214-221.	10.8	92
40	Tunable electronic coupling of cobalt sulfide/carbon composites for optimizing oxygen evolution reaction activity. Journal of Materials Chemistry A, 2018, 6, 10304-10312.	5.2	86
41	Multifunctional Electrocatalysis on a Porous N-Doped NiCo <sub>2</sub> O <sub>4</sub> @C Nanonetwork. ACS Applied Materials & Interfaces, 2019, 11, 45546-45553.	4.0	85
42	Implanting Single Zn Atoms Coupled with Metallic Co Nanoparticles into Porous Carbon Nanosheets Grafted with Carbon Nanotubes for High-Performance Lithium-Sulfur Batteries. Advanced Functional Materials, 2022, 32, .	7.8	85
43	Charge pumping enabling Co-NC to outperform benchmark Pt catalyst for pH-universal hydrogen evolution reaction. Energy and Environmental Science, 2021, 14, 3160-3173.	15.6	81
44	Growth of Tapered SiC Nanowires on Flexible Carbon Fabric: Toward Field Emission Applications. Journal of Physical Chemistry C, 2012, 116, 12940-12945.	1.5	78
45	Tuning the Electronic Structure of NiO via Li Doping for the Fast Oxygen Evolution Reaction. Chemistry of Materials, 2019, 31, 419-428.	3.2	78
46	Charge Transfer Engineering via Multiple Heteroatom Doping in Dual Carbon-Coupled Cobalt Phosphides for Highly Efficient Overall Water Splitting. Applied Catalysis B: Environmental, 2020, 268, 118404.	10.8	73
47	Sequential Phase Conversion-Induced Phosphides Heteronanorod Arrays for Superior Hydrogen Evolution Performance to Pt in Wide pH Media. Advanced Materials, 2022, 34, e2107548.	11.1	73
48	3D urchin-like architectures assembled by MnS nanorods encapsulated in N-doped carbon tubes for superior lithium storage capability. Chemical Engineering Journal, 2019, 355, 752-759.	6.6	69
49	Strongly coupling of Co <sub>9</sub> S <sub>8</sub> /Zn-Co-S heterostructures rooted in carbon nanocages towards efficient oxygen evolution reaction. Journal of Catalysis, 2018, 361, 322-330.	3.1	68
50	Binder-Free Air Electrodes for Rechargeable Zinc-Air Batteries: Recent Progress and Future Perspectives. Small Methods, 2021, 5, e2000827.	4.6	66
51	Embedding heterostructured MnS/Co <sub>1-x</sub> S nanoparticles in porous carbon/graphene for superior lithium storage. Journal of Materials Chemistry A, 2019, 7, 1260-1266.	5.2	64
52	Anion-cation co-substitution activation of spinel CoMoO <sub>4</sub> for efficient oxygen evolution reaction. Chemical Engineering Journal, 2020, 394, 124926.	6.6	64
53	Hierarchically porous-structured Zn <sub>x</sub> Co <sub>1-x</sub> S@CNT nanocomposites with high-rate cycling performance for lithium-ion batteries. Journal of Materials Chemistry A, 2017, 5, 23221-23227.	5.2	63
54	Synthesis and photoluminescence of needle-shaped 3C-SiC nanowires on the substrate of PAN carbon fiber. Journal of Alloys and Compounds, 2008, 456, 320-323.	2.8	61

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55	Alloying Co Species into Ordered and Interconnected Macroporous Carbon Polyhedra for Efficient Oxygen Reduction Reaction in Rechargeable Zinc-Air Batteries. <i>Advanced Materials</i> , 2022, 34, e2109605.	11.1	61
56	Doping Strategy To Boost the Electromagnetic Wave Attenuation Ability of Hollow Carbon Spheres at Elevated Temperatures. <i>ACS Sustainable Chemistry and Engineering</i> , 2018, 6, 1539-1544.	3.2	59
57	Interfacial Charge Field in Hierarchical Yolk-Shell Nanocapsule Enables Efficient Immobilization and Catalysis of Polysulfides Conversion. <i>Advanced Energy Materials</i> , 2019, 9, 1901667.	10.2	59
58	Water Splitting: Oriented Transformation of Co-LDH into 2D/3D ZIF-67 to Achieve Co-N-C Hybrids for Efficient Overall Water Splitting ( <i>Adv. Energy Mater.</i> 19/2019). <i>Advanced Energy Materials</i> , 2019, 9, 1970066.	10.2	54
59	A general approach towards multi-faceted hollow oxide composites using zeolitic imidazolate frameworks. <i>Nanoscale</i> , 2015, 7, 965-974.	2.8	53
60	In-situ growth of Ni nanoparticle-encapsulated N-doped carbon nanotubes on carbon nanorods for efficient hydrogen evolution electrocatalysis. <i>Nano Research</i> , 2020, 13, 975-982.	5.8	49
61	Dual carbon-hosted Co-N <sub>3</sub> enabling unusual reaction pathway for efficient oxygen reduction reaction. <i>Applied Catalysis B: Environmental</i> , 2021, 297, 120390.	10.8	46
62	Well-aligned SiC nanoneedle arrays for excellent field emitters. <i>Materials Letters</i> , 2013, 91, 220-223.	1.3	44
63	Three-dimensional graphene network-supported Co, N-codoped porous carbon nanocages as free-standing polysulfides mediator for lithium-sulfur batteries. <i>Chemical Engineering Journal</i> , 2020, 399, 125686.	6.6	44
64	Core-shell SiC/SiO <sub>2</sub> heterostructures in nanowires. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2012, 209, 553-558.	0.8	42
65	Unconventional bi-vacancies activating inert Prussian blue analogues nanocubes for efficient hydrogen evolution. <i>Chemical Engineering Journal</i> , 2021, 420, 127671.	6.6	42
66	Multifunctional bayberry-like composites consisting of CoFe encapsulated by carbon nanotubes for overall water splitting and zinc-air batteries. <i>Journal of Materials Chemistry A</i> , 2021, 9, 21741-21749.	5.2	40
67	Porous Carbon Architecture Assembled by Cross-Linked Carbon Leaves with Implanted Atomic Cobalt for High-Performance Li-S Batteries. <i>Nano-Micro Letters</i> , 2021, 13, 151.	14.4	40
68	MOF-derived rod-like composites consisting of iron sulfides embedded in nitrogen-rich carbon as high-performance lithium-ion battery anodes. <i>Applied Surface Science</i> , 2019, 481, 33-39.	3.1	38
69	In Situ Biomimetic Mineralization on ZIF-8 for Smart Drug Delivery. <i>ACS Biomaterials Science and Engineering</i> , 2020, 6, 4595-4603.	2.6	37
70	Growth of SiC Nanowires from NiSi Solution. <i>Crystal Growth and Design</i> , 2009, 9, 100-104.	1.4	36
71	Discarded cigarette filter-derived hierarchically porous carbon@graphene composites for lithium-sulfur batteries. <i>Journal of Materials Chemistry A</i> , 2019, 7, 3558-3562.	5.2	35
72	Cobalt diselenide nanoparticles embedded within porous carbon polyhedra as advanced electrocatalyst for oxygen reduction reaction. <i>Journal of Power Sources</i> , 2016, 330, 132-139.	4.0	34

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73	Metal-organic framework-derived mesoporous octahedral copper oxide/titania composites for high-performance lithium-ion batteries. <i>Journal of Colloid and Interface Science</i> , 2018, 529, 265-272.	5.0	33
74	Photothermal coupling electrolysis on Ni <sub>2</sub> W <sub>2</sub> B toward practical overall water splitting. <i>Journal of Materials Chemistry A</i> , 2019, 7, 12440-12445.	5.2	31
75	ZIF-8-Templated Hollow Cubelike Si/SiO <sub>2</sub> @C Nanocomposites for Superior Lithium Storage Performance. <i>ACS Applied Energy Materials</i> , 2019, 2, 531-538.	2.5	29
76	Porous hollow composites assembled by Ni <sub>x</sub> Co <sub>1-x</sub> Se <sub>2</sub> nanosheets rooted on carbon polyhedra for superior lithium storage capability. <i>Journal of Colloid and Interface Science</i> , 2019, 536, 673-680.	5.0	23
77	Synthesis of iron-based hexagonal microflakes for strong microwave attenuation. <i>Journal of Alloys and Compounds</i> , 2017, 718, 46-52.	2.8	21
78	Passivation of Nickel Nanoneedles in Aqueous Solutions. <i>Journal of Physical Chemistry C</i> , 2014, 118, 9073-9077.	1.5	15
79	Coordination polymer-derived mesoporous Co <sub>3</sub> O <sub>4</sub> hollow nanospheres for high-performance lithium-ions batteries. <i>RSC Advances</i> , 2016, 6, 50846-50850.	1.7	15
80	In-situ embedding cobalt-doped copper sulfide within ultrathin carbon nanosheets for superior lithium storage performance. <i>Journal of Colloid and Interface Science</i> , 2020, 566, 1-10.	5.0	15
81	Dual-carbon coupled Co <sub>5.47</sub> N composites for capacitive lithium-ion storage. <i>Journal of Colloid and Interface Science</i> , 2021, 587, 192-201.	5.0	13
82	SiC crystal growth from transition metal silicide fluxes. <i>Crystal Research and Technology</i> , 2007, 42, 445-450.	0.6	12
83	Highly ordered three-dimensional TiO <sub>2</sub> @C nanotube arrays as freestanding electrode for sodium-ion battery. <i>Materials Letters</i> , 2017, 207, 149-152.	1.3	10
84	Assembly of Pt Nanowires into Cubelike Superstructures Supported on Aligned Carbon Nanotubes as Highly Stable Electrocatalysts. <i>Chemistry - A European Journal</i> , 2013, 19, 9155-9159.	1.7	8
85	Co Nanoparticles Encapsulated in N-Doped Carbon Nanotubes Grafted CNTs as Electrocatalysts for Enhanced Oxygen Reduction Reaction. <i>Advanced Materials Interfaces</i> , 2022, 9, .	1.9	8
86	Facile chemical synthesis of amorphous FeB alloy nanoparticles and their superior electromagnetic wave absorption performance. <i>Journal of Physics and Chemistry of Solids</i> , 2019, 126, 143-149.	1.9	5
87	NiS <sub>1-x</sub> Se <sub>x</sub> Nanoparticles Anchored on Nitrogen-Doped Reduced Graphene Oxide as Highly Stable Anode for Sodium-Ion Battery. <i>Processes</i> , 2022, 10, 566.	1.3	3