Wen-Bin Gong

List of Publications by Year
in descending order

69 papers	3,150 citations	186265 28 h-index	161849 54 g-index
73 all docs	73 docs citations	73 times ranked	4082 citing authors

#	Article	IF	Citations
1	Semiconductor SERS enhancement enabled by oxygen incorporation. Nature Communications, 2017, 8, 1993.	12.8	306
2	Multifunctional Aramid Nanofiber/Carbon Nanotube Hybrid Aerogel Films. ACS Nano, 2020, 14, 688-697.	14.6	298
3	Hot-pressing induced alignment of boron nitride in polyurethane for composite films with thermal conductivity over 50â€¯Wmâˆ’1â€¯Kâˆ’1. Composites Science and Technology, 2018, 160, 199-207.	7.8	212
4	Defect engineered bioactive transition metals dichalcogenides quantum dots. Nature Communications, 2019, 10, 41.	12.8	168
5	Electrochromic semiconductors as colorimetric SERS substrates with high reproducibility and renewability. Nature Communications, 2019, 10, 678.	12.8	131
6	Ultrathin Twoâ€Dimensional Nanostructures: Surface Defects for Morphologyâ€Driven Enhanced Semiconductor SERS. Angewandte Chemie - International Edition, 2021, 60, 5505-5511.	13.8	123
7	Coordination-controlled single-atom tungsten as a non-3d-metal oxygen reduction reaction electrocatalyst with ultrahigh mass activity. Nano Energy, 2019, 60, 394-403.	16.0	119
8	Eutectoid-structured WC/W2C heterostructures: A new platform for long-term alkaline hydrogen evolution reaction at low overpotentials. Nano Energy, 2020, 68, 104335.	16.0	98
9	Boron Nitride Aerogels with Superâ€Flexibility Ranging from Liquid Nitrogen Temperature to 1000 Â°C. Advanced Functional Materials, 2019, 29, 1900188.	14.9	97
10	â€œOne Stone Two Birdsâ€•Design for Dualâ€Functional TiO₂â€TiN Heterostructures Enabled Dendriteâ€Free and Kineticsâ€Enhanced Lithiumâ€“Sulfur Batteries. Advanced Energy Materials, 2022, 12, .	19.5	80
11	Synergistic Manipulation of Zn²⁺ Ion Flux and Nucleation Induction Effect Enabled by 3D Hollow SiO₂/TiO₂/Carbon Fiber for Longâ€Lifespan and Dendriteâ€Free Znâ€“Metal Composite Anodes. Advanced Functional Materials, 2021, 31, 2106417.	14.9	74
12	Enhanced thermal conductivity of free-standing 3D hierarchical carbon nanotube-graphene hybrid paper. Composites Part A: Applied Science and Manufacturing, 2017, 102, 1-8.	7.6	70
13	Molecularly Thin Nitride Sheets Stabilized by Titanium Carbide as Efficient Bifunctional Electrocatalysts for Fiber-Shaped Rechargeable Zinc-Air Batteries. Nano Letters, 2020, 20, 2892-2898.	9.1	68
14	Kinetic Enhancement of Sulfur Cathodes by Nâ€Doped Porous Graphitic Carbon with Bound VN Nanocrystals. Small, 2020, 16, e2004950.	10.0	64
15	Strong graphene-interlayered carbon nanotube films with high thermal conductivity. Carbon, 2017, 118, 659-665.	10.3	62
16	Remarkable Near-Infrared Electrochromism in Tungsten Oxide Driven by Interlayer Water-Induced Battery-to-Pseudocapacitor Transition. ACS Applied Materials & Interfaces, 2020, 12, 33917-33925.	8.0	61
17	Engineering MoS₂ Nanosheets on Spindleâ€Like Î±â€Fe₂O₃ as Highâ€Performance Coreâ€“Shell Pseudocapacitive Anodes for Fiberâ€Shaped Aqueous Lithiumâ€Ion Capacitors. Advanced Functional Materials, 2020, 30, 2003967.	14.9	60
18	Sizeâ€Independent Fast Ion Intercalation in Twoâ€Dimensional Titania Nanosheets for Alkaliâ€Metalâ€Ion Batteries. Angewandte Chemie - International Edition, 2019, 58, 8740-8745.	13.8	53

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19	All Two-Dimensional Pseudocapacitive Sheet Materials for Flexible Asymmetric Solid-State Planar Microsupercapacitors with High Energy Density. ACS Nano, 2020, 14, 603-610.	14.6	53
20	A Conjugated Porous Polymer Complexed with a Single-Atom Cobalt Catalyst as An Electrocatalytic Sulfur Host for Enhancing Cathode Reaction Kinetics. Energy Storage Materials, 2021, 41, 14-23.	18.0	51
21	Boosting Zn-ion storage capability of self-standing Zn-doped Co3O4 nanowire array as advanced cathodes for high-performance wearable aqueous rechargeable Co//Zn batteries. Nano Research, 2021, 14, 91-99.	10.4	50
22	MOF-derived vertically stacked Mn₂O₃@C flakes for fiber-shaped zinc-ion batteries. Journal of Materials Chemistry A, 2020, 8, 24031-24039.	10.3	48
23	NaTi2(PO4)3 hollow nanoparticles encapsulated in carbon nanofibers as novel anodes for flexible aqueous rechargeable sodium-ion batteries. Nano Energy, 2021, 82, 105764.	16.0	43
24	CoNiO₂/Co₄N Heterostructure Nanowires Assisted Polysulfide Reaction Kinetics for Improved Lithiumâ€“Sulfur Batteries. Advanced Science, 2022, 9, e2104375.	11.2	42
25	Morphology-Controlled Synthesis of Hybrid Nanocrystals via a Selenium-Mediated Strategy with Ligand Shielding Effect: The Case of Dual Plasmonic Auâ€“Cu_{2â€“x}Se. ACS Nano, 2017, 11, 3776-3785.	14.6	40
26	Interface engineered and surface modulated electrode materials for ultrahigh-energy-density wearable NiCo//Fe batteries. Energy Storage Materials, 2020, 27, 316-326.	18.0	40
27	Rational Construction of Selfâ€Standing Sulfurâ€Doped Fe₂O₃ Anodes with Promoted Energy Storage Capability for Wearable Aqueous Rechargeable NiCoâ€Fe Batteries. Advanced Energy Materials, 2020, 10, 2001064.	19.5	39
28	Woodâ€Inspired Binder Enabled Vertical 3D Printing of gâ€C₃N₄/CNT Arrays for Highly Efficient Photoelectrochemical Hydrogen Evolution. Advanced Functional Materials, 2021, 31, 2105045.	14.9	34
29	Towards ultrahigh-energy-density flexible aqueous rechargeable Ni//Bi batteries: Free-standing hierarchical nanowire arrays core-shell heterostructures system. Energy Storage Materials, 2021, 42, 815-825.	18.0	31
30	Janus Electrolyte with Modified Li⁺ Solvation for Highâ€Performance Solidâ€State Lithium Batteries. Advanced Functional Materials, 2022, 32, .	14.9	30
31	Active Manipulation of NIR Plasmonics: the Case of Cu_{2â€“x}Se through Electrochemistry. Journal of Physical Chemistry Letters, 2018, 9, 274-280.	4.6	29
32	Revealing molecular conformationâ€“induced stress at embedded interfaces of organic optoelectronic devices by sum frequency generation spectroscopy. Science Advances, 2021, 7, .	10.3	29
33	Strengthening carbon nanotube fibers with semi-crystallized polyvinyl alcohol and hot-stretching. Composites Science and Technology, 2018, 164, 290-295.	7.8	28
34	Balancing the film strain of organic semiconductors for ultrastable organic transistors with a five-year lifetime. Nature Communications, 2022, 13, 1480.	12.8	26
35	Surface-Modified Two-Dimensional Titanium Carbide Sheets for Intrinsic Vibrational Signal-Retained Surface-Enhanced Raman Scattering with Ultrahigh Uniformity. ACS Applied Materials & Interfaces, 2020, 12, 23523-23531.	8.0	25
36	Hot pressing-induced alignment of hexagonal boron nitride in SEBS elastomer for superior thermally conductive composites. RSC Advances, 2018, 8, 25835-25845.	3.6	24

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37	Coaxially grafting conjugated microporous polymers containing single-atom cobalt catalysts to carbon nanotubes enhances sulfur cathode reaction kinetics. Chemical Engineering Journal, 2022, 444, 136546.	12.7	24
38	Highâ€Capacity Ironâ€Based Anodes for Aqueous Secondary Nickelâ˜Iron Batteries: Recent Progress and Prospects. ChemElectroChem, 2021, 8, 274-290.	3.4	23
39	Understanding the influence of single-walled carbon nanotube dispersion states on the microstructure and mechanical properties of wet-spun fibers. Carbon, 2020, 169, 17-24.	10.3	22
40	Stabilizing photo-induced vacancy defects in MOF matrix for high-performance SERS detection. Nano Research, 2022, 15, 5347-5354.	10.4	21
41	Calcium-Doped Boron Nitride Aerogel Enables Infrared Stealth at High Temperature Up to 1300ÂÂ°C. Nano-Micro Letters, 2022, 14, 18.	27.0	21
42	Interconnected surface-vacancy-rich PtFe nanowires for efficient oxygen reduction. Journal of Materials Chemistry A, 2021, 9, 12845-12852.	10.3	18
43	Structure-induced partial phase transformation endows hollow TiO₂/TiN heterostructure fibers stacked with nanosheet arrays with extraordinary sodium storage performance. Journal of Materials Chemistry A, 2021, 9, 12109-12118.	10.3	16
44	Highâ€Purity Monochiral Carbon Nanotubes with a 1.2Ânm Diameter for Highâ€Performance Fieldâ€Effect Transistors. Advanced Functional Materials, 2022, 32, 2107119.	14.9	16
45	Adsorption and diffusion of fluorine on Cr-doped Ni(111) surface: Fluorine-induced initial corrosion of non-passivated Ni-based alloy. Journal of Nuclear Materials, 2016, 478, 295-302.	2.7	14
46	Ultrathin Two-Dimensional Metalâ€"Organic Framework Nanosheets with Activated Ligand-Cluster Units for Enhanced SERS. ACS Applied Materials & Interfaces, 2022, 14, 2326-2334.	8.0	14
47	Sizeâ€Independent Fast Ion Intercalation in Twoâ€Dimensional Titania Nanosheets for Alkaliâ€Metalâ€Ion Batteries. Angewandte Chemie, 2019, 131, 8832-8837.	2.0	13
48	Developing strong and tough carbon nanotube films by a proper dispersing strategy and enhanced interfacial interactions. Carbon, 2019, 149, 117-124.	10.3	13
49	Genuine divalent magnesium-ion storage and fast diffusion kinetics in metal oxides at room temperature. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.1	12
50	Ultrathin Twoâ€Dimensional Nanostructures: Surface Defects for Morphologyâ€Driven Enhanced Semiconductor SERS. Angewandte Chemie, 2021, 133, 5565-5571.	2.0	11
51	Silica Aerogels with Self-Reinforced Microstructure for Bioinspired Hydrogels. Langmuir, 2021, 37, 5923-5931.	3.5	10
52	PtNiFe nanoalloys with co-existence of energy-optimized active surfaces for synergistic catalysis of oxygen reduction and evolution. Journal of Materials Chemistry A, 2021, 9, 16187-16195.	10.3	9
53	Electrokinetic effect and H₂O₂ boosting in synthetic graphene/Î±-FeOOH aerogel films for the generation of electricity. Journal of Materials Chemistry A, 2021, 9, 5588-5596.	10.3	9
54	Fluorine interaction with defects on graphite surface by a first-principles study. Applied Surface Science, 2014, 292, 488-493.	6.1	8

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55	Bio-inspired synthesis of highly crystallized hexagonal boron nitride nanosheets. Ceramics International, 2018, 44, 14228-14235.	4.8	8
56	A Dopant Replacementâ€Driven Molten Salt Method toward the Synthesis of Subâ€5â€nmâ€Sized Ultrathin Nanowires. Small, 2020, 16, 2001098.	10.0	8
57	Effect of dispersion time on the microstructural and mechanical properties of carbon nanotube solutions and their spun fibers. Composites Communications, 2021, 27, 100872.	6.3	7
58	Onâ€Demand Preparation of Î±â€Phaseâ€Dominated Tungsten Films for Highly Qualified Thermal Reflectors. Advanced Materials Interfaces, 2019, 6, 1900031.	3.7	6
59	Horizontally aligned surface segments enhancing the adhesion of carbon nanotube forests. Carbon, 2021, 176, 540-547.	10.3	6
60	Symmetry-breaking triggered by atomic tungsten for largely enhanced piezoelectric response in hexagonal boron nitride. Nano Energy, 2022, 99, 107375.	16.0	6
61	Molecular dynamics study on radial deformation of armchair single-walled boron nitride nanotubes. Applied Physics Express, 2017, 10, 105001.	2.4	5
62	Strain-controlled interface engineering of binding and charge doping at metal-graphene contacts. Applied Physics Letters, 2013, 103, 143107.	3.3	4
63	Joining cross-stacked carbon nanotube architecture with covalent bonding. Applied Physics Letters, 2017, 110, 183101.	3.3	4
64	Theoretical study on the interaction between graphene divacancies and C2H2. Chemical Physics Letters, 2013, 567, 43-47.	2.6	3
65	Molecular dynamics study on the generation and propagation of heat signals in single-wall carbon nanotubes. RSC Advances, 2013, 3, 12855.	3.6	2
66	Electrocatalysis: Kinetic Enhancement of Sulfur Cathodes by Nâ€Doped Porous Graphitic Carbon with Bound VN Nanocrystals (Small 48/2020). Small, 2020, 16, 2070261.	10.0	2
67	Highâ€Capacity Ironâ€Based Anodes for Aqueous Secondary Nickelâ€"Iron Batteries: Recent Progress and Prospects. ChemElectroChem, 2021, 8, 273-273.	3.4	2
68	Influence of self-consistent screening and polarizability contractions on interlayer sliding behavior of hexagonal boron nitride. Physical Review B, 2017, 96, .	3.2	1
69	Molecular Dynamics Simulation of Damage to Coiled Carbon Nanotubes under C Ion Irradiation. Chinese Physics Letters, 2013, 30, 113402.	3.3	0