Yi Hu

List of Publications by Citations

69	4,476	32	66
papers	citations	h-index	g-index

84	5,417	9.5	5.61
ext. papers	ext. citations	avg, IF	L-index

#	Paper	IF	Citations
69	All-Inorganic Perovskite Solar Cells. *Journal of the American Chemical Society*, **2016**, 138, 15829-15832	16.4	700
68	Self-Templated Formation of Interlaced Carbon Nanotubes Threaded Hollow CoS Nanoboxes for High-Rate and Heat-Resistant Lithium-Sulfur Batteries. *Journal of the American Chemical Society*, **2017**, 139, 12710-12715	16.4	364
67	CsPbSnIBr Based All-Inorganic Perovskite Solar Cells with Exceptional Efficiency and Stability. *Journal of the American Chemical Society*, **2017**, 139, 14009-14012	16.4	353
66	Oxygen Vacancy Engineering Promoted Photocatalytic Ammonia Synthesis on Ultrathin Two-Dimensional Bismuth Oxybromide Nanosheets. *Nano Letters*, **2018**, 18, 7372-7377	11.5	200
65	Highly Efficient Retention of Polysulfides in "Sea Urchin"-Like Carbon Nanotube/Nanopolyhedra Superstructures as Cathode Material for Ultralong-Life Lithium-Sulfur Batteries. *Nano Letters*, **2017**, 17, 437-444	11.5	194
64	Strong Capillarity, Chemisorption, and Electrocatalytic Capability of Crisscrossed Nanostraws Enabled Flexible, High-Rate, and Long-Cycling Lithium-Sulfur Batteries. *ACS Nano*, **2018**, 12, 4868-4876	16.7	177
63	Porous-Shell Vanadium Nitride Nanobubbles with Ultrahigh Areal Sulfur Loading for High-Capacity and Long-Life Lithium-Sulfur Batteries. *Nano Letters*, **2017**, 17, 7839-7846	11.5	172
62	Review on photocatalytic and electrocatalytic artificial nitrogen fixation for ammonia synthesis at mild conditions: Advances, challenges and perspectives. *Nano Research*, **2019**, 12, 1229-1249	10	172
61	Cerium Oxide Nanocrystal Embedded Bimodal Micromesoporous Nitrogen-Rich Carbon Nanospheres as Effective Sulfur Host for Lithium-Sulfur Batteries. *ACS Nano*, **2017**, 11, 7274-7283	16.7	167
60	Walnut-Like Multicore–Shell MnO Encapsulated Nitrogen-Rich Carbon Nanocapsules as Anode Material for Long-Cycling and Soft-Packed Lithium-Ion Batteries. *Advanced Functional Materials*, **2018**, 28, 1800003	15.6	148
59	In Situ Thermal Synthesis of Inlaid Ultrathin MoS2/Graphene Nanosheets as Electrocatalysts for the Hydrogen Evolution Reaction. *Chemistry of Materials*, **2016**, 28, 5733-5742	9.6	145
58	Pine needle-derived microporous nitrogen-doped carbon frameworks exhibit high performances in electrocatalytic hydrogen evolution reaction and supercapacitors. *Nanoscale*, **2017**, 9, 1237-1243	7.7	121
57	Highly Branched VS Nanodendrites with 1D Atomic-Chain Structure as a Promising Cathode Material for Long-Cycling Magnesium Batteries. *Advanced Materials*, **2018**, 30, e1802563	24	119
56	MoS2-Based All-Purpose Fibrous Electrode and Self-Powering Energy Fiber for Efficient Energy Harvesting and Storage. *Advanced Energy Materials*, **2017**, 7, 1601208	21.8	110
55	Versatile Electronic Skins for Motion Detection of Joints Enabled by Aligned Few-Walled Carbon Nanotubes in Flexible Polymer Composites. *Advanced Functional Materials*, **2017**, 27, 1606604	15.6	92
54	Atomic Substitution Enabled Synthesis of Vacancy-Rich Two-Dimensional Black TiO Nanoflakes for High-Performance Rechargeable Magnesium Batteries. *ACS Nano*, **2018**, 12, 12492-12502	16.7	85
53	One-Step Synthesis of 2-Ethylhexylamine Pillared Vanadium Disulfide Nanoflowers with Ultralarge Interlayer Spacing for High-Performance Magnesium Storage. *Advanced Energy Materials*, **2019**, 9, 1900145	21.8	79

52	Nitrogen-Doped Carbon Nanotube Forests Planted on Cobalt Nanoflowers as Polysulfide Mediator for Ultralow Self-Discharge and High Areal-Capacity Lithium-Sulfur Batteries. *Nano Letters*, **2018**, 18, 7949-7954	11.5	66
51	All-polymer particulate slurry batteries. *Nature Communications*, **2019**, 10, 2513	17.4	57
50	Integrated perovskite solar capacitors with high energy conversion efficiency and fast photo-charging rate. *Journal of Materials Chemistry A*, **2018**, 6, 2047-2052	13	56
49	Hierarchical porous nitrogen-rich carbon nanospheres with high and durable capabilities for lithium and sodium storage. *Nanoscale*, **2016**, 8, 17911-17918	7.7	54
48	Self-Assembly of Polymer Tethered Molecular Nanoparticle Shape Amphiphiles in Selective Solvents. *Macromolecules*, **2015**, 48, 3112-3120	5.5	49
47	Dendrite-Free and Stable Lithium Metal Anodes Enabled by an Antimony-Based Lithiophilic Interphase. *Chemistry of Materials*, **2019**, 31, 7565-7573	9.6	45
46	Interface Engineering of Anchored Ultrathin TiO/MoS Heterolayers for Highly-Efficient Electrochemical Hydrogen Production. *ACS Applied Materials & Interfaces*, **2018**, 10, 6084-6089	9.5	43
45	Li3V2(PO4)3 encapsulated flexible free-standing nanofabric cathodes for fast charging and long life-cycle lithium-ion batteries. *Nanoscale*, **2016**, 8, 7408-15	7.7	43
44	High-performance Li-ion capacitor based on black-TiO2-x/graphene aerogel anode and biomass-derived microporous carbon cathode. *Nano Research*, **2019**, 12, 1713-1719	10	42
43	Hierarchical Ternary Carbide Nanoparticle/Carbon Nanotube-Inserted N-Doped Carbon Concave-Polyhedrons for Efficient Lithium and Sodium Storage. *ACS Applied Materials & Interfaces*, **2016**, 8, 26834-26841	9.5	40
42	Bottom-up synthesis of nitrogen-doped porous carbon scaffolds for lithium and sodium storage. *Nanoscale*, **2017**, 9, 1972-1977	7.7	36
41	Controlled growth and photoconductive properties of hexagonal SnS2 nanoflakes with mesa-shaped atomic steps. *Nano Research*, **2017**, 10, 1434-1447	10	36
40	Arsenene: A Potential Therapeutic Agent for Acute Promyelocytic Leukaemia Cells by Acting on Nuclear Proteins. *Angewandte Chemie - International Edition*, **2020**, 59, 5151-5158	16.4	33
39	Highly efficient overall water splitting driven by all-inorganic perovskite solar cells and promoted by bifunctional bimetallic phosphide nanowire arrays. *Journal of Materials Chemistry A*, **2018**, 6, 20076-20082	13	33
38	CoxFeyN nanoparticles decorated on graphene sheets as high-performance electrocatalysts for the oxygen evolution reaction. *Journal of Materials Chemistry A*, **2019**, 7, 12489-12497	13	32
37	Pitaya-like microspheres derived from Prussian blue analogues as ultralong-life anodes for lithium storage. *Journal of Materials Chemistry A*, **2016**, 4, 15041-15048	13	30
36	Three-dimensional spongy framework as superlyophilic, strongly absorbing, and electrocatalytic polysulfide reservoir layer for high-rate and long-cycling lithium-sulfur batteries. *Nano Research*, **2018**, 11, 6436-6446	10	29
35	Nanocapillarity and Nanoconfinement Effects of Pipet-like Bismuth@Carbon Nanotubes for Highly Efficient Electrocatalytic CO Reduction. *Nano Letters*, **2021**, 21, 2650-2657	11.5	29

34	Amphiphilic Block Copolymer Aided Design of Hybrid Assemblies of Nanoparticles: Nanowire, Nanoring, and Nanocluster. *Macromolecules*, **2016**, 49, 3535-3541	5.5	28
33	Cucurbit[8]uril-Based Water-Soluble Supramolecular Dendronized Polymer: Evidence from Single Polymer Chain Morphology and Force Spectroscopy. *ACS Macro Letters*, **2017**, 6, 139-143	6.6	26
32	van der Waals Epitaxial Growth and Interfacial Passivation of Two-Dimensional Single-Crystalline Few-Layer Gray Arsenic Nanoflakes. *Chemistry of Materials*, **2019**, 31, 4524-4535	9.6	23
31	Chelation-assisted formation of multi-yolk□shell Co4N@carbon nanoboxes for self-discharge-suppressed high-performance Li□S batteries. *Journal of Materials Chemistry A*, **2019**, 7, 20302-20309	13	22
30	Tuning the liquid-phase exfoliation of arsenic nanosheets by interaction with various solvents. *Physical Chemistry Chemical Physics*, **2019**, 21, 12087-12090	3.6	18
29	Morphology of renormalization-group flow for the de Almeida-Thouless-Gardner universality class. *Physical Review E*, **2019**, 99, 022132	2.4	18
28	Intermetallic SnSb nanodots embedded in carbon nanotubes reinforced nanofabric electrodes with high reversibility and rate capability for flexible Li-ion batteries. *Nanoscale*, **2019**, 11, 13282-13288	7.7	17
27	Nanoparticle encapsulation in vesicles formed by amphiphilic diblock copolymers. *Soft Matter*, **2017**, 13, 7840-7847	3.6	17
26	Dynamic Properties of DNA-Programmable Nanoparticle Crystallization. *ACS Nano*, **2016**, 10, 7485-92	16.7	16
25	Near-Infrared-Emissive Amphiphilic BODIPY Assemblies Manipulated by Charge-Transfer Interaction: From Nanofibers to Nanorods and Nanodisks. *Chemistry - an Asian Journal*, **2017**, 12, 3088-3095	4.5	15
24	Clustering and assembly dynamics of a one-dimensional microphase former. *Soft Matter*, **2018**, 14, 4101-4109	3.6	12
23	Hierarchical Colloidal Polymeric Structure from Surfactant-Like Amphiphiles in Selective Solvents. *Langmuir*, **2017**, 33, 3427-3433	4	10
22	Tissue self-organization underlies morphogenesis of the notochord. *Philosophical Transactions of the Royal Society B: Biological Sciences*, **2018**, 373,	5.8	10
21	Controlled growth and ion intercalation mechanism of monocrystalline niobium pentoxide nanotubes for advanced rechargeable aluminum-ion batteries. *Nanoscale*, **2020**, 12, 12531-12540	7.7	9
20	Quasi-Phthalocyanine Conjugated Covalent Organic Frameworks with Nitrogen-Coordinated Transition Metal Centers for High-Efficiency Electrocatalytic Ammonia Synthesis.. *Nano Letters*, **2021**,	11.5	8
19	Correlation lengths in quasi-one-dimensional systems via transfer matrices. *Molecular Physics*, **2018**, 116, 3345-3354	1.7	7
18	Chirp excitation technique to enhance microbubble displacement induced by ultrasound radiation force. *Journal of the Acoustical Society of America*, **2009**, 125, 1410-15	2.2	7
17	Interplay between percolation and glassiness in the random Lorentz gas. *Physical Review E*, **2021**, 103, L030104	2.4	7

List of Publications

16	Dynamics around the site percolation threshold on high-dimensional hypercubic lattices. *Physical Review E*, **2019**, 99, 022118	2.4	5
15	Controllable growth and flexible optoelectronic devices of regularly-assembled Bi2S3 semiconductor nanowire bifurcated junctions and crosslinked networks. *Nano Research*, **2020**, 13, 2226-2232	10	5
14	Significance of DNA bond strength in programmable nanoparticle thermodynamics and dynamics. *Soft Matter*, **2018**, 14, 2665-2670	3.6	5
13	Rh/Al Nanoantenna Photothermal Catalyst for Wide-Spectrum Solar-Driven CO Methanation with Nearly 100% Selectivity. *Nano Letters*, **2021**, 21, 8824-8830	11.5	4
12	Photodriven Catalytic Hydrogenation of CO to CH with Nearly 100% Selectivity over Ag Clusters. *Nano Letters*, **2021**, 21, 8693-8700	11.5	4
11	Mean-Field Caging in a Random Lorentz Gas. *Journal of Physical Chemistry B*, **2021**, 125, 6244-6254	3.4	4
10	2D Arsenene and Arsenic Materials: Fundamental Properties, Preparation, and Applications. *Small*, **2021**, e2104556	11	3
9	2D layered black arsenic-phosphorus materials: Synthesis, properties, and device applications. *Nano Research*, **2022**, 15, 3737-3752	10	3
8	Wet Chemistry Vitrification and Metal-to-Semiconductor Transition of 2D Gray Arsenene Nanoflakes. *Advanced Functional Materials*,2106529	15.6	2
7	Promoting Z-to-E Thermal Isomerization of Azobenzene Derivatives by Noncovalent Interaction with Phosphorene: Theoretical Prediction and Experimental Study. *Journal of Physical Chemistry C*, **2020**, 124, 15961-15968	3.8	1
6	High-dimensional percolation criticality and hints of mean-field-like caging of the random Lorentz gas. *Physical Review E*, **2021**, 104, 024137	2.4	1
5	Ag24Au cluster decorated mesoporous Co3O4 for highly selective and efficient photothermal CO2 hydrogenation. *Nano Research*,1	10	1
4	Percolation thresholds on high-dimensional D_{n} and E_{8}-related lattices. *Physical Review E*, **2021**, 103, 062115	2.4	0
3	The dimensional evolution of structure and dynamics in hard sphere liquids.. *Journal of Chemical Physics*, **2022**, 156, 134502	3.9	0
2	Local Dynamical Heterogeneity in Simple Glass Formers.. *Physical Review Letters*, **2022**, 128, 175501	7.4	0
1	Arsenene: A Potential Therapeutic Agent for Acute Promyelocytic Leukaemia Cells by Acting on Nuclear Proteins. *Angewandte Chemie*, **2020**, 132, 5189-5196	3.6	