Zhanxi Fan

List of Publications by Year
in descending order

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93 papers	15,744 citations	23567 58 h-index	39675 94 g-index
103 all docs	103 docs citations	103 times ranked	19759 citing authors

#	Article	IF	Citations
1	Synthesis of Pd₃Sn and PdCuSn Nanorods with L1₂ Phase for Highly Efficient Electrocatalytic Ethanol Oxidation. Advanced Materials, 2022, 34, e2106115.	21.0	65
2	Surface Molecular Functionalization of Unusual Phase Metal Nanomaterials for Highly Efficient Electrochemical Carbon Dioxide Reduction under Industryâ€Relevant Current Density. Small, 2022, 18, e2106766.	10.0	30
3	Deformation-Induced Phase Transformations in Gold Nanoribbons with the 4H Phase. ACS Nano, 2022, 16, 3272-3279.	14.6	5
4	Confined Growth of Silverâ€“Copper Janus Nanostructures with {100} Facets for Highly Selective Tandem Electrocatalytic Carbon Dioxide Reduction. Advanced Materials, 2022, 34, e2110607.	21.0	82
5	Preparation of Au@Pd Coreâ€“Shell Nanorods with fcc-2H-fcc Heterophase for Highly Efficient Electrocatalytic Alcohol Oxidation. Journal of the American Chemical Society, 2022, 144, 547-555.	13.7	88
6	Decreasing the Overpotential of Aprotic Liâ€CO₂ Batteries with the Inâ€Plane Alloy Structure in Ultrathin 2D Ruâ€Based Nanosheets. Advanced Functional Materials, 2022, 32, .	14.9	39
7	Transient Solidâ€State Laser Activation of Indium for Highâ€Performance Reduction of CO₂ to Formate. Small, 2022, 18, e2201311.	10.0	22
8	Electrochemical lithium extraction from aqueous sources. Matter, 2022, 5, 1760-1791.	10.0	27
9	Quasiâ€Epitaxial Growth of Magnetic Nanostructures on 4Hâ€Au Nanoribbons. Advanced Materials, 2021, 33, e2007140.	21.0	18
10	Recent Advances in the Controlled Synthesis and Catalytic Applications of Two-Dimensional Rhodium Nanomaterials. , 2021, 3, 121-133.		28
11	Gold-based nanoalloys: synthetic methods and catalytic applications. Journal of Materials Chemistry A, 2021, 9, 19025-19053.	10.3	16
12	2D Materials for electrochemical carbon dioxide reduction. , 2021, , 183-196.		1
13	Evoking ordered vacancies in metallic nanostructures toward a vacated Barlow packing for high-performance hydrogen evolution. Science Advances, 2021, 7, .	10.3	64
14	Surface modification of metal materials for high-performance electrocatalytic carbon dioxide reduction. Matter, 2021, 4, 888-926.	10.0	74
15	Tandem catalysis in electrochemical CO2 reduction reaction. Nano Research, 2021, 14, 4471-4486.	10.4	105
16	Dopantâ€Free Holeâ€Transporting Material with Enhanced Intermolecular Interaction for Efficient and Stable nâ€ip Perovskite Solar Cells. Advanced Energy Materials, 2021, 11, 2100967.	19.5	51
17	General Synthesis of Ordered Mesoporous Carbonaceous Hybrid Nanostructures with Molecularly Dispersed Polyoxometallates. Angewandte Chemie - International Edition, 2021, 60, 15556-15562.	13.8	13
18	Recent Progresses in Electrochemical Carbon Dioxide Reduction on Copperâ€Based Catalysts toward Multicarbon Products. Advanced Functional Materials, 2021, 31, 2102151.	14.9	123

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19	General Synthesis of Ordered Mesoporous Carbonaceous Hybrid Nanostructures with Molecularly Dispersed Polyoxometallates. Angewandte Chemie, 2021, 133, 15684-15690.	2.0	0
20	Recent Progress on Two-Dimensional Materials. Wuli Huaxue Xuebao/ Acta Physico - Chimica Sinica, 2021, .	4.9	269
21	Thermal Effect and Rayleigh Instability of Ultrathin 4H Hexagonal Gold Nanoribbons. Matter, 2020, 2, 658-665.	10.0	30
22	Phase-Selective Epitaxial Growth of Heterophase Nanostructures on Unconventional 2H-Pd Nanoparticles. Journal of the American Chemical Society, 2020, 142, 18971-18980.	13.7	111
23	Undercoordinated Active Sites on 4H Gold Nanostructures for CO₂ Reduction. Nano Letters, 2020, 20, 8074-8080.	9.1	46
24	Crystal Phase Control of Gold Nanomaterials by Wet-Chemical Synthesis. Accounts of Chemical Research, 2020, 53, 2106-2118.	15.6	75
25	Phase Engineering of Nanomaterials for Clean Energy and Catalytic Applications. Advanced Energy Materials, 2020, 10, 2002019.	19.5	85
26	Crystal phase-controlled growth of PtCu and PtCo alloys on 4H Au nanoribbons for electrocatalytic ethanol oxidation reaction. Nano Research, 2020, 13, 1970-1975.	10.4	32
27	Key factors affecting Rayleigh instability of ultrathin 4H hexagonal gold nanoribbons. Nanoscale Advances, 2020, 2, 3027-3032.	4.6	1
28	Ethylene Selectivity in Electrocatalytic CO₂ Reduction on Cu Nanomaterials: A Crystal Phase-Dependent Study. Journal of the American Chemical Society, 2020, 142, 12760-12766.	13.7	183
29	Phase engineering of nanomaterials. Nature Reviews Chemistry, 2020, 4, 243-256.	30.2	438
30	Heterophase fcc-2H-fcc gold nanorods. Nature Communications, 2020, 11, 3293.	12.8	92
31	Unusual 4H-phase twinned noble metal nanokites. Nature Communications, 2019, 10, 2881.	12.8	25
32	Crystal phase-based epitaxial growth of hybrid noble metal nanostructures on 4H/fcc Au nanowires. Nature Chemistry, 2018, 10, 456-461.	13.6	220
33	Two-Dimensional Metal Nanomaterials: Synthesis, Properties, and Applications. Chemical Reviews, 2018, 118, 6409-6455.	47.7	711
34	Nanosheet Sensors: Recent Advances in Sensing Applications of Twoâ€Ðimensional Transition Metal Dichalcogenide Nanosheets and Their Composites (Adv. Funct. Mater. 19/2017). Advanced Functional Materials, 2017, 27, .	14.9	2
35	Recent Advances in Sensing Applications of Twoâ€Ðimensional Transition Metal Dichalcogenide Nanosheets and Their Composites. Advanced Functional Materials, 2017, 27, 1605817.	14.9	206
36	Ultrathin Twoâ€Ðimensional Organicâ€“Inorganic Hybrid Perovskite Nanosheets with Bright, Tunable Photoluminescence and High Stability. Angewandte Chemie - International Edition, 2017, 56, 4252-4255.	13.8	206

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37	Graphene Oxide Scroll Meshes Prepared by Molecular Combing for Transparent and Flexible Electrodes. Advanced Materials Technologies, 2017, 2, 1600231.	5.8	12
38	Molecularâ€Level Design of Hierarchically Porous Carbons Codoped with Nitrogen and Phosphorus Capable of In Situ Selfâ€Activation for Sustainable Energy Systems. Small, 2017, 13, 1602010.	10.0	47
39	Spirals and helices by asymmetric active surface growth. Nanoscale, 2017, 9, 18352-18358.	5.6	7
40	Facile synthesis of gold nanomaterials with unusual crystal structures. Nature Protocols, 2017, 12, 2367-2376.	12.0	72
41	Highâ€Yield Synthesis of Crystalâ€Phaseâ€Heterostructured 4H/fcc Au@Pd Coreâ€“Shell Nanorods for Electrocatalytic Ethanol Oxidation. Advanced Materials, 2017, 29, 1701331.	21.0	144
42	Synthesis of Ultrathin PdCu Alloy Nanosheets Used as a Highly Efficient Electrocatalyst for Formic Acid Oxidation. Advanced Materials, 2017, 29, 1700769.	21.0	207
43	Epitaxial growth of unusual 4H hexagonal Ir, Rh, Os, Ru and Cu nanostructures on 4H Au nanoribbons. Chemical Science, 2017, 8, 795-799.	7.4	81
44	Synthesis of 4H/fccâ€Au@M (M = Ir, Os, IrOs) Coreâ€Shell Nanoribbons For Electrocatalytic Oxygen Evolution Reaction. Small, 2016, 12, 3908-3913.	10.0	59
45	Template Synthesis of Noble Metal Nanocrystals with Unusual Crystal Structures and Their Catalytic Applications. Accounts of Chemical Research, 2016, 49, 2841-2850.	15.6	181
46	Oneâ€Pot Synthesis of Highly Anisotropic Fiveâ€Foldâ€Twinned PtCu Nanoframes Used as a Bifunctional Electrocatalyst for Oxygen Reduction and Methanol Oxidation. Advanced Materials, 2016, 28, 8712-8717.	21.0	336
47	Submonolayered Ru Deposited on Ultrathin Pd Nanosheets used for Enhanced Catalytic Applications. Advanced Materials, 2016, 28, 10282-10286.	21.0	148
48	Synthesis of 4H/fcc Noble Multimetallic Nanoribbons for Electrocatalytic Hydrogen Evolution Reaction. Journal of the American Chemical Society, 2016, 138, 1414-1419.	13.7	196
49	Atomic-layer-deposited iron oxide on arrays of metal/carbon spheres and their application for electrocatalysis. Nano Energy, 2016, 20, 244-253.	16.0	62
50	Crystal phase-controlled synthesis, properties and applications of noble metal nanomaterials. Chemical Society Reviews, 2016, 45, 63-82.	38.1	330
51	Supramolecular Polymerization Promoted In Situ Fabrication of Nitrogenâ€Doped Porous Graphene Sheets as Anode Materials for Liâ€Ion Batteries. Advanced Energy Materials, 2015, 5, 1500559.	19.5	133
52	Reduced Graphene Oxideâ€Wrapped MoO₃ Composites Prepared by Using Metalâ€“Organic Frameworks as Precursor for Allâ€Solidâ€State Flexible Supercapacitors. Advanced Materials, 2015, 27, 4695-4701.	21.0	388
53	Enhanced Lithium Storage Performance of CuO Nanowires by Coating of Graphene Quantum Dots. Advanced Materials Interfaces, 2015, 2, 1400499.	3.7	102
54	AuAg Nanosheets Assembled from Ultrathin AuAg Nanowires. Journal of the American Chemical Society, 2015, 137, 1444-1447.	13.7	68

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55	Substrate-bound growth of Auâ€“Pd diblock nanowire and hybrid nanorodâ€“plate. Nanoscale, 2015, 7, 8115-8121.	5.6	12
56	Stabilization of 4H hexagonal phase in gold nanoribbons. Nature Communications, 2015, 6, 7684.	12.8	215
57	Controllable Galvanic Synthesis of Triangular Agâ€“Pd Alloy Nanoframes for Efficient Electrocatalytic Methanol Oxidation. Chemistry - A European Journal, 2015, 21, 8691-8695.	3.3	48
58	Iron Oxide-Decorated Carbon for Supercapacitor Anodes with Ultrahigh Energy Density and Outstanding Cycling Stability. ACS Nano, 2015, 9, 5198-5207.	14.6	441
59	Synthesis of Ultrathin Faceâ€Centeredâ€Cubic Au@Pt and Au@Pd Coreâ€“Shell Nanoplates from Hexagonalâ€Closeâ€Packed Au Square Sheets. Angewandte Chemie - International Edition, 2015, 54, 5672-5676.	13.8	111
60	Tubular TiC fibre nanostructures as supercapacitor electrode materials with stable cycling life and wide-temperature performance. Energy and Environmental Science, 2015, 8, 1559-1568.	30.8	210
61	Surface modification-induced phase transformation of hexagonal close-packed gold square sheets. Nature Communications, 2015, 6, 6571.	12.8	195
62	Conformally deposited NiO on a hierarchical carbon support for high-power and durable asymmetric supercapacitors. Journal of Materials Chemistry A, 2015, 3, 23283-23288.	10.3	103
63	Hierarchical Ni-Mo-S nanosheets on carbon fiber cloth: A flexible electrode for efficient hydrogen generation in neutral electrolyte. Science Advances, 2015, 1, e1500259.	10.3	427
64	Synthesis of 4H/fcc-Au@Metal Sulfide Coreâ€“Shell Nanoribbons. Journal of the American Chemical Society, 2015, 137, 10910-10913.	13.7	44
65	Oneâ€pot Synthesis of CdS Nanocrystals Hybridized with Singleâ€Layer Transitionâ€Metal Dichalcogenide Nanosheets for Efficient Photocatalytic Hydrogen Evolution. Angewandte Chemie - International Edition, 2015, 54, 1210-1214.	13.8	584
66	Novel Metal@Carbon Spheres Coreâ€“Shell Arrays by Controlled Selfâ€Assembly of Carbon Nanospheres: A Stable and Flexible Supercapacitor Electrode. Advanced Energy Materials, 2015, 5, 1401709.	19.5	139
67	VO₂ nanoflake arrays for supercapacitor and Li-ion battery electrodes: performance enhancement by hydrogen molybdenum bronze as an efficient shell material. Materials Horizons, 2015, 2, 237-244.	12.2	152
68	Thin metal nanostructures: synthesis, properties and applications. Chemical Science, 2015, 6, 95-111.	7.4	198
69	Graphene Quantum Dots Coating Enhances Lithium Storage Performance of CuO Nanowires. , 2015, , .		0
70	Rational Synthesis of Triangular Auâ€“Ag₂S Hybrid Nanoframes with Effective Photoresponses. Chemistry - A European Journal, 2014, 20, 2742-2745.	3.3	22
71	Periodic AuAgâ€Ag₂S Heterostructured Nanowires. Small, 2014, 10, 479-482.	10.0	20
72	TiO2 nanotube @ SnO2 nanoflake coreâ€“branch arrays for lithium-ion battery anode. Nano Energy, 2014, 4, 105-112.	16.0	165

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73	Chemically engineered graphene oxide as high performance cathode materials for Li-ion batteries. Carbon, 2014, 76, 148-154.	10.3	80
74	Highly Stable and Reversible Lithium Storage in SnO₂ Nanowires Surface Coated with a Uniform Hollow Shell by Atomic Layer Deposition. Nano Letters, 2014, 14, 4852-4858.	9.1	269
75	Triangular Agâ€“Pd alloy nanoprisms: rational synthesis with high-efficiency for electrocatalytic oxygen reduction. Nanoscale, 2014, 6, 11738-11743.	5.6	43
76	Encapsulation of nanoscale metal oxides into an ultra-thin Ni matrix for superior Li-ion batteries: a versatile strategy. Nanoscale, 2014, 6, 12990-13000.	5.6	21
77	Coating Two-Dimensional Nanomaterials with Metalâ€“Organic Frameworks. ACS Nano, 2014, 8, 8695-8701.	14.6	168
78	3D Carbon/Cobaltâ€Nickel Mixedâ€Oxide Hybrid Nanostructured Arrays for Asymmetric Supercapacitors. Small, 2014, 10, 2937-2945.	10.0	146
79	Nitrogen and Sulfur Codoped Graphene: Multifunctional Electrode Materials for Highâ€Performance Liâ€Ion Batteries and Oxygen Reduction Reaction. Advanced Materials, 2014, 26, 6186-6192.	21.0	598
80	A Universal Method for Preparation of Noble Metal Nanoparticleâ€Decorated Transition Metal Dichalcogenide Nanobelts. Advanced Materials, 2014, 26, 6250-6254.	21.0	71
81	A New Type of Porous Graphite Foams and Their Integrated Composites with Oxide/Polymer Core/Shell Nanowires for Supercapacitors: Structural Design, Fabrication, and Full Supercapacitor Demonstrations. Nano Letters, 2014, 14, 1651-1658.	9.1	428
82	Evolution of disposable bamboo chopsticks into uniform carbon fibers: a smart strategy to fabricate sustainable anodes for Li-ion batteries. Energy and Environmental Science, 2014, 7, 2670-2679.	30.8	271
83	A V₂O₅/Conductiveâ€Polymer Core/Shell Nanobelt Array on Threeâ€Dimensional Graphite Foam: A Highâ€Rate, Ultrastable, and Freestanding Cathode for Lithiumâ€Ion Batteries. Advanced Materials, 2014, 26, 5794-5800.	21.0	450
84	Synthesis of Fewâ€Layer MoS₂ Nanosheetâ€Coated TiO₂ Nanobelt Heterostructures for Enhanced Photocatalytic Activities. Small, 2013, 9, 140-147.	10.0	1,166
85	Solution-phase epitaxial growth of noble metal nanostructures on dispersible single-layer molybdenum disulfide nanosheets. Nature Communications, 2013, 4, 1444.	12.8	756
86	Achieving high open-circuit voltage in the PPV-CdHgTe bilayer photovoltaic devices on the basis of the heterojunction interfacial modification. Journal of Materials Chemistry, 2012, 22, 9161.	6.7	16
87	Grapheneâ€Based Electrodes. Advanced Materials, 2012, 24, 5979-6004.	21.0	829
88	An Effective Method for the Fabrication of Fewâ€Layerâ€Thick Inorganic Nanosheets. Angewandte Chemie - International Edition, 2012, 51, 9052-9056.	13.8	520
89	Efficient polymer/nanocrystal hybrid solar cells fabricated from aqueous materials. Energy and Environmental Science, 2011, 4, 2831.	30.8	58
90	Aqueous-Solution-Processed Hybrid Solar Cells from Poly(1,4-naphthalenevinylene) and CdTe Nanocrystals. ACS Applied Materials & Interfaces, 2011, 3, 2919-2923.	8.0	32

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91	Polymer-mediated growth of fluorescent semiconductor nanoparticles in preformed nanocomposites. Physical Chemistry Chemical Physics, 2010, 12, 11843.	2.8	9
92	Facile Approach in Fabricating Superhydrophobic and Superoleophilic Surface for Water and Oil Mixture Separation. ACS Applied Materials & Interfaces, 2009, 1, 2613-2617.	8.0	341
93	Hard nanocrystalline gold materials prepared via high-pressure phase transformation. Nano Research, 0, , .	10.4	3