Peng-Yi Tang

List of Publications by Year
in descending order

63	3,589	117625	144013
papers	citations	34 h-index	57 g-index

65	65	65	5483
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Siteâ€Specific Axial Oxygen Coordinated FeN₄ Active Sites for Highly Selective Electroreduction of Carbon Dioxide. Advanced Functional Materials, 2022, 32, .	14.9	38
2	A High Conductivity 1D Ï€â€“d Conjugated Metalâ€“Organic Framework with Efficient Polysulfide Trappingâ€Diffusionâ€Catalysis in Lithiumâ€“Sulfur Batteries. Advanced Materials, 2022, 34, e2108835.	21.0	86
3	Amorphizing noble metal chalcogenide catalysts at the single-layer limit towards hydrogen production. Nature Catalysis, 2022, 5, 212-221.	34.4	113
4	A novel Ï€-d conjugated cobalt tetraaza[14]annulene based atomically dispersed electrocatalyst for efficient CO2 reduction. Chemical Engineering Journal, 2022, 442, 136129.	12.7	16
5	Atomic-Scale Insights into Nickel Exsolution on LaNiO₃ Catalysts via In Situ Electron Microscopy. Journal of Physical Chemistry C, 2022, 126, 786-796.	3.1	14
6	Molecular engineering to introduce carbonyl between nickel salophen active sites to enhance electrochemical CO2 reduction to methanol. Applied Catalysis B: Environmental, 2022, 314, 121451.	20.2	32
7	Engineering the Interfacial Microenvironment via Surface Hydroxylation to Realize the Global Optimization of Electrochemical CO₂ Reduction. ACS Applied Materials & Interfaces, 2022, 14, 32157-32165.	8.0	8
8	Atomically dispersed Fe in a C₂N Based Catalyst as a Sulfur Host for Efficient Lithiumâ€“Sulfur Batteries. Advanced Energy Materials, 2021, 11, 2003507.	19.5	91
9	Quasi-double-star nickel and iron active sites for high-efficiency carbon dioxide electroreduction. Energy and Environmental Science, 2021, 14, 4847-4857.	30.8	43
10	2Dâ€Organic Layered Materials: Atomically dispersed Fe in a C₂N Based Catalyst as a Sulfur Host for Efficient Lithiumâ€“Sulfur Batteries (Adv. Energy Mater. 5/2021). Advanced Energy Materials, 2021, 11, 2170022.	19.5	3
11	Pushâ€Pull Electronic Effects in Surfaceâ€Active Sites Enhance Electrocatalytic Oxygen Evolution on Transition Metal Oxides. ChemSusChem, 2021, 14, 1595-1601.	6.8	10
12	Decoupling the effects of defects on efficiency and stability through phosphonates in stable halide perovskite solar cells. Joule, 2021, 5, 1246-1266.	24.0	91
13	Metal Oxide Clusters on Nitrogen-Doped Carbon are Highly Selective for CO₂ Electroreduction to CO. ACS Catalysis, 2021, 11, 10028-10042.	11.2	37
14	Molecular Engineering to Tune the Ligand Environment of Atomically Dispersed Nickel for Efficient Alcohol Electrochemical Oxidation. Advanced Functional Materials, 2021, 31, 2106349.	14.9	27
15	Engineering grain boundaries at theÂ2D limit for theÂhydrogen evolution reaction. Nature Communications, 2020, 11, 57.	12.8	153
16	Cobalt Hexacyanoferrate as a Selective and High Current Density Formate Oxidation Electrocatalyst. ACS Applied Energy Materials, 2020, 3, 9198-9207.	5.1	15
17	Stability of Pd₃Pb Nanocubes during Electrocatalytic Ethanol Oxidation. Chemistry of Materials, 2020, 32, 2044-2052.	6.7	62
18	Upscaling high activity oxygen evolution catalysts based on CoFe2O4 nanoparticles supported on nickel foam for power-to-gas electrochemical conversion with energy efficiencies above 80%. Applied Catalysis B: Environmental, 2019, 259, 118055.	20.2	35

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19	Boosting Photoelectrochemical Water Oxidation of Hematite in Acidic Electrolytes by Surface State Modification. Advanced Energy Materials, 2019, 9, 1901836.	19.5	64
20	Porous NiTiO₃/TiO₂nanostructures for photocatatalytic hydrogen evolution. Journal of Materials Chemistry A, 2019, 7, 17053-17059.	10.3	33
21	Photoelectrochemical Water Splitting: Boosting Photoelectrochemical Water Oxidation of Hematite in Acidic Electrolytes by Surface State Modification (Adv. Energy Mater. 34/2019). Advanced Energy Materials, 2019, 9, 1970131.	19.5	1
22	Superior methanol electrooxidation performance of (110)-faceted nickel polyhedral nanocrystals. Journal of Materials Chemistry A, 2019, 7, 22036-22043.	10.3	38
23	From rational design of a new bimetallic MOF family with tunable linkers to OER catalysts. Journal of Materials Chemistry A, 2019, 7, 1616-1628.	10.3	148
24	Coâ€“Sn Nanocrystalline Solid Solutions as Anode Materials in Lithiumâ€Ion Batteries with High Pseudocapacitive Contribution. ChemSusChem, 2019, 12, 1451-1458.	6.8	38
25	Engineering surface states of hematite based photoanodes for boosting photoelectrochemical water splitting. Nanoscale Horizons, 2019, 4, 1256-1276.	8.0	79
26	Compositionally tuned NixSn alloys as anode materials for lithium-ion and sodium-ion batteries with a high pseudocapacitive contribution. Electrochimica Acta, 2019, 304, 246-254.	5.2	51
27	MoS_x@NiO Composite Nanostructures: An Advanced Nonprecious Catalyst for Hydrogen Evolution Reaction in Alkaline Media. Advanced Functional Materials, 2019, 29, 1807562.	14.9	83
28	Multilayered Hematite Nanowires with Thinâ€Film Silicon Photovoltaics in an Allâ€Earthâ€Abundant Hybrid Tandem Device for Solar Water Splitting. ChemSusChem, 2019, 12, 1428-1436.	6.8	17
29	Tailor-made metal-nitrogen-carbon bifunctional electrocatalysts for rechargeable Zn-air batteries via controllable MOF units. Energy Storage Materials, 2019, 17, 46-61.	18.0	70
30	(Invited) Bottom-up Engineering of Hematite Nanowire Heterostructures for Photoelectrochemical Water Splitting. ECS Meeting Abstracts, 2019, , .	0.0	0
31	Role of Tungsten Doping on the Surface States in BiVO₄ Photoanodes for Water Oxidation: Tuning the Electron Trapping Process. ACS Catalysis, 2018, 8, 3331-3342.	11.2	135
32	NiSn bimetallic nanoparticles as stable electrocatalysts for methanol oxidation reaction. Applied Catalysis B: Environmental, 2018, 234, 10-18.	20.2	142
33	Ultrasensitive binder-free glucose sensors based on the pyrolysis of in situ grown Cu MOF. Sensors and Actuators B: Chemical, 2018, 254, 272-281.	7.8	84
34	Colloidal Niâ€“Coâ€“Sn nanoparticles as efficient electrocatalysts for the methanol oxidation reaction. Journal of Materials Chemistry A, 2018, 6, 22915-22924.	10.3	85
35	Tin Diselenide Molecular Precursor for Solutionâ€Processable Thermoelectric Materials. Angewandte Chemie, 2018, 130, 17309-17314.	2.0	9
36	Tailoring Copper Foam with Silver Dendrite Catalysts for Highly Selective Carbon Dioxide Conversion into Carbon Monoxide. ACS Applied Materials & Interfaces, 2018, 10, 43650-43660.	8.0	39

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37	Tin Diselenide Molecular Precursor for Solutionâ€Processable Thermoelectric Materials. Angewandte Chemie - International Edition, 2018, 57, 17063-17068.	13.8	23
38	Enhanced Heteroâ€Junction Quality and Performance of Kesterite Solar Cells by Aluminum Hydroxide Nanolayers and Efficiency Limitation Revealed by Atomicâ€resolution Scanning Transmission Electron Microscopy. Solar Rrl, 2018, 3, 1800279.	5.8	6
39	Insights into the Performance of Co_xNi_{1â€“x}TiO₃ Solid Solutions as Photocatalysts for Sun-Driven Water Oxidation. ACS Applied Materials & Interfaces, 2017, 9, 40290-40297.	8.0	23
40	Solvothermal Synthesis, Gasâ€Sensing Properties, and Solar Cellâ€Aided Investigation of TiO₂â€“MoO_x Nanocrystals. ChemNanoMat, 2017, 3, 798-807.	2.8	2
41	A prototype reactor for highly selective solar-driven CO₂reduction to synthesis gas using nanosized earth-abundant catalysts and silicon photovoltaics. Energy and Environmental Science, 2017, 10, 2256-2266.	30.8	116
42	Enhanced photoelectrochemical water splitting of hematite multilayer nanowire photoanodes by tuning the surface state via bottom-up interfacial engineering. Energy and Environmental Science, 2017, 10, 2124-2136.	30.8	185
43	A universal strategy for metal oxide anchored and binder-free carbon matrix electrode: A supercapacitor case with superior rate performance and high mass loading. Nano Energy, 2017, 31, 311-321.	16.0	169
44	Hierarchically encapsulated MoO<inf>3</inf>@SnO<inf>2</inf> nanobelts as negative electrodes of supercapacitors. , 2017, , .		0
45	The Ethylhexanoate Route to Metal Oxide Nanocrystals: Synthesis of CoO Nanooctahedra from CoII 2-Ethylhexanoate. European Journal of Inorganic Chemistry, 2016, 2016, 3963-3968.	2.0	5
46	Enhanced Activity and Acid pH Stability of Prussian Blue-type Oxygen Evolution Electrocatalysts Processed by Chemical Etching. Journal of the American Chemical Society, 2016, 138, 16037-16045.	13.7	194
47	Synergistic effects in 3D honeycomb-like hematite nanoflakes/branched polypyrrole nanoleaves heterostructures as high-performance negative electrodes for asymmetric supercapacitors. Nano Energy, 2016, 22, 189-201.	16.0	102
48	Controlled Construction of Hierarchical Nanocomposites Consisting of MnO2and PEDOT for High-Performance Supercapacitor Applications. ChemElectroChem, 2015, 2, 913-913.	3.4	0
49	Molecular dynamics simulation of deformation accumulation in repeated nanometric cutting on single-crystal copper. RSC Advances, 2015, 5, 12678-12685.	3.6	25
50	Microscale flowers. Materials Today, 2015, 18, 410-411.	14.2	2
51	Encapsulation architecture for energy storage. Materials Today, 2015, 18, 352-353.	14.2	9
52	Controlled Construction of Hierarchical Nanocomposites Consisting of MnO₂ and PEDOT for Highâ€Performance Supercapacitor Applications. ChemElectroChem, 2015, 2, 949-957.	3.4	34
53	Facile Synthesis of Graphite/PEDOT/MnO₂ Composites on Commercial Supercapacitor Separator Membranes as Flexible and High-Performance Supercapacitor Electrodes. ACS Applied Materials & Interfaces, 2014, 6, 10506-10515.	8.0	205
54	Constructed Uninterrupted Charge-Transfer Pathways in Three-Dimensional Micro/Nanointerconnected Carbon-Based Electrodes for High Energy-Density Ultralight Flexible Supercapacitors. ACS Applied Materials & Interfaces, 2014, 6, 210-218.	8.0	52

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55	Hierarchical Co3O4@PPy@MnO2 coreâ€“shellâ€“shell nanowire arrays for enhanced electrochemical energy storage. Nano Energy, 2014, 7, 42-51.	16.0	152
56	A metal-decorated nickel foam-inducing regulatable manganese dioxide nanosheet array architecture for high-performance supercapacitor applications. Nanoscale, 2013, 5, 8156.	5.6	34
57	Step-by-step assembled poly(3,4-ethylenedioxythiophene)/manganese dioxide composite electrodes: Tuning the structure for high electrochemical performance. Electrochimica Acta, 2013, 89, 300-309.	5.2	48
58	Enhanced energy density of asymmetric supercapacitors via optimizing negative electrode material and mass ratio of negative/positive electrodes. Journal of Solid State Electrochemistry, 2013, 17, 1701-1710.	2.5	33
59	High performance asymmetric supercapacitor based on MnO2 electrode in ionic liquid electrolyte. Journal of Materials Chemistry A, 2013, 1, 3706.	10.3	90
60	MnO2/graphene/nickel foam composite as high performance supercapacitor electrode via a facile electrochemical deposition strategy. Materials Letters, 2012, 76, 127-130.	2.6	89
61	Boosting Photoelectrochemical Water Oxidation of Hematite by Surface States Modification. SSRN Electronic Journal, 0, , .	0.4	1
62	Bottom-up Engineering of Hematite Nanowire Heterostructures for Photoelectrochemical Water Splitting. , 0, , .		0
63	Bottom-up Engineering of Hematite Nanowire Heterostructures for Photoelectrochemical Water Splitting. , 0, , .		0