Xin-Long Tian

List of Publications by Year
in descending order

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110 papers	7,692 citations	53660 45 h-index	54797 84 g-index
111 all docs	111 docs citations	111 times ranked	6293 citing authors

#	Article	IF	Citations
1	Isolated Co Atoms Anchored on Defective Nitrogenâ€doped Carbon Graphene as Efficient Oxygen Reduction Reaction Electrocatalysts. Energy and Environmental Materials, 2023, 6, .	7.3	16
2	High valence state of Ni and Mo synergism in NiS2-MoS2 hetero-nanorods catalyst with layered surface structure for urea electrocatalysis. Journal of Energy Chemistry, 2022, 66, 483-492.	7.1	158
3	Progress in the development of heteroatom-doped nickel phosphates for electrocatalytic water splitting. Journal of Colloid and Interface Science, 2022, 607, 1091-1102.	5.0	76
4	Photocatalytic Hydrogen Evolution Using Ternaryâ€Metalâ€Sulfide/TiO₂ Heterojunction Photocatalysts. ChemCatChem, 2022, 14, .	1.8	21
5	Recent progress in seawater electrolysis for hydrogen evolution by transition metal phosphides. Catalysis Communications, 2022, 162, 106382.	1.6	30
6	Photocatalytic reduction of water to hydrogen by CuPbSbS3 nanoflakes. Materials Today Energy, 2022, 25, 100956.	2.5	8
7	Performance improvement induced by membrane treatment in proton exchange membrane water electrolysis cells. International Journal of Hydrogen Energy, 2022, 47, 5807-5816.	3.8	22
8	Recent Advances in the Hydrogen Evolution Reaction of Zn_xCd_{1â^'x}Sâ€Based Photocatalysts. Solar Rrl, 2022, 6, .	3.1	32
9	Bridge the activity and durability of Ruthenium for hydrogen evolution reaction with the Ru O C link. Chemical Engineering Journal, 2022, 433, 134421.	6.6	30
10	Ni2P nanoparticles-inserted NiFeP nanosheets with rich interfaces as efficient catalysts for the oxygen evolution reaction. Journal of Alloys and Compounds, 2022, 903, 163855.	2.8	20
11	Tetrazole-functionalized two-dimensional covalent organic frameworks coordinated with metal ions for electrocatalytic oxygen evolution reaction. Materials Today Chemistry, 2022, 24, 100777.	1.7	8
12	Facile fabrication of single-atom catalysts by a plasma-etching strategy for oxygen reduction reaction. Journal of Materials Chemistry A, 2022, 10, 6531-6537.	5.2	24
13	Toward efficient electrocatalytic oxygen evolution with a low concentration baking soda activated IrO_xsurface in a hydrothermal medium. Materials Chemistry Frontiers, 2022, 6, 1282-1291.	3.2	2
14	Ruthenium Complex of sp² Carbonâ€Conjugated Covalent Organic Frameworks as an Efficient Electrocatalyst for Hydrogen Evolution. Small, 2022, 18, e2107750.	5.2	24
15	General Method for Synthesizing Effective and Durable Electrocatalysts Derived from Cellulose for Microbial Fuel Cells. ACS Applied Materials & Interfaces, 2022, 14, 13369-13378.	4.0	4
16	Heterogeneous structured Ni3Se2/MoO2@Ni12P5 catalyst for durable urea oxidation reaction. Materials Today Physics, 2022, 23, 100646.	2.9	30
17	Amorphousâ€“Amorphous Coupling Enhancing the Oxygen Evolution Reaction Activity and Stability of the NiFe-Based Catalyst. ACS Applied Materials & Interfaces, 2022, 14, 15205-15213.	4.0	16
18	Fundamentals and photocatalytic hydrogen evolution applications of quaternary chalcogenide semiconductor: Cu2ZnSnS4. Rare Metals, 2022, 41, 2153-2168.	3.6	20

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19	Propagation and attenuation of swell energy in the Pacific Ocean. Renewable Energy, 2022, 188, 750-764.	4.3	7
20	Au decorated Pd nanowires for methane oxidation to liquid C1 products. Applied Catalysis B: Environmental, 2022, 308, 121223.	10.8	20
21	Rational design ternary platinum based electrocatalysts for effective methanol oxidation reaction. Journal of Energy Chemistry, 2022, 70, 230-235.	7.1	75
22	Structure evolution from Fe2Ni MIL MOF to carbon confined O-doped FeNi/FeF2 via partial fluorination for improved oxygen evolution reaction. Chemical Engineering Journal, 2022, 442, 136165.	6.6	31
23	Facile synthesis of C3N4/NiIn2S4 heterostructure with novel solar steam evaporation efficiency and photocatalytic H2O2 production performance. Applied Catalysis B: Environmental, 2022, 310, 121336.	10.8	40
24	Recent Progress in Layered Double Hydroxideâ€Based Electrocatalyst for Hydrogen Evolution Reaction. ChemElectroChem, 2022, 9, .	1.7	5
25	Nitrogen-bonded ultrasmall palladium clusters over the nitrogen-doped carbon for promoting Suzuki cross-coupling reactions. Advanced Composites and Hybrid Materials, 2022, 5, 1396-1403.	9.9	5
26	Plasma induced Fe-N active sites to improve the oxygen reduction reaction performance. , 2022, 1, 100005.		22
27	Oneâ€dimensional PtFe hollow nanochains for the efficient oxygen reduction reaction. , 2022, 4, 1003-1010.		27
28	A plasma bombing strategy to synthesize high-loading single-atom catalysts for oxygen reduction reaction. Cell Reports Physical Science, 2022, 3, 100880.	2.8	31
29	Exploring and understanding the internal voltage losses through catalyst layers in proton exchange membrane water electrolysis devices. Applied Energy, 2022, 317, 119213.	5.1	36
30	Single atomic cobalt electrocatalyst for efficient oxygen reduction reaction. EScience, 2022, 2, 399-404.	25.0	127
31	Mo-decorated cobalt phosphide nanoarrays as bifunctional electrocatalysts for efficient overall water/seawater splitting. Materials Today Nano, 2022, 18, 100216.	2.3	30
32	Recent advances in MOFs/MOF derived nanomaterials toward high-efficiency aqueous zinc ion batteries. Coordination Chemistry Reviews, 2022, 468, 214642.	9.5	55
33	Hierarchical Natural Pollen Cell-Derived Composite Sorbents for Efficient Atmospheric Water Harvesting. ACS Applied Materials & Interfaces, 2022, 14, 33032-33040.	4.0	15
34	Layer-structured FeCo bihydroxide as an ultra-stable bifunctional electrocatalyst for water splitting at high current densities. Sustainable Energy and Fuels, 2021, 5, 2747-2752.	2.5	13
35	Sandwich hydrogel with confined plasmonic Cu/carbon cells for efficient solar water purification. Journal of Materials Chemistry A, 2021, 9, 15462-15471.	5.2	41
36	Advanced Platinum-Based Oxygen Reduction Electrocatalysts for Fuel Cells. Accounts of Chemical Research, 2021, 54, 311-322.	7.6	237

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37	In situformation of grain boundaries on a supported hybrid to boost water oxidation activity of iridium oxide. Nanoscale, 2021, 13, 13845-13857.	2.8	6
38	Tunable cobalt doping titanium nitride (Ti Co N) interlaced nanotubes enable an enhanced electronic synergy on visible-light driven hydrogen evolution. International Journal of Hydrogen Energy, 2021, 46, 17143-17153.	3.8	5
39	Cationic covalent-organic framework for sulfur storage with high-performance in lithium-sulfur batteries. Journal of Colloid and Interface Science, 2021, 591, 264-272.	5.0	57
40	Engineering PdAu Nanowires for Highly Efficient Direct Methane Conversion to Methanol under Mild Conditions. Journal of Physical Chemistry C, 2021, 125, 12713-12720.	1.5	17
41	In Situ Hybridizing Cu 3 (BTC) 2 and Titania to Attain a Highâ€Performance Copper Catalyst: Dualâ€Functional Role of Metalâ€Support Interaction on the Activity and Selectivity. ChemCatChem, 2021, 13, 3846-3856.	1.8	6
42	Bifunctional Pd@RhPd Coreâ€“Shell Nanodendrites for Methanol Electrolysis. ACS Applied Materials & Interfaces, 2021, 13, 35767-35776.	4.0	28
43	Engineering Ruthenium-Based Electrocatalysts for Effective Hydrogen Evolution Reaction. Nano-Micro Letters, 2021, 13, 160.	14.4	142
44	Self-regulating and asymmetric evaporator for efficient solar water-electricity generation. Nano Energy, 2021, 86, 106112.	8.2	60
45	Advanced Atomically Dispersed Metalâ€“Nitrogenâ€“Carbon Catalysts Toward Cathodic Oxygen Reduction in PEM Fuel Cells. Advanced Energy Materials, 2021, 11, 2101222.	10.2	109
46	Nodal PtNi nanowires with Pt skin and controllable Near-Surface composition for enhanced oxygen reduction electrocatalysis in fuel cells. Chemical Engineering Journal, 2021, 418, 129322.	6.6	36
47	Porous carbon polyhedrons with exclusive Cu-Nx moieties as highly effective electrocatalysts for oxygen reduction reactions. International Journal of Hydrogen Energy, 2021, 46, 28021-28027.	3.8	12
48	A scalable, cost-effective and salt-rejecting MoS2/SA@melamine foam for continuous solar steam generation. Nano Energy, 2021, 87, 106213.	8.2	99
49	Pyrimidineâ€Functionalized Covalent Organic Framework and its Cobalt Complex as an Efficient Electrocatalyst for Oxygen Evolution Reaction. ChemSusChem, 2021, 14, 4556-4562.	3.6	26
50	Recent advances in two-dimensional Pt based electrocatalysts for methanol oxidation reaction. International Journal of Hydrogen Energy, 2021, 46, 31202-31215.	3.8	87
51	Ultrastable NiFeOOH/NiFe/Ni electrocatalysts prepared by in-situ electro-oxidation for oxygen evolution reaction at large current density. Applied Surface Science, 2021, 564, 150440.	3.1	30
52	Holey platinum nanotubes for ethanol electrochemical reforming in aqueous solution. Science Bulletin, 2021, 66, 2079-2089.	4.3	66
53	S, N co-doped carbon nanotube encased Co NPs as efficient bifunctional oxygen electrocatalysts for zinc-air batteries. Chemical Engineering Journal, 2021, 422, 130135.	6.6	54
54	Au@Ir core-shell nanowires towards oxygen reduction reaction. Chemical Engineering Journal, 2021, 421, 129760.	6.6	27

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55	Direct integration of ultralow-platinum alloy into nanocarbon architectures for efficient oxygen reduction in fuel cells. Science Bulletin, 2021, 66, 2207-2216.	4.3	49
56	Preparation of highly active MoNi4 alloys in 3D porous nanostructures and their application as bifunctional electrocatalysts for overall water splitting. Catalysis Communications, 2021, 159, 106350.	1.6	12
57	A graphene-like nanoribbon for efficient bifunctional electrocatalysts. Journal of Materials Chemistry A, 2021, 9, 26688-26697.	5.2	10
58	Facile Synthesis of Iron and Phosphorousâ€embedded Nitrogenâ€containing Porous Carbon as an Efficient Electrocatalyst for Microbial Fuel Cells. ChemElectroChem, 2021, 8, 4108.	1.7	5
59	Synthesis and Design of a Highly Stable Platinum Nickel Electrocatalyst for the Oxygen Reduction Reaction. ACS Applied Materials & Interfaces, 2021, 13, 52681-52687.	4.0	14
60	IrO_x Nanoclusters Modified by BaCO₃ Enable â€³Two Birds with One Stoneâ€³ in Solar-Driven Direct Unbuffered Seawater Electrolysis. ACS Applied Materials & Interfaces, 2021, 13, 61088-61097.	4.0	10
61	Three-dimensional hierarchical CuxS-based evaporator for high-efficiency multifunctional solar distillation. Nano Energy, 2020, 69, 104465.	8.2	107
62	A mesoporous carbon derived from 4,4â€²-dipyridyl iron as an efficient catalyst for oxygen reduction. Journal of Materials Chemistry A, 2020, 8, 2439-2444.	5.2	12
63	A comparative study on the catalytic activities and stabilities of atomic-layered platinum on dispersed Ti0.9Cu0.1N nanoparticles supported by N-doped carbon nanotubes (N-CNTs) and reduced graphene oxide (N-rGO). International Journal of Hydrogen Energy, 2020, 45, 1857-1866.	3.8	2
64	Sandwich Photothermal Membrane with Confined Hierarchical Carbon Cells Enabling Highâ€Efficiency Solar Steam Generation. Small, 2020, 16, e2000573.	5.2	67
65	An amorphous lanthanumâ€“iridium solid solution with an open structure for efficient water splitting. Journal of Materials Chemistry A, 2020, 8, 12518-12525.	5.2	24
66	Assembly of a Highly Active Iridium-Based Oxide Oxygen Evolution Reaction Catalyst by Using Metalâ€“Organic Framework Self-Dissolution. ACS Applied Materials & Interfaces, 2020, 12, 29414-29423.	4.0	6
67	Coupling hollow Fe3O4 nanoparticles with oxygen vacancy on mesoporous carbon as a high-efficiency ORR electrocatalyst for Zn-air battery. Journal of Colloid and Interface Science, 2020, 567, 410-418.	5.0	75
68	Hierarchically open-porous carbon networks enriched with exclusive Feâ€“Nx active sites as efficient oxygen reduction catalysts towards acidic H2â€“O2 PEM fuel cell and alkaline Znâ€“air battery. Chemical Engineering Journal, 2020, 390, 124479.	6.6	61
69	Advanced Electrocatalysts for the Oxygen Reduction Reaction in Energy Conversion Technologies. Joule, 2020, 4, 45-68.	11.7	596
70	MOF-Templated sword-like Co3O4@NiCo2O4 sheet arrays on carbon cloth as highly efficient Liâ€“O2 battery cathode. Journal of Power Sources, 2020, 450, 227725.	4.0	62
71	Engineering the electronic and strained interface for high activity of PdMcore@Ptmonolayer electrocatalysts for oxygen reduction reaction. Science Bulletin, 2020, 65, 1396-1404.	4.3	76
72	A strategy to unlock the potential of CrN as a highly active oxygen reduction reaction catalyst. Journal of Materials Chemistry A, 2020, 8, 8575-8585.	5.2	38

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73	Rechargeable Zincâ€“Air Battery with Ultrahigh Power Density Based on Uniform N, Co Codoped Carbon Nanospheres. ACS Applied Materials & Interfaces, 2019, 11, 44153-44160.	4.0	20
74	Engineering bunched Pt-Ni alloy nanocages for efficient oxygen reduction in practical fuel cells. Science, 2019, 366, 850-856.	6.0	1,005
75	g-C₃N₄ promoted MOF derived hollow carbon nanopolyhedra doped with high density/fraction of single Fe atoms as an ultra-high performance non-precious catalyst towards acidic ORR and PEM fuel cells. Journal of Materials Chemistry A, 2019, 7, 5020-5030.	5.2	152
76	Glucose-derived carbon supported well-dispersed CrN as competitive oxygen reduction catalysts in acidic medium. Electrochimica Acta, 2019, 314, 202-211.	2.6	12
77	Engineering one-dimensional and hierarchical PtFe alloy assemblies towards durable methanol electrooxidation. Journal of Materials Chemistry A, 2019, 7, 13090-13095.	5.2	56
78	Engineering of Hierarchical and Threeâ€Dimensional Architectures Constructed by Titanium Nitride Nanowire Assemblies for Efficient Electrocatalysis. ChemElectroChem, 2019, 6, 2208-2214.	1.7	60
79	Platinum-decorated three dimensional titanium copper nitride architectures with durable methanol oxidation reaction activity. International Journal of Hydrogen Energy, 2019, 44, 8415-8424.	3.8	19
80	Designing Robust Support for Pt Alloy Nanoframes with Durable Oxygen Reduction Reaction Activity. ACS Applied Materials & Interfaces, 2019, 11, 9117-9124.	4.0	60
81	Highly stable Pt₃Ni nanowires tailored with trace Au for the oxygen reduction reaction. Journal of Materials Chemistry A, 2019, 7, 26402-26409.	5.2	55
82	Three dimensional titanium molybdenum nitride nanowire assemblies as highly efficient and durable platinum support for methanol oxidation reaction. Electrochimica Acta, 2019, 295, 50-57.	2.6	24
83	Recent Progress on Transition Metal Oxides as Bifunctional Catalysts for Lithiumâ€Air and Zincâ€Air Batteries. Batteries and Supercaps, 2019, 2, 336-347.	2.4	173
84	Structural engineering of robust titanium nitride as effective platinum support for the oxygen reduction reaction. Journal of Materials Chemistry A, 2018, 6, 6065-6073.	5.2	61
85	Platinum-Silver Alloy Nanoballoon Nanoassemblies with Super Catalytic Activity for the Formate Electrooxidation. ACS Applied Energy Materials, 2018, 1, 1252-1258.	2.5	50
86	Platinum decorated hierarchical porous structures composed of ultrathin titanium nitride nanoflakes for efficient methanol oxidation reaction. Electrochimica Acta, 2018, 264, 216-224.	2.6	47
87	Surfactant-free atomically ultrathin rhodium nanosheet nanoassemblies for efficient nitrogen electroreduction. Journal of Materials Chemistry A, 2018, 6, 3211-3217.	5.2	376
88	Enhanced cyclability of Liâ€“O₂batteries with cathodes of Ir and MnO₂supported on well-defined TiN arrays. Nanoscale, 2018, 10, 2983-2989.	2.8	44
89	Highly Selective TiN-Supported Highly Dispersed Pt Catalyst: Ultra Active toward Hydrogen Oxidation and Inactive toward Oxygen Reduction. ACS Applied Materials & Interfaces, 2018, 10, 3530-3537.	4.0	48
90	Template-Free Preparation of 3D Porous Co-Doped VN Nanosheet-Assembled Microflowers with Enhanced Oxygen Reduction Activity. ACS Applied Materials & Interfaces, 2018, 10, 11604-11612.	4.0	47

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91	Platinum supported on multifunctional titanium cobalt oxide nanosheets assembles for efficient oxygen reduction reaction. Electrochimica Acta, 2018, 265, 364-371.	2.6	16
92	Synthesis of a N-doped mesoporous carbon as an efficient electrocatalyst for oxygen reduction. International Journal of Hydrogen Energy, 2018, 43, 21791-21797.	3.8	15
93	Porous and three dimensional titanium nitride supported platinum as an electrocatalyst for oxygen reduction reaction. Electrochemistry Communications, 2018, 91, 31-35.	2.3	46
94	Formation of a Tubular Assembly by Ultrathin Ti_{0.8}Co_{0.2}N Nanosheets as Efficient Oxygen Reduction Electrocatalysts for Hydrogenâ€“/Metalâ€“Air Fuel Cells. ACS Catalysis, 2018, 8, 8970-8975.	5.5	147
95	Binary Fe, Cu-doped bamboo-like carbon nanotubes as efficient catalyst for the oxygen reduction reaction. Nano Energy, 2017, 37, 187-194.	8.2	125
96	In situ construction of Ir@Pt/C nanoparticles in the cathode layer of membrane electrode assemblies with ultra-low Pt loading and high Pt exposure. Journal of Power Sources, 2017, 355, 83-89.	4.0	45
97	High-Performance Coreâ€“Shell Catalyst with Nitride Nanoparticles as a Core: Well-Defined Titanium Copper Nitride Coated with an Atomic Pt Layer for the Oxygen Reduction Reaction. ACS Catalysis, 2017, 7, 3810-3817.	5.5	84
98	A Co-doped porous niobium nitride nanogrid as an effective oxygen reduction catalyst. Journal of Materials Chemistry A, 2017, 5, 14278-14285.	5.2	51
99	Research advances in unsupported Pt-based catalysts for electrochemical methanol oxidation. Journal of Energy Chemistry, 2017, 26, 1067-1076.	7.1	163
100	Atomic platinum layer coated titanium copper nitride supported on carbon nanotubes for the methanol oxidation reaction. Electrochimica Acta, 2017, 248, 349-355.	2.6	19
101	Unsupported Platinum-Based Electrocatalysts for Oxygen Reduction Reaction. ACS Energy Letters, 2017, 2, 2035-2043.	8.8	174
102	Preparation of nitride nanoparticles based core-shell structured catalyst and its catalysis towards formic acid oxidation. Scientia Sinica Chimica, 2017, 47, 641-646.	0.2	0
103	Limitations and Improvement Strategies for Early-Transition-Metal Nitrides as Competitive Catalysts toward the Oxygen Reduction Reaction. ACS Catalysis, 2016, 6, 6165-6174.	5.5	130
104	Construction of a high-performance air-breathing cathode using platinum catalyst supported by carbon black and carbon nanotubes. International Journal of Hydrogen Energy, 2016, 41, 9191-9196.	3.8	8
105	Transition Metal Nitride Coated with Atomic Layers of Pt as a Low-Cost, Highly Stable Electrocatalyst for the Oxygen Reduction Reaction. Journal of the American Chemical Society, 2016, 138, 1575-1583.	6.6	348
106	A coreâ€“shell Pd₁Ru₁Ni₂@Pt/C catalyst with a ternary alloy core and Pt monolayer: enhanced activity and stability towards the oxygen reduction reaction by the addition of Ni. Journal of Materials Chemistry A, 2016, 4, 847-855.	5.2	40
107	A Platinum Monolayer Core-Shell Catalyst with a Ternary Alloy Nanoparticle Core and Enhanced Stability for the Oxygen Reduction Reaction. Journal of Nanomaterials, 2015, 2015, 1-11.	1.5	7
108	Enhanced water management in the cathode of an air-breathing PEMFC using a dual catalyst layer and optimizing the gas diffusion and microporous layers. International Journal of Hydrogen Energy, 2015, 40, 3961-3967.	3.8	45

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109	Binary transition metal nitrides with enhanced activity and durability for the oxygen reduction reaction. Journal of Materials Chemistry A, 2015, 3, 16801-16809.	5.2	115
110	Effect of Transition Metals on the Structure and Performance of the Doped Carbon Catalysts Derived From Polyaniline and Melamine for ORR Application. ACS Catalysis, 2014, 4, 3797-3805.	5.5	351