Jiantao T Han

List of Publications by Year
in descending order

109 papers	8,249 citations	41258 49 h-index	48187 88 g-index
112 all docs	112 docs citations	112 times ranked	10250 citing authors

#	Article	IF	Citations
1	Nitrogen-Doped Graphene-Rich Catalysts Derived from Heteroatom Polymers for Oxygen Reduction in Nonaqueous Lithiumâ€“O₂ Battery Cathodes. ACS Nano, 2012, 6, 9764-9776.	7.3	486
2	Superionic Conductivity in Lithium-Rich Anti-Perovskites. Journal of the American Chemical Society, 2012, 134, 15042-15047.	6.6	458
3	Routes to High Energy Cathodes of Sodiumâ€Ion Batteries. Advanced Energy Materials, 2016, 6, 1501727.	10.2	408
4	New Anode Framework for Rechargeable Lithium Batteries. Chemistry of Materials, 2011, 23, 2027-2029.	3.2	360
5	Tunable Synthesis of Bismuth Ferrites with Various Morphologies. Advanced Materials, 2006, 18, 2145-2148.	11.1	283
6	NiFe (Oxy) Hydroxides Derived from NiFe Disulfides as an Efficient Oxygen Evolution Catalyst for Rechargeable Znâ€“Air Batteries: The Effect of Surface S Residues. Advanced Materials, 2018, 30, e1800757.	11.1	219
7	High-performance single atom bifunctional oxygen catalysts derived from ZIF-67 superstructures. Nano Energy, 2019, 61, 245-250.	8.2	205
8	3-V Full Cell Performance of Anode Framework TiNb₂O₇/Spinel LiNi_{0.5}Mn_{1.5}O₄. Chemistry of Materials, 2011, 23, 3404-3407.	3.2	198
9	Inhibition of Manganese Dissolution in Mn₂O₃ Cathode with Controllable Ni²⁺ Incorporation for Highâ€Performance Zinc Ion Battery. Advanced Functional Materials, 2021, 31, 2009412.	7.8	176
10	Sonocatalytic degradation of methyl orange in the presence of TiO2 catalysts and catalytic activity comparison of rutile and anatase. Ultrasonics Sonochemistry, 2005, 12, 331-337.	3.8	173
11	Ultrasound Switch and Thermal Selfâ€Repair of Morphology and Surface Wettability in a Cholesterolâ€Based Selfâ€Assembly System. Angewandte Chemie - International Edition, 2008, 47, 1063-1067.	7.2	163
12	Synthesis, Crystal Structure, and Elastic Properties of Novel Tungsten Nitrides. Chemistry of Materials, 2012, 24, 3023-3028.	3.2	154
13	Tungstenâ€Doped L1₀â€PtCo Ultrasmall Nanoparticles as a Highâ€Performance Fuel Cell Cathode. Angewandte Chemie - International Edition, 2019, 58, 15471-15477.	7.2	150
14	Metalâ€“Organic Framework Derived Honeycomb Co₉S₈@C Composites for Highâ€Performance Supercapacitors. Advanced Energy Materials, 2018, 8, 1801080.	10.2	147
15	Preparation and Study of Polyacryamide-Stabilized Silver Nanoparticles through a One-Pot Process. Journal of Physical Chemistry B, 2006, 110, 11224-11231.	1.2	144
16	A Dualâ€Insertion Type Sodiumâ€Ion Full Cell Based on Highâ€Quality Ternaryâ€Metal Prussian Blue Analogs. Advanced Energy Materials, 2018, 8, 1702856.	10.2	143
17	Low-Cost and High-Performance Hard Carbon Anode Materials for Sodium-Ion Batteries. ACS Omega, 2017, 2, 1687-1695.	1.6	142
18	Ionic distribution and conductivity in lithium garnet Li7La3Zr2O12. Journal of Power Sources, 2012, 209, 278-281.	4.0	141

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19	Rare Earth Ionâ€Doped CsPbBr₃ Nanocrystals. Advanced Optical Materials, 2018, 6, 1700864.	3.6	130
20	High valence Mo-doped Na₃V₂(PO₄)₃/C as a high rate and stable cycle-life cathode for sodium battery. Journal of Materials Chemistry A, 2018, 6, 1390-1396.	5.2	129
21	Subâ€6 nm Fully Ordered L1₀â€Ptâ€“Niâ€“Co Nanoparticles Enhance Oxygen Reduction via Co Doping Induced Ferromagnetism Enhancement and Optimized Surface Strain. Advanced Energy Materials, 2019, 9, 1803771.	10.2	127
22	Bifunctional Atomically Dispersed Moâ€“N₂/C Nanosheets Boost Lithium Sulfide Deposition/Decomposition for Stable Lithiumâ€“Sulfur Batteries. ACS Nano, 2020, 14, 10115-10126.	7.3	106
23	Highâ€Performance Direct Methanol Fuel Cells with Preciousâ€Metalâ€Free Cathode. Advanced Science, 2016, 3, 1600140.	5.6	105
24	Amorphous Coâ€“Feâ€“P nanospheres for efficient water oxidation. Journal of Materials Chemistry A, 2017, 5, 25378-25384.	5.2	100
25	Superior Na-ion storage achieved by Ti substitution in Na3V2(PO4)3. Energy Storage Materials, 2018, 15, 108-115.	9.5	100
26	Porous N, B co-doped carbon nanotubes as efficient metal-free electrocatalysts for ORR and Zn-air batteries. Chemical Engineering Journal, 2021, 422, 130134.	6.6	98
27	Experimental visualization of lithium conduction pathways in garnet-type Li7La3Zr2O12. Chemical Communications, 2012, 48, 9840.	2.2	95
28	Structure Distortion Induced Monoclinic Nickel Hexacyanoferrate as Highâ€Performance Cathode for Naâ€Ion Batteries. Advanced Energy Materials, 2019, 9, 1803158.	10.2	93
29	Atomicâ€Level Feâ€Nâ€C Coupled with Fe₃Câ€Fe Nanocomposites in Carbon Matrixes as Highâ€Efficiency Bifunctional Oxygen Catalysts. Small, 2020, 16, e1906057.	5.2	90
30	Regulating solvation structure to stabilize zinc anode by fastening the free water molecules with an inorganic colloidal electrolyte. Nano Energy, 2022, 93, 106839.	8.2	88
31	High-Performance Hard Carbon Anode: Tunable Local Structures and Sodium Storage Mechanism. ACS Applied Energy Materials, 2018, 1, 2295-2305.	2.5	87
32	A Metalâ€“Organic Compound as Cathode Material with Superhigh Capacity Achieved by Reversible Cationic and Anionic Redox Chemistry for Highâ€Energy Sodiumâ€Ion Batteries. Angewandte Chemie - International Edition, 2017, 56, 6793-6797.	7.2	85
33	Lithium Ion Intercalation Performance of Niobium Oxides: KNb₅O₁₃ and K₆Nb_{10.8}O₃₀. Chemistry of Materials, 2009, 21, 4753-4755.	3.2	83
34	Thermally-induced reversible structural isomerization in colloidal semiconductor CdS magic-size clusters. Nature Communications, 2018, 9, 2499.	5.8	79
35	Enhanced Oxygen Evolution Reaction Activity by Encapsulating NiFe Alloy Nanoparticles in Nitrogen-Doped Carbon Nanofibers. ACS Applied Materials & Interfaces, 2020, 12, 31503-31513.	4.0	78
36	Graphene-Roll-Wrapped Prussian Blue Nanospheres as a High-Performance Binder-Free Cathode for Sodium-Ion Batteries. ACS Applied Materials & Interfaces, 2017, 9, 25317-25322.	4.0	75

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37	Efficient entrapment and catalytic conversion of lithium polysulfides on hollow metal oxide submicro-spheres as lithiumâ€“sulfur battery cathodes. Nanoscale, 2018, 10, 5634-5641.	2.8	74
38	Enhancing Sodium-Ion Storage Behaviors in TiNb₂O₇ by Mechanical Ball Milling. ACS Applied Materials & Interfaces, 2017, 9, 8696-8703.	4.0	70
39	Two Birds with One Stone: Boosting Zinc-Ion Insertion/Extraction Kinetics and Suppressing Vanadium Dissolution of V₂O₅ via La³⁺ Incorporation Enable Advanced Zinc-Ion Batteries. ACS Applied Materials & Interfaces, 2021, 13, 38416-38424.	4.0	70
40	F-doped O3-NaNi1/3Fe1/3Mn1/3O2 as high-performance cathode materials for sodium-ion batteries. Science China Materials, 2017, 60, 629-636.	3.5	64
41	Realization of a High-Voltage and High-Rate Nickel-Rich NCM Cathode Material for LIBs by Co and Ti Dual Modification. ACS Applied Materials & Interfaces, 2021, 13, 17707-17716.	4.0	64
42	Defect-free-induced Na⁺ disordering in electrode materials. Energy and Environmental Science, 2021, 14, 3130-3140.	15.6	62
43	Selective Synthesis of TbMn2O5 Nanorods and TbMnO3 Micron Crystals. Journal of the American Chemical Society, 2006, 128, 14454-14455.	6.6	58
44	Electron density modulation of MoP by rare earth metal as highly efficient electrocatalysts for pH-universal hydrogen evolution reaction. Applied Catalysis B: Environmental, 2021, 299, 120657.	10.8	57
45	Ultrathin and defect-rich intermetallic Pd₂Sn nanosheets for efficient oxygen reduction electrocatalysis. Journal of Materials Chemistry A, 2020, 8, 15665-15669.	5.2	54
46	Structure, morphology, and cathode performance of Li1â^'x[Ni0.5Mn1.5]O4 prepared by coprecipitation with oxalic acid. Journal of Power Sources, 2010, 195, 2918-2923.	4.0	53
47	Porous NaTi₂(PO₄)₃/C Hierarchical Nanofibers for Ultrafast Electrochemical Energy Storage. ACS Applied Materials & Interfaces, 2018, 10, 27039-27046.	4.0	52
48	F-Doped NaTi₂(PO₄)₃/C Nanocomposite as a High-Performance Anode for Sodium-Ion Batteries. ACS Applied Materials & Interfaces, 2019, 11, 3116-3124.	4.0	52
49	Crystallization-induced ultrafast Na-ion diffusion in nickel hexacyanoferrate for high-performance sodium-ion batteries. Nano Energy, 2020, 67, 104250.	8.2	52
50	Promoting C₂₊ Production from Electrochemical CO₂ Reduction on Shape-Controlled Cuprous Oxide Nanocrystals with High-Index Facets. ACS Sustainable Chemistry and Engineering, 2020, 8, 15223-15229.	3.2	51
51	Hierarchical Cu doped SnSe nanoclusters as high-performance anode for sodium-ion batteries. Electrochimica Acta, 2018, 282, 973-980.	2.6	50
52	Access to M[sup 3+]/M[sup 2+] Redox Couples in Layered LiMS[sub 2] Sulfides (M=Ti,â€,V,â€,Cr) as Anodes for Li-Ion Battery. Journal of the Electrochemical Society, 2009, 156, A703.	1.3	46
53	Elemental selenium enables enhanced water oxidation electrocatalysis of NiFe layered double hydroxides. Nanoscale, 2019, 11, 17376-17383.	2.8	46
54	Enabling Anionic Redox Stability of P2â€Na_{5/6}Li_{1/4}Mn_{3/4}O₂ by Mg Substitution. Advanced Materials, 2022, 34, e2105404.	11.1	46

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55	Inâ€…Situ Selfâ€Assembly of Coreâ€“Shell Multimetal Prussian Blue Analogues for Highâ€Performance Sodiumâ€Ion Batteries. ChemSusChem, 2019, 12, 4786-4790.	3.6	45
56	New P2-Type Honeycomb-Layered Sodium-Ion Conductor: Na₂Mg₂TeO₆. ACS Applied Materials & Interfaces, 2018, 10, 15760-15766.	4.0	44
57	Nitrogen-doped carbon coated LiNi0.6Co0.2Mn0.2O2 cathode with enhanced electrochemical performance for Li-Ion batteries. Electrochimica Acta, 2018, 284, 526-533.	2.6	44
58	Phase-transformed Mo4P3 nanoparticles as efficient catalysts towards lithium polysulfide conversion for lithiumâ€“sulfur battery. Electrochimica Acta, 2020, 330, 135310.	2.6	44
59	Synthesis and magnetic property of submicron Bi2Fe4O9. Journal of Crystal Growth, 2006, 294, 469-473.	0.7	43
60	Hydrochloric acid corrosion induced bifunctional free-standing NiFe hydroxide nanosheets towards high-performance alkaline seawater splitting. Nanoscale, 2020, 12, 21743-21749.	2.8	43
61	Dual redox-active copper hexacyanoferrate nanosheets as cathode materials for advanced sodium-ion batteries. Energy Storage Materials, 2020, 33, 432-441.	9.5	43
62	A P2â€Type Layered Superionic Conductor Gaâ€Doped Na₂Zn₂TeO₆ for Allâ€Solidâ€State Sodiumâ€Ion Batteries. Chemistry - A European Journal, 2018, 24, 1057-1061.	1.7	42
63	Ca-doped Na2Zn2TeO6 layered sodium conductor for all-solid-state sodium-ion batteries. Electrochimica Acta, 2019, 298, 121-126.	2.6	40
64	In Situ FTIR-Assisted Synthesis of Nickel Hexacyanoferrate Cathodes for Long-Life Sodium-Ion Batteries. ACS Applied Materials & Interfaces, 2019, 11, 29985-29992.	4.0	39
65	Effects of Sr-site deficiency on structure and electrochemical performance in Sr 2 MgMoO 6 for solid-oxide fuel cell. Journal of Power Sources, 2014, 270, 441-448.	4.0	38
66	A novel photoâ€responsive organogel based on azobenzene. Journal of Physical Organic Chemistry, 2008, 21, 338-343.	0.9	37
67	Crystal structure and encapsulation dynamics of ice II-structured neon hydrate. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 10456-10461.	3.3	36
68	A Metalâ€“Organic Compound as Cathode Material with Superhigh Capacity Achieved by Reversible Cationic and Anionic Redox Chemistry for Highâ€Energy Sodiumâ€Ion Batteries. Angewandte Chemie, 2017, 129, 6897-6901.	1.6	36
69	A New Pnictide Superconductor without Iron. Journal of the American Chemical Society, 2010, 132, 908-909.	6.6	35
70	3D hierarchical porous Co_{1â^'x}S@C derived from a ZIF-67 single crystals self-assembling superstructure with superior pseudocapacitance. Journal of Materials Chemistry A, 2019, 7, 17248-17253.	5.2	34
71	High pressure-high temperature synthesis of lithium-rich Li3O(Cl, Br) and Li3â^'xCax/2OCl anti-perovskite halides. Inorganic Chemistry Communication, 2014, 48, 140-143.	1.8	33
72	Highly crystalline nickel hexacyanoferrate as a long-life cathode material for sodium-ion batteries. RSC Advances, 2020, 10, 27033-27041.	1.7	31

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73	Tungstenâ€Đoped L1 0 â€PtCo Ultrasmall Nanoparticles as a Highâ€Performance Fuel Cell Cathode. Angewandte Chemie, 2019, 131, 15617-15623.	1.6	30
74	Constructing Coâ€“Nâ€“C Catalyst via a Double Crosslinking Hydrogel Strategy for Enhanced Oxygen Reduction Catalysis in Fuel Cells. Small, 2021, 17, e2100735.	5.2	29
75	Novel Cerium Hexacyanoferrate(II) as Cathode Material for Sodium-Ion Batteries. ACS Applied Energy Materials, 2019, 2, 187-191.	2.5	26
76	Accelerated polysulfide conversion on hierarchical porous vanadiumâ€“nitrogenâ€“carbon for advanced lithiumâ€“sulfur batteries. Nanoscale, 2020, 12, 584-590.	2.8	26
77	Bimetallic Co/Mo₂C Nanoparticles Embedded in 3D Hierarchical Nâ€doped Carbon Heterostructures as Highly Efficient Electrocatalysts for Water Splitting. ChemCatChem, 2020, 12, 3737-3745.	1.8	26
78	Jahnâ€“Teller distortion in perovskite KCuF3 under high pressure. Journal of Fluorine Chemistry, 2011, 132, 1117-1121.	0.9	23
79	Immobilizing an organic electrode material through Ï€â€“Ï€ interaction for high-performance Li-organic batteries. Journal of Materials Chemistry A, 2019, 7, 22398-22404.	5.2	23
80	N,Sâ€Coâ€Doped Porous Carbon Nanofiber Films Derived from Fullerenes (C₆₀) as Efficient Electrocatalysts for Oxygen Reduction and a Znâ€“Air Battery. Chemistry - A European Journal, 2021, 27, 1423-1429.	1.7	22
81	Solvothermal synthesis and magnetic properties of pyrite Co1âˆ’xFexS2 with various morphologies. Materials Letters, 2006, 60, 1805-1808.	1.3	20
82	Controllable synthesis and magnetic property of BiMn2O5 crystals. Materials Research Bulletin, 2008, 43, 1702-1708.	2.7	20
83	Redox Behaviors of Ni and Cr with Different Counter Cations in Spinel Cathodes for Li-Ion Batteries. Journal of the Electrochemical Society, 2010, 157, A770.	1.3	20
84	Polymer-assisted synthesis of LiNi2/3Mn1/3O2 cathode material with enhanced electrochemical performance. Journal of Alloys and Compounds, 2013, 559, 203-208.	2.8	20
85	Construction of an N-Decorated Carbon-Encapsulated W₂C/WP Heterostructure as an Efficient Electrocatalyst for Hydrogen Evolution in Both Alkaline and Acidic Media. ACS Applied Materials & Interfaces, 2021, 13, 53955-53964.	4.0	20
86	Li₆La₃SnMO₁₂(M = Sb, Nb, Ta), a Family of Lithium Garnets with High Li-Ion Conductivity. Journal of the Electrochemical Society, 2012, 159, A1148-A1151.	1.3	19
87	Local Structural Changes and Inductive Effects on Ion Conduction in Antiperovskite Solid Electrolytes. Chemistry of Materials, 2020, 32, 8827-8835.	3.2	19
88	Correlation between Potassium-Ion Storage Mechanism and Local Structural Evolution in Hard Carbon Materials. Chemistry of Materials, 2022, 34, 4202-4211.	3.2	19
89	A new layered titanate Na₂Li₂Ti₅O₁₂as a high-performance intercalation anode for sodium-ion batteries. Journal of Materials Chemistry A, 2017, 5, 22208-22215.	5.2	18
90	An effective dual-modification strategy to enhance the performance of LiNi_{0.6}Co_{0.2}Mn_{0.2}O₂ cathode for Li-ion batteries. Nanoscale, 2021, 13, 4670-4677.	2.8	17

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91	Local Structures of Soft Carbon and Electrochemical Performance of Potassium-Ion Batteries. ACS Applied Materials & Interfaces, 2021, 13, 28261-28269.	4.0	17
92	Al doping effects on LiCrTiO₄ as an anode for lithium-ion batteries. RSC Advances, 2017, 7, 4791-4797.	1.7	16
93	Yolk@Shell Structured MnS@Nitrogen-Doped Carbon as a Sulfur Host and Polysulfide Conversion Booster for Lithium/Sodium Sulfur Batteries. ACS Applied Energy Materials, 2021, 4, 3487-3494.	2.5	16
94	Engineering a High-Voltage Durable Cathode/Electrolyte Interface for All-Solid-State Lithium Metal Batteries via In Situ Electropolymerization. ACS Applied Materials & Interfaces, 2022, 14, 21018-21027.	4.0	15
95	Molybdenumâ€doped ordered L1₀â€PdZn nanosheets for enhanced oxygen reduction electrocatalysis. SusMat, 2022, 2, 347-356.	7.8	13
96	Unusual structural evolution in KCuF<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow /><mml:mn>3</mml:mn></mml:msub></mml:math>at high temperatures by neutron powder diffraction. Physical Review B, 2013, 87, .	1.1	12
97	A High Rate and Stable Hybrid Li/Naâ€ion Battery Based on a Hydrated Molten Inorganic Salt Electrolyte. Small, 2021, 17, e2101650.	5.2	12
98	Defect-rich N/S-co-doped porous hollow carbon nanospheres derived from fullerenes as efficient electrocatalysts for the oxygen-reduction reaction and Znâ€“air batteries. Materials Chemistry Frontiers, 2021, 5, 7873-7882.	3.2	12
99	Redox potential regulation toward suppressing hydrogen evolution in aqueous sodium-ion batteries: Na_{1.5}Ti_{1.5}Fe_{0.5}(PO₄)₃. Journal of Materials Chemistry A, 2019, 7, 24953-24963.	5.2	10
100	Protrusionâ€Rich Cu@NiRu Core@shell Nanotubes for Efficient Alkaline Hydrogen Evolution Electrocatalysis. Small, 2022, 18, .	5.2	10
101	Core@shell Sb@Sb₂O₃ nanoparticles anchored on 3D nitrogen-doped carbon nanosheets as advanced anode materials for Li-ion batteries. Nanoscale Advances, 2020, 2, 5578-5583.	2.2	9
102	Defective porous carbon microrods derived from fullerenes (C₇₀) as high-performance electrocatalysts for the oxygen reduction reaction. Nanoscale, 2022, 14, 473-481.	2.8	8
103	Magnetic origin of phase stability in cubic Î³-MoN. Applied Physics Letters, 2018, 113, 221901.	1.5	6
104	Hard carbon spheres prepared by a modified StÃ¶ber method as anode material for high-performance potassium-ion batteries. RSC Advances, 2021, 11, 14883-14890.	1.7	6
105	Tailoring Electrolytes to Enable Low-Temperature Cycling of Ni-Rich NCM Cathode Materials for Li-Ion Batteries. ACS Applied Energy Materials, 2022, 5, 5867-5874.	2.5	4
106	Sodium Ion Batteries: A Dual-Insertion Type Sodium-Ion Full Cell Based on High-Quality Ternary-Metal Prussian Blue Analogs (Adv. Energy Mater. 11/2018). Advanced Energy Materials, 2018, 8, 1870048.	10.2	3
107	Boosting Li/Na storage performance of graphite by defect engineering. RSC Advances, 2021, 11, 22297-22304.	1.7	3
108	Seamlessly Merging the Capacity of P into Sb at Same Voltage with Maintained Superior Cycle Stability and Lowâ€temperature Performance for Liâ€ion Batteries. Energy and Environmental Materials, 2023, 6, .	7.3	3

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109	â€œRoom Temperature Molten Saltâ€•Based Polymer Electrolyte Enabling a High-Rate and High-Thermal Stability Hybrid Li/Na-Ion Battery. ACS Applied Energy Materials, 0, , .	2.5	3