Dingguo Xia

List of Publications by Year
in descending order

118	8,433	34016	45213
papers	citations	52 h-index	90 g-index

123	123	123	10781
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Sulfuration of Liâ€Rich Mnâ€Based Cathode Materials for Multianionic Redox and Stabilized Coordination Environment. Advanced Materials, 2022, 34, e2109564.	11.1	39
2	Spinel LiMn2O4 integrated with coating and doping by Sn self-segregation. International Journal of Minerals, Metallurgy and Materials, 2022, 29, 909-916.	2.4	4
3	Nanoconfining red phosphorus within MOF-derived hierarchically porous carbon networks for high performance potassium storage. Materials Chemistry Frontiers, 2022, 6, 2184-2189.	3.2	2
4	Covalent organic framework-based materials for energy applications. Energy and Environmental Science, 2021, 14, 688-728.	15.6	209
5	3D ordered macroporous copper nitrideâ€“titanium oxynitride as highly efficient electrocatalysts for universal-pH hydrogen evolution reaction. Journal of Materials Chemistry A, 2021, 9, 14392-14399.	5.2	15
6	Insight of reaction mechanism and anionic redox behavior for Li-rich and Mn-based oxide materials from local structure. Nano Energy, 2021, 83, 105812.	8.2	24
7	Metalâ€Ligand Ï€ Interactions in Lithiumâ€Rich Li₂RhO₃ Cathode Material Activate Bimodal Anionic Redox. Advanced Energy Materials, 2021, 11, 2100892.	10.2	21
8	Relationship between Voltage Hysteresis and Voltage Decay in Lithium-Rich Layered Oxide Cathodes. Journal of Physical Chemistry C, 2021, 125, 16913-16920.	1.5	12
9	Sub-2 nm Ultrasmall High-Entropy Alloy Nanoparticles for Extremely Superior Electrocatalytic Hydrogen Evolution. Journal of the American Chemical Society, 2021, 143, 17117-17127.	6.6	202
10	Systematic density functional theory investigations on cubic lithium-rich iron-based Li2FeO3: A multiple electrons cationic and anionic redox cathode material. ETransportation, 2021, 10, 100141.	6.8	8
11	Inhibition of oxygen dimerization by local symmetry tuning in Li-rich layered oxides for improved stability. Nature Communications, 2020, 11, 4973.	5.8	66
12	A Highâ€Performance Liâ€“Mnâ€“O Liâ€rich Cathode Material with Rhombohedral Symmetry via Intralayer Li/Mn Disordering. Advanced Materials, 2020, 32, e2000190.	11.1	83
13	O2-Type Li_{0.78}[Li_{0.24}Mn_{0.76}]O₂ Nanowires for High-Performance Lithium-Ion Battery Cathode. Nano Letters, 2020, 20, 5779-5785.	4.5	37
14	Enabling an intrinsically safe and highâ€energyâ€density 4.5 Vâ€class Liâ€ion battery with nonflammable electrolyte. InformaÄnÃ-MateriÃ¡ly, 2020, 2, 984-992.	8.5	81
15	Suppressing Voltage Fading of Liâ€Rich Oxide Cathode via Building a Wellâ€Protected and Partiallyâ€Protonated Surface by Polyacrylic Acid Binder for Cycleâ€Stable Liâ€ion Batteries. Advanced Energy Materials, 2020, 10, 1904264.	10.2	101
16	Electrolytic-anion-redox adsorption pseudocapacitance in nanosized lithium-free transition metal oxides as cathode materials for Li-ion batteries. Nano Energy, 2020, 72, 104727.	8.2	49
17	Voltage Decay in Layered Li-Rich Mn-Based Cathode Materials. Electrochemical Energy Reviews, 2019, 2, 606-623.	13.1	108
18	Mitigating Voltage Decay of Li-Rich Layered Oxide by Incorporation of 5d Metal Rhenium. Journal of Physical Chemistry C, 2019, 123, 18870-18876.	1.5	23

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19	Atomically ordered non-precious Co3Ta intermetallic nanoparticles as high-performance catalysts for hydrazine electrooxidation. Nature Communications, 2019, 10, 4514.	5.8	80
20	Ultrafine Ru/RuO_x Nanoparticles Uniformly Anchored on Carbon Nanotubes as Cathode Electrocatalyst for Lithiumâ€Oxygen Batteries. ChemistrySelect, 2019, 4, 4593-4597.	0.7	11
21	Three-electron reversible redox for a high-energy fluorophosphate cathode: Na₃V₂O₂(PO₄)₂F. Chemical Communications, 2019, 55, 3979-3982.	2.2	18
22	Surface thermodynamic stability of Li-rich Li2MnO3: Effect of defective graphene. Energy Storage Materials, 2019, 22, 113-119.	9.5	45
23	Atomically Dispersed Metal Sites in MOFâ€Based Materials for Electrocatalytic and Photocatalytic Energy Conversion. Angewandte Chemie - International Edition, 2018, 57, 9604-9633.	7.2	452
24	Atomar dispergierte Metallzentren in Metallâ€organischen GerÃ¼ststrukturen fÃ¼r die elektrokatalytische und photokatalytische Energieumwandlung. Angewandte Chemie, 2018, 130, 9750-9780.	1.6	58
25	A highly active and durable iron/cobalt alloy catalyst encapsulated in N-doped graphitic carbon nanotubes for oxygen reduction reaction by a nanofibrous dicyandiamide template. Journal of Materials Chemistry A, 2018, 6, 5962-5970.	5.2	77
26	A Highâ€Capacity O2â€Type Liâ€Rich Cathode Material with a Singleâ€Layer Li₂MnO₃ Superstructure. Advanced Materials, 2018, 30, e1707255.	11.1	197
27	Thermodynamic Activation of Charge Transfer in Anionic Redox Process for Liâ€Ion Batteries. Advanced Functional Materials, 2018, 28, 1704864.	7.8	49
28	Building a cycle-stable sulphur cathode by tailoring its redox reaction into a solid-phase conversion mechanism. Journal of Materials Chemistry A, 2018, 6, 23396-23407.	5.2	52
29	Effects of Particle Size on Voltage Fade for Li-Rich Mn-Based Layered Oxides. ACS Omega, 2018, 3, 11136-11143.	1.6	8
30	Crossed PtCoCu Alloy Nanocrystals with Highâ€Index Facets as Highly Active Catalyst for Methanol Oxidation Reaction. Advanced Materials Interfaces, 2018, 5, 1800297.	1.9	19
31	Suppressing Voltage Decay of a Lithium-Rich Cathode Material by Surface Enrichment with Atomic Ruthenium. ACS Applied Materials & Interfaces, 2018, 10, 21349-21355.	4.0	36
32	Tuning the Reversibility of Oxygen Redox in Lithium-Rich Layered Oxides. Chemistry of Materials, 2017, 29, 2811-2818.	3.2	56
33	One Step Synthesis of Uniform SnO₂ Electrode by UV Curing Technology toward Enhanced Lithium-Ion Storage. ACS Applied Materials & Interfaces, 2017, 9, 7169-7176.	4.0	22
34	High-Performance Energy Storage and Conversion Materials Derived from a Single Metalâ€“Organic Framework/Graphene Aerogel Composite. Nano Letters, 2017, 17, 2788-2795.	4.5	348
35	First-Principles Study: Tuning the Redox Behavior of Lithium-Rich Layered Oxides by Chlorine Doping. Journal of Physical Chemistry C, 2017, 121, 7155-7163.	1.5	41
36	Application of Synchrotron Radiation Technologies to Electrode Materials for Liâ€and Naâ€Ion Batteries. Advanced Energy Materials, 2017, 7, 1700460.	10.2	39

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37	Synthesis of Si-Induced MnO/Mn₂SiO₄@C Cuboids as High-Performance Anodes for Lithium-Ion Batteries. ACS Applied Materials & Interfaces, 2017, 9, 43657-43664.	4.0	8
38	Anionic Redox in Rechargeable Lithium Batteries. Advanced Materials, 2017, 29, 1701054.	11.1	220
39	Boron Nitride Nanocages as High Activity Electrocatalysts for Oxygen Reduction Reaction: Synergistic Catalysis by Dual Active Sites. Journal of Physical Chemistry C, 2016, 120, 28912-28916.	1.5	41
40	Lithiumâ€Ion Batteries: Understanding the Stability for Liâ€Rich Layered Oxide Li₂RuO₃ Cathode (Adv. Funct. Mater. 9/2016). Advanced Functional Materials, 2016, 26, 1306-1306.	7.8	5
41	Oxygen Reduction: Non-Pt Nanostructured Catalysts for Oxygen Reduction Reaction: Synthesis, Catalytic Activity and its Key Factors (Adv. Energy Mater. 17/2016). Advanced Energy Materials, 2016, 6, .	10.2	1
42	Layered Transition Metal Oxynitride Co₃Mo₂O_xN_{6â€“x}/C Catalyst for Oxygen Reduction Reaction. ACS Applied Materials & Interfaces, 2016, 8, 29536-29542.	4.0	12
43	Nonâ€Pt Nanostructured Catalysts for Oxygen Reduction Reaction: Synthesis, Catalytic Activity and its Key Factors. Advanced Energy Materials, 2016, 6, 1600458.	10.2	160
44	Tuning the Electronic Structure of the Metalâ€“Oxygen Group by Silicon Substitution in Lithium-Rich Manganese-Based Oxides for Superior Performance. Journal of Physical Chemistry C, 2016, 120, 13421-13426.	1.5	23
45	Understanding the Stability for Liâ€Rich Layered Oxide Li₂RuO₃ Cathode. Advanced Functional Materials, 2016, 26, 1330-1337.	7.8	118
46	Tuning ultrafine manganese oxide nanowire synthesis seeded by Si particles and its superior Li storage behaviors. NPG Asia Materials, 2016, 8, e255-e255.	3.8	9
47	Catalytic performance and mechanism of N-CoTi@CoTiO 3 catalysts for oxygen reduction reaction. Nano Energy, 2016, 20, 134-143.	8.2	33
48	Designing and Modifying of Lithium-Rich Layered Compound Based on Anion Redox. ECS Meeting Abstracts, 2016, , .	0.0	0
49	Lithium Ion Batteries: Facile Synthesis of Ultrasmall CoS₂Nanoparticles within Thin N-Doped Porous Carbon Shell for High Performance Lithium-Ion Batteries (Small 21/2015). Small, 2015, 11, 2510-2510.	5.2	4
50	Probing the Influence of the Conjugated Structure and Halogen Atoms of Poly-Iron-Phthalocyanine on the Oxygen Reduction Reaction by X-ray Absorption Spectroscopy and Density Functional Theory. Electrochimica Acta, 2015, 154, 102-109.	2.6	11
51	Origins for the Synergetic Effects of AuCu₃ in Catalysis for Oxygen Reduction Reaction. Journal of Physical Chemistry C, 2015, 119, 907-912.	1.5	13
52	Facile Synthesis of Ultrasmall CoS₂Nanoparticles within Thin N-Doped Porous Carbon Shell for High Performance Lithium-Ion Batteries. Small, 2015, 11, 2511-2517.	5.2	334
53	Selfâ€Assembled Alluaudite Na₂Fe_{3â^'x}Mn_x(PO₄)₃ Micro/Nanocompounds for Sodiumâ€Ion Battery Electrodes: A New Insight into Their Electronic and Geometric Structure. Chemistry - A European Journal, 2015, 21, 851-860.	1.7	63
54	A New Route Toward Improved Sodium Ion Batteries: A Multifunctional Fluffy Na_{0.67}FePO₄/CNT Nanocactus. Small, 2015, 11, 2170-2176.	5.2	43

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55	Direct Electrochemistry of Glucose Oxidase on a Three-Dimensional Porous Zirconium Phosphateâ€“Carbon Aerogel Composite. Electrocatalysis, 2015, 6, 341-347.	1.5	9
56	Compressibility of carbonophosphate bradleyite Na3Mg(CO3)(PO4) by X-ray diffraction and Raman spectroscopy. Physics and Chemistry of Minerals, 2015, 42, 191-201.	0.3	16
57	Why Do Boron and Nitrogen Doped Î±- and Î³-Graphyne Exhibit Different Oxygen Reduction Mechanism? A First-Principles Study. Journal of Physical Chemistry C, 2015, 119, 11493-11498.	1.5	77
58	One-Step, Facile and Ultrafast Synthesis of Phase- and Size-Controlled Ptâ€“Bi Intermetallic Nanocatalysts through Continuous-Flow Microfluidics. Journal of the American Chemical Society, 2015, 137, 6263-6269.	6.6	90
59	Rutheniumâ€Oxideâ€Coated Sodium Vanadium Fluorophosphate Nanowires as Highâ€Power Cathode Materials for Sodiumâ€Ion Batteries. Angewandte Chemie - International Edition, 2015, 54, 6452-6456.	7.2	132
60	Highly active Nâ€“PtTe/reduced graphene oxide intermetallic catalyst for formic acid oxidation. Nano Energy, 2015, 15, 24-32.	8.2	26
61	A highly homogeneous nanocoating strategy for Li-rich Mn-based layered oxides based on chemical conversion. Journal of Power Sources, 2015, 277, 393-402.	4.0	55
62	A metalâ€“organic framework route to in situ encapsulation of Co@Co₃O₄@C core@bishell nanoparticles into a highly ordered porous carbon matrix for oxygen reduction. Energy and Environmental Science, 2015, 8, 568-576.	15.6	571
63	Manipulating the Electronic Structure of Liâ€Rich Manganeseâ€Based Oxide Using Polyanions: Towards Better Electrochemical Performance. Advanced Functional Materials, 2014, 24, 5112-5118.	7.8	259
64	Electrocatalytic Dechlorination of Atrazine Using Binuclear Iron Phthalocyanine as Electrocatalysts. Electrocatalysis, 2014, 5, 68-74.	1.5	20
65	Fuel Cells: Nano-Intermetallic AuCu3Catalyst for Oxygen Reduction Reaction: Performance and Mechanism (Small 13/2014). Small, 2014, 10, 2661-2661.	5.2	1
66	Nanoâ€Intermetallic AuCu₃ Catalyst for Oxygen Reduction Reaction: Performance and Mechanism. Small, 2014, 10, 2662-2669.	5.2	54
67	A novel CoN electrocatalyst with high activity and stability toward oxygen reduction reaction. Journal of Materials Chemistry A, 2014, 2, 62-65.	5.2	55
68	Enhanced Cycle Performance of Lithiumâ€“Sulfur Batteries Using a Separator Modified with a PVDF-C Layer. ACS Applied Materials & Interfaces, 2014, 6, 20276-20281.	4.0	131
69	Well-defined carbon polyhedrons prepared from nano metalâ€“organic frameworks for oxygen reduction. Journal of Materials Chemistry A, 2014, 2, 11606-11613.	5.2	461
70	In-situ generated nano-Fe3C embedded into nitrogen-doped carbon for high performance anode in lithium ion battery. Electrochimica Acta, 2014, 116, 292-299.	2.6	66
71	High-performance self-organized Si nanocomposite anode for lithium-ion batteries. Journal of Energy Chemistry, 2014, 23, 291-300.	7.1	10
72	Detailed investigation of Na2.24FePO4CO3 as a cathode material for Na-ion batteries. Scientific Reports, 2014, 4, 4188.	1.6	75

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73	In situ synthesis of CoS2/RGO nanocomposites with enhanced electrode performance for lithium-ion batteries. Journal of Alloys and Compounds, 2013, 579, 372-376.	2.8	81
74	Structural and electrochemical characterization of 0.7LiFePO4Â·0.3Li3V2(PO4)3/C cathode materials using PEG and glucose as carbon sources. Electrochimica Acta, 2013, 106, 187-194.	2.6	9
75	Tailoring CoOâ€“ZnO nanorod and nanotube arrays for Li-ion battery anode materials. Journal of Materials Chemistry A, 2013, 1, 9654.	5.2	59
76	Facile preparation of hierarchically porous carbons from metal-organic gels and their application in energy storage. Scientific Reports, 2013, 3, 1935.	1.6	130
77	Mechanism of oxygen reduction reaction catalyzed by Fe(Co)â€“Nx/C. Physical Chemistry Chemical Physics, 2013, 15, 19330.	1.3	55
78	Synthesis of high dispersed intermetallic Ag4Sn/C and its enhanced oxygen reduction reaction activity. Journal of Power Sources, 2013, 240, 606-611.	4.0	29
79	High crystallinity binuclear iron phthalocyanine catalyst with enhanced performance for oxygen reduction reaction. Journal of Power Sources, 2013, 231, 91-96.	4.0	30
80	The Interactions of Oxygen with Small Gold Clusters on Nitrogen-Doped Graphene. Molecules, 2013, 18, 3279-3291.	1.7	17
81	Theoretical Study of Oxygen Reduction Reaction Catalysts: From Pt to Non-precious Metal Catalysts. Lecture Notes in Energy, 2013, , 339-373.	0.2	2
82	Surface phase composition of nanosized LiFePO4 and their enhanced electrochemical properties. Journal of Materials Chemistry A, 2013, 1, 6635.	5.2	15
83	Functional Zeoliticâ€Imidazolateâ€Frameworkâ€Templated Porous Carbon Materials for CO₂ Capture and Enhanced Capacitors. Chemistry - an Asian Journal, 2013, 8, 1879-1885.	1.7	131
84	cDNA cloning, expression, and enzymatic activity of a novel endogenous cellulase from the beetle Batocera horsfieldi. Gene, 2013, 514, 62-68.	1.0	18
85	Durability Enhancement of Intermetallics Electrocatalysts via N-anchor Effect for Fuel Cells. Scientific Reports, 2013, 3, 3234.	1.6	29
86	Supported sub-5nm Ptâ€“Fe intermetallic compounds for electrocatalytic application. Journal of Materials Chemistry, 2012, 22, 6047.	6.7	70
87	Fiber-like nanostructured Ti4O7 used as durable fuel cell catalyst support in oxygen reduction catalysis. Journal of Materials Chemistry, 2012, 22, 16560.	6.7	90
88	Density Functional Theory Study of the Oxygen Reduction Reaction on a Cobaltâ€“Polypyrrole Composite Catalyst. Journal of Physical Chemistry C, 2012, 116, 12553-12558.	1.5	35
89	DFT Study of Polyaniline and Metal Composites as Nonprecious Metal Catalysts for Oxygen Reduction in Fuel Cells. Journal of Physical Chemistry C, 2012, 116, 22737-22742.	1.5	39
90	An Fe3O4â€“FeOâ€“Fe@C composite and its application as anode for lithium-ion battery. Journal of Alloys and Compounds, 2012, 513, 460-465.	2.8	40

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91	Fe₃O₄/Fe/Carbon Composite and Its Application as Anode Material for Lithium-Ion Batteries. ACS Applied Materials & Interfaces, 2012, 4, 1350-1356.	4.0	110
92	Pore size-controlled gases and alcohols separation within ultramicroporous homochiral lanthanideâ€“organic frameworks. Journal of Materials Chemistry, 2012, 22, 7813.	6.7	53
93	Electrochemical lithium storage of C/Co composite as an anode material for lithium ion batteries. Electrochemistry Communications, 2012, 18, 44-47.	2.3	55
94	Controllable synthesis of coreâ€“shell Co@CoO nanocomposites with a superior performance as an anode material for lithium-ion batteries. Journal of Materials Chemistry, 2011, 21, 18279.	6.7	113
95	Density Functional Theory Study of the Oxygen Reduction Reaction on Metalloporphyrins and Metallophthalocyanines. Journal of Physical Chemistry C, 2011, 115, 9511-9517.	1.5	115
96	Facile synthesis of MnO/C anode materials for lithium-ion batteries. Electrochimica Acta, 2011, 56, 6448-6452.	2.6	151
97	Enhanced Electrochemical Performance of Li[Li[sub 0.2]Ni[sub 0.2]Mn[sub 0.6]]O[sub 2] Modified by Manganese Oxide Coating for Lithium-Ion Batteries. Electrochemical and Solid-State Letters, 2011, 14, A1.	2.2	64
98	Synthesis and study of Î»-MnO2 supported Pt nanocatalyst for methanol electro-oxidation. Rare Metals, 2010, 29, 187-192.	3.6	6
99	Stability, electrochemical behaviors and electronic structures of iron hydroxyl-phosphate. Materials Chemistry and Physics, 2010, 123, 28-34.	2.0	10
100	XAS study of LiFePO4 synthesized by solid state reactions and hydrothermal method. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2010, 619, 122-127.	0.7	13
101	Local structure of vanadium in doped LiFePO₄. Journal of Synchrotron Radiation, 2010, 17, 584-589.	1.0	17
102	Structural and morphological characterization of goldâ€“nickel electrocatalyst synthesized by taking advantage of the AuNi phase separation mechanism. Journal of Alloys and Compounds, 2010, 492, 83-87.	2.8	19
103	An Electrocatalyst for Methanol Oxidation in DMFC: PtBi/XC-72 with Pt Solid-Solution Structure. Journal of the Electrochemical Society, 2010, 157, B580.	1.3	16
104	Influence of the surfactant and temperature on the morphology and physico-chemical properties of hydrothermally synthesized composite oxide BiVO4. Materials Chemistry and Physics, 2009, 114, 69-72.	2.0	51
105	Synthesis and electrochemical performance of LiCoPO4 micron-rods by dispersant-aided hydrothermal method for lithium ion batteries. Rare Metals, 2009, 28, 117-121.	3.6	31
106	Preparation, characterization and electrochemical properties of mesoporous LiFe0.99Mo0.01PO4/C. Rare Metals, 2009, 28, 317-321.	3.6	1
107	Preparation and electrocatalytic property of Au-Pt/SnO2/GC composite electrode. Rare Metals, 2009, 28, 350-354.	3.6	3
108	Self-assembly of highly crystalline spherical BiVO4 in aqueous solutions. Journal of Crystal Growth, 2009, 311, 4505-4509.	0.7	32

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109	Methanol-tolerant MoN electrocatalyst synthesized through heat treatment of molybdenum tetraphenylporphyrin for four-electron oxygen reduction reaction. Journal of Power Sources, 2008, 177, 296-302.	4.0	78
110	Synthesises, characterizations and electrochemical properties of spherical-like LiFePO4 by hydrothermal method. Journal of Power Sources, 2008, 184, 633-636.	4.0	56
111	One-Pot Synthesis of Carbon Nanotube@SnO₂â^'Au Coaxial Nanocable for Lithium-Ion Batteries with High Rate Capability. Chemistry of Materials, 2008, 20, 6951-6956.	3.2	160
112	Investigation of Electronic Conductivity and Occupancy Sites of Mo Doped into LiFePO₄ by ab Initio Calculation and X-ray Absorption Spectroscopy. Journal of Physical Chemistry C, 2008, 112, 17450-17455.	1.5	56
113	Facile Synthesis of Coâ^'Pt Hollow Sphere Electrocatalyst. Chemistry of Materials, 2007, 19, 1840-1844.	3.2	142
114	Reply to Comment on â€œSynthesis of Ordered Intermetallic PtBi2Nanoparticles for Methanol-Tolerant Catalyst in Oxygen Electroreductionâ€• Chemistry of Materials, 2007, 19, 1530-1530.	3.2	1
115	Electrocatalytic Hydrogenation of 4-Chlorophenol on the Glassy Carbon Electrode Modified by Composite Polypyrrole/Palladium Film. Journal of Physical Chemistry B, 2006, 110, 4863-4868.	1.2	64
116	Synthesis of Ordered Intermetallic PtBi2Nanoparticles for Methanol-Tolerant Catalyst in Oxygen Electroreduction. Chemistry of Materials, 2006, 18, 5746-5749.	3.2	44
117	Electrocatalytic activity of ordered intermetallic PtSb for methanol electro-oxidation. Applied Surface Science, 2006, 252, 2191-2195.	3.1	65
118	Electrochemically reductive dechlorination of micro amounts of 2,4,6-trichlorophenol in aqueous medium on molybdenum oxide containing supported palladium. Electrochimica Acta, 2004, 50, 933-937.	2.6	43