Shuqiang Jiao

List of Publications by Year
in descending order

119	6,998	50170 46	62479 80
papers	citations	h-index	g-index

125	125	125	5957
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	A new aluminium-ion battery with high voltage, high safety and low cost. Chemical Communications, 2015, 51, 11892-11895.	2.2	411
2	High-Performance Aluminum-Ion Battery with CuS@C Microsphere Composite Cathode. ACS Nano, 2017, 11, 469-477.	7.3	388
3	A Novel Aluminumâ€•Ion Battery: Al/AlCl₃â€•[EMIm]Cl/Ni₃S₂@Graphene. Advanced Energy Materials, 2016, 6, 1600137.	10.2	365
4	A new cathode material for super-valent battery based on aluminium ion intercalation and deintercalation. Scientific Reports, 2013, 3, 3383.	1.6	286
5	In situ synthesis of Î±â€“Î² phase heterojunction on Bi2O3 nanowires with exceptional visible-light photocatalytic performance. Applied Catalysis B: Environmental, 2013, 142-143, 504-511.	10.8	263
6	Flexible Stable Solidâ€•State Alâ€•Ion Batteries. Advanced Functional Materials, 2019, 29, 1806799.	7.8	177
7	Rechargeable ultrahigh-capacity telluriumâ€“aluminum batteries. Energy and Environmental Science, 2019, 12, 1918-1927.	15.6	172
8	High-performance p-Cu₂O/n-TaON heterojunction nanorod photoanodes passivated with an ultrathin carbon sheath for photoelectrochemical water splitting. Energy and Environmental Science, 2014, 7, 3758-3768.	15.6	170
9	Microspheric Na₂Ti₃O₇consisting of tiny nanotubes: an anode material for sodium-ion batteries with ultrafast chargeâ€“discharge rates. Nanoscale, 2013, 5, 594-599.	2.8	167
10	Efficient visible-light-driven photocatalytic hydrogen production using CdS@TaON coreâ€“shell composites coupled with graphene oxide nanosheets. Journal of Materials Chemistry, 2012, 22, 7291.	6.7	157
11	Bi2O3 quantum dots decorated anatase TiO2 nanocrystals with exposed {001} facets on graphene sheets for enhanced visible-light photocatalytic performance. Applied Catalysis B: Environmental, 2013, 129, 333-341.	10.8	155
12	A long-life rechargeable Al ion battery based on molten salts. Journal of Materials Chemistry A, 2017, 5, 1282-1291.	5.2	153
13	Nonaqueous Rechargeable Aluminum Batteries: Progresses, Challenges, and Perspectives. Chemical Reviews, 2021, 121, 4903-4961.	23.0	147
14	An industrialized prototype of the rechargeable Al/AlCl 3 -[EMIm]Cl/graphite battery and recycling of the graphitic cathode into graphene. Carbon, 2016, 109, 276-281.	5.4	129
15	Porous CuO microsphere architectures as high-performance cathode materials for aluminum-ion batteries. Journal of Materials Chemistry A, 2018, 6, 3084-3090.	5.2	128
16	Novel metallurgical process for titanium production. Journal of Materials Research, 2006, 21, 2172-2175.	1.2	117
17	Ternary 3D architectures of CdS QDs/graphene/ZnIn2S4 heterostructures for efficient photocatalytic H2 production. Physical Chemistry Chemical Physics, 2013, 15, 15660.	1.3	117
18	Hierarchical metastable Î³-TaON hollow structures for efficient visible-light water splitting. Energy and Environmental Science, 2013, 6, 2134.	15.6	104

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19	Hierarchically Plasmonic Z-Scheme Photocatalyst of Ag/AgCl Nanocrystals Decorated Mesoporous Single-Crystalline Metastable Bi₂₀TiO₃₂ Nanosheets. Journal of Physical Chemistry C, 2013, 117, 5132-5141.	1.5	103
20	Flowerâ€like Vanadium Suflide/Reduced Graphene Oxide Composite: An Energy Storage Material for Aluminumâ€Ion Batteries. ChemSusChem, 2018, 11, 709-715.	3.6	101
21	A Novel Ultrafast Rechargeable Multiâ€Ions Battery. Advanced Materials, 2017, 29, 1606349.	11.1	97
22	Cobalt-bilayer catalyst decorated Ta3N5 nanorod arrays as integrated electrodes for photoelectrochemical water oxidation. Energy and Environmental Science, 2013, 6, 3322.	15.6	94
23	3D Bi12TiO20/TiO2 hierarchical heterostructure: Synthesis and enhanced visible-light photocatalytic activities. Journal of Hazardous Materials, 2011, 192, 1772-1779.	6.5	92
24	Three-dimensional Z-scheme AgCl/Ag/Î³-TaON heterostructural hollow spheres for enhanced visible-light photocatalytic performance. Applied Catalysis B: Environmental, 2013, 142-143, 579-589.	10.8	89
25	A novel dual-graphite aluminum-ion battery. Energy Storage Materials, 2018, 12, 119-127.	9.5	86
26	Ordered WO_{3âˆ'x} nanorods: facile synthesis and their electrochemical properties for aluminum-ion batteries. Chemical Communications, 2018, 54, 1343-1346.	2.2	86
27	Cu₃P as a novel cathode material for rechargeable aluminum-ion batteries. Journal of Materials Chemistry A, 2019, 7, 8368-8375.	5.2	85
28	Dense graphene papers: Toward stable and recoverable Al-ion battery cathodes with high volumetric and areal energy and power density. Energy Storage Materials, 2018, 13, 103-111.	9.5	81
29	Bi2O3 quantum-dot decorated nitrogen-doped Bi3NbO7 nanosheets: in situ synthesis and enhanced visible-light photocatalytic activity. CrystEngComm, 2012, 14, 5923.	1.3	71
30	Rechargeable Nickel Telluride/Aluminum Batteries with High Capacity and Enhanced Cycling Performance. ACS Nano, 2020, 14, 3469-3476.	7.3	70
31	In situ chemical reduction of the Ta3N5 quantum dots coupled TaON hollow spheres heterojunction photocatalyst for water oxidation. Journal of Materials Chemistry, 2012, 22, 21972.	6.7	65
32	Chromium-doped bismuth titanate nanosheets as enhanced visible-light photocatalysts with a high percentage of reactive {110} facets. Journal of Materials Chemistry, 2011, 21, 7296.	6.7	63
33	Three-dimensional MoS₂â€"CdSâ€"Î³-TaON hollow composites for enhanced visible-light-driven hydrogen evolution. Chemical Communications, 2014, 50, 1731-1734.	2.2	61
34	Nickel Phosphide Nanosheets Supported on Reduced Graphene Oxide for Enhanced Aluminum-Ion Batteries. ACS Sustainable Chemistry and Engineering, 2019, 7, 6004-6012.	3.2	61
35	PANI/Bi12TiO20 complex architectures: Controllable synthesis and enhanced visible-light photocatalytic activities. Applied Catalysis B: Environmental, 2011, 104, 399-406.	10.8	57
36	Hierarchical nitrogen doped bismuth niobate architectures: Controllable synthesis and excellent photocatalytic activity. Journal of Hazardous Materials, 2012, 217-218, 177-186.	6.5	57

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37	Metalâ€"Organic Framework-Derived Co₃O₄@MWCNTs Polyhedron as Cathode Material for a High-Performance Aluminum-Ion Battery. ACS Sustainable Chemistry and Engineering, 2019, 7, 16200-16208.	3.2	55
38	Gel electrolytes with a wide potential window for high-rate Al-ion batteries. Journal of Materials Chemistry A, 2019, 7, 20348-20356.	5.2	54
39	Stable Highâ€Capacity Organic Aluminumâ€"Porphyrin Batteries. Advanced Energy Materials, 2021, 11, 2101446.	10.2	54
40	Electrochemically assembling of a porous nano-polyaniline network in a reverse micelle and its application in a supercapacitor. Journal of Materials Chemistry, 2011, 21, 9027.	6.7	53
41	In Situ Self-Assembled FeWO₄/Graphene Mesoporous Composites for Li-Ion and Na-Ion Batteries. Chemistry of Materials, 2014, 26, 3721-3730.	3.2	52
42	A Rechargeable Alâ€"Te Battery. ACS Applied Energy Materials, 2018, 1, 4924-4930.	2.5	51
43	Bismuth titanate pyrochlore microspheres: Directed synthesis and their visible light photocatalytic activity. Journal of Solid State Chemistry, 2011, 184, 154-158.	1.4	50
44	Exfoliation Mechanism of Graphite Cathode in Ionic Liquids. ACS Applied Materials & Interfaces, 2017, 9, 36702-36707.	4.0	50
45	Sodium modified molybdenum sulfide via molten salt electrolysis as an anode material for high performance sodium-ion batteries. Physical Chemistry Chemical Physics, 2016, 18, 3204-3213.	1.3	49
46	Active cyano groups to coordinate AlCl2+ cation for rechargeable aluminum batteries. Energy Storage Materials, 2020, 33, 250-257.	9.5	49
47	Hydrothermal synthesis of CdS/CdLa2S4 heterostructures for efficient visible-light-driven photocatalytic hydrogen production. RSC Advances, 2012, 2, 10330.	1.7	48
48	Preparation of Titanium Deposit in Chloride Melts. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2011, 42, 1181-1187.	1.0	45
49	Nasicon material NaZr₂(PO₄)₃: a novel storage material for sodium-ion batteries. Journal of Materials Chemistry A, 2014, 2, 1341-1345.	5.2	44
50	A new consumable anode material of titanium oxycarbonitride for the USTB titanium process. Physical Chemistry Chemical Physics, 2014, 16, 8086.	1.3	42
51	The electrochemical behavior of an aluminum alloy anode for rechargeable Al-ion batteries using an AlCl₃â€"urea liquid electrolyte. RSC Advances, 2017, 7, 32288-32293.	1.7	41
52	Ternary AlCl₃-Urea-[EMIm]Cl Ionic Liquid Electrolyte for Rechargeable Aluminum-Ion Batteries. Journal of the Electrochemical Society, 2017, 164, A3093-A3100.	1.3	40
53	Alternate Storage of Opposite Charges in Multisites for Highâ€Energyâ€Density Alâ€"MOF Batteries. Advanced Materials, 2022, 34, e2110109.	11.1	39
54	Sb₂Se₃ nanorods with N-doped reduced graphene oxide hybrids as high-capacity positive electrode materials for rechargeable aluminum batteries. Nanoscale, 2019, 11, 16437-16444.	2.8	38

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55	Self-supporting and high-loading hierarchically porous Co-P cathode for advanced Al-ion battery. Chemical Engineering Journal, 2020, 389, 124370.	6.6	38
56	Modified separators for rechargeable high-capacity selenium-aluminium batteries. Chemical Engineering Journal, 2020, 385, 123452.	6.6	36
57	The Equilibrium Between Titanium Ions and Titanium Metal in NaCl-KCl Equimolar Molten Salt. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2013, 44, 906-913.	1.0	35
58	Electrochemical synthesis of titanium oxycarbide in a CaCl2 based molten salt. Electrochimica Acta, 2012, 75, 357-359.	2.6	33
59	Green and sustainable molten salt electrochemistry for the conversion of secondary carbon pollutants to advanced carbon materials. Journal of Materials Chemistry A, 2021, 9, 14119-14146.	5.2	32
60	The molten chlorides for aluminum-graphite rechargeable batteries. Journal of Alloys and Compounds, 2020, 821, 153285.	2.8	30
61	Coral-Like TeO₂ Microwires for Rechargeable Aluminum Batteries. ACS Sustainable Chemistry and Engineering, 2020, 8, 2416-2422.	3.2	29
62	Coordination interaction boosts energy storage in rechargeable Al battery with a positive electrode material of CuSe. Chemical Engineering Journal, 2021, 421, 127792.	6.6	28
63	Preparation of polyaniline modified TaON with enhanced visible light photocatalytic activities. Dalton Transactions, 2011, 40, 4038.	1.6	27
64	The Cathodic Behavior of Ti(III) Ion in a NaCl-2CsCl Melt. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2016, 47, 804-810.	1.0	27
65	The Effects of Anions Behaviors on Electrochemical Properties of Al/Graphite Rechargeable Aluminum-Ion Battery via Molten AlCl₃-NaCl Liquid Electrolyte. Journal of the Electrochemical Society, 2017, 164, A3292-A3302.	1.3	27
66	All-carbon positive electrodes for stable aluminium batteries. Journal of Energy Chemistry, 2020, 42, 17-26.	7.1	27
67	Single-crystal and hierarchical VSe₂ as an aluminum-ion battery cathode. Sustainable Energy and Fuels, 2019, 3, 2717-2724.	2.5	26
68	Nonmetal Current Collectors: The Key Component for Highâ€Energyâ€Density Aluminum Batteries. Advanced Materials, 2020, 32, e2001212.	11.1	26
69	A sodium ion intercalation material: a comparative study of amorphous and crystalline FePO₄. Physical Chemistry Chemical Physics, 2015, 17, 4551-4557.	1.3	25
70	Bismuth ferrite: an abnormal perovskite with electrochemical extraction of ions from A site. Journal of Materials Chemistry A, 2019, 7, 12176-12190.	5.2	25
71	Liquid gallium as long cycle life and recyclable negative electrode for Al-ion batteries. Chemical Engineering Journal, 2020, 391, 123594.	6.6	25
72	3D flower-like NaHTi₃O₇ nanotubes as high-performance anodes for sodium-ion batteries. Journal of Materials Chemistry A, 2015, 3, 16528-16534.	5.2	24

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73	The potential application of black and blue phosphorene as cathode materials in rechargeable aluminum batteries: a first-principles study. Physical Chemistry Chemical Physics, 2019, 21, 7021-7028.	1.3	24
74	Hierarchical N-doped porous carbon hosts for stabilizing tellurium in promoting Al-Te batteries. Journal of Energy Chemistry, 2021, 57, 378-385.	7.1	23
75	Producing metallic titanium through electro-refining of titanium nitride anode. Electrochemistry Communications, 2013, 35, 135-138.	2.3	22
76	Electrochemically depositing titanium(<scp>iii</scp>) ions at liquid tin in a NaClâ€“KCl melt. RSC Advances, 2015, 5, 62235-62240.	1.7	22
77	Electrochemical Behavior of Titanium(II) Ion in a Purified Calcium Chloride Melt. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2015, 46, 162-168.	1.0	22
78	NiCo₂S₄ Nanosheet with Hexagonal Architectures as an Advanced Cathode for Al-Ion Batteries. Journal of the Electrochemical Society, 2018, 165, A3504-A3509.	1.3	21
79	Cellulose-derived flake graphite as positive electrodes for Al-ion batteries. Sustainable Energy and Fuels, 2019, 3, 3561-3568.	2.5	21
80	Electrocatalysis for Continuous Multiâ€Step Reactions in Quasiâ€Solidâ€State Electrolytes Towards Highâ€Energy and Longâ€Life Aluminumâ€“Sulfur Batteries. Angewandte Chemie - International Edition, 2022, 61, .	7.2	21
81	Hierarchical Flower-Like MoS₂ Microspheres and Their Efficient Al Storage Properties. Journal of Physical Chemistry C, 2019, 123, 26794-26802.	1.5	20
82	Cu-Al Composite as the Negative Electrode for Long-life Al-Ion Batteries. Journal of the Electrochemical Society, 2019, 166, A3539-A3545.	1.3	20
83	A Rechargeable Al/Graphite Battery Based on AlCl₃/1â€butylâ€3â€methylimidazolium Chloride Ionic Liquid Electrolyte. ChemistrySelect, 2019, 4, 3018-3024.	0.7	20
84	A cobalt-based metalâ€“organic framework and its derived material as sulfur hosts for aluminumâ€“sulfur batteries with the chemical anchoring effect. Physical Chemistry Chemical Physics, 2021, 23, 10326-10334.	1.3	20
85	Al homogeneous deposition induced by N-containing functional groups for enhanced cycling stability of Al-ion battery negative electrode. Nano Research, 2021, 14, 646-653.	5.8	19
86	Stable Quasiâ€Solidâ€State Aluminum Batteries. Advanced Materials, 2022, 34, e2104557.	11.1	19
87	Facile synthesis and visible-light photocatalytic activity of bismuth titanate nanorods. Journal of Nanoparticle Research, 2011, 13, 5557-5564.	0.8	18
88	Experimental and firstâ€principles study of Tiâ€“Câ€“O system: Interplay of thermodynamic and structural properties. Journal of the American Ceramic Society, 2017, 100, 2253-2265.	1.9	17
89	A dual-protection strategy using CMK-3 coated selenium and modified separators for high-energy Alâ€“Se batteries. Inorganic Chemistry Frontiers, 2021, 8, 1030-1038.	3.0	16
90	Structural stability of Î²-TiO with disordered vacancies: A first-principles calculation. Physica B: Condensed Matter, 2013, 421, 110-116.	1.3	15

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91	Anodic Dissolution of Titanium Oxycarbide TiCxO1-x with Different O/C Ratio. Journal of the Electrochemical Society, 2019, 166, E22-E28.	1.3	15
92	Stable wide-temperature and low volume expansion Al batteries: Integrating few-layer graphene with multifunctional cobalt boride nanocluster as positive electrode. Nano Research, 2020, 13, 419-429.	5.8	15
93	Design Strategies of Highâ€Performance Positive Materials for Nonaqueous Rechargeable Aluminum Batteries: From Crystal Control to Battery Configuration. Small, 2022, 18, .	5.2	15
94	A high-performance dual-ion cell utilizing Si nanosphere@graphene anode. Electrochimica Acta, 2018, 282, 946-954.	2.6	13
95	Improved USTB Titanium Production with a Ti₂CO Anode Formed by Casting. Journal of the Electrochemical Society, 2019, 166, E226-E230.	1.3	13
96	Structural and Thermodynamic Properties of TiC x N y O z Solid Solution: Experimental Study and First-Principles Approaches. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2016, 47, 4721-4731.	1.1	12
97	Thick electrodes upon biomass-derivative carbon current collectors: High-areal capacity positive electrodes for aluminum-ion batteries. Electrochimica Acta, 2019, 323, 134805.	2.6	12
98	Self-supporting and dual-active 3D Co-S nanosheets constructed by ligand replacement reaction from MOF for rechargeable Al battery. Journal of Energy Chemistry, 2022, 69, 35-43.	7.1	12
99	A 4D x-ray computer microtomography for high-temperature electrochemistry. Science Advances, 2022, 8, eabm5678.	4.7	11
100	Rapid Electrodeposition of Ti on a Liquid Zn Cathode from a Consumable Casting TiC_{0.5}O_{0.5} Anode. Journal of the Electrochemical Society, 2020, 167, 123502.	1.3	9
101	Quantificational 4D Visualization of Industrial Electrodeposition. Advanced Science, 2021, 8, e2101373.	5.6	9
102	Graphene-encapsulated selenium@polyaniline nanowires with three-dimensional hierarchical architecture for high-capacity aluminumâ€“selenium batteries. Journal of Materials Chemistry A, 2022, 10, 15146-15154.	5.2	9
103	A strategy for massively suppressing the shuttle effect in rechargeable Alâ€“Te batteries. Inorganic Chemistry Frontiers, 2020, 7, 4000-4009.	3.0	8
104	Rechargeable High-Capacity Antimony-Aluminum Batteries. Journal of the Electrochemical Society, 2020, 167, 080541.	1.3	8
105	Electrochemical behavior of NiCl₂/Ni in acidic AlCl₃-based ionic liquid electrolyte. Inorganic Chemistry Frontiers, 2020, 7, 1909-1917.	3.0	8
106	Initial Electrode Kinetics of Anion Intercalation and Deâ€intercalation in Nonaqueous Alâ€Graphite Batteries â€. Chinese Journal of Chemistry, 2021, 39, 157-164.	2.6	8
107	A novel titanium oxycarbide phase with metal-vacancy (Ti1-C O1-): Structural and thermodynamic basis. Ceramics International, 2021, 47, 16324-16332.	2.3	8
108	Stable and low-voltage-hysteresis zinc negative electrode promoting aluminum dual-ion batteries. Chemical Engineering Journal, 2022, 430, 132743.	6.6	8

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109	Sb₂Te₃ Hexagonal Nanosheets as High-Capacity Positive Materials for Rechargeable Aluminum Batteries. ACS Applied Energy Materials, 2020, 3, 12635-12643.	2.5	7
110	Depolarization Behavior of Ti Deposition at Liquid Metal Cathodes in a NaCl-KCl-KF Melt. Journal of the Electrochemical Society, 2019, 166, E401-E406.	1.3	6
111	Pivot roles of noble metal in single-phase TaXzON (0 < Z â‰ 0.001) and heterostructured XÎ´/TaXzâˆ'Î´ON (X =) Tj ETQq1 1 0.784314 rg transfer for hydrogen production. Journal of Materials Chemistry A, 2013, 1, 5394.	5.2	5
112	Electrochemically Exfoliating Graphite Cathode to N-Doped Graphene Analogue and Its Excellent Al Storage Performance. Journal of the Electrochemical Society, 2019, 166, A1738-A1744.	1.3	5
113	Electrochemical Behaviour of K₂TiF₆ at Liquid Metal Cathodes in the LiFâ€"NaFâ€"KF Eutectic Melt. Electrochemistry, 2019, 87, 142-147.	0.6	4
114	Modified Al negative electrode for stable high-capacity Alâ€"Te batteries. International Journal of Minerals, Metallurgy and Materials, 2022, 29, 896-904.	2.4	4
115	Facile preparation of metallic vanadium from consumable V2CO solid solution by molten salt electrolysis. Separation and Purification Technology, 2022, 295, 121361.	3.9	4
116	Electrocatalysis for Continuous Multiâ€Step Reactions in Quasiâ€Solidâ€State Electrolytes Towards Highâ€Energy and Longâ€Life Aluminumâ€"Sulfur Batteries. Angewandte Chemie, 2022, 134, .	1.6	3
117	Electrochemical Behaviors of Consumable Ti₂CO@Al₂O₃ Anode for Ti Extraction by USTB Process. Journal of the Electrochemical Society, 2021, 168, 103508.	1.3	2
118	Titanium production through electrolysis of titanium oxycarbide consumable anodeâ€"the USTB process. , 2020, , 315-329.		1
119	FeWO4: An Anode Material for Sodium-Ion Batteries. , 2014, , 899-905.		0