

Shuqiang Jiao

List of Publications by Year in Descending Order

Source: <https://exaly.com/author-pdf/11706376/shuqiang-jiao-publications-by-year.pdf>

Version: 2024-04-23

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

122
papers

5,285
citations

38
h-index

70
g-index

125
ext. papers

6,133
ext. citations

10.5
avg, IF

6.07
L-index

#	Paper	IF	Citations
122	Alternate Storage of Opposite Charges in Multisite for High-Energy-Density Al-MOF Battery.. <i>Advanced Materials</i> , 2022 , e2110109	24	7
121	Self-supporting and dual-active 3D Co-S nanosheets constructed by ligand replacement reaction from MOF for rechargeable Al battery. <i>Journal of Energy Chemistry</i> , 2022 , 69, 35-43	12	1
120	Modified Al negative electrode for stable high-capacity Al/Se batteries. <i>International Journal of Minerals, Metallurgy and Materials</i> , 2022 , 29, 896-904	3.1	0
119	A 4D x-ray computer microtomography for high-temperature electrochemistry.. <i>Science Advances</i> , 2022 , 8, eabm5678	14.3	2
118	Facile preparation of metallic vanadium from consumable V ₂ O ₅ solid solution by molten salt electrolysis. <i>Separation and Purification Technology</i> , 2022 , 295, 121361	8.3	
117	Stable quasi-solid-state Aluminum Batteries. <i>Advanced Materials</i> , 2021 , e2104557	24	2
116	Electrochemical Behaviors of Consumable Ti ₂ CO@Al ₂ O ₃ Anode for Ti Extraction by USTB Process. <i>Journal of the Electrochemical Society</i> , 2021 , 168, 103508	3.9	0
115	Quantificational 4D Visualization of Industrial Electrodeposition. <i>Advanced Science</i> , 2021 , e2101373	13.6	2
114	Nonaqueous Rechargeable Aluminum Batteries: Progresses, Challenges, and Perspectives. <i>Chemical Reviews</i> , 2021 , 121, 4903-4961	68.1	34
113	A novel titanium oxycarbide phase with metal-vacancy (Ti _{1-x} C _{1-x} O _{1-x}): Structural and thermodynamic basis. <i>Ceramics International</i> , 2021 , 47, 16324-16332	5.1	2
112	Stable High-Capacity Organic Aluminum/Borophyrin Batteries. <i>Advanced Energy Materials</i> , 2021 , 11, 2101446	6.8	15
111	Hierarchical N-doped porous carbon hosts for stabilizing tellurium in promoting Al-Te batteries. <i>Journal of Energy Chemistry</i> , 2021 , 57, 378-385	12	10
110	Al homogeneous deposition induced by N-containing functional groups for enhanced cycling stability of Al-ion battery negative electrode. <i>Nano Research</i> , 2021 , 14, 646-653	10	6
109	A dual-protection strategy using CMK-3 coated selenium and modified separators for high-energy Al/Se batteries. <i>Inorganic Chemistry Frontiers</i> , 2021 , 8, 1030-1038	6.8	4
108	Coordination interaction boosts energy storage in rechargeable Al battery with a positive electrode material of CuSe. <i>Chemical Engineering Journal</i> , 2021 , 421, 127792	14.7	11
107	Initial Electrode Kinetics of Anion Intercalation and De-intercalation in Nonaqueous Al-Graphite Batteries [Chinese Journal of Chemistry, 2021 , 39, 157-164	4.9	3
106	A cobalt-based metal-organic framework and its derived material as sulfur hosts for aluminum-sulfur batteries with the chemical anchoring effect. <i>Physical Chemistry Chemical Physics</i> , 2021 , 23, 10326-10334	3.6	2

105	Green and sustainable molten salt electrochemistry for the conversion of secondary carbon pollutants to advanced carbon materials. <i>Journal of Materials Chemistry A</i> , 2021 , 9, 14119-14146	13	8
104	Stable and low-voltage-hysteresis zinc negative electrode promoting aluminum dual-ion batteries. <i>Chemical Engineering Journal</i> , 2021 , 132743	14.7	1
103	Rechargeable High-Capacity Antimony-Aluminum Batteries. <i>Journal of the Electrochemical Society</i> , 2020 , 167, 080541	3.9	5
102	Titanium production through electrolysis of titanium oxycarbide consumable anode process 2020 , 315-329		1
101	Rechargeable Nickel Telluride/Aluminum Batteries with High Capacity and Enhanced Cycling Performance. <i>ACS Nano</i> , 2020 , 14, 3469-3476	16.7	36
100	Stable wide-temperature and low volume expansion Al batteries: Integrating few-layer graphene with multifunctional cobalt boride nanocluster as positive electrode. <i>Nano Research</i> , 2020 , 13, 419-429	10	9
99	Self-supporting and high-loading hierarchically porous Co-P cathode for advanced Al-ion battery. <i>Chemical Engineering Journal</i> , 2020 , 389, 124370	14.7	28
98	Electrochemical behavior of NiCl ₂ /Ni in acidic AlCl ₃ -based ionic liquid electrolyte. <i>Inorganic Chemistry Frontiers</i> , 2020 , 7, 1909-1917	6.8	4
97	Rapid Electrodeposition of Ti on a Liquid Zn Cathode from a Consumable Casting Ti _{0.5} O _{0.5} Anode. <i>Journal of the Electrochemical Society</i> , 2020 , 167, 123502	3.9	7
96	Modified separators for rechargeable high-capacity selenium-aluminium batteries. <i>Chemical Engineering Journal</i> , 2020 , 385, 123452	14.7	16
95	The molten chlorides for aluminum-graphite rechargeable batteries. <i>Journal of Alloys and Compounds</i> , 2020 , 821, 153285	5.7	14
94	Liquid gallium as long cycle life and recyclable negative electrode for Al-ion batteries. <i>Chemical Engineering Journal</i> , 2020 , 391, 123594	14.7	13
93	Active cyano groups to coordinate AlCl ₂ ⁺ cation for rechargeable aluminum batteries. <i>Energy Storage Materials</i> , 2020 , 33, 250-257	19.4	15
92	Coral-Like TeO ₂ Microwires for Rechargeable Aluminum Batteries. <i>ACS Sustainable Chemistry and Engineering</i> , 2020 , 8, 2416-2422	8.3	12
91	Sb ₂ Te ₃ Hexagonal Nanosheets as High-Capacity Positive Materials for Rechargeable Aluminum Batteries. <i>ACS Applied Energy Materials</i> , 2020 , 3, 12635-12643	6.1	2
90	Nonmetal Current Collectors: The Key Component for High-Energy-Density Aluminum Batteries. <i>Advanced Materials</i> , 2020 , 32, e2001212	24	11
89	A strategy for massively suppressing the shuttle effect in rechargeable Al ⁺ batteries. <i>Inorganic Chemistry Frontiers</i> , 2020 , 7, 4000-4009	6.8	5
88	All-carbon positive electrodes for stable aluminium batteries. <i>Journal of Energy Chemistry</i> , 2020 , 42, 17-26		18

87	Cu-Al Composite as the Negative Electrode for Long-life Al-Ion Batteries. <i>Journal of the Electrochemical Society</i> , 2019 , 166, A3539-A3545	3.9	11
86	Metal-Organic Framework-Derived Co ₃ O ₄ @MWCNTs Polyhedron as Cathode Material for a High-Performance Aluminum-Ion Battery. <i>ACS Sustainable Chemistry and Engineering</i> , 2019 , 7, 16200-16208	8.3	32
85	Depolarization Behavior of Ti Deposition at Liquid Metal Cathodes in a NaCl-KCl-KF Melt. <i>Journal of the Electrochemical Society</i> , 2019 , 166, E401-E406	3.9	5
84	Thick electrodes upon biomass-derivative carbon current collectors: High-area capacity positive electrodes for aluminum-ion batteries. <i>Electrochimica Acta</i> , 2019 , 323, 134805	6.7	8
83	Electrochemically Exfoliating Graphite Cathode to N-Doped Graphene Analogue and Its Excellent Al Storage Performance. <i>Journal of the Electrochemical Society</i> , 2019 , 166, A1738-A1744	3.9	5
82	Bismuth ferrite: an abnormal perovskite with electrochemical extraction of ions from A site. <i>Journal of Materials Chemistry A</i> , 2019 , 7, 12176-12190	13	14
81	Electrochemical Behaviour of K ₂ TiF ₆ at Liquid Metal Cathodes in the LiF-NaF-KF Eutectic Melt. <i>Electrochemistry</i> , 2019 , 87, 142-147	1.2	3
80	Rechargeable ultrahigh-capacity tellurium-aluminum batteries. <i>Energy and Environmental Science</i> , 2019 , 12, 1918-1927	35.4	124
79	Improved USTB Titanium Production with a Ti ₂ CO Anode Formed by Casting. <i>Journal of the Electrochemical Society</i> , 2019 , 166, E226-E230	3.9	10
78	A Rechargeable Al/Graphite Battery Based on AlCl ₃ /1-butyl-3-methylimidazolium Chloride Ionic Liquid Electrolyte. <i>ChemistrySelect</i> , 2019 , 4, 3018-3024	1.8	11
77	The potential application of black and blue phosphorene as cathode materials in rechargeable aluminum batteries: a first-principles study. <i>Physical Chemistry Chemical Physics</i> , 2019 , 21, 7021-7028	3.6	16
76	Cu ₃ P as a novel cathode material for rechargeable aluminum-ion batteries. <i>Journal of Materials Chemistry A</i> , 2019 , 7, 8368-8375	13	52
75	SbSe nanorods with N-doped reduced graphene oxide hybrids as high-capacity positive electrode materials for rechargeable aluminum batteries. <i>Nanoscale</i> , 2019 , 11, 16437-16444	7.7	24
74	Gel electrolytes with a wide potential window for high-rate Al-ion batteries. <i>Journal of Materials Chemistry A</i> , 2019 , 7, 20348-20356	13	29
73	Single-crystal and hierarchical VSe ₂ as an aluminum-ion battery cathode. <i>Sustainable Energy and Fuels</i> , 2019 , 3, 2717-2724	5.8	12
72	Hierarchical Flower-Like MoS ₂ Microspheres and Their Efficient Al Storage Properties. <i>Journal of Physical Chemistry C</i> , 2019 , 123, 26794-26802	3.8	15
71	Nickel Phosphide Nanosheets Supported on Reduced Graphene Oxide for Enhanced Aluminum-Ion Batteries. <i>ACS Sustainable Chemistry and Engineering</i> , 2019 , 7, 6004-6012	8.3	40
70	Cellulose-derived flake graphite as positive electrodes for Al-ion batteries. <i>Sustainable Energy and Fuels</i> , 2019 , 3, 3561-3568	5.8	11

69	Flexible Stable Solid-State Al-Ion Batteries. <i>Advanced Functional Materials</i> , 2019 , 29, 1806799	15.6	126
68	Anodic Dissolution of Titanium Oxycarbide TiC_xO_{1-x} with Different O/C Ratio. <i>Journal of the Electrochemical Society</i> , 2019 , 166, E22-E28	3.9	14
67	Porous CuO microsphere architectures as high-performance cathode materials for aluminum-ion batteries. <i>Journal of Materials Chemistry A</i> , 2018 , 6, 3084-3090	13	98
66	Flower-like Vanadium Sulfide/Reduced Graphene Oxide Composite: An Energy Storage Material for Aluminum-Ion Batteries. <i>ChemSusChem</i> , 2018 , 11, 709-715	8.3	79
65	A novel dual-graphite aluminum-ion battery. <i>Energy Storage Materials</i> , 2018 , 12, 119-127	19.4	61
64	Ordered WO nanorods: facile synthesis and their electrochemical properties for aluminum-ion batteries. <i>Chemical Communications</i> , 2018 , 54, 1343-1346	5.8	69
63	Dense graphene papers: Toward stable and recoverable Al-ion battery cathodes with high volumetric and areal energy and power density. <i>Energy Storage Materials</i> , 2018 , 13, 103-111	19.4	68
62	A Rechargeable Al ^{III} Battery. <i>ACS Applied Energy Materials</i> , 2018 , 1, 4924-4930	6.1	34
61	A high-performance dual-ion cell utilizing Si nanosphere@graphene anode. <i>Electrochimica Acta</i> , 2018 , 282, 946-954	6.7	6
60	NiCo ₂ S ₄ Nanosheet with Hexagonal Architectures as an Advanced Cathode for Al-Ion Batteries. <i>Journal of the Electrochemical Society</i> , 2018 , 165, A3504-A3509	3.9	16
59	Experimental and first-principles study of TiO ₂ system: Interplay of thermodynamic and structural properties. <i>Journal of the American Ceramic Society</i> , 2017 , 100, 2253-2265	3.8	16
58	A Novel Ultrafast Rechargeable Multi-Ions Battery. <i>Advanced Materials</i> , 2017 , 29, 1606349	24	74
57	The electrochemical behavior of an aluminum alloy anode for rechargeable Al-ion batteries using an AlCl ₃ /urea liquid electrolyte. <i>RSC Advances</i> , 2017 , 7, 32288-32293	3.7	29
56	A long-life rechargeable Al ion battery based on molten salts. <i>Journal of Materials Chemistry A</i> , 2017 , 5, 1282-1291	13	121
55	High-Performance Aluminum-Ion Battery with CuS@C Microsphere Composite Cathode. <i>ACS Nano</i> , 2017 , 11, 469-477	16.7	298
54	Exfoliation Mechanism of Graphite Cathode in Ionic Liquids. <i>ACS Applied Materials & Interfaces</i> , 2017 , 9, 36702-36707	9.5	37
53	The Effects of Anions Behaviors on Electrochemical Properties of Al/Graphite Rechargeable Aluminum-Ion Battery via Molten AlCl ₃ -NaCl Liquid Electrolyte. <i>Journal of the Electrochemical Society</i> , 2017 , 164, A3292-A3302	3.9	20
52	Ternary AlCl ₃ -Urea-[EMIm]Cl Ionic Liquid Electrolyte for Rechargeable Aluminum-Ion Batteries. <i>Journal of the Electrochemical Society</i> , 2017 , 164, A3093-A3100	3.9	29

51	An industrialized prototype of the rechargeable Al/AlCl ₃ -[EMIm]Cl/graphite battery and recycling of the graphitic cathode into graphene. <i>Carbon</i> , 2016 , 109, 276-281	10.4	105
50	A Novel Aluminum-Ion Battery: Al/AlCl ₃ -[EMIm]Cl/Ni ₃ S ₂ @Graphene. <i>Advanced Energy Materials</i> , 2016 , 6, 1600137	21.8	306
49	The Cathodic Behavior of Ti(III) Ion in a NaCl-2CsCl Melt. <i>Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science</i> , 2016 , 47, 804-810	2.5	19
48	Sodium modified molybdenum sulfide via molten salt electrolysis as an anode material for high performance sodium-ion batteries. <i>Physical Chemistry Chemical Physics</i> , 2016 , 18, 3204-13	3.6	36
47	Selective Reduction of TiO ₂ -SiO ₂ in the Carbothermal Reduction of Titanium Raw Materials for Preparation of Titanium Oxycarbide 2016 , 419-425		
46	Electrochemical Behavior of Titanium Ions at Liquid Metal Cathodes in Molten Salts 2016 , 183-186		
45	Structural and Thermodynamic Properties of TiC _x N _y O _z Solid Solution: Experimental Study and First-Principles Approaches. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2016 , 47, 4721-4731	2.3	9
44	3D flower-like NaHTi ₃ O ₇ nanotubes as high-performance anodes for sodium-ion batteries. <i>Journal of Materials Chemistry A</i> , 2015 , 3, 16528-16534	13	20
43	Electrochemically depositing titanium(III) ions at liquid tin in a NaCl/KCl melt. <i>RSC Advances</i> , 2015 , 5, 62235-62240	3.7	20
42	A new aluminium-ion battery with high voltage, high safety and low cost. <i>Chemical Communications</i> , 2015 , 51, 11892-5	5.8	341
41	Electrochemical Behavior of Titanium(II) Ion in a Purified Calcium Chloride Melt. <i>Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science</i> , 2015 , 46, 162-168	2.5	18
40	A sodium ion intercalation material: a comparative study of amorphous and crystalline FePO ₄ . <i>Physical Chemistry Chemical Physics</i> , 2015 , 17, 4551-7	3.6	20
39	FeWO ₄ : An Anode Material for Sodium-Ion Batteries 2014 , 899-905		
38	Three-dimensional MoS ₂ -CdS-TaON hollow composites for enhanced visible-light-driven hydrogen evolution. <i>Chemical Communications</i> , 2014 , 50, 1731-4	5.8	55
37	A new consumable anode material of titanium oxycarbonitride for the USTB titanium process. <i>Physical Chemistry Chemical Physics</i> , 2014 , 16, 8086-91	3.6	32
36	Nasicon material NaZr ₂ (PO ₄) ₃ : a novel storage material for sodium-ion batteries. <i>Journal of Materials Chemistry A</i> , 2014 , 2, 1341-1345	13	33
35	High-performance p-Cu ₂ O/n-TaON heterojunction nanorod photoanodes passivated with an ultrathin carbon sheath for photoelectrochemical water splitting. <i>Energy and Environmental Science</i> , 2014 , 7, 3758-3768	35.4	152
34	In Situ Self-Assembled FeWO ₄ /Graphene Mesoporous Composites for Li-Ion and Na-Ion Batteries. <i>Chemistry of Materials</i> , 2014 , 26, 3721-3730	9.6	42

33	FeWO ₄ : An Anode Material for Sodium-Ion Batteries 2014 , 899-905		
32	In situ synthesis of phase heterojunction on Bi ₂ O ₃ nanowires with exceptional visible-light photocatalytic performance. <i>Applied Catalysis B: Environmental</i> , 2013 , 142-143, 504-511	21.8	207
31	The Equilibrium Between Titanium Ions and Titanium Metal in NaCl-KCl Equimolar Molten Salt. <i>Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science</i> , 2013 , 44, 906-913	2.5	25
30	Cobalt-bilayer catalyst decorated Ta ₃ N ₅ nanorod arrays as integrated electrodes for photoelectrochemical water oxidation. <i>Energy and Environmental Science</i> , 2013 , 6, 3322	35.4	89
29	Producing metallic titanium through electro-refining of titanium nitride anode. <i>Electrochemistry Communications</i> , 2013 , 35, 135-138	5.1	17
28	Pivot roles of noble metal in single-phase Ta _x Zr _{1-x} O _n (0 Journal of Materials Chemistry A, 2013 , 1, 5394	13	5
27	Structural stability of TiO with disordered vacancies: A first-principles calculation. <i>Physica B: Condensed Matter</i> , 2013 , 421, 110-116	2.8	14
26	Three-dimensional Z-scheme AgCl/Ag/TaON heterostructural hollow spheres for enhanced visible-light photocatalytic performance. <i>Applied Catalysis B: Environmental</i> , 2013 , 142-143, 579-589	21.8	81
25	Hierarchical metastable TaON hollow structures for efficient visible-light water splitting. <i>Energy and Environmental Science</i> , 2013 , 6, 2134	35.4	96
24	Microspheric Na ₂ Ti ₃ O ₇ consisting of tiny nanotubes: an anode material for sodium-ion batteries with ultrafast charge-discharge rates. <i>Nanoscale</i> , 2013 , 5, 594-9	7.7	150
23	Bi ₂ O ₃ quantum dots decorated anatase TiO ₂ nanocrystals with exposed {0 0 1} facets on graphene sheets for enhanced visible-light photocatalytic performance. <i>Applied Catalysis B: Environmental</i> , 2013 , 129, 333-341	21.8	140
22	Ternary 3D architectures of CdS QDs/graphene/ZnIn ₂ S ₄ heterostructures for efficient photocatalytic H ₂ production. <i>Physical Chemistry Chemical Physics</i> , 2013 , 15, 15660-8	3.6	104
21	Hierarchically Plasmonic Z-Scheme Photocatalyst of Ag/AgCl Nanocrystals Decorated Mesoporous Single-Crystalline Metastable Bi ₂₀ TiO ₃₂ Nanosheets. <i>Journal of Physical Chemistry C</i> , 2013 , 117, 5132-5141	3.8	95
20	A new cathode material for super-valent battery based on aluminium ion intercalation and deintercalation. <i>Scientific Reports</i> , 2013 , 3, 3383	4.9	252
19	Electrochemical synthesis of titanium oxycarbide in a CaCl ₂ based molten salt. <i>Electrochimica Acta</i> , 2012 , 75, 357-359	6.7	32
18	Hierarchical nitrogen doped bismuth niobate architectures: controllable synthesis and excellent photocatalytic activity. <i>Journal of Hazardous Materials</i> , 2012 , 217-218, 177-86	12.8	52
17	In situ chemical reduction of the Ta ₃ N ₅ quantum dots coupled TaON hollow spheres heterojunction photocatalyst for water oxidation. <i>Journal of Materials Chemistry</i> , 2012 , 22, 21972		60
16	Hydrothermal synthesis of CdS/CdLa ₂ S ₄ heterostructures for efficient visible-light-driven photocatalytic hydrogen production. <i>RSC Advances</i> , 2012 , 2, 10330	3.7	44

15	Bi ₂ O ₃ quantum-dot decorated nitrogen-doped Bi ₃ NbO ₇ nanosheets: in situ synthesis and enhanced visible-light photocatalytic activity. <i>CrystEngComm</i> , 2012 , 14, 5923	3.3	69
14	Efficient visible-light-driven photocatalytic hydrogen production using CdS@TaON core-shell composites coupled with graphene oxide nanosheets. <i>Journal of Materials Chemistry</i> , 2012 , 22, 7291		144
13	Electrochemically assembling of a porous nano-polyaniline network in a reverse micelle and its application in a supercapacitor. <i>Journal of Materials Chemistry</i> , 2011 , 21, 9027		52
12	3D Bi ₁₂ TiO ₂₀ /TiO ₂ hierarchical heterostructure: synthesis and enhanced visible-light photocatalytic activities. <i>Journal of Hazardous Materials</i> , 2011 , 192, 1772-9	12.8	86
11	Facile synthesis and visible-light photocatalytic activity of bismuth titanate nanorods. <i>Journal of Nanoparticle Research</i> , 2011 , 13, 5557-5564	2.3	18
10	Preparation of Titanium Deposit in Chloride Melts. <i>Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science</i> , 2011 , 42, 1181-1187	2.5	35
9	Preparation of polyaniline modified TaON with enhanced visible light photocatalytic activities. <i>Dalton Transactions</i> , 2011 , 40, 4038-41	4.3	25
8	Chromium-doped bismuth titanate nanosheets as enhanced visible-light photocatalysts with a high percentage of reactive {110} facets. <i>Journal of Materials Chemistry</i> , 2011 , 21, 7296		54
7	PANI/Bi ₁₂ TiO ₂₀ complex architectures: Controllable synthesis and enhanced visible-light photocatalytic activities. <i>Applied Catalysis B: Environmental</i> , 2011 , 104, 399-406	21.8	55
6	Bismuth titanate pyrochlore microspheres: Directed synthesis and their visible light photocatalytic activity. <i>Journal of Solid State Chemistry</i> , 2011 , 184, 154-158	3.3	43
5	Novel metallurgical process for titanium production. <i>Journal of Materials Research</i> , 2006 , 21, 2172-2175	2.5	104
4	The Dissolution Behavior of Ti _x O _{1-x} Solid Solutions in Chloride Melt	605-612	2
3	Graphene as an Electron Mediator in Tantalum Oxynitride Based Composites Z-Schem Photocatalytic Water Splitting	17-23	1
2	Selective Reduction of TiO ₂ -SiO ₂ in the Carbothermal Reduction of Titanium Raw Materials for Preparation of Titanium Oxycarbide	419-425	2
1	Design Strategies of High-Performance Positive Materials for Nonaqueous Rechargeable Aluminum Batteries: From Crystal Control to Battery Configuration. <i>Small</i> , 2011 , 7, 1362	11	1