Jiguo Tu

List of Publications by Year
in descending order

92 papers	4,083 citations	117571 34 h-index	123376 61 g-index
93 all docs	93 docs citations	93 times ranked	3222 citing authors

#	Article	IF	Citations
1	A Novel Aluminumâ€ion Battery: Al/AlCl₃â€[EMIm]Cl/Ni₃S₂@Graphene. Advanced Energy Materials, 2016, 6, 1600137.	10.2	365
2	A new cathode material for super-valent battery based on aluminium ion intercalation and deintercalation. Scientific Reports, 2013, 3, 3383.	1.6	286
3	Flexible Stable Solidâ€State Alâ€ion Batteries. Advanced Functional Materials, 2019, 29, 1806799.	7.8	177
4	Rechargeable ultrahigh-capacity telluriumâ€“aluminum batteries. Energy and Environmental Science, 2019, 12, 1918-1927.	15.6	172
5	A long-life rechargeable Al ion battery based on molten salts. Journal of Materials Chemistry A, 2017, 5, 1282-1291.	5.2	153
6	A rechargeable Al-ion battery: Al/molten AlCl₃â€“urea/graphite. Chemical Communications, 2017, 53, 2331-2334.	2.2	147
7	Nonaqueous Rechargeable Aluminum Batteries: Progresses, Challenges, and Perspectives. Chemical Reviews, 2021, 121, 4903-4961.	23.0	147
8	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
9	Straightforward Approach toward SiO₂ Nanospheres and Their Superior Lithium Storage Performance. Journal of Physical Chemistry C, 2014, 118, 7357-7362.	1.5	104
10	Flowerâ€like Vanadium Suflide/Reduced Graphene Oxide Composite: An Energy Storage Material for Aluminumâ€ion Batteries. ChemSusChem, 2018, 11, 709-715.	3.6	101
11	A Novel Ultrafast Rechargeable Multiâ€ions Battery. Advanced Materials, 2017, 29, 1606349.	11.1	97
12	A novel dual-graphite aluminum-ion battery. Energy Storage Materials, 2018, 12, 119-127.	9.5	86
13	Ordered WO_{3âˆ’x} nanorods: facile synthesis and their electrochemical properties for aluminum-ion batteries. Chemical Communications, 2018, 54, 1343-1346.	2.2	86
14	Cu₃P as a novel cathode material for rechargeable aluminum-ion batteries. Journal of Materials Chemistry A, 2019, 7, 8368-8375.	5.2	85
15	In situ electrochemical polymerization of a nanorod-PANIâ€“Graphene composite in a reverse micelle electrolyte and its application in a supercapacitor. Physical Chemistry Chemical Physics, 2012, 14, 15652.	1.3	83
16	Mgâ€“Ti co-doping behavior of porous LiFePO₄ microspheres for high-rate lithium-ion batteries. Journal of Materials Chemistry A, 2017, 5, 17021-17028.	5.2	80
17	Rechargeable Nickel Telluride/Aluminum Batteries with High Capacity and Enhanced Cycling Performance. ACS Nano, 2020, 14, 3469-3476.	7.3	70
18	High-efficiency transformation of amorphous carbon into graphite nanoflakes for stable aluminum-ion battery cathodes. Nanoscale, 2019, 11, 12537-12546.	2.8	61

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19	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
20	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
21	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
22	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
23	Exfoliation Mechanism of Graphite Cathode in Ionic Liquids. ACS Applied Materials & Interfaces, 2017, 9, 36702-36707.	4.0	50
24	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
25	Active cyano groups to coordinate AlCl2+ cation for rechargeable aluminum batteries. Energy Storage Materials, 2020, 33, 250-257.	9.5	49
26	Electrochemically assembling of polythiophene film in ionic liquids (ILs) microemulsions and its application in an electrochemical capacitor. Electrochimica Acta, 2014, 120, 122-127.	2.6	41
27	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
28	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
29	Room temperature solid state dual-ion batteries based on gel electrolytes. Journal of Materials Chemistry A, 2018, 6, 4313-4323.	5.2	40
30	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
31	Self-supporting and high-loading hierarchically porous Co-P cathode for advanced Al-ion battery. Chemical Engineering Journal, 2020, 389, 124370.	6.6	38
32	Modified separators for rechargeable high-capacity selenium-aluminium batteries. Chemical Engineering Journal, 2020, 385, 123452.	6.6	36
33	A green electrochemical transformation of inferior coals to crystalline graphite for stable Li-ion storage. Journal of Materials Chemistry A, 2019, 7, 7533-7540.	5.2	35
34	Selection of Carbon Sources for Enhancing 3D Conductivity in the Secondary Structure of LiFePO4/C Cathode. Electrochimica Acta, 2016, 193, 206-215.	2.6	34
35	Facile synthesis of Ni₁₁(HPO₃)₈(OH)₆/rGO nanorods with enhanced electrochemical performance for aluminum-ion batteries. Nanoscale, 2018, 10, 21284-21291.	2.8	34
36	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

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37	Aluminumâ€Ion Asymmetric Supercapacitor Incorporating Carbon Nanotubes and an Ionic Liquid Electrolyte: Al/AlCl₃â€[EMIm]Cl/CNTs. Energy Technology, 2016, 4, 1112-1118.	1.8	30
38	The molten chlorides for aluminum-graphite rechargeable batteries. Journal of Alloys and Compounds, 2020, 821, 153285.	2.8	30
39	The effect of graphitization degree of carbonaceous material on the electrochemical performance for aluminum-ion batteries. RSC Advances, 2019, 9, 38990-38997.	1.7	29
40	Coral-Like TeO₂ Microwires for Rechargeable Aluminum Batteries. ACS Sustainable Chemistry and Engineering, 2020, 8, 2416-2422.	3.2	29
41	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
42	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
43	Production of AlCrNbTaTi High Entropy Alloy via Electro-Deoxidation of Metal Oxides. Journal of the Electrochemical Society, 2018, 165, D574-D579.	1.3	27
44	Single-crystal and hierarchical VSe₂ as an aluminum-ion battery cathode. Sustainable Energy and Fuels, 2019, 3, 2717-2724.	2.5	26
45	Electrochemical graphitization conversion of CO2 through soluble NaVO3 homogeneous catalyst in carbonate molten salt. Electrochimica Acta, 2020, 331, 135461.	2.6	26
46	Liquid gallium as long cycle life and recyclable negative electrode for Al-ion batteries. Chemical Engineering Journal, 2020, 391, 123594.	6.6	25
47	A nitrogen-doped graphene cathode for high-capacitance aluminum-ion hybrid supercapacitors. New Journal of Chemistry, 2018, 42, 15684-15691.	1.4	24
48	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
49	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
50	3D skeleton nanostructured Ni3S2/Ni foam@RGO composite anode for high-performance dual-ion battery. Journal of Energy Chemistry, 2019, 28, 144-150.	7.1	22
51	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
52	Cellulose-derived flake graphite as positive electrodes for Al-ion batteries. Sustainable Energy and Fuels, 2019, 3, 3561-3568.	2.5	21
53	Self-assembled amorphous manganese oxide/hydroxide spheres via multi-phase electrochemical interactions in reverse micelle electrolytes and their capacitive behavior. Journal of Materials Chemistry A, 2013, 1, 5136.	5.2	20
54	Hierarchical Flower-Like MoS₂ Microspheres and Their Efficient Al Storage Properties. Journal of Physical Chemistry C, 2019, 123, 26794-26802.	1.5	20

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55	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
56	A Rechargeable Al/Graphite Battery Based on AlCl₃/1â€butylâ€3â€methylimidazolium Chloride Ionic Liquid Electrolyte. ChemistrySelect, 2019, 4, 3018-3024.	0.7	20
57	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
58	Preparation of porous nanorod polyaniline film and its high electrochemical capacitance performance. Synthetic Metals, 2011, 161, 1255-1258.	2.1	19
59	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
60	A Review of Integrated Systems Based on Perovskite Solar Cells and Energy Storage Units: Fundamental, Progresses, Challenges, and Perspectives. Advanced Science, 2021, 8, 2100552.	5.6	19
61	Photo-electrochemical enhanced mechanism enables a fast-charging and high-energy aqueous Al/MnO2 battery. Energy Storage Materials, 2022, 45, 586-594.	9.5	19
62	In-Situ Synthesis of Silicon/Polyaniline Core/Shell and Its Electrochemical Performance for Lithium-Ion Batteries. Journal of the Electrochemical Society, 2013, 160, A1916-A1921.	1.3	17
63	Surface treatment functionalization of sodium hydroxide onto 3D printed porous Ti6Al4V for improved biological activities and osteogenic potencies. Journal of Materials Research and Technology, 2020, 9, 13661-13670.	2.6	17
64	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
65	Design Strategies of Highâ€Performance Positive Materials for Nonaqueous Rechargeable Aluminum Batteries: From Crystal Control to Battery Configuration. Small, 2022, 18, .	5.2	15
66	Nanostructured Li4Ti5O12 synthesized in a reverse micelle: A bridge between pseudocapacitor and lithium ion battery. Electrochimica Acta, 2012, 68, 254-259.	2.6	14
67	Enhanced intercalation behaviors of edge-rich flakes-stacked graphite for Al-graphite dual-ion battery. Journal of Power Sources, 2021, 492, 229674.	4.0	14
68	Direct Production of Fe and Fe-Ni Alloy via Molten Oxides Electrolysis. Journal of the Electrochemical Society, 2017, 164, E113-E116.	1.3	13
69	Production of Tiâ€“Fe alloys <i>via</i> molten oxide electrolysis at a liquid iron cathode. RSC Advances, 2018, 8, 17575-17581.	1.7	13
70	Green preparation of vanadium carbide through one-step molten salt electrolysis. Ceramics International, 2021, 47, 28203-28209.	2.3	13
71	Stable Interface between a NaClâ€“AlCl₃ Melt and a Liquid Ga Negative Electrode for a Long-Life Stationary Al-Ion Energy Storage Battery. ACS Applied Materials & Interfaces, 2020, 12, 15063-15070.	4.0	12
72	High Specific Capacitance Based on N-Doped Microporous Carbon in [EMIm]Al_xCl_yIonic Liquid Electrolyte. Journal of the Electrochemical Society, 2017, 164, A3319-A3325.	1.3	10

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73	An investigation into the anodic behavior of TiB2 in a CaCl2-based molten salt. Corrosion Science, 2021, 178, 109089.	3.0	10
74	Controllable Cu2Oâ€“Cu nanoparticle electrodeposition onto carbon paper and its superior photoelectrochemical performance. RSC Advances, 2014, 4, 16380.	1.7	9
75	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
76	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
77	Electrochemical performance of Si@TiN composite anode synthesized in a liquid ammonia for lithium-ion batteries. Materials Chemistry and Physics, 2012, 136, 863-867.	2.0	8
78	A novel ordered SiOxCy film anode fabricated via electrodeposition in air for Li-ion batteries. Journal of Materials Chemistry A, 2014, 2, 2467.	5.2	8
79	A strategy for massively suppressing the shuttle effect in rechargeable Alâ€“Te batteries. Inorganic Chemistry Frontiers, 2020, 7, 4000-4009.	3.0	8
80	Rechargeable High-Capacity Antimony-Aluminum Batteries. Journal of the Electrochemical Society, 2020, 167, 080541.	1.3	8
81	Electrochemical behavior of NiCl₂/Ni in acidic AlCl₃-based ionic liquid electrolyte. Inorganic Chemistry Frontiers, 2020, 7, 1909-1917.	3.0	8
82	Stable and low-voltage-hysteresis zinc negative electrode promoting aluminum dual-ion batteries. Chemical Engineering Journal, 2022, 430, 132743.	6.6	8
83	Sb₂Te₃ Hexagonal Nanosheets as High-Capacity Positive Materials for Rechargeable Aluminum Batteries. ACS Applied Energy Materials, 2020, 3, 12635-12643.	2.5	7
84	Coreâ€“shell Siâ€“N-doped C assembled via an oxidative template for lithium-ion anodes. Physical Chemistry Chemical Physics, 2013, 15, 18549.	1.3	6
85	3D structure through planting coreâ€“shell Si@TiN into an amorphous carbon slag: improved capacity of lithium-ion anodes. Physical Chemistry Chemical Physics, 2013, 15, 10472.	1.3	6
86	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
87	Preparation of petaloid graphite nanoflakes in molten salt for high-performance lithium-ion batteries. Ionics, 2020, 26, 3351-3358.	1.2	6
88	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
89	Nanosheet-stacked flake graphite for high-performance Al storage in inorganic molten AlCl3â€“NaCl salt. International Journal of Minerals, Metallurgy and Materials, 2020, 27, 1711-1722.	2.4	5
90	Facile Electrochemical Preparation of Al-Sm Alloys in Molten Calcium Chloride. Journal of the Electrochemical Society, 2018, 165, E616-E621.	1.3	3

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91	Enhanced storage behavior of quasi-solid-state aluminumâ€“selenium battery. RSC Advances, 2021, 11, 39484-39492.	1.7	3
92	Effect of Laser Remelting on Microstructure, Residual Stress, and Mechanical Property of Selective Laser Melting-Processed Ti-6Al-4V Alloy. Minerals, Metals and Materials Series, 2021, , 92-99.	0.3	0