Kun Fu

List of Publications by Year
in descending order

117 papers	17,708 citations	19657 61 h-index	23533 111 g-index
117 all docs	117 docs citations	117 times ranked	16036 citing authors

#	Article	IF	Citations
1	3D printing of polymer composites: Materials, processes, and applications. Matter, 2022, 5, 43-76.	10.0	136
2	Garnet ceramic fabric-reinforced flexible composite solid electrolyte derived from silk template for safe and long-term stable All-Solid-State lithium metal batteries. Energy Storage Materials, 2022, 47, 279-287.	18.0	43
3	All-textile sensors for boxing punch force and velocity detection. Nano Energy, 2022, 97, 107114.	16.0	45
4	Highâ€entropy alloy stabilized and activated Pt clusters for highly efficient electrocatalysis. SusMat, 2022, 2, 186-196.	14.9	41
5	Research progress of low dielectric constant polymer materials. Journal of Polymer Engineering, 2022, 42, 677-687.	1.4	37
6	Cellulose nanocrystal enhanced, high dielectric 3D printing composite resin for energy applications. Composites Science and Technology, 2022, 227, 109601.	7.8	19
7	Scalable Synthesis of LiFâ€rich 3D Architected Li Metal Anode via Direct Lithiumâ€Fluoropolymer Pyrolysis to Enable Fast Li Cycling. Energy and Environmental Materials, 2021, 4, 213-221.	12.8	16
8	3D printingâ€enabled advanced electrode architecture design. , 2021, 3, 424-439.		82
9	Flexible, Mechanically Robust, Solid-State Electrolyte Membrane with Conducting Oxide-Enhanced 3D Nanofiber Networks for Lithium Batteries. Nano Letters, 2021, 21, 7070-7078.	9.1	72
10	Core-shell hybrid pre-preg tow for lightweight composite truss. Composites Part B: Engineering, 2021, 223, 109093.	12.0	1
11	Inserting insulating barriers into conductive particle channels: A new paradigm for fabricating polymer composites with high dielectric permittivity and low dielectric loss. Composites Science and Technology, 2021, 216, 109070.	7.8	27
12	Rapid electrothermal-triggered flooded thermoset curing for scalable carbon/polymer composite manufacturing. Composites Science and Technology, 2020, 200, 108409.	7.8	14
13	Rapid Nanowelding of Carbon Coatings onto Glass Fibers by Electrothermal Shock. ACS Applied Materials & Interfaces, 2020, 12, 37722-37731.	8.0	13
14	Dynamic Capillary-Driven Additive Manufacturing of Continuous Carbon Fiber Composite. Matter, 2020, 2, 1594-1604.	10.0	64
15	Low Tortuous, Highly Conductive, and High-Areal-Capacity Battery Electrodes Enabled by Through-thickness Aligned Carbon Fiber Framework. Nano Letters, 2020, 20, 5504-5512.	9.1	64
16	Flexible nanocellulose enhanced Li+ conducting membrane for solid polymer electrolyte. Energy Storage Materials, 2020, 28, 293-299.	18.0	70
17	Garnet-Type Solid-State Electrolytes: Materials, Interfaces, and Batteries. Chemical Reviews, 2020, 120, 4257-4300.	47.7	655
18	Electric Field-Induced Assembly and Alignment of Silver-Coated Cellulose for Polymer Composite Films with Enhanced Dielectric Permittivity and Anisotropic Light Transmission. ACS Applied Materials & Interfaces, 2020, 12, 24242-24249.	8.0	41

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19	Additive Manufacturing of Carbon Nanotube-Based Three-Dimensional Multi-Scale Architectures. ECS Meeting Abstracts, 2020, MA2020-01, 704-704.	0.0	0
20	Low-Tortuosity, Highly Conductive, Vertically Aligned, Ultra-Thick Composite Electrode Design for Batteries. ECS Meeting Abstracts, 2020, MA2020-01, 2725-2725.	0.0	0
21	(Invited) Advanced Battery Electrode Architectures Enabled By Additive Manufacturing Techniques. ECS Meeting Abstracts, 2020, MA2020-02, 3692-3692.	0.0	0
22	Flexible Solid-State Electrolyte with Aligned Nanostructures Derived from Wood. , 2019, 1, 354-361.		72
23	Ultrafast, Controllable Synthesis of Sub-Nano Metallic Clusters through Defect Engineering. ACS Applied Materials & Interfaces, 2019, 11, 29773-29779.	8.0	28
24	Designing Textile Architectures for High Energy-Efficiency Human Body Sweat- and Cooling-Management. Advanced Fiber Materials, 2019, 1, 61-70.	16.1	56
25	Fabrication of high dielectric permittivity polymer composites by architecting aligned micro-enhanced-zones of ultralow content graphene using electric fields. Materials Today Communications, 2019, 21, 100649.	1.9	12
26	Remotely and Sequentially Controlled Actuation of Electroactivated Carbon Nanotube/Shape Memory Polymer Composites. Advanced Materials Technologies, 2019, 4, 1900600.	5.8	50
27	Hybrid Carbon Nanotube Fabrics with Sacrificial Nanofibers for Flexible High Performance Lithium-Ion Battery Anodes. Journal of the Electrochemical Society, 2019, 166, A473-A479.	2.9	16
28	An Electron/Ion Dualâ€Conductive Alloy Framework for Highâ€Rate and Highâ€Capacity Solidâ€State Lithiumâ€Metal Batteries. Advanced Materials, 2019, 31, e1804815.	21.0	188
29	One-Step, Catalyst-Free, Scalable in Situ Synthesis of Single-Crystal Aluminum Nanowires in Confined Graphene Space. ACS Applied Materials & Interfaces, 2019, 11, 6009-6014.	8.0	7
30	Nanomanufacturing of graphene nanosheets through nano-hole opening and closing. Materials Today, 2019, 24, 26-32.	14.2	48
31	Necklaceâ€Like Silicon Carbide and Carbon Nanocomposites Formed by Steady Joule Heating. Small Methods, 2018, 2, 1700371.	8.6	17
32	Flexible, Scalable, and Highly Conductive Garnetâ€Polymer Solid Electrolyte Templated by Bacterial Cellulose. Advanced Energy Materials, 2018, 8, 1703474.	19.5	189
33	3D lithium metal anodes hosted in asymmetric garnet frameworks toward high energy density batteries. Energy Storage Materials, 2018, 14, 376-382.	18.0	114
34	Lithium-ion conductive ceramic textile: A new architecture for flexible solid-state lithium metal batteries. Materials Today, 2018, 21, 594-601.	14.2	134
35	Textile Inspired Lithiumâ€"Oxygen Battery Cathode with Decoupled Oxygen and Electrolyte Pathways. Advanced Materials, 2018, 30, 1704907.	21.0	92
36	Epitaxial Welding of Carbon Nanotube Networks for Aqueous Battery Current Collectors. ACS Nano, 2018, 12, 5266-5273.	14.6	51

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37	All-in-one lithium-sulfur battery enabled by a porous-dense-porous garnet architecture. Energy Storage Materials, 2018, 15, 458-464.	18.0	108
38	From Wood to Textiles: Topâ€Down Assembly of Aligned Cellulose Nanofibers. Advanced Materials, 2018, 30, e1801347.	21.0	121
39	Design of High Capacity Dissoluble Electrodes for All Transient Batteries. Advanced Functional Materials, 2017, 27, 1605724.	14.9	21
40	<i>In Situ</i> High Temperature Synthesis of Single-Component Metallic Nanoparticles. ACS Central Science, 2017, 3, 294-301.	11.3	34
41	Reducing Interfacial Resistance between Garnetâ€Structured Solidâ€State Electrolyte and Liâ€Metal Anode by a Germanium Layer. Advanced Materials, 2017, 29, 1606042.	21.0	512
42	Synergistic protective effect of a BN-carbon separator for highly stable lithium sulfur batteries. NPG Asia Materials, 2017, 9, e375-e375.	7.9	85
43	Garnet Solid Electrolyte Protected Li-Metal Batteries. ACS Applied Materials & Interfaces, 2017, 9, 18809-18815.	8.0	247
44	Enabling High-Areal-Capacity Lithiumâ€"Sulfur Batteries: Designing Anisotropic and Low-Tortuosity Porous Architectures. ACS Nano, 2017, 11, 4801-4807.	14.6	151
45	Three-dimensional bilayer garnet solid electrolyte based high energy density lithium metalâ€"sulfur batteries. Energy and Environmental Science, 2017, 10, 1568-1575.	30.8	499
46	Mesoporous, Three-Dimensional Wood Membrane Decorated with Nanoparticles for Highly Efficient Water Treatment. ACS Nano, 2017, 11, 4275-4282.	14.6	392
47	Toward garnet electrolyteâ€"based Li metal batteries: An ultrathin, highly effective, artificial solid-state electrolyte/metallic Li interface. Science Advances, 2017, 3, e1601659.	10.3	647
48	Negating interfacial impedance in garnet-based solid-state Li metal batteries. Nature Materials, 2017, 16, 572-579.	27.5	1,583
49	Progress in 3D Printing of Carbon Materials for Energyâ€Related Applications. Advanced Materials, 2017, 29, 1603486.	21.0	364
50	Conformal, Nanoscale ZnO Surface Modification of Garnet-Based Solid-State Electrolyte for Lithium Metal Anodes. Nano Letters, 2017, 17, 565-571.	9.1	556
51	Three-Dimensional Printed Thermal Regulation Textiles. ACS Nano, 2017, 11, 11513-11520.	14.6	261
52	Transient Behavior of the Metal Interface in Lithium Metalâ€"Garnet Batteries. Angewandte Chemie - International Edition, 2017, 56, 14942-14947.	13.8	227
53	Transient Behavior of the Metal Interface in Lithium Metalâ€"Garnet Batteries. Angewandte Chemie, 2017, 129, 15138-15143.	2.0	12
54	Celluloseâ€Nanofiberâ€Enabled 3D Printing of a Carbonâ€Nanotube Microfiber Network. Small Methods, 2017, 1, 1700222.	8.6	130

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55	Stabilizing the Garnet Solid-Electrolyte/Polysulfide Interface in Liâ€“S Batteries. Chemistry of Materials, 2017, 29, 8037-8041.	6.7	73
56	3Dâ€Printed Allâ€Fiber Liâ€Ion Battery toward Wearable Energy Storage. Advanced Functional Materials, 2017, 27, 1703140.	14.9	270
57	Superâ€Strong, Superâ€Stiff Macrofibers with Aligned, Long Bacterial Cellulose Nanofibers. Advanced Materials, 2017, 29, 1702498.	21.0	185
58	Protected Lithiumâ€Metal Anodes in Batteries: From Liquid to Solid. Advanced Materials, 2017, 29, 1701169.	21.0	596
59	Inverted battery design as ion generator for interfacing with biosystems. Nature Communications, 2017, 8, 15609.	12.8	21
60	Rapid Thermal Annealing of Cathode-Garnet Interface toward High-Temperature Solid State Batteries. Nano Letters, 2017, 17, 4917-4923.	9.1	89
61	Universal, In Situ Transformation of Bulky Compounds into Nanoscale Catalysts by High-Temperature Pulse. Nano Letters, 2017, 17, 5817-5822.	9.1	29
62	A solid state energy storage device with supercapacitorâ€“battery hybrid design. Journal of Materials Chemistry A, 2017, 5, 15266-15272.	10.3	31
63	Nanocarbon Paper: Flexible, High Temperature, Planar Lighting with Large Scale Printable Nanocarbon Paper (Adv. Mater. 23/2016). Advanced Materials, 2016, 28, 4566-4566.	21.0	3
64	Flexible, High Temperature, Planar Lighting with Large Scale Printable Nanocarbon Paper. Advanced Materials, 2016, 28, 4684-4691.	21.0	59
65	Graphene Oxideâ€Based Electrode Inks for 3Dâ€Printed Lithiumâ€Ion Batteries. Advanced Materials, 2016, 28, 2587-2594.	21.0	590
66	Allâ€Component Transient Lithiumâ€Ion Batteries. Advanced Energy Materials, 2016, 6, 1502496.	19.5	47
67	Light management in plasticâ€“paper hybrid substrate towards high-performance optoelectronics. Energy and Environmental Science, 2016, 9, 2278-2285.	30.8	103
68	Reduced Graphene Oxide Films with Ultrahigh Conductivity as Li-Ion Battery Current Collectors. Nano Letters, 2016, 16, 3616-3623.	9.1	187
69	Three-Dimensional Printable High-Temperature and High-Rate Heaters. ACS Nano, 2016, 10, 5272-5279.	14.6	161
70	Transient Electronics: Materials and Devices. Chemistry of Materials, 2016, 28, 3527-3539.	6.7	284
71	Transition from Superlithiophobicity to Superlithiophilicity of Garnet Solid-State Electrolyte. Journal of the American Chemical Society, 2016, 138, 12258-12262.	13.7	548
72	Cut-and-stack nanofiber paper toward fast transient energy storage. Inorganic Chemistry Frontiers, 2016, 3, 681-688.	6.0	10

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73	Rapid, in Situ Synthesis of High Capacity Battery Anodes through High Temperature Radiation-Based Thermal Shock. Nano Letters, 2016, 16, 5553-5558.	9.1	67
74	A Solutionâ€Processed Highâ€Temperature, Flexible, Thinâ€Film Actuator. Advanced Materials, 2016, 28, 8618-8624.	21.0	53
75	Carbon Welding by Ultrafast Joule Heating. Nano Letters, 2016, 16, 7282-7289.	9.1	88
76	Ultra-fast self-assembly and stabilization of reactive nanoparticles in reduced graphene oxide films. Nature Communications, 2016, 7, 12332.	12.8	123
77	Thermally conductive, dielectric PCMâ€“boron nitride nanosheet composites for efficient electronic system thermal management. Nanoscale, 2016, 8, 19326-19333.	5.6	80
78	Flash-induced reduced graphene oxide as a Sn anode host for high performance sodium ion batteries. Journal of Materials Chemistry A, 2016, 4, 18306-18313.	10.3	47
79	Flexible Batteries: From Mechanics to Devices. ACS Energy Letters, 2016, 1, 1065-1079.	17.4	170
80	Flexible, solid-state, ion-conducting membrane with 3D garnet nanofiber networks for lithium batteries. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 7094-7099.	7.1	769
81	Understanding glass fiber membrane used as a novel separator for lithiumâ€“sulfur batteries. Journal of Membrane Science, 2016, 504, 89-96.	8.2	152
82	Comparing the structures and sodium storage properties of centrifugally spun SnO2 microfiber anodes with/without chemical vapor deposition. Journal of Materials Science, 2016, 51, 4549-4558.	3.7	8
83	Carbonized-leaf Membrane with Anisotropic Surfaces for Sodium-ion Battery. ACS Applied Materials & Interfaces, 2016, 8, 2204-2210.	8.0	146
84	Use of a tin antimony alloy-filled porous carbon nanofiber composite as an anode in sodium-ion batteries. RSC Advances, 2015, 5, 30793-30800.	3.6	70
85	A Thermally Conductive Separator for Stable Li Metal Anodes. Nano Letters, 2015, 15, 6149-6154.	9.1	313
86	Nitrogen-doped carbon nanofibers derived from polyacrylonitrile for use as anode material in sodium-ion batteries. Carbon, 2015, 94, 189-195.	10.3	260
87	Hydroxylated carbon nanotube enhanced sulfur cathodes for improved electrochemical performance of lithiumâ€“sulfur batteries. Chemical Communications, 2015, 51, 13682-13685.	4.1	55
88	Transient Rechargeable Batteries Triggered by Cascade Reactions. Nano Letters, 2015, 15, 4664-4671.	9.1	77
89	Encapsulation of S/SWNT with PANI Web for Enhanced Rate and Cycle Performance in Lithium Sulfur Batteries. Scientific Reports, 2015, 5, 8946.	3.3	42
90	SiO₂-confined silicon/carbon nanofiber composites as an anode for lithium-ion batteries. RSC Advances, 2015, 5, 34744-34751.	3.6	20

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91	Chemically Crushed Wood Cellulose Fiber towards High-Performance Sodium-Ion Batteries. ACS Applied Materials & Interfaces, 2015, 7, 23291-23296.	8.0	123
92	Organic electrode for non-aqueous potassium-ion batteries. Nano Energy, 2015, 18, 205-211.	16.0	397
93	Centrifugally-spun tin-containing carbon nanofibers as anode material for lithium-ion batteries. Journal of Materials Science, 2015, 50, 1094-1102.	3.7	34
94	Centrifugal spinning: A novel approach to fabricate porous carbon fibers as binder-free electrodes for electric double-layer capacitors. Journal of Power Sources, 2015, 273, 502-510.	7.8	72
95	Nanosized Ge@CNF, Ge@C@CNF and Ge@CNF@C composites via chemical vapour deposition method for use in advanced lithium-ion batteries. Journal of Power Sources, 2014, 253, 366-372.	7.8	50
96	A one-pot biosynthesis of reduced graphene oxide (RGO)/bacterial cellulose (BC) nanocomposites. Green Chemistry, 2014, 16, 3195-3201.	9.0	90
97	Nanoparticle-on-nanofiber hybrid membrane separators for lithium-ion batteries via combining electrospraying and electrospinning techniques. Journal of Membrane Science, 2014, 456, 57-65.	8.2	180
98	Carbon-Confined PVA-Derived Silicon/Silica/Carbon Nanofiber Composites as Anode for Lithium-Ion Batteries. Journal of the Electrochemical Society, 2014, 161, A2197-A2203.	2.9	42
99	Sulfur gradient-distributed CNF composite: a self-inhibiting cathode for binder-free lithiumâ€“sulfur batteries. Chemical Communications, 2014, 50, 10277-10280.	4.1	75
100	A review of recent developments in membrane separators for rechargeable lithium-ion batteries. Energy and Environmental Science, 2014, 7, 3857-3886.	30.8	1,152
101	Copper-doped Li4Ti5O12/carbon nanofiber composites as anode for high-performance sodium-ion batteries. Journal of Power Sources, 2014, 272, 860-865.	7.8	86
102	Comparison of Si/C, Ge/C and Sn/C composite nanofiber anodes used in advanced lithium-ion batteries. Solid State Ionics, 2014, 254, 17-26.	2.7	44
103	One-dimensional SiOC/C composite nanofibers as binder-free anodes for lithium-ion batteries. Journal of Power Sources, 2014, 254, 33-38.	7.8	44
104	Carbon-enhanced electrodeposited SnO2/carbon nanofiber composites as anode for lithium-ion batteries. Journal of Power Sources, 2014, 264, 240-247.	7.8	96
105	Chamber-confined siliconâ€“carbon nanofiber composites for prolonged cycling life of Li-ion batteries. Nanoscale, 2014, 6, 7489-7495.	5.6	60
106	Aligned Carbon Nanotubeâ€Silicon Sheets: A Novel Nanoâ€architecture for Flexible Lithium Ion Battery Electrodes. Advanced Materials, 2013, 25, 5109-5114.	21.0	232
107	Co3O4/Carbon Composite Nanofibers for Use as Anode Material in Advanced Lithium-Ion Batteries. ACS Symposium Series, 2013, , 55-66.	0.5	0
108	Parameter study and characterization for polyacrylonitrile nanofibers fabricated via centrifugal spinning process. European Polymer Journal, 2013, 49, 3834-3845.	5.4	157

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109	A simple method to encapsulate SnSb nanoparticles into hollow carbon nanofibers with superior lithium-ion storage capability. Journal of Materials Chemistry A, 2013, 1, 13807.	10.3	56
110	Effect of CVD carbon coatings on Si@CNF composite as anode for lithium-ion batteries. Nano Energy, 2013, 2, 976-986.	16.0	129
111	Si/C composite nanofibers with stable electric conductive network for use as durable lithium-ion battery anode. Nano Energy, 2013, 2, 361-367.	16.0	84
112	Carbon-Coated Si Nanoparticles Dispersed in Carbon Nanotube Networks As Anode Material for Lithium-Ion Batteries. ACS Applied Materials & Interfaces, 2013, 5, 21-25.	8.0	148
113	High-performance Sn/Carbon Composite Anodes Derived from Sn(II) Acetate/Polyacrylonitrile Precursors by Electrospinning Technology. Current Organic Chemistry, 2013, 17, 1448-1454.	1.6	2
114	Influence of ethylene glycol pretreatment on effectiveness of atmospheric pressure plasma treatment of polyethylene fibers. Applied Surface Science, 2010, 256, 3253-3258.	6.1	8
115	Effect of Microstructure on the Resilience of Silicon Carbide to Palladium Attack. Journal of the American Ceramic Society, 2010, 93, 4135-4141.	3.8	20
116	Polarized Angular Dependent Light Scattering Properties of Bare and PEGylated Gold Nanoshells. Current Nanoscience, 2007, 3, 167-170.	1.2	14
117	Non-critical phase matching of GdxY1âˆ’xCa4O(BO3)3(GdxY1âˆ’xCOB) crystal. Solid State Communications, 2001, 120, 397-400.	1.9	23