Ke Chen

List of Publications by Year
in descending order

104 papers	6,832 citations	61984 43 h-index	60623 81 g-index
104 all docs	104 docs citations	104 times ranked	10059 citing authors

#	Article	IF	Citations
1	Enhanced photovoltage for inverted planar heterojunction perovskite solar cells. Science, 2018, 360, 1442-1446.	12.6	1,221
2	Inverted Perovskite Solar Cells: Progresses and Perspectives. Advanced Energy Materials, 2016, 6, 1600457.	19.5	387
3	Fluorinated hybrid solid-electrolyte-interphase for dendrite-free lithium deposition. Nature Communications, 2020, 11, 93.	12.8	312
4	Chargeâ€Carrier Balance for Highly Efficient Inverted Planar Heterojunction Perovskite Solar Cells. Advanced Materials, 2016, 28, 10718-10724.	21.0	214
5	Scalable Seashell-Based Chemical Vapor Deposition Growth of Three-Dimensional Graphene Foams for Oilâ€"Water Separation. Journal of the American Chemical Society, 2016, 138, 6360-6363.	13.7	212
6	Low-dimensional perovskite interlayer for highly efficient lead-free formamidinium tin iodide perovskite solar cells. Nano Energy, 2018, 49, 411-418.	16.0	184
7	A strategic review on processing routes towards highly efficient perovskite solar cells. Journal of Materials Chemistry A, 2018, 6, 2406-2431.	10.3	179
8	Highâ€Performance Inverted Planar Heterojunction Perovskite Solar Cells Based on Lead Acetate Precursor with Efficiency Exceeding 18%. Advanced Functional Materials, 2016, 26, 3508-3514.	14.9	176
9	Flower-shaped lithium nitride as a protective layer via facile plasma activation for stable lithium metal anodes. Energy Storage Materials, 2019, 18, 389-396.	18.0	149
10	Dualâ€Source Precursor Approach for Highly Efficient Inverted Planar Heterojunction Perovskite Solar Cells. Advanced Materials, 2017, 29, 1604758.	21.0	142
11	Scalable chemical-vapour-deposition growth of three-dimensional graphene materials towards energy-related applications. Chemical Society Reviews, 2018, 47, 3018-3036.	38.1	140
12	Highly Efficient Perovskite Solar Cell Photocharging of Lithium Ion Battery Using DCâ€"DC Booster. Advanced Energy Materials, 2017, 7, 1602105.	19.5	128
13	Ultrathin Bilayer of Graphite/SiO₂ as Solid Interface for Reviving Li Metal Anode. Advanced Energy Materials, 2019, 9, 1901486.	19.5	128
14	Graphene photonic crystal fibre with strong and tunable lightâ€"matter interaction. Nature Photonics, 2019, 13, 754-759.	31.4	127
15	Mesoporous PbI₂ Scaffold for Highâ€Performance Planar Heterojunction Perovskite Solar Cells. Advanced Energy Materials, 2016, 6, 1501890.	19.5	124
16	Catalyst-Free Growth of Three-Dimensional Graphene Flakes and Graphene/g-C₃N₄ Composite for Hydrocarbon Oxidation. ACS Nano, 2016, 10, 3665-3673.	14.6	122
17	Direct low-temperature synthesis of graphene on various glasses by plasma-enhanced chemical vapor deposition for versatile, cost-effective electrodes. Nano Research, 2015, 8, 3496-3504.	10.4	112
18	Tailored PEDOT:PSS hole transport layer for higher performance in perovskite solar cells: Enhancement of electrical and optical properties with improved morphology. Journal of Energy Chemistry, 2020, 44, 41-50.	12.9	105

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19	Phenylhydrazinium Iodide for Surface Passivation and Defects Suppression in Perovskite Solar Cells. Advanced Functional Materials, 2020, 30, 2000778.	14.9	103
20	Synthesis of Au@ZIF-8 nanocomposites for enhanced electrochemical detection of dopamine. Electrochemistry Communications, 2020, 114, 106715.	4.7	97
21	A universal etching-free transfer of MoS2 films for applications in photodetectors. Nano Research, 2015, 8, 3662-3672.	10.4	94
22	Improving photovoltaic performance of carbon-based CsPbBr3 perovskite solar cells by interfacial engineering using P3HT interlayer. Journal of Power Sources, 2019, 432, 48-54.	7.8	94
23	Growing three-dimensional biomorphic graphene powders using naturally abundant diatomite templates towards high solution processability. Nature Communications, 2016, 7, 13440.	12.8	93
24	Self-recovery in Li-metal hybrid lithium-ion batteries via WO₃ reduction. Nanoscale, 2018, 10, 15956-15966.	5.6	87
25	Inverted Currentâ€"Voltage Hysteresis in Perovskite Solar Cells. ACS Energy Letters, 2018, 3, 2457-2460.	17.4	84
26	A review on strategies addressing interface incompatibilities in inorganic all-solid-state lithium batteries. Sustainable Energy and Fuels, 2019, 3, 3279-3309.	4.9	83
27	Bias-Dependent Normal and Inverted Jâ€"V Hysteresis in Perovskite Solar Cells. ACS Applied Materials & Interfaces, 2018, 10, 25604-25613.	8.0	77
28	High lithium electroactivity of electrospun CuFe2O4 nanofibers as anode material for lithium-ion batteries. Electrochimica Acta, 2014, 144, 85-91.	5.2	74
29	MOF-derived hierarchical carbon network as an extremely-high-performance supercapacitor electrode. Electrochimica Acta, 2021, 394, 139058.	5.2	67
30	Synthesis of resorcinolâ€"formaldehyde/silica composite aerogels and their low-temperature conversion to mesoporous silicon carbide. Microporous and Mesoporous Materials, 2012, 149, 16-24.	4.4	65
31	The distinctive phase stability and defect physics in CsPbI₂Br perovskite. Journal of Materials Chemistry A, 2019, 7, 20201-20207.	10.3	64
32	Switching Vertical to Horizontal Graphene Growth Using Faraday Cageâ€Assisted PECVD Approach for Highâ€Performance Transparent Heating Device. Advanced Materials, 2018, 30, 1704839.	21.0	62
33	Laccase Biosensor Based on Electrospun Copper/Carbon Composite Nanofibers for Catechol Detection. Sensors, 2014, 14, 3543-3556.	3.8	61
34	Advanced strategies for the development of porous carbon as a Li host/current collector for lithium metal batteries. Energy Storage Materials, 2021, 41, 448-465.	18.0	60
35	Freestanding monolithic silicon aerogels. Journal of Materials Chemistry, 2012, 22, 16196.	6.7	58
36	High-performance carbon electrode-based CsPbI2Br inorganic perovskite solar cell based on poly(3-hexylthiophene)-carbon nanotubes composite hole-transporting layer. Journal of Colloid and Interface Science, 2019, 555, 180-186.	9.4	58

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37	Direct Synthesis of Fewâ€Layer Graphene on NaCl Crystals. Small, 2015, 11, 6302-6308.	10.0	57
38	Pinhole-Free Hybrid Perovskite Film with Arbitrarily-Shaped Micro-Patterns for Functional Optoelectronic Devices. Nano Letters, 2017, 17, 3563-3569.	9.1	57
39	A highly efficient, orange light-emitting (K_{0.5}Na_{0.5})NbO₃:Sm³⁺/Zr⁴⁺ lead-free piezoelectric material with superior water resistance behavior. Journal of Materials Chemistry C, 2015, 3, 5275-5284.	5.5	54
40	A copper-clad lithiophilic current collector for dendrite-free lithium metal anodes. Journal of Materials Chemistry A, 2020, 8, 1911-1919.	10.3	49
41	The novel transistor and photodetector of monolayer MoS2 based on surface-ionic-gate modulation powered by a triboelectric nanogenerator. Nano Energy, 2019, 62, 38-45.	16.0	46
42	Reduced graphene oxide paper by supercritical ethanol treatment and its electrochemical properties. Applied Surface Science, 2012, 258, 5299-5303.	6.1	45
43	Fabrication of electrospun ZnMn 2 O 4 nanofibers as anode material for lithium-ion batteries. Electrochimica Acta, 2015, 177, 283-289.	5.2	44
44	Electrospun synthesis and lithium storage properties of magnesium ferrite nanofibers. Electrochimica Acta, 2015, 160, 43-49.	5.2	43
45	Massive Growth of Graphene Quartz Fiber as a Multifunctional Electrode. ACS Nano, 2020, 14, 5938-5945.	14.6	43
46	Mitigating Open-Circuit Voltage Loss in Pbâ€“Sn Low-Bandgap Perovskite Solar Cells via Additive Engineering. ACS Applied Energy Materials, 2021, 4, 1731-1742.	5.1	43
47	Facile synthesis of one-dimensional zinc vanadate nanofibers for high lithium storage anode material. Journal of Alloys and Compounds, 2015, 649, 1019-1024.	5.5	42
48	Plasma Oxidized Ti₃C₂T_x MXene as Electron Transport Layer for Efficient Perovskite Solar Cells. ACS Applied Materials & Interfaces, 2021, 13, 32495-32502.	8.0	41
49	Highly Conductive Nitrogen-Doped Graphene Grown on Glass toward Electrochromic Applications. ACS Applied Materials & Interfaces, 2018, 10, 32622-32630.	8.0	37
50	Fabrication of PANI-coated ZnFe2O4 nanofibers with enhanced electrochemical performance for energy storage. Electrochimica Acta, 2018, 273, 282-288.	5.2	36
51	Superstable copper nanowire network electrodes by single-crystal graphene covering and their applications in flexible nanogenerator and light-emitting diode. Nano Energy, 2020, 71, 104638.	16.0	35
52	Ultrafast Catalyst-Free Graphene Growth on Glass Assisted by Local Fluorine Supply. ACS Nano, 2019, 13, 10272-10278.	14.6	32
53	High-energy plasma activation of renewable carbon for enhanced capacitive performance of supercapacitor electrode. Electrochimica Acta, 2020, 362, 137148.	5.2	31
54	Rearâ€Illuminated Perovskite Photorechargeable Lithium Battery. Advanced Functional Materials, 2020, 30, 2001865.	14.9	31

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55	High-mass-loading Sn-based anode boosted by pseudocapacitance for long-life sodium-ion batteries. Chemical Engineering Journal, 2021, 414, 128638.	12.7	29
56	Nitrogen-doped graphdiyne nanowall stabilized dendrite-free lithium metal anodes. Journal of Materials Chemistry A, 2019, 7, 27535-27546.	10.3	28
57	One-pot synthesis, characterization and properties of acid-catalyzed resorcinol/formaldehyde cross-linked silica aerogels and their conversion to hierarchical porous carbon monoliths. Journal of Sol-Gel Science and Technology, 2012, 62, 294-303.	2.4	27
58	Activation of Passive Nanofillers in Composite Polymer Electrolyte for Higher Performance Lithiumâ€Ion Batteries. Advanced Sustainable Systems, 2017, 1, 1700043.	5.3	26
59	Growth of defect-engineered graphene on manganese oxides for Li-ion storage. Energy Storage Materials, 2018, 12, 110-118.	18.0	26
60	Bioinspired synthesis of CVD graphene flakes and graphene-supported molybdenum sulfide catalysts for hydrogen evolution reaction. Nano Research, 2016, 9, 249-259.	10.4	24
61	Amino-functionalized magnetic magnesium silicate double-shelled hollow microspheres for enhanced removal of lead ions. RSC Advances, 2015, 5, 22973-22979.	3.6	21
62	Mineralâ€Templated 3D Graphene Architectures for Energyâ€Efficient Electrodes. Small, 2018, 14, e1801009.	10.0	21
63	Grain Boundary Defect Passivation in Quadruple Cation Wideâ€Bandgap Perovskite Solar Cells. Solar Rrl, 2021, 5, 2000740.	5.8	19
64	Uniform single-layer graphene growth on recyclable tungsten foils. Nano Research, 2015, 8, 592-599.	10.4	18
65	Comparison of performance and optoelectronic processes in ZnO and TiO2 nanorod array-based hybrid solar cells. Applied Surface Science, 2018, 456, 124-132.	6.1	18
66	Oneâ€Step Growth of Graphene/Carbon Nanotube Hybrid Films on Sodaâ€Lime Glass for Transparent Conducting Applications. Advanced Electronic Materials, 2017, 3, 1700212.	5.1	17
67	Fast-growing procedure for perovskite films in planar heterojunction perovskite solar cells. Chinese Chemical Letters, 2015, 26, 1518-1521.	9.0	16
68	Size and crystallinity control of dispersed VO₂ particles for modulation of metalâ€"insulator transition temperature and hysteresis. CrystEngComm, 2019, 21, 5749-5756.	2.6	16
69	Mitigating Interfacial Mismatch between Lithium Metal and Garnet-Type Solid Electrolyte by Depositing Metal Nitride Lithiophilic Interlayer. ACS Applied Energy Materials, 2022, 5, 648-657.	5.1	16
70	Tailoring the Grain Boundaries of Wideâ€Bandgap Perovskite Solar Cells by Molecular Engineering. Solar Rrl, 2020, 4, 2000384.	5.8	15
71	Electrospun synthesis and electrochemical property of zinc ferrite nanofibers. Ionics, 2016, 22, 967-974.	2.4	13
72	Low temperature pseudomorphic synthesis of nanocrystalline carbide aerogels for electrocatalysis. Journal of Materials Chemistry A, 2015, 3, 11745-11749.	10.3	12

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73	Fabrication of compact and stable perovskite films with optimized precursor composition in the fast-growing procedure. Science China Materials, 2017, 60, 608-616.	6.3	12
74	Structural Regulation for Highly Efficient and Stable Perovskite Solar Cells via Mixed-Vapor Deposition. ACS Applied Energy Materials, 2020, 3, 6544-6551.	5.1	10
75	Achieving High Pseudocapacitance Anode by An In Situ Nanocrystallization Strategy for Ultrastable Sodium-Ion Batteries. ACS Applied Materials & Interfaces, 2021, 13, 22577-22585.	8.0	10
76	Synthesis and characterization of carbide nanosheets by a template-confined reaction. Journal of Nanoparticle Research, 2012, 14, 1.	1.9	9
77	Sonochemical synthesis and high lithium storage properties of Sn/CMK-3 nanocomposites. Electrochimica Acta, 2015, 165, 149-154.	5.2	9
78	Rapid and Low-Temperature Processing of Mesoporous and Nanocrystalline TiO₂ Film Using Microwave Irradiation. ACS Applied Energy Materials, 2018, 1, 6288-6294.	5.1	9
79	The electronic properties tuned by the synergy of polaron and d-orbital in a Coâ€“Sn co-intercalated Î±-MoO₃ system. Journal of Materials Chemistry C, 2020, 8, 6536-6541.	5.5	9
80	Enhanced Hemocompatibility of a Direct Chemical Vapor Deposition-Derived Graphene Film. ACS Applied Materials & Interfaces, 2021, 13, 4835-4843.	8.0	8
81	Ultraflat Langmuirâ€“Blodgett assembled graphene oxide saturable-absorber films for pulsed near-infrared laser generation. Nanotechnology, 2021, 32, 385709.	2.6	8
82	Potential SiO2/CRF bilayer perturbation aerogel target for ICF hydrodynamic instability experiment. Fusion Engineering and Design, 2012, 87, 92-97.	1.9	7
83	Solution-processed all-oxide bulk heterojunction solar cells based on CuO nanaorod array and TiO2nanocrystals. Nanotechnology, 2018, 29, 215403.	2.6	7
84	Controllable Growth of Graphene Photonic Crystal Fibers with Tunable Optical Nonlinearity. ACS Photonics, 2022, 9, 961-968.	6.6	7
85	Graphene-integrated waveguides: Properties, preparation, and applications. Nano Research, 2022, 15, 9704-9726.	10.4	7
86	Template confined synthetic strategy for three-dimensional free-standing hierarchical porous nanocrystalline tantalum. Materials Letters, 2014, 116, 31-34.	2.6	6
87	Perovskite Solar Cells: High-Performance Inverted Planar Heterojunction Perovskite Solar Cells Based on Lead Acetate Precursor with Efficiency Exceeding 18% (Adv. Funct. Mater. 20/2016). Advanced Functional Materials, 2016, 26, 3551-3551.	14.9	6
88	Suppressing interface charge recombination for efficient integrated perovskite/organic bulk-heterojunction solar cells. Journal of Power Sources, 2022, 541, 231665.	7.8	6
89	Design and fabrication of a CH/CRF dual-layer perturbation target for ICF hydrodynamic experiments. Nuclear Fusion, 2011, 51, 083044.	3.5	5
90	Facile Chemical Fabrication of a Three-Dimensional Copper Current Collector for Stable Lithium Metal Anodes. Journal of the Electrochemical Society, 2021, 168, 070502.	2.9	5

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91	Thermal and illumination effects on a PbI₂ nanoplate and its transformation to CH₃NH₃PbI₃ perovskite. CrystEngComm, 2019, 21, 736-740.	2.6	4
92	Molecule occupancy by a n-butylamine treatment to facilitate the conversion of PbI₂ to perovskite in sequential deposition. Physical Chemistry Chemical Physics, 2020, 22, 981-984.	2.8	4
93	Research progress of solution processed all-inorganic perovskite solar cell. Wuli Xuebao/Acta Physica Sinica, 2019, 68, 158806.	0.5	4
94	Enhanced near-field coupling and tunable topological transitions in hyperbolic van der Waals metasurfaces for optical nanomanipulation. Nanoscale, 2022, 14, 7075-7082.	5.6	4
95	One-pot synthesis of 3D Au nanoparticle clusters with tunable size and their application. Nanotechnology, 2020, 31, 085601.	2.6	3
96	SnO2 Nanoparticles Embedded Biochar as Anode Material in Lithium Ion Batteries. , 2019, , .		1
97	Modeling of Charge Transfer in Mesoscopic Perovskite Solar Cells by Considering a Trapassisted Interface. , 2019, , .		1
98	Dynamics analysis of erythrosine B sensitized photopolymer holographic gratings. , 2008, , .		0
99	Comparison of high-density holographic characteristics of photopolymers sensitized by two kinds of thiazine dyes. , 2008, , .		0
100	Charge Carrier Balance for Highly Efficient Inverted Planar Heterojunction Perovskite Solar Cells Based on Interface Engineering. , 2016, , .		0
101	Capacity Revival of Tungsten trioxide Anode Material in Lithium-Ion Battery. , 2019, , .		0
102	High efficiency photocatalytic reaction dominated by the direct transfer of hot electrons. Physica E: Low-Dimensional Systems and Nanostructures, 2020, 115, 113699.	2.7	0
103	Solving Lithium Dendrite Problems through Structure Design of Advanced Metal Anodes for Lithium Metal Batteries. ECS Meeting Abstracts, 2021, MA2021-01, 2085-2085.	0.0	0
104	Flexible 3D Cu/C Scaffolds As Lithium Host for Dendrite-Free Lithium Metal Battery. ECS Meeting Abstracts, 2020, MA2020-02, 3787-3787.	0.0	0