Kai Wu

List of Publications by Year
in descending order

53 papers	3,527 citations	159585 30 h-index	168389 53 g-index
53 all docs	53 docs citations	53 times ranked	2593 citing authors

#	Article	IF	Citations
1	A Structured Phase Change Material with Controllable Thermoconductive Highways Enables Unparalleled Electricity via Solarâ€Thermalâ€Electric Conversion. Advanced Functional Materials, 2022, 32, 2109255.	14.9	49
2	Highly thermoconductive yet ultraflexible polymer composites with superior mechanical properties and autonomous self-healing functionalityviaa binary filler strategy. Materials Horizons, 2022, 9, 640-652.	12.2	53
3	Aldehyde-methacrylate-hyaluronan profited hydrogel system integrating aligned and viscoelastic cues for neurogenesis. Carbohydrate Polymers, 2022, 278, 118961.	10.2	9
4	One-step synthesis of ultrabright amphiphilic carbon dots for rapid and precise tracking lipid droplets dynamics in biosystems. Biosensors and Bioelectronics, 2022, 200, 113928.	10.1	26
5	Semiconvertible Hyaluronic Hydrogel Enabled Red-Light-Responsive Reversible Mechanics, Adhesion, and Self-Healing. Biomacromolecules, 2022, 23, 1030-1040.	5.4	19
6	A thermally conductive interface material with tremendous and reversible surface adhesion promises durable cross-interface heat conduction. Materials Horizons, 2022, 9, 1690-1699.	12.2	55
7	The effect of filler permittivity on the dielectric properties of polymer-based composites. Composites Science and Technology, 2022, 222, 109342.	7.8	20
8	Knittable Composite Fiber Allows Constant and Tremendous Selfâ€Powering Based on the Transpirationâ€Driven Electrokinetic Effect. Advanced Functional Materials, 2022, 32, .	14.9	17
9	A Universal Mechanochemistry Allows Onâ€Demand Synthesis of Stable and Processable Liquid Metal Composites. Small Methods, 2022, 6, .	8.6	24
10	Highly thermo-conductive but electrically insulating filament via a volume-confinement self-assembled strategy for thermoelectric wearables. Chemical Engineering Journal, 2021, 421, 127764.	12.7	14
11	A self-reinforcing and self-healing elastomer with high strength, unprecedented toughness and room-temperature reparability. Materials Horizons, 2021, 8, 267-275.	12.2	161
12	Fiber-reinforced monolithic supercapacitors with interdigitated interfaces. Journal of Materials Chemistry A, 2021, 9, 11033-11041.	10.3	6
13	Improved dielectric and energy storage properties of polypropylene by adding hybrid fillers and high-speed extrusion. Polymer, 2021, 214, 123348.	3.8	30
14	The effect of cellulose molecular weight on internal structure and properties of regenerated cellulose fibers as spun from the alkali/urea aqueous system. Polymer, 2021, 215, 123379.	3.8	22
15	Insights into the microstructures and reinforcement mechanism of nano-fibrillated cellulose/MXene based electromagnetic interference shielding film. Cellulose, 2021, 28, 3311-3325.	4.9	31
16	Reconfigurable and Renewable Nanoâ€Microâ€Structured Plastics for Radiative Cooling. Advanced Functional Materials, 2021, 31, 2100535.	14.9	58
17	Staticâ€“Dynamic Profited Viscoelastic Hydrogels for Motor-Clutch-Regulated Neurogenesis. ACS Applied Materials & Interfaces, 2021, 13, 24463-24476.	8.0	23
18	Thermo-conductive phase change materials with binary fillers of core-shell-like distribution. Composites Part A: Applied Science and Manufacturing, 2021, 144, 106326.	7.6	21

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19	Fully Organic Bulk Polymer with Metallic Thermal Conductivity and Tunable Thermal Pathways. Advanced Science, 2021, 8, e2004821.	11.2	51
20	One-step alkyl-modification on boron nitride nanosheets for polypropylene nanocomposites with enhanced thermal conductivity and ultra-low dielectric loss. Composites Science and Technology, 2021, 208, 108756.	7.8	51
21	Magnetoelectric Nanoparticles Incorporated Biomimetic Matrix for Wireless Electrical Stimulation and Nerve Regeneration. Advanced Healthcare Materials, 2021, 10, e2100695.	7.6	59
22	Dragonfly wing-inspired architecture makes a stiff yet tough healable material. Matter, 2021, 4, 2474-2489.	10.0	63
23	Controlled Vertically Aligned Structures in Polymer Composites: Natural Inspiration, Structural Processing, and Functional Application. Advanced Materials, 2021, 33, e2103495.	21.0	62
24	Highly thermo-conductive yet electrically insulating material with perpendicularly engineered assembly of boron nitride nanosheets. Composites Science and Technology, 2021, 214, 108995.	7.8	29
25	Antioxidative and Conductive Nanoparticles-Embedded Cell Niche for Neural Differentiation and Spinal Cord Injury Repair. ACS Applied Materials & Interfaces, 2021, 13, 52346-52361.	8.0	35
26	Tunable Fast Relaxation in Imine-Based Nanofibrillar Hydrogels Stimulates Cell Response through TRPV4 Activation. Biomacromolecules, 2020, 21, 3745-3755.	5.4	20
27	Spatiotemporal regulation of dynamic cell microenvironment signals based on an azobenzene photoswitch. Journal of Materials Chemistry B, 2020, 8, 9212-9226.	5.8	8
28	A Dual-Crosslinked and Anisotropic Regenerated Cellulose/Boron Nitride Nanosheets Film With High Thermal Conductivity, Mechanical Strength, and Toughness. Frontiers in Bioengineering and Biotechnology, 2020, 8, 602318.	4.1	3
29	A Multidirectionally Thermoconductive Phase Change Material Enables High and Durable Electricity <i>via</i> Real-Environment Solarâ€“Thermalâ€“Electric Conversion. ACS Nano, 2020, 14, 15738-15747.	14.6	152
30	Metal-Level Robust, Folding Endurance, and Highly Temperature-Stable MXene-Based Film with Engineered Aramid Nanofiber for Extreme-Condition Electromagnetic Interference Shielding Applications. ACS Applied Materials & Interfaces, 2020, 12, 26485-26495.	8.0	113
31	Addressing the challenge of fabricating a high content regenerated cellulose/nanomaterial composite: the magical effect of urea. Green Chemistry, 2020, 22, 4121-4127.	9.0	7
32	Highly Thermoconductive, Thermostable, and Superâ€Flexible Film by Engineering 1D Rigid Rodâ€Like Aramid Nanofiber/2D Boron Nitride Nanosheets. Advanced Materials, 2020, 32, e1906939.	21.0	234
33	Is filler orientation always good for thermal management performance: A visualized study from experimental results to simulative analysis. Chemical Engineering Journal, 2020, 394, 124929.	12.7	52
34	Utilizing ammonium persulfate assisted expansion to fabricate flexible expanded graphite films with excellent thermal conductivity by introducing wrinkles. Carbon, 2019, 153, 565-574.	10.3	29
35	Phase change material with anisotropically high thermal conductivity and excellent shape stability due to its robust cellulose/BNNSs skeleton. Journal of Materials Chemistry A, 2019, 7, 19364-19373.	10.3	103
36	Green Production of Regenerated Cellulose/Boron Nitride Nanosheet Textiles for Static and Dynamic Personal Cooling. ACS Applied Materials & Interfaces, 2019, 11, 40685-40693.	8.0	61

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37	Largely enhanced energy density of polypropylene based nanocomposites via synergistic hybrid fillers and high shear extrusion assisted dispersion. Composites Part A: Applied Science and Manufacturing, 2019, 119, 134-144.	7.6	33
38	Preparation of highly thermally conductive but electrically insulating composites by constructing a segregated double network in polymer composites. Composites Science and Technology, 2019, 175, 135-142.	7.8	70
39	Surface modifications of boron nitride nanosheets for poly(vinylidene fluoride) based film capacitors: advantages of edge-hydroxylation. Journal of Materials Chemistry A, 2019, 7, 7664-7674.	10.3	82
40	Largely enhanced energy storage density of poly(vinylidene fluoride) nanocomposites based on surface hydroxylation of boron nitride nanosheets. Journal of Materials Chemistry A, 2018, 6, 7573-7584.	10.3	139
41	Graphene enhanced flexible expanded graphite film with high electric, thermal conductivities and EMI shielding at low content. Carbon, 2018, 133, 435-445.	10.3	104
42	New insight of high temperature oxidation on self-exfoliation capability of graphene oxide. Nanotechnology, 2018, 29, 185601.	2.6	11
43	Preparation of a thermally conductive biodegradable cellulose nanofiber/hydroxylated boron nitride nanosheet film: the critical role of edge-hydroxylation. Journal of Materials Chemistry A, 2018, 6, 11863-11873.	10.3	119
44	Design and Preparation of a Unique Segregated Double Network with Excellent Thermal Conductive Property. ACS Applied Materials & Interfaces, 2017, 9, 7637-7647.	8.0	155
45	Largely improved thermal conductivity of HDPE/expanded graphite/carbon nanotubes ternary composites via filler network-network synergy. Composites Part A: Applied Science and Manufacturing, 2017, 99, 32-40.	7.6	143
46	Ultrathin flexible reduced graphene oxide/cellulose nanofiber composite films with strongly anisotropic thermal conductivity and efficient electromagnetic interference shielding. Journal of Materials Chemistry C, 2017, 5, 3748-3756.	5.5	294
47	Constructing conductive multi-walled carbon nanotubes network inside hexagonal boron nitride network in polymer composites for significantly improved dielectric property and thermal conductivity. Composites Science and Technology, 2017, 151, 193-201.	7.8	43
48	Achieving a Collapsible, Strong, and Highly Thermally Conductive Film Based on Oriented Functionalized Boron Nitride Nanosheets and Cellulose Nanofiber. ACS Applied Materials & Interfaces, 2017, 9, 30035-30045.	8.0	258
49	Preparation of nylon MXD6/EG/CNTs ternary composites with excellent thermal conductivity and electromagnetic interference shielding effectiveness. Chinese Journal of Polymer Science (English) Tj ETQq1 1 0.784314 rgBT /Overlock	4.1	30
50	Largely enhanced thermal and electrical conductivity via constructing double percolated filler network in polypropylene/expanded graphite â€“ Multi-wall carbon nanotubes ternary composites. Composites Science and Technology, 2016, 130, 28-35.	7.8	86
51	Surface modification of boron nitride by reduced graphene oxide for preparation of dielectric material with enhanced dielectric constant and well-suppressed dielectric loss. Composites Science and Technology, 2016, 134, 191-200.	7.8	98
52	Largely enhanced electrical properties of polymer composites via the combined effect of volume exclusion and synergy. RSC Advances, 2016, 6, 51900-51907.	3.6	9
53	Polydopamine coating layer on graphene for suppressing loss tangent and enhancing dielectric constant of poly(vinylidene fluoride)/graphene composites. Composites Part A: Applied Science and Manufacturing, 2015, 73, 85-92.	7.6	83