

Kai Wu

List of Publications by Year in descending order

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53
papers

3,527
citations

159585
30
h-index

168389
53
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all docs

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docs citations

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times ranked

2593
citing authors

#	ARTICLE	IF	CITATIONS
1	Ultrathin flexible reduced graphene oxide/cellulose nanofiber composite films with strongly anisotropic thermal conductivity and efficient electromagnetic interference shielding. <i>Journal of Materials Chemistry C</i> , 2017, 5, 3748-3756.	5.5	294
2	Achieving a Collapsible, Strong, and Highly Thermally Conductive Film Based on Oriented Functionalized Boron Nitride Nanosheets and Cellulose Nanofiber. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 30035-30045.	8.0	258
3	Highly Thermoconductive, Thermostable, and Superflexible Film by Engineering 1D Rigid Rodlike Aramid Nanofiber/2D Boron Nitride Nanosheets. <i>Advanced Materials</i> , 2020, 32, e1906939.	21.0	234
4	A self-reinforcing and self-healing elastomer with high strength, unprecedented toughness and room-temperature reparability. <i>Materials Horizons</i> , 2021, 8, 267-275.	12.2	161
5	Design and Preparation of a Unique Segregated Double Network with Excellent Thermal Conductive Property. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 7637-7647.	8.0	155
6	A Multidirectionally Thermoconductive Phase Change Material Enables High and Durable Electricity via Real-Environment Solar-Thermal-Electric Conversion. <i>ACS Nano</i> , 2020, 14, 15738-15747.	14.6	152
7	Largely improved thermal conductivity of HDPE/expanded graphite/carbon nanotubes ternary composites via filler network-network synergy. <i>Composites Part A: Applied Science and Manufacturing</i> , 2017, 99, 32-40.	7.6	143
8	Largely enhanced energy storage density of poly(vinylidene fluoride) nanocomposites based on surface hydroxylation of boron nitride nanosheets. <i>Journal of Materials Chemistry A</i> , 2018, 6, 7573-7584.	10.3	139
9	Preparation of a thermally conductive biodegradable cellulose nanofiber/hydroxylated boron nitride nanosheet film: the critical role of edge-hydroxylation. <i>Journal of Materials Chemistry A</i> , 2018, 6, 11863-11873.	10.3	119
10	Metal-Level Robust, Folding Endurance, and Highly Temperature-Stable MXene-Based Film with Engineered Aramid Nanofiber for Extreme-Condition Electromagnetic Interference Shielding Applications. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 26485-26495.	8.0	113
11	Graphene enhanced flexible expanded graphite film with high electric, thermal conductivities and EMI shielding at low content. <i>Carbon</i> , 2018, 133, 435-445.	10.3	104
12	Phase change material with anisotropically high thermal conductivity and excellent shape stability due to its robust cellulose/BNNSs skeleton. <i>Journal of Materials Chemistry A</i> , 2019, 7, 19364-19373.	10.3	103
13	Surface modification of boron nitride by reduced graphene oxide for preparation of dielectric material with enhanced dielectric constant and well-suppressed dielectric loss. <i>Composites Science and Technology</i> , 2016, 134, 191-200.	7.8	98
14	Largely enhanced thermal and electrical conductivity via constructing double percolated filler network in polypropylene/expanded graphite Multi-wall carbon nanotubes ternary composites. <i>Composites Science and Technology</i> , 2016, 130, 28-35.	7.8	86
15	Polydopamine coating layer on graphene for suppressing loss tangent and enhancing dielectric constant of poly(vinylidene fluoride)/graphene composites. <i>Composites Part A: Applied Science and Manufacturing</i> , 2015, 73, 85-92.	7.6	83
16	Surface modifications of boron nitride nanosheets for poly(vinylidene fluoride) based film capacitors: advantages of edge-hydroxylation. <i>Journal of Materials Chemistry A</i> , 2019, 7, 7664-7674.	10.3	82
17	Preparation of highly thermally conductive but electrically insulating composites by constructing a segregated double network in polymer composites. <i>Composites Science and Technology</i> , 2019, 175, 135-142.	7.8	70
18	Dragonfly wing-inspired architecture makes a stiff yet tough healable material. <i>Matter</i> , 2021, 4, 2474-2489.	10.0	63

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19	Controlled Vertically Aligned Structures in Polymer Composites: Natural Inspiration, Structural Processing, and Functional Application. <i>Advanced Materials</i> , 2021, 33, e2103495.	21.0	62
20	Green Production of Regenerated Cellulose/Boron Nitride Nanosheet Textiles for Static and Dynamic Personal Cooling. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 40685-40693.	8.0	61
21	Magnetoelectric Nanoparticles Incorporated Biomimetic Matrix for Wireless Electrical Stimulation and Nerve Regeneration. <i>Advanced Healthcare Materials</i> , 2021, 10, e2100695.	7.6	59
22	Reconfigurable and Renewable Nano-Structured Plastics for Radiative Cooling. <i>Advanced Functional Materials</i> , 2021, 31, 2100535.	14.9	58
23	A thermally conductive interface material with tremendous and reversible surface adhesion promises durable cross-interface heat conduction. <i>Materials Horizons</i> , 2022, 9, 1690-1699.	12.2	55
24	Highly thermoconductive yet ultraflexible polymer composites with superior mechanical properties and autonomous self-healing functionality via a binary filler strategy. <i>Materials Horizons</i> , 2022, 9, 640-652.	12.2	53
25	Is filler orientation always good for thermal management performance: A visualized study from experimental results to simulative analysis. <i>Chemical Engineering Journal</i> , 2020, 394, 124929.	12.7	52
26	Fully Organic Bulk Polymer with Metallic Thermal Conductivity and Tunable Thermal Pathways. <i>Advanced Science</i> , 2021, 8, e2004821.	11.2	51
27	One-step alkyl-modification on boron nitride nanosheets for polypropylene nanocomposites with enhanced thermal conductivity and ultra-low dielectric loss. <i>Composites Science and Technology</i> , 2021, 208, 108756.	7.8	51
28	A Structured Phase Change Material with Controllable Thermoconductive Highways Enables Unparalleled Electricity via Solar-Thermal-Electric Conversion. <i>Advanced Functional Materials</i> , 2022, 32, 2109255.	14.9	49
29	Constructing conductive multi-walled carbon nanotubes network inside hexagonal boron nitride network in polymer composites for significantly improved dielectric property and thermal conductivity. <i>Composites Science and Technology</i> , 2017, 151, 193-201.	7.8	43
30	Antioxidative and Conductive Nanoparticles-Embedded Cell Niche for Neural Differentiation and Spinal Cord Injury Repair. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 52346-52361.	8.0	35
31	Largely enhanced energy density of polypropylene based nanocomposites via synergistic hybrid fillers and high shear extrusion assisted dispersion. <i>Composites Part A: Applied Science and Manufacturing</i> , 2019, 119, 134-144.	7.6	33
32	Insights into the microstructures and reinforcement mechanism of nano-fibrillated cellulose/MXene based electromagnetic interference shielding film. <i>Cellulose</i> , 2021, 28, 3311-3325.	4.9	31
33	Preparation of nylon MXD6/EG/CNTs ternary composites with excellent thermal conductivity and electromagnetic interference shielding effectiveness. <i>Chinese Journal of Polymer Science (English)</i> 1 0.784314 rgBT3/Overlook	4.1	30
34	Improved dielectric and energy storage properties of polypropylene by adding hybrid fillers and high-speed extrusion. <i>Polymer</i> , 2021, 214, 123348.	3.8	30
35	Utilizing ammonium persulfate assisted expansion to fabricate flexible expanded graphite films with excellent thermal conductivity by introducing wrinkles. <i>Carbon</i> , 2019, 153, 565-574.	10.3	29
36	Highly thermo-conductive yet electrically insulating material with perpendicularly engineered assembly of boron nitride nanosheets. <i>Composites Science and Technology</i> , 2021, 214, 108995.	7.8	29

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37	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
38	A Universal Mechanochemistry Allows Onâ€Demand Synthesis of Stable and Processable Liquid Metal Composites. Small Methods, 2022, 6, .	8.6	24
39	Staticâ€Dynamic Profited Viscoelastic Hydrogels for Motor-Clutch-Regulated Neurogenesis. ACS Applied Materials & Interfaces, 2021, 13, 24463-24476.	8.0	23
40	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
41	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
42	Tunable Fast Relaxation in Imine-Based Nanofibrillar Hydrogels Stimulates Cell Response through TRPV4 Activation. Biomacromolecules, 2020, 21, 3745-3755.	5.4	20
43	The effect of filler permittivity on the dielectric properties of polymer-based composites. Composites Science and Technology, 2022, 222, 109342.	7.8	20
44	Semiconvertible Hyaluronic Hydrogel Enabled Red-Light-Responsive Reversible Mechanics, Adhesion, and Self-Healing. Biomacromolecules, 2022, 23, 1030-1040.	5.4	19
45	Knittable Composite Fiber Allows Constant and Tremendous Selfâ€Powering Based on the Transpirationâ€Driven Electrokinetic Effect. Advanced Functional Materials, 2022, 32, .	14.9	17
46	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
47	New insight of high temperature oxidation on self-exfoliation capability of graphene oxide. Nanotechnology, 2018, 29, 185601.	2.6	11
48	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
49	Aldehyde-methacrylate-hyaluronan profited hydrogel system integrating aligned and viscoelastic cues for neurogenesis. Carbohydrate Polymers, 2022, 278, 118961.	10.2	9
50	Spatiotemporal regulation of dynamic cell microenvironment signals based on an azobenzene photoswitch. Journal of Materials Chemistry B, 2020, 8, 9212-9226.	5.8	8
51	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
52	Fiber-reinforced monolithic supercapacitors with interdigitated interfaces. Journal of Materials Chemistry A, 2021, 9, 11033-11041.	10.3	6
53	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