

Enhanced thermal conductivity and mechanical properties in polyvinylidene fluoride fibers by electrospinning

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Citation Report

#	ARTICLE	IF	CITATIONS
1	Paving thermally conductive highway by 3D interconnected framework of carbon nanotube and graphene oxide in poly(vinylidene fluoride). Composites Part A: Applied Science and Manufacturing, 2018, 115, 331-340.	7.6	26
2	Scalable one-step synthesis of hydroxylated boron nitride nanosheets for obtaining multifunctional polyvinyl alcohol nanocomposite films: Multi-azimuth properties improvement. Composites Science and Technology, 2018, 168, 74-80.	7.8	32
3	Synergistic Enhancement of Thermal Conductivity and Dielectric Properties in Al ₂ O ₃ /BaTiO ₃ /PP Composites. Materials, 2018, 11, 1536.	2.9	29
4	Electrically insulating, layer structured SiR/GNPs/BN thermal management materials with enhanced thermal conductivity and breakdown voltage. Composites Science and Technology, 2018, 167, 456-462.	7.8	97
5	Recent developments in bio-monitoring via advanced polymer nanocomposite-based wearable strain sensors. Biosensors and Bioelectronics, 2019, 123, 167-177.	10.1	274
6	Preparation and application of high thermal conductivity TMBPDGE-DDM@h-BN composites. Materials Research Express, 2019, 6, 095320.	1.6	7
7	Cationic Polyelectrolyte Bridged Boron Nitride Microplatelet Based Poly(vinyl alcohol) Composite: A Novel Method toward High Thermal Conductivity. Advanced Materials Interfaces, 2019, 6, 1900787.	3.7	24
8	Mechanically stretchable piezoelectric polyvinylidene fluoride (PVDF)/Boron nitride nanosheets (BNNs) polymer nanocomposites. Composites Part B: Engineering, 2019, 175, 107157.	12.0	43
9	Flexible, thermally conductive layered composite films from massively exfoliated boron nitride nanosheets. Composites Part A: Applied Science and Manufacturing, 2019, 124, 105498.	7.6	56
10	Continuous network of CNTs in poly(vinylidene fluoride) composites with high thermal and mechanical performance for heat exchangers. Composites Science and Technology, 2019, 173, 33-40.	7.8	31
11	Simultaneous improvement of thermal conductivities and electromagnetic interference shielding performances in polystyrene composites via constructing interconnection oriented networks based on electrospinning technology. Composites Part A: Applied Science and Manufacturing, 2019, 124, 105484.	7.6	109
12	Constructing fully carbon-based fillers with a hierarchical structure to fabricate highly thermally conductive polyimide nanocomposites. Journal of Materials Chemistry C, 2019, 7, 7035-7044.	5.5	130
13	Highly Thermally Conducting Polymer-Based Films with Magnetic Field-Assisted Vertically Aligned Hexagonal Boron Nitride for Flexible Electronic Encapsulation. ACS Applied Materials & Interfaces, 2019, 11, 17915-17924.	8.0	70
14	Functionalized Boron Nitride Nanosheets/Poly(L-lactide) Nanocomposites and Their Crystallization Behavior. Polymers, 2019, 11, 440.	4.5	34
15	Preparation of highly thermally conductive epoxy resin composites via hollow boron nitride microbeads with segregated structure. Composites Part A: Applied Science and Manufacturing, 2019, 121, 330-340.	7.6	57
16	Oriented electrospun carbon nanofibers for improved through-plane thermal conductivity. , 2019, , .		0
17	Enhanced thermal conductivity of polyurethane composites via engineering small/large sizes interconnected boron nitride nanosheets. Composites Science and Technology, 2019, 170, 93-100.	7.8	160
18	Processable Thermally Conductive Polyurethane Composite Fibers. Macromolecular Materials and Engineering, 2019, 304, 1800542.	3.6	24

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19	Highly anisotropic thermally conductive polyimide composites via the alignment of boron nitride platelets. <i>Composites Part B: Engineering</i> , 2019, 158, 311-318.	12.0	79
20	The oxidation behavior of ZrB ₂ @ZrC composite nanofibers fabricated by electrospinning and carbothermal reduction. <i>Ceramics International</i> , 2020, 46, 10409-10415.	4.8	5
21	Highly Thermally Conductive Polyimide Composite Films with Excellent Thermal and Electrical Insulating Properties. <i>Industrial & Engineering Chemistry Research</i> , 2020, 59, 1925-1933.	3.7	52
22	Nanofibrillated Cellulose/MgO@rGO composite films with highly anisotropic thermal conductivity and electrical insulation. <i>Chemical Engineering Journal</i> , 2020, 392, 123714.	12.7	65
23	Enhancing thermal stability of P(VDF-HFP) based nanocomposites with core-shell fillers for energy storage applications. <i>Composites Science and Technology</i> , 2020, 186, 107934.	7.8	30
24	Construction of hexagonal boron nitride@polystyrene nanocomposite with high thermal conductivity for thermal management application. <i>Ceramics International</i> , 2020, 46, 7595-7601.	4.8	33
25	A combination of nanodiamond and boron nitride for the preparation of polyvinyl alcohol composite film with high thermal conductivity. <i>Polymer</i> , 2020, 206, 122885.	3.8	31
26	The Properties and Preparation Methods of Different Boron Nitride Nanostructures and Applications of Related Nanocomposites. <i>Chemical Record</i> , 2020, 20, 1314-1337.	5.8	32
27	Flexible and fire-resistant all-inorganic composite film with high in-plane thermal conductivity. <i>Chemical Engineering Journal</i> , 2020, 398, 125633.	12.7	23
28	Improved salt rejection, hydrophilicity and mechanical properties of novel thermoplastic polymer/chitosan nanofibre membranes. <i>Journal of Engineered Fibers and Fabrics</i> , 2020, 15, 155892502092317.	1.0	2
29	Studies on mechanical, thermal and tribological properties of carbon fibre-reinforced boron nitride-filled epoxy composites. <i>High Performance Polymers</i> , 2020, 32, 1061-1081.	1.8	23
30	Factors affecting thermal conductivities of the polymers and polymer composites: A review. <i>Composites Science and Technology</i> , 2020, 193, 108134.	7.8	434
31	Enhanced Thermal Conductivity of Bioinspired Nanofibrillated Cellulose Hybrid Films Based on Graphene Sheets and Nanodiamonds. <i>ACS Sustainable Chemistry and Engineering</i> , 2020, 8, 6363-6370.	6.7	65
32	Thermoconductive, Moisture-Permeable, and Superhydrophobic Nanofibrous Membranes with Interpenetrated Boron Nitride Network for Personal Cooling Fabrics. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 32078-32089.	8.0	90
33	Preparation of highly thermally conductive and electrically insulating PI/BNNSs nanocomposites by hot-pressing self-assembled PI/BNNSs microspheres. <i>Composites Part B: Engineering</i> , 2020, 188, 107882.	12.0	67
34	Sandwich-structured polymers with electrospun boron nitrides layers as high-temperature energy storage dielectrics. <i>Chemical Engineering Journal</i> , 2020, 389, 124443.	12.7	143
35	Novel Functionalized BN Nanosheets/Epoxy Composites with Advanced Thermal Conductivity and Mechanical Properties. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 6503-6515.	8.0	314
36	<i>In situ</i> Polymerization of Polyamide 6/Boron Nitride Composites to Enhance Thermal Conductivity and Mechanical Properties via Boron Nitride Covalently Grafted Polyamide 6. <i>Polymer Engineering and Science</i> , 2020, 60, 710-716.	3.1	16

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37	Improved breakdown strength of Poly(vinylidene Fluoride)-based composites by using all ball-milled hexagonal boron nitride sheets without centrifugation. <i>Composites Science and Technology</i> , 2020, 190, 108046.	7.8	46
38	Highly thermally conductive electrospun stereocomplex polylactide fibrous film dip-coated with silver nanowires. <i>Polymer</i> , 2020, 194, 122390.	3.8	25
39	Copper nanowires embedded in boron nitride nanosheet-polymer composites with enhanced thermal conductivities for thermal management. <i>Polymer</i> , 2020, 195, 122455.	3.8	36
40	Enhancement of thermal conductivity and dimensional stability of polyimide/boron nitride films through mechanochemistry. <i>Composites Communications</i> , 2021, 23, 100549.	6.3	51
41	Effects and mechanism of filler surface coating strategy on thermal conductivity of composites: A case study on epoxy/SiO ₂ -coated BN composites. <i>International Journal of Heat and Mass Transfer</i> , 2021, 164, 120533.	4.8	16
42	Influence of oleylamine-functionalized boron nitride nanosheets on the crystalline phases, mechanical and piezoelectric properties of electrospun PVDF nanofibers. <i>Composites Science and Technology</i> , 2021, 203, 108570.	7.8	20
43	Enhanced mechanical and anisotropic thermal conductive properties of polyimide nanocomposite films reinforced with hexagonal boron nitride nanosheets. <i>Journal of Applied Polymer Science</i> , 2021, 138, 50324.	2.6	19
44	Highly thermally conductive polyvinyl alcohol/boron nitride nanocomposites with interconnection oriented boron nitride nanoplatelets. <i>Composites Science and Technology</i> , 2021, 201, 108521.	7.8	62
45	Hypergravity-Induced Accumulation: A New, Efficient, and Simple Strategy to Improve the Thermal Conductivity of Boron Nitride Filled Polymer Composites. <i>Polymers</i> , 2021, 13, 459.	4.5	8
46	Beyond homogeneous dispersion: oriented conductive fillers for high κ nanocomposites. <i>Materials Horizons</i> , 2021, 8, 3009-3042.	12.2	21
47	Recent Advances in the Rational Design of Thermal Conductive Polymer Composites. <i>Industrial & Engineering Chemistry Research</i> , 2021, 60, 1137-1154.	3.7	63
48	3D printing of highly flexible, cytocompatible nanocomposites for thermal management. <i>Journal of Materials Science</i> , 2021, 56, 6385-6400.	3.7	14
49	Fabrication of Poly (Acrylonitrile-Co-Methyl Methacrylate) Nanofibers Containing Boron via Electrospinning Method: A Study on Size Distribution, Thermal, Crystalline, and Mechanical Strength Properties. <i>Sustainability</i> , 2021, 13, 4342.	3.2	1
50	Energy storage properties of P(VDF-TrFE)-based composite dielectrics with uniform and gradient-doped boron nitride nanosheets. <i>IET Nanodielectrics</i> , 2022, 5, 50-61.	4.1	13
51	Tailoring the Thermal Conductivity of Rubber Nanocomposites by Inorganic Systems: Opportunities and Challenges for Their Application in Tires Formulation. <i>Molecules</i> , 2021, 26, 3555.	3.8	18
52	Highly Thermally Conductive Fluorinated Graphene/Aramid Nanofiber Films with Superior Mechanical Properties and Thermostability. <i>Industrial & Engineering Chemistry Research</i> , 2021, 60, 8451-8459.	3.7	17
53	Highly Thermal Conductive Poly(vinyl alcohol) Composites with Oriented Hybrid Networks: Silver Nanowire Bridged Boron Nitride Nanoplatelets. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 32286-32294.	8.0	67
54	Design of Novel POB/h-BN Co-Filled PTFE Composites with Enhanced Thermal-Mechanical Properties. <i>Crystals</i> , 2021, 11, 778.	2.2	2

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55	Electroless deposition surface engineering of boron nitride sheets for enhanced thermal conductivity and decreased interfacial thermal resistance of epoxy composites. <i>International Journal of Heat and Mass Transfer</i> , 2021, 174, 121306.	4.8	11
56	High thermal conductivity of self-healing polydimethylsiloxane elastomer composites by the orientation of boron nitride nano sheets. <i>Polymers for Advanced Technologies</i> , 2021, 32, 4745-4754.	3.2	20
57	Review of Nanocomposite Dielectric Materials With High Thermal Conductivity. <i>Proceedings of the IEEE</i> , 2021, 109, 1364-1397.	21.3	32
58	A mini review on factors affecting network in thermally enhanced polymer composites: filler content, shape, size, and tailoring methods. <i>Advanced Composites and Hybrid Materials</i> , 2022, 5, 21-38.	21.1	48
59	Effects of frequency and thermal conductivity on dielectric breakdown characteristics of epoxy/cellulose/BN composites fabricated by ice-templated method. <i>Composites Science and Technology</i> , 2021, 213, 108945.	7.8	32
60	A Comprehensive Review on the Applications of Boron Nitride Nanomaterials in Membrane Fabrication and Modification. <i>Industrial & Engineering Chemistry Research</i> , 2021, 60, 13391-13424.	3.7	35
61	Highly Intrinsic Thermally Conductive Electrospinning Film with Intermolecular Interaction. <i>Journal of Physical Chemistry C</i> , 2021, 125, 21580-21587.	3.1	7
62	Highly anisotropic thermal and electrical conductivities of nylon composite papers with the integration of strength and toughness. <i>Journal of Materials Chemistry A</i> , 2021, 9, 22982-22993.	10.3	11
63	Enhanced thermal conductivities and decreased thermal resistances of functionalized boron nitride/polyimide composites. <i>Composites Part B: Engineering</i> , 2019, 164, 732-739.	12.0	311
64	Plasma-assisted mechanochemistry to produce polyamide/boron nitride nanocomposites with high thermal conductivities and mechanical properties. <i>Composites Part B: Engineering</i> , 2019, 164, 710-719.	12.0	40
65	Electric-field-induced out-of-plane alignment of clay in poly(dimethylsiloxane) with enhanced anisotropic thermal conductivity and mechanical properties. <i>Composites Science and Technology</i> , 2018, 165, 39-47.	7.8	21
66	Healable, highly thermal conductive, flexible polymer composite with excellent mechanical properties and multiple functionalities. <i>Chemical Engineering Journal</i> , 2022, 430, 133163.	12.7	35
67	Simultaneously improved thermal conductivity and mechanical properties of boron nitride nanosheets/aramid nanofiber films by constructing multilayer gradient structure. <i>Composites Part B: Engineering</i> , 2022, 229, 109454.	12.0	60
68	A comprehensive review on planar boron nitride nanomaterials: From 2D nanosheets towards OD quantum dots. <i>Progress in Materials Science</i> , 2022, 124, 100884.	32.8	59
69	An electrospinning-electrospraying technique for connecting electrospun fibers to enhance the thermal conductivity of boron nitride/polymer composite films. <i>Composites Part B: Engineering</i> , 2022, 230, 109505.	12.0	60
70	Constructing a "Pearl-Necklace-Like" architecture for enhancing thermal conductivity of composite films by electrospinning. <i>Composites Communications</i> , 2022, 29, 101036.	6.3	19
71	Improving thermal conductivities of textile materials by nanohybrid approaches. <i>IScience</i> , 2022, 25, 103825.	4.1	18
72	Development of a Thermally Conductive and Antimicrobial Nanofibrous Mat for Cold Chain Packaging of Fruits and Vegetables. <i>SSRN Electronic Journal</i> , 0, , .	0.4	0

#	ARTICLE	IF	CITATIONS
73	Constructing a High-Density Thermally Conductive Network through Electrospinning and Hot-Pressing of BN@PDA/GO/PVDF Composites. <i>ACS Applied Polymer Materials</i> , 2022, 4, 2414-2422.	4.4	12
74	Review on nitride compounds and its polymer composites: a multifunctional material. <i>Journal of Materials Research and Technology</i> , 2022, 18, 2175-2193.	5.8	34
75	Enhanced thermal conductance and electrical insulation of AlN/PMIA composite paper via nano splitting of matrix and size grading of fillers. <i>Composites Science and Technology</i> , 2022, 224, 109477.	7.8	18
76	Impregnation assisted graphene oxide/polyimide nanofiber composites with improved thermal conductivity and breakdown strength. <i>Journal of Polymer Research</i> , 2022, 29, .	2.4	6
77	Recent advances in thermally conductive polymer composites. <i>High Performance Polymers</i> , 2022, 34, 1081-1101.	1.8	4
78	Enhanced thermal transportation across an electrostatic self-assembly of black phosphorene and boron nitride nanosheets in flexible composite films. <i>Nanoscale</i> , 2022, 14, 9743-9753.	5.6	10
79	Development of a thermally conductive and antimicrobial nanofibrous mat for the cold chain packaging of fruits and vegetables. <i>Materials and Design</i> , 2022, 221, 110931.	7.0	7
80	Construction of compressible dual thermally conductive boron nitride network supported by Polyurethane@Polydopamine skeleton for improved thermal management performance. <i>Composites Part A: Applied Science and Manufacturing</i> , 2022, 161, 107104.	7.6	4
81	Spherical boron nitride/silicone rubber composite with high isotropic thermal conductivity via pre-constructing thermally conductive networks. <i>Journal of Applied Polymer Science</i> , 2022, 139, .	2.6	4
82	Space Charge and Trap Distributions and Charge Dynamic Migration Characteristics in Polypropylene under Strong Electric Field. <i>ECS Journal of Solid State Science and Technology</i> , 2022, 11, 083003.	1.8	2
83	Scalable Polymer-Infiltrated Boron Nitride Nanoplatelet Films with High Thermal Conductivity and Electrical Insulation for Thermal Management. <i>ACS Applied Electronic Materials</i> , 2022, 4, 4622-4631.	4.3	6
84	Facile fabrication of large-area BN films for thermal management in flexible electronics. <i>Composites Communications</i> , 2022, 36, 101392.	6.3	5
85	Eco-friendly and scalable strategy to design electrically insulating boron nitride/polymer composites with high through-plane thermal conductivity. <i>Composites Part B: Engineering</i> , 2023, 248, 110355.	12.0	31
86	MgAl Layered Double Oxide/Reduced Graphene Oxide Composites with Reduced Interfacial Thermal Resistance for Thermal Conductivity and Electrical Insulation Applications. <i>ACS Applied Nano Materials</i> , 2022, 5, 18955-18964.	5.0	1
87	Electrospun polymer nanocomposites for thermal management: a review. <i>Nanoscale</i> , 2023, 15, 2003-2017.	5.6	11
88	Thermally conductive polymer composites. , 2023, , 149-196.		0
89	Boron nitride decorated poly(vinyl alcohol)/poly(acrylic acid) composite nanofibers: A promising material for biomedical applications. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2023, 141, 105773.	3.1	3
90	Thermally conductive composites based on hexagonal boron nitride nanosheets for thermal management: Fundamentals to applications. <i>Composites Part A: Applied Science and Manufacturing</i> , 2023, 169, 107533.	7.6	22

#	ARTICLE	IF	CITATIONS
91	Hydroxyl-group decreased dielectric loss coupled with 3D-BN network enhanced high thermal conductivity epoxy composite for high voltage-high frequency conditions. <i>Composites Science and Technology</i> , 2023, 234, 109934.	7.8	6
92	Enhancement and control of water vapor permeability and thermal conductivity of polymers: A review. <i>Polymers for Advanced Technologies</i> , 2023, 34, 1451-1466.	3.2	2
93	Constructing Sandwich-Structured Poly(vinyl alcohol) Composite Films with Thermal Conductive and Electrical Performance. <i>ACS Applied Materials & Interfaces</i> , 2023, 15, 12315-12326.	8.0	8
94	Structural Design and Research Progress of Thermally Conductive Polyimide Film – A Review. <i>Macromolecular Rapid Communications</i> , 2023, 44, .	3.9	3
95	Improvement of in-plane thermal conductivity of heterostructured fillers on thermal conductivity of poly(vinyl Tj ETQq0,0 0 rgBT/Overlock	4.6	0
96	Internal oriented strategy of the hBN composite resin with enhanced in-plane or through-plane thermal conductivity via 3D printing. <i>Composites Part A: Applied Science and Manufacturing</i> , 2023, 173, 107638.	7.6	3
97	A Roadmap Review of Thermally Conductive Polymer Composites: Critical Factors, Progress, and Prospects. <i>Advanced Functional Materials</i> , 2023, 33, .	14.9	27
98	Electrospun silicon carbide nanowire film: A highly thermally conductivity and flexible material for advanced thermal management. <i>Composites Communications</i> , 2023, 41, 101654.	6.3	1
99	High thermal conductivity insulating AlN/Poly(m-phenylenedicarbonyl-m-phenylenediamine) paper realized by enhanced compatibility: a selection of appropriate coupling agent. <i>Journal Physics D: Applied Physics</i> , 0, , .	2.8	0
100	Electrical and thermal conductivity studies of fluoropolymer nanocomposites. , 2023, , 181-211.		0
101	Bridging a Gap in Thermal Conductivity and Heat Transfer in Hybrid Fibers and Yarns via Polyimide and Silicon Nitride Composites. <i>Small</i> , 2023, 19, .	10.0	2
102	Mechanical property-enhanced thermally conductive self-healing composites: preparation using designed self-healing matrix phase and hyBNNSs. <i>Nanoscale</i> , 2023, 15, 13428-13436.	5.6	0
103	Polymer dielectrics for high-temperature energy storage: Constructing carrier traps. <i>Progress in Materials Science</i> , 2023, 140, 101208.	32.8	8
104	Electrospinning of Highly Bi-Oriented Flexible Piezoelectric Nanofibers for Anisotropic-Responsive Intelligent Sensing. <i>Small Methods</i> , 2023, 7, .	8.6	5
105	Enhanced thermal conductivity and electrical insulation by patterned self-assembly of electrospun nanofibers. <i>Composites Science and Technology</i> , 2024, 246, 110367.	7.8	0
106	Highly thermally conductive electrically insulating composites composed of core-shell structure fiber boron nitride@titanium dioxide filler. <i>Polymer Composites</i> , 2024, 45, 3785-3797.	4.6	0
107	Pore-penetration enabled ultrahigh interfacial thermal conductance between polyethylene and carbon honeycomb. <i>Computational Materials Science</i> , 2024, 236, 112864.	3.0	0
108	Synergistic effect of BNNS and MgAl layered double hydroxide nanosheets on dielectric properties and thermal conductivity of polyetherimide nanocomposite films. <i>Polymer Composites</i> , 0, , .	4.6	0

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109	High Thermally Conductive and Electrical Insulating “Sandwich”-Structured Composites Fabricated by Hot-pressing of PEEK Film Combined with fBNNs@fMWCNT/SPEEK Membrane via Electrospinning. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2024, , 133644.	4.7	0