Jun-Wei Zha

List of Publications by Year
in descending order

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		13099	18130
263	16,718	68	120
papers	citations	h-index	g-index

269	269	269	9616
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Fundamentals, processes and applications of high-permittivity polymerâ€“matrix composites. Progress in Materials Science, 2012, 57, 660-723.	32.8	1,467
2	Flexible Nanodielectric Materials with High Permittivity for Power Energy Storage. Advanced Materials, 2013, 25, 6334-6365.	21.0	1,204
3	Carbon nanotube composites with high dielectric constant at low percolation threshold. Applied Physics Letters, 2005, 87, 042903.	3.3	460
4	1D/2D Carbon Nanomaterialâ€Polymer Dielectric Composites with High Permittivity for Power Energy Storage Applications. Small, 2016, 12, 1688-1701.	10.0	405
5	Improving Dielectric Properties of BaTiO₃/Ferroelectric Polymer Composites by Employing Surface Hydroxylated BaTiO₃ Nanoparticles. ACS Applied Materials & Interfaces, 2011, 3, 2184-2188.	8.0	388
6	Advanced Calcium Copper Titanate/Polyimide Functional Hybrid Films with High Dielectric Permittivity. Advanced Materials, 2009, 21, 2077-2082.	21.0	378
7	Giant Dielectric Permittivity Nanocomposites: Realizing True Potential of Pristine Carbon Nanotubes in Polyvinylidene Fluoride Matrix through an Enhanced Interfacial Interaction. Journal of Physical Chemistry C, 2011, 115, 5515-5521.	3.1	341
8	Fabrication and Dielectric Characterization of Advanced BaTiO₃/Polyimide Nanocomposite Films with High Thermal Stability. Advanced Functional Materials, 2008, 18, 1509-1517.	14.9	294
9	Improved Dielectric Properties of Nanocomposites Based on Poly(vinylidene fluoride) and Poly(vinyl) Tj ETQq1 1 0.784314 rgBT /Over	8.0	277
10	Recent Progress and Future Prospects on All-Organic Polymer Dielectrics for Energy Storage Capacitors. Chemical Reviews, 2022, 122, 3820-3878.	47.7	240
11	Influence of silane coupling agent on morphology and dielectric property in BaTiO3/polyvinylidene fluoride composites. Applied Physics Letters, 2006, 89, 112902.	3.3	224
12	Dielectric properties of reduced graphene oxide/polypropylene composites with ultralow percolation threshold. Polymer, 2013, 54, 1916-1922.	3.8	204
13	Improved dielectric, tensile and energy storage properties of surface rubberized BaTiO3/polypropylene nanocomposites. Nano Energy, 2018, 48, 144-151.	16.0	190
14	Fabrication and dielectric properties of advanced high permittivity polyaniline/poly(vinylidene) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 227 2441.	6.7	188
15	Significantly enhanced low-frequency dielectric permittivity in the BaTiO3/poly(vinylidene fluoride) nanocomposite. Applied Physics Letters, 2007, 90, 012901.	3.3	180
16	Study on microstructure and dielectric property of the BaTiO3/epoxy resin composites. Composites Science and Technology, 2008, 68, 171-177.	7.8	180
17	Dielectric behavior of a metal-polymer composite with low percolation threshold. Applied Physics Letters, 2006, 89, 072902.	3.3	179
18	Functionalized grapheneâ€“BaTiO3/ferroelectric polymer nanodielectric composites with high permittivity, low dielectric loss, and low percolation threshold. Journal of Materials Chemistry A, 2013, 1, 6162.	10.3	179

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19	Morphology and Dielectric Property of Homogenous BaTiO3/PVDF Nanocomposites Prepared via the Natural Adsorption Action of Nanosized BaTiO3. Macromolecular Rapid Communications, 2005, 26, 1185-1189.	3.9	170
20	Tailored Dielectric Properties based on Microstructure Change in BaTiO₃-Carbon Nanotube/Polyvinylidene Fluoride Three-Phase Nanocomposites. Journal of Physical Chemistry C, 2010, 114, 13204-13209.	3.1	168
21	High-temperature polyimide dielectric materials for energy storage: theory, design, preparation and properties. Energy and Environmental Science, 2022, 15, 56-81.	30.8	166
22	Improved Thermal Conductivity and Flame Retardancy in Polystyrene/Poly(vinylidene fluoride) Blends by Controlling Selective Localization and Surface Modification of SiC Nanoparticles. ACS Applied Materials & Interfaces, 2013, 5, 6915-6924.	8.0	153
23	Dependence of dielectric behavior on the physical property of fillers in the polymer-matrix composites. Synthetic Metals, 2004, 146, 79-84.	3.9	138
24	Electrochemical performance of all-solid-state lithium batteries using inorganic lithium garnets particulate reinforced PEO/LiClO4 electrolyte. Electrochimica Acta, 2017, 253, 430-438.	5.2	133
25	Polymer-based dielectrics with high permittivity for electric energy storage: A review. Nano Energy, 2021, 89, 106438.	16.0	130
26	Dielectric behavior and dependence of percolation threshold on the conductivity of fillers in polymer-semiconductor composites. Applied Physics Letters, 2004, 85, 97-99.	3.3	128
27	Influence of aspect ratio of carbon nanotube on percolation threshold in ferroelectric polymer nanocomposite. Applied Physics Letters, 2007, 91, .	3.3	125
28	BaTiO 3 -carbon nanotube/polyvinylidene fluoride three-phase composites with high dielectric constant and low dielectric loss. Applied Physics Letters, 2008, 93, .	3.3	123
29	Dielectric properties of upright carbon fiber filled poly(vinylidene fluoride) composite with low percolation threshold and weak temperature dependence. Applied Physics Letters, 2007, 91, .	3.3	122
30	Supersensitive linear piezoresistive property in carbon nanotubesâˆ•silicone rubber nanocomposites. Journal of Applied Physics, 2008, 104, .	2.5	117
31	High thermal conductivity and high electrical resistivity of poly(vinylidene fluoride)/polystyrene blends by controlling the localization of hybrid fillers. Composites Science and Technology, 2013, 89, 142-148.	7.8	115
32	High energy density and discharge efficiency polypropylene nanocomposites for potential high-power capacitor. Energy Storage Materials, 2020, 27, 443-452.	18.0	113
33	Enhanced thermal conductivity and mechanical property through boron nitride hot string in polyvinylidene fluoride fibers by electrospinning. Composites Science and Technology, 2018, 156, 1-7.	7.8	109
34	Giant dielectric constant and resistance-pressure sensitivity in carbon nanotubes/rubber nanocomposites with low percolation threshold. Applied Physics Letters, 2007, 90, 042914.	3.3	108
35	High thermal conductivity and excellent electrical insulation performance in double-percolated three-phase polymer nanocomposites. Composites Science and Technology, 2017, 144, 36-42.	7.8	107
36	Surface-Functionalized MWNTs with Emeraldine Base: Preparation and Improving Dielectric Properties of Polymer Nanocomposites. ACS Applied Materials & Interfaces, 2011, 3, 4557-4560.	8.0	106

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37	Positive piezoresistive behavior of electrically conductive alkyl-functionalized graphene/polydimethylsilicone nanocomposites. Journal of Materials Chemistry C, 2013, 1, 515-521.	5.5	106
38	Size-dependent low-frequency dielectric properties in the BaTiO3/poly(vinylidene fluoride) nanocomposite films. Applied Physics Letters, 2012, 100, .	3.3	104
39	Past and future on nanodielectrics. IET Nanodielectrics, 2018, 1, 41-47.	4.1	103
40	Increased electroaction through a molecular flexibility tuning process in TiO2â€“polydimethylsilicone nanocomposites. Journal of Materials Chemistry A, 2013, 1, 3140.	10.3	100
41	Polymer composites filled with core@double-shell structured fillers: Effects of multiple shells on dielectric and thermal properties. Composites Science and Technology, 2019, 181, 107686.	7.8	99
42	Highly efficient antifogging and antibacterial food packaging film fabricated by novel quaternary ammonium chitosan composite. Food Chemistry, 2020, 308, 125682.	8.2	99
43	Effects of carbon nanotubes aspect ratio on the qualitative and quantitative aspects of frequency response of electrical conductivity and dielectric permittivity in the carbon nanotube/polymer composites. Carbon, 2013, 54, 105-112.	10.3	98
44	Ultrasonication assisted preparation of carbonaceous nanoparticles modified polyurethane foam with good conductivity and high oil absorption properties. Nanoscale, 2014, 6, 13748-13753.	5.6	98
45	High dielectric permittivity silver/polyimide composite films with excellent thermal stability. Applied Physics Letters, 2008, 92, .	3.3	93
46	Electrical property and microstructure analysis of poly(vinylidene fluoride)-based composites with different conducting fillers. Chemical Physics Letters, 2007, 438, 196-202.	2.6	92
47	Preparation and dielectric properties of surface modified TiO2/silicone rubber nanocomposites. Materials Letters, 2011, 65, 3430-3432.	2.6	92
48	Broad-frequency dielectric behaviors in multiwalled carbon nanotube/rubber nanocomposites. Journal of Applied Physics, 2009, 106, .	2.5	89
49	Effect of the selective localization of carbon nanotubes in polystyrene/poly(vinylidene fluoride) blends on their dielectric, thermal, and mechanical properties. Materials & Design, 2014, 56, 807-815.	5.1	89
50	Improvement of space charge suppression of polypropylene for potential application in HVDC cables. IEEE Transactions on Dielectrics and Electrical Insulation, 2016, 23, 2337-2343.	2.9	89
51	Effects of surface modification of carbon nanotubes on the microstructure and electrical properties of carbon nanotubes/rubber nanocomposites. Chemical Physics Letters, 2008, 457, 352-356.	2.6	85
52	Enhanced dielectric properties and positive temperature coefficient effect in the binary polymer composites with surface modified carbon black. Journal of Materials Chemistry, 2008, 18, 229-234.	6.7	85
53	Preparation and dielectric properties of coreâ€“shell structured Ag@polydopamine/poly(vinylidene) Tj ETQq1 1 0.784314 rgBT /Overlock	7.8	85
54	High-performance strain sensors based on functionalized graphene nanoplates for damage monitoring. Composites Science and Technology, 2016, 123, 32-38.	7.8	84

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55	Complementary percolation characteristics of carbon fillers based electrically percolative thermoplastic elastomer composites. Composites Science and Technology, 2011, 72, 28-35.	7.8	83
56	Highly improved electro-actuation of dielectric elastomers by molecular grafting of azobenzenes to silicon rubber. Journal of Materials Chemistry C, 2015, 3, 4883-4889.	5.5	82
57	Soft, tough, and fast polyacrylate dielectric elastomer for non-magnetic motor. Nature Communications, 2021, 12, 4517.	12.8	82
58	Novel antimicrobial packaging film based on porous poly(lactic acid) nanofiber and polymeric coating for humidity-controlled release of thyme essential oil. LWT - Food Science and Technology, 2021, 135, 110034.	5.2	81
59	Temperature dependence of electric and dielectric behaviors of Ni/polyvinylidene fluoride composites. Journal of Applied Physics, 2010, 107, .	2.5	80
60	Low dielectric permittivity and high thermal conductivity silicone rubber composites with micro-nano-sized particles. Applied Physics Letters, 2012, 101, 062905.	3.3	78
61	Tuning of thermal and dielectric properties for epoxy composites filled with electrospun alumina fibers and graphene nanoplatelets through hybridization. Journal of Materials Chemistry C, 2015, 3, 7195-7202.	5.5	78
62	Dielectric properties and effect of electrical aging on space charge accumulation in polyimide/TiO2 nanocomposite films. Journal of Applied Physics, 2010, 108, 094113.	2.5	77
63	High performance hybrid carbon fillers/binaryâ€“polymer nanocomposites with remarkably enhanced positive temperature coefficient effect of resistance. Journal of Materials Chemistry A, 2013, 1, 843-851.	10.3	76
64	Effect of BaTiO3 size on dielectric property of BaTiO3/PVDF composites. Journal of Electroceramics, 2008, 21, 381-384.	2.0	75
65	Effect of tensile strain on morphology and dielectric property in nanotube/polymer nanocomposites. Applied Physics Letters, 2007, 90, 012907.	3.3	74
66	Dielectric Elastomer Generator with Improved Energy Density and Conversion Efficiency Based on Polyurethane Composites. ACS Applied Materials & Interfaces, 2017, 9, 5237-5243.	8.0	74
67	Effect of micro-Si₃N₄-nano-Al₂O₃ co-filled particles on thermal conductivity, dielectric and mechanical properties of silicone rubber composites. IEEE Transactions on Dielectrics and Electrical Insulation, 2014, 21, 1989-1996.	2.9	73
68	Mechanical and dielectric properties of graphene incorporated polypropylene nanocomposites using polypropylene-graft-maleic anhydride as a compatibilizer. Composites Science and Technology, 2017, 153, 111-118.	7.8	73
69	Stretch-Modulated Carbon Nanotube Alignment in Ferroelectric Polymer Composites: Characterization of the Orientation State and Its Influence on the Dielectric Properties. Journal of Physical Chemistry C, 2011, 115, 20011-20017.	3.1	72
70	Enhanced electrical conductivity in chemically modified carbon nanotube/methylvinyl silicone rubber nanocomposite. European Polymer Journal, 2007, 43, 4924-4930.	5.4	71
71	Experimental study and theoretical prediction of dielectric permittivity in BaTiO3/polyimide nanocomposite films. Applied Physics Letters, 2012, 100, .	3.3	71
72	All-organic dielectric polymer films exhibiting superior electric breakdown strength and discharged energy density by adjusting the electrodeâ€“dielectric interface with an organic nano-interlayer. Energy and Environmental Science, 2021, 14, 5513-5522.	30.8	67

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73	Novel high-dielectric-permittivity poly(vinylidene fluoride)/polypropylene blend composites: The influence of the poly(vinylidene fluoride) concentration and compatibilizer. Journal of Applied Polymer Science, 2007, 105, 3649-3655.	2.6	66
74	On improvement of mechanical and thermo-mechanical properties of glass fabric/epoxy composites by incorporating CNTâ€“Al2O3 hybrids. Composites Science and Technology, 2014, 103, 36-43.	7.8	65
75	Enhanced energy conversion efficiency in the surface modified BaTiO3 nanoparticles/polyurethane nanocomposites for potential dielectric elastomer generators. Nano Energy, 2019, 59, 363-371.	16.0	65
76	Significant temperature and pressure sensitivities of electrical properties in chemically modified multiwall carbon nanotube/methylvinyl silicone rubber nanocomposites. Applied Physics Letters, 2006, 89, 182902.	3.3	64
77	Preparation and dielectric behaviors of thermoplastic and thermosetting polymer nanocomposite films containing BaTiO3 nanoparticles with different diameters. Composites Science and Technology, 2013, 80, 66-72.	7.8	64
78	Mechanism analysis of improved corona-resistant characteristic in polyimide/TiO2 nanohybrid films. Applied Physics Letters, 2008, 93, .	3.3	63
79	Tuning the Dielectric Properties of Polystyrene/Poly(vinylidene fluoride) Blends by Selectively Localizing Carbon Black Nanoparticles. Journal of Physical Chemistry B, 2013, 117, 2505-2515.	2.6	62
80	Dually Actuated Triple Shape Memory Polymers of Cross-Linked Polycyclooctyleneâ€“Carbon Nanotube/Polyethylene Nanocomposites. ACS Applied Materials & Interfaces, 2014, 6, 20051-20059.	8.0	61
81	Significantly improved dielectric properties of polylactide nanocomposites via TiO2 decorated carbon nanotubes. Composites Part A: Applied Science and Manufacturing, 2019, 127, 105650.	7.6	59
82	Theoretical prediction and experimental study of dielectric properties in poly(vinylidene fluoride) matrix composites with micronanosize BaTiO3 filler. Applied Physics Letters, 2007, 91, .	3.3	57
83	Remarkable selective localization of modified nanoscaled carbon black and positive temperature coefficient effect in binary-polymer matrix composites. Journal of Materials Chemistry, 2008, 18, 2685.	6.7	56
84	Effect of shellâ€layer thickness on dielectric properties in Ag@TiO₂ core@shell nanoparticles filled ferroelectric poly(vinylidene fluoride) composites. Physica Status Solidi (A) Applications and Materials Science, 2010, 207, 739-742.	1.8	56
85	Dielectric properties of poly(vinylidene fluoride) nanocomposites filled with surface coated BaTiO3 by SnO2 nanodots. Applied Physics Letters, 2014, 104, .	3.3	56
86	A remarkable suppression on space charge in isotatic polypropylene by inducing the Î²-crystal formation. Applied Physics Letters, 2015, 107, .	3.3	55
87	Preparation, microstructure and properties of polyethylene/alumina nanocomposites for HVDC insulation. IEEE Transactions on Dielectrics and Electrical Insulation, 2015, 22, 3350-3356.	2.9	55
88	Advanced dielectric properties of BaTiO₃/polyvinylidene-fluoride nanocomposites with sandwich multi-layer structure. IEEE Transactions on Dielectrics and Electrical Insulation, 2012, 19, 1312-1317.	2.9	54
89	Rescaled temperature dependence of dielectric behavior of ferroelectric polymer composites. Applied Physics Letters, 2005, 86, 172905.	3.3	52
90	Tailored high cycling performance in a solid polymer electrolyte with perovskite-type Li_{0.33}La_{0.557}TiO₃ nanofibers for all-solid-state lithium ion batteries. Dalton Transactions, 2019, 48, 3263-3269.	3.3	52

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91	Enhanced dielectric properties and energy storage of the sandwichâ€structured poly(vinylidene) Tj ETQq1 1 0.784314 rgBT /Overlock 10 ₂ O ₃ nanofibres. IET Nanodielectrics, 2019, 2, 103-108.	4.1	52
92	Enhanced breakdown strength of poly(vinylidene fluoride) utilizing rubber nanoparticles for energy storage application. Applied Physics Letters, 2016, 109, .	3.3	51
93	Advanced dielectric polymer nanocomposites by constructing a ternary continuous structure in polymer blends containing poly(methyl methacrylate) (PMMA) modified carbon nanotubes. Journal of Materials Chemistry A, 2014, 2, 10614.	10.3	50
94	Morphology and crystalline-phase-dependent electrical insulating properties in tailored polypropylene for HVDC cables. Applied Physics Letters, 2016, 109, .	3.3	50
95	Dielectric Properties of Polyimide-Mica Hybrid Films. Macromolecular Rapid Communications, 2005, 26, 1473-1477.	3.9	47
96	Electrical properties of TiO2-filled polyimide nanocomposite films prepared via an in situ polymerization process. Synthetic Metals, 2010, 160, 2670-2674.	3.9	47
97	Effect of aspect ratio of multiwall carbon nanotubes on resistance-pressure sensitivity of rubber nanocomposites. Applied Physics Letters, 2007, 91, .	3.3	46
98	Enhancement of breakdown strength of multilayer polymer film through electric field redistribution and defect modification. Applied Physics Letters, 2019, 114, 103702.	3.3	46
99	Mechanical, Thermal, and Electrical Properties of BNâ€“Epoxy Composites Modified with Carboxyl-Terminated Butadiene Nitrile Liquid Rubber. Polymers, 2019, 11, 1548.	4.5	45
100	High-permittivity polymer nanocomposites: Influence of interface on dielectric properties. Journal of Advanced Dielectrics, 2013, 03, 1330004.	2.4	44
101	Thermally stable polyimide nanocomposite films from electrospun BaTiO₃ fibers for high-density energy storage capacitors. RSC Advances, 2015, 5, 44749-44755.	3.6	44
102	Distinctive electrical properties in sandwich-structured Al2O3/low density polyethylene nanocomposites. Applied Physics Letters, 2016, 108, .	3.3	44
103	Remarkable electrically actuation performance in advanced acrylic-based dielectric elastomers without pre-strain at very low driving electric field. Polymer, 2018, 137, 269-275.	3.8	43
104	Tailored Ultralow Dielectric Permittivity in High-Performance Fluorinated Polyimide Films by Adjusting Nanoporous Characterisitics. Journal of Physical Chemistry C, 2012, 116, 23676-23681.	3.1	42
105	Dielectric properties of LTNO ceramics and LTNO/PVDF composites. Ceramics International, 2005, 31, 349-351.	4.8	41
106	The influence of TiO2 nanoparticle incorporation on surface potential decay of corona-resistant polyimide nanocomposite films. Journal of Electrostatics, 2011, 69, 255-260.	1.9	41
107	Composition dependence of dielectric properties, elastic modulus, and electroactivity in (carbon) Tj ETQq1 1 0.784314 rgBT /Overlock 127, 4440-4445.	2.6	41
108	Enhanced positive temperature coefficient behavior of the high-density polyethylene composites with multi-dimensional carbon fillers and their use for temperature-sensing resistors. RSC Advances, 2017, 7, 11338-11344.	3.6	41

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109	Surface Functionalization of Multiwalled Carbon Nanotube with Trifluorophenyl. Journal of Nanomaterials, 2006, 2006, 1-5.	2.7	40
110	Effect of the ceramic particle size on the microstructure and dielectric properties of barium titanate/polystyrene composites. Journal of Applied Polymer Science, 2008, 110, 3473-3479.	2.6	40
111	Temperature-dependent electro-mechanical actuation sensitivity in stiffness-tunable BaTiO3/polydimethylsiloxane dielectric elastomer nanocomposites. Applied Physics Letters, 2015, 106, .	3.3	38
112	Polyurethane induced high breakdown strength and high energy storage density in polyurethane/poly(vinylidene fluoride) composite films. Applied Physics Letters, 2017, 110, .	3.3	38
113	Allâ€Organic Dielectrics with High Breakdown Strength and Energy Storage Density for Highâ€Power Capacitors. Macromolecular Rapid Communications, 2021, 42, e2100116.	3.9	38
114	Improved dielectric properties of PVDF nanocomposites with coreâ€“shell structured BaTiO ₃ @polyurethane nanoparticles. IET Nanodielectrics, 2020, 3, 94-98.	4.1	38
115	High-dielectric-permittivity high-elasticity three-component nanocomposites with low percolation threshold and low dielectric loss. Applied Physics Letters, 2009, 94, .	3.3	37
116	Improved dielectric properties and thermal conductivity of PVDF composites filled with coreâ€“shell structured Cu@CuO particles. Journal of Materials Science: Materials in Electronics, 2019, 30, 18350-18361.	2.2	37
117	Surface engineering of 2D dielectric polymer films for scalable production of High-Energy-Density films. Progress in Materials Science, 2022, 128, 100968.	32.8	37
118	Preparation and characterization of surface modified silicon carbide/polystyrene nanocomposites. Journal of Applied Polymer Science, 2013, 130, 638-644.	2.6	36
119	Interfacial engineering of polypropylene/graphene nanocomposites: improvement of graphene dispersion by using tryptophan as a stabilizer. RSC Advances, 2014, 4, 8799.	3.6	36
120	Significantly improved high-temperature charge-discharge efficiency of all-organic polyimide composites by suppressing space charges. Nano Energy, 2022, 99, 107410.	16.0	36
121	Exploration of dielectric constant dependence on evolution of microstructure in nanotube/ferroelectric polymer nanocomposites. Applied Physics Letters, 2008, 92, 082902.	3.3	35
122	Synergetic Enhancement of Permittivity and Breakdown Strength in Allâ€Polymeric Dielectrics toward Flexible Energy Storage Devices. Advanced Materials Interfaces, 2016, 3, 1600016.	3.7	35
123	Enhancement of high-temperature dielectric energy storage performances of polyimide nanocomposites utilizing surface functionalized MAX nanosheets. Composites Science and Technology, 2022, 218, 109193.	7.8	35
124	Review of dielectric elastomers for actuators, generators and sensors. IET Nanodielectrics, 2020, 3, 99-106.	4.1	34
125	Preparation and wide-frequency dielectric properties of (Ba0.5Sr0.4Ca0.1)TiO3/poly(vinylidene) Tj ETQq1 1 0.784314 rgBT /Overlock	2.5	33
126	Influence of carbon nanotube dimensions on the percolation characteristics of carbon nanotube/polymer composites. Journal of Applied Physics, 2014, 116, .	2.5	32

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127	Mussel-inspired polydopamine functionalized silicon carbide whisker for PVDF composites with enhanced dielectric performance. Composites Part A: Applied Science and Manufacturing, 2021, 148, 106486.	7.6	32
128	Origin of remarkable positive temperature coefficient effect in the modified carbon black and carbon fiber cofillled polymer composites. Journal of Applied Physics, 2009, 106, 024913.	2.5	31
129	A hybrid Mgâ€“Al layered double hydroxide/graphene nanostructure obtained via hydrothermal synthesis. Chemical Physics Letters, 2014, 605-606, 77-80.	2.6	31
130	Electrical properties of polypropylene/styrene-ethylene-butylene-styrene block copolymer/MgO nanocomposites. IEEE Transactions on Dielectrics and Electrical Insulation, 2017, 24, 1457-1464.	2.9	31
131	Exploration of unusual electrical properties in carbon black/binary-polymer nanocomposites. Applied Physics Letters, 2007, 90, 152912.	3.3	30
132	Coulomb block effect inducing distinctive dielectric properties in electroless plated barium titanate@silver/poly(vinylidene fluoride) nanocomposites. RSC Advances, 2015, 5, 65167-65174.	3.6	30
133	Constructing advanced dielectric elastomer based on copolymer of acrylate and polyurethane with large actuation strain at low electric field. Polymer, 2018, 149, 39-44.	3.8	30
134	Ultrahigh chargeâ€“discharge efficiency and high energy density of a high-temperature stable sandwich-structured polymer. Journal of Materials Chemistry A, 2022, 10, 1579-1587.	10.3	30
135	Flexible Dielectric Nanocomposites with Ultrawide Zero-Temperature Coefficient Windows for Electrical Energy Storage and Conversion under Extreme Conditions. ACS Applied Materials & Interfaces, 2017, 9, 7591-7600.	8.0	29
136	Largely enhanced dielectric constant of PVDF nanocomposites through a coreâ€“shell strategy. Physical Chemistry Chemical Physics, 2018, 20, 2777-2786.	2.8	29
137	Towards suppressing dielectric loss of GO/PVDF nanocomposites with TA-Fe coordination complexes as an interface layer. Journal of Materials Science and Technology, 2018, 34, 2415-2423.	10.7	29
138	The effect of aspect ratio on the piezoresistive behavior of the multiwalled carbon nanotubes/thermoplastic elastomer nanocomposites. Journal of Applied Physics, 2013, 113, .	2.5	28
139	Coreâ€shell structured Al/PVDF nanocomposites with high dielectric permittivity but low loss and enhanced thermal conductivity. Polymer Engineering and Science, 2019, 59, 103-111.	3.1	28
140	Origin of ultralow permittivity in polyimide/mesoporous silicate nanohybrid films with high resistivity and high breakdown strength. Journal of Applied Physics, 2009, 105, .	2.5	27
141	Improved stability of volume resistivity in carbon black/ethylene-vinyl acetate copolymer composites by employing multi-walled carbon nanotubes as second filler. Polymer, 2012, 53, 4871-4878.	3.8	27
142	Two percolation thresholds and remarkably high dielectric permittivity in pristine carbon nanotube/elastomer composites. Applied Nanoscience (Switzerland), 2015, 5, 969-974.	3.1	27
143	Improved dielectric properties of polypropylene-based nanocomposites via co-filling with zinc oxide and barium titanate. Composites Science and Technology, 2017, 148, 20-26.	7.8	27
144	Fabrication of BaTiO3@super short MWCNTs core-shell particles reinforced PVDF composite films with improved dielectric properties and high thermal conductivity. Composites Science and Technology, 2020, 200, 108405.	7.8	26

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145	High energy density of polyimide films employing an imidization reaction kinetics strategy at elevated temperature. Journal of Materials Chemistry A, 2022, 10, 10950-10959.	10.3	26
146	Recyclability and Selfâ€Healing of Dynamic Crossâ€Linked Polyimide with Mechanical/Electrical Damage. Energy and Environmental Materials, 2023, 6, .	12.8	26
147	Copper particles/epoxy resin thermosetting conductive adhesive using polyamide resin as curing agent. Journal of Applied Polymer Science, 2012, 126, 815-821.	2.6	25
148	Towards balanced mechanical and electrical properties of thermoplastic vulcanizates composites via unique synergistic effects of single-walled carbon nanotubes and graphene. Composites Science and Technology, 2018, 157, 134-143.	7.8	25
149	Flexible electrospun polyvinylidene fluoride nanofibrous composites with high electrical conductivity and good mechanical properties by employing ultrasonication induced dispersion of multi-walled carbon nanotubes. Composites Science and Technology, 2016, 128, 201-206.	7.8	24
150	Dielectric properties of polystyrene based composites filled with core-shell BaTiO₃/polystyrene hybrid nanoparticles. IEEE Transactions on Dielectrics and Electrical Insulation, 2014, 21, 1438-1445.	2.9	23
151	Low dielectric loss and weak frequency dependence of dielectric permittivity of the CeO2/polystyrene nanocomposite films. Applied Physics Letters, 2014, 105, .	3.3	23
152	Difunctional Grapheneâ€“Fe₃O₄ Hybrid Nanosheet/Polydimethylsiloxane Nanocomposites with High Positive Piezoresistive and Superparamagnetism Properties as Flexible Touch Sensors. Advanced Materials Interfaces, 2016, 3, 1500418.	3.7	23
153	Influence of hierarchy structure on electrical properties of gradient-distribution aluminum oxide/polyethylene nanocomposites. Composites Science and Technology, 2016, 135, 100-105.	7.8	23
154	Effect of nano-fillers distribution on the nonlinear conductivity and space charge behavior in SiC/PDMS composites. IEEE Transactions on Dielectrics and Electrical Insulation, 2017, 24, 1735-1742.	2.9	23
155	Synthesis, nanostructures and dielectric properties of novel liquid crystalline block copolymers. Polymer Chemistry, 2014, 5, 2513.	3.9	22
156	Remarkably improved electromechanical actuation of polyurethane enabled by blending with silicone rubber. RSC Advances, 2017, 7, 22900-22908.	3.6	22
157	Microstructure and dielectric characterization of micro- nanosize co-filled composite films with high dielectric permittivity. IEEE Transactions on Dielectrics and Electrical Insulation, 2011, 18, 1518-1525.	2.9	21
158	Dielectric and magnetic properties of Fe@Fe O /epoxy resin nanocomposites as high-performance electromagnetic insulating materials. Composites Science and Technology, 2015, 114, 57-63.	7.8	21
159	Enhanced thermal conductivity and dielectric properties in electrostatic self-assembly 3D pBN@nCNTs fillers loaded in epoxy resin composites. Journal of Materiomics, 2020, 6, 751-759.	5.7	21
160	Thermal, electrical, and mechanical properties of additionâ€type liquid silicone rubber coâ€filled with <scp>Al₂O₃</scp> particles and <scp>BN</scp> sheets. Journal of Applied Polymer Science, 2020, 137, 49399.	2.6	21
161	On Refining the Relationship between Aspect Ratio and Percolation Threshold of Practical Carbon Nanotubes/Polymer Nanocomposites. Japanese Journal of Applied Physics, 2011, 50, 080214.	1.5	20
162	Theoretical analysis and application of polymerâ€matrix field grading materials in HVDC cable terminals. High Voltage, 2017, 2, 39-46.	4.7	20

#	Article	IF	Citations
163	Prediction on effective permittivity of 0â€“3 connectivity particle/polymer composites at low concentration with finite element method. IEEE Transactions on Dielectrics and Electrical Insulation, 2018, 25, 2122-2128.	2.9	20
164	Unique dielectric properties in polyaniline/poly(vinylidene fluoride) composites induced by temperature variation. Physica Status Solidi - Rapid Research Letters, 2008, 2, 233-235.	2.4	19
165	Influence of the second filler on the positive piezoresistance behavior of carbon nanotubes/silicone rubber composites. Materials Letters, 2014, 118, 161-164.	2.6	19
166	High improvement in trap level density and direct current breakdown strength of block polypropylene by doping with a Î²-nucleating agent. Applied Physics Letters, 2018, 112, .	3.3	19
167	Effect of modified ZnO on electrical properties of PP/SEBS nanocomposites for HVDC cables. IEEE Transactions on Dielectrics and Electrical Insulation, 2018, 25, 2358-2365.	2.9	19
168	Dielectric Polymer Materials for Electrical Energy Storage and Dielectric Physics: A Guide. Journal of Advanced Physics, 2015, 4, 302-313.	0.4	19
169	Effect of high-thermal conductivity epoxy resin on heat dissipation performance of saturated reactor. IEEE Transactions on Dielectrics and Electrical Insulation, 2017, 24, 3898-3905.	2.9	18
170	Environmentally friendly polypropylene/thermoplastic elastomer composites with modified graphene oxide for HVDC application. IEEE Transactions on Dielectrics and Electrical Insulation, 2018, 25, 1088-1094.	2.9	18
171	Surface modification of GO by PDA for dielectric material with well-suppressed dielectric loss. High Performance Polymers, 2019, 31, 1183-1194.	1.8	18
172	Effect of trap level density on breakdown strength and space charge distribution of polypropylene/lowâ€density polyethylene composites. Polymer Composites, 2020, 41, 780-787.	4.6	18
173	Construction of a Three-Dimensional BaTiO3 Network for Enhanced Permittivity and Energy Storage of PVDF Composites. Materials, 2021, 14, 3585.	2.9	18
174	Potential Bioelectroactive Bone Regeneration Polymer Nanocomposites with High Dielectric Permittivity. Advanced Engineering Materials, 2009, 11, B144.	3.5	17
175	Microstructure and electrical properties in three-component (Al₂O₃â€“TiO₂)/polyimide nanocomposite films. Journal of Materials Research, 2010, 25, 2384-2391.	2.6	17
176	Remarkably variable dielectric and magnetic properties of poly(vinylidene fluoride) nanocomposite films with triple-layer structure. Composites Science and Technology, 2015, 107, 107-112.	7.8	17
177	Improvements of dielectric properties and energy storage performances in BaTiO₃/PVDF nanocomposites by employing a thermal treatment process. Journal of Advanced Dielectrics, 2018, 08, 1850043.	2.4	16
178	Synergy improvement of dielectric properties and thermal conductivity in PVDF composites with coreâ€shell structured Ni@SiO2. Journal of Materials Science: Materials in Electronics, 2021, 32, 4076-4089.	2.2	16
179	Piezoresistive Behavior of Electrically Conductive Carbon Fillers/Thermoplastic Elastomer Nanocomposites. Journal of Advanced Physics, 2013, 2, 70-74.	0.4	16
180	High strength, stable and self-healing copolyimide for defects induced by mechanical and electrical damages. Journal of Materials Chemistry C, 2022, 10, 11307-11315.	5.5	16

#	Article	IF	Citations
181	Prominent nonlinear electrical conduction characteristic in T-ZnOw/PTFE composites with low threshold field. IEEE Transactions on Dielectrics and Electrical Insulation, 2012, 19, 567-573.	2.9	15
182	Remarkable piezoresistance effect on the flexible strain sensor based on a single ultralong tellurium micrometre wire. Journal Physics D: Applied Physics, 2014, 47, 505103.	2.8	15
183	Improved mechanical and electrical properties in electrospun polyimide/multiwalled carbon nanotubes nanofibrous composites. Journal of Applied Physics, 2014, 116, 134104.	2.5	15
184	Co-continuous structural polystyrene/poly(vinylidene fluoride) nanocomposites with high dielectric constant and magnetic properties. Composites Communications, 2017, 4, 24-32.	6.3	15
185	Construction of micro-branched crosslink fluorinated polyimide with ultra-low dielectric permittivity and enhanced mechanical properties. EXPRESS Polymer Letters, 2022, 16, 142-151.	2.1	15
186	Enhanced electrical properties in percolative low-density polyethylene/carbon nanotubes nanocomposites. IEEE Transactions on Dielectrics and Electrical Insulation, 2010, 17, 645-652.	2.9	14
187	Synthesis of polypropyleneâ€grafted graphene and its compatibilization effect on polypropylene/polystyrene blends. Journal of Applied Polymer Science, 2014, 131, .	2.6	14
188	Tailored wide-frequency dielectric behavior of polyimide composite films with Ba_xSr_{1-x}TiO₃Perovskites ceramic particles. IEEE Transactions on Dielectrics and Electrical Insulation, 2016, 23, 113-120.	2.9	14
189	Plasticized thermoplastic polyurethanes for dielectric elastomers with improved electromechanical actuation. Journal of Applied Polymer Science, 2017, 134, 45123.	2.6	14
190	Improved space charge suppression in PP/SEBS nanocomposites by controlling MgO nanoparticles with abundant surface defects. Applied Physics Letters, 2019, 115, .	3.3	14
191	Effect of the compatibility on dielectric performance and breakdown strength of poly(vinylidene) Tj ETQq1 1 0.784314 rgBT /Overlock	2.6	13
192	Effect of fiber alignment on dielectric response in the 1â€“3 connectivity fiber/polymer composites by quantitative evaluation. Applied Physics Letters, 2018, 113, .	3.3	13
193	Achieving high insulating strength and energy storage properties of all-organic dielectric composites by surface morphology modification. Composites Science and Technology, 2022, 226, 109545.	7.8	13
194	Origin of large field-induced strain of azobenzene/polyurethane blend dielectric elastomers. RSC Advances, 2015, 5, 82215-82226.	3.6	12
195	Effect of multi-structured zinc oxide on the electrical properties of polypropylene insulating materials. Journal Physics D: Applied Physics, 2017, 50, 305301.	2.8	12
196	Characterization of percolation behavior in conductorâ€“dielectric 0-3 composites. Journal of Advanced Dielectrics, 2014, 04, 1450035.	2.4	11
197	Enhanced electro-mechanical actuation strain in polyaniline nanorods/silicone rubber nanodielectric elastomer films. Applied Physics Letters, 2014, 104, 242903.	3.3	11
198	Improved dielectric performance of polypropylene/multiwalled carbon nanotube nanocomposites by solidâ€phase orientation. Journal of Applied Polymer Science, 2016, 133, .	2.6	11

#	Article	IF	Citations
199	Nonlinear electric conductivity and thermal conductivity of WS2/EPDM field grading materials. Journal of Applied Physics, 2017, 122, .	2.5	11
200	Sandwiched structure effect on space charge characteristics of alumina/polyethylene nanocomposites. IEEE Transactions on Dielectrics and Electrical Insulation, 2017, 24, 1365-1371.	2.9	11
201	Electrospun poly(ethylene oxide) nanofibrous composites with enhanced ionic conductivity as flexible solid polymer electrolytes. High Voltage, 2017, 2, 25-31.	4.7	11
202	Effect of interparticle electrostatic interactions on the dielectric response of 0â€“3 connectivity particle/polymer composites for high energy density storage. Journal of Applied Physics, 2020, 127, 184106.	2.5	11
203	Ductile polymer-based films with ultrahigh permittivity and low dielectric loss. Polymer, 2017, 130, 258-266.	3.8	10
204	Space charge suppression in environment-friendly PP nanocomposites by employing freeze-dried MgO with foam nanostructure for high-voltage power cable insulation. Applied Physics Letters, 2019, 114, 252902.	3.3	10
205	Structural, electrical, and thermal features of polyimide composites filled with semiconductive MXene sheets. Applied Physics Letters, 2021, 118, .	3.3	10
206	Lowâ€”Permittivity Copolymerized Polyimides with Fluorene Rigid Conjugated Structure. Materials, 2021, 14, 6266.	2.9	10
207	Phenomena of Multiarc Roots and Parallel Arcs in a Large-Scale Magnetically Rotating Arc Plasma Generator. IEEE Transactions on Plasma Science, 2013, 41, 601-605.	1.3	9
208	Effects of trap density on space charge suppression of block polypropylene/Al₂O₃ composite under high temperature. IEEE Transactions on Dielectrics and Electrical Insulation, 2018, 25, 1293-1299.	2.9	9
209	Effect of multi-dimensional zinc oxide on electrical properties of polypropylene nanocomposites for HVDC cables. IEEE Transactions on Dielectrics and Electrical Insulation, 2019, 26, 868-875.	2.9	9
210	Dual functionalized Janus structural PVDF nanocomposite with surface-modified dielectric and magnetic nanoparticles. Applied Physics Letters, 2020, 117, .	3.3	9
211	Advanced dielectric elastomer based on optimized thermoplastic polyurethaneâ€“styrene ethylene butylene styrene blend: Experiment and simulation. Journal of Applied Polymer Science, 2022, 139, 51595.	2.6	9
212	Multiphase/Multicomponent Dielectric Polymer Materials With High Permittivity and High Breakdown Strength. , 2018, , 247-287.		8
213	Barium titanate@polyaniline coreâ€“shell semiconducting particles reinforced poly(vinylidene) Tj ETQq1 1 0.784314 rgBT /Overlock 1 Materials Science: Materials in Electronics, 2019, 30, 3325-3331.	2.2	8
214	A facile route to prepare highâ^'performance dielectric nanocomposites of poly(methyl) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 147 Td (m 209, 108792.	7.8	8
215	Yolk-shelled FeP/Ni2P/C@C nanospheres with void: Controllable synthesis and excellent performance as the anode for lithium-ion batteries. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2020, 602, 125103.	4.7	7
216	Fabrication and actuation characterisation of a new UV curing acrylic dielectric elastomer. IET Nanodielectrics, 2022, 5, 104-111.	4.1	7

#	Article	IF	Citations
217	Preparation and dielectric properties of (Ba_{0.5}Sr_{0.4}Ca_{0.1})TiO₃/polystyrene composites. Journal of Applied Polymer Science, 2015, 132, .	2.6	6
218	Nonlinear electrical conductivity of ionic liquid modified WS2/EPDM field grading material. Journal of Applied Physics, 2018, 123, 205113.	2.5	6
219	Dielectric Properties and Thermal Expansion of ZrW2 O8 /Polyimide Hybrid Films. Journal of Advanced Physics, 2012, 1, 48-53.	0.4	5
220	Synthesis and dielectric properties of novel liquid crystalline triblock copolymers with cyanobiphenyl moieties and poly(nâ€butyl acrylate) segments. Polymers for Advanced Technologies, 2014, 25, 920-926.	3.2	5
221	Polymer Nanocomposites with High Permittivity. , 2014, , 305-333.		5
222	Reduced sedimentation of barium titanate nanoparticles in poly(vinylidene fluoride) films during solution casting by surface modification. Journal of Applied Polymer Science, 2015, 132, .	2.6	5
223	Processing of Polymeric Dielectrics for High Energy Density Capacitors. , 2018, , 429-446.		5
224	Integrated multifunctional properties of polypropylene composites by employing threeâ€dimensional flowerâ€like MgO with hierarchical surface morphology. IET Nanodielectrics, 2021, 4, 27-37.	4.1	5
225	Regulating dielectric performances of Poly(vinylidene fluoride) nanocomposites by individually controlling shell thickness of Core@Doubleâ€Shells structured nanowires. IET Nanodielectrics, 2021, 4, 11-20.	4.1	5
226	Achieving Hydrophobic Ultralow Dielectric Constant Polyimide Composites: Combined Efforts of Fluorination and Porous Fillers. Macromolecular Materials and Engineering, 2022, 307, .	3.6	5
227	Prediction of high-temperature polymer dielectrics using a Bayesian molecular design model. Journal of Applied Physics, 2022, 132, .	2.5	5
228	Experimental study of the rheological, mechanical, and dielectric properties of MgO/LDPE nanocomposites. Journal of Applied Polymer Science, 2016, 133, .	2.6	4
229	Functionalization of multi-walled carbon nanotubes by radiation-induced graft polymerization in aqueous solution. Fullerenes Nanotubes and Carbon Nanostructures, 2017, 25, 250-255.	2.1	4
230	The Thermal Conductivity and Electrical Properties of EP Composite With Different Size BN. , 2018, , .		4
231	Enhanced dielectric properties of PVDF nanocomposites with modified sandwich-like GO@PVP hybrids. Polymer-Plastics Technology and Materials, 2020, 59, 592-605.	1.3	4
232	Novel surface potential decay of TiO<inf>2</inf>-based polyimide nanocomposite films. , 2010, , .		3
233	Low-frequency dielectric phenomena in BaTiO<inf>3</inf>/polymer nanocomposites. , 2013, , .		3
234	Dispersion of Carbon Blacks and Their Influence on the Properties of Semiconductive Materials use for High-voltage Power Cables. , 2018, , .		3

#	Article	IF	Citations
235	High Energy Storage Dielectric Polymer Materials With Hierarchical Microstructures. , 2018, , 165-197.		3
236	Electrospinning Functional Fillers/Polymer Composites With High Energy Storage. , 2018, , 289-321.		3
237	Photoinduced healing of polyolefin dielectrics enabled by surface plasmon resonance of gold nanoparticles. Journal of Applied Polymer Science, 2019, 136, 47158.	2.6	3
238	Relaxation dynamics of Ni/epoxy composites studied by dielectric relaxation spectroscopy. Journal of Elastomers and Plastics, 2020, 52, 304-321.	1.5	3
239	High dielectric properties and thermal conductivity of the PVDF-based composites with a low filler content reinforced by BaTiO3@super-short MWCNT coreâ€“shell particles. Journal of Materials Science: Materials in Electronics, 2022, 33, 4268.	2.2	3
240	Dielectric properties of silica hollow spheres/epoxy nanocomposites. , 2012, , .		2
241	Fabrication and properties of high performance polyimide nanofibrous films by electrospinning. , 2013, , .		2
242	Insulating Properties of Low Density Polyethylene/Alumina Nanocomposites. American Journal of Engineering and Applied Sciences, 2015, 8, 405-409.	0.6	2
243	Dielectric Properties of Chemical Dehydrofluorinated Poly(vinylidene fluoride). Journal of Advanced Physics, 2015, 4, 380-383.	0.4	2
244	Preparation and Characterization of All-organic TPU/P(VDF-HFP) Flexible Composite Films with High Energy Storage. Acta Chimica Sinica, 2021, 79, 1273.	1.4	2
245	Carbon black-BaTiO<inf>3</inf>/silicone rubber electroactive nanocomposites with large strain coefficient. , 2009, , .		1
246	Space charge dynamics in polyimide based nanocomposites. , 2010, , .		1
247	Aluminum Nitride/Polyimide Nanocomposite Films with High Thermal Conductivity and Low Dielectric Permittivity. Journal of Advanced Physics, 2012, 1, 78-83.	0.4	1
248	Improving electromechanical strain of polyurethanes via optimizing electric field ramp rate and actuator size. Sensors and Actuators A: Physical, 2017, 262, 29-34.	4.1	1
249	Micro Structural and Electrical properties of Liquid Silicone Rubber Used for External Insulation. , 2018, , .		1
250	Effect of thickness of one-dimensional nanofibers by electrospinning on the dielectric properties of PVDF composites. , 2019, , .		1
251	Low-k cross-linked polyimide for microelectronic packaging application. , 2021, , .		1
252	Electrical-Induced Wrinkling and Bulging Phenomena in Flexible Electroactive Polymer Composites. Journal of Advanced Physics, 2013, 2, 13-19.	0.4	1

#	Article	IF	Citations
253	Mechanism and properties of piezoresistive in rubber-matrix nanocomposites. , 2011, , .		0
254	Preparation and charge transport of polyimide insulating nanocomposite films. , 2011, , .		0
255	Dielectric properties of epoxy/Al<inf>2</inf>O<inf>3</inf> nanomposites derived from Al<inf>2</inf>O<inf>3</inf> nanoparticles. , 2012, , .		0
256	Sandwich-structural PVDF nanocomposites with high thermal conductivity and excellent dielectric properties. , 2017, , .		0
257	Enhanced dielectric properties of polyvinylidene fluoride nanocomposites via calcium copper titanate nanofibers. , 2017, , .		0
258	Enhanced dielectric properties and thermal conductivity of sandwich-structured PVDF composites by spin coating. , 2017, , .		0
259	Preparation of New Acrylic-Based Dielectric Elastomers Based on Complexation of Ca²+ Ions with Carboxyl Groups Displaying Excellent Performance. , 2018, , .		0
260	Space charge behavior in LDPE/EBA insulation materials for HVDC cables. , 2019, , .		0
261	Alcohol Sensor Based on a Single Ultralong <I>p</I>-Type Tellurium Micrometer Wire. Journal of Advanced Physics, 2014, 3, 293-296.	0.4	0
262	Piezoelectric Sensor Based on a Single Ultralong Tellurium Microwire. Journal of Advanced Physics, 2015, 4, 181-184.	0.4	0
263	Effect of filler's parameters on dielectric performance of the co-filled sphere-fiber/polymer composites by numerical evaluation. , 2020, , .		0