Jin-Kai Yuan

List of Publications by Year
in descending order

50 papers	5,503 citations	257101 24 h-index	233125 45 g-index
51 all docs	51 docs citations	51 times ranked	4522 citing authors

#	Article	IF	Citations
1	Fundamentals, processes and applications of high-permittivity polymerâ€“matrix composites. Progress in Materials Science, 2012, 57, 660-723.	16.0	1,467
2	Flexible Nanodielectric Materials with High Permittivity for Power Energy Storage. Advanced Materials, 2013, 25, 6334-6365.	11.1	1,204
3	Improving Dielectric Properties of BaTiO₃/Ferroelectric Polymer Composites by Employing Surface Hydroxylated BaTiO₃ Nanoparticles. ACS Applied Materials & Interfaces, 2011, 3, 2184-2188.	4.0	388
4	Advanced Calcium Copper Titanate/Polyimide Functional Hybrid Films with High Dielectric Permittivity. Advanced Materials, 2009, 21, 2077-2082.	11.1	378
5	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.	1.5	341
6	Fabrication and dielectric properties of advanced high permittivity polyaniline/poly(vinylidene) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 547 2441.	6.7	188
7	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.	1.5	168
8	Shape memory nanocomposite fibers for untethered high-energy microengines. Science, 2019, 365, 155-158.	6.0	151
9	High dielectric permittivity and low percolation threshold in polymer composites based on SiC-carbon nanotubes micro/nano hybrid. Applied Physics Letters, 2011, 98, .	1.5	124
10	Biphasic Polymer Blends Containing Carbon Nanotubes: Heterogeneous Nanotube Distribution and Its Influence on the Dielectric Properties. Journal of Physical Chemistry C, 2012, 116, 2051-2058.	1.5	116
11	Preparation and dielectric properties of surface modified TiO2/silicone rubber nanocomposites. Materials Letters, 2011, 65, 3430-3432.	1.3	92
12	Graphene liquid crystal retarded percolation for new high-k materials. Nature Communications, 2015, 6, 8700.	5.8	85
13	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.	1.5	72
14	Flower-like NiCo2O4â€“CN as efficient bifunctional electrocatalyst for Zn-Air battery. Electrochimica Acta, 2020, 341, 135997.	2.6	57
15	High-permittivity polymer nanocomposites: Influence of interface on dielectric properties. Journal of Advanced Dielectrics, 2013, 03, 1330004.	1.5	44
16	Vertically Aligned Carbon Nanotube Arrays on SiC Microplatelets: A High Figure-of-Merit Strategy for Achieving Large Dielectric Constant and Low Loss in Polymer Composites. Journal of Physical Chemistry C, 2014, 118, 22975-22983.	1.5	42
17	Core@double-shells nanowires strategy for simultaneously improving dielectric constants and suppressing losses of poly(vinylidene fluoride) nanocomposites. Carbon, 2018, 132, 152-156.	5.4	42
18	Anisotropic Percolation of SiCâ€“Carbon Nanotube Hybrids: A New Route toward Thermally Conductive High-k Polymer Composites. Journal of Physical Chemistry C, 2017, 121, 12063-12070.	1.5	34

#	Article	IF	Citations
19	The controlled formation of hybrid structures of multi-walled carbon nanotubes on SiC plate-like particles and their synergetic effect as a filler in poly(vinylidene fluoride) based composites. Carbon, 2013, 51, 355-364.	5.4	33
20	Effective synergistic effect of Al₂O₃ and SiC microparticles on the growth of carbon nanotubes and their application in high dielectric permittivity polymer composites. Journal of Materials Chemistry A, 2014, 2, 7980-7987.	5.2	32
21	Chemical Vapor Deposition Synthesis of Carbon Nanotube-Graphene Nanosheet Hybrids and Their Application in Polymer Composites. Journal of Nanoscience and Nanotechnology, 2012, 12, 6935-6940.	0.9	31
22	Carbon nanotube forest based electrostatic capacitor with excellent dielectric performances. Carbon, 2017, 116, 648-654.	5.4	30
23	High dielectric performance of three-component nanocomposites induced by a synergetic effect. Materials Letters, 2010, 64, 2682-2684.	1.3	28
24	Effect of oxygen vacancy on the dielectric relaxation of BaTiO3 thin films in a quenched state. Journal of Applied Physics, 2012, 111, .	1.1	24
25	The use of vertically aligned carbon nanotubes grown on SiC for in situ sensing of elastic and plastic deformation in electrically percolative epoxy composites. Carbon, 2012, 50, 4298-4301.	5.4	24
26	Improved Dielectric Properties in Polypropylene/Poly(vinylidene fluoride) Binary Blends Containing Boron Nitride Nanosheets: Toward High-Voltage Current Application. Journal of Physical Chemistry C, 2019, 123, 11993-12000.	1.5	24
27	Percolation of carbon nanomaterials for high-k polymer nanocomposites. Chinese Chemical Letters, 2017, 28, 2036-2044.	4.8	22
28	Fibers Do the Twist. Science, 2014, 343, 845-846.	6.0	21
29	Giant Permittivity Polymer Nanocomposites Obtained by Curing a Direct Emulsion. Langmuir, 2015, 31, 12231-12239.	1.6	21
30	Giant Electrostriction of Soft Nanocomposites Based on Liquid Crystalline Graphene. ACS Nano, 2018, 12, 1688-1695.	7.3	21
31	Chemically bonding BaTiO₃ nanoparticles in highly filled polymer nanocomposites for greatly enhanced dielectric properties. Journal of Materials Chemistry C, 2020, 8, 8786-8795.	2.7	21
32	Inkjet Printing of Latexâ€Based Highâ€Energy Microcapacitors. Advanced Functional Materials, 2019, 29, 1901884.	7.8	20
33	Unique dielectric properties in polyaniline/poly(vinylidene fluoride) composites induced by temperature variation. Physica Status Solidi - Rapid Research Letters, 2008, 2, 233-235.	1.2	19
34	Giant Electrostrictive Response and Piezoresistivity of Emulsion Templated Nanocomposites. Langmuir, 2017, 33, 4528-4536.	1.6	19
35	Piezoresistive Behavior of Electrically Conductive Carbon Fillers/Thermoplastic Elastomer Nanocomposites. Journal of Advanced Physics, 2013, 2, 70-74.	0.4	16
36	Water-processable cellulosic nanocomposites as green dielectric films for high-energy storage. Energy Storage Materials, 2022, 48, 497-506.	9.5	16

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37	A facile way to fabricate novel 2â€“3-type composites based on zinc powders and polyvinylidene fluoride with enhanced dielectric properties. Composites Part A: Applied Science and Manufacturing, 2012, 43, 842-846.	3.8	15
38	All-organic microelectromechanical systems integrating electrostrictive nanocomposite for mechanical energy harvesting. Nano Energy, 2018, 44, 1-6.	8.2	15
39	Dielectric Constant of Polymer Composites and the Routes to High-k or Low-k Nanocomposite Materials. , 2016, , 3-28.		11
40	Waterborne Nanocomposites with Enhanced Breakdown Strength for High Energy Storage. ACS Applied Energy Materials, 2020, 3, 9107-9116.	2.5	11
41	Improving dielectric strength of polyvinylidene fluoride by blending chains with different molecular weights. Polymer, 2020, 190, 122235.	1.8	11
42	High loading BaTiO₃ nanoparticles chemically bonded with fluorinated silicone rubber for largely enhanced dielectric properties of polymer nanocomposites. Physical Chemistry Chemical Physics, 2021, 23, 26219-26226.	1.3	7
43	Dielectric Properties and Thermal Expansion of ZrW2 O8 /Polyimide Hybrid Films. Journal of Advanced Physics, 2012, 1, 48-53.	0.4	5
44	Temperature and electrical memory of polymer fibers. AIP Conference Proceedings, 2014, , .	0.3	4
45	Thermally Conductive Dielectric Polymer Materials for Energy Storage. , 2018, , 323-349.		3
46	Systematic investigation of the influence of experimental conditions on TiO2 nanosheet structures. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2021, 610, 125716.	2.3	3
47	Electrostrictive polymer composites based on liquid crystalline graphene for mechanical energy harvesting. , 2018, , .		1
48	Flexible Nanodielectric Materials with High Permittivity for Power Energy Storage. , 2020, , 411-495.		1
49	Polyaniline/poly(vinylidene fluoride) functional hybrid films with high electric energy density. , 2009, , .		0
50	Electrostrictive polymer composites based on liquid crystalline graphene for mechanical energy harvesting. , 2018, , .		0