Qi Li

List of Publications by Year in descending order

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73 papers	7,532 citations	94433 37 h-index	82547 72 g-index
73 all docs	73 docs citations	73 times ranked	4827 citing authors

#	Article	IF	Citations
1	Flexible high-temperature dielectric materials from polymer nanocomposites. Nature, 2015, 523, 576-579.	27.8	1,476
2	Solution-processed ferroelectric terpolymer nanocomposites with high breakdown strength and energy density utilizing boron nitride nanosheets. Energy and Environmental Science, 2015, 8, 922-931.	30.8	541
3	High-Temperature Dielectric Materials for Electrical Energy Storage. Annual Review of Materials Research, 2018, 48, 219-243.	9.3	540
4	Ferroelectric polymer networks with high energy density and improved discharged efficiency for dielectric energy storage. Nature Communications, 2013, 4, 2845.	12.8	382
5	Highâ€Energyâ€Density Dielectric Polymer Nanocomposites with Trilayered Architecture. Advanced Functional Materials, 2017, 27, 1606292.	14.9	338
6	Sandwich-structured polymer nanocomposites with high energy density and great chargeâ€“discharge efficiency at elevated temperatures. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 9995-10000.	7.1	317
7	Highâ€Performance Polymers Sandwiched with Chemical Vapor Deposited Hexagonal Boron Nitrides as Scalable Highâ€Temperature Dielectric Materials. Advanced Materials, 2017, 29, 1701864.	21.0	270
8	Ferroelectric Polymers and Their Energyâ€Related Applications. Macromolecular Chemistry and Physics, 2016, 217, 1228-1244.	2.2	193
9	Ferroelectric Polymer Nanocomposites for Roomâ€Temperature Electrocaloric Refrigeration. Advanced Materials, 2015, 27, 1450-1454.	21.0	192
10	Self-healing of electrical damage in polymers using superparamagnetic nanoparticles. Nature Nanotechnology, 2019, 14, 151-155.	31.5	169
11	Highâ€Energy Storage Performance of (Pb_{0.87}Ba_{0.1}La_{0.02})(Zr_{0.68}Sn_{0.24}Ti_{0.08})O₃ Antiferroelectric Ceramics Fabricated by the Hotâ€Press Sintering Method. Journal of the American Ceramic Society, 2015, 98, 1175-1181.	3.8	168
12	Colossal Room-Temperature Electrocaloric Effect in Ferroelectric Polymer Nanocomposites Using Nanostructured Barium Strontium Titanates. ACS Nano, 2015, 9, 7164-7174.	14.6	164
13	Interface-modulated nanocomposites based on polypropylene for high-temperature energy storage. Energy Storage Materials, 2020, 28, 255-263.	18.0	159
14	Poly(methyl methacrylate)/boron nitride nanocomposites with enhanced energy density as high temperature dielectrics. Composites Science and Technology, 2017, 142, 139-144.	7.8	153
15	A Hybrid Material Approach Toward Solutionâ€Processable Dielectrics Exhibiting Enhanced Breakdown Strength and High Energy Density. Advanced Functional Materials, 2015, 25, 3505-3513.	14.9	152
16	Relaxor Ferroelectricâ€Based Electrocaloric Polymer Nanocomposites with a Broad Operating Temperature Range and High Cooling Energy. Advanced Materials, 2015, 27, 2236-2241.	21.0	143
17	Y doping and grain size co-effects on the electrical energy storage performance of (Pb0.87Ba0.1La0.02)(Zr0.65Sn0.3Ti0.05)O3 anti-ferroelectric ceramics. Ceramics International, 2014, 40, 5455-5460.	4.8	129
18	Toward Wearable Cooling Devices: Highly Flexible Electrocaloric Ba_{0.67}Sr_{0.33}TiO₃ Nanowire Arrays. Advanced Materials, 2016, 28, 4811-4816.	21.0	101

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19	Solvent-free Fluids Based on Rhombohedral Nanoparticles of Calcium Carbonate. Journal of the American Chemical Society, 2009, 131, 9148-9149.	13.7	93
20	Understanding of Relaxor Ferroelectric Behavior of Poly(vinylidene) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 707 Td (fluorideâ€“trifluoroeth 2731-2739.	4.8	93
21	Improved Energy Storage Properties Accompanied by Enhanced Interface Polarization in Annealed Microwaveâ€Sintered BST. Journal of the American Ceramic Society, 2015, 98, 3212-3222.	3.8	90
22	Propertyâ^'Structure Relationship of Nanoscale Ionic Materials Based on Multiwalled Carbon Nanotubes. ACS Nano, 2010, 4, 5797-5806.	14.6	86
23	Direct Detection of Local Electric Polarization in the Interfacial Region in Ferroelectric Polymer Nanocomposites. Advanced Materials, 2019, 31, e1807722.	21.0	81
24	Suppression of energy dissipation and enhancement of breakdown strength in ferroelectric polymerâ€“graphene percolative composites. Journal of Materials Chemistry C, 2013, 1, 7034.	5.5	78
25	Polymer nanocomposites with high energy density and improved chargeâ€“discharge efficiency utilizing hierarchically-structured nanofillers. Journal of Materials Chemistry A, 2020, 8, 6576-6585.	10.3	74
26	Selfâ€Healable Polymer Nanocomposites Capable of Simultaneously Recovering Multiple Functionalities. Advanced Functional Materials, 2016, 26, 3524-3531.	14.9	69
27	Aqueous preparation of polyethylene glycol/sulfonated graphene phase change composite with enhanced thermal performance. Energy Conversion and Management, 2013, 75, 482-487.	9.2	65
28	Ternary PVDF-based terpolymer nanocomposites with enhanced energy density and high power density. Composites Part A: Applied Science and Manufacturing, 2018, 109, 597-603.	7.6	64
29	Fluxible Monodisperse Quantum Dots with Efficient Luminescence. Angewandte Chemie - International Edition, 2010, 49, 9943-9946.	13.8	60
30	Flexible Ionic Diodes for Lowâ€Frequency Mechanical Energy Harvesting. Advanced Energy Materials, 2017, 7, 1601983.	19.5	51
31	Polypropylene-based ternary nanocomposites for recyclable high-voltage direct-current cable insulation. Composites Science and Technology, 2018, 165, 168-174.	7.8	48
32	High Energy Density and Breakdown Strength from Î² and Î³ Phases in Poly(vinylidene) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 227 Td (flu 6, 18981-18988.	8.0	47
33	NiO hierarchical hollow nanofibers as high-performance supercapacitor electrodes. RSC Advances, 2015, 5, 96205-96212.	3.6	47
34	Selfâ€Healing of Electrical Damage in Polymers. Advanced Science, 2020, 7, 2002131.	11.2	46
35	Ultrahigh-energy-density dielectric materials from ferroelectric polymer/glucose all-organic composites with a cross-linking network of hydrogen bonds. Energy Storage Materials, 2022, 49, 339-347.	18.0	46
36	Suppression of elevated temperature space charge accumulation in polypropylene/elastomer blends by deep traps induced by surface-modified ZnO nanoparticles. Composites Science and Technology, 2017, 153, 103-110.	7.8	42

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37	Origins and effects of deep traps in functional group grafted polymeric dielectric materials. Journal Physics D: Applied Physics, 2020, 53, 475301.	2.8	42
38	Enhanced pyroelectric properties of porous Ba0.67Sr0.33TiO3 ceramics fabricated with carbon nanotubes. Journal of Alloys and Compounds, 2015, 636, 93-96.	5.5	41
39	Controlling Chain Conformations of Highâ€k Fluoropolymer Dielectrics to Enhance Charge Mobilities in Rubrene Singleâ€Crystal Fieldâ€Effect Transistors. Advanced Materials, 2016, 28, 10095-10102.	21.0	38
40	Self-healing of internal damage in mechanically robust polymers utilizing a reversibly convertible molecular network. Journal of Materials Chemistry A, 2021, 9, 15975-15984.	10.3	34
41	Towards multicaloric effect with ferroelectrics. Physical Review B, 2016, 94, .	3.2	33
42	Solid-state cooling by elastocaloric polymer with uniform chain-lengths. Nature Communications, 2022, 13, 9.	12.8	33
43	Mapping the Space Charge at Nanoscale in Dielectric Polymer Nanocomposites. ACS Applied Materials & Interfaces, 2020, 12, 53425-53434.	8.0	32
44	A binary solvent system for improved liquid phase exfoliation of pristine graphene materials. Carbon, 2015, 94, 405-411.	10.3	31
45	Self-healing of electrical damage in thermoset polymers via anionic polymerization. Journal of Materials Chemistry C, 2020, 8, 6025-6033.	5.5	31
46	Selfâ€Unfolded Graphene Sheets. Chemistry - A European Journal, 2012, 18, 7055-7059.	3.3	29
47	Biocompatible and Flexible Hydrogel Diodeâ€Based Mechanical Energy Harvesting. Advanced Materials Technologies, 2017, 2, 1700118.	5.8	29
48	Fluxible Nanoclusters of Fe₃O₄ Nanocrystal-Embedded Polyaniline by Macromolecule-Induced Self-Assembly. Langmuir, 2013, 29, 10223-10228.	3.5	28
49	Facile preparation and thermal performances of hexadecanol/crosslinked polystyrene core/shell nanocapsules as phase change material. Polymer Composites, 2014, 35, 2154-2158.	4.6	28
50	Tuning the potential distribution of AC cable terminals by stress cone of nonlinear conductivity material. IEEE Transactions on Dielectrics and Electrical Insulation, 2017, 24, 2686-2693.	2.9	28
51	Multilayered ferroelectric polymer composites with high energy density at elevated temperature. Composites Science and Technology, 2021, 202, 108594.	7.8	28
52	A carbon black derivative with liquid behavior. Carbon, 2011, 49, 1047-1051.	10.3	27
53	Synergistic effect of ZnO microspherical varistors and carbon fibers on nonlinear conductivity and mechanical properties of the silicone rubber-based material. Composites Science and Technology, 2017, 150, 187-193.	7.8	27
54	The effect of the addition of carbon nanotube fluids to a polymeric matrix to produce simultaneous reinforcement and plasticization. Carbon, 2012, 50, 2056-2060.	10.3	26

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55	Effect of Mn₃O₄ nanoparticle composition and distribution on graphene as a potential hybrid anode material for lithium-ion batteries. RSC Advances, 2016, 6, 33022-33030.	3.6	19
56	Large energy density in Ba doped Pb0.97La0.02(Zr0.65Sn0.3Ti0.05)O3 antiferroelectric ceramics with improved temperature stability. IEEE Transactions on Dielectrics and Electrical Insulation, 2017, 24, 744-748.	2.9	17
57	How nonlinear V-I characteristics of single ZnO microvaristor influences the performance of its silicone rubber composite. IEEE Transactions on Dielectrics and Electrical Insulation, 2018, 25, 623-630.	2.9	17
58	Optimal design of high temperature metalized thin-film polymer capacitors: A combined numerical and experimental method. Journal of Power Sources, 2017, 357, 149-157.	7.8	16
59	Nonlinear effective permittivity of field grading composite dielectrics. Journal Physics D: Applied Physics, 2018, 51, 075304.	2.8	16
60	Defect-targeted self-healing of multiscale damage in polymers. Nanoscale, 2020, 12, 3605-3613.	5.6	16
61	Selfâ€Suspended Polyaniline Doped with a Protonic Acid Containing a Polyethylene Glycol Segment. Chemistry - an Asian Journal, 2011, 6, 2920-2924.	3.3	15
62	Scalable production of few-layer molybdenum disulfide nanosheets by supercritical carbon dioxide. Journal of Materials Science, 2018, 53, 7258-7265.	3.7	15
63	Self-assembled quantum dotsâ€“polyhedral oligomeric silsesquioxane nanohybrids with enhanced photoluminescence. Scripta Materialia, 2012, 66, 646-649.	5.2	11
64	Polymer Nanocomposites with High Energy Density Utilizing Oriented Nanosheets and High-Dielectric-Constant Nanoparticles. Materials, 2021, 14, 4780.	2.9	9
65	A Dielectric Polymer/Metal Oxide Nanowire Composite for Self-Adaptive Charge Release. Nano Letters, 2022, 22, 5167-5174.	9.1	9
66	Electroluminescence and electrical degradation of insulating polymers at electrode interfaces under divergent fields. Journal of Applied Physics, 2018, 123, .	2.5	8
67	Insight into the Experimental Error in the Mapping of Electrical Properties with Electrostatic Force Microscopy. Langmuir, 2022, 38, 8534-8544.	3.5	8
68	Self-assembled long-chain organic ion grafted carbon dot ionic nanohybrids with liquid-like behavior and dual luminescence. New Journal of Chemistry, 2013, 37, 3857.	2.8	7
69	Highly reflective and adhesive surface of aluminized polyvinyl chloride film by vacuum evaporation. Applied Surface Science, 2014, 311, 541-548.	6.1	7
70	Self-suspended polyaniline containing self-dissolved lyotropic liquid crystal with electrical conductivity. Journal of Polymer Science Part A, 2016, 54, 3578-3582.	2.3	4
71	Solvent-free Synthesis of Flowable Carbon Clusters with Customizable Size and Tunable Optical Performance. Chinese Journal of Chemistry, 2013, 31, 1513-1518.	4.9	3
72	Nanoscale mapping of electric polarizability in a heterogeneous dielectric material with surface irregularities. Nanotechnology, 2021, 32, 505711.	2.6	3

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73	Polymer Nanocomposites for Power Energy Storage. , 2016, , 139-163.		0