

# Lin Zhang

## List of Publications by Year in descending order

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91  
papers

5,144  
citations

94433

37  
h-index

88630

70  
g-index

91  
all docs

91  
docs citations

91  
times ranked

5111  
citing authors

#	ARTICLE	IF	CITATIONS
1	Monitoring of the central blood pressure waveform via a conformal ultrasonic device. <i>Nature Biomedical Engineering</i> , 2018, 2, 687-695.	22.5	520
2	Recent progress in carbon-based materials for supercapacitor electrodes: a review. <i>Journal of Materials Science</i> , 2021, 56, 173-200.	3.7	474
3	Recent Progress on Nanocellulose Aerogels: Preparation, Modification, Composite Fabrication, Applications. <i>Advanced Materials</i> , 2021, 33, e2005569.	21.0	311
4	Stretchable ultrasonic transducer arrays for three-dimensional imaging on complex surfaces. <i>Science Advances</i> , 2018, 4, eaar3979.	10.3	204
5	Recent progress on nanostructured conducting polymers and composites: synthesis, application and future aspects. <i>Science China Materials</i> , 2018, 61, 303-352.	6.3	184
6	Click chemistry in polymeric scaffolds: Bioactive materials for tissue engineering. <i>Journal of Controlled Release</i> , 2018, 273, 160-179.	9.9	172
7	Wood-Inspired Anisotropic Cellulose Nanofibril Composite Sponges for Multifunctional Applications. <i>ACS Applied Materials &amp; Interfaces</i> , 2020, 12, 35513-35522.	8.0	148
8	Porous aerogel and sponge composites: Assisted by novel nanomaterials for electromagnetic interference shielding. <i>Nano Today</i> , 2021, 38, 101204.	11.9	142
9	DEVELOPMENT OF POLYMER-BASED 0 <sup>th</sup> –3 COMPOSITES WITH HIGH DIELECTRIC CONSTANT. <i>Journal of Advanced Dielectrics</i> , 2011, 01, 389-406.	2.4	140
10	Synergistic effects in 3D honeycomb-like hematite nanoflakes/branched polypyrrole nanoleaves heterostructures as high-performance negative electrodes for asymmetric supercapacitors. <i>Nano Energy</i> , 2016, 22, 189-201.	16.0	102
11	Nano-clip based composites with a low percolation threshold and high dielectric constant. <i>Nano Energy</i> , 2016, 26, 550-557.	16.0	98
12	Flexible hC-G reinforced polyimide composites with high dielectric permittivity. <i>Composites Part A: Applied Science and Manufacturing</i> , 2017, 101, 50-58.	7.6	98
13	Preparation process and dielectric properties of Ba <sub>0.5</sub> Sr <sub>0.5</sub> TiO <sub>3</sub> /P(VDF-CTFE) nanocomposites. <i>Composites Part B: Engineering</i> , 2014, 56, 284-289.	12.0	97
14	Dielectric characteristics of CaCu <sub>3</sub> Ti <sub>4</sub> O <sub>12</sub> /P(VDF-TrFE) nanocomposites. <i>Applied Physics A: Materials Science and Processing</i> , 2012, 107, 597-602.	2.3	94
15	BST-P(VDF-CTFE) nanocomposite films with high dielectric constant, low dielectric loss, and high energy-storage density. <i>Composites Part B: Engineering</i> , 2019, 168, 34-43.	12.0	94
16	Polymer Dielectrics with Simultaneous Ultrahigh Energy Density and Low Loss. <i>Advanced Materials</i> , 2021, 33, e2008198.	21.0	85
17	Process and Microstructure to Achieve Ultra-high Dielectric Constant in Ceramic-Polymer Composites. <i>Scientific Reports</i> , 2016, 6, 35763.	3.3	81
18	High electric field-induced strain with ultra-low hysteresis and giant electrostrictive coefficient in barium strontium titanate lead-free ferroelectrics. <i>Journal of the European Ceramic Society</i> , 2019, 39, 295-304.	5.7	80

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19	Magnetostrictive resonators as sensors and actuators. <i>Sensors and Actuators A: Physical</i> , 2013, 200, 2-10.	4.1	71
20	High energy density with ultrahigh discharging efficiency obtained in ceramic-polymer nanocomposites using a non-ferroelectric polar polymer as matrix. <i>Nano Energy</i> , 2020, 70, 104551.	16.0	70
21	Metal-polymer nanocomposites with high percolation threshold and high dielectric constant. <i>Applied Physics Letters</i> , 2013, 103, 232903.	3.3	67
22	Structure evolution and exceptionally ultra-low hysteresis unipolar electric field-induced strain in $(1-x)\text{NaNbO}_3-x\text{BaTiO}_3$ lead-free ferroelectrics. <i>Ceramics International</i> , 2018, 44, 5492-5499.	4.8	65
23	Controlled functionalization of poly(4-methyl-1-pentene) films for high energy storage applications. <i>Journal of Materials Chemistry A</i> , 2016, 4, 4797-4807.	10.3	58
24	High thermal stability of electric field-induced strain in $(1-x)(\text{Bi}_{0.5}\text{Na}_{0.5})\text{TiO}_3-x\text{Ba}_{0.85}\text{Ca}_{0.15}\text{Ti}_{0.9}\text{Zr}_{0.1}\text{O}_3$ lead-free ferroelectrics. <i>Journal of the European Ceramic Society</i> , 2019, 39, 277-286.	5.7	56
25	Ultrafast Microwave Welding/Reinforcing Approach at the Interface of Thermoplastic Materials. <i>ACS Applied Materials &amp; Interfaces</i> , 2015, 7, 22469-22477.	8.0	55
26	Decoding of facial strains via conformable piezoelectric interfaces. <i>Nature Biomedical Engineering</i> , 2020, 4, 954-972.	22.5	54
27	All-organic dielectric nanocomposites using conducting polypyrrole nanoclips as filler. <i>Composites Science and Technology</i> , 2018, 167, 285-293.	7.8	51
28	Dielectric composites with a high and temperature-independent dielectric constant. <i>Journal of Advanced Ceramics</i> , 2012, 1, 310-316.	17.4	49
29	A strategy for obtaining high electrostrictive properties and its application in barium stannate titanate lead-free ferroelectrics. <i>Ceramics International</i> , 2018, 44, 21816-21824.	4.8	45
30	Dielectric and energy-storage performance of $\text{Ba}_{0.5}\text{Sr}_{0.5}\text{TiO}_3\text{-SiO}_2$ ceramic-glass composites. <i>Journal of Alloys and Compounds</i> , 2018, 745, 127-134.	5.5	44
31	A high-temperature dielectric polymer poly(acrylonitrile butadiene styrene) with enhanced energy density and efficiency due to a cyano group. <i>Journal of Materials Chemistry A</i> , 2020, 8, 15122-15129.	10.3	43
32	Revisiting the percolation phenomena in dielectric composites with conducting fillers. <i>Applied Physics Letters</i> , 2014, 105, .	3.3	40
33	Origin of composition-insensitive electrostrictive coefficient and continuous decrease of domain wall density in $(1-x)\text{NaNbO}_3-x\text{BaTiO}_3$ lead-free ferroelectrics. <i>Journal of the European Ceramic Society</i> , 2018, 38, 3127-3135.	5.7	40
34	Enhanced energy storage performance of polymer nanocomposites using hybrid 2D $\text{ZnO}@\text{MoS}_2$ semiconductive nano-fillers. <i>Chemical Engineering Journal</i> , 2022, 430, 132676.	12.7	40
35	Conducting Polymer - Metal Nanocomposites Synthesis and Their Sensory Applications. <i>Current Organic Chemistry</i> , 2013, 17, 2256-2267.	1.6	39
36	Preparation and energy storage performance of transparent dielectric films with two-dimensional platelets. <i>Composites Science and Technology</i> , 2019, 182, 107759.	7.8	39

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37	Phase evolution and relaxor to ferroelectric phase transition boosting ultrahigh electrostrains in $(1-x)(\text{Bi}_{1/2}\text{Na}_{1/2})\text{TiO}_3-x(\text{Bi}_{1/2}\text{K}_{1/2})\text{TiO}_3$ solid solutions. <i>Journal of Materiomics</i> , 2022, 8, 335-346.	5.7	39
38	An ultrafast microwave approach towards multi-component and multi-dimensional nanomaterials. <i>RSC Advances</i> , 2014, 4, 9308.	3.6	38
39	Ultrahigh electrostrictive effect in potassium sodium niobate-based lead-free ceramics. <i>Journal of the European Ceramic Society</i> , 2022, 42, 944-953.	5.7	37
40	High electrostrictive effect in $\text{La}^{3+}$ -doped $\text{Ba}(\text{Zr}_{0.2}\text{Ti}_{0.8})\text{O}_3$ lead-free ferroelectrics. <i>Journal of Alloys and Compounds</i> , 2019, 776, 599-605.	5.5	35
41	Crystallization behaviors and related dielectric properties of semicrystalline matrix in polymer-ceramic nanocomposites. <i>Composites Part B: Engineering</i> , 2021, 224, 109195.	12.0	35
42	Ultrafast Cr(vi) removal from polluted water by microwave synthesized iron oxide submicron wires. <i>Chemical Communications</i> , 2014, 50, 8036.	4.1	34
43	Characterizations of P(VDF-HFP)- $\text{BaTiO}_3$ nanocomposite films fabricated by a spin-coating process. <i>Ceramics International</i> , 2019, 45, 17758-17766.	4.8	34
44	Synthesis of $\text{BF}_4^-$ PT perovskite powders by high-energy ball milling. <i>Materials Letters</i> , 2007, 61, 1130-1133.	2.6	33
45	Thermal stability of dielectric and energy storage performances of Ca-substituted BNTZ ferroelectric ceramics. <i>Ceramics International</i> , 2021, 47, 6298-6309.	4.8	33
46	Effects of CuO additive on the dielectric property and energy-storage performance of $\text{BaTiO}_3$ - $\text{SiO}_2$ ceramic-glass composite. <i>Ceramics International</i> , 2018, 44, 16977-16983.	4.8	31
47	Controlled synthesis of transition metal/conducting polymer nanocomposites. <i>Nanotechnology</i> , 2012, 23, 335603.	2.6	29
48	Ultra-low hysteresis electrostrictive strain with high thermal stability in $\text{Bi}(\text{Li}_{0.5}\text{Nb}_{0.5})\text{O}_3$ -modified $\text{BaTiO}_3$ lead-free ferroelectrics. <i>Journal of Alloys and Compounds</i> , 2018, 753, 558-565.	5.5	29
49	Ultrafast Microwave Nano-manufacturing of Fullerene-Like Metal Chalcogenides. <i>Scientific Reports</i> , 2016, 6, 22503.	3.3	28
50	Synthesis, sintering and characterization of PNZST ceramics from high-energy ball milling process. <i>Ceramics International</i> , 2008, 34, 709-713.	4.8	27
51	Physical aspects of 0-3 dielectric composites. <i>Journal of Advanced Dielectrics</i> , 2015, 05, 1550012.	2.4	27
52	Piezoelectric-excited membrane for liquids viscosity and mass density measurement. <i>Sensors and Actuators A: Physical</i> , 2017, 261, 196-201.	4.1	27
53	Enhanced piezoelectric and acoustic performances of poly(vinylidene fluoride-trifluoroethylene) films for hydroacoustic applications. <i>Physical Chemistry Chemical Physics</i> , 2020, 22, 5711-5722.	2.8	27
54	Effects of particle size of dielectric fillers on the output performance of piezoelectric and triboelectric nanogenerators. <i>Journal of Advanced Ceramics</i> , 2021, 10, 991-1000.	17.4	27

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55	Preparation and characterization of high T <sub>c</sub> (1-x) BiScO <sub>3</sub> -xPbTiO <sub>3</sub> ceramics from high energy ball milling process. <i>Journal of Electroceramics</i> , 2008, 21, 605-608.	2.0	26
56	Ultra-low hysteresis electric field-induced strain with high electrostrictive coefficient in lead-free Ba(Zr Ti <sub>1-x</sub> )O <sub>3</sub> ferroelectrics. <i>Journal of Alloys and Compounds</i> , 2019, 784, 931-938.	5.5	26
57	Significantly enhanced energy storage performance of flexible composites using sodium bismuth titanate based lead-free fillers. <i>Journal of Materials Chemistry C</i> , 2020, 8, 14910-14918.	5.5	26
58	Flexible composites with Ce-doped BaTiO <sub>3</sub> /P(VDF-TrFE) nanofibers for piezoelectric device. <i>Composites Science and Technology</i> , 2020, 200, 108386.	7.8	26
59	Enhanced dielectric, ferroelectric, and optical properties in rare earth elements doped PMN-PT thin films. <i>Journal of Advanced Ceramics</i> , 2021, 10, 98-107.	17.4	26
60	Dielectric property and ac conductivity of P(VDF-CTFE)-PLZST polymer-ceramic composite films. <i>Ceramics International</i> , 2019, 45, 8979-8987.	4.8	25
61	Microstructure and dielectric response of BaSrTiO <sub>3</sub> /P(VDF-CTFE) nanocomposites. <i>Materials Letters</i> , 2015, 159, 72-75.	2.6	24
62	Microstructure effect on dielectric Properties of MgO-doped BaTiO <sub>3</sub> -BiYO <sub>3</sub> ceramics. <i>Ceramics International</i> , 2015, 41, 7489-7495.	4.8	24
63	High dielectric permittivity and electrostrictive strain in a wide temperature range in relaxor ferroelectric (1-x)[Pb(Mg <sub>1/3</sub> Nb <sub>2/3</sub> )O <sub>3</sub> -PbTiO <sub>3</sub> ]-xBa(Zn <sub>1/3</sub> Nb <sub>2/3</sub> )O <sub>3</sub> solid solutions. <i>Ceramics International</i> , 2019, 45, 5518-5524.	4.8	24
64	Fabrication of carbon nanotubes grown woven carbon fiber/epoxy composites and their electrical and mechanical properties. <i>Journal of Applied Physics</i> , 2013, 113, .	2.5	22
65	High dielectric tunability in composites prepared using SiO <sub>2</sub> coated Ba <sub>0.5</sub> Sr <sub>0.5</sub> TiO <sub>3</sub> nanoparticles. <i>Ceramics International</i> , 2018, 44, 9875-9879.	4.8	22
66	Filler size effects on the microstructure and properties of polymer-ceramic nanocomposites using a semicrystalline matrix. <i>Journal of Materials Science</i> , 2021, 56, 19983-19995.	3.7	22
67	Influence of silane coupling agent on microstructure and properties of CCTO-P(VDF-CTFE) composites. <i>Journal of Advanced Dielectrics</i> , 2018, 08, 1850008.	2.4	21
68	Effect of coupling agents on the dielectric properties and energy storage of Ba <sub>0.5</sub> Sr <sub>0.5</sub> TiO <sub>3</sub> /P(VDF-CTFE) nanocomposites. <i>AIP Advances</i> , 2017, 7, 075210.	1.3	20
69	Novel multi-layer-composites design for ultrasonic transducer applications. <i>Composite Structures</i> , 2020, 245, 112364.	5.8	19
70	Magnetostrictive particle based biosensors for in situ and real-time detection of pathogens in water. <i>Biotechnology and Bioengineering</i> , 2014, 111, 2229-2238.	3.3	18
71	Microstructure and Dielectric Properties of CCTO-P(VDF-TrFE) Nanocomposites. <i>Ferroelectrics</i> , 2010, 405, 92-97.	0.6	17
72	High frequency needle ultrasonic transducers based on Mn doped piezoelectric single crystal. <i>Journal of Alloys and Compounds</i> , 2020, 832, 154951.	5.5	17

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73	Enhancement of Biodegradable Poly(Ethylene Oxide) Ionic Polymer Metallic Composite Actuators with Nanocrystalline Cellulose Fillers. <i>Actuators</i> , 2018, 7, 72.	2.3	16
74	Mass Load Distribution Dependence of Mass Sensitivity of Magnetoelastic Sensors under Different Resonance Modes. <i>Sensors</i> , 2015, 15, 20267-20278.	3.8	14
75	Polymer-Based Nanocomposites with High Dielectric Permittivity. , 2019, , 201-243.		12
76	Characterization of percolation behavior in conductor-dielectric 0-3 composites. <i>Journal of Advanced Dielectrics</i> , 2014, 04, 1450035.	2.4	11
77	Dielectric response and percolation behavior of Ni-P(VDF-TrFE) nanocomposites. <i>Journal of Advanced Dielectrics</i> , 2017, 07, 1750015.	2.4	10
78	Time-dependence of the electromechanical bending actuation observed in ionic-electroactive polymers. <i>Journal of Advanced Dielectrics</i> , 2017, 07, 1720002.	2.4	8
79	Phonon band structures of the three dimensional latticed pentamode metamaterials. <i>AIP Advances</i> , 2017, 7, .	1.3	7
80	Microwave energy-based manufacturing of hollow carbon nanospheres decorated with carbon nanotubes or metal oxide nanowires. <i>Journal of Materials Science</i> , 2018, 53, 12178-12189.	3.7	7
81	A Case Study of Conductor-Dielectric 0-3 Composites Using Ni-P(VDF-CTFE) Nanocomposites. <i>Journal of Advanced Physics</i> , 2015, 4, 362-369.	0.4	7
82	Improving the Energy Density and Efficiency of the Linear Polymer PMMA with a Double-Bond Fluoropolymer at Elevated Temperatures. <i>ACS Omega</i> , 2021, 6, 35014-35022.	3.5	6
83	Dielectric Behavior of CaCu <sub>3</sub> Ti <sub>4</sub> O <sub>12</sub> -Polyethylene Composites with a Low Dielectric Loss. <i>Iranian Journal of Science and Technology, Transaction A: Science</i> , 2017, 41, 7-16.	1.5	5
84	Synthesis and Photoluminescence Properties of Tb <sup>3+</sup> Doped ZrO <sub>2</sub> Hollow Spheres. <i>Journal of Nanoscience and Nanotechnology</i> , 2017, 17, 3233-3237.	0.9	4
85	Fabrication of three-dimensional micro-nanofiber structures by a novel solution blow spinning device. <i>AIP Advances</i> , 2017, 7, .	1.3	4
86	Influence of Process Condition on the Dielectric Properties of CCTO-P(VDF-TrFE) 0-3 Composites. <i>Materials Research Society Symposia Proceedings</i> , 2011, 1312, 1.	0.1	2
87	Effects of Annealing on the Structure and Magnetic Properties of Fe <sub>80</sub> B <sub>20</sub> Magnetostrictive Fibers. <i>Journal of Applied Biomaterials and Functional Materials</i> , 2016, 14, 56-61.	1.6	2
88	Angle-insensitive acoustic metamaterial plane with extraordinary transmission using two embedded and coaxial split spherical shells. <i>Applied Physics Express</i> , 2017, 10, 104001.	2.4	2
89	Formation mechanism of barium titanate single crystalline microplates based on topochemical transformation using bismuth-based precursors. <i>Ceramics International</i> , 2021, 47, 4543-4550.	4.8	2
90	Electromechanical response of NCC-PEO composites. , 2014, , .		0

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91	Modeling of the time-dependent strain response of electroactive NCC-PEO and PVDF composites. , 2015, , ·		0