# Changhai Zhang

List of Publications by Year
in descending order

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|---|---|---|---|
| 61 papers | 2,814 citations | 201674 27 h-index | 175258 52 g-index |
| 61 all docs | 61 docs citations | 61 times ranked | 1463 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Excellent energy storage performance and thermal property of polymer-based composite induced by multifunctional one-dimensional nanofibers oriented in-plane direction. Nano Energy, 2019, 56, 138-150. | 16.0 | 289 |
| 2 | Significantly enhanced energy storage density for poly(vinylidene fluoride) composites by induced PDA-coated 0.5Ba(Zr<sub>0.2</sub>Ti<sub>0.8</sub>)O<sub>3</sub>â€“0.5(Ba<sub>0.7</sub>Ca<sub>0.3</sub>)TiO<sub>3</sub> nanofibers. Journal of Materials Chemistry A, 2017, 5, 16757-16766. | 10.3 | 177 |
| 3 | Ultrahigh discharge efficiency and excellent energy density in oriented core-shell nanofiber-polyetherimide composites. Energy Storage Materials, 2020, 25, 180-192. | 18.0 | 152 |
| 4 | Sandwich-structured polymers with electrospun boron nitrides layers as high-temperature energy storage dielectrics. Chemical Engineering Journal, 2020, 389, 124443. | 12.7 | 143 |
| 5 | Enhanced dielectric performance of amorphous calcium copper titanate/polyimide hybrid film. Journal of Materials Chemistry C, 2014, 2, 172-177. | 5.5 | 115 |
| 6 | High Energy Storage Density for Poly(vinylidene fluoride) Composites by Introduced Coreâ€“Shell CaCu<sub>3</sub>Ti<sub>4</sub>O<sub>12</sub>@Al<sub>2</sub>O<sub>3</sub> Nanofibers. ACS Sustainable Chemistry and Engineering, 2018, 6, 8641-8649. | 6.7 | 112 |
| 7 | Excellent Energy Storage of Sandwich-Structured PVDF-Based Composite at Low Electric Field by Introduction of the Hybrid CoFe<sub>2</sub>O<sub>4</sub>@BZTâ€“BCT Nanofibers. ACS Sustainable Chemistry and Engineering, 2018, 6, 403-412. | 6.7 | 110 |
| 8 | Sandwich-Structured PVDF-Based Composite Incorporated with Hybrid Fe<sub>3</sub>O<sub>4</sub>@BN Nanosheets for Excellent Dielectric Properties and Energy Storage Performance. Journal of Physical Chemistry C, 2018, 122, 1500-1512. | 3.1 | 108 |
| 9 | Polymer dielectric films exhibiting superior high-temperature capacitive performance by utilizing an inorganic insulation interlayer. Materials Horizons, 2022, 9, 1273-1282. | 12.2 | 93 |
| 10 | Energy storage enhancement of P(VDF-TrFE-CFE)-based composites with double-shell structured BZCT nanofibers of parallel and orthogonal configurations. Nano Energy, 2019, 66, 104195. | 16.0 | 89 |
| 11 | Excellent energy storage density and efficiency in blend polymer-based composites by design of core-shell structured inorganic fibers and sandwich structured films. Composites Part B: Engineering, 2019, 177, 107429. | 12.0 | 89 |
| 12 | Excellent Energy Storage Properties with High-Temperature Stability in Sandwich-Structured Polyimide-Based Composite Films. ACS Sustainable Chemistry and Engineering, 2019, 7, 748-757. | 6.7 | 88 |
| 13 | Nano iron oxide-deposited calcium copper titanate/polyimide hybrid films induced by an external magnetic field: toward a high dielectric constant and suppressed loss. Journal of Materials Chemistry C, 2016, 4, 8179-8188. | 5.5 | 86 |
| 14 | Enhanced dielectric properties of poly(vinylidene fluoride) composites filled with nano iron oxide-deposited barium titanate hybrid particles. Scientific Reports, 2016, 6, 33508. | 3.3 | 80 |
| 15 | A blended binary composite of poly(vinylidene fluoride) and poly(methyl methacrylate) exhibiting excellent energy storage performances. Journal of Materials Chemistry C, 2019, 7, 14148-14158. | 5.5 | 74 |
| 16 | PVDF-Based Dielectric Composite Films with Excellent Energy Storage Performances by Design of Nanofibers Composition Gradient Structure. ACS Applied Energy Materials, 2018, 1, 6320-6329. | 5.1 | 70 |
| 17 | Excellent Energy Storage Performance of Ferroconcrete-like All-Organic Linear/Ferroelectric Polymer Films Utilizing Interface Engineering. ACS Applied Materials & Interfaces, 2020, 12, 56424-56434. | 8.0 | 66 |
| 18 | High-temperature all-organic energy storage dielectric with the performance of self-adjusting electric field distribution. Journal of Materials Chemistry A, 2021, 9, 16384-16394. | 10.3 | 65 |

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|---|---|---|---|
| 19 | High energy storage density and efficiency in aligned nanofiber filled nanocomposites with multilayer structure. Composites Part B: Engineering, 2020, 198, 108206. | 12.0 | 64 |
| 20 | Polymer nanocomposites with excellent energy storage performances by utilizing the dielectric properties of inorganic fillers. Chemical Engineering Journal, 2021, 408, 127314. | 12.7 | 61 |
| 21 | Enhanced electric polarization and breakdown strength in the all-organic sandwich-structured poly(vinylidene fluoride)-based dielectric film for high energy density capacitor. APL Materials, 2017, 5, . | 5.1 | 55 |
| 22 | Designing of Ferroelectric/Linear Dielectric Bilayer Films: An Effective Way to Improve the Energy Storage Performances of Polymer-Based Capacitors. Journal of Physical Chemistry C, 2020, 124, 5920-5927. | 3.1 | 52 |
| 23 | Enhanced Thermal Conductivity and Dielectric Properties of Iron Oxide/Polyethylene Nanocomposites Induced by a Magnetic Field. Scientific Reports, 2017, 7, 3072. | 3.3 | 46 |
| 24 | Microstructures and energy storage property of sandwiched BZT-BCT@Fe3O4/polyimide composites. Journal of Materials Science: Materials in Electronics, 2019, 30, 1-8. | 2.2 | 46 |
| 25 | Microstructure and dielectric properties of BZT-BCT/PVDF nanocomposites. Results in Physics, 2018, 8, 391-396. | 4.1 | 45 |
| 26 | Significantly Improved Energy Storage Performance of PVDF Ferroelectric Films by Blending PMMA and Filling PCBM. ACS Sustainable Chemistry and Engineering, 2021, 9, 16291-16303. | 6.7 | 42 |
| 27 | Improved Energy Storage Performance of All-Organic Composite Dielectric via Constructing Sandwich Structure. Polymers, 2020, 12, 1972. | 4.5 | 30 |
| 28 | Enhanced Energy Storage Characteristics in PVDF-Based Nanodielectrics With Core-Shell Structured and Optimized Shape Fillers. IEEE Access, 2020, 8, 81542-81550. | 4.2 | 30 |
| 29 | Improved Highâ€Temperature Energy Storage Performance of PEI Dielectric Films by Introducing an SiO<sub>2</sub> Insulating Layer. Macromolecular Materials and Engineering, 2021, 306, 2100514. | 3.6 | 24 |
| 30 | Dielectric properties of sandwich-structured BaTiO3/polyimide hybrid films. Journal of Materials Science: Materials in Electronics, 2017, 28, 15142-15148. | 2.2 | 23 |
| 31 | Optimizing sandwich-structured composites based on the structure of the filler and the polymer matrix: toward high energy storage properties. RSC Advances, 2019, 9, 33229-33237. | 3.6 | 22 |
| 32 | Highly (100)-oriented sandwich structure of (Na<sub>0.85</sub>K<sub>0.15</sub>)<sub>0.5</sub>Bi<sub>0.5</sub>TiO<sub>3</sub> composite films with outstanding pyroelectric properties. Journal of Materials Chemistry C, 2016, 4, 4442-4450. | 5.5 | 21 |
| 33 | Designing of surface modification and sandwich structure: effective routs to improve energy storage property in polyimide-based composite films. Journal of Materials Science: Materials in Electronics, 2019, 30, 19956-19965. | 2.2 | 18 |
| 34 | Effects of magnetic field treatment on dielectric properties of CCTO@Ni/PVDF composite with low concentration of ceramic fillers. AIP Advances, 2015, 5, . | 1.3 | 17 |
| 35 | Low temperature growth of (100)-oriented Ba(Zr0.2Ti0.8)O3- 0.5(Ba0.7Ca0.3)TiO3 thin films using a LaNiO3 seed layer. Journal of Alloys and Compounds, 2016, 663, 818-822. | 5.5 | 17 |
| 36 | Study on nonlinear conductivity and breakdown characteristics of zinc oxideâ€“hexagonal boron nitride/EPDM composites. Journal of Materials Science: Materials in Electronics, 2018, 29, 19678-19688. | 2.2 | 15 |

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|---|---|---|---|
| 37 | Sandwich structured BT-Fe3O4/PVDF composites with excellent dielectric properties and energy density. Journal of Materials Science: Materials in Electronics, 2017, 28, 11900-11906. | 2.2 | 14 |
| 38 | Improved energy storage performances of solution-processable ferroelectric polymer by modulating of microscopic and mesoscopic structure. Composites Part B: Engineering, 2020, 199, 108312. | 12.0 | 14 |
| 39 | Effect of particle size on the dielectric properties of 0.5Ba(Zr0.2Ti0.8)O3â€“0.5(Ba0.7Ca0.8)TiO3/polyvinylidene fluoride hybrid films. Ceramics International, 2015, 41, 15116-15121. | 4.8 | 13 |
| 40 | Energy storage properties of P(VDFâ€TrFEâ€CTFE)â€based composite dielectrics with uniform and gradientâ€doped boron nitride nanosheets. IET Nanodielectrics, 2022, 5, 50-61. | 4.1 | 13 |
| 41 | Interesting Influence of Different Inorganic Particles on the Energy Storage Performance of a Polyethersulfone-Based Dielectric Composite. ACS Applied Energy Materials, 2022, 5, 3545-3557. | 5.1 | 13 |
| 42 | High Energy Storage Performance of All-Inorganic Flexible Antiferroelectricâ€“Insulator Multilayered Thin Films. ACS Applied Materials & Interfaces, 2022, 14, 28997-29006. | 8.0 | 13 |
| 43 | Excellent energy storage performance for P(VDF-TrFE-CFE) composites by filling coreâ€“shell structured inorganic fibers. Journal of Materials Science: Materials in Electronics, 2020, 31, 21128-21141. | 2.2 | 11 |
| 44 | High energy storage performance for flexible PbZrO3 thin films by seed layer engineering. Ceramics International, 2022, 48, 23840-23848. | 4.8 | 10 |
| 45 | Improved Energy Storage Performance of P(VDF-TrFE-CFE) Multilayer Films by Utilizing Inorganic Functional Layers. ACS Applied Energy Materials, 2021, 4, 11726-11734. | 5.1 | 9 |
| 46 | Ni-coated CaCu3Ti4O12/low density polyethylene composite material with ultra-high dielectric permittivity. AIP Advances, 2015, 5, . | 1.3 | 8 |
| 47 | Investigation of electrical and mechanical properties of silver-hexagonal boron nitride/EPDM composites. Journal of Materials Science: Materials in Electronics, 2019, 30, 13321-13329. | 2.2 | 8 |
| 48 | Nonlinear conductivity and breakdown strength characteristics of silicon carbide and hexagonal boron nitride co-doped epoxy resin composites. AIP Advances, 2020, 10, . | 1.3 | 8 |
| 49 | Thermal and Electrical Properties of Epoxy Composites Filled with 3D hâ€BN/TOCNF Fillers. Macromolecular Materials and Engineering, 2022, 307, . | 3.6 | 8 |
| 50 | Microstructure and electric properties of Nb doping x(Ba0.7Ca0.3)TiO3â€“(1â^'x)Ba(Zr0.2Ti0.8)O3 ceramics. Journal of Alloys and Compounds, 2016, 685, 936-940. | 5.5 | 7 |
| 51 | Nano-Fe3O4 deposited CaCu3Ti4O12/poly(vinylidene fluoride) composites with enhanced dielectric properties. Journal of Materials Science: Materials in Electronics, 2017, 28, 2502-2510. | 2.2 | 7 |
| 52 | Structure and piezoelectric properties of MnO2 doped Ba0.985Ca0.005Ti0.98Sn0.02O3 lead-free ceramics. Journal of Materials Science: Materials in Electronics, 2019, 30, 18950-18958. | 2.2 | 5 |
| 53 | Low temperature preparation and electric properties of highly (100)-oriented (Na0.85K0.15)0.5Bi0.5TiO3 thin films prepared by a solâ€“gel route. Ceramics International, 2016, 42, 2497-2501. | 4.8 | 4 |
| 54 | Investigation of electrical properties of ZnO@Ag/EPDM composites. AIP Advances, 2020, 10, . | 1.3 | 3 |

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|---|---|---|---|
| 55 | Electrical, mechanical and thermal properties of ZnO/SiR composite dielectric. Journal of Materials Science: Materials in Electronics, 2021, 32, 17253-17265. | 2.2 | 3 |
| 56 | Structure, dielectric, ferroelectric, and energy density properties of polyethersulfone-based composite for energy storage application. Journal of Materials Science: Materials in Electronics, 2022, 33, 12884-12899. | 2.2 | 3 |
| 57 | Effect of MWCNTs/ZnO inorganic fillers on the electrical, mechanical and thermal properties of SiR-based composites. Journal of Materials Science: Materials in Electronics, 2021, 32, 27676-27687. | 2.2 | 2 |
| 58 | Investigations on the Electrical Performances of CuNPs/BN/EPDM Composites. Journal of Electronic Materials, 2022, 51, 1349-1357. | 2.2 | 2 |
| 59 | Interface diffusion and pyroelectric properties of Pb0.8La0.1Ca0.1Ti0.975O3/(Na0.85K0.15)0.5Bi0.5TiO3 hierarchical composite thin films. Ceramics International, 2015, 41, 13767-13771. | 4.8 | 1 |
| 60 | Study on Nonlinear Conductivity of CCTO/EPDM Rubber Composites. Materials, 2018, 11, 1590. | 2.9 | 1 |
| 61 | Study on electrical properties of donor ZnO nanoparticles/EPDM composites. Journal of Materials Science: Materials in Electronics, 2021, 32, 26894-26904. | 2.2 | 0 |