Hang Luo

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/8785003/publications.pdf

Version: 2024-02-01

103	4,743	36	64
papers	citations	h-index	g-index
103	103	103	2510
all docs	docs citations	times ranked	citing authors

#	Article	IF	CITATIONS
1	Enhanced energy density in sandwich-structured P(VDF-HFP) nanocomposites containing Hf0.5Zr0.5O2 nanofibers. Chemical Engineering Journal, 2022, 436, 131123.	6.6	10
2	High-temperature dielectric polymers with high breakdown strength and energy density via constructing the electron traps in blends. Composites Part A: Applied Science and Manufacturing, 2022, 152, 106679.	3.8	34
3	Piezo-photoelectronic coupling effect of BaTiO3@TiO2 nanowires for highly concentrated dye degradation. Nano Energy, 2022, 92, 106702.	8.2	100
4	Synergistic enhancement of piezoelectricity and thermal stability in AlN-doped Bi0.5Na0.5TiO3-based ceramics. Journal of the European Ceramic Society, 2022, 42, 1425-1433.	2.8	13
5	Extremely low loading of carbon quantum dots for high energy density in polyetherimide nanocomposites. Chemical Engineering Journal, 2022, 433, 133601.	6.6	26
6	Constructing a correlation between ferroelectricity and grain sizes in Hf _{0.5} Zr _{0.5} O ₂ ferroelectric thin films. CrystEngComm, 2022, 24, 1731-1737.	1.3	11
7	Enhanced dielectric constant and breakdown strength in dielectric composites using TiO2@HfO2 nanowires with gradient dielectric constant. Ceramics International, 2022, 48, 12483-12489.	2.3	12
8	HfO2-based ferroelectrics: From enhancing performance, material design, to applications. Applied Physics Reviews, 2022, 9, .	5.5	49
9	Concurrently enhanced dielectric properties and energy density in poly(vinylidene fluoride)-based core–shell BaTiO ₃ nanocomposites <i>via</i> constructing a polar and rigid polymer interfacial layer. Journal of Materials Chemistry C, 2022, 10, 6323-6333.	2.7	28
10	Achieving high breakdown strength and energy density in all-organic sandwich-structured dielectrics by introducing polyacrylate elastomers. Journal of Materials Chemistry A, 2022, 10, 9103-9113.	5.2	28
11	Surface-Decorated Graphene Oxide Sheets with Copper Nanoderivatives for Bone Regeneration: An <i>In Vitro</i> and <i>In Vivo</i> Study Regarding Molecular Mechanisms, Osteogenesis, and Anti-infection Potential. ACS Infectious Diseases, 2022, 8, 499-515.	1.8	7
12	Direct ink writing of 3D piezoelectric ceramics with complex unsupported structures. Journal of the European Ceramic Society, 2022, 42, 3841-3847.	2.8	10
13	Electrospinning Synthesis of Na0.5Bi0.5TiO3 Nanofibers for Dielectric Capacitors in Energy Storage Application. Nanomaterials, 2022, 12, 906.	1.9	6
14	Bilayer structured PVDF-based composites via integrating BaTiO3 nanowire arrays and BN nanosheets for high energy density capacitors. Chemical Engineering Journal, 2022, 437, 135497.	6.6	37
15	Enhanced breakdown strength and energy density over a broad temperature range in polyimide dielectrics using oxidized MXenes filler. Journal of Power Sources, 2022, 535, 231415.	4.0	38
16	Three dimensional BaTiO3 piezoelectric ceramics coated with TiO2 nanoarray for high performance of piezo-photoelectric catalysis. Nano Energy, 2022, 98, 107267.	8.2	25
17	Improved Energy Density and Energy Efficiency of Poly(vinylidene difluoride) Nanocomposite Dielectrics Using 0.93Na _{0.5} Bi _{0.5} TiO ₃ -0.07BaTiO ₃ Nanofibers. ACS Applied Materials & Samp; Interfaces, 2022, 14, 19376-19387.	4.0	22
18	Piezo-assisted photoelectric catalysis degradation for dyes and antibiotics by Ag dots-modified NaNbO3 powders. Ceramics International, 2022, 48, 23182-23194.	2.3	23

#	Article	IF	Citations
19	All-organic polymer dielectrics prepared via optimization of sequential structure of polystyrene-based copolymers. Chemical Engineering Journal, 2022, 446, 137106.	6.6	16
20	Synthesis of dielectric polystyrene via one-step nitration reaction for large-scale energy storage. Chemical Engineering Journal, 2022, 446, 137281.	6.6	38
21	Novel Therapeutic Strategy for Bacteria ontaminated Bone Defects: Reconstruction with Multiâ€Biofunctional GO/Cuâ€Incorporated 3D Scaffolds. Advanced Therapeutics, 2022, 5, .	1.6	4
22	Dielectric nanocomposites with high energy density by doping core-double shell structured fillers. Composites Part A: Applied Science and Manufacturing, 2022, 159, 107019.	3.8	14
23	Effects of doping concentration and annealing temperatures on the ferroelectric memory properties of yttrium doped HfO ₂ . Journal Physics D: Applied Physics, 2022, 55, 394001.	1.3	3
24	Significantly enhanced breakdown strength and energy density in sandwich-structured nanocomposites with low-level BaTiO3 nanowires. Nano Energy, 2021, 79, 105412.	8.2	167
25	Significant improvement of ferroelectricity and reliability in Hf0.5Zr0.5O2 films by inserting an ultrathin Al2O3 buffer layer. Applied Surface Science, 2021, 542, 148737.	3.1	34
26	Ultrafast Electric Field-Induced Phase Transition in Bulk Bi _{0.5} Na _{0.5} TiO ₃ under High-Intensity Terahertz Irradiation. ACS Photonics, 2021, 8, 147-151.	3.2	8
27	n-Type Semiconductive Polymer and Poly(vinylidene) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 427 Td (fluor Applied Polymer Materials, 2021, 3, 879-887.	ide-trifluo 2.0	roethylene-c 18
28	Superior photo-piezoelectric catalytic performance using Bi _{0.5} Na _{0.5} TiO ₃ @BiVO ₄ based cloth. Journal of Materials Chemistry A, 2021, 9, 17841-17854.	5.2	33
29	Constructing High-Performance Dielectrics via Molecular and Phase Engineering in Dipolar Polymers. ACS Applied Energy Materials, 2021, 4, 2451-2462.	2.5	18
30	Achieving Superior Energy Storage Properties of All-Organic Dielectric Polystyrene-Based Composites by Blending Rod–Coil Block Copolymers. ACS Sustainable Chemistry and Engineering, 2021, 9, 8156-8169.	3.2	34
31	Excellent catalytic performance of molten-salt-synthesized Bi0.5Na0.5TiO3 nanorods by the piezo-phototronic coupling effect. Nano Energy, 2021, 84, 105936.	8.2	89
32	Enhanced dielectric constant of PVDF-based nanocomposites with one-dimensional core-shell polypyrrole/sepiolite nanofibers. Composites Part A: Applied Science and Manufacturing, 2021, 145, 106384.	3.8	22
33	All-Organic Polymer Dielectrics Containing Sulfonyl Dipolar Groups and π–π Stacking Interaction in Side-Chain Architectures. Macromolecules, 2021, 54, 8195-8206.	2.2	46
34	Phase structure and properties of sodium bismuth titanate lead-free piezoelectric ceramics. Progress in Materials Science, 2021, 122, 100836.	16.0	139
35	Temperature-stable Na0.5Bi0.5TiO3-based relaxor ceramics with high permittivity and large energy density under low electric fields. Journal of Alloys and Compounds, 2021, 882, 160755.	2.8	15
36	Tunable phase transitions in NaNbO ₃ ceramics through bismuth/vacancy modification. Journal of Materials Chemistry C, 2021, 9, 4289-4299.	2.7	28

#	Article	IF	CITATIONS
37	Thickness-dependent ferroelectric properties of HfO2/ZrO2 nanolaminates using atomic layer deposition. Journal of Materials Science, 2021, 56, 6064-6072.	1.7	17
38	Enhanced performance of all-organic sandwich structured dielectrics with linear dielectric and ferroelectric polymers. Journal of Materials Chemistry A, 2021, 9, 8674-8684.	5.2	82
39	Symmetric Trilayer Dielectric Composites with High Energy Density Using a Low Loading of KNbO ₃ Nanosheets. ACS Sustainable Chemistry and Engineering, 2021, 9, 15983-15994.	3.2	18
40	Ultrahigh energy density of poly(vinylidene fluoride) from synergistically improved dielectric constant and withstand voltage by tuning the crystallization behavior. Journal of Materials Chemistry A, 2021, 9, 27660-27671.	5.2	43
41	Significantly enhanced permittivity and energy density in dielectric composites with aligned BaTiO ₃ lamellar structures. Journal of Materials Chemistry A, 2020, 8, 3135-3144.	5.2	75
42	Phase transitions in RbPrNb2O7, a layer structuredÂferroelectric with a high Curie point. Acta Materialia, 2020, 200, 971-979.	3.8	10
43	High Breakdown Strength and Energy Density in Multilayer-Structured Ferroelectric Composite. ACS Omega, 2020, 5, 32660-32666.	1.6	19
44	<p>Graphene Oxide/Copper Nanoderivatives-Modified Chitosan/Hyaluronic Acid Dressings for Facilitating Wound Healing in Infected Full-Thickness Skin Defects</p> . International Journal of Nanomedicine, 2020, Volume 15, 8231-8247.	3.3	36
45	3D printing of anisotropic polymer nanocomposites with aligned BaTiO ₃ nanowires for enhanced energy density. Materials Advances, 2020, 1, 14-19.	2.6	14
46	Enhanced permittivity in polymer blends <i>via</i> tailoring the orderliness of semiconductive liquid crystalline polymers and intermolecular interactions. Journal of Materials Chemistry C, 2020, 8, 8440-8450.	2.7	31
47	Core-shell TiO2@HfO2 nanowire arrays with designable shell thicknesses for improved permittivity and energy density in polymer nanocomposites. Composites Part A: Applied Science and Manufacturing, 2020, 137, 106012.	3.8	26
48	High piezoelectric response and excellent fatigue resistance in Rb-substituted BNT–BKT–BT ceramics. Journal of Materials Science, 2020, 55, 7634-7644.	1.7	7
49	Polymer-based dielectric nanocomposites with high energy density via using natural sepiolite nanofibers. Chemical Engineering Journal, 2020, 401, 126095.	6.6	60
50	Suppressed polarization by epitaxial growth of SrTiO ₃ on BaTiO ₃ nanoparticles for high discharged energy density and efficiency nanocomposites. Nanoscale, 2020, 12, 8230-8236.	2.8	31
51	Terahertz Probing Irreversible Phase Transitions Related to Polar Clusters in Bi _{0.5} Na _{0.5} TiO ₃ â€Based Ferroelectric. Advanced Electronic Materials, 2020, 6, 1901373.	2.6	10
52	Obvious ferroelectricity in undoped HfO ₂ films by chemical solution deposition. Journal of Materials Chemistry C, 2020, 8, 2820-2826.	2.7	40
53	Interface design for high energy density polymer nanocomposites. Chemical Society Reviews, 2019, 48, 4424-4465.	18.7	531
54	Superior Thermal Stability of High Energy Density and Power Density in Domain-Engineered Bi _{0.5} Na _{0.5} TiO ₃ â€"NaTaO ₃ Relaxor Ferroelectrics. ACS Applied Materials & Description of the Applied Materials & Descrip	4.0	189

#	Article	IF	Citations
55	Enhanced dielectric properties of poly(vinylidene fluoride-co-hexafluoropropylene) nanocomposites using oriented nickel nanowires. Composites Communications, 2019, 16, 11-19.	3.3	24
56	Dual-Purpose Magnesium-Incorporated Titanium Nanotubes for Combating Bacterial Infection and Ameliorating Osteolysis to Realize Better Osseointegration. ACS Biomaterials Science and Engineering, 2019, 5, 5368-5383.	2.6	38
57	Large energy density with excellent stability in fine-grained (Bi0.5Na0.5)TiO3-based lead-free ceramics. Journal of the European Ceramic Society, 2019, 39, 4053-4059.	2.8	85
58	Self-organization of cholesterol-side-chain liquid crystalline polymers by tailoring the main chain structure and flexible spacer length. New Journal of Chemistry, 2019, 43, 5429-5440.	1.4	7
59	Silver niobate based lead-free ceramics with high energy storage density. Journal of Materials Chemistry A, 2019, 7, 10702-10711.	5.2	135
60	Electrical properties and relaxor phase evolution of Nb-Modified Bi0.5Na0.5TiO3-Bi0.5K0.5TiO3-SrTiO3 lead-free ceramics. Journal of the European Ceramic Society, 2019, 39, 2310-2317.	2.8	39
61	Optimising the dielectric property of carbon nanotubes/P(VDF TFE) nanocomposites by tailoring the shell thickness of liquid crystalline polymer modified layer. IET Nanodielectrics, 2019, 2, 142-150.	2.0	14
62	Sandwich-structured all-organic composites with high breakdown strength and high dielectric constant for film capacitor. Composites Part A: Applied Science and Manufacturing, 2019, 117, 369-376.	3.8	65
63	Core–Shell Nanostructure Design in Polymer Nanocomposite Capacitors for Energy Storage Applications. ACS Sustainable Chemistry and Engineering, 2019, 7, 3145-3153.	3.2	96
64	Regulating crystal structure and ferroelectricity in Sr doped HfO2 thin films fabricated by metallo-organic decomposition. Ceramics International, 2019, 45, 3140-3147.	2.3	33
65	BaTiO3 platelets and poly(vinylidene fluoride-trifluoroethylene-chlorofluoroethylene) hybrid composites for energy storage application. Mechanical Systems and Signal Processing, 2018, 108, 48-57.	4.4	31
66	Molten salt synthesis and characterization of lead-free (1-x)Na0.5Bi0.5TiO3-xSrTiO3 (x†=â€0, 0.10, 0.26) whiskers. Ceramics International, 2018, 44, 9174-9180.	2.3	7
67	High Discharge Energy Density at Low Electric Field Using an Aligned Titanium Dioxide/Lead Zirconate Titanate Nanowire Array. Advanced Science, 2018, 5, 1700512.	5.6	154
68	Using a novel rigid-fluoride polymer to control the interfacial thickness of graphene and tailor the dielectric behavior of poly(vinylidene fluoride–trifluoroethylene–chlorotrifluoroethylene) nanocomposites. Physical Chemistry Chemical Physics, 2018, 20, 2826-2837.	1.3	35
69	Multiple Effects Tailoring the Self-organization Behaviors of Triphenylene Side-chain Liquid Crystalline Polymers via Changing the Spacer Length. Chinese Journal of Polymer Science (English) Tj ETQq1 1 C).78 43 014 r	gBTI.‡Overloc
70	Enhanced performance of P(VDF-HFP) composites using two-dimensional BaTiO3 platelets and graphene hybrids. Composites Science and Technology, 2018, 160, 237-244.	3.8	34
71	Improved energy density and dielectric properties of P(VDF-HFP) composites with TiO2 nanowire clusters. Journal of Electroceramics, 2018, 40, 65-71.	0.8	16
72	Na2Ti6O13@TiO2 core-shell nanorods with controllable mesoporous shells and their enhanced photocatalytic performance. Applied Surface Science, 2018, 427, 1183-1192.	3.1	22

#	Article	lF	Citations
73	Significantly improved energy density of BaTiO ₃ nanocomposites by accurate interfacial tailoring using a novel rigid-fluoro-polymer. Polymer Chemistry, 2018, 9, 548-557.	1.9	55
74	Improved dielectric constant and energy density of P(VDF-HFP) composites using NBT-xST (x=0, 0.10,) Tj ETQq(0 0 q.ggBT	/Ovgrlock 10 T
75	Interfacial engineering tailoring the dielectric behavior and energy density of BaTiO3/P(VDF-TrFE-CTFE) nanocomposites by regulating a liquid-crystalline polymer modifier structure. Dalton Transactions, 2018, 47, 12759-12768.	1.6	20
76	Enhanced permittivity and energy density of P(VDF-HFP)-based capacitor using core-shell structured BaTiO3@TiO2 fillers. lonics, 2018, 24, 3975-3982.	1.2	17
77	Enhanced performance in multilayer-structured nanocomposites using BaTiO3 and Ba0.8Sr0.2TiO3 decorated graphene hybrids. Ceramics International, 2018, 44, 20871-20876.	2.3	22
78	High energy density in PVDF nanocomposites using an optimized nanowire array. Physical Chemistry Chemical Physics, 2018, 20, 18031-18037.	1.3	26
79	High performance capacitors via aligned TiO2 nanowire array. Applied Physics Letters, 2017, 110, .	1.5	56
80	Significantly Enhanced Energy Storage Density by Modulating the Aspect Ratio of BaTiO3 Nanofibers. Scientific Reports, 2017, 7, 45179.	1.6	61
81	Direct ink writing of zirconia three-dimensional structures. Journal of Materials Chemistry C, 2017, 5, 5867-5871.	2.7	54
82	Influence of main chain on the phase behaviors of side hain liquid rystalline polymers with triphenylene mesogens of long alkyl tail substituents. Journal of Polymer Science Part A, 2017, 55, 754-766.	2.5	15
83	Self-organization behaviours of hemiphasmidic side-chain liquid-crystalline polymers with different spacer lengths. New Journal of Chemistry, 2017, 41, 7553-7561.	1.4	9
84	High energy density in P(VDF-HFP) nanocomposite with paraffin engineered BaTiO3 nanoparticles. Sensors and Actuators A: Physical, 2017, 260, 228-235.	2.0	33
85	Enhanced actuation performance of piezoelectric fiber composites induced by incorporated BaTiO 3 nanoparticles in epoxy resin. Physics Letters, Section A: General, Atomic and Solid State Physics, 2017, 381, 1641-1647.	0.9	16
86	Ultra-high discharged energy density capacitor using high aspect ratio Na _{0.5} Bi _{0.5} TiO ₃ nanofibers. Journal of Materials Chemistry A, 2017, 5, 7091-7102.	5.2	157
87	Enhanced energy density in P(VDF-HFP) nanocomposites with gradient dielectric fillers and interfacial polarization. Journal of Alloys and Compounds, 2017, 696, 1220-1227.	2.8	60
88	High Performance Capacitors Using BaTiO ₃ Nanowires Engineered by Rigid Liquid-crystalline Polymers. Journal of Physical Chemistry C, 2017, 121, 20075-20083.	1.5	41
89	Interfacial Design in Dielectric Nanocomposite Using Liquid-Crystalline Polymers. Macromolecules, 2017, 50, 5132-5137.	2.2	124
90	Influence of alkyl tail length on self-organisation of side-chain liquid crystalline polymers with biphenyl hemiphasmidic mesogens. Liquid Crystals, 2017, 44, 1031-1043.	0.9	7

#	Article	IF	CITATIONS
91	Building Hierarchical Interfaces Using BaSrTiO ₃ Nanocuboid Dotted Graphene Sheets in an Optimized Percolative Nanocomposite with Outstanding Dielectric Properties. Advanced Materials Interfaces, 2016, 3, 1600157.	1.9	25
92	Grain oriented Na 0.5 Bi 0.5 TiO 3 -BaTiO 3 ceramics with giant strain response derived from single-crystalline Na 0.5 Bi 0.5 TiO 3 -BaTiO 3 templates. Journal of the European Ceramic Society, 2016, 36, 1377-1383.	2.8	47
93	Methoxypolyethylene glycol functionalized carbon nanotube composites with high permittivity and low dielectric loss. Composites Part A: Applied Science and Manufacturing, 2016, 86, 57-65.	3.8	39
94	Enhanced piezoresponse and electric field induced relaxor-ferroelectric phase transition in NBT-0.06BT ceramic prepared from hydrothermally synthesized nanoparticles. Ceramics International, 2016, 42, 18631-18640.	2.3	30
95	Significantly enhanced energy storage density of sandwich-structured (Na _{0.5} Bi _{0.5} /P(VDF–HFP) composites induced by PVP-modified two-dimensional platelets. Journal of Materials Chemistry A, 2016, 4. 18050-18059.	5.2	65
96	Morphology control and piezoelectric response of Na _{0.5} Bi _{0.5} TiO ₃ synthesized via a hydrothermal method. CrystEngComm, 2016, 18, 1302-1310.	1.3	44
97	Highly enhanced dielectric strength and energy storage density in hydantoin@BaTiO3–P(VDF-HFP) composites with a sandwich-structure. RSC Advances, 2015, 5, 52809-52816.	1.7	57
98	Enhancement of dielectric properties and energy storage density in poly(vinylidene) Tj ETQq0 0 0 rgBT /Overlock 3 68515-68522.	10 Tf 50 40 1.7	67 Td (fluor 41
99	Improved Dielectric Properties and Energy Storage Density of Poly(vinylidene) Tj ETQq1 1 0.784314 rgBT /Overloc BaTiO ₃ . ACS Applied Materials & Samp; Interfaces, 2015, 7, 8061-8069.	ck 10 Tf 50 4.0) 427 Td (flu 253
100	The effects of precursors on the morphology and microstructure of potassium sodium niobate nanorods synthesized by molten salt synthesis. CrystEngComm, 2015, 17, 8710-8719.	1.3	7
101	Transitional Suspensions Containing Thermosensitive Dispersant for Three-Dimensional Printing. ACS Applied Materials & Samp; Interfaces, 2015, 7, 26131-26136.	4.0	54
102	Synthesis of mesogen-jacketed liquid crystalline polymers with long symmetry mesogenic core containing two biphenyls. Polymer, 2013, 54, 1794-1802.	1.8	14
103	Significantly Improved Dielectric Breakdown Strength and Energy Density in P(VDF-TrFE-CTFE) Polymer via a Facile Uniaxial Drawing Process. ACS Applied Polymer Materials, 0, , .	2.0	1