

Recent Progress and Future Prospects on All-Organic Pseudocapacitors

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Citation Report

#	ARTICLE	IF	CITATIONS
1	Research Advances in Hierarchically Structured PVDF-Based All-Organic Composites for High-Energy Density Capacitors. <i>Membranes</i> , 2022, 12, 274.	3.0	5
2	Preparation and application of dielectric polymers with high permittivity and low energy loss: A mini review. <i>Journal of Applied Polymer Science</i> , 2022, 139, .	2.6	33
3	Ultrahigh Energy Density in Continuously Gradient-Structured All-Organic Dielectric Polymer Films. <i>Advanced Functional Materials</i> , 2022, 32, .	14.9	55
4	Multiscale Characterization of the Influence of the Organic-Inorganic Interface on the Dielectric Breakdown of Nanocomposites. <i>ACS Nano</i> , 2022, 16, 6744-6754.	14.6	15
5	Improved breakdown strength and energy storage performances of PEI-based nanocomposite with core-shell structured PI@BaTiO ₃ nanofillers. <i>Ceramics International</i> , 2022, 48, 20526-20533.	4.8	17
6	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. <i>ACS Applied Materials & Interfaces</i> , 2022, 14, 19376-19387.	8.0	22
7	Improved Conductivity and Breakdown Performance of Polypropylene Film by Parylene Blending for Power Capacitor. <i>IEEE Transactions on Dielectrics and Electrical Insulation</i> , 2022, 29, 997-1004.	2.9	3
8	Notably decreased dielectric loss of high dielectric constant P(VDF-TrFE)/CuBTC MOF composites through adding silica powder. <i>Chemical Papers</i> , 2022, 76, 4967-4976.	2.2	1
9	Outstanding discharge energy density and efficiency of the bilayer nanocomposite films with BaTiO ₃ -dispersed PVDF polymer and polyetherimide layer. <i>Chemical Engineering Journal</i> , 2022, 446, 136926.	12.7	16
10	Achieving high insulating strength and energy storage properties of all-organic dielectric composites by surface morphology modification. <i>Composites Science and Technology</i> , 2022, 226, 109545.	7.8	13
11	Significantly improved high-temperature charge-discharge efficiency of all-organic polyimide composites by suppressing space charges. <i>Nano Energy</i> , 2022, 99, 107410.	16.0	36
12	Exploring dielectric spectra of polymer through molecular dynamics simulations. <i>Molecular Simulation</i> , 0, , 1-9.	2.0	1
13	Ultra-sensitive flexible piezoelectric energy harvesters inspired by pine branches for detection. <i>Nano Energy</i> , 2022, 99, 107422.	16.0	11
14	Double gradient composite dielectric with high energy density and efficiency. <i>Journal of Materials Chemistry A</i> , 2022, 10, 15183-15195.	10.3	28
15	Insulating materials for realising carbon neutrality: Opportunities, remaining issues and challenges. <i>High Voltage</i> , 2022, 7, 610-632.	4.7	85
16	Heat-resistant and electrical properties of bismaleimide modified epoxy resin. <i>Journal of Materials Science: Materials in Electronics</i> , 2022, 33, 17868-17876.	2.2	2
17	Prediction of high-temperature polymer dielectrics using a Bayesian molecular design model. <i>Journal of Applied Physics</i> , 2022, 132, .	2.5	5
18	Effect of multilayer structure on energy storage characteristics of PVDF ferroelectric polymer. , 2022, , .		2

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19	Controllable synthesis and structural design of novel all-organic polymers toward high energy storage dielectrics. <i>Frontiers in Chemistry</i> , 0, 10, .	3.6	4
20	All-polymeric multilayer para/ferroelectric dielectric films utilizing a gradient structure toward concurrent high discharge efficiency and energy density. <i>Materials Today Energy</i> , 2022, 29, 101119.	4.7	7
21	Polyimide/BaTiO ₃ /NiNWs composites with enhanced dielectric properties. <i>Composites Communications</i> , 2022, 35, 101286.	6.3	8
22	Suppressing the Loss of Polymer-Based Dielectrics for High Power Energy Storage. <i>Advanced Materials</i> , 2023, 35, .	21.0	30
23	Interface-Tailored Relaxor Ferroelectric Nanocomposites with Ultrahigh-Insulation Shell of Fluorinated Aromatic Polythiourea for High-Capacitance Energy Storage Applications. <i>Advanced Electronic Materials</i> , 2022, 8, .	5.1	2
24	Dielectric and energy storage properties of all-organic sandwich-structured films used for high-temperature film capacitors. <i>Materials Today Energy</i> , 2022, 29, 101132.	4.7	19
25	Enhanced actuation performance of silicone rubber via the synergistic effect of polyaniline particles and silicone oil. <i>Composites Part A: Applied Science and Manufacturing</i> , 2022, 163, 107200.	7.6	4
26	Precursor chemistry-mediated defect regulation of asphalt-derived carbonaceous materials for slope-dominated sodium storage. <i>Journal of Alloys and Compounds</i> , 2022, 928, 167103.	5.5	4
27	Influence of dodecyl surfactants on the cross-linking, plasticization and damping behavior of epoxy novolac resins. <i>Soft Matter</i> , 2022, 18, 7380-7393.	2.7	0
28	Largely enhanced energy density of BOPP@OBT@CPP BOPP sandwich-structured dielectric composites. <i>Journal of Materials Chemistry C</i> , 2022, 10, 13074-13083.	5.5	9
29	Unveiling the Enhancement Essence on Li ₂ S Deposition by the Polarized Topological Γ -Polyvinylidene Fluoride: More than Built-In Electric Field Effect. <i>SSRN Electronic Journal</i> , 0, .	0.4	0
31	Highly Transparent PVDF Films with Enhanced Dielectric and Energy Storage Properties Tailored by a PMMA-co-GMA Copolymer. <i>ACS Applied Energy Materials</i> , 2022, 5, 12693-12706.	5.1	4
32	Ceramic-Polymer Nanocomposites Design for Energy Storage Capacitor Applications. <i>Advanced Materials Interfaces</i> , 2022, 9, .	3.7	8
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34	All-Organic Polymer Dielectric Materials for Advanced Dielectric Capacitors: Theory, Property, Modified Design and Future Prospects. <i>Polymer Reviews</i> , 2023, 63, 515-573.	10.9	6
35	High-temperature energy storage performances of α -isomer-like-polyimide and its thermoplastic polyurethane blending system. <i>Journal of Materials Chemistry C</i> , 2022, 10, 17326-17335.	5.5	7
36	Temperature-Dependent Rotational Dipole Mobility and Devitrification of the Rigid Amorphous Fraction in Unpoled and Poled Biaxially Oriented Poly(vinylidene fluoride). <i>Macromolecules</i> , 2022, 55, 9705-9714.	4.8	9
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38	Wide Bandgap Nanocoatings for Polymer Dielectric with Outstanding Electrical Strength. <i>Advanced Materials Interfaces</i> , 2022, 9, .	3.7	10
39	Self-Healing Polymers for Electronics and Energy Devices. <i>Chemical Reviews</i> , 2023, 123, 558-612.	47.7	48
40	Scalable Ultrathin All-Organic Polymer Dielectric Films for High-Temperature Capacitive Energy Storage. <i>Advanced Materials</i> , 2022, 34, .	21.0	53
41	Enhanced Quasilinear Dielectric Behavior of Polyvinylidene Fluoride via Confined Crystallization and Aligned Dipole Polarization. <i>Macromolecules</i> , 2022, 55, 9680-9689.	4.8	9
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48	Superior High-Temperature Energy Density in Molecular Semiconductor/Polymer All-Organic Composites. <i>Advanced Functional Materials</i> , 2023, 33, .	14.9	50
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52	Artificial Intelligence Aided Design for Film Capacitors. , 2022, , .		1
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94	Significantly enhanced energy density of nanodiamond/polyimide composites at high temperatures with ultralow nanodiamond contents. <i>Science China Technological Sciences</i> , 2023, 66, 956-965.	4.0	4
95	Fabrication of Advanced Cellulosic Triboelectric Materials via Dielectric Modulation. <i>Advanced Science</i> , 2023, 10, .	11.2	37
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