

Lihua Chen

List of Publications by Year in descending order

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36
papers

1,707
citations

331670

21
h-index

395702

33
g-index

36
all docs

36
docs citations

36
times ranked

1581
citing authors

#	ARTICLE	IF	CITATIONS
1	Flexible polyolefin dielectric by strategic design of organic modules for harsh condition electrification. <i>Energy and Environmental Science</i> , 2022, 15, 1307-1314.	30.8	56
2	Synthesis of Mg Alkoxide Nanowires from Mg Alkoxide Nanoparticles upon Ligand Exchange. <i>ACS Applied Materials & Interfaces</i> , 2022, 14, 13820-13827.	8.0	0
3	Modulating Polymerization Thermodynamics of Thiolactones Through Substituent and Heteroatom Incorporation. <i>ACS Macro Letters</i> , 2022, 11, 895-901.	4.8	28
4	Improving the Rotational Freedom of Polyetherimide: Enhancement of the Dielectric Properties of a Commodity High-Temperature Polymer Using a Structural Defect. <i>Chemistry of Materials</i> , 2022, 34, 6553-6558.	6.7	22
5	Polymer design using genetic algorithm and machine learning. <i>Computational Materials Science</i> , 2021, 186, 110067.	3.0	105
6	Polymer informatics: Current status and critical next steps. <i>Materials Science and Engineering Reports</i> , 2021, 144, 100595.	31.8	117
7	Polymer informatics with multi-task learning. <i>Patterns</i> , 2021, 2, 100238.	5.9	43
8	Novel high voltage polymer insulators using computational and data-driven techniques. <i>Journal of Chemical Physics</i> , 2021, 154, 174906.	3.0	12
9	An Informatics Approach for Designing Conducting Polymers. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 53314-53322.	8.0	11
10	Dielectric Polymers Tolerant to Electric Field and Temperature Extremes: Integration of Phenomenology, Informatics, and Experimental Validation. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 53416-53424.	8.0	20
11	Remarks on the Design of Flexible High-Temperature Polymer Dielectrics for Emerging Grand Electrification - Exemplified by Poly(oxa)norbornenes. <i>IEEE Transactions on Dielectrics and Electrical Insulation</i> , 2021, 28, 1468-1470.	2.9	5
12	Design of polymers for energy storage capacitors using machine learning and evolutionary algorithms. <i>Journal of Materials Science</i> , 2021, 56, 19623-19635.	3.7	9
13	Tuning Surface States of Metal/Polymer Contacts Toward Highly Insulating Polymer-Based Dielectrics. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 46142-46150.	8.0	31
14	Data-assisted polymer retrosynthesis planning. <i>Applied Physics Reviews</i> , 2021, 8, .	11.3	11
15	Controlling wettability, wet strength, and fluid transport selectivity of nanopaper with atomic layer deposited (ALD) sub-nanometer metal oxide coatings. <i>Nanoscale Advances</i> , 2020, 2, 356-367.	4.6	13
16	Machine-learning predictions of polymer properties with Polymer Genome. <i>Journal of Applied Physics</i> , 2020, 128, .	2.5	111
17	Computable Bulk and Interfacial Electronic Structure Features as Proxies for Dielectric Breakdown of Polymers. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 37182-37187.	8.0	21
18	Polymers for Extreme Conditions Designed Using Syntax-Directed Variational Autoencoders. <i>Chemistry of Materials</i> , 2020, 32, 10489-10500.	6.7	43

#	ARTICLE	IF	CITATIONS
19	Frequency-dependent dielectric constant prediction of polymers using machine learning. Npj Computational Materials, 2020, 6, .	8.7	75
20	Molecular Engineering: Flexible Temperature-Invariant Polymer Dielectrics with Large Bandgap (Adv.) Tj ETQq0 0 0, BT /Overlock 10 T	21.0	17
21	Predicting Crystallization Tendency of Polymers Using Multifidelity Information Fusion and Machine Learning. Journal of Physical Chemistry B, 2020, 124, 6046-6054.	2.6	35
22	Refractive index prediction models for polymers using machine learning. Journal of Applied Physics, 2020, 127, .	2.5	20
23	Flexible Temperature-Invariant Polymer Dielectrics with Large Bandgap. Advanced Materials, 2020, 32, e2000499.	21.0	128
24	Machine learning models for the lattice thermal conductivity prediction of inorganic materials. Computational Materials Science, 2019, 170, 109155.	3.0	84
25	General Atomic Neighborhood Fingerprint for Machine Learning-Based Methods. Journal of Physical Chemistry C, 2019, 123, 15859-15866.	3.1	33
26	Electrochemical Stability Window of Polymeric Electrolytes. Chemistry of Materials, 2019, 31, 4598-4604.	6.7	83
27	Solving the electronic structure problem with machine learning. Npj Computational Materials, 2019, 5, .	8.7	191
28	Tailoring Polymeric Insulation Materials for DC Cable Dielectrics. , 2019, , .		3
29	High Electric Field Conduction of Polymers at Ambient and Elevated Temperatures. , 2019, , .		3
30	Atomistic mechanisms for chemical defects formation in polyethylene. Journal of Chemical Physics, 2018, 149, 234902.	3.0	11
31	Electronic Structure of Polymer Dielectrics: The Role of Chemical and Morphological Complexity. Chemistry of Materials, 2018, 30, 7699-7706.	6.7	26
32	A density functional theory based approach for predicting melting points of ionic liquids. Physical Chemistry Chemical Physics, 2017, 19, 4114-4124.	2.8	22
33	A universal strategy for the creation of machine learning-based atomistic force fields. Npj Computational Materials, 2017, 3, .	8.7	188
34	Electronic Structure of Polyethylene: Role of Chemical, Morphological and Interfacial Complexity. Scientific Reports, 2017, 7, 6128.	3.3	53
35	Charge injection barriers at metal/polyethylene interfaces. Journal of Materials Science, 2016, 51, 506-512.	3.7	56
36	Unraveling the luminescence signatures of chemical defects in polyethylene. Journal of Chemical Physics, 2015, 143, 124907.	3.0	21