# Lihua Chen

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/7110422/publications.pdf

Version: 2024-02-01

| 36 | 1,707 | 331259 21 | 395343 33 |
|---|---|---|---|
| papers | citations | h-index | g-index |

| 36 | 36 | 36 | 1581 |
|---|---|---|---|
| all docs | docs citations | times ranked | citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Solving the electronic structure problem with machine learning. Npj Computational Materials, 2019, 5, . | 3.5 | 191 |
| 2 | A universal strategy for the creation of machine learning-based atomistic force fields. Npj Computational Materials, 2017, 3, . | 3.5 | 188 |
| 3 | Flexible Temperatureâ€Invariant Polymer Dielectrics with Large Bandgap. Advanced Materials, 2020, 32, e2000499. | 11.1 | 128 |
| 4 | Polymer informatics: Current status and critical next steps. Materials Science and Engineering Reports, 2021, 144, 100595. | 14.8 | 117 |
| 5 | Machine-learning predictions of polymer properties with Polymer Genome. Journal of Applied Physics, 2020, 128, . | 1.1 | 111 |
| 6 | Polymer design using genetic algorithm and machine learning. Computational Materials Science, 2021, 186, 110067. | 1.4 | 105 |
| 7 | Machine learning models for the lattice thermal conductivity prediction of inorganic materials. Computational Materials Science, 2019, 170, 109155. | 1.4 | 84 |
| 8 | Electrochemical Stability Window of Polymeric Electrolytes. Chemistry of Materials, 2019, 31, 4598-4604. | 3.2 | 83 |
| 9 | Frequency-dependent dielectric constant prediction of polymers using machine learning. Npj Computational Materials, 2020, 6, . | 3.5 | 75 |
| 10 | Charge injection barriers at metal/polyethylene interfaces. Journal of Materials Science, 2016, 51, 506-512. | 1.7 | 56 |
| 11 | Flexible polyolefin dielectric by strategic design of organic modules for harsh condition electrification. Energy and Environmental Science, 2022, 15, 1307-1314. | 15.6 | 56 |
| 12 | Electronic Structure of Polyethylene: Role of Chemical, Morphological and Interfacial Complexity. Scientific Reports, 2017, 7, 6128. | 1.6 | 53 |
| 13 | Polymers for Extreme Conditions Designed Using Syntax-Directed Variational Autoencoders. Chemistry of Materials, 2020, 32, 10489-10500. | 3.2 | 43 |
| 14 | Polymer informatics with multi-task learning. Patterns, 2021, 2, 100238. | 3.1 | 43 |
| 15 | Predicting Crystallization Tendency of Polymers Using Multifidelity Information Fusion and Machine Learning. Journal of Physical Chemistry B, 2020, 124, 6046-6054. | 1.2 | 35 |
| 16 | General Atomic Neighborhood Fingerprint for Machine Learning-Based Methods. Journal of Physical Chemistry C, 2019, 123, 15859-15866. | 1.5 | 33 |
| 17 | Tuning Surface States of Metal/Polymer Contacts Toward Highly Insulating Polymer-Based Dielectrics. ACS Applied Materials & Interfaces, 2021, 13, 46142-46150. | 4.0 | 31 |
| 18 | Modulating Polymerization Thermodynamics of Thiolactones Through Substituent and Heteroatom Incorporation. ACS Macro Letters, 2022, 11, 895-901. | 2.3 | 28 |

| # | Article | IF | Citations |
|---|---|---|---|
| 19 | Electronic Structure of Polymer Dielectrics: The Role of Chemical and Morphological Complexity. Chemistry of Materials, 2018, 30, 7699-7706. | 3.2 | 26 |
| 20 | A density functional theory based approach for predicting melting points of ionic liquids. Physical Chemistry Chemical Physics, 2017, 19, 4114-4124. | 1.3 | 22 |
| 21 | Improving the Rotational Freedom of Polyetherimide: Enhancement of the Dielectric Properties of a Commodity High-Temperature Polymer Using a Structural Defect. Chemistry of Materials, 2022, 34, 6553-6558. | 3.2 | 22 |
| 22 | Unraveling the luminescence signatures of chemical defects in polyethylene. Journal of Chemical Physics, 2015, 143, 124907. | 1.2 | 21 |
| 23 | Computable Bulk and Interfacial Electronic Structure Features as Proxies for Dielectric Breakdown of Polymers. ACS Applied Materials & Interfaces, 2020, 12, 37182-37187. | 4.0 | 21 |
| 24 | Refractive index prediction models for polymers using machine learning. Journal of Applied Physics, 2020, 127, . | 1.1 | 20 |
| 25 | Dielectric Polymers Tolerant to Electric Field and Temperature Extremes: Integration of Phenomenology, Informatics, and Experimental Validation. ACS Applied Materials & Interfaces, 2021, 13, 53416-53424. | 4.0 | 20 |
| 26 | Molecular Engineering: Flexible Temperatureâ€Invariant Polymer Dielectrics with Large Bandgap (Adv.) Tj ETQq0 0 0 rgBT /Overlock 10 T | 11.1 | 17 |
| 27 | Controlling wettability, wet strength, and fluid transport selectivity of nanopaper with atomic layer deposited (ALD) sub-nanometer metal oxide coatings. Nanoscale Advances, 2020, 2, 356-367. | 2.2 | 13 |
| 28 | Novel high voltage polymer insulators using computational and data-driven techniques. Journal of Chemical Physics, 2021, 154, 174906. | 1.2 | 12 |
| 29 | Atomistic mechanisms for chemical defects formation in polyethylene. Journal of Chemical Physics, 2018, 149, 234902. | 1.2 | 11 |
| 30 | An Informatics Approach for Designing Conducting Polymers. ACS Applied Materials & Interfaces, 2021, 13, 53314-53322. | 4.0 | 11 |
| 31 | Data-assisted polymer retrosynthesis planning. Applied Physics Reviews, 2021, 8, . | 5.5 | 11 |
| 32 | Design of polymers for energy storage capacitors using machine learning and evolutionary algorithms. Journal of Materials Science, 2021, 56, 19623-19635. | 1.7 | 9 |
| 33 | Remarks on the Design of Flexible High-Temperature Polymer Dielectrics for Emerging Grand Electrification - Exemplified by Poly(oxa)norbornenes. IEEE Transactions on Dielectrics and Electrical Insulation, 2021, 28, 1468-1470. | 1.8 | 5 |
| 34 | Tailoring Polymeric Insulation Materials for DC Cable Dielectrics. , 2019, , . | | 3 |
| 35 | High Electric Field Conduction of Polymers at Ambient and Elevated Temperatures. , 2019, , . | | 3 |
| 36 | Synthesis of Mg Alkoxide Nanowires from Mg Alkoxide Nanoparticles upon Ligand Exchange. ACS Applied Materials & Interfaces, 2022, 14, 13820-13827. | 4.0 | 0 |