Christopher M Evans

List of Publications by Year
in descending order

36 papers	1,084 citations	393982 19 h-index	433756 31 g-index
36 all docs	36 docs citations	36 times ranked	1186 citing authors

#	Article	IF	Citations
1	Catalyst-Free Dynamic Networks for Recyclable, Self-Healing Solid Polymer Electrolytes. Journal of the American Chemical Society, 2019, 141, 18932-18937.	6.6	113
2	Ultra-thin self-healing vitrimer coatings for durable hydrophobicity. Nature Communications, 2021, 12, 5210.	5.8	89
3	Anhydrous Proton Transport in Polymerized Ionic Liquid Block Copolymers: Roles of Block Length, Ionic Content, and Confinement. Macromolecules, 2016, 49, 395-404.	2.2	88
4	Importance of Broad Temperature Windows and Multiple Rheological Approaches for Probing Viscoelasticity and Entropic Elasticity in Vitrimers. Macromolecules, 2021, 54, 4782-4791.	2.2	73
5	Role of Tethered Ion Placement on Polymerized Ionic Liquid Structure and Conductivity: Pendant versus Backbone Charge Placement. ACS Macro Letters, 2016, 5, 925-930.	2.3	63
6	Harvesting Waste Heat in Unipolar Ion Conducting Polymers. ACS Macro Letters, 2016, 5, 94-98.	2.3	62
7	Ion Transport in Dynamic Polymer Networks Based on Metalâ€"Ligand Coordination: Effect of Cross-Linker Concentration. Macromolecules, 2018, 51, 2017-2026.	2.2	45
8	Structureâ€"Conductivity Relationships of Block Copolymer Membranes Based on Hydrated Protic Polymerized Ionic Liquids: Effect of Domain Spacing. Macromolecules, 2016, 49, 2216-2223.	2.2	43
9	Effect of precise linker length, bond density, and broad temperature window on the rheological properties of ethylene vitrimers. Soft Matter, 2021, 17, 3569-3577.	1.2	42
10	Shock Wave Energy Dissipation in Catalyst-Free Poly(dimethylsiloxane) Vitrimers. Macromolecules, 2020, 53, 4741-4747.	2.2	32
11	Vitrimers: Using Dynamic Associative Bonds to Control Viscoelasticity, Assembly, and Functionality in Polymer Networks. ACS Macro Letters, 2022, 11, 475-483.	2.3	32
12	Anisotropic Thermal Transport in Thermoelectric Composites of Conjugated Polyelectrolytes/Single-Walled Carbon Nanotubes. Macromolecules, 2016, 49, 4957-4963.	2.2	31
13	Effect of Amine Hardener Molecular Structure on the Thermal Conductivity of Epoxy Resins. ACS Applied Polymer Materials, 2021, 3, 259-267.	2.0	30
14	Effect of Network Architecture and Linker Polarity on Ion Aggregation and Conductivity in Precise Polymerized Ionic Liquids. ACS Macro Letters, 2019, 8, 658-663.	2.3	28
15	Effect of Aromatic/Aliphatic Structure and Cross-Linking Density on the Thermal Conductivity of Epoxy Resins. ACS Applied Polymer Materials, 2021, 3, 1555-1562.	2.0	25
16	Determining multiple component glass transition temperatures in miscible polymer blends: Comparison of fluorescence spectroscopy and differential scanning calorimetry. Polymer, 2012, 53, 6118-6124.	1.8	24
17	Ion specific, oddâ€"even glass transition temperatures and conductivities in precise network polymerized ionic liquids. Molecular Systems Design and Engineering, 2019, 4, 332-341.	1.7	24
18	Relaxation of Vitrimers with Kinetically Distinct Mixed Dynamic Bonds. Macromolecules, 2022, 55, 4450-4458.	2.2	24

#	Article	IF	Citations
19	Improving the Gas Barrier Properties of Nafion via Thermal Annealing: Evidence for Diffusion through Hydrophilic Channels and Matrix. Macromolecules, 2015, 48, 3303-3309.	2.2	19
20	High Thermal Conductivity Semicrystalline Epoxy Resins with Anthraquinone-Based Hardeners. ACS Applied Polymer Materials, 2021, 3, 4430-4435.	2.0	19
21	Decoupling Mechanical and Conductive Dynamics of Polymeric Ionic Liquids via a Trivalent Anion Additive. Macromolecules, 2017, 50, 8979-8987.	2.2	18
22	Precise Network Polymerized Ionic Liquids for Lowâ€Voltage, Dopantâ€Free Soft Actuators. Advanced Materials Technologies, 2019, 4, 1800535.	3.0	18
23	Effect of Linker Length and Temperature on the Thermal Conductivity of Ethylene Dynamic Networks. ACS Macro Letters, 2021, 10, 1088-1093.	2.3	17
24	Structural Relaxation and Vitrification in Dense Cross-Linked Polymer Networks: Simulation, Theory, and Experiment. Macromolecules, 2022, 55, 4159-4173.	2.2	17
25	Understanding the Roles of Mesh Size, Tg, and Segmental Dynamics on Probe Diffusion in Dense Polymer Networks. Macromolecules, 0, , .	2.2	13
26	Ion Gel Dynamic Templates for Large Modulation of Morphology and Charge Transport Properties of Solution-Coated Conjugated Polymer Thin Films. ACS Applied Materials & Interfaces, 2019, 11, 22561-22574.	4.0	12
27	Effect of Polymerized Ionic Liquid Structure and Morphology on Shockwave Energy Dissipation. ACS Macro Letters, 2019, 8, 535-539.	2.3	12
28	Effect of Molecular Weight on Viscosity Scaling and Ion Transport in Linear Polymerized Ionic Liquids. Macromolecules, 2021, 54, 3395-3404.	2.2	12
29	Impact of dynamic covalent chemistry and precise linker length on crystallization kinetics and morphology in ethylene vitrimers. Soft Matter, 2022, 18, 293-303.	1.2	12
30	<scp>Conductivityâ€“modulusâ€“<i>T</i>_g</scp> relationships in solventâ€free, single lithium ion conducting network electrolytes. Journal of Polymer Science, 2020, 58, 2376-2388.	2.0	11
31	Solid-State, Single-Anion-Conducting Networks for Flexible and Stable Supercapacitor Electrolytes. ACS Applied Polymer Materials, 2021, 3, 4168-4176.	2.0	8
32	Ion Specific, Thin Film Confinement Effects on Conductivity in Polymerized Ionic Liquids. Macromolecules, 2021, 54, 10520-10528.	2.2	8
33	Role of Multivalent Interactions in Dynamic-Template-Directed Assembly of Conjugated Polymers. ACS Applied Materials & Interfaces, 2020, 12, 2753-2762.	4.0	7
34	Molecular Design of Precise Network Polymerized Ionic Liquid Membranes for Toluene/Heptane Separations. Industrial & Engineering Chemistry Research, 2019, 58, 14389-14395.	1.8	6
35	Critical Role of Ion Exchange Conditions on the Properties of Network Ionic Polymers. ACS Macro Letters, 2020, 9, 1718-1725.	2.3	4
36	Effects of crosslinking density and Lewis acidic sites on conductivity and viscoelasticity of dynamic network electrolytes. Journal of Polymer Science, 0, , .	2.0	3