Tuan Liu

List of Publications by Year
in descending order

43 papers	2,861 citations	257357 24 h-index	254106 43 g-index
44 all docs	44 docs citations	44 times ranked	1967 citing authors

#	Article	IF	Citations
1	Liquid Crystalline Elastomers Based on Click Chemistry. ACS Applied Materials & Interfaces, 2022, 14, 14842-14858.	4.0	20
2	Fully Eugenolâ€Based Epoxy Thermosets: Synthesis, Curing, and Properties. Macromolecular Materials and Engineering, 2022, 307, .	1.7	3
3	Recyclable CFRPs with extremely high <i>T</i>_g: hydrothermal recyclability in pure water and upcycling of the recyclates for new composite preparation. Journal of Materials Chemistry A, 2022, 10, 15623-15633.	5.2	15
4	Carbon Fiber Reinforced Epoxy Vitrimer: Robust Mechanical Performance and Facile Hydrothermal Decomposition in Pure Water. Macromolecular Rapid Communications, 2021, 42, e2000458.	2.0	42
5	From Glassy Plastic to Ductile Elastomer: Vegetable Oil-Based UV-Curable Vitrimers and Their Potential Use in 3D Printing. ACS Applied Polymer Materials, 2021, 3, 2470-2479.	2.0	43
6	Robust supramolecular composite hydrogels for sustainable and â€œvisibleâ€•agriculture irrigation. Journal of Materials Chemistry A, 2021, 9, 24613-24621.	5.2	11
7	Biobased miktoarm star copolymer from soybean oil, isosorbide, and caprolactone. Journal of Applied Polymer Science, 2020, 137, 48281.	1.3	7
8	Catalyst-free vitrimer elastomers based on a dimer acid: robust mechanical performance, adaptability and hydrothermal recyclability. Green Chemistry, 2020, 22, 870-881.	4.6	124
9	Liquid crystalline networks based on photo-initiated thiolâ€“ene click chemistry. Soft Matter, 2020, 16, 1760-1770.	1.2	12
10	A renewable dynamic covalent network based on itaconic anhydride crosslinked polyglycerol: Adaptability, UV blocking and fluorescence. Chemical Engineering Journal, 2020, 385, 123960.	6.6	19
11	Combined light- and heat-induced shape memory behavior of anthracene-based epoxy elastomers. Scientific Reports, 2020, 10, 20214.	1.6	13
12	Shape memory Poly(lactic acid) binary blends with unusual fluorescence. Polymer, 2020, 209, 122980.	1.8	8
13	Hempseed Oil-Based Covalent Adaptable Epoxy-Amine Network and Its Potential Use for Room-Temperature Curable Coatings. ACS Sustainable Chemistry and Engineering, 2020, 8, 14964-14974.	3.2	51
14	Preparation and Characterization of Electrospun Conductive Janus Nanofibers with Polyaniline. ACS Applied Polymer Materials, 2020, 2, 2819-2829.	2.0	19
15	Recent development of repairable, malleable and recyclable thermosetting polymers through dynamic transesterification. Polymer, 2020, 194, 122392.	1.8	191
16	Triethanolamine-Mediated Covalent Adaptable Epoxy Network: Excellent Mechanical Properties, Fast Repairing, and Easy Recycling. Macromolecules, 2020, 53, 3110-3118.	2.2	118
17	Styrene-Free Soybean Oil Thermoset Composites Reinforced by Hybrid Fibers from Recycled and Natural Resources. ACS Sustainable Chemistry and Engineering, 2019, 7, 17808-17816.	3.2	13
18	Glycerol Induced Catalystâ€Free Curing of Epoxy and Vitrimer Preparation. Macromolecular Rapid Communications, 2019, 40, e1800889.	2.0	108

#	Article	IF	Citations
19	Hyperbranched Polymer Assisted Curing and Repairing of an Epoxy Coating. Industrial & Engineering Chemistry Research, 2019, 58, 6466-6475.	1.8	45
20	An intrinsic white-light-emitting hyperbranched polyimide: synthesis, structureâ€“property and its application as a â€œturn-offâ€• sensor for iron(iii) ions. Journal of Materials Chemistry C, 2019, 7, 14320-14333.	2.7	8
21	Eco-friendly post-consumer cotton waste recycling for regenerated cellulose fibers. Carbohydrate Polymers, 2019, 206, 141-148.	5.1	100
22	A Highâ€•Ligninâ€•Content, Removable, and Glycolâ€•Assisted Repairable Coating Based on Dynamic Covalent Bonds. ChemSusChem, 2019, 12, 1049-1058.	3.6	89
23	Use of Hempseed-Oil-Derived Polyacid and Rosin-Derived Anhydride Acid as Cocuring Agents for Epoxy Materials. ACS Sustainable Chemistry and Engineering, 2018, 6, 4016-4025.	3.2	43
24	Temperature and pH Responsive Hydrogels Using Methacrylated Lignosulfonate Cross-Linker: Synthesis, Characterization, and Properties. ACS Sustainable Chemistry and Engineering, 2018, 6, 1763-1771.	3.2	78
25	Tetrafunctional epoxy as an allâ€•purpose modifier for homopolymerized bisphenol A diglycidyl ether. Journal of Applied Polymer Science, 2018, 135, 46431.	1.3	4
26	Thiolâ€“Ene Synthesis of Cysteine-Functionalized Lignin for the Enhanced Adsorption of Cu(II) and Pb(II). Industrial & Engineering Chemistry Research, 2018, 57, 7872-7880.	1.8	55
27	Catalytic Conversion of Biomass-Derived 1,2-Propanediol to Propylene Oxide over Supported Solid-Base Catalysts. ACS Omega, 2018, 3, 8718-8723.	1.6	4
28	A Self-Healable High Glass Transition Temperature Bioepoxy Material Based on Vitrimer Chemistry. Macromolecules, 2018, 51, 5577-5585.	2.2	224
29	A Catalyst-Free Epoxy Vitrimer System Based on Multifunctional Hyperbranched Polymer. Macromolecules, 2018, 51, 6789-6799.	2.2	234
30	Tertiary-amine-free, non-planar, fluorine-containing tetrafunctional epoxy and its application as high performance matrix. Polymer Testing, 2018, 71, 38-48.	2.3	16
31	Preparation of a lignin-based vitrimer material and its potential use for recoverable adhesives. Green Chemistry, 2018, 20, 2995-3000.	4.6	222
32	Improving Grafting Efficiency of Dicarboxylic Anhydride Monomer on Polylactic Acid by Manipulating Monomer Structure and Using Comonomer and Reducing Agent. Industrial & Engineering Chemistry Research, 2017, 56, 3920-3927.	1.8	16
33	Nitrogen-Free Tetrafunctional Epoxy and Its DDS-Cured High-Performance Matrix for Aerospace Applications. Industrial & Engineering Chemistry Research, 2017, 56, 7708-7719.	1.8	50
34	Mild chemical recycling of aerospace fiber/epoxy composite wastes and utilization of the decomposed resin. Polymer Degradation and Stability, 2017, 139, 20-27.	2.7	107
35	Eugenol-Derived Biobased Epoxy: Shape Memory, Repairing, and Recyclability. Macromolecules, 2017, 50, 8588-8597.	2.2	316
36	Selective cleavage of ester linkages of anhydride-cured epoxy using a benign method and reuse of the decomposed polymer in new epoxy preparation. Green Chemistry, 2017, 19, 4364-4372.	4.6	113

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37	Environmentally friendly high performance homopolymerized epoxy using hyperbranched epoxy as a modifier. RSC Advances, 2016, 6, 14211-14221.	1.7	24
38	Control-synthesized multilayer hyperbranchedâ€"hyperbranched polyethers with a tunable molecular weight and an invariant degree of branching. New Journal of Chemistry, 2016, 40, 3432-3439.	1.4	6
39	Fluorescent aliphatic hyperbranched polyether: chromophore-free and without any N and P atoms. Physical Chemistry Chemical Physics, 2016, 18, 4295-4299.	1.3	79
40	Hyperbranched polyether as an all-purpose epoxy modifier: controlled synthesis and toughening mechanisms. Journal of Materials Chemistry A, 2015, 3, 1188-1198.	5.2	114
41	Dependence of epoxy toughness on the backbone structure of hyperbranched polyether modifiers. RSC Advances, 2015, 5, 3408-3416.	1.7	49
42	Hyperbranched polyethers with tunable glass transition temperature: controlled synthesis and mixing rules. RSC Advances, 2014, 4, 30250-30258.	1.7	14
43	Unusual strong fluorescence of a hyperbranched phosphate: discovery and explanations. RSC Advances, 2013, 3, 8269.	1.7	33