Hongzhi Liu

List of Publications by Year
in descending order

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63 papers	3,215 citations	236925 25 h-index	149698 56 g-index
64 all docs	64 docs citations	64 times ranked	3447 citing authors

#	Article	IF	Citations
1	Research progress in toughening modification of poly(lactic acid). Journal of Polymer Science, Part B: Polymer Physics, 2011, 49, 1051-1083.	2.1	620
2	Interaction of Microstructure and Interfacial Adhesion on Impact Performance of Polylactide (PLA) Ternary Blends. Macromolecules, 2011, 44, 1513-1522.	4.8	283
3	Super Toughened Poly(lactic acid) Ternary Blends by Simultaneous Dynamic Vulcanization and Interfacial Compatibilization. Macromolecules, 2010, 43, 6058-6066.	4.8	279
4	Review on the Aerogel-Type Oil Sorbents Derived from Nanocellulose. ACS Sustainable Chemistry and Engineering, 2017, 5, 49-66.	6.7	270
5	Use of eugenol and rosin as feedstocks for biobased epoxy resins and study of curing and performance properties. Polymer International, 2014, 63, 760-765.	3.1	143
6	Surface-Tailored Nanocellulose Aerogels with Thiol-Functional Moieties for Highly Efficient and Selective Removal of Hg(II) Ions from Water. ACS Sustainable Chemistry and Engineering, 2017, 5, 11715-11726.	6.7	135
7	Toward Fully Bio-based and Supertough PLA Blends via in Situ Formation of Cross-Linked Biopolyamide Continuity Network. Macromolecules, 2019, 52, 8415-8429.	4.8	88
8	Manipulating interphase reactions for mechanically robust, flame-retardant and sustainable polylactide biocomposites. Composites Part B: Engineering, 2020, 190, 107930.	12.0	81
9	Compatibilizing Effects of Maleated Poly(lactic acid) (PLA) on Properties of PLA/Soy Protein Composites. Industrial & Engineering Chemistry Research, 2012, 51, 7786-7792.	3.7	79
10	Thermo-responsive and compression properties of TEMPO-oxidized cellulose nanofiber-modified PNIPAm hydrogels. Carbohydrate Polymers, 2016, 147, 201-207.	10.2	73
11	Comparative characteristics of TEMPO-oxidized cellulose nanofibers and resulting nanopapers from bamboo, softwood, and hardwood pulps. Cellulose, 2017, 24, 4831-4844.	4.9	64
12	Effects of reactive blending temperature on impact toughness of poly(lactic acid) ternary blends. Polymer, 2012, 53, 272-276.	3.8	57
13	Effects of ionomer characteristics on reactions and properties of poly(lactic acid) ternary blends prepared by reactive blending. Polymer, 2012, 53, 2476-2484.	3.8	49
14	Synergetic Effect of Dual Compatibilizers on in Situ Formed Poly(Lactic Acid)/Soy Protein Composites. Industrial & Engineering Chemistry Research, 2010, 49, 6399-6406.	3.7	47
15	Morphology, healing and mechanical performance of nanofibrillated cellulose reinforced poly(ĩμ-caprolactone)/epoxy composites. Composites Science and Technology, 2016, 125, 62-70.	7.8	46
16	Effect of surface charge content in the TEMPO-oxidized cellulose nanofibers on morphologies and properties of poly(N -isopropylacrylamide)-based composite hydrogels. Industrial Crops and Products, 2016, 92, 227-235.	5.2	45
17	Preparation and characteristics of TEMPO-oxidized cellulose nanofibrils from bamboo pulp and their oxygen-barrier application in PLA films. Frontiers of Chemical Science and Engineering, 2017, 11, 554-563.	4.4	44
18	Recyclable Oil-Absorption Foams via Secondary Phase Separation. ACS Sustainable Chemistry and Engineering, 2018, 6, 13834-13843.	6.7	39

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19	Bio-based nanocomposites by in situ cure of phenolic prepolymers with cellulose whiskers. Cellulose, 2011, 18, 619-630.	4.9	35
20	Highly fibrillated and intrinsically flame-retardant nanofibrillated cellulose for transparent mineral filler-free fire-protective coatings. Chemical Engineering Journal, 2021, 419, 129440.	12.7	32
21	In-situ incorporating zwitterionic nanocellulose into polyamide nanofiltration membrane towards excellent perm-selectivity and antifouling performances. Desalination, 2022, 521, 115397.	8.2	32
22	Three-dimensional macroscopic aminosilylated nanocellulose aerogels as sustainable bio-adsorbents for the effective removal of heavy metal ions. International Journal of Biological Macromolecules, 2021, 190, 170-177.	7.5	31
23	Charge-functionalized and mechanically durable composite cryogels from Q-NFC and CS for highly selective removal of anionic dyes. Carbohydrate Polymers, 2017, 174, 841-848.	10.2	30
24	Synthesis, anti-oxidant activity, and biodegradability of a novel recombinant polysaccharide derived from chitosan and lactose. Carbohydrate Polymers, 2015, 118, 218-223.	10.2	28
25	Nonsolvent-assisted fabrication of multi-scaled polylactide as superhydrophobic surfaces. Soft Matter, 2016, 12, 2766-2772.	2.7	27
26	Effects of Metal Ion Type on Ionomer-Assisted Reactive Toughening of Poly(lactic acid). Industrial & Engineering Chemistry Research, 2013, 52, 4787-4793.	3.7	26
27	Highly permeable polyamide nanofiltration membrane incorporated with phosphorylated nanocellulose for enhanced desalination. Journal of Membrane Science, 2022, 647, 120339.	8.2	26
28	Crystallization Behaviors of Polypropylene/Polyamide-6 Blends Modified by a Maleated Thermoplastic Elastomer. Polymer Journal, 2006, 38, 21-30.	2.7	25
29	A novel wood flour-filled composite based on microfibrillar high-density polyethylene (HDPE)/Nylon-6 blends. Bioresource Technology, 2010, 101, 3295-3297.	9.6	24
30	Rice straw fiber reinforced high density polyethylene composite: Effect of coupled compatibilizating and toughening treatment. Journal of Applied Polymer Science, 2011, 119, 2214-2222.	2.6	24
31	A reusable surface-quaternized nanocellulose-based hybrid cryogel loaded with N-doped TiO₂for self-integrated adsorption/photo-degradation of methyl orange dye. RSC Advances, 2017, 7, 17279-17288.	3.6	24
32	Flexible lignin-derived electrospun carbon nanofiber mats as a highly efficient and binder-free counter electrode for dye-sensitized solar cells. Journal of Materials Science, 2018, 53, 7637-7647.	3.7	23
33	Extraordinary toughness enhancement of poly(lactic acid) by incorporating very low loadings of noncovalent functionalized graphene-oxide via masterbatch-based melt blending. Chemical Engineering Journal, 2018, 334, 2014-2020.	12.7	23
34	A high-capacity nanocellulose aerogel uniformly immobilized with a high loading of nano-La(OH)3 for phosphate removal. Chemical Engineering Journal, 2022, 433, 134439.	12.7	23
35	Preparation and Characterization of Aldehyde-Functionalized Cellulosic Fibers through Periodate Oxidization of Bamboo Pulp. BioResources, 2016, 11, .	1.0	21
36	Morphological and property characteristics of surface-quaternized nanofibrillated cellulose derived from bamboo pulp. Cellulose, 2019, 26, 1683-1701.	4.9	20

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37	Preparation and characterization of thermoplastic polyurethane elastomer and polyamide 6 blends by in situ anionic ring-opening polymerization of Îµ-caprolactam. Polymer Engineering and Science, 2006, 46, 1196-1203.	3.1	19
38	Effects of Polyoxymethylene as a Polymeric Nucleating Agent on the Isothermal Crystallization and Visible Transmittance of Poly(lactic acid). Industrial & Engineering Chemistry Research, 2014, 53, 16754-16762.	3.7	19
39	Facile synthesis of thermo-responsive nanogels less than 50Ânm in diameter via soap- and heat-free precipitation polymerization. Journal of Materials Science, 2018, 53, 12056-12064.	3.7	19
40	Toughening and compatibilization of polypropylene/polyamide-6 blends with a maleatedâ€“grafted ethylene-co-vinyl acetate. Journal of Applied Polymer Science, 2006, 99, 3300-3307.	2.6	18
41	Isothermal and nonisothermal crystallization kinetics of a semicrystalline copolyterephthalamide based on poly(decamethylene terephthalamide). Journal of Applied Polymer Science, 2004, 94, 819-826.	2.6	17
42	Effect of ionomer on clay dispersions in polypropylene-layered silicate nanocomposites. Journal of Applied Polymer Science, 2007, 104, 4024-4034.	2.6	17
43	Melting behavior and nonisothermal crystallization kinetics of polyamide 6/polyamide 66 molecular composites viain situ polymerization. Journal of Applied Polymer Science, 2005, 98, 2172-2177.	2.6	16
44	Flame-Retardant and Smoke Suppression Properties of Nano MgAl-LDH Coating on Bamboo Prepared by an In Situ Reaction. Journal of Nanomaterials, 2019, 2019, 1-12.	2.7	14
45	Polyethylene glycol grafted with carboxylated graphene oxide as a novel interface modifier for polylactic acid/graphene nanocomposites. Royal Society Open Science, 2020, 7, 192154.	2.4	14
46	Phase morphology development in PP/PA6 blends induced by a maleated thermoplastic elastomer. Journal of Polymer Science, Part B: Polymer Physics, 2006, 44, 1050-1061.	2.1	13
47	Controllable domain morphology in coated poly(lactic acid) films for high-efficiency and high-precision transportation of water droplet arrays. RSC Advances, 2017, 7, 53525-53531.	3.6	13
48	Dynamic Rheological Properties of Polypropylene/Polyamide-6 Blends Modified with a Maleated Thermoplastic Elastomer. Polymer Journal, 2004, 36, 754-760.	2.7	12
49	Synergistically toughening high-density polyethylene with calcium carbonate and elastomer. Journal of Polymer Science, Part B: Polymer Physics, 2005, 43, 3213-3221.	2.1	11
50	Influence of reactive blending temperature on impact toughness and phase morphologies of PLA ternary blend system containing magnesium ionomer. Journal of Applied Polymer Science, 2019, 136, 47682.	2.6	11
51	Effects of Extraction Methods on Anti-Mould Property of Bamboo Strips. BioResources, 2018, 13, .	1.0	10
52	Inhibited-nanophase-separation modulated polymerization for recoverable ultrahigh-strain biobased shape memory polymers. Materials Horizons, 2020, 7, 2760-2767.	12.2	10
53	Different Effects of Water and Glycerol on Morphology and Properties of Poly(lactic acid)/Soy Protein Concentrate Blends. Macromolecular Materials and Engineering, 2010, 295, 123-129.	3.6	9
54	Novel Polyamide 6/Polystyrene In Situ Microfibrillar Blends Prepared by Anionic Polymerization of Îµâ€Caprolactam via Reactive Extrusion. Macromolecular Materials and Engineering, 2016, 301, 1242-1247.	3.6	8

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55	Ploy (lactic acid)/organo-modified montmorillonite nanocomposites for improved eletret properties. Journal of Electrostatics, 2016, 80, 17-21.	1.9	8
56	Nonleachable Antibacterial Nanocellulose with Excellent Cytocompatible and UV-Shielding Properties Achieved by Counterion Exchange with Nature-Based Phenolic Acids. ACS Sustainable Chemistry and Engineering, 2021, 9, 15755-15767.	6.7	8
57	Property transitions in high-density polyethylene/maleated poly(ethyleneâ€“octene)/calcium carbonate ternary composites. Journal of Applied Polymer Science, 2006, 101, 3361-3366.	2.6	7
58	Toughening Modification of Poly(lactic acid) via Melt Blending. ACS Symposium Series, 2012, , 27-46.	0.5	7
59	Facile and solvent-free synthesis of a novel bio-based hyperbranched polyester with excellent low-temperature flexibility and thermal stability. Industrial Crops and Products, 2020, 148, 112302.	5.2	7
60	Novel multimonomer-grafted polypropylene preparation and application in polypropylene/poly(vinyl) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 5	2.6	3
61	EFFECT OF INTERFACIAL INTERACTION ON THE TOUGHNESS OF HDPE/POEg/CaCO₃ TERNARY COMPOSITES. Acta Polymerica Sinica, 2006, 006, 53-58.	0.0	3
62	A novel biodegradable hyperbranched polyester prepared from cellulose and tyrosine via the synthesis route of glycopeptides. Polymer Chemistry, 2015, 6, 2822-2826.	3.9	2
63	A novel bioderived <scp>AB₂</scp>â€type monomer from castor oil derivative for the preparation of fully biobased hyperbranched polyesters. Journal of Applied Polymer Science, 2022, 139, .	2.6	1