Lan Xie

List of Publications by Year
in descending order

43 papers	1,577 citations	236612 25 h-index	301761 39 g-index
43 all docs	43 docs citations	43 times ranked	1491 citing authors

#	Article	IF	Citations
1	Unprecedented Access to Strong and Ductile Poly(lactic acid) by Introducing In Situ Nanofibrillar Poly(butylene succinate) for Green Packaging. Biomacromolecules, 2014, 15, 4054-4064.	2.6	149
2	Thermostable and Impermeable â€œNano-Barrier Wallsâ€• Constructed by Poly(lactic acid) Stereocomplex Crystal Decorated Graphene Oxide Nanosheets. Macromolecules, 2015, 48, 2127-2137.	2.2	95
3	Flexible multilayered films consisting of alternating nanofibrillated cellulose/Fe3O4 and carbon nanotube/polyethylene oxide layers for electromagnetic interference shielding. Chemical Engineering Journal, 2021, 410, 128356.	6.6	89
4	Controllable Ag-rGO heterostructure for highly thermal conductivity in layer-by-layer nanocellulose hybrid films. Chemical Engineering Journal, 2020, 383, 123072.	6.6	84
5	From Nanofibrillar to Nanolaminar Poly(butylene succinate): Paving the Way to Robust Barrier and Mechanical Properties for Full-Biodegradable Poly(lactic acid) Films. ACS Applied Materials & Interfaces, 2015, 7, 8023-8032.	4.0	67
6	Coffee-Ground-Derived Quantum Dots for Aqueous Processable Nanoporous Graphene Membranes. ACS Sustainable Chemistry and Engineering, 2017, 5, 5360-5367.	3.2	63
7	Strong and tough micro/nanostructured poly(lactic acid) by mimicking the multifunctional hierarchy of shell. Materials Horizons, 2014, 1, 546-552.	6.4	61
8	Structural Basis for Unique Hierarchical Cylindrites Induced by Ultrahigh Shear Gradient in Single Natural Fiber Reinforced Poly(lactic acid) Green Composites. Biomacromolecules, 2014, 15, 1676-1686.	2.6	57
9	Tune the phase morphology to design conductive polymer composites: A review. Polymer Composites, 2018, 39, 2985-2996.	2.3	52
10	Zero-Dimensional and Highly Oxygenated Graphene Oxide for Multifunctional Poly(lactic acid) Bionanocomposites. ACS Sustainable Chemistry and Engineering, 2016, 4, 5618-5631.	3.2	50
11	Toward Stronger Transcrystalline Layers in Poly(<scp>l</scp>-lactic acid)/Natural Fiber Biocomposites with the Aid of an Accelerator of Chain Mobility. Journal of Physical Chemistry B, 2014, 118, 812-823.	1.2	49
12	Conformational Footprint in Hydrolysis-Induced Nanofibrillation and Crystallization of Poly(lactic) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 3	2.6	49
13	Immobilized Graphene Oxide Nanosheets as Thin but Strong Nanointerfaces in Biocomposites. ACS Sustainable Chemistry and Engineering, 2016, 4, 2211-2222.	3.2	48
14	Graphene Oxide-Driven Design of Strong and Flexible Biopolymer Barrier Films: From Smart Crystallization Control to Affordable Engineering. ACS Sustainable Chemistry and Engineering, 2016, 4, 334-349.	3.2	47
15	3D porous poly(l-lactic acid) materials with controllable multi-scale microstructures and their potential application in oil-water separation. Applied Surface Science, 2018, 462, 633-640.	3.1	47
16	Modulating Electron Transfer in Vanadiumâ€Based Artificial Enzymes for Enhanced ROSâ€Catalysis and Disinfection. Advanced Materials, 2022, 34, e2108646.	11.1	44
17	Directional Electromagnetic Interference Shielding Based on Step-Wise Asymmetric Conductive Networks. Nano-Micro Letters, 2022, 14, 16.	14.4	44
18	Coffee Grounds to Multifunctional Quantum Dots: Extreme Nanoenhancers of Polymer Biocomposites. ACS Applied Materials & Interfaces, 2017, 9, 27972-27983.	4.0	41

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19	Beyond a Model of Polymer Processing-Triggered Shear: Reconciling Shish-Kebab Formation and Control of Chain Degradation in Sheared Poly(<scp>l</scp>-lactic acid). ACS Sustainable Chemistry and Engineering, 2015, 3, 1443-1452.	3.2	35
20	From tanghulu-like to cattail-like SiC nanowire architectures: interfacial design of nanocellulose composites toward high thermal conductivity. Journal of Materials Chemistry A, 2020, 8, 14506-14518.	5.2	33
21	Toward faster degradation for natural fiber reinforced poly(lactic acid) biocomposites by enhancing the hydrolysis-induced surface erosion. Journal of Polymer Research, 2014, 21, 1.	1.2	31
22	Structural Hierarchy and Polymorphic Transformation in Shearâ€Induced Shishâ€Kebab of Stereocomplex Poly(Lactic Acid). Macromolecular Rapid Communications, 2016, 37, 745-751.	2.0	31
23	Super-hydrophobic poly (lactic acid) by controlling the hierarchical structure and polymorphic transformation. Chemical Engineering Journal, 2020, 397, 125297.	6.6	31
24	Structural conversion of PLLA/ZnO composites facilitated by interfacial crystallization to potential application in oil-water separation. Applied Surface Science, 2020, 517, 146135.	3.1	29
25	Self-nanofibrillation strategy to an unusual combination of strength and toughness for poly(lactic) Tj ETQq1 1 0.784314 rgBT /Overlock	1.7	26
26	Interface Engineering Based on Polydopamine-Assisted Metallization in Highly Thermal Conductive Cellulose/Nanodiamonds Composite Paper. ACS Sustainable Chemistry and Engineering, 2020, 8, 17639-17650.	3.2	26
27	Biomimetic Nanofibrillation in Two-Component Biopolymer Blends with Structural Analogs to Spider Silk. Scientific Reports, 2016, 6, 34572.	1.6	24
28	Natural Fiber-Anchored Few-Layer Graphene Oxide Nanosheets for Ultrastrong Interfaces in Poly(lactic acid). ACS Sustainable Chemistry and Engineering, 2017, 5, 3279-3289.	3.2	24
29	Heat-Resistant and Microwaveable Poly(lactic acid) by Quantum-Dot-Promoted Stereocomplexation. ACS Sustainable Chemistry and Engineering, 2017, 5, 11607-11617.	3.2	23
30	An unprecedented quinoidâ€“donorâ€“acceptor strategy to boost the carrier mobilities of semiconducting polymers for organic field-effect transistors. Journal of Materials Chemistry A, 2021, 9, 23497-23505.	5.2	20
31	Multilayered epoxy/glass fiber felt composites with excellently acoustical and thermal insulation properties. Journal of Applied Polymer Science, 2019, 136, 46935.	1.3	18
32	Extensional flow-induced conductive nanohybrid shish in poly(lactic acid) nanocomposites toward pioneering combination of high electrical conductivity, strength, and ductility. Composites Part B: Engineering, 2021, 207, 108556.	5.9	16
33	Enhanced fouling-resistance performance of polypropylene hollow fiber membrane fabricated by ultrasonic-assisted graft polymerization of acrylic acid. Applied Surface Science, 2020, 502, 144098.	3.1	12
34	A free radical assisted strategy for preparing functionalized carbon nanotubes as a highly efficient nucleating agent for poly(<scp>l</scp>-lactide). RSC Advances, 2015, 5, 16604-16610.	1.7	11
35	Unravelling the Role of Electron Acceptors for the Universal Enhancement of Charge Transport in Quinoidâ€Donorâ€Acceptor Polymers for Highâ€Performance Transistors. Advanced Functional Materials, 2022, 32, .	7.8	11
36	Detailed molecular movements during poly(<scp>l</scp>-lactic acid) cold-crystallization investigated by FTIR spectroscopy combined with two-dimensional correlation analysis. RSC Advances, 2017, 7, 47017-47028.	1.7	10

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37	Aqueous Nanocoating Approach to Strong Natural Microfibers with Tunable Electrical Conductivity for Wearable Electronic Textiles. ACS Applied Nano Materials, 2018, 1, 2406-2413.	2.4	10
38	Can classic Avrami theory describe the isothermal crystallization kinetics for stereocomplex poly(lactic acid)?. Chinese Journal of Polymer Science (English Edition), 2017, 35, 773-781.	2.0	8
39	Flammability and thermal analysis of thermoplastic polyurethane/DOPO derivative/sepiolite composites. Journal of Thermal Analysis and Calorimetry, 2022, 147, 8225-8234.	2.0	6
40	Extensional flow-induced conductive nanohybrid shish in poly(lactic acid) nanocomposites toward pioneering combination of high electrical conductivity, strength, and ductility. Composites Part B: Engineering, 2020, 203, 108467.	5.9	3
41	Strong and ductile poly(butylene adipateâ€<i>co</i>â€terephthalate) biocomposites fabricated by oscillation shear injection molding. Journal of Applied Polymer Science, 2016, 133, .	1.3	2
42	Modulating Electron Transfer in Vanadiumâ€Based Artificial Enzymes for Enhanced ROSâ€Catalysis and Disinfection (Adv. Mater. 17/2022). Advanced Materials, 2022, 34, .	11.1	1
43	The combined plasticization of jute and tung oil anhydride for jute fiber reinforced poly(lactic acid) composites. Polymers and Polymer Composites, 0, , 096739112110576.	1.0	0