LongBo Luo

List of Publications by Year
in descending order

67	1,465	279798 23	377865 34
papers	citations	h-index	g-index

67	67	67	1035
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	The evolution of macromolecular packing and sudden crystallization in rigid-rod polyimide via effect of multiple H-bonding on charge transfer (CT) interactions. Polymer, 2014, 55, 4258-4269.	3.8	92
2	Aramid fiber with excellent interfacial properties suitable for resin composite in a wide polarity range. Chemical Engineering Journal, 2018, 347, 483-492.	12.7	88
3	Mechanically Strong Chitin Fibers with Nanofibril Structure, Biocompatibility, and Biodegradability. Chemistry of Materials, 2019, 31, 2078-2087.	6.7	66
4	Mechanically Strong Multifilament Fibers Spun from Cellulose Solution via Inducing Formation of Nanofibers. ACS Sustainable Chemistry and Engineering, 2018, 6, 5314-5321.	6.7	56
5	Surface modification of PBO fibers by direct fluorination and corresponding chemical reaction mechanism. Composites Science and Technology, 2018, 165, 106-114.	7.8	49
6	Influences of Coagulation Conditions on the Structure and Properties of Regenerated Cellulose Filaments via Wet-Spinning in LiOH/Urea Solvent. ACS Sustainable Chemistry and Engineering, 2018, 6, 4056-4067.	6.7	47
7	Construction of stable hydrogen bonds at high temperature for preparation of polyimide films with ultralow coefficient of thermal expansion and high Tg. Polymer, 2020, 188, 122100.	3.8	44
8	Highly improved Uv resistance and composite interfacial properties of aramid fiber via iron (III) coordination. Applied Surface Science, 2018, 434, 473-480.	6.1	42
9	The introduction of asymmetric heterocyclic units into poly(p-phenylene terephthalamide) and its effect on microstructure, interactions and properties. Journal of Materials Science, 2018, 53, 13291-13303.	3.7	41
10	Biocompatible In Situ Polymerization of Multipurpose Polyacrylamide-Based Hydrogels on Skin via Silver Ion Catalyzation. ACS Applied Materials & Interfaces, 2020, 12, 31079-31089.	8.0	36
11	Flexible pressure sensors with high pressure sensitivity and low detection limit using a unique honeycomb-designed polyimide/reduced graphene oxide composite aerogel. RSC Advances, 2021, 11, 11760-11770.	3.6	35
12	The wear-resistance of composite depending on the interfacial interaction between thermoplastic polyurethane and fluorinated UHMWPE particles with or without oxygen. Composites Science and Technology, 2015, 106, 68-75.	7.8	34
13	Direct fluorination of para-aramid fibers 1: Fluorination reaction process of PPTA fiber. Journal of Fluorine Chemistry, 2016, 186, 12-18.	1.7	34
14	Characterization of Alignment Correlation between LC Molecules and Chemical Groups on/in the Surface of Polyimide Films with Biphenyl Side Chains. Macromolecules, 2011, 44, 9731-9737.	4.8	32
15	Preparation and characterization of novel polyimide films containing amide groups. Journal of Polymer Research, 2012, 19, 1.	2.4	31
16	Fabrication of durable superhydrophobic surfaces of polyester fabrics via fluorination-induced grafting copolymerization. Applied Surface Science, 2020, 515, 146006.	6.1	31
17	Control of Head/Tail Isomeric Structure in Polyimide and Isomerismâ€Derived Difference in Molecular Packing and Properties. Macromolecular Rapid Communications, 2017, 38, 1700404.	3.9	30
18	The novel high performance aramid fibers containing benzimidazole moieties and chloride substitutions. Materials and Design, 2018, 158, 127-135.	7.0	30

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19	Fast and efficient oil-water separation under harsh conditions of the flexible polyimide aerogel containing benzimidazole structure. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2019, 581, 123809.	4.7	30
20	Constructing mainstay-body structure in heterocyclic aramid fiber to simultaneously improve tensile strength and toughness. Composites Part B: Engineering, 2020, 202, 108411.	12.0	28
21	Enhancement of properties of polyimide/silica hybrid nanocomposites by benzimidazole formed hydrogen bond. Polymers for Advanced Technologies, 2012, 23, 1362-1368.	3.2	27
22	Facile preparation of highly hydrophilic, recyclable high-performance polyimide adsorbents for the removal of heavy metal ions. Journal of Hazardous Materials, 2016, 306, 210-219.	12.4	26
23	A facile strategy for fabricating aramid fiber with simultaneously high compressive strength and high interfacial shear strength through cross-linking promoted by oxygen. Composites Part A: Applied Science and Manufacturing, 2018, 113, 233-241.	7.6	26
24	Grafting degradable coordination polymer on aramid fiber surface to improve its interfacial properties. Materials Letters, 2018, 233, 102-106.	2.6	25
25	The dominant factor for mechanical property of polyimide films containing heterocyclic moieties: Inâ€plane orientation, crystallization, or hydrogen bonding. Journal of Applied Polymer Science, 2016, 133, .	2.6	24
26	Pre-drawing induced evolution of phase, microstructure and property in para-aramid fibres containing benzimidazole moiety. RSC Advances, 2016, 6, 62695-62704.	3.6	24
27	Construction of polyimide films with excellent dimensional stability and toughness via incorporating point-to-face multi-coordination structure. Composites Part B: Engineering, 2021, 208, 108566.	12.0	23
28	Constructing a weaving structure for aramid fiber by carbon nanotube-based network to simultaneously improve composites interfacial properties and compressive properties. Composites Science and Technology, 2019, 182, 107721.	7.8	22
29	Electrospun Separator Based on Sulfonated Polyoxadiazole with Outstanding Thermal Stability and Electrochemical Properties for Lithium-Ion Batteries. ACS Applied Energy Materials, 2021, 4, 879-887.	5.1	21
30	Structural evolution of fluorinated aramid fibers with fluorination degree and dominant factor for its adhesion property. Journal of Fluorine Chemistry, 2016, 188, 139-146.	1.7	20
31	Green and Economical Strategy for Spinning Robust Cellulose Filaments. ACS Sustainable Chemistry and Engineering, 2020, 8, 14927-14937.	6.7	20
32	Improving dimensional stability at high temperature and toughness of polyimide films via adjustable entanglement density. Polymer, 2021, 218, 123488.	3.8	20
33	The Effect of Asymmetric Heterocyclic Units on the Microstructure and the Improvement of Mechanical Properties of Three Rigidâ€Rod coâ€PI Fibers. Macromolecular Materials and Engineering, 2016, 301, 853-863.	3.6	19
34	Self-enhancement in aramid fiber by filling free hydrogen bonding interaction sites in macromolecular chains with its oligomer. Polymer, 2019, 180, 121687.	3.8	19
35	Nondestructive modification of aramid fiber based on selective reaction of external cross-linker to improve interfacial shear strength and compressive strength. Composites Part A: Applied Science and Manufacturing, 2019, 119, 217-224.	7.6	19
36	Dependence of pretilt angle on orientation and conformation of side chain with different chemical structure in polyimide film surface. RSC Advances, 2012, 2, 9463.	3.6	15

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37	Highâ€performance copoly(benzimidazoleâ€benzoxazoleâ€imide) fibers: Fabrication, structure, and properties. Journal of Applied Polymer Science, 2015, 132, .	2.6	15
38	Synthesis of Heterocyclic Aramid Fiber Based on Solidâ€Phase Crossâ€Linking of Oligomers with Reactive End Group. Macromolecular Materials and Engineering, 2018, 303, 1800076.	3.6	15
39	In-situ generation of hydrated nanoparticles on commercial stainless steel mesh for durable superhydrophilicity and self-cleaning. Materials and Design, 2018, 157, 284-293.	7.0	15
40	Regulating Cu(II)-benzimidazole coordination structure in rigid-rod aramid fiber and its composites enhancement effects. Composites Science and Technology, 2019, 184, 107837.	7.8	14
41	Post-construction of weaving structure in aramid fiber towards improvements of its transverse properties. Composites Science and Technology, 2021, 208, 108780.	7.8	14
42	Enhancing mechanical properties of aromatic polyamide fibers containing benzimidazole units via temporarily suppressing hydrogen bonding and crystallization. Journal of Applied Polymer Science, 2015, 132, .	2.6	13
43	The evolution of structure and properties for copolyamide fibersâ€“containing benzimidazole units during the decomplexation of hydrogen chloride. High Performance Polymers, 2016, 28, 381-389.	1.8	13
44	Preparation of novel aramid film with ultra-high breakdown strength via constructing three-dimensional covalent crosslinked structure. Chemical Engineering Journal, 2019, 375, 122042.	12.7	13
45	Releasing silica-confined macromolecular crystallization to enhance mechanical properties of polyimide/silica hybrid fibers. Composites Science and Technology, 2014, 101, 24-31.	7.8	12
46	Benzimidazole-containing aramid nanofiber for naked-eye detection of heavy metal ions. Analyst, The, 2018, 143, 5225-5233.	3.5	12
47	Preparation of High Strength and Toughness Aramid Fiber by Introducing Flexible Asymmetric Monomer to Construct Misplacedâ€Nunchaku Structure. Macromolecular Materials and Engineering, 2021, 306, 2000814.	3.6	12
48	Fe3+ coordination induced selective fluorination of aramid fiber to suppress surface chain scission behavior and improve surface polarity. Applied Surface Science, 2018, 456, 221-229.	6.1	11
49	Fluorination-generated uninterrupted gradient-refractive index on commercial flexible substrates for high broadband and omnidirectional transmittance. Applied Surface Science, 2019, 489, 494-503.	6.1	11
50	Fabrication of high-temperature aromatic polyamides with ultra-high breakdown strength via complex-assisted chain arrangement. Chemical Engineering Journal, 2022, 432, 134407.	12.7	8
51	Free Hâ€Bonding Interaction Sites in Rigidâ€Chain Polymers and Their Filling Approach: A Molecular Dynamics Simulation Study. Advanced Theory and Simulations, 2021, 4, 2100016.	2.8	7
52	Ultrahigh strength and modulus copolyamide films with uniaxially cold-drawing induced molecular orientation. High Performance Polymers, 2017, 29, 58-67.	1.8	6
53	Increasing pretilt angle by grafting hexafluorobutyl acrylate into the surface of polyimide alignment films via electron beam irradiation. Liquid Crystals, 2013, 40, 435-440.	2.2	5
54	Improving Compressive Strength of Aramid Fiber by Introducing Carbon Nanotube Derivates Grafted with Oligomers of Different Conformations and Controlling Its Alignment. Macromolecular Materials and Engineering, 2019, 304, 1900127.	3.6	5

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55	Improving Interfacial and Compressive Properties of Aramid by Synchronously Grafting and Crosslinking. Macromolecular Materials and Engineering, 2019, 304, 1900044.	3.6	5
56	Toughening and enhancing thermostability of vitrimer rubber via adding heterocyclic aramid. Composites Communications, 2021, 28, 100934.	6.3	5
57	Synthesis of tautomerization-inhibited diamino substituted tetraphenylethene derivatives with different mechanochromisms: the vital role of chlorine. Materials Chemistry Frontiers, 2021, 5, 2387-2398.	5.9	5
58	Releasing and Freezing Phase Separation of Polyvinyl Alcohol/Silica To Control Polymorphs of Silica. Crystal Growth and Design, 2015, 15, 2072-2078.	3.0	4
59	Synergistic â€œAnchorâ€•Effect of Carbon Nanotubes and Silica: A Facile and Efficient Double-Nanocomposite System To Reinforce High-Performance Polyimide Fibers. Industrial & Engineering Chemistry Research, 2019, 58, 16620-16628.	3.7	4
60	Dissolution of Aramid by Ionization of Byproduct HCl Promoted by Acetate. ChemistrySelect, 2019, 4, 123-129.	1.5	4
61	Câ€”N Coupling Reactions on Graphene with Aromatic Macromolecules and the Spatial Conformation of Grafted Macromolecules. Chemistry - A European Journal, 2020, 26, 1819-1826.	3.3	4
62	Crystallization of inorganic silica based on interaction between polyimide and silica by solâ€“gel method. Journal of Sol-Gel Science and Technology, 2013, 66, 193-198.	2.4	3
63	Synthesis of A Novel Crossâ€linker with High Reactivity for Enhancing Compressive Strength of Highâ€performance Organic Fibers. ChemistrySelect, 2019, 4, 3980-3983.	1.5	2
64	The adsorption of aromatic macromolecules on graphene with entropy-tailored behavior and its utilization in exfoliating graphite. Journal of Colloid and Interface Science, 2021, 599, 12-22.	9.4	2
65	The effect of Trimethylchlorosilane as a reactive additive on solution behavior of polyamide acid and properties of corresponding polyimide. Journal of Polymer Research, 2014, 21, 1.	2.4	0
66	Structural Evolution and Mechinical Properties of Copolyamide Fibers during Thermal Annealing. Materials Science Forum, 2015, 815, 515-522.	0.3	0
67	Allâ€organic filler with fractal structure for reinforcement and toughening of aromatic polyamide film. Macromolecular Materials and Engineering, 0, , 2200031.	3.6	0