Chengguo Wang

List of Publications by Year
in descending order

#	Article	IF	Citations
1	Structural Evolution of Polyacrylonitrile Precursor Fibers during Preoxidation and Carbonization. Polymer Bulletin, 2007, 59, 527-536.	1.7	113
2	Influence of Precursor Properties on the Thermal Stabilization of Polyacrylonitrile Fibers. Polymer Bulletin, 2006, 57, 757-763.	1.7	53
3	Combined Effect of Processing Parameters on Thermal Stabilization of PAN Fibers. Polymer Bulletin, 2006, 57, 525-533.	1.7	48
4	Evolution of tension during the thermal stabilization of polyacrylonitrile fibers under different parameters. Journal of Applied Polymer Science, 2006, 102, 5500-5506.	1.3	31
5	Synthesis and growth mechanism of carbon nanotubes growing on carbon fiber surfaces with improved tensile strength. Nanotechnology, 2018, 29, 395602.	1.3	28
6	High-molecular-weight polyacrylonitrile by atom transfer radical polymerization. Journal of Applied Polymer Science, 2006, 100, 3372-3376.	1.3	27
7	Fibrils separated from polyacrylonitrile fiber by ultrasonic etching in dimethylsulphoxide solution. Journal of Polymer Science, Part B: Polymer Physics, 2010, 48, 617-619.	2.4	26
8	Synthesis of polyacrylonitrile via reverse atom transfer radical polymerization catalyzed by FeCl3/isophthalic acid. Journal of Polymer Science Part A, 2006, 44, 219-225.	2.5	23
9	Continuous method for grafting CNTs on the surface of carbon fibers based on cobalt catalyst assisted by thiourea. Journal of Materials Science, 2019, 54, 12498-12508.	1.7	23
10	Microstructural evolution in polyacrylonitrile fibers during oxidative stabilization. Journal of Polymer Science, Part B: Polymer Physics, 2008, 46, 759-765.	2.4	22
11	Morphology-controlled ZnO particles from an ionic liquid precursor. CrystEngComm, 2009, 11, 2683.	1.3	21
12	Aqueous deposited copolymerization of acrylonitrile and itaconic acid. Journal of Applied Polymer Science, 2009, 111, 3163-3169.	1.3	20
13	Effect of coagulation temperature on the properties of poly(acrylonitrile- itaconic acid) fibers in wet spinning. Journal of Polymer Research, 2007, 14, 223-228.	1.2	19
14	Heredity and difference of multipleâ€scale microstructures in PANâ€based carbon fibers and their precursor fibers. Journal of Applied Polymer Science, 2012, 125, 3159-3166.	1.3	19
15	Electrochemical Insights, Developing Strategies, and Perspectives toward Advanced Potassiumâ€"Sulfur Batteries. Small, 2020, 16, e2003386.	5.2	19
16	Reverse atom-transfer radical polymerization of acrylonitrile catalyzed by FeCl3/iminodiacetic acid. Polymer International, 2006, 55, 171-175.	1.6	17
17	Preparation of High-Quality Polyacrylonitrile Precursors for Carbon Fibers Through a High Drawing Ratio in the Coagulation Bath During a Dry-Jet Wet Spinning Process. Journal of Macromolecular Science - Physics, 2019, 58, 128-140.	0.4	17
18	Correlation between fibril structures and mechanical properties of polyacrylonitrile fibers during the dryâ€jet wet spinning process. Journal of Applied Polymer Science, 2019, 136, 47336.	1.3	17

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19	Microstructure of fibrils separated from polyacrylonitrile fibers by ultrasonic etching. Science China Technological Sciences, 2010, 53, 1489-1494.	2.0	16
20	Reverse atom transfer radical polymerization of acrylonitrile. Journal of Applied Polymer Science, 2006, 99, 32-36.	1.3	15
21	Atom transfer radical polymerization of acrylonitrile. Journal of Applied Polymer Science, 2006, 99, 1050-1054.	1.3	15
22	Tensile properties of CNTs-grown carbon fiber fabrics prepared using Feâ€“Co bimetallic catalysts at low temperature. Journal of Materials Science, 2019, 54, 11841-11847.	1.7	15
23	Influencing factors and growth kinetics analysis of carbon nanotube growth on the surface of continuous fibers. Nanotechnology, 2021, 32, 285702.	1.3	14
24	Synthesis of polyacrylonitrile via reverse atom transfer radial polymerization (ATRP) initiated by diethyl 2,3-dicyano-2,3-diphenylsuccinate, FeCl3, and triphenylphosphine. Polymer International, 2006, 55, 326-329.	1.6	13
25	Study on monomer reactivity ratios of acrylonitrile/itaconic acid in aqueous deposited copolymerization system initiated by ammonium persulfate. Journal of Polymer Research, 2009, 16, 437-442.	1.2	13
26	Determination of monomer apparent reactivity ratios for acrylonitrile-acrylamide copolymerization system. Journal of Materials Science, 2005, 40, 609-612.	1.7	12
27	Effect of Microstructures of Carbon Nanoproducts Grown on Carbon Fibers on the Interfacial Properties of Epoxy Composites. Langmuir, 2022, 38, 2392-2400.	1.6	12
28	Mesopores variation in polyacrylonitrile fibers during dry-jet wet spinning process. Iranian Polymer Journal (English Edition), 2019, 28, 259-269.	1.3	10
29	Force field in coagulation bath at low temperature induced microfibril evolution within PAN nascent fiber and precursor fiber. Journal of Applied Polymer Science, 2020, 137, 49380.	1.3	10
30	Feasible Catalytic-Insoluble Strategy Enabled by Sulfurized Polyacrylonitrile with <i>In Situ</i> Built Electrocatalysts for Ultrastable Lithiumâ€“Sulfur Batteries. ACS Applied Materials & Interfaces, 2021, 13, 50936-50947.	4.0	10
31	Degradation of acrylonitrile-ammonium itaconate copolymers. Journal of Applied Polymer Science, 2005, 98, 1708-1711.	1.3	9
32	Growth of carbon nanotubes on carbon fiber at relatively low temperature for improved interfacial adhesion with epoxy. Journal of Materials Science, 2022, 57, 4594-4604.	1.7	9
33	Thermal properties of acrylonitrile/itaconic acid polymers in oxidative and nonoxidative atmospheres. Journal of Applied Polymer Science, 2010, 116, 1207-1212.	1.3	8
34	A new structure-related model to predict the permeability of non-crimp fabric preform. Journal of Composite Materials, 2013, 47, 3053-3063.	1.2	8
35	From Microfibrillar Network to Lamellae during the Coagulation Process of Polyacrylonitrile Fiber: Visualization of Intermediate Structure Evolution. Macromolecules, 2020, 53, 8663-8673.	2.2	8
36	Monomer apparent reactivity ratios for acrylonitrile/methyl vinyl ketone copolymerization system. Journal of Applied Polymer Science, 2006, 102, 4045-4048.	1.3	7

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37	Comparison of tensile fracture morphologies among various polyacrylonitrile-based carbon fibers. Polymer Bulletin, 2007, 59, 381-390.	1.7	7
38	The degradation and prestabilization of acrylonitrile copolymers. Journal of Applied Polymer Science, 2010, 117, 1596-1600.	1.3	7
39	Fibrillar structure development of polyacrylonitrile fibers treated by ultrasonic etching in oxidative stabilization. Polymers for Advanced Technologies, 2017, 28, 1038-1043.	1.6	7
40	Hierarchically Porous Carbon/Î±â€Fe@Fe₃C Absorbers Derived from Luffa Sponge with Efficient Microwave Absorption. ChemistrySelect, 2020, 5, 15075-15083.	0.7	7
41	Acrylonitrile/ammonium itaconate aqueous deposited copolymerization. Journal of Applied Polymer Science, 2006, 102, 904-908.	1.3	6
42	Structure and property relations between the polyacrylonitrileâ€based prestabilized fibers and the partially carbonized fibers. Journal of Applied Polymer Science, 2012, 124, 5172-5179.	1.3	6
43	Thermal Curing Induced Deformation of Fiber Composite Laminates. Polymers and Polymer Composites, 2012, 20, 171-176.	1.0	6
44	Communicationâ€"A Technique for Online Continuous Manufacture of Carbon Nanotubes-Grown Carbon Fibers. ECS Journal of Solid State Science and Technology, 2019, 8, M23-M25.	0.9	6
45	Interaction between polyacrylonitrile and alkalis. Journal of Applied Polymer Science, 2006, 102, 272-275.	1.3	5
46	Densification treatment and properties of carbon fiber reinforced contact strip. Science and Engineering of Composite Materials, 2014, 21, 49-58.	0.6	5
47	Synthesis and electromagnetic properties of nanodendritic Î³â€²-Fe₄N. Functional Materials Letters, 2016, 09, 1650021.	0.7	5
48	Fibril microstructural changes of polyacrylonitrile fibers during the post-spinning process. Colloid and Polymer Science, 2018, 296, 1307-1311.	1.0	5
49	Visualization of microfibrillar elements in crossâ€section of polyacrylonitrile fiber along the fiber spinning line. Microscopy Research and Technique, 2019, 82, 2026-2034.	1.2	5
50	Determination of the degradation apparent activation energy of acrylonitrile/acrylic acid copolymers. Journal of Applied Polymer Science, 2006, 100, 4668-4671.	1.3	4
51	Synthesis and properties of acrylonitrile-methyl itaconate copolymers as spun carbon fiber precursors. Fibers and Polymers, 2014, 15, 1583-1588.	1.1	4
52	The morphology and crystalline region distribution of polyacrylonitrile nanofibers prepared by electrospinning. Polymer Science - Series A, 2016, 58, 357-367.	0.4	4
53	Effects of grafting low-generation poly(amido amine) onto carbon fiber surface by in situ polymerization on the mechanical properties of fiber composites. High Performance Polymers, 2017, 29, 808-815.	0.8	4
54	Research on PAN Nascent Fiber Interior Microstructure through Ultrasonic Etching and Ultrathin Sectioning. Polymer Science - Series A, 2018, 60, 594-598.	0.4	4

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55	Copolymerization of acrylonitrile with methyl vinyl ketone. Journal of Applied Polymer Science, 2006, 99, 1940-1944.	1.3	3
56	Research on the multi-scale microstructure of polyacrylonitrile precursors prepared by a dry-jet wet spinning process. High Performance Polymers, 2019, 31, 662-670.	0.8	3
57	Effect of Comonomers on Finishing Behavior of Carbon Fiber Precursors. Journal of Polymer Research, 2005, 12, 313-316.	1.2	2
58	Viscometric Study of Dilute Poly(Acrylonitrileâ€"Ammonium Itaconate) Solutions. Journal of Polymer Research, 2006, 13, 293-296.	1.2	2
59	Study on the relationships of mechanical performance with the short-range and long-range structure of 500â€"900â„ƒ carbonized fiber. Journal of Industrial Textiles, 2015, 45, 33-47.	1.1	2
60	Evaluation of the Fluidized Preoxidation for Producing High Behavior PAN Based Carbon Fiber. Polymer Bulletin, 2007, 59, 555-566.	1.7	1
61	Practical Application Study of Hybrid Fibers Reinforced Organic Brake Pad for Railroad Passenger-Coach Braking. Journal of Macromolecular Science - Pure and Applied Chemistry, 2011, 48, 531-537.	1.2	1
62	Effect of drying method on the microstructures and mechanical strength of polyacrylonitrile nascent fibers. Drying Technology, 2022, 40, 1329-1337.	1.7	1
63	Controlled chemical oxidative polymerization of conductive polyaniline with excellent pseudocapacitive properties. Journal of Materials Science: Materials in Electronics, 2021, 32, 6965-6975.	1.1	0