

Guoliang Liu

List of Publications by Year in descending order

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104
papers

8,767
citations

57758

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42399

92
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108
all docs

108
docs citations

108
times ranked

11803
citing authors

#	ARTICLE	IF	CITATIONS
1	Porous Carbon Nanofiber-Modified Carbon Fiber Microelectrodes for Dopamine Detection. ACS Applied Nano Materials, 2022, 5, 2241-2249.	5.0	16
2	Block Copolymer-Derived Porous Carbon Fibers Enable High MnO ₂ Loading and Fast Charging in Aqueous Zinc-Ion Battery. Batteries and Supercaps, 2022, 5, .	4.7	9
3	Physics and chemistry-based constitutive modeling of photo-oxidative aging in semi-crystalline polymers. International Journal of Solids and Structures, 2022, 239-240, 111427.	2.7	6
4	Can the Voigt Model be Directly Used for Determining the Modulus of Graphene in Laminate Thin Films?. ACS Applied Polymer Materials, 2022, 4, 394-402.	4.4	2
5	Utilization of Block Copolymers to Understand Water Vaporization Enthalpy Reduction in Uniform Pores. Macromolecules, 2022, 55, 4803-4811.	4.8	5
6	Humidity-Controlled Preparation of Flexible Porous Carbon Fibers from Block Copolymers. ACS Applied Polymer Materials, 2022, 4, 4980-4992.	4.4	6
7	Covalent and Noncovalent Loading of Doxorubicin by Folic Acid-Carbon Dot Nanoparticles for Cancer Theranostics. ACS Omega, 2022, 7, 23322-23331.	3.5	10
8	Mutually Reinforced Polymer-Graphene Bilayer Membranes for Energy-Efficient Acoustic Transduction. Advanced Materials, 2021, 33, e2004053.	21.0	9
9	Solvent-Resistant Self-Crosslinked Poly(ether imide). Macromolecules, 2021, 54, 3405-3412.	4.8	16
10	Recent development of polyimides: Synthesis, processing, and application in gas separation. Journal of Polymer Science, 2021, 59, 943-962.	3.8	43
11	Poly(ether imide)s with tailored end groups. Journal of Polymer Science, 2021, 59, 2365.	3.8	2
12	Mesoporous polyetherimide thin films <i>via</i> hydrolysis of poly(lactide- <i>b</i> -polyetherimide- <i>b</i> -poly(lactide)). Polymer Chemistry, 2021, 12, 3939-3946.	3.9	2
13	Controlling the physical and electrochemical properties of block copolymer-based porous carbon fibers by pyrolysis temperature. Molecular Systems Design and Engineering, 2020, 5, 153-165.	3.4	34
14	Impact of metal cations on the thermal, mechanical, and rheological properties of telechelic sulfonated polyetherimides. Polymer Chemistry, 2020, 11, 393-400.	3.9	10
15	Facile Preparation of Halogen-Free Poly(ether imide) Containing Phosphonium and Sulfonate Groups. ACS Applied Polymer Materials, 2020, 2, 66-73.	4.4	4
16	Porous organic materials offer vast future opportunities. Nature Communications, 2020, 11, 4984.	12.8	39
17	Molecular-Level Control over Plasmonic Properties in Silver Nanoparticle/Self-Assembling Peptide Hybrids. Journal of the American Chemical Society, 2020, 142, 9158-9162.	13.7	26
18	A Review on Nano-/Microstructured Materials Constructed by Electrochemical Technologies for Supercapacitors. Nano-Micro Letters, 2020, 12, 118.	27.0	146

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19	Capacitive Organic Dye Removal by Block Copolymer Based Porous Carbon Fibers. <i>Advanced Materials Interfaces</i> , 2020, 7, 2000507.	3.7	11
20	Addressing the Achilles' heel of pseudocapacitive materials: Long-term stability. <i>Informa-Materially</i> , 2020, 2, 807-842.	17.3	135
21	Overlooking Issues and Prospective Resolutions Behind the Prosperity of Three-Dimensional Porous Carbon Supercapacitor Electrodes. <i>Frontiers in Energy Research</i> , 2020, 8, .	2.3	3
22	Thermally Stable and Mechanically Strong Mesoporous Films of Poly(ether imide)-Based Triblock Copolymers. <i>ACS Applied Polymer Materials</i> , 2020, 2, 1398-1405.	4.4	11
23	Exceptional capacitive deionization rate and capacity by block copolymer-based porous carbon fibers. <i>Science Advances</i> , 2020, 6, eaaz0906.	10.3	108
24	Cobalt-Containing Nanoporous Nitrogen-Doped Carbon Nanocuboids from Zeolite Imidazole Frameworks for Supercapacitors. <i>Nanomaterials</i> , 2019, 9, 1110.	4.1	21
25	Block copolymer-based porous carbons for supercapacitors. <i>Journal of Materials Chemistry A</i> , 2019, 7, 23476-23488.	10.3	74
26	Zippering Up NiFe(OH)-Encapsulated Hematite To Achieve an Ultralow Turn-On Potential for Water Oxidation. <i>ACS Energy Letters</i> , 2019, 4, 1983-1990.	17.4	82
27	Composition Design of Block Copolymers for Porous Carbon Fibers. <i>Chemistry of Materials</i> , 2019, 31, 8898-8907.	6.7	31
28	Sub-10 nm domains in high-performance polyetherimides. <i>Polymer Chemistry</i> , 2019, 10, 379-385.	3.9	15
29	Mechanically Strong, Thermally Stable, and Flame Retardant Poly(ether imide) Terminated with Phosphonium Bromide. <i>Macromolecules</i> , 2019, 52, 7361-7368.	4.8	14
30	Block copolymer-based porous carbon fibers. <i>Science Advances</i> , 2019, 5, eaau6852.	10.3	201
31	Nanostructure stability and swelling of ternary block copolymer/homopolymer blends: A direct comparison between dissipative particle dynamics and experiment. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 2019, 57, 794-803.	2.1	12
32	Spectral-Selective Plasmonic Polymer Nanocomposites Across the Visible and Near-Infrared. <i>ACS Nano</i> , 2019, 13, 4255-4266.	14.6	12
33	Pore and Heteroatom Engineered Carbon Foams for Supercapacitors. <i>Advanced Energy Materials</i> , 2019, 9, 1803665.	19.5	321
34	The potassium hydroxide-urea synergy in improving the capacitive energy-storage performance of agar-derived carbon aerogels. <i>Carbon</i> , 2019, 147, 451-459.	10.3	46
35	Critical Role of Polystyrene Layer on Plasmonic Silver Nanoplates in Organic Photovoltaics. <i>ACS Applied Energy Materials</i> , 2019, 2, 2475-2485.	5.1	4
36	A silver wire aerogel promotes hydrogen peroxide reduction for fuel cells and electrochemical sensors. <i>Journal of Materials Chemistry A</i> , 2019, 7, 11497-11505.	10.3	32

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37	Block copolymers for supercapacitors, dielectric capacitors and batteries. <i>Journal of Physics Condensed Matter</i> , 2019, 31, 233001.	1.8	27
38	Block copolymer derived uniform mesopores enable ultrafast electron and ion transport at high mass loadings. <i>Nature Communications</i> , 2019, 10, 675.	12.8	213
39	Aligned continuous cylindrical pores derived from electrospun polymer fibers in titanium diboride. <i>International Journal of Applied Ceramic Technology</i> , 2019, 16, 802-813.	2.1	9
40	Generating Electricity on Chips: Microfluidic Biofuel Cells in Perspective. <i>Industrial & Engineering Chemistry Research</i> , 2018, 57, 2746-2758.	3.7	22
41	Stereoselective photoredox ring-opening polymerization of O-carboxyanhydrides. <i>Nature Communications</i> , 2018, 9, 1559.	12.8	51
42	The Effect of End Group and Molecular Weight on the Yellowness of Polyetherimide. <i>Macromolecular Rapid Communications</i> , 2018, 39, e1800045.	3.9	11
43	Nitrogen-doped carbon "spider webs" derived from pyrolysis of polyaniline nanofibers in ammonia for capacitive energy storage. <i>Journal of Materials Research</i> , 2018, 33, 1109-1119.	2.6	16
44	Preferred domain orientation in block copolymer fibers after solvent annealing. <i>Molecular Systems Design and Engineering</i> , 2018, 3, 357-363.	3.4	8
45	Reduced graphene oxide modified activated carbon for improving power generation of air-cathode microbial fuel cells. <i>Journal of Materials Research</i> , 2018, 33, 1279-1287.	2.6	8
46	Melt-processable telechelic poly(ether imide)s end-capped with zinc sulfonate salts. <i>Polymer Chemistry</i> , 2018, 9, 5660-5670.	3.9	8
47	Janus Plasmonic Silver Nanoplatelets for Interface Stabilization. <i>ACS Applied Nano Materials</i> , 2018, 1, 5377-5381.	5.0	9
48	Boosting the Power-Generation Performance of Micro-Sized Al-H ₂ O ₂ Fuel Cells by Using Silver Nanowires as the Cathode. <i>Energies</i> , 2018, 11, 2316.	3.1	6
49	Direct ink writing of organic and carbon aerogels. <i>Materials Horizons</i> , 2018, 5, 1166-1175.	12.2	78
50	Tuning the Electrochemical Properties of Nitrogen-Doped Carbon Aerogels in a Blend of Ammonia and Nitrogen Gases. <i>ACS Applied Energy Materials</i> , 2018, 1, 5043-5053.	5.1	21
51	Engineering of Mesoscale Pores in Balancing Mass Loading and Rate Capability of Hematite Films for Electrochemical Capacitors. <i>Advanced Energy Materials</i> , 2018, 8, 1801784.	19.5	97
52	Controlling the Pore Size of Mesoporous Carbon Thin Films through Thermal and Solvent Annealing. <i>Small</i> , 2017, 13, 1603107.	10.0	43
53	Low-Molecular-Weight, High-Mechanical-Strength, and Solution-Processable Telechelic Poly(ether) Tj ETQq1 1 0.784314 rgBT /Overlook	4.8	45
54	Multiscale Pore Network Boosts Capacitance of Carbon Electrodes for Ultrafast Charging. <i>Nano Letters</i> , 2017, 17, 3097-3104.	9.1	251

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55	Two-Dimensional Plasmonic Nanoparticle as a Nanoscale Sensor to Probe Polymer Brush Formation. <i>Analytical Chemistry</i> , 2017, 89, 7541-7548.	6.5	13
56	Progress in Developing Metal Oxide Nanomaterials for Photoelectrochemical Water Splitting. <i>Advanced Energy Materials</i> , 2017, 7, 1700555.	19.5	455
57	Improved block copolymer domain dispersity on chemical patterns via homopolymer-blending and molecular transfer printing. <i>Polymer</i> , 2017, 116, 99-104.	3.8	5
58	Morphology and Doping Engineering of Sn-Doped Hematite Nanowire Photoanodes. <i>Nano Letters</i> , 2017, 17, 2490-2495.	9.1	204
59	Drug-Loaded Polymeric Spherical Nucleic Acids: Enhancing Colloidal Stability and Cellular Uptake of Polymeric Nanoparticles through DNA Surface-Functionalization. <i>Biomacromolecules</i> , 2017, 18, 483-489.	5.4	47
60	Poly(vinylpyrrolidone)-Free Multistep Synthesis of Silver Nanoplates with Plasmon Resonance in the Near Infrared Range. <i>Small</i> , 2017, 13, 1701715.	10.0	23
61	Recent advances in chemical methods for activating carbon and metal oxide based electrodes for supercapacitors. <i>Journal of Materials Chemistry A</i> , 2017, 5, 17151-17173.	10.3	135
62	Revitalizing carbon supercapacitor electrodes with hierarchical porous structures. <i>Journal of Materials Chemistry A</i> , 2017, 5, 17705-17733.	10.3	464
63	3D Printed Functionally Graded Plasmonic Constructs. <i>Advanced Optical Materials</i> , 2017, 5, 1700367.	7.3	37
64	Ostwald Ripening Improves Rate Capability of High Mass Loading Manganese Oxide for Supercapacitors. <i>ACS Energy Letters</i> , 2017, 2, 1752-1759.	17.4	146
65	3D printed functional nanomaterials for electrochemical energy storage. <i>Nano Today</i> , 2017, 15, 107-120.	11.9	302
66	Hierarchically porous carbon foams for electric double layer capacitors. <i>Nano Research</i> , 2016, 9, 2875-2888.	10.4	120
67	A three-dimensional nitrogen-doped graphene aerogel-activated carbon composite catalyst that enables low-cost microfluidic microbial fuel cells with superior performance. <i>Journal of Materials Chemistry A</i> , 2016, 4, 15913-15919.	10.3	68
68	Key Parameter Controlling the Sensitivity of Plasmonic Metal Nanoparticles: Aspect Ratio. <i>Journal of Physical Chemistry C</i> , 2016, 120, 19353-19364.	3.1	56
69	Plasmonic solar desalination. <i>Nature Photonics</i> , 2016, 10, 361-362.	31.4	35
70	Supercapacitors Based on Three-Dimensional Hierarchical Graphene Aerogels with Periodic Macropores. <i>Nano Letters</i> , 2016, 16, 3448-3456.	9.1	608
71	Using Scanning-Probe Block Copolymer Lithography and Electron Microscopy To Track Shape Evolution in Multimetallic Nanoclusters. <i>ACS Nano</i> , 2015, 9, 12137-12145.	14.6	21
72	Tip-Directed Synthesis of Multimetallic Nanoparticles. <i>Journal of the American Chemical Society</i> , 2015, 137, 9167-9173.	13.7	136

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73	An Electrochemical Capacitor with Applicable Energy Density of 7.4 Wh/kg at Average Power Density of 3000 W/kg. <i>Nano Letters</i> , 2015, 15, 3189-3194.	9.1	118
74	Photohole Induced Corrosion of Titanium Dioxide: Mechanism and Solutions. <i>Nano Letters</i> , 2015, 15, 7051-7057.	9.1	57
75	Assembly of Supramolecular Nanotubes from Molecular Triangles and 1,2-Dihalohydrocarbons. <i>Journal of the American Chemical Society</i> , 2014, 136, 16651-16660.	13.7	81
76	A New Benchmark Capacitance for Supercapacitor Anodes by Mixed-valence Sulfur-doped VO ₆ O ₁₃ . <i>Advanced Materials</i> , 2014, 26, 5869-5875.	21.0	305
77	Polyaniline and Polypyrrole Pseudocapacitor Electrodes with Excellent Cycling Stability. <i>Nano Letters</i> , 2014, 14, 2522-2527.	9.1	688
78	Improving the Cycling Stability of Metal-Nitride Supercapacitor Electrodes with a Thin Carbon Shell. <i>Advanced Energy Materials</i> , 2014, 4, 1300994.	19.5	217
79	Desktop nanofabrication with massively multiplexed beam pen lithography. <i>Nature Communications</i> , 2013, 4, 2103.	12.8	86
80	Anisotropic Nanoparticles as Shape-Directing Catalysts for the Chemical Etching of Silicon. <i>Journal of the American Chemical Society</i> , 2013, 135, 12196-12199.	13.7	44
81	The role of viscosity on polymer ink transport in dip-pen nanolithography. <i>Chemical Science</i> , 2013, 4, 2093.	7.4	44
82	A cantilever-free approach to dot-matrix nanoprinting. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2013, 110, 12921-12924.	7.1	33
83	Selective isolation of gold facilitated by second-sphere coordination with β -cyclodextrin. <i>Nature Communications</i> , 2013, 4, 1855.	12.8	156
84	A general approach to DNA-programmable atom equivalents. <i>Nature Materials</i> , 2013, 12, 741-746.	27.5	279
85	Layer-by-Layer Assembly of a Metallomesogen by Dip-Pen Nanolithography. <i>ACS Nano</i> , 2013, 7, 2602-2609.	14.6	21
86	Delineating the pathways for the site-directed synthesis of individual nanoparticles on surfaces. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2013, 110, 887-891.	7.1	78
87	Directed Assembly of Non-equilibrium ABA Triblock Copolymer Morphologies on Nanopatterned Substrates. <i>ACS Nano</i> , 2012, 6, 5440-5448.	14.6	50
88	Hollow Spherical Nucleic Acids for Intracellular Gene Regulation Based upon Biocompatible Silica Shells. <i>Nano Letters</i> , 2012, 12, 3867-3871.	9.1	111
89	Morphology of Lamellae-Forming Block Copolymer Films between Two Orthogonal Chemically Nanopatterned Striped Surfaces. <i>Physical Review Letters</i> , 2012, 108, 065502.	7.8	34
90	Symmetric Diblock Copolymers Confined by Two Nanopatterned Surfaces. <i>Macromolecules</i> , 2012, 45, 2588-2596.	4.8	25

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91	Nonbulk Complex Structures in Thin Films of Symmetric Block Copolymers on Chemically Nanopatterned Surfaces. <i>Macromolecules</i> , 2012, 45, 3986-3992.	4.8	40
92	Fabrication of chevron patterns for patterned media with block copolymer directed assembly. <i>Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics</i> , 2011, 29, 06F204.	1.2	14
93	Cross-sectional Imaging of Block Copolymer Thin Films on Chemically Patterned Surfaces. <i>Journal of Photopolymer Science and Technology = [Fotopolyma Konwakai Shi]</i> , 2010, 23, 149-154.	0.3	14
94	Integration of Density Multiplication in the Formation of Device-Oriented Structures by Directed Assembly of Block Copolymer-Homopolymer Blends. <i>Advanced Functional Materials</i> , 2010, 20, 1251-1257.	14.9	99
95	Mechanism and dynamics of block copolymer directed assembly with density multiplication on chemically patterned surfaces. <i>Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics</i> , 2010, 28, C6B13-C6B19.	1.2	10
96	Molecular Transfer Printing Using Block Copolymers. <i>ACS Nano</i> , 2010, 4, 599-609.	14.6	69
97	Interpolation in the Directed Assembly of Block Copolymers on Nanopatterned Substrates: Simulation and Experiments. <i>Macromolecules</i> , 2010, 43, 3446-3454.	4.8	131
98	Modification of a polystyrene brush layer by insertion of poly(methyl methacrylate) molecules. <i>Journal of Vacuum Science & Technology B</i> , 2009, 27, 3038-3042.	1.3	18
99	Dimensional Scaling of Cylinders in Thin Films of Block Copolymer-Homopolymer Ternary Blends. <i>Macromolecules</i> , 2009, 42, 5139-5145.	4.8	49
100	Phase Behavior and Dimensional Scaling of Symmetric Block Copolymer-Homopolymer Ternary Blends in Thin Films. <i>Macromolecules</i> , 2009, 42, 3063-3072.	4.8	63
101	Preparation of Neutral Wetting Brushes for Block Copolymer Films from Homopolymer Blends. <i>Advanced Materials</i> , 2008, 20, 3054-3060.	21.0	74
102	In situ characterization of block copolymer ordering on chemically nanopatterned surfaces by time-resolved small angle x-ray scattering. <i>Journal of Vacuum Science & Technology B</i> , 2008, 26, 2504-2508.	1.3	7
103	Directed Self-Assembly of Block Copolymers for Nanolithography: Fabrication of Isolated Features and Essential Integrated Circuit Geometries. <i>ACS Nano</i> , 2007, 1, 168-175.	14.6	424
104	Enhanced Mechanical Properties of Natural Rubber by Block Copolymer-Based Porous Carbon Fibers. <i>ACS Applied Polymer Materials</i> , 0, , .	4.4	6