

# Gaigai Duan

## List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

86  
papers

9,239  
citations

38  
h-index

88  
g-index

88  
ext. papers

11,098  
ext. citations

8.1  
avg, IF

6.93  
L-index

#	Paper	IF	Citations
86	Fabrication of Functional Polycatechol Nanoparticles.. <i>ACS Macro Letters</i> , <b>2022</b> , 11, 251-256	6.6	10
85	Excellent fluoride removal performance by electrospun LaMn bimetal oxide nanofibers. <i>New Journal of Chemistry</i> , <b>2022</b> , 46, 490-497	3.6	8
84	Size Regulation of Polydopamine Nanoparticles by Boronic Acid and Lewis Base.. <i>Macromolecular Rapid Communications</i> , <b>2022</b> , e2100916	4.8	9
83	An Electrospinning Anisotropic Hydrogel with Remotely-Controlled Photo-Responsive Deformation and Long-Range Navigation for Synergist Actuation. <i>Chemical Engineering Journal</i> , <b>2022</b> , 433, 134258	14.7	7
82	One-step fabrication of eco-friendly superhydrophobic fabrics for high-efficiency oil/water separation and oil spill cleanup.. <i>Nanoscale</i> , <b>2022</b> ,	7.7	18
81	Anisotropic cellulose nanofibril composite sponges for electromagnetic interference shielding with low reflection loss. <i>Carbohydrate Polymers</i> , <b>2022</b> , 276, 118799	10.3	17
80	Recent advances in dynamic covalent bond-based shape memory polymers. <i>E-Polymers</i> , <b>2022</b> , 22, 285-300.	0.7	2
79	Lightweight and anisotropic cellulose nanofibril/rectorite composite sponges for efficient dye adsorption and selective separation.. <i>International Journal of Biological Macromolecules</i> , <b>2022</b> , 207, 130-139	7.9	5
78	A poly(amidoxime)-modified MOF macroporous membrane for high-efficient uranium extraction from seawater. <i>E-Polymers</i> , <b>2022</b> , 22, 399-410	2.7	10
77	A wood-mimetic porous MXene/gelatin hydrogel for electric field/sunlight bi-enhanced uranium adsorption. <i>E-Polymers</i> , <b>2022</b> , 22, 468-477	2.7	3
76	Wood-Derived High-Mass-Loading MnO Composite Carbon Electrode Enabling High Energy Density and High-Rate Supercapacitor.. <i>Small</i> , <b>2022</b> , e2201307	11	2
75	Electrospun magnetic La <sub>2</sub> O <sub>3</sub> /CeO <sub>2</sub> /Fe <sub>3</sub> O <sub>4</sub> composite nanofibers for removal of fluoride from aqueous solution. <i>Composites Communications</i> , <b>2022</b> , 33, 101194	6.7	2
74	Self-Assembly of Poly(Janus particle)s into Unimolecular and Oligomeric Spherical Micelles.. <i>ACS Macro Letters</i> , <b>2021</b> , 10, 1563-1569	6.6	1
73	Synthetic melanin facilitates MnO supercapacitors with high specific capacitance and wide operation potential window. <i>Polymer</i> , <b>2021</b> , 235, 124276	3.9	6
72	Boosting solar steam generation by photothermal enhanced polydopamine/wood composites. <i>Polymer</i> , <b>2021</b> , 217, 123464	3.9	46
71	Hydrothermal Synthesis of Ce-doped ZnO Heterojunction Supported on Carbon Nanofibers with High Visible Light Photocatalytic Activity. <i>Chemical Research in Chinese Universities</i> , <b>2021</b> , 37, 565-570	2.2	12
70	Emergence of melanin-inspired supercapacitors. <i>Nano Today</i> , <b>2021</b> , 37, 101075	17.9	41

69	Rambutan-like Nb <sub>2</sub> O <sub>5</sub> @SHCs microspheres for improved microwave absorption performance. <i>Composites Communications</i> , <b>2021</b> , 24, 100643	6.7	15
68	Metal-phenolic network green flame retardants. <i>Polymer</i> , <b>2021</b> , 221, 123627	3.9	13
67	Antibiofouling Ultrathin Poly(amidoxime) Membrane for Enhanced U(VI) Recovery from Wastewater and Seawater. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2021</b> , 13, 21272-21285	9.5	16
66	Flexible Polydopamine Bioelectronics. <i>Advanced Functional Materials</i> , <b>2021</b> , 31, 2103391	15.6	29
65	Pyrolysis of Enzymolysis-Treated Wood: Hierarchically Assembled Porous Carbon Electrode for Advanced Energy Storage Devices. <i>Advanced Functional Materials</i> , <b>2021</b> , 31, 2101077	15.6	26
64	Porous aerogel and sponge composites: Assisted by novel nanomaterials for electromagnetic interference shielding. <i>Nano Today</i> , <b>2021</b> , 38, 101204	17.9	33
63	Core effect on mechanical properties of one dimensional electrospun core-sheath composite fibers. <i>Composites Communications</i> , <b>2021</b> , 25, 100773	6.7	8
62	Magnetically separable and recyclable Fe <sub>3</sub> O <sub>4</sub> @PDA covalent grafted by l-cysteine core-shell nanoparticles toward efficient removal of Pb <sup>2+</sup> . <i>Vacuum</i> , <b>2021</b> , 189, 110229	3.7	15
61	Wood-Derived, Conductivity and Hierarchical Pore Integrated Thick Electrode Enabling High Areal/Volumetric Energy Density for Hybrid Capacitors. <i>Small</i> , <b>2021</b> , 17, e2102532	11	15
60	Facile preparation of CNTs microspheres as improved carbon absorbers for high-efficiency electromagnetic wave absorption. <i>Ceramics International</i> , <b>2021</b> , 47, 10013-10018	5.1	19
59	Recent progress in carbon-based materials for supercapacitor electrodes: a review. <i>Journal of Materials Science</i> , <b>2021</b> , 56, 173-200	4.3	150
58	A Mussel-Inspired Polydopamine-Filled Cellulose Aerogel for Solar-Enabled Water Remediation. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2021</b> , 13, 7617-7624	9.5	60
57	Adsorption of volatile benzene series compounds by surface-modified glass fibers: kinetics, thermodynamic adsorption efficiencies, and mechanisms. <i>Environmental Science and Pollution Research</i> , <b>2021</b> , 28, 30898-30907	5.1	5
56	Recent Progress on Nanocellulose Aerogels: Preparation, Modification, Composite Fabrication, Applications. <i>Advanced Materials</i> , <b>2021</b> , 33, e2005569	24	101
55	Green Nanoparticle Scavengers against Oxidative Stress. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2021</b> , 13, 39126-39134	9.5	9
54	Liquid Transport and Real-Time Dye Purification Lotus Petiole-Inspired Long-Range-Ordered Anisotropic Cellulose Nanofibril Aerogels. <i>ACS Nano</i> , <b>2021</b> ,	16.7	15
53	Giving Penetrable Remote-Control Ability to Thermoresponsive Fibrous Composite Actuator with Fast Response Induced by Alternative Magnetic Field.. <i>Nanomaterials</i> , <b>2021</b> , 12,	5.4	1
52	Electrospinning of ABS nanofibers and their high filtration performance. <i>Advanced Fiber Materials</i> , <b>2020</b> , 2, 34-43	10.9	19

51	High-density Fibrous Polyimide Sponges with Superior Mechanical and Thermal Properties. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2020</b> , 12, 19006-19014	9.5	66
50	Fatsia Japonica-Derived Hierarchical Porous Carbon for Supercapacitors With High Energy Density and Long Cycle Life. <i>Frontiers in Chemistry</i> , <b>2020</b> , 8, 89	5	14
49	Electrospun Functional Materials toward Food Packaging Applications: A Review. <i>Nanomaterials</i> , <b>2020</b> , 10,	5.4	94
48	Dense and thin coating of gel polymer electrolyte on sulfur cathode toward high performance Li-sulfur battery. <i>Composites Communications</i> , <b>2020</b> , 19, 239-245	6.7	22
47	Structural design toward functional materials by electrospinning: A review. <i>E-Polymers</i> , <b>2020</b> , 20, 682-712.	7	48
46	Electrospun polyimide nonwovens with enhanced mechanical and thermal properties by addition of trace plasticizer. <i>Journal of Materials Science</i> , <b>2020</b> , 55, 5667-5679	4.3	34
45	Design and fabrication of conductive polymer hydrogels and their applications in flexible supercapacitors. <i>Journal of Materials Chemistry A</i> , <b>2020</b> , 8, 23059-23095	13	54
44	A review of smart electrospun fibers toward textiles. <i>Composites Communications</i> , <b>2020</b> , 22, 100506	6.7	50
43	Wood-Inspired Anisotropic Cellulose Nanofibril Composite Sponges for Multifunctional Applications. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2020</b> , 12, 35513-35522	9.5	77
42	Fluorescent and Colorimetric Sensors Based on the Oxidation of -Phenylenediamine. <i>ACS Omega</i> , <b>2020</b> , 5, 20698-20706	3.9	12
41	Mechanical and thermal properties of electrospun polyimide/rGO composite nanofibers via in-situ polymerization and in-situ thermal conversion. <i>European Polymer Journal</i> , <b>2020</b> , 141, 110083	5.2	19
40	High-performance polyamide-imide films and electrospun aligned nanofibers from an amide-containing diamine. <i>Journal of Materials Science</i> , <b>2019</b> , 54, 6719-6727	4.3	60
39	Mesostructured Nonwovens with Penguin Downy Feather-Like Morphology Top-Down Combined with Bottom-Up. <i>Advanced Functional Materials</i> , <b>2019</b> , 29, 1903166	15.6	13
38	Anisotropic nanocellulose aerogels with ordered structures fabricated by directional freeze-drying for fast liquid transport. <i>Cellulose</i> , <b>2019</b> , 26, 6653-6667	5.5	66
37	Investigating the draw ratio and velocity of an electrically charged liquid jet during electrospinning.. <i>RSC Advances</i> , <b>2019</b> , 9, 13608-13613	3.7	23
36	Air-Blowing-Assisted Coaxial Electrospinning toward High Productivity of Core/Sheath and Hollow Fibers. <i>Macromolecular Materials and Engineering</i> , <b>2019</b> , 304, 1800669	3.9	66
35	Robust strong electrospun polyimide composite nanofibers from a ternary polyamic acid blend. <i>Composites Communications</i> , <b>2019</b> , 15, 92-95	6.7	39
34	High strength in combination with high toughness in robust and sustainable polymeric materials. <i>Science</i> , <b>2019</b> , 366, 1376-1379	33.3	89

33	Low Density, Thermally Stable, and Intrinsic Flame Retardant Poly(bis(benzimidazo)Benzophenanthroline-dione) Sponge. <i>Macromolecular Materials and Engineering</i> , <b>2018</b> , 303, 1700615	3.9	35
32	Electrospun nanofiber reinforced composites: a review. <i>Polymer Chemistry</i> , <b>2018</b> , 9, 2685-2720	4.9	336
31	Polymer nanofibre composite nonwovens with metal-like electrical conductivity. <i>Npj Flexible Electronics</i> , <b>2018</b> , 2,	10.7	23
30	Nanofibers with diameter below one nanometer from electrospinning.. <i>RSC Advances</i> , <b>2018</b> , 8, 4794-4803	3.7	87
29	Low-Density Self-Assembled Poly(N-Isopropyl Acrylamide) Sponges with Ultrahigh and Extremely Fast Water Uptake and Release. <i>Macromolecular Rapid Communications</i> , <b>2018</b> , 39, e1700838	4.8	44
28	Temperature-induced molecular orientation and mechanical properties of single electrospun polyimide nanofiber. <i>Materials Letters</i> , <b>2018</b> , 216, 81-83	3.3	70
27	Molecular orientation in aligned electrospun polyimide nanofibers by polarized FT-IR spectroscopy. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , <b>2018</b> , 200, 339-344	4.4	44
26	β-Cyclodextrin toughened polyimide composites toward all-organic dielectric materials. <i>Journal of Materials Science: Materials in Electronics</i> , <b>2018</b> , 29, 1182-1188	2.1	8
25	Microstructures and mechanical properties of aligned electrospun carbon nanofibers from binary composites of polyacrylonitrile and polyamic acid. <i>Journal of Materials Science</i> , <b>2018</b> , 53, 15096-15106	4.3	107
24	Synthesis of polyacrylonitrile and mechanical properties of its electrospun nanofibers. <i>E-Polymers</i> , <b>2018</b> , 18, 569-573	2.7	42
23	Spongy Gels by a Top-Down Approach from Polymer Fibrous Sponges. <i>Angewandte Chemie</i> , <b>2017</b> , 129, 3333-3336	3.6	16
22	Low-Density Open Cellular Sponges as Functional Materials. <i>Angewandte Chemie - International Edition</i> , <b>2017</b> , 56, 15520-15538	16.4	136
21	Ultralight, Thermally Insulating, Compressible Polyimide Fiber Assembled Sponges. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2017</b> , 9, 32308-32315	9.5	147
20	Exploration of Macroporous Polymeric Sponges As Drug Carriers. <i>Biomacromolecules</i> , <b>2017</b> , 18, 3215-3221	3.9	50
19	Highly Efficient Reusable Sponge-Type Catalyst Carriers Based on Short Electrospun Fibers. <i>Macromolecular Rapid Communications</i> , <b>2017</b> , 38, 1600511	4.8	34
18	Ultralight open cell polymer sponges with advanced properties by PPX CVD coating. <i>Polymer Chemistry</i> , <b>2016</b> , 7, 2759-2764	4.9	39
17	Polyimide Nanofibers by Green Electrospinning via Aqueous Solution for Filtration Applications. <i>ACS Sustainable Chemistry and Engineering</i> , <b>2016</b> , 4, 4797-4804	8.3	104
16	Thermal, mechanical and thermomechanical properties of tough electrospun poly(imide-co-benzoxazole) nanofiber belts. <i>New Journal of Chemistry</i> , <b>2015</b> , 39, 7797-7804	3.6	22

15	Ultralight, Soft Polymer Sponges by Self-Assembly of Short Electrospun Fibers in Colloidal Dispersions. <i>Advanced Functional Materials</i> , <b>2015</b> , 25, 2850-2856	15.6	134
14	Mechanical performance of aligned electrospun polyimide nanofiber belt at high temperature. <i>Materials Letters</i> , <b>2015</b> , 140, 12-15	3.3	36
13	Highly flexible and tough concentric triaxial polystyrene fibers. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2014</b> , 6, 5918-23	9.5	86
12	Modification of precursor polymer using co-polymerization: A good way to high performance electrospun carbon nanofiber bundles. <i>Materials Letters</i> , <b>2014</b> , 122, 178-181	3.3	29
11	Heat-resistant polybenzoxazole nanofibers made by electrospinning. <i>European Polymer Journal</i> , <b>2014</b> , 50, 61-68	5.2	19
10	Short nylon-6 nanofiber reinforced transparent and high modulus thermoplastic polymeric composites. <i>Composites Science and Technology</i> , <b>2013</b> , 87, 164-169	8.6	53
9	Short electrospun polymeric nanofibers reinforced polyimide nanocomposites. <i>Composites Science and Technology</i> , <b>2013</b> , 88, 57-61	8.6	69
8	Functional materials by electrospinning of polymers. <i>Progress in Polymer Science</i> , <b>2013</b> , 38, 963-991	29.6	653
7	Tough and transparent nylon-6 electrospun nanofiber reinforced melamine-formaldehyde composites. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2012</b> , 4, 2597-603	9.5	81
6	Heat and Solvent Resistant Electrospun Polybenzoxazole Nanofibers from Methoxy-Containing Polyamide. <i>Journal of Nanomaterials</i> , <b>2010</b> , 2010, 1-5	3.2	12
5	Progress in the field of electrospinning for tissue engineering applications. <i>Advanced Materials</i> , <b>2009</b> , 21, 3343-51	24	395
4	Use of electrospinning technique for biomedical applications. <i>Polymer</i> , <b>2008</b> , 49, 5603-5621	3.9	1337
3	Electrospun nanofiber belts made from high performance copolyimide. <i>Nanotechnology</i> , <b>2008</b> , 19, 015604	9.4	46
2	Electrospinning: a fascinating method for the preparation of ultrathin fibers. <i>Angewandte Chemie - International Edition</i> , <b>2007</b> , 46, 5670-703	16.4	3325
1	Molecular engineering of carbonyl organic electrodes for rechargeable metal-ion batteries: fundamentals, recent advances, and challenges. <i>Energy and Environmental Science</i> ,	35.4	24