Junqi Sun

List of Publications by Year in descending order

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118 papers	9,817 citations	34493 54 h-index	43601 95 g-index
122 all docs	122 docs citations	122 times ranked	9677 citing authors

#	Article	IF	Citations
1	Complexation of Sulfonate-Containing Polyurethane and Polyacrylic Acid Enables Fabrication of Self-Healing Hydrogel Membranes with High Mechanical Strength and Excellent Elasticity. ACS Applied Materials & Interfaces, 2023, 15, 25082-25090.	4.0	9
2	Self-Healing Hydrophilic Porous Photothermal Membranes for Durable and Highly Efficient Solar-Driven Interfacial Water Evaporation. CCS Chemistry, 2022, 4, 2396-2408.	4.6	11
3	Highly Stretchable, Elastic, Healable, and Ultra-Durable Polyvinyl Alcohol-Based Ionic Conductors Capable of Safe Disposal. CCS Chemistry, 2022, 4, 3170-3180.	4.6	27
4	Highly Transparent and Selfâ€Healable Solar Thermal Antiâ€/Deicing Surfaces: When Ultrathin MXene Multilayers Marry a Solid Slippery Selfâ€Cleaning Coating. Advanced Materials, 2022, 34, e2108232.	11.1	76
5	Spontaneous self-healing ionogels for efficient and reliable carbon dioxide separation. Journal of Materials Chemistry A, 2022, 10, 4695-4702.	5.2	12
6	Mechanically Robust Supramolecular Plastics with Energy-Saving and Highly Efficient Closed-Loop Recyclability. Macromolecules, 2022, 55, 2557-2565.	2.2	22
7	Healable and Recyclable Polymeric Materials with High Mechanical Robustness. , 2022, 4, 554-571.		49
8	Degradable, Recyclable, Water-Resistant, and Eco-Friendly Poly(vinyl alcohol)-Based Supramolecular Plastics. , 2022, 4, 1132-1138.		26
9	Mechanically Robust Skin-like Poly(urethane-urea) Elastomers Cross-Linked with Hydrogen-Bond Arrays and Their Application as High-Performance Ultrastretchable Conductors. Macromolecules, 2022, 55, 5816-5825.	2.2	35
10	Nonfluorinated, transparent, and spontaneous self-healing superhydrophobic coatings enabled by supramolecular polymers. Chemical Engineering Journal, 2021, 404, 126504.	6.6	53
11	Room-temperature healable, recyclable and mechanically super-strong poly(urea-urethane)s cross-linked with nitrogen-coordinated boroxines. Journal of Materials Chemistry A, 2021, 9, 11025-11032.	5.2	33
12	Degradable Poly(vinyl alcohol)â€Based Supramolecular Plastics with High Mechanical Strength in a Watery Environment. Advanced Materials, 2021, 33, e2007371.	11.1	77
13	Self-healing superhydrophobic conductive coatings for self-cleaning and humidity-insensitive hydrogen sensors. Chemical Engineering Journal, 2021, 410, 128353.	6.6	31
14	Superstrong Water-Based Supramolecular Adhesives Derived from Poly(vinyl alcohol)/Poly(acrylic) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50		49
15	Healable and Recyclable Elastomers with Recordâ€High Mechanical Robustness, Unprecedented Crack Tolerance, and Superhigh Elastic Restorability. Advanced Materials, 2021, 33, e2101498.	11.1	227
16	Solutionâ€Processable and Thermostable Superâ€Strong Poly(aryl ether ketone) Supramolecular Thermosets Crossâ€Linked with Dynamic Boroxines. Advanced Functional Materials, 2021, 31, 2103061.	7.8	29
17	Polymeric materials reinforced by noncovalent aggregates of polymer chains. Aggregate, 2021, 2, e109.	5.2	28
18	Mechanically and environmentally stable triboelectric nanogenerator based on high-strength and anti-compression self-healing ionogel. Nano Energy, 2021, 90, 106645.	8.2	46

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19	Skin-Inspired Healable Conductive Elastomers with Exceptional Strain-Adaptive Stiffening and Damage Tolerance. Macromolecules, 2021, 54, 10767-10775.	2.2	42
20	An organicâ€“inorganic semi-interpenetrating network ionogel electrolyte for high-voltage lithium metal batteries. Journal of Materials Chemistry A, 2020, 8, 4775-4783.	5.2	27
21	Solid-state and liquid-free elastomeric ionic conductors with autonomous self-healing ability. Materials Horizons, 2020, 7, 2994-3004.	6.4	103
22	Polymeric Complex-Based Transparent and Healable Ionogels with High Mechanical Strength and Ionic Conductivity as Reliable Strain Sensors. ACS Applied Materials & Interfaces, 2020, 12, 57477-57485.	4.0	74
23	Healable, Recyclable, and Mechanically Tough Polyurethane Elastomers with Exceptional Damage Tolerance. Advanced Materials, 2020, 32, e2005759.	11.1	262
24	Rediscovering Surlyn: A Supramolecular Thermoset Capable of Healing and Recycling. Macromolecular Rapid Communications, 2020, 41, e2000097.	2.0	17
25	Remalleable, Healable, and Highly Sustainable Supramolecular Polymeric Materials Combining Superhigh Strength and Ultrahigh Toughness. ACS Applied Materials & Interfaces, 2020, 12, 30805-30814.	4.0	111
26	Dynamic Hydrophobic Domains Enable the Fabrication of Mechanically Robust and Highly Elastic Poly(vinyl alcohol)-Based Hydrogels with Excellent Self-Healing Ability. , 2020, 2, 764-770.		59
27	Mechanically Robust, Elastic, and Healable Ionogels for Highly Sensitive Ultraâ€Durable Ionic Skins. Advanced Materials, 2020, 32, e2002706.	11.1	300
28	Axial Alignment of Carbon Nanotubes on Fibers To Enable Highly Conductive Fabrics for Electromagnetic Interference Shielding. ACS Applied Materials & Interfaces, 2020, 12, 7477-7485.	4.0	60
29	Polyelectrolyte complex-based self-healing, fatigue-resistant and anti-freezing hydrogels as highly sensitive ionic skins. Journal of Materials Chemistry A, 2020, 8, 3667-3675.	5.2	170
30	Self-healing and highly elastic fluorine-free proton exchange membranes comprised of poly(vinyl) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 3	3.5	7
31	Understanding the mechanism of byproduct formation with in operando synchrotron techniques and its effects on the electrochemical performance of VO₂(B) nanoflakes in aqueous rechargeable zinc batteries. Journal of Materials Chemistry A, 2020, 8, 9567-9578.	5.2	40
32	Polymeric Complex Nanoparticles Enable the Fabrication of Mechanically Superstrong and Recyclable Poly(aryl ether sulfone)-based Polymer Composites. CCS Chemistry, 2020, 2, 524-532.	4.6	19
33	Polymeric Complex Nanoparticles Enable the Fabrication of Mechanically Superstrong and Recyclable Poly(aryl ether sulfone)-based Polymer Composites. CCS Chemistry, 2020, 2, 524-532.	4.6	11
34	Mechanically Strong and Highly Stiff Supramolecular Polymer Composites Repairable at Ambient Conditions. CCS Chemistry, 2020, 2, 280-292.	4.6	40
35	Polymer Research at the State Key Laboratory of Supramolecular Structure and Materials, Jilin University. Macromolecular Rapid Communications, 2020, 41, e2000630.	2.0	0
36	Self-Healing and Recyclable Hydrogels Reinforced with in Situ-Formed Organic Nanofibrils Exhibit Simultaneously Enhanced Mechanical Strength and Stretchability. ACS Applied Materials & Interfaces, 2019, 11, 32346-32353.	4.0	30

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37	Facile Fabrication of Room-Temperature Self-Healing, Mechanically Robust, Highly Stretchable, and Tough Polymers Using Dual Dynamic Cross-Linked Polymer Complexes. ACS Applied Materials & Interfaces, 2019, 11, 33356-33363.	4.0	41
38	Healable and Mechanically Superâ€Strong Polymeric Composites Derived from Hydrogenâ€Bonded Polymeric Complexes. Advanced Materials, 2019, 31, e1904882.	11.1	109
39	Plant oil and amino acid-derived elastomers with rapid room temperature self-healing ability. Journal of Materials Chemistry A, 2019, 7, 21927-21933.	5.2	31
40	Utilization of Azobenzene Units to Control Zinc-mediated Ring Opening Polymerization of Cyclic Esters. Chemical Research in Chinese Universities, 2019, 35, 747-748.	1.3	2
41	Superhydrophobic Foams with Chemical- and Mechanical-Damage-Healing Abilities Enabled by Self-Healing Polymers. ACS Applied Materials & Interfaces, 2019, 11, 37285-37294.	4.0	69
42	Transparent antismudge coatings with thermally assisted healing ability. Journal of Materials Chemistry A, 2019, 7, 2812-2820.	5.2	24
43	Healable and shape editable supercapacitors based on shape memory polyurethanes. Journal of Materials Chemistry A, 2019, 7, 17456-17465.	5.2	40
44	Healable, Highly Conductive, Flexible, and Nonflammable Supramolecular Ionogel Electrolytes for Lithium-Ion Batteries. ACS Applied Materials & Interfaces, 2019, 11, 19413-19420.	4.0	125
45	Highly Tough, Stretchable, Self-Healing, and Recyclable Hydrogels Reinforced by in Situ-Formed Polyelectrolyte Complex Nanoparticles. Macromolecules, 2019, 52, 3141-3149.	2.2	115
46	One-Step Synthesis of Healable Weak-Polyelectrolyte-Based Hydrogels with High Mechanical Strength, Toughness, and Excellent Self-Recovery. ACS Macro Letters, 2019, 8, 500-505.	2.3	52
47	Thermally and Near-Infrared Light-Induced Shape Memory Polymers Capable of Healing Mechanical Damage and Fatigued Shape Memory Function. ACS Applied Materials & Interfaces, 2019, 11, 9470-9477.	4.0	81
48	Nitrogen-Coordinated Boroxines Enable the Fabrication of Mechanically Robust Supramolecular Thermosets Capable of Healing and Recycling under Mild Conditions. ACS Applied Materials & Interfaces, 2019, 11, 9478-9486.	4.0	67
49	Roomâ€Temperature Selfâ€Healing and Recyclable Tough Polymer Composites Using Nitrogenâ€Coordinated Boroxines. Advanced Functional Materials, 2018, 28, 1800560.	7.8	192
50	Counteranion-Mediated Intrinsic Healing of Poly(ionic liquid) Copolymers. ACS Applied Materials & Interfaces, 2018, 10, 2105-2113.	4.0	59
51	Healability Demonstrates Enhanced Shape-Recovery of Graphene-Oxide-Reinforced Shape-Memory Polymeric Films. ACS Applied Materials & Interfaces, 2018, 10, 2897-2906.	4.0	36
52	Selfâ€Healing Protonâ€Exchange Membranes Composed of Nafionâ€“Poly(vinyl alcohol) Complexes for Durable Direct Methanol Fuel Cells. Advanced Materials, 2018, 30, e1707146.	11.1	116
53	Salt effects on the structural tailoring of layer-by-layer assembled polyelectrolyte complexes and salt-containing polyelectrolyte films. Thin Solid Films, 2018, 653, 258-266.	0.8	5
54	Durable, Highly Electrically Conductive Cotton Fabrics with Healable Superamphiphobicity. ACS Applied Materials & Interfaces, 2018, 10, 12042-12050.	4.0	101

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55	Transparent Polymeric Films Capable of Healing Millimeter-Scale Cuts. ACS Applied Materials & Interfaces, 2018, 10, 13073-13081.	4.0	20
56	Bioinspired photothermal conversion coatings with self-healing superhydrophobicity for efficient solar steam generation. Journal of Materials Chemistry A, 2018, 6, 24441-24451.	5.2	92
57	Saltâ€Mediated Polyampholyte Hydrogels with High Mechanical Strength, Excellent Selfâ€Healing Property, and Satisfactory Electrical Conductivity. Advanced Functional Materials, 2018, 28, 1804416.	7.8	201
58	Mechanically Robust Atomic Oxygenâ€Resistant Coatings Capable of Autonomously Healing Damage in Low Earth Orbit Space Environment. Advanced Materials, 2018, 30, e1803854.	11.1	109
59	Polymers with a Coiled Conformation Enable Healing of Wide and Deep Damages in Polymeric Films. ACS Applied Materials & Interfaces, 2018, 10, 30716-30722.	4.0	15
60	Healable Antifouling Films Composed of Partially Hydrolyzed Poly(2-ethyl-2-oxazoline) and Poly(acrylic acid). ACS Applied Materials & Interfaces, 2017, 9, 14429-14436.	4.0	51
61	Oil-Repellent Antifogging Films with Water-Enabled Functional and Structural Healing Ability. ACS Applied Materials & Interfaces, 2017, 9, 27955-27963.	4.0	64
62	Transparent, Healable Elastomers with High Mechanical Strength and Elasticity Derived from Hydrogen-Bonded Polymer Complexes. ACS Applied Materials & Interfaces, 2017, 9, 29120-29129.	4.0	136
63	Reduced Graphene Oxide-Reinforced Polymeric Films with Excellent Mechanical Robustness and Rapid and Highly Efficient Healing Properties. ACS Nano, 2017, 11, 7134-7141.	7.3	73
64	Spontaneous wrinkling of layer-by-layer assembled polyelectrolyte films for humidity-responsive superhydrophobicity. Science China Chemistry, 2016, 59, 1568-1573.	4.2	7
65	Near-Infrared Light-Stimulus-Responsive Film as a Sacrificial Layer for the Preparation of Free-Standing Films. Langmuir, 2016, 32, 3393-3399.	1.6	21
66	Layer-by-Layer Assembly of Fluorine-Free Polyelectrolyteâ€“Surfactant Complexes for the Fabrication of Self-Healing Superhydrophobic Films. Langmuir, 2016, 32, 12361-12369.	1.6	69
67	Highly Transparent and Water-Enabled Healable Antifogging and Frost-Resisting Films Based on Poly(vinyl alcohol)â€“Nafion Complexes. Chemistry of Materials, 2016, 28, 6975-6984.	3.2	96
68	Applied Voltage and Nearâ€Infrared Light Enable Healing of Superhydrophobicity Loss Caused by Severe Scratches in Conductive Superhydrophobic Films. Advanced Functional Materials, 2016, 26, 6777-6784.	7.8	114
69	Silverâ€Nanoparticleâ€Colored Cotton Fabrics with Tunable Colors and Durable Antibacterial and Selfâ€Healing Superhydrophobic Properties. Advanced Functional Materials, 2016, 26, 569-576.	7.8	397
70	Layerâ€byâ€Layerâ€Assembled Healable Antifouling Films. Advanced Materials, 2015, 27, 5882-5888.	11.1	145
71	Healable and Optically Transparent Polymeric Films Capable of Being Erased on Demand. ACS Applied Materials & Interfaces, 2015, 7, 13597-13603.	4.0	42
72	Multilevel and Multicomponent Layer-by-Layer Assembly for the Fabrication of Nanofibrillar Films. ACS Nano, 2015, 9, 7124-7132.	7.3	20

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73	Intumescent Flame-Retardant and Self-Healing Superhydrophobic Coatings on Cotton Fabric. ACS Nano, 2015, 9, 4070-4076.	7.3	465
74	Highly Transparent, Nanofiller-Reinforced Scratch-Resistant Polymeric Composite Films Capable of Healing Scratches. ACS Nano, 2015, 9, 10055-10065.	7.3	45
75	Antifogging and Frost-Resisting Polyelectrolyte Coatings Capable of Healing Scratches and Restoring Transparency. Chemistry of Materials, 2015, 27, 8058-8065.	3.2	86
76	Robust, Flexible, and Bioadhesive Free-Standing Films for the Co-Delivery of Antibiotics and Growth Factors. Langmuir, 2014, 30, 13898-13906.	1.6	38
77	BIOINSPIRED SELF-HEALING COATINGS. World Scientific Series in Nanoscience and Nanotechnology, 2014, , 391-417.	0.1	2
78	Optically Transparent Antibacterial Films Capable of Healing Multiple Scratches. Advanced Functional Materials, 2014, 24, 403-411.	7.8	123
79	Fabrication of Macroporous Films with Closed Honeycombâ€Like Pores from Exponentially Growing Layerâ€byâ€Layer Assembled Polyelectrolyte Multilayers. Chemistry - an Asian Journal, 2014, 9, 2063-2067.	1.7	23
80	All Spraying Processes for the Fabrication of Robust, Selfâ€Healing, Superhydrophobic Coatings. Advanced Materials, 2014, 26, 3344-3348.	11.1	313
81	Nearâ€Infrared Lightâ€Driven, Highly Efficient Bilayer Actuators Based on Polydopamineâ€Modified Reduced Graphene Oxide. Advanced Functional Materials, 2014, 24, 5412-5419.	7.8	195
82	Rapid and Efficient Multiple Healing of Flexible Conductive Films by Near-Infrared Light Irradiation. ACS Applied Materials & Interfaces, 2014, 6, 16409-16415.	4.0	72
83	Macromolecular self-assembly and nanotechnology in China. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2013, 371, 20120305.	1.6	10
84	Layer-by-layer assembled highly adhesive microgel films. Polymer, 2013, 54, 4220-4226.	1.8	22
85	Robust and Flexible Free-Standing Films for Unidirectional Drug Delivery. Langmuir, 2013, 29, 8328-8334.	1.6	29
86	Reversible Actuation of Polyelectrolyte Films: Expansion-Induced Mechanical Force Enables cisâ€“trans Isomerization of Azobenzenes. Langmuir, 2013, 29, 14919-14925.	1.6	26
87	Drying and Nondrying Layer-by-Layer Assembly for the Fabrication of Sodium Silicate/TiO₂ Nanoparticle Composite Films. Langmuir, 2012, 28, 1816-1823.	1.6	10
88	Layer-by-layer assembly for rapid fabrication of thick polymeric films. Chemical Society Reviews, 2012, 41, 5998.	18.7	323
89	Polyelectrolyte Multilayers Impart Healability to Highly Electrically Conductive Films. Advanced Materials, 2012, 24, 4578-4582.	11.1	224
90	High Efficient Loading of Hydrophobic Molecules in Layer-by-Layer Assembled Microgel Films with the Assistance of Surfactant Micelles. Acta Chimica Sinica, 2012, 70, 1779.	0.5	3

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91	Layer-by-Layer Assembly of Salt-Containing Polyelectrolyte Complexes for the Fabrication of Dewetting-Induced Porous Coatings. Langmuir, 2011, 27, 1346-1352.	1.6	45
92	Polyelectrolyte Multilayer Films for Building Energetic Walking Devices. Angewandte Chemie - International Edition, 2011, 50, 6254-6257.	7.2	161
93	Waterâ€Enabled Selfâ€Healing of Polyelectrolyte Multilayer Coatings. Angewandte Chemie - International Edition, 2011, 50, 11378-11381.	7.2	288
94	LAYER-BY-LAYER ASSEMBLY OF POLYMERIC COMPLEXES. Acta Polymerica Sinica, 2011, 011, 923-931.	0.0	2
95	Bioinspired Selfâ€Healing Superhydrophobic Coatings. Angewandte Chemie - International Edition, 2010, 49, 6129-6133.	7.2	549
96	Layer-by-layer deposition of magnetic microgel films on plastic surfaces for the preparation of magnetic resonance visibility enhancing coatings. Journal of Materials Chemistry, 2010, 20, 555-560.	6.7	9
97	Rapid and substrate-independent layer-by-layer fabrication of antireflection- and antifogging-integrated coatings. Journal of Materials Chemistry, 2010, 20, 6125.	6.7	94
98	Exponential growth of layer-by-layer assembled coatings with well-dispersed ultrafine nanofillers: a facile route to scratch-resistant and transparent hybrid coatings. Journal of Materials Chemistry, 2010, 20, 7721.	6.7	34
99	Humido- and Thermo-Responsive Free-Standing Films Mimicking the Petals of the Morning Glory Flower. Chemistry of Materials, 2009, 21, 898-902.	3.2	72
100	Layer-by-Layer Deposition of Polyelectrolyteâ"Polyelectrolyte Complexes for Multilayer Film Fabrication. Langmuir, 2009, 25, 1004-1010.	1.6	100
101	Layer-by-Layer Deposition of Polymeric Microgel Films on Surgical Sutures for Loading and Release of Ibuprofen. Langmuir, 2009, 25, 7990-7994.	1.6	59
102	Polymeric complexes as building blocks for rapid fabrication of layer-by-layer assembled multilayer films and their application as superhydrophobic coatings. Journal of Materials Chemistry, 2009, 19, 497-504.	6.7	61
103	A facile layer-by-layer deposition process for the fabrication of highly transparent superhydrophobic coatings. Chemical Communications, 2009, , 2730.	2.2	187
104	Poly(allylamine hydrochloride)â€"dextran microgels functionalized with magnetic and luminescent nanoparticles. Journal of Materials Chemistry, 2008, 18, 4042.	6.7	21
105	Layer-by-Layer Assembled Microgel Films with High Loading Capacity:â€‰ Reversible Loading and Release of Dyes and Nanoparticles. Langmuir, 2008, 24, 1902-1909.	1.6	64
106	Mechanically Stable Antireflection and Antifogging Coatings Fabricated by the Layer-by-Layer Deposition Process and Postcalcination. Langmuir, 2008, 24, 10851-10857.	1.6	176
107	Ion-Triggered Exfoliation of Layer-by-Layer Assembled Poly(acrylic acid)/Poly(allylamine) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 1 Chemistry of Materials, 2007, 19, 5058-5062.	3.2	63
108	Room-Temperature Imprinting Poly(acrylic acid)/Poly(allylamine hydrochloride) Multilayer Films by Using Polymer Molds. Langmuir, 2007, 23, 3254-3259.	1.6	47

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109	Robust Ion-Permselective Multilayer Films Prepared by Photolysis of Polyelectrolyte Multilayers Containing Photo-Cross-Linkable and Photolabile Groups. Langmuir, 2006, 22, 7894-7901.	1.6	38
110	Patterning Layered Polymeric Multilayer Films by Room-Temperature Nanoimprint Lithography. Macromolecular Rapid Communications, 2006, 27, 505-510.	2.0	20
111	Fabrication of a Stable Polyelectrolyte/Au Nanoparticles Multilayer Film. Macromolecular Rapid Communications, 2002, 23, 256-259.	2.0	61
112	Stable Entrapment of Small Molecules Bearing Sulfonate Groups in Multilayer Assemblies. Langmuir, 2001, 17, 4035-4041.	1.6	21
113	Ionic Self-Assembly of Glucose Oxidase with Polycation Bearing Os Complex. Macromolecular Chemistry and Physics, 2001, 202, 111-116.	1.1	28
114	Investigation of the Covalently Attached Multilayer Architecture Based on Diazo-Resins and Poly(4-styrene sulfonate). Macromolecular Chemistry and Physics, 2001, 202, 967-973.	1.1	21
115	Polymeric nanostructured composite films. Pure and Applied Chemistry, 2000, 72, 147-155.	0.9	5
116	Nano-size stripes of self-assembled bolaform amphiphiles. Chemical Communications, 2000, , 1273-1274.	2.2	23
117	Covalently Attached Multilayer Assemblies by Sequential Adsorption of Polycationic Diazo-Resins and Polyanionic Poly(acrylic acid). Langmuir, 2000, 16, 4620-4624.	1.6	128
118	Layer-by-layer assemblies of polycation bearing Os complex with electroactive and electroinactive polyanions and their electrocatalytic reduction of nitrite. Macromolecular Chemistry and Physics, 1999, 200, 840-844.	1.1	22