Self-healing polymeric materials

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Citation Report

#	Article	IF	Citations
2	Harnessing Interfacially-Active Nanorods to Regenerate Severed Polymer Gels. Nano Letters, 2013, 13, 6269-6274.	4.5	75
3	Designing biomimetic reactive polymer gels. Materials Today, 2014, 17, 486-493.	8.3	7
5	Microencapsulation of UV-Curable Self-healing Agent for Smart Anticorrosive Coating. Chinese Journal of Chemical Physics, 2014, 27, 607-615.	0.6	13
6	Self-replenishing ability of cross-linked low surface energy polymer films investigated by a complementary experimental-simulation approach. Journal of Chemical Physics, 2014, 140, 124902.	1.2	15
7	A Rapidly Selfâ€Healing Supramolecular Polymer Hydrogel with Photostimulated Roomâ€Temperature Phosphorescence Responsiveness. Angewandte Chemie - International Edition, 2014, 53, 14149-14152.	7.2	305
8	Selfâ€Repairable Polyurethane Networks by Atmospheric Carbon Dioxide and Water. Angewandte Chemie - International Edition, 2014, 53, 12142-12147.	7.2	73
9	On the Benefits of Rubbing Salt in the Cut: Selfâ€Healing of Saloplastic PAA/PAH Compact Polyelectrolyte Complexes. Advanced Materials, 2014, 26, 2547-2551.	11.1	113
10	In situ hydrogel constructed by starch-based nanoparticles via a Schiff base reaction. Carbohydrate Polymers, 2014, 110, 87-94.	5.1	83
11	Microfibrillated cellulose-reinforced bio-based poly(propylene carbonate) with dual shape memory and self-healing properties. Journal of Materials Chemistry A, 2014, 2, 20393-20401.	5.2	84
12	Self-healable macro-/microscopic shape memory hydrogels based on supramolecular interactions. Chemical Communications, 2014, 50, 12277-12280.	2.2	168
13	UV-induced self-repairing polydimethylsiloxaneâ€“polyurethane (PDMSâ€“PUR) and polyethylene glycolâ€“polyurethane (PEGâ€“PUR) Cu-catalyzed networks. Journal of Materials Chemistry A, 2014, 2, 15527.	5.2	67
14	Multivalency in healable supramolecular polymers: the effect of supramolecular cross-link density on the mechanical properties and healing of non-covalent polymer networks. Polymer Chemistry, 2014, 5, 3680-3688.	1.9	75
15	Multi-responsive hydrogels for drug delivery and tissue engineering applications. International Journal of Energy Production and Management, 2014, 1, 57-65.	1.9	135
16	Self-healing mechanism of metallopolymers investigated by QM/MM simulations and Raman spectroscopy. Physical Chemistry Chemical Physics, 2014, 16, 12422.	1.3	53
17	Hyperbranched polydendrons: a new controlled macromolecular architecture with self-assembly in water and organic solvents. Chemical Science, 2014, 5, 1844-1853.	3.7	42
18	Experimental and theoretical methods for the analyses of dynamic combinatorial libraries. New Journal of Chemistry, 2014, 38, 3336-3349.	1.4	35
19	Residual stress in self-healing microcapsule-loaded epoxy. Materials Letters, 2014, 137, 9-12.	1.3	12
20	Agarose based multifunctional materials: Evaluation of thixotropy, self-healability and stretchability. Carbohydrate Polymers, 2014, 114, 306-311.	5.1	8

#	Article	IF	Citations
21	Heatâ€•or Waterâ€Driven Malleability in a Highly Recyclable Covalent Network Polymer. Advanced Materials, 2014, 26, 3938-3942.	11.1	636
22	Reversible Cross-Linking, Microdomain Structure, and Heterogeneous Dynamics in Thermally Reversible Cross-Linked Polyurethane as Revealed by Solid-State NMR. Journal of Physical Chemistry B, 2014, 118, 1126-1137.	1.2	58
23	Thermoplastic Silicone Elastomers through Self-Association of Pendant Coumarin Groups. Macromolecules, 2014, 47, 1656-1663.	2.2	84
24	Dynamic Covalent Chemistry Approaches Toward Macrocycles, Molecular Cages, and Polymers. Accounts of Chemical Research, 2014, 47, 1575-1586.	7.6	406
25	Evolution of supramolecular healable composites: a minireview. Polymer International, 2014, 63, 933-942.	1.6	19
26	Healable Supramolecular Polymers as Organic Metals. Journal of the American Chemical Society, 2014, 136, 11382-11388.	6.6	86
27	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
28	Facile method to prepare self-healable PVA hydrogels with high water stability. Materials Letters, 2014, 122, 227-229.	1.3	21
29	Effect of Solvent Polarizability on the Assembly and Ordering of Nanoscale Polyhedral Oligomeric Silsesquioxane Films. Langmuir, 2014, 30, 196-202.	1.6	4
35	Formation of Redox-Responsive Supramolecular Polymeric Materials Based on Host-Guest Interaction at Polymer Side Chain. Kobunshi Ronbunshu, 2015, 72, 573-581.	0.2	0
36	Self-Healing Functional Polymeric Materials. Advances in Polymer Science, 2015, , 247-283.	0.4	19
37	Selfâ€Healing, Expansionâ€“Contraction, and Shapeâ€Memory Properties of a Preorganized Supramolecular Hydrogel through Hostâ€“Guest Interactions. Angewandte Chemie - International Edition, 2015, 54, 8984-8987.	7.2	454
39	Healable, Transparent, Roomâ€Temperature Electronic Sensors Based on Carbon Nanotube Networkâ€Coated Polyelectrolyte Multilayers. Small, 2015, 11, 5807-5813.	5.2	151
40	Visibleâ€Lightâ€Induced Selfâ€Healing Diselenideâ€Containing Polyurethane Elastomer. Advanced Materials, 2015, 27, 7740-7745.	11.1	308
41	Energy dissipation and recovery in a simple model with reversible cross-links. Physical Review E, 2015, 91, 032603.	0.8	12
42	Self-healing polymers with PEG oligomer side chains based on multiple H-bonding and adhesion properties. Polymer Chemistry, 2015, 6, 5086-5092.	1.9	50
43	Expanding the Polymer Mechanochemistry Toolbox through Surface-Initiated Polymerization. ACS Macro Letters, 2015, 4, 636-639.	2.3	58
44	Thermo-moldable self-healing commodity plastics with heat resisting and oxygen-insensitive healant capable of room temperature redox cationic polymerization. Journal of Materials Chemistry A, 2015, 3, 1858-1862.	5.2	24

#	Article	IF	Citations
45	Loops versus Branch Functionality in Model Click Hydrogels. Macromolecules, 2015, 48, 8980-8988.	2.2	86
46	Development of zwitterionic polyurethanes with multi-shape memory effects and self-healing properties. Journal of Materials Chemistry A, 2015, 3, 2924-2933.	5.2	114
47	Supramolecular hydrogen-bonded polyolefin elastomer/modified graphene nanocomposites with near infrared responsive shape memory and healing properties. European Polymer Journal, 2015, 66, 273-281.	2.6	33
48	Self-healing polymer materials constructed by macrocycle-based hostâ€“guest interactions. Soft Matter, 2015, 11, 1242-1252.	1.2	82
49	Spatial resolution comparison of AC-SECM with SECM and their characterization of self-healing performance of hexamethylene diisocyanate trimer microcapsule coatings. Journal of Materials Chemistry A, 2015, 3, 5599-5607.	5.2	32
50	Anisotropic Liquid Microcapsules from Biomimetic Self-Folding Polymer Films. ACS Applied Materials & Interfaces, 2015, 7, 12367-12372.	4.0	22
51	Electrochemically and Chemically Induced Redox Processes in Molecular Machines. ChemElectroChem, 2015, 2, 475-496.	1.7	39
52	Characterization of Viscoelasticity and Selfâ€Healing Ability of VHB 4910. Macromolecular Materials and Engineering, 2015, 300, 99-106.	1.7	20
53	Bioinspired Self-Healing Organic Materials: Chemical Mechanisms and Fabrications. Journal of Bionic Engineering, 2015, 12, 1-16.	2.7	47
54	Synthesis of selfâ€healing polyurethane ureaâ€based supramolecular materials. Journal of Polymer Science, Part B: Polymer Physics, 2015, 53, 468-474.	2.4	41
55	An efficient multiple healing conductive composite via hostâ€“guest inclusion. Chemical Communications, 2015, 51, 6377-6380.	2.2	45
56	Overview of crack self-healing. , 2015, , 1-19.		13
57	Self-healing polymeric materials based on microencapsulated healing agents: From design to preparation. Progress in Polymer Science, 2015, 49-50, 175-220.	11.8	443
58	Chemical and physical aspects of self-healing materials. Progress in Polymer Science, 2015, 49-50, 34-59.	11.8	375
59	Design of Self-Healing Supramolecular Rubbers with a Tunable Number of Chemical Cross-Links. Macromolecules, 2015, 48, 4394-4402.	2.2	108
60	Facile fabrication of a well-defined poly(p-dioxanone) dynamic network from metallosupramolecular interactions to obtain an excellent shape-memory effect. Polymer Chemistry, 2015, 6, 4177-4184.	1.9	29
61	Tuning of sunlight-induced self-cleaning and self-healing attributes of an elastomeric nanocomposite by judicious compositional variation of the TiO₂â€“reduced graphene oxide nanohybrid. Journal of Materials Chemistry A, 2015, 3, 12334-12342.	5.2	61
62	Zwitterionic copolymer-based and hydrogen bonding-strengthened self-healing hydrogel. RSC Advances, 2015, 5, 33083-33088.	1.7	73

#	Article	IF	Citations
63	Healable supramolecular polymer solids. Progress in Polymer Science, 2015, 49-50, 60-78.	11.8	112
64	A self-healing PDMS polymer with solvatochromic properties. Chemical Communications, 2015, 51, 8928-8930.	2.2	84
65	Intelligent rubber with tailored properties for self-healing and shape memory. Journal of Materials Chemistry A, 2015, 3, 12864-12872.	5.2	132
66	Stimuli-Responsive Iron-Cross-Linked Hydrogels That Undergo Redox-Driven Switching between Hard and Soft States. Macromolecules, 2015, 48, 1736-1747.	2.2	55
67	Room-Temperature Self-Healing Polymers Based on Dynamic-Covalent Boronic Esters. Macromolecules, 2015, 48, 2098-2106.	2.2	534
68	Responsive Polymers as Sensors, Muscles, and Self-Healing Materials. Topics in Current Chemistry, 2015, 369, 377-424.	4.0	8
69	The selfâ€healing mechanism of an industrial acrylic elastomer. Journal of Applied Polymer Science, 2015, 132, .	1.3	7
70	DYNAMERS: dynamic polymers as self-healing materials. Chemical Society Reviews, 2015, 44, 3786-3807.	18.7	582
71	Stimuli-responsive materials in analytical separation. Analytical and Bioanalytical Chemistry, 2015, 407, 4927-4948.	1.9	50
72	Perylene as an electron-rich moiety in healable, complementary Ï€â€“Ï€ stacked, supramolecular polymer systems. Polymer, 2015, 69, 293-300.	1.8	56
73	Self-healing properties of layer-by-layer assembled multilayers. Polymer International, 2015, 64, 713-723.	1.6	54
74	Recent progress in shape memory polymer: New behavior, enabling materials, and mechanistic understanding. Progress in Polymer Science, 2015, 49-50, 79-120.	11.8	1,057
75	Shape memory polymers: Past, present and future developments. Progress in Polymer Science, 2015, 49-50, 3-33.	11.8	739
76	Correlation between scratch healing and rheological behavior for terpyridine complex based metallopolymers. Journal of Materials Chemistry A, 2015, 3, 22145-22153.	5.2	79
77	Highly Transparent, Nanofiller-Reinforced Scratch-Resistant Polymeric Composite Films Capable of Healing Scratches. ACS Nano, 2015, 9, 10055-10065.	7.3	45
78	Novel photolabile crosslinkers based on O-acyloxime moiety. RSC Advances, 2015, 5, 31506-31513.	1.7	18
79	Self-healing elastomer assembly towards three-dimensional shape memory devices. RSC Advances, 2015, 5, 70000-70004.	1.7	16
80	Healing damaged coatings using friction-sensitive hybrid microcapsules. Journal of Materials Chemistry A, 2015, 3, 17966-17970.	5.2	11

#	Article	IF	Citations
81	Antifouling and antibacterial hydrogel coatings with self-healing properties based on a dynamic disulfide exchange reaction. Polymer Chemistry, 2015, 6, 7027-7035.	1.9	131
82	Self-healing composites: A review. Cogent Engineering, 2015, 2, 1075686.	1.1	116
83	A dual-functional polymeric system combining shape memory with self-healing properties. Composites Part B: Engineering, 2015, 83, 7-13.	5.9	48
84	Self-healing poly(N-isopropylacrylamide) hydrogels. European Polymer Journal, 2015, 72, 12-22.	2.6	31
85	Self-healing, malleable and creep limiting materials using both supramolecular and reversible covalent linkages. Polymer Chemistry, 2015, 6, 7368-7372.	1.9	89
86	Programmable self-assembly of a cystamine-block copolymer in response to pH and progressive reductionâ€“ionizationâ€“oxidation. Polymer Chemistry, 2015, 6, 7455-7463.	1.9	5
87	Exceptionally tough and notch-insensitive magnetic hydrogels. Soft Matter, 2015, 11, 8253-8261.	1.2	97
88	Hydrogen-bonded supramolecular polyurethanes. Polymer International, 2015, 64, 165-173.	1.6	38
89	Graphene improved electrochemical property in self-healing multilayer polyelectrolyte film. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2015, 465, 26-31.	2.3	33
90	Advanced micro/nanocapsules for self-healing smart anticorrosion coatings. Journal of Materials Chemistry A, 2015, 3, 469-480.	5.2	334
91	Curing kinetics of self-healing epoxy thermosets. Journal of Thermal Analysis and Calorimetry, 2015, 119, 547-555.	2.0	14
92	A fluorescent supramolecular polymer with aggregation induced emission (AIE) properties formed by crown ether-based hostâ€“guest interactions. Polymer Chemistry, 2015, 6, 25-29.	1.9	86
93	Self-Healing Photocurable Epoxy/thiol-ene Systems Using an Aromatic Epoxy Resin. Advances in Materials Science and Engineering, 2016, 2016, 1-11.	1.0	14
94	Evolution of the Automotive Body Coating Processâ€”A Review. Coatings, 2016, 6, 24.	1.2	169
95	Cytocompatible, Photoreversible, and Selfâ€Healing Hydrogels for Regulating Bone Marrow Stromal Cell Differentiation. Macromolecular Bioscience, 2016, 16, 1381-1390.	2.1	16
96	Waterâ€Triggered Selfâ€Healing Coatings of Hydrogenâ€Bonded Complexes for High Binding Affinity and Antioxidative Property. Advanced Materials Interfaces, 2016, 3, 1600167.	1.9	48
97	Comparative analysis of shape memoryâ€based selfâ€healing coatings. Journal of Polymer Science, Part B: Polymer Physics, 2016, 54, 1415-1426.	2.4	20
98	A Highly Stretchable Polymer that Can Be Thermally Healed at Mild Temperature. Macromolecular Rapid Communications, 2016, 37, 952-956.	2.0	68

#	Article	IF	Citations
99	Mechanical Robust and Selfâ€Healable Supramolecular Hydrogel. Macromolecular Rapid Communications, 2016, 37, 265-270.	2.0	58
100	Self-healing Materials. Advances in Polymer Science, 2016, , .	0.4	54
101	A combined interfacial and in-situ polymerization strategy to construct well-defined core-shell epoxy-containing SiO2-based microcapsules with high encapsulation loading, super thermal stability and nonpolar solvent tolerance. International Journal of Smart and Nano Materials, 2016, 7, 221-235.	2.0	10
102	Combining Mobile and Dynamic Bonds for Rapid and Efficient Self-Healing Materials. CheM, 2016, 1, 672-673.	5.8	2
103	The rise of plastic bioelectronics. Nature, 2016, 540, 379-385.	13.7	1,280
104	Selective crosslinking or addressing of individual domains within block copolymer nanostructures. European Polymer Journal, 2016, 80, 317-331.	2.6	25
105	A review of shape memory polymers bearing reversible binding groups. Journal of Polymer Science, Part B: Polymer Physics, 2016, 54, 1340-1364.	2.4	130
106	An adhesive elastomeric supramolecular polyurethane healable at body temperature. Chemical Science, 2016, 7, 4291-4300.	3.7	65
107	Clinically Applicable Self-Healing Dental Resin Composites. MRS Advances, 2016, 1, 547-552.	0.5	8
108	Damage Tolerance, Reliability and Fracture Characteristics of Multilayered Engineering Composites. , 2016, , .		1
109	A highly stretchable autonomous self-healing elastomer. Nature Chemistry, 2016, 8, 618-624.	6.6	1,133
110	Photothermal triggering of self-healing processes applied to the reparation of bio-based polymer networks. Materials Research Express, 2016, 3, 045003.	0.8	36
111	Stretchable Self-Healing Polymeric Dielectrics Cross-Linked Through Metalâ€“Ligand Coordination. Journal of the American Chemical Society, 2016, 138, 6020-6027.	6.6	453
112	Self-healing antimicrobial polymer coating with efficacy in the presence of organic matter. Applied Surface Science, 2016, 378, 479-488.	3.1	46
113	Biologically Inspired Materials Exhibiting Repeatable Regeneration with Selfâ€Sealing Capabilities without External Stimuli or Catalysts. Advanced Materials, 2016, 28, 9961-9968.	11.1	73
114	Developing a self-healing supramolecular nucleoside hydrogel. Soft Matter, 2016, 12, 8950-8957.	1.2	21
115	Thermomechanics of a temperature sensitive covalent adaptable polymer with bond exchange reactions. Soft Matter, 2016, 12, 8847-8860.	1.2	16
116	Effect of curing on the mechanical and healing behaviour of a hybrid dual network: a time resolved evaluation. RSC Advances, 2016, 6, 91806-91814.	1.7	17

#	Article	IF	Citations
117	Stiffer but More Healable Exponential Layered Assemblies with Boron Nitride Nanoplatelets. ACS Nano, 2016, 10, 9434-9445.	7.3	33
118	Selfâ€Healing Hydrogels. Advanced Materials, 2016, 28, 9060-9093.	11.1	993
119	A Novel and Non-Cytotoxic Self-Healing Supramolecular Elastomer Synthesized with Small Molecular Biological Acids. Macromolecular Rapid Communications, 2016, 37, 1603-1610.	2.0	21
120	Dynamic sulfur chemistry as a key tool in the design of self-healing polymers. Smart Materials and Structures, 2016, 25, 084017.	1.8	57
121	Highly Flexible, Tough, and Selfâ€Healing Supramolecular Polymeric Materials Using Hostâ€“Guest Interaction. Macromolecular Rapid Communications, 2016, 37, 86-92.	2.0	207
122	UV-Triggered Self-Healing of a Single Robust SiO₂ Microcapsule Based on Cationic Polymerization for Potential Application in Aerospace Coatings. ACS Applied Materials & Interfaces, 2016, 8, 21046-21054.	4.0	80
123	Advanced Materials for Thermo-Responsive Applications. , 2016, , 283-315.		0
124	A Highly Stretchable and Autonomous Selfâ€Healing Polymer Based on Combination of PtÂ·Â·Â·Pt and Ï€â€“Ï€ Interactions. Macromolecular Rapid Communications, 2016, 37, 1667-1675.	2.0	199
125	Dynamic Covalent Polymer Networks Based on Degenerative Imine Bond Exchange: Tuning the Malleability and Self-Healing Properties by Solvent. Macromolecules, 2016, 49, 6277-6284.	2.2	310
126	Tuning Dynamic Mechanical Response in Metallopolymer Networks through Simultaneous Control of Structural and Temporal Properties of the Networks. Macromolecules, 2016, 49, 6310-6321.	2.2	124
127	Stabilization of catecholâ€“boronic ester bonds for underwater self-healing and recycling of lipophilic bulk polymer in wider pH range. Journal of Materials Chemistry A, 2016, 4, 14122-14131.	5.2	75
128	Intrinsically stretchable and healable semiconducting polymer for organic transistors. Nature, 2016, 539, 411-415.	13.7	1,030
129	Aromatic disulfide crosslinks in polymer systems: Self-healing, reprocessability, recyclability and more. European Polymer Journal, 2016, 84, 147-160.	2.6	234
130	Dynamic Thiolâ€“Michael Chemistry for Thermoresponsive Rehealable and Malleable Networks. Macromolecules, 2016, 49, 6871-6878.	2.2	123
131	Selfâ€Healing Molecular Crystals. Angewandte Chemie - International Edition, 2016, 55, 13028-13032.	7.2	69
132	Selfâ€Healing Molecular Crystals. Angewandte Chemie, 2016, 128, 13222-13226.	1.6	20
133	A Stiff and Healable Polymer Based on Dynamicâ€Covalent Boroxine Bonds. Advanced Materials, 2016, 28, 8277-8282.	11.1	349
134	An autonomic self-healing organogel with a photo-mediated modulus. Chemical Communications, 2016, 52, 14157-14160.	2.2	29

#	Article	IF	Citations
135	Self-Healing Materials Formed by Cross-Linked Polyrotaxanes with Reversible Bonds. CheM, 2016, 1, 766-775.	5.8	121
136	Self-healing poly(siloxane-urethane) elastomers with remoldability, shape memory and biocompatibility. Polymer Chemistry, 2016, 7, 7278-7286.	1.9	103
137	Unveiling the molecular mechanism of self-healing in a telechelic, supramolecular polymer network. Scientific Reports, 2016, 6, 32356.	1.6	67
138	Re-healable polyimine thermosets: polymer composition and moisture sensitivity. Polymer Chemistry, 2016, 7, 7052-7056.	1.9	108
139	Fabrication of self-healing and hydrophilic coatings from liquid-like graphene@SiO2 hybrids. Composites Science and Technology, 2016, 136, 133-144.	3.8	24
140	Synthesis and characterization of polyurethanes bearing carbosilane segments. RSC Advances, 2016, 6, 94803-94808.	1.7	1
141	Bioinspired Metal Ion Coordinated Polyelectrolyte Fibrous Nanoreactors. Advanced Materials Interfaces, 2016, 3, 1600692.	1.9	13
143	Self-healing hyperbranched polytriazoles prepared by metal-free click polymerization of propiolate and azide monomers. Science China Chemistry, 2016, 59, 1554-1560.	4.2	22
144	A Catalystâ€Based Selfâ€Sufficient System with Durable Selfâ€Healing Functionality. Advanced Engineering Materials, 2016, 18, 923-931.	1.6	10
145	Influence of Constitution and Charge on Radical Pairing Interactions in Tris-radical Tricationic Complexes. Journal of the American Chemical Society, 2016, 138, 8288-8300.	6.6	29
146	A modular approach towards functional supramolecular aggregates â€“ subtle structural differences inducing liquid crystallinity. Chemical Communications, 2016, 52, 8549-8552.	2.2	52
147	Blue light emitting self-healable graphene quantum dot embedded hydrogels. RSC Advances, 2016, 6, 54793-54800.	1.7	31
148	Spontaneously Healable Thermoplastic Elastomers Achieved through One-Pot Living Ring-Opening Metathesis Copolymerization of Well-Designed Bulky Monomers. ACS Applied Materials & Interfaces, 2016, 8, 12445-12455.	4.0	39
149	Elastin-Based Rubber-Like Hydrogels. Biomacromolecules, 2016, 17, 2409-2416.	2.6	34
150	Anodic Oxidation in Aluminum Electrode by Using Hydrated Amorphous Aluminum Oxide Film as Solid Electrolyte under High Electric Field. ACS Applied Materials & Interfaces, 2016, 8, 11100-11107.	4.0	26
151	Crack healing in nanocrystalline palladium. Extreme Mechanics Letters, 2016, 8, 208-212.	2.0	7
152	Self-Healing Superhydrophobic Fluoropolymer Brushes as Highly Protein-Repellent Coatings. Langmuir, 2016, 32, 6310-6318.	1.6	67
153	A self-healing, re-moldable and biocompatible crosslinked polysiloxane elastomer. Journal of Materials Chemistry B, 2016, 4, 982-989.	2.9	158

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154	Progress towards self-healing polymers for composite structural applications. Polymer, 2016, 83, 260-282.	1.8	122
155	Effects of water-aging on self-healing dental composite containing microcapsules. Journal of Dentistry, 2016, 47, 86-93.	1.7	50
156	Toxicity of organometal halide perovskite solar cells. Nature Materials, 2016, 15, 247-251.	13.3	1,029
157	Self-healing fluoropolymer brushes as highly polymer-repellent coatings. Journal of Materials Chemistry A, 2016, 4, 2408-2412.	5.2	39
158	Multi-stimuli-responsive self-healing metallo-supramolecular polymer nanocomposites. Journal of Materials Chemistry A, 2016, 4, 3324-3334.	5.2	73
159	Light-Controlled Radical Polymerization: Mechanisms, Methods, and Applications. Chemical Reviews, 2016, 116, 10167-10211.	23.0	883
160	Novel self-healing dental resin with microcapsules of polymerizable triethylene glycol dimethacrylate and N,N-dihydroxyethyl-p-toluidine. Dental Materials, 2016, 32, 294-304.	1.6	58
161	Advances in healing-on-demand polymers and polymer composites. Progress in Polymer Science, 2016, 57, 32-63.	11.8	172
162	Healing of shape memory polyurethane fiber-reinforced syntactic foam subjected to tensile stress. Journal of Intelligent Material Systems and Structures, 2016, 27, 1792-1801.	1.4	29
163	Superhydrophobic surfaces for corrosion protection: a review of recent progresses and future directions. Journal of Coatings Technology Research, 2016, 13, 11-29.	1.2	296
164	Chitosan: A Potential Therapeutic Dressing Material for Wound Healing. Springer Series on Polymer and Composite Materials, 2016, , 193-227.	0.5	11
165	Strategies and Molecular Design Criteria for 3D Printable Hydrogels. Chemical Reviews, 2016, 116, 1496-1539.	23.0	580
167	Supramolecular polymer adhesives: advanced materials inspired by nature. Chemical Society Reviews, 2016, 45, 342-358.	18.7	338
168	Anisotropic Self-Assembly of Supramolecular Polymers and Plasmonic Nanoparticles at the Liquidâ€“Liquid Interface. Journal of the American Chemical Society, 2017, 139, 2345-2350.	6.6	61
169	Doubly Dynamic Selfâ€Healing Materials Based on Oxime Click Chemistry and Boronic Acids. Macromolecular Rapid Communications, 2017, 38, 1600760.	2.0	80
170	Self-Healing Hydrogel Pore-Filled Water Filtration Membranes. Environmental Science & Technology, 2017, 51, 905-913.	4.6	74
171	Control over the assembly and rheology of supramolecular networks via multi-responsive double hydrophilic copolymers. Polymer Chemistry, 2017, 8, 1527-1539.	1.9	19
172	A biomass approach to mendable bio-elastomers. Soft Matter, 2017, 13, 1306-1313.	1.2	27

#	Article	IF	Citations
173	Advanced Materials for Use in Soft Selfâ€Healing Devices. Advanced Materials, 2017, 29, 1604973.	11.1	362
175	Functioning via hostâ€“guest interactions. Journal of Inclusion Phenomena and Macrocyclic Chemistry, 2017, 87, 313-330.	0.9	22
176	Microwave assisted healing of carbon fiber/polypropylene composites. Microwave and Optical Technology Letters, 2017, 59, 900-902.	0.9	3
177	Lightâ€Switchable Selfâ€Healing Hydrogel Based on Hostâ€“Guest Macroâ€Crosslinking. Macromolecular Rapid Communications, 2017, 38, 1600741.	2.0	78
178	A Comprehensive Depiction of the Furanâ€Maleimide Coupling via Kinetic and Thermodynamic Investigations of the Dielsâ€Alder Reaction of Poly(styreneâ€“coâ€2â€vinylfuran) with Maleimides. ChemistrySelect, 2017, 2, 1605-1612.	0.7	16
179	Dual-band dual-sense circularly polarized square slot antenna with changeable polarization. Microwave and Optical Technology Letters, 2017, 59, 902-907.	0.9	14
180	Effect of Polymer Network Architecture, Enhancing Soft Materials Using Orthogonal Dynamic Bonds in an Interpenetrating Network. ACS Macro Letters, 2017, 6, 495-499.	2.3	94
181	Tough, self-healable and tissue-adhesive hydrogel with tunable multifunctionality. NPG Asia Materials, 2017, 9, e372-e372.	3.8	441
182	Self-Healable and Reprocessable Polysulfide Sealants Prepared from Liquid Polysulfide Oligomer and Epoxy Resin. ACS Applied Materials & Interfaces, 2017, 9, 15798-15808.	4.0	78
183	Self-healing polyurethane/attapulgite nanocomposites based on disulfide bonds and shape memory effect. Materials Chemistry and Physics, 2017, 195, 40-48.	2.0	46
184	Determination of the diffusion coefficient of hydrogen ion in hydrogels. Physical Chemistry Chemical Physics, 2017, 19, 12136-12143.	1.3	16
185	Thermally reversible crosslinked copolymers: Solution and bulk behavior. Polymer, 2017, 117, 342-353.	1.8	8
186	Synthesis of a self-healing siloxane-based elastomer cross-linked via a furan-modified polyhedral oligomeric silsesquioxane: investigation of a thermally reversible silicon-based cross-link. Polymer Chemistry, 2017, 8, 2942-2952.	1.9	43
187	Healable Transparent Electronic Devices. Advanced Functional Materials, 2017, 27, 1606339.	7.8	118
188	Synthesis and solidâ€state properties of crosslinked alternating copolymers of phenyl vinylethylene carbonate and Nâ€substituted maleimides. Journal of Applied Polymer Science, 2017, 134, 45247.	1.3	7
189	Multiple shape memory effects of transâ€1,4â€polyisoprene and lowâ€density polyethylene blends. Polymer International, 2017, 66, 1382-1388.	1.6	23
190	Dually crosslinked self-healing hydrogels originating from cell-enhanced effect. Journal of Materials Chemistry B, 2017, 5, 3816-3822.	2.9	10
191	Imaging the Molecular Motions of Autonomous Repair in a Selfâ€Healing Polymer. Advanced Materials, 2017, 29, 1701017.	11.1	55

#	Article	IF	Citations
192	Stimuli-responsive polymeric materials functioning via hostâ€“guest interactions. Journal of Inclusion Phenomena and Macrocyclic Chemistry, 2017, 88, 85-104.	0.9	22
193	Dynamic Iminoboronateâ€Based Boroxine Chemistry for the Design of Ambient Humidityâ€Sensitive Selfâ€Healing Polymers. Chemistry - A European Journal, 2017, 23, 6730-6735.	1.7	54
194	Thermo-reversible MWCNTs/epoxy polymer for use in self-healing and recyclable epoxy adhesive. Chinese Journal of Polymer Science (English Edition), 2017, 35, 728-738.	2.0	15
195	Photoresponsive Supramolecular Polymer Networks via Hydrogen Bond Assisted Molecular Tweezer/Guest Complexation. ACS Macro Letters, 2017, 6, 541-545.	2.3	36
196	Light-responsive expansion-contraction of spherical nanoparticle grafted with azopolymers. Journal of Chemical Physics, 2017, 146, 164901.	1.2	5
197	Highly efficient thermogenesis from Fe₃O₄ nanoparticles for thermoplastic material repair both in air and underwater. Journal of Materials Chemistry A, 2017, 5, 1221-1232.	5.2	29
198	Developments in smart anticorrosive coatings with multifunctional characteristics. Progress in Organic Coatings, 2017, 111, 294-314.	1.9	158
199	Polymer-Cement Composites with Self-Healing Ability for Geothermal and Fossil Energy Applications. Chemistry of Materials, 2017, 29, 4708-4718.	3.2	28
200	Development of humidity-responsive self-healing zwitterionic polyurethanes for renewable shape memory applications. RSC Advances, 2017, 7, 31525-31534.	1.7	37
201	The effects of counter anions on the dynamic mechanical response in polymer networks crosslinked by metalâ€“ligand coordination. Journal of Polymer Science Part A, 2017, 55, 3110-3116.	2.5	29
202	Healable green hydrogen bonded networks for circuit repair, wearable sensor and flexible electronic devices. Journal of Materials Chemistry A, 2017, 5, 13138-13144.	5.2	83
203	Multifunctional Stimuli-Responsive Supramolecular Materials with Stretching, Coloring, and Self-Healing Properties Functionalized via Hostâ€“Guest Interactions. Macromolecules, 2017, 50, 4144-4150.	2.2	96
204	A Microvascular System for the Autonomous Regeneration of Large Scale Damage in Polymeric Coatings. Advanced Engineering Materials, 2017, 19, 1700319.	1.6	5
205	Tough Supramolecular Polymer Networks with Extreme Stretchability and Fast Roomâ€Temperature Selfâ€Healing. Advanced Materials, 2017, 29, 1605325.	11.1	347
206	Selfâ€Healable Supramolecular Hydrogel Formed by Norâ€Secoâ€Cucurbit[10]uril as a Supramolecular Crosslinker. Chemistry - an Asian Journal, 2017, 12, 1461-1464.	1.7	22
207	Supramolecular Materials Cross-Linked by Hostâ€“Guest Inclusion Complexes: The Effect of Side Chain Molecules on Mechanical Properties. Macromolecules, 2017, 50, 3254-3261.	2.2	72
208	Fast Selfâ€Healing of Polyelectrolyte Multilayer Nanocoating and Restoration of Super Oxygen Barrier. Macromolecular Rapid Communications, 2017, 38, 1700064.	2.0	36
209	Novel highly-flexible, acid-resistant and self-healing host-guest transparent multilayer films. Applied Surface Science, 2017, 411, 303-314.	3.1	31

#	Article	IF	Citations
210	Flame-retardant, non-irritating and self-healing multilayer films with double-network structure. Composites Science and Technology, 2017, 145, 15-23.	3.8	29
211	Self-healed Materials from Thermoplastic Polymer Composites. Springer Series on Polymer and Composite Materials, 2017, , 153-180.	0.5	2
212	Multiresponsive and biocompatible self-healing hydrogel: its facile synthesis in water, characterization and properties. Soft Matter, 2017, 13, 3003-3012.	1.2	41
213	Selfâ€Healing Behavior in a Thermoâ€Mechanically Responsive Cocrystal during a Reversible Phase Transition. Angewandte Chemie - International Edition, 2017, 56, 198-202.	7.2	164
214	Selfâ€Healing Behavior in a Thermoâ€Mechanically Responsive Cocrystal during a Reversible Phase Transition. Angewandte Chemie, 2017, 129, 204-208.	1.6	36
215	A covalently cross-linked reduced functionalized graphene oxide/polyurethane composite based on Dielsâ€“Alder chemistry and its potential application in healable flexible electronics. Journal of Materials Chemistry C, 2017, 5, 220-228.	2.7	72
216	Ionic transport and barrier effect of anodic oxide layer in a solid-state Al2O3 capacitor under high electric field. Electrochimica Acta, 2017, 224, 235-242.	2.6	9
217	Dual-action smart coatings with a self-healing superhydrophobic surface and anti-corrosion properties. Journal of Materials Chemistry A, 2017, 5, 2355-2364.	5.2	413
218	Rapid self-healing and recycling of multiple-responsive mechanically enhanced epoxy resin/graphene nanocomposites. RSC Advances, 2017, 7, 46336-46343.	1.7	23
219	Spontaneous Crack Healing in Nanostructured Silica-Based Thin Films. ACS Nano, 2017, 11, 10289-10294.	7.3	14
220	Durable superhydrophobic and superamphiphobic polymeric surfaces and their applications: A review. Advances in Colloid and Interface Science, 2017, 250, 132-157.	7.0	203
221	50th Anniversary Perspective: Solid-State Multistimuli, Multiresponsive Polymeric Materials. Macromolecules, 2017, 50, 8845-8870.	2.2	117
222	Enzymatically crosslinked hydrogels based on linear poly(ethylene glycol) polymer: performance and mechanism. Polymer Chemistry, 2017, 8, 7017-7024.	1.9	20
223	Self-Healable Gels for Use in Wearable Devices. Chemistry of Materials, 2017, 29, 8932-8952.	3.2	160
224	Dual stimuli responsive self-healing and malleable materials based on dynamic thiol-Michael chemistry. Polymer Chemistry, 2017, 8, 6534-6543.	1.9	54
225	A stretchable polysiloxane elastomer with self-healing capacity at room temperature and solvatochromic properties. Chemical Communications, 2017, 53, 12088-12091.	2.2	59
226	One-Pot Preparation of Autonomously Self-Healable Elastomeric Hydrogel from Boric Acid and Random Copolymer Bearing Hydroxyl Groups. ACS Macro Letters, 2017, 6, 1129-1133.	2.3	49
227	Tough, Stretchable, Compressive Novel Polymer/Graphene Oxide Nanocomposite Hydrogels with Excellent Self-Healing Performance. ACS Applied Materials & Interfaces, 2017, 9, 38052-38061.	4.0	156

#	Article	IF	Citations
228	A novel self-healing electrochromic film based on a triphenylamine cross-linked polymer. Polymer Chemistry, 2017, 8, 6981-6988.	1.9	22
229	Fully self-healing and shape-tailorable triboelectric nanogenerators based on healable polymer and magnetic-assisted electrode. Nano Energy, 2017, 40, 399-407.	8.2	113
230	Design and development of trivalent aluminum ions induced self-healing polyacrylic acid novel hydrogels. Polymer, 2017, 126, 196-205.	1.8	44
231	Selfâ€Healing Materials for Nextâ€Generation Energy Harvesting and Storage Devices. Advanced Energy Materials, 2017, 7, 1700890.	10.2	206
232	Biobased, self-healable, high strength rubber with tunicate cellulose nanocrystals. Nanoscale, 2017, 9, 15696-15706.	2.8	115
233	Multidimensional performance optimization of conducting polymer-based supercapacitor electrodes. Sustainable Energy and Fuels, 2017, 1, 1857-1874.	2.5	133
234	Structureâ€“Property Relationships in Hydrogen-Bonded Liquid Crystals. Chemistry of Materials, 2017, 29, 8462-8471.	3.2	38
235	Wetting and Coalescence of Drops of Self-Healing Agents on Electrospun Nanofiber Mats. Langmuir, 2017, 33, 10663-10672.	1.6	9
236	Environmental performance of bio-based and biodegradable plastics: the road ahead. Chemical Society Reviews, 2017, 46, 6855-6871.	18.7	502
237	Recyclable Polydimethylsiloxane Network Crosslinked by Dynamic Transesterification Reaction. Scientific Reports, 2017, 7, 11833.	1.6	72
238	Interfacial self-healing of nanocomposite hydrogels: Theory and experiment. Journal of the Mechanics and Physics of Solids, 2017, 109, 288-306.	2.3	30
239	Movable Cross-Linked Polymeric Materials from Bulk Polymerization of Reactive Polyrotaxane Cross-Linker with Acrylate Monomers. Macromolecules, 2017, 50, 5695-5700.	2.2	54
240	Enhancement of self-healing property by introducing ethylene glycol group into thermally reversible Diels-Alder reaction based self-healable materials. Macromolecular Research, 2017, 25, 640-647.	1.0	26
241	Selfâ€Healing Silk Fibroinâ€Based Hydrogel for Bone Regeneration: Dynamic Metalâ€Ligand Selfâ€Assembly Approach. Advanced Functional Materials, 2017, 27, 1700591.	7.8	200
242	The Functionalization of Miniature Energyâ€Storage Devices. Small Methods, 2017, 1, 1700211.	4.6	23
243	Self-healing and photoluminescent carboxymethyl cellulose-based hydrogels. European Polymer Journal, 2017, 94, 501-510.	2.6	67
244	Furan-functionalized aniline trimer based self-healing polymers exhibiting high efficiency of anticorrosion. Polymer, 2017, 125, 227-233.	1.8	35
245	Tough Selfâ€Healing Elastomers by Molecular Enforced Integration of Covalent and Reversible Networks. Advanced Materials, 2017, 29, 1702616.	11.1	304

#	Article	IF	Citations
246	Responsiveness and Morphology Study of Dual Stimuliâ€Controlled Supramolecular Polymer. Macromolecular Rapid Communications, 2017, 38, 1700358.	2.0	7
247	High-Strength, Tough, and Self-Healing Nanocomposite Physical Hydrogels Based on the Synergistic Effects of Dynamic Hydrogen Bond and Dual Coordination Bonds. ACS Applied Materials & Interfaces, 2017, 9, 28305-28318.	4.0	326
248	An advanced elastomer with an unprecedented combination of excellent mechanical properties and high self-healing capability. Journal of Materials Chemistry A, 2017, 5, 25660-25671.	5.2	128
249	Stretchable electronics: recent progress in the preparation of stretchable and self-healing semiconducting conjugated polymers. Flexible and Printed Electronics, 2017, 2, 043002.	1.5	65
250	Supramolecular Organogels Prepared from Pillar[5]arene-Functionalized Conjugated Polymers. Macromolecules, 2017, 50, 9144-9150.	2.2	44
251	Synthesis and properties of room-temperature self-healing polyurethane elastomers. Journal of Macromolecular Science - Pure and Applied Chemistry, 2017, 54, 956-966.	1.2	26
252	CO₂-responsive self-healable hydrogels based on hydrophobically-modified polymers bridged by wormlike micelles. RSC Advances, 2017, 7, 34669-34675.	1.7	34
253	Metallo-supramolecular hydrogels based on amphiphilic polymers bearing a hydrophobic Schiff base ligand with rapid self-healing and multi-stimuli responsive properties. Polymer Chemistry, 2017, 8, 4680-4687.	1.9	37
254	Self-Healing Polyphosphonium Ionic Networks. Macromolecules, 2017, 50, 5253-5260.	2.2	37
255	Effect of Sterics and Degree of Cross-Linking on the Mechanical Properties of Dynamic Poly(alkylureaâ€“urethane) Networks. Macromolecules, 2017, 50, 5051-5060.	2.2	186
256	Water-repairable zwitterionic polymer coatings for anti-biofouling surfaces. Journal of Materials Chemistry B, 2017, 5, 6728-6733.	2.9	58
257	Improvement of energy density in SrTiO3 film capacitor via self-repairing behavior. Ceramics International, 2017, 43, 13069-13074.	2.3	14
258	One-Pot Assembly of Microfibrillated Cellulose Reinforced PVAâ€“Borax Hydrogels with Self-Healing and pH-Responsive Properties. ACS Sustainable Chemistry and Engineering, 2017, 5, 948-956.	3.2	188
259	Synthesis and properties of self-healing waterborne polyurethanes containing disulfide bonds in the main chain. Journal of Materials Science, 2017, 52, 197-207.	1.7	104
260	Photoswitching of glass transition temperatures of azobenzene-containing polymers induces reversible solid-to-liquid transitions. Nature Chemistry, 2017, 9, 145-151.	6.6	469
261	Wetting of inclined nano-textured surfaces by self-healing agents. Applied Physics Letters, 2017, 111, .	1.5	6
262	Low-Temperature Self-Healing of a Microcapsule-Type Protective Coating. Materials, 2017, 10, 1079.	1.3	27
263	Metamorphic biomaterials. , 2017, , 69-99.		6

#	Article	IF	Citations
264	Microcapsule-Type Self-Healing Protective Coating for Cementitious Composites with Secondary Crack Preventing Ability. Materials, 2017, 10, 114.	1.3	20
265	Controlled Light Cross-Linking Technique to Prepare Healable Materials. Polymers, 2017, 9, 241.	2.0	1
266	Autonomic healable waterborne organic-inorganic polyurethane hybrids based on aromatic disulfide moieties. EXPRESS Polymer Letters, 2017, 11, 266-277.	1.1	54
268	Nitroarylurea-terminated supramolecular polymers that exhibit facile thermal repair and aqueous swelling-induced sealing of defects. Polymer, 2018, 140, 1-9.	1.8	7
269	How to Design a Selfâ€Healing Polymer: General Concepts of Dynamic Covalent Bonds and Their Application for Intrinsic Healable Materials. Advanced Materials Interfaces, 2018, 5, 1800051.	1.9	177
270	Distinct Mechanical and Self-Healing Properties in Two Polydimethylsiloxane Coordination Polymers with Fine-Tuned Bond Strength. Inorganic Chemistry, 2018, 57, 3232-3242.	1.9	51
271	Dynamic ionic crosslinks enable high strength and ultrastretchability in a single elastomer. Communications Chemistry, 2018, 1, .	2.0	129
272	Recent advances in chitosan-based self-healing materials. Research on Chemical Intermediates, 2018, 44, 4827-4840.	1.3	44
273	4D printed thermally activated self-healing and shape memory polycaprolactone-based polymers. European Polymer Journal, 2018, 101, 169-176.	2.6	156
274	Heatâ€triggered poly(siloxaneâ€urethane)s based on disulfide bonds for selfâ€healing application. Journal of Applied Polymer Science, 2018, 135, 46532.	1.3	77
275	Synthesis of new ionic crosslinked polymer hydrogel combining polystyrene and poly(4â€vinyl pyridine) and its selfâ€healing through a reshuffling reaction of the trithiocarbonate moiety under irradiation of ultraviolet light. Polymer International, 2018, 67, 868-873.	1.6	19
276	Sustainable epoxy resins derived from plant oils with thermo- and chemo-responsive shape memory behavior. Polymer, 2018, 144, 121-127.	1.8	36
277	Self-Healing Electronic Materials for a Smart and Sustainable Future. ACS Applied Materials & Interfaces, 2018, 10, 15331-15345.	4.0	170
278	Laser Rewritable Dichroics through Reconfigurable Organic Chargeâ€Transfer Liquid Crystals. Advanced Materials, 2018, 30, e1706787.	11.1	8
280	Selfâ€Healing Biomaterials: From Molecular Concepts to Clinical Applications. Advanced Materials Interfaces, 2018, 5, 1800118.	1.9	73
282	Chemically and thermally stable isocyanate microcapsules having good self-healing and self-lubricating performances. Chemical Engineering Journal, 2018, 346, 289-297.	6.6	104
283	Self-Healing Phase Change Salogels with Tunable Gelation Temperature. ACS Applied Materials & Interfaces, 2018, 10, 14786-14795.	4.0	27
284	Design of a self-healing and flame-retardant cyclotriphosphazene-based epoxy vitrimer. Journal of Materials Science, 2018, 53, 7030-7047.	1.7	77

#	Article	IF	Citations
285	Supramolecular Nested Microbeads as Building Blocks for Macroscopic Selfâ€Healing Scaffolds. Angewandte Chemie - International Edition, 2018, 57, 3079-3083.	7.2	50
286	An Epidermis-like Hierarchical Smart Coating with a Hardness of Tooth Enamel. ACS Nano, 2018, 12, 1062-1073.	7.3	43
287	Biobased Multifunctional Macroglycol Containing Smart Thermoplastic Hyperbranched Polyurethane Elastomer with Intrinsic Self-Healing Attribute. ACS Sustainable Chemistry and Engineering, 2018, 6, 4370-4381.	3.2	46
289	Magnetic Macroporous Hydrogels as a Novel Approach for Perfused Stem Cell Culture in 3D Scaffolds via Contactless Motion Control. Advanced Healthcare Materials, 2018, 7, e1701403.	3.9	28
290	Tough and Waterâ€Insensitive Selfâ€Healing Elastomer for Robust Electronic Skin. Advanced Materials, 2018, 30, e1706846.	11.1	798
291	Construction of Autonomic Self-Healing CO₂-Based Polycarbonates via One-Pot Tandem Synthetic Strategy. Macromolecules, 2018, 51, 1308-1313.	2.2	40
292	From Coordination Chemistry to Adaptive Chemistry. Advances in Inorganic Chemistry, 2018, 71, 3-78.	0.4	33
293	Tough, adhesive and self-healing conductive 3D network hydrogel of physically linked functionalized-boron nitride/clay /poly(N-isopropylacrylamide). Journal of Materials Chemistry A, 2018, 6, 3091-3099.	5.2	110
294	Counteranion-Mediated Intrinsic Healing of Poly(ionic liquid) Copolymers. ACS Applied Materials & Interfaces, 2018, 10, 2105-2113.	4.0	59
295	Mutual Complexation between Ï€â€“Ï€ Stacked Molecular Tweezers. Crystal Growth and Design, 2018, 18, 386-392.	1.4	15
296	Stimuli-responsive dendronized polymeric hydrogels through Schiff-base chemistry showing remarkable topological effects. Polymer Chemistry, 2018, 9, 378-387.	1.9	36
297	Self-healing strategy for Si nanoparticles towards practical application as anode materials for Li-ion batteries. Electrochemistry Communications, 2018, 87, 22-26.	2.3	46
298	Transiently malleable multi-healable hydrogel nanocomposites based on responsive boronic acid copolymers. Polymer Chemistry, 2018, 9, 525-537.	1.9	39
299	A Facile Strategy for Selfâ€Healing Polyurethanes Containing Multiple Metalâ€“Ligand Bonds. Macromolecular Rapid Communications, 2018, 39, e1700678.	2.0	92
300	Sulfenamides as Building Blocks for Efficient Disulfideâ€Based Selfâ€Healing Materials. A Quantum Chemical Study. ChemistryOpen, 2018, 7, 248-255.	0.9	16
301	Bio-derived aliphatic hyperbranched polyurethane nanocomposites with inherent self healing tendency and surface hydrophobicity: Towards creating high performance smart materials. Composites Part A: Applied Science and Manufacturing, 2018, 110, 142-153.	3.8	18
302	Intercalating cation specific self-repairing of vermiculite nanofluidic membrane. Journal of Materials Chemistry A, 2018, 6, 21990-21998.	5.2	16
303	Routes to Make Natural Rubber Heal: A Review. Polymer Reviews, 2018, 58, 585-609.	5.3	48

#	Article	IF	Citations
304	Sustainable Multiple- and Multistimulus-Shape-Memory and Self-Healing Elastomers with Semi-interpenetrating Network Derived from Biomass via Bulk Radical Polymerization. ACS Sustainable Chemistry and Engineering, 2018, 6, 6527-6535.	3.2	56
305	Dielsâ€“Alder dynamic crosslinked polyurethane/polydopamine composites with NIR triggered self-healing function. Polymer Chemistry, 2018, 9, 2166-2172.	1.9	111
306	Effects of temperature and humidity on self-healing behaviour of biopolymer hydroxylpropyl methylcellulose for ecotribology. Surface and Coatings Technology, 2018, 350, 997-1002.	2.2	15
307	Shape memory polymers for composites. Composites Science and Technology, 2018, 160, 169-198.	3.8	211
308	Transparent Polymeric Films Capable of Healing Millimeter-Scale Cuts. ACS Applied Materials & Interfaces, 2018, 10, 13073-13081.	4.0	20
309	Self-healable tough supramolecular hydrogels crosslinked by poly-cyclodextrin through host-guest interaction. Carbohydrate Polymers, 2018, 193, 54-61.	5.1	59
310	Smart Passivation Materials with a Liquid Metal Microcapsule as Selfâ€Healing Conductors for Sustainable and Flexible Perovskite Solar Cells. Advanced Functional Materials, 2018, 28, 1800110.	7.8	80
311	Multiamine-induced self-healing poly (Acrylic Acid) hydrogels with shape memory behavior. Polymer Journal, 2018, 50, 485-493.	1.3	12
312	Supramolecular Nested Microbeads as Building Blocks for Macroscopic Selfâ€Healing Scaffolds. Angewandte Chemie, 2018, 130, 3133-3137.	1.6	6
313	Advances in Atomic Force Microscopy for Probing Polymer Structure and Properties. Macromolecules, 2018, 51, 3-24.	2.2	129
314	Water-adaptive and repeatable self-healing polymers bearing bulky urea bonds. Polymer Chemistry, 2018, 9, 11-19.	1.9	39
315	Stimuli responsive ion gels based on polysaccharides and other polymers prepared using ionic liquids and deep eutectic solvents. Carbohydrate Polymers, 2018, 180, 328-336.	5.1	53
316	Restoration of Impact Damage in Polymers via a Hybrid Microcapsuleâ€“Microvascular Selfâ€Healing System. Advanced Functional Materials, 2018, 28, 1704197.	7.8	48
317	Autonomously Self-Adhesive Hydrogels as Building Blocks for Additive Manufacturing. Biomacromolecules, 2018, 19, 62-70.	2.6	25
318	Shape memory and self-healing materials from supramolecular block polymers. Polymer, 2018, 134, 35-43.	1.8	44
319	Mechanically robust, readily repairable polymers via tailored noncovalent cross-linking. Science, 2018, 359, 72-76.	6.0	716
320	Bioinspired Anisotropic Hydrogel Actuators with Onâ€“Off Switchable and Colorâ€Tunable Fluorescence Behaviors. Advanced Functional Materials, 2018, 28, 1704568.	7.8	353
321	A Solventâ€Resistant and Biocompatible Selfâ€Healing Supramolecular Elastomer with Tunable Mechanical Properties. Macromolecular Chemistry and Physics, 2018, 219, 1700409.	1.1	13

#	Article	IF	Citations
322	Superior Toughness and Fast Selfâ€Healing at Room Temperature Engineered by Transparent Elastomers. Advanced Materials, 2018, 30, 1705145.	11.1	532
323	Inducing hardening and healability in poly(ethylene-co-acrylic acid) via blending with complementary low molecular weight additives. RSC Advances, 2018, 8, 41445-41453.	1.7	6
324	Dual water-healable zwitterionic polymer coatings for anti-biofouling surfaces. Journal of Materials Chemistry B, 2018, 6, 6930-6935.	2.9	40
325	Photohealable ion gels based on the reversible dimerisation of anthracene. Chemical Communications, 2018, 54, 13371-13374.	2.2	24
326	The effect of electron density in furan pendant group on thermal-reversible Dielsâ€“Alder reaction based self-healing properties of polymethacrylate derivatives. RSC Advances, 2018, 8, 39432-39443.	1.7	7
327	Mesophase behavior of new linear supramolecular hydrogen-bonding complexes. RSC Advances, 2018, 8, 34937-34946.	1.7	31
329	Design of Novel Self-Healing Thermoplastic Vulcanizates Utilizing Thermal/Magnetic/Light-Triggered Shape Memory Effects. ACS Applied Materials & Interfaces, 2018, 10, 40996-41002.	4.0	120
330	Supramolecular Networks from Block Copolymers Based on Styrene and Isoprene Using Hydrogen Bonding Motifsâ€”Part 1: Synthesis and Characterization. Materials, 2018, 11, 1608.	1.3	4
331	Crosslinker mobility weakens transient polymer networks. Physical Review E, 2018, 98, .	0.8	14
332	A Perspective on Reversibility in Controlled Polymerization Systems: Recent Progress and New Opportunities. Molecules, 2018, 23, 2870.	1.7	14
333	Rapid Selfâ€healing Film From Novel Photo Polymerization Additive.. ChemistrySelect, 2018, 3, 12836-12840.	0.7	3
334	Efficient Graphene/Cyclodextrin-Based Nanocontainer: Synthesis and Hostâ€“Guest Inclusion for Self-Healing Anticorrosion Application. ACS Applied Materials & Interfaces, 2018, 10, 36229-36239.	4.0	180
335	Precisely Controlling Dimerization and Trimerization in Topochemical Reaction Templated by Biomacromolecules. Macromolecules, 2018, 51, 8038-8045.	2.2	4
336	Functional Supramolecular Materials Formed by Non-covalent Bonds. , 2018, , 183-225.		2
337	Supramolecular Networks from Block Copolymers Based on Styrene and Isoprene Using Hydrogen Bonding Motifsâ€”Part 2: Dynamic Mechanical Analysis. Materials, 2018, 11, 1688.	1.3	2
338	Superhydrophobic Film Coatings for Corrosion Inhibition. Interface Science and Technology, 2018, , 133-184.	1.6	3
339	Modular Design of Porous Soft Materials via Self-Organization of Metalâ€“Organic Cages. Accounts of Chemical Research, 2018, 51, 2437-2446.	7.6	133
341	Assessment of microscopic repair dynamics in self-healing polymer by modeling laser speckle images. Laser Physics, 2018, 28, 126003.	0.6	1

#	Article	IF	Citations
342	Key-and-lock commodity self-healing copolymers. Science, 2018, 362, 220-225.	6.0	251
343	Next-generation self-healing materials. Science, 2018, 362, 150-151.	6.0	60
344	Rigid Oligomer from Lignin in Designing of Tough, Self-Healing Elastomers. ACS Macro Letters, 2018, 7, 1328-1332.	2.3	54
345	Prospects of Application of Self-Healing Materials and Technologies Based on Them. Inorganic Materials: Applied Research, 2018, 9, 785-793.	0.1	17
346	Physical and Adhesion Properties of Supramolecular Hydrogels Cross-linked by Movable Cross-linking Molecule and Host-guest Interactions. Chemistry Letters, 2018, 47, 1387-1390.	0.7	13
347	Hydrogels. Gels Horizons: From Science To Smart Materials, 2018, , .	0.3	36
348	Intelligent Biomimetic Chameleon Skin with Excellent Self-Healing and Electrochromic Properties. ACS Applied Materials & Interfaces, 2018, 10, 35533-35538.	4.0	63
349	Ultratough, Self-Healing, and Tissue-Adhesive Hydrogel for Wound Dressing. ACS Applied Materials & Interfaces, 2018, 10, 33523-33531.	4.0	381
350	Stiff Self-Healing Coating Based on UV-Curable Polyurethane with a â€œHard Core, Flexible Armâ€• Structure. ACS Omega, 2018, 3, 11128-11135.	1.6	22
351	Hydrogels from Catechol-Conjugated Polymeric Materials. Gels Horizons: From Science To Smart Materials, 2018, , 435-470.	0.3	2
352	Conjugated Polyimine Dynamers as Phase-Sensitive Membrane Probes. Journal of the American Chemical Society, 2018, 140, 11438-11443.	6.6	29
353	Polymer nanocomposite-enabled high-performance triboelectric nanogenerator with self-healing capability. RSC Advances, 2018, 8, 30661-30668.	1.7	28
354	Self-healing polyurethane based on ditelluride bonds. Applied Surface Science, 2018, 455, 318-325.	3.1	48
355	Silicone-Containing Biodegradable Smart Elastomeric Thermoplastic Hyperbranched Polyurethane. ACS Omega, 2018, 3, 6849-6859.	1.6	25
356	Leaf-Inspired Self-Healing Polymers. CheM, 2018, 4, 1928-1936.	5.8	111
357	On the impact of linking groups in hydrogen-bonded liquid crystals â€“ a case study. Soft Matter, 2018, 14, 6214-6221.	1.2	17
358	Slippery liquid-infused porous surface fabricated on CuZn: A barrier to abiotic seawater corrosion and microbiologically induced corrosion. Applied Surface Science, 2018, 457, 468-476.	3.1	52
359	Selfâ€Healing Micellar Ion Gels Based on Multiple Hydrogen Bonding. Advanced Materials, 2018, 30, e1802792.	11.1	208

#	Article	IF	Citations
360	Ionic Gels and Their Applications in Stretchable Electronics. Macromolecular Rapid Communications, 2018, 39, e1800246.	2.0	112
361	Toward Growing Robots: A Historical Evolution from Cellular to Plant-Inspired Robotics. Frontiers in Robotics and AI, 2018, 5, 16.	2.0	51
363	Colorless, Transparent, Robust, and Fast Scratchâ€Selfâ€Healing Elastomers via a Phaseâ€Locked Dynamic Bonds Design. Advanced Materials, 2018, 30, e1802556.	11.1	448
364	Fabrication of Self-healing Superhydrophobic Surfaces from Water-Soluble Polymer Suspensions Free of Inorganic Particles through Polymer Thermal Reconstruction. Coatings, 2018, 8, 144.	1.2	16
365	Near-Infrared Light and Solar Light Activated Self-Healing Epoxy Coating having Enhanced Properties Using MXene Flakes as Multifunctional Fillers. Polymers, 2018, 10, 474.	2.0	59
366	A Self-Healable High Glass Transition Temperature Bioepoxy Material Based on Vitrimer Chemistry. Macromolecules, 2018, 51, 5577-5585.	2.2	224
367	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
368	Multistimuli-Responsive Intrinsic Self-Healing Epoxy Resin Constructed by Hostâ€“Guest Interactions. Macromolecules, 2018, 51, 5294-5303.	2.2	190
369	A rigid and healable polymer cross-linked by weak but abundant Zn(II)-carboxylate interactions. Nature Communications, 2018, 9, 2725.	5.8	242
370	Tough interpenetrating polymer network of silicone containing polyurethane and polystyrene with self-healing, shape memory and self-cleaning attributes. RSC Advances, 2018, 8, 17044-17055.	1.7	22
371	Extremely Stretchable, Self-Healable Elastomers with Tunable Mechanical Properties: Synthesis and Applications. Chemistry of Materials, 2018, 30, 6026-6039.	3.2	118
372	An integrated self-healable electronic skin system fabricated via dynamic reconstruction of a nanostructured conducting network. Nature Nanotechnology, 2018, 13, 1057-1065.	15.6	736
373	A bifunctional triphenylamine-based electrochromic polymer with excellent self-healing performance. Electrochimica Acta, 2018, 286, 296-303.	2.6	25
374	Recent advances on organic coating system technologies for corrosion protection of offshore metallic structures. Journal of Molecular Liquids, 2018, 269, 572-606.	2.3	148
375	Tuning thermoresponsive network materials through macromolecular architecture and dynamic thiol-Michael chemistry. Polymer Chemistry, 2018, 9, 4744-4756.	1.9	36
376	Micro/nanocapsules for anticorrosion coatings. , 2018, , 521-551.		1
377	Coordinated silicon elastomer coating@fabrics with oil/water separation capabilities, outstanding durability and ultra-fast room-temperature self-healing ability. Journal of Materials Chemistry A, 2018, 6, 17156-17163.	5.2	50
378	Self-healing mechanisms in smart protective coatings: A review. Corrosion Science, 2018, 144, 74-88.	3.0	543

#	Article	IF	Citations
379	Mechanics of self-healing polymer networks crosslinked by dynamic bonds. Journal of the Mechanics and Physics of Solids, 2018, 121, 409-431.	2.3	89
380	Selfâ€Healing Latex Containing Polyelectrolyte Multilayers. Macromolecular Materials and Engineering, 2018, 303, 1700596.	1.7	8
381	Selfâ€Healing of Polymers via Supramolecular Chemistry. Advanced Materials Interfaces, 2018, 5, 1800384.	1.9	132
382	Polyurethane networks based on disulfide bonds: from tunable multi-shape memory effects to simultaneous self-healing. Science China Materials, 2019, 62, 437-447.	3.5	60
383	Selfâ€healing behaviors of sulfobetaine polyacrylamide/chromium gel decided by viscosity and chemical compositions. Journal of Applied Polymer Science, 2019, 136, 46991.	1.3	1
384	Tunable Orthogonal Reversible Covalent (TORC) Bonds: Dynamic Chemical Control over Molecular Assembly. Angewandte Chemie - International Edition, 2019, 58, 74-85.	7.2	86
385	Einstellbare orthogonale reversible kovalente Bindungen: dynamische Kontrolle Ã¼ber die molekulare Selbstorganisation. Angewandte Chemie, 2019, 131, 76-88.	1.6	22
386	Stimuli-chromism of photoswitches in smart polymers: Recent advances and applications as chemosensors. Progress in Polymer Science, 2019, 98, 101149.	11.8	179
387	Bioâ€Inspired Multiple Cycle Healing and Damage Sensing in Elastomerâ€“Magnet Nanocomposites. Macromolecular Chemistry and Physics, 2019, 220, 1900168.	1.1	9
388	Mechanically interlocked materials. Rotaxanes and catenanes beyond the small molecule. Chemical Society Reviews, 2019, 48, 5016-5032.	18.7	178
389	Mechanical and Self-Healing Performances of Asphalt Mixtures Containing Recycled Asphalt Materials and Light-Activated Self-Healing Polymer. Journal of Materials in Civil Engineering, 2019, 31, .	1.3	8
390	Notch-Insensitive, Ultrastretchable, Efficient Self-Healing Supramolecular Polymers Constructed from Multiphase Active Hydrogen Bonds for Electronic Applications. Chemistry of Materials, 2019, 31, 7951-7961.	3.2	106
391	TO/TMMP-TMTGE Double-Healing Composite Containing a Transesterification Reversible Matrix and Tung Oil-Loaded Microcapsules for Active Self-Healing. Polymers, 2019, 11, 1127.	2.0	14
392	Fluorescence Turn-On Visualization of Microscopic Processes for Self-Healing Gels by AIEgens and Anticounterfeiting Application. Chemistry of Materials, 2019, 31, 5683-5690.	3.2	52
393	A Visibleâ€Lightâ€Induced Dynamic Mechanical Bond as a Linkage for Dynamic Materials. Angewandte Chemie, 2019, 131, 12835-12840.	1.6	8
394	Advances in Hydrogels in Organoids and Organsâ€onâ€aâ€Chip. Advanced Materials, 2019, 31, e1902042.	11.1	212
395	Deconvolution of the Effects of Binary Associations and Collective Assemblies on the Rheological Properties of Entangled Side-Chain Supramolecular Polymer Networks. Macromolecules, 2019, 52, 5255-5267.	2.2	31
396	Molecular-Level Tuning toward Aggregation Dynamics of Self-Healing Materials. Macromolecules, 2019, 52, 5289-5297.	2.2	25

#	Article	IF	Citations
397	The journey of self-healing and shape memory polyurethanes from bench to translational research. Polymer Chemistry, 2019, 10, 4370-4388.	1.9	54
398	Effect of external and internal plasticization on the glass transition temperature of (Meth)acrylate polymers studied with molecular dynamics simulations and calorimetry. Polymer, 2019, 179, 121635.	1.8	24
399	A Visibleâ€Lightâ€Induced Dynamic Mechanical Bond as a Linkage for Dynamic Materials. Angewandte Chemie - International Edition, 2019, 58, 12705-12710.	7.2	13
400	Self-Healing Paint and Varnish Polymer Coatings. Russian Journal of Applied Chemistry, 2019, 92, 689-700.	0.1	2
401	A novel AIE-based supramolecular polymer gel serves as an ultrasensitive detection and efficient separation material for multiple heavy metal ions. Soft Matter, 2019, 15, 6878-6884.	1.2	22
402	Improving the mesomorphic behaviour of supramolecular liquid crystals by resonance-assisted hydrogen bonding. Journal of Materials Chemistry C, 2019, 7, 8643-8648.	2.7	27
403	Soft Self-Healing Nanocomposites. Frontiers in Materials, 2019, 6, .	1.2	44
404	Flow Control and Optimization Technologies of Information System. Journal of Physics: Conference Series, 2019, 1302, 022067.	0.3	0
405	Self-Healing Heterometallic Supramolecular Polymers Constructed by Hierarchical Assembly of Triply Orthogonal Interactions with Tunable Photophysical Properties. Journal of the American Chemical Society, 2019, 141, 17909-17917.	6.6	80
406	Selfâ€Healing Polymers Based on Coordination Bonds. Advanced Materials, 2020, 32, e1903762.	11.1	343
407	Alkaline monomer for mechanical enhanced and self-healing hydrogels based on dynamic borate ester bonds. Polymer, 2019, 184, 121882.	1.8	34
408	Frontiers of Adaptive Design, Synthetic Biology and Growing Skins for Ephemeral Hybrid Structures. , 0, , .		2
409	Synthesis of folic acid functionalized gold nanoclusters for targeting folate receptor-positive cells. Nanotechnology, 2019, 30, 505102.	1.3	4
410	Planting carbon nanotubes onto supramolecular polymer matrices for waterproof non-contact self-healing. Nanoscale, 2019, 11, 467-473.	2.8	26
411	Fabrication of self-healing hydrogels with surface functionalized microcapsules from stellate mesoporous silica. Polymer Chemistry, 2019, 10, 503-511.	1.9	35
412	Research on the causes of smog and the effect of spatial spillover. IOP Conference Series: Earth and Environmental Science, 2019, 310, 022001.	0.2	0
414	Stretchable self-healable semiconducting polymer film for active-matrix strain-sensing array. Science Advances, 2019, 5, eaav3097.	4.7	179
415	Self-Healing Polysiloxane Elastomer Based on Integration of Covalent and Reversible Networks. Industrial & Engineering Chemistry Research, 2019, 58, 21504-21512.	1.8	40

#	Article	IF	Citations
416	Self-Healing Polyurethane Elastomers Based on a Disulfide Bond by Digital Light Processing 3D Printing. ACS Macro Letters, 2019, 8, 1511-1516.	2.3	192
417	â€œButton and Buttonholeâ€•Supramolecular Structure Enables the Self-Healing Behaviors of Functionalized Poly(ether sulfone) Membranes for Osmotic Power Generation. ACS Applied Materials & Interfaces, 2019, 11, 42322-42329.	4.0	11
418	Tuning Mechanical Properties of Biobased Polymers by Supramolecular Chain Entanglement. Macromolecules, 2019, 52, 8967-8975.	2.2	31
420	Self-Healing Polymer Composites for Structural Application. , 0, , .		12
421	Mesogens with Aggregation-Induced Emission Formed by Hydrogen Bonding. , 2019, 1, 589-593.		19
422	Application of quantum chemical methods in polymer chemistry. International Reviews in Physical Chemistry, 2019, 38, 343-403.	0.9	22
423	Ultrathin PEDOT:PSS/rGO Aerogel Providing Tapeâ€Like Selfâ€Healable Electrode for Sensing Space Electric Field with Electrochemical Mechanism. Advanced Electronic Materials, 2019, 5, 1900637.	2.6	19
424	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
425	Preparation and properties of self-healing cross-linked polyurethanes based on blocking and deblocking reaction. Reactive and Functional Polymers, 2019, 144, 104347.	2.0	22
426	Supramolecular Elastomers with Movable Cross-Linkers Showing High Fracture Energy Based on Stress Dispersion. Macromolecules, 2019, 52, 6953-6962.	2.2	34
427	Imine and metalâ€“ligand dynamic bonds in soft polymers for autonomous self-healing capacitive-based pressure sensors. Soft Matter, 2019, 15, 7654-7662.	1.2	44
428	A Self-Healing and Shape Memory Polymer that Functions at Body Temperature. Molecules, 2019, 24, 3224.	1.7	39
429	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
430	Design of Healable Shape-Memory Materials from Dynamic Interactions. Materials Today: Proceedings, 2019, 16, 1502-1506.	0.9	2
431	Elasticity and Relaxation in Full and Partial Vitrimer Networks. Macromolecules, 2019, 52, 7423-7429.	2.2	52
432	Preparation of inorganic-organic hybrid gels by radical exchange reaction using TiO2 nanoparticles modified with organophosphonic acid bearing C-ON bonds. Materials Today: Proceedings, 2019, 16, 180-186.	0.9	0
433	Dynamics of supramolecular associative polymer networks at the interplay of chain entanglement, transient chain association, and chainâ€sticker clustering. Journal of Polymer Science, Part B: Polymer Physics, 2019, 57, 1209-1223.	2.4	26
434	New insights into the mechanical and self-healing properties of polymers cross-linked by Fe(<scp>iii</scp>)-2,6-pyridinedicarboxamide coordination complexes. Polymer Chemistry, 2019, 10, 362-371.	1.9	21

#	Article	IF	Citations
435	Transparent antismudge coatings with thermally assisted healing ability. Journal of Materials Chemistry A, 2019, 7, 2812-2820.	5.2	24
436	One pot stimuli-responsive linear waterborne polyurethanes via Diels-Alder reaction. Progress in Organic Coatings, 2019, 130, 31-43.	1.9	22
437	Hydrogen-bonded liquid crystals with broad-range blue phases. Journal of Materials Chemistry C, 2019, 7, 3150-3153.	2.7	30
438	Selfâ€Healing Polymeric Hydrogel Formed by Metalâ€“Ligand Coordination Assembly: Design, Fabrication, and Biomedical Applications. Macromolecular Rapid Communications, 2019, 40, e1800837.	2.0	183
439	Robust, Stretchable, and Self-Healable Supramolecular Elastomers Synergistically Cross-Linked by Hydrogen Bonds and Coordination Bonds. ACS Applied Materials & Interfaces, 2019, 11, 7387-7396.	4.0	165
440	Stereolithographic 3D printing of extrinsically self-healing composites. Scientific Reports, 2019, 9, 388.	1.6	42
441	Smart Coatings. , 2019, , 341-372.		7
442	Additive manufacturing of self-healing elastomers. NPG Asia Materials, 2019, 11, .	3.8	111
443	Complex systems that incorporate cyclodextrins to get materials for some specific applications. Carbohydrate Research, 2019, 480, 12-34.	1.1	30
444	Spontaneously Regenerative Tough Hydrogels. Angewandte Chemie, 2019, 131, 11067-11071.	1.6	8
445	Hierarchical Uniform Supramolecular Conjugated Spherulites with Suppression of Defect Emission. IScience, 2019, 16, 399-409.	1.9	30
446	Preparation, characterization and properties of intrinsic self-healing elastomers. Journal of Materials Chemistry B, 2019, 7, 4876-4926.	2.9	141
447	Synthesis of poly(acrylic acid)â€“Fe³⁺/gelatin/poly(vinyl alcohol) tripleâ€network supramolecular hydrogels with high toughness, high strength and selfâ€healing properties. Polymer International, 2019, 68, 1710-1721.	1.6	27
448	To investigate the effect of ester-linkage on the properties of polyvinyl alcohol/carboxymethyl cellulose based hydrogel. Materials Letters, 2019, 252, 308-312.	1.3	22
449	Hypervalent iodine-based dynamic and self-healing network polymers. Polymer Chemistry, 2019, 10, 3943-3950.	1.9	4
450	Spontaneously Regenerative Tough Hydrogels. Angewandte Chemie - International Edition, 2019, 58, 10951-10955.	7.2	30
451	Biomimetic Composite Scaffolds to Manipulate Stem Cells for Aiding Rheumatoid Arthritis Management. Advanced Functional Materials, 2019, 29, 1807860.	7.8	54
452	Self-Healing Polycarbonate-Based Polyurethane with Shape Memory Behavior. Macromolecular Research, 2019, 27, 649-656.	1.0	5

#	Article	IF	Citations
453	Thermal- and water-induced shape memory Eucommia ulmoides rubber and microcrystalline cellulose composites. Polymer Testing, 2019, 77, 105910.	2.3	11
454	Noncovalent Hydrogen Bonds Tune the Mechanical Properties of Phosphoester Polyethylene Mimics. ACS Omega, 2019, 4, 9324-9332.	1.6	14
455	Biodegradable Poly(acrylic acid-co-acrylamide)/Poly(vinyl alcohol) Double Network Hydrogels with Tunable Mechanics and High Self-healing Performance. Polymers, 2019, 11, 952.	2.0	47
456	Elastic carbon dot/polymer films for fluorescent tensile sensing and mechano-optical tuning. Carbon, 2019, 152, 363-371.	5.4	42
457	Healable and shape-memory dual functional polymers for reliable and multipurpose mechanical energy harvesting devices. Journal of Materials Chemistry A, 2019, 7, 16267-16276.	5.2	45
458	Association and relaxation of supra-macromolecular polymers. Soft Matter, 2019, 15, 5296-5307.	1.2	12
459	Self-healable electrochromic ion gels for low power and robust displays. Organic Electronics, 2019, 71, 199-205.	1.4	21
460	Shaping and structuring supramolecular gels. Nature Reviews Materials, 2019, 4, 463-478.	23.3	270
461	Self-Healable Dielectric Polydimethylsiloxane Composite Based on Zinc-Imidazole Coordination Bond. Macromolecular Research, 2019, 27, 435-443.	1.0	18
462	Temperature-regulated flexibility of polymer chains in rapidly self-healing hydrogels. NPG Asia Materials, 2019, 11, .	3.8	29
463	Light-Healable Epoxy Polymer Networks via Anthracene Dimer Scission of Diamine Crosslinker. ACS Applied Materials & Interfaces, 2019, 11, 19429-19443.	4.0	48
464	Hydrogelation Landscape Engineering and a Novel Strategy To Design Radically Induced Healable and Stimuli-Responsive Hydrogels. ACS Applied Materials & Interfaces, 2019, 11, 19605-19612.	4.0	31
465	Optimized Association of Short Alkyl Side Chains Enables Stiff, Self-Recoverable, and Durable Shape-Memory Hydrogel. ACS Applied Materials & Interfaces, 2019, 11, 19554-19564.	4.0	24
466	Bio-inspired self-healing polyurethanes with multiple stimulus responsiveness. Polymer Chemistry, 2019, 10, 3362-3370.	1.9	29
467	Development of an Injectable Tissue Adhesive Hybrid Hydrogel for Growth Factor-Free Tissue Integration in Advanced Wound Regeneration. ACS Applied Bio Materials, 2019, 2, 2500-2510.	2.3	22
468	Photo-cross-linking: A powerful and versatile strategy to develop shape-memory polymers. Progress in Polymer Science, 2019, 95, 32-64.	11.8	91
469	An Ultrastretchable and Self-Healable Nanocomposite Conductor Enabled by Autonomously Percolative Electrical Pathways. ACS Nano, 2019, 13, 6531-6539.	7.3	99
470	Utilizing Self-Immolative ATRP Initiators To Prepare Stimuli-Responsive Polymeric Films from Nonresponsive Polymers. Macromolecules, 2019, 52, 3268-3277.	2.2	13

#	Article	IF	Citations
471	A deconvolution protocol of the mechanical relaxation spectrum to identify and quantify individual polymer feature contributions to self-healing. Physical Chemistry Chemical Physics, 2019, 21, 10171-10184.	1.3	5
472	Autonomous Supramolecular Interface Selfâ€Healing Monitored by Restoration of UV/Vis Absorption Spectra of Selfâ€Assembled Thiazole Layers. Chemistry - A European Journal, 2019, 25, 8630-8634.	1.7	10
473	Healable, Highly Conductive, Flexible, and Nonflammable Supramolecular Ionogel Electrolytes for Lithium-Ion Batteries. ACS Applied Materials & Interfaces, 2019, 11, 19413-19420.	4.0	125
474	High flux membranes, based on self-assembled and H-bond linked triblock copolymer nanospheres. Journal of Membrane Science, 2019, 585, 10-18.	4.1	9
475	Unexpected Healability of an ortho-Blocked Polybenzoxazine Resin. ACS Macro Letters, 2019, 8, 506-511.	2.3	18
476	Simple Approach for a Self-Healable and Stiff Polymer Network from Iminoboronate-Based Boroxine Chemistry. Chemistry of Materials, 2019, 31, 3736-3744.	3.2	87
477	A robust self-healing polyurethane elastomer: From H-bonds and stacking interactions to well-defined microphase morphology. Science China Materials, 2019, 62, 1188-1198.	3.5	83
478	Self-Healing Alkyl Acrylate-Based Supramolecular Elastomers Cross-Linked via Hostâ€“Guest Interactions. Macromolecules, 2019, 52, 2659-2668.	2.2	83
479	Biodegradable body temperatureâ€responsive shape memory polyurethanes with selfâ€healing behavior. Polymer Engineering and Science, 2019, 59, E310.	1.5	20
480	Macroscopic Observations of Physicochemical Aspects of Self-Healing Phenomena. Advanced Structured Materials, 2019, , 37-74.	0.3	0
481	A Dual Cross-Linked Strategy to Construct Moldable Hydrogels with High Stretchability, Good Self-Recovery, and Self-Healing Capability. Journal of Agricultural and Food Chemistry, 2019, 67, 3966-3980.	2.4	65
482	From mechanical resilience to active material properties in biopolymer networks. Nature Reviews Physics, 2019, 1, 249-263.	11.9	111
483	Functional fluorinated polymer materials and preliminary self-healing behavior. Polymer Chemistry, 2019, 10, 1993-1997.	1.9	24
484	Preparation and Characterization of Isosorbide-Based Self-Healable Polyurethane Elastomers with Thermally Reversible Bonds. Molecules, 2019, 24, 1061.	1.7	14
485	Mechanical properties of supramolecular polymeric materials cross-linked by donorâ€“acceptor interactions. Chemical Communications, 2019, 55, 3809-3812.	2.2	6
486	Multifunctional Skinâ€Inspired Flexible Sensor Systems for Wearable Electronics. Advanced Materials Technologies, 2019, 4, 1800628.	3.0	431
487	Self-healing ability and application of impact hardening polymers. Polymer Testing, 2019, 76, 43-53.	2.3	17
488	Thermodynamically stable whilst kinetically labile coordination bonds lead to strong and tough self-healing polymers. Nature Communications, 2019, 10, 1164.	5.8	258

#	Article	IF	Citations
489	Reversible Self-Healing for Preserving Optical Transparency and Repairing Mechanical Damage in Composites. ACS Applied Materials & Interfaces, 2019, 11, 12797-12807.	4.0	6
490	An antibacterial hydrogel with desirable mechanical, self-healing and recyclable properties based on triple-physical crosslinking. Chemical Engineering Journal, 2019, 370, 1228-1238.	6.6	94
491	Smartâ€Sensing Polymer Coatings with Autonomously Reporting Corrosion Dynamics of Selfâ€Healing Systems. Advanced Materials Interfaces, 2019, 6, 1900055.	1.9	41
492	Self-healing soft electronics. Nature Electronics, 2019, 2, 144-150.	13.1	464
493	Facile Fabrication of Self-Healable and Antibacterial Soy Protein-Based Films with High Mechanical Strength. ACS Applied Materials & Interfaces, 2019, 11, 16107-16116.	4.0	60
494	Interpenetrated polymer network with modified chitosan in composition and self-healing properties. International Journal of Biological Macromolecules, 2019, 132, 374-384.	3.6	35
495	A (Macro)Molecular-Level Understanding of Polymer Network Topology. Trends in Chemistry, 2019, 1, 318-334.	4.4	127
496	Light- and pH-responsive self-healing hydrogel. Journal of Materials Science, 2019, 54, 9983-9994.	1.7	20
497	Dynamic Covalent Bonds in Polymeric Materials. Angewandte Chemie, 2019, 131, 9784-9797.	1.6	95
498	Optically healable polyurethanes with tunable mechanical properties. Polymer Chemistry, 2019, 10, 2247-2255.	1.9	11
499	A Tough Metalâ€Coordinated Elastomer: A Fatigueâ€Resistant, Notchâ€Insensitive Material with an Excellent Selfâ€Healing Capacity. ChemPlusChem, 2019, 84, 432-440.	1.3	18
500	Electrical and Mechanical Selfâ€Healing in Highâ€Performance Dielectric Elastomer Actuator Materials. Advanced Functional Materials, 2019, 29, 1808431.	7.8	92
501	Dynamic Covalent Bonds in Polymeric Materials. Angewandte Chemie - International Edition, 2019, 58, 9682-9695.	7.2	592
502	Synthesis of Self-Healing Polymers by Scandium-Catalyzed Copolymerization of Ethylene and Anisylpropylenes. Journal of the American Chemical Society, 2019, 141, 3249-3257.	6.6	144
503	From Fragile Plastic to Room-Temperature Self-Healing Elastomer: Tuning Quadruple Hydrogen Bonding Interaction through One-Pot Synthesis. ACS Applied Polymer Materials, 2019, 1, 425-436.	2.0	38
504	Multivalent urea bond assembly of polyacrylate oligomers with improved mechanical strength and high self-healing efficiency. Reactive and Functional Polymers, 2019, 137, 79-87.	2.0	8
505	Photoinduced Reversible Solidâ€toâ€Liquid Transitions for Photoswitchable Materials. Angewandte Chemie - International Edition, 2019, 58, 9712-9740.	7.2	208
506	Shape-Memory Assisted Scratch-Healing of Transparent Thiol-Ene Coatings. Materials, 2019, 12, 482.	1.3	19

#	Article	IF	Citations
507	Photoinduzierte, reversible Festâ€flÃ¼ssigâ€ÃœbergÃnge unter Verwendung photoschaltbarer Materialien. Angewandte Chemie, 2019, 131, 9814-9843.	1.6	22
508	Polymeric arsenicals as scaffolds for functional and responsive hydrogels. Journal of Materials Chemistry B, 2019, 7, 4263-4271.	2.9	4
509	Robust Organicâ€“Inorganic Composite Films with Multifunctional Properties of Superhydrophobicity, Self-Healing, and Drag Reduction. Industrial & Engineering Chemistry Research, 2019, 58, 4468-4478.	1.8	38
510	Catalyst-Free Vitrimers from Vinyl Polymers. Macromolecules, 2019, 52, 2105-2111.	2.2	205
511	Prospect for Supramolecular Chemistry in High-Energy-Density Rechargeable Batteries. Joule, 2019, 3, 662-682.	11.7	66
512	The leakage current characterization on the electrical tree aging of polymer. , 2019, , .		2
513	3. Self-Healing Materials: Design and Applications. , 2019, , 87-112.		0
514	Development of Self-Healable Organic/Inorganic Hybrid Materials Containing a Biobased Copolymer via Dielsâ€“Alder Chemistry and Their Application in Electromagnetic Interference Shielding. Polymers, 2019, 11, 1755.	2.0	12
515	Dual-dynamic interpenetrated networks tuned through macromolecular architecture. Polymer Chemistry, 2019, 10, 6290-6304.	1.9	40
516	A facile approach to thermomechanically enhanced fatty acid-containing bioplastics using metalâ€“ligand coordination. Polymer Chemistry, 2019, 10, 6570-6579.	1.9	13
517	A highly stretchable, ultra-tough, remarkably tolerant, and robust self-healing glycerol-hydrogel for a dual-responsive soft actuator. Journal of Materials Chemistry A, 2019, 7, 25969-25977.	5.2	111
518	An integrated self-healable and robust conductive hydrogel for dynamically self-adhesive and highly conformable electronic skin. Journal of Materials Chemistry C, 2019, 7, 15208-15218.	2.7	67
519	Phase-Locked Dynamic and Mechanoresponsive Bonds Design toward Robust and Mechanoluminescent Self-Healing Polyurethanes: A Microscopic View of Self-Healing Behaviors. Macromolecules, 2019, 52, 9376-9382.	2.2	56
520	Autonomous self-healing, self-adhesive, highly conductive composites based on a silver-filled polyborosiloxane/polydimethylsiloxane double-network elastomer. Journal of Materials Chemistry A, 2019, 7, 27278-27288.	5.2	79
521	Mechanistic Insights on Spontaneous Moisture-Driven Healing of Urea-Based Polyurethanes. ACS Applied Materials & Interfaces, 2019, 11, 46176-46182.	4.0	18
523	Influence of interfacial interaction on the mechanical properties of amorphous PE/MMT nanocomposites. AIP Advances, 2019, 9, 125201.	0.6	6
524	Wide nematic phases induced by hydrogen-bonding. Liquid Crystals, 2019, 46, 550-559.	0.9	37
525	Condensation Polymers: Their Chemical Peculiarities Offer Great Opportunities. Progress in Polymer Science, 2019, 89, 1-18.	11.8	24

#	Article	IF	Citations
526	Synthesis and analysis of a healable, poly(propylene glycol)-based supramolecular network. Progress in Organic Coatings, 2019, 127, 260-265.	1.9	2
527	Recent Advances on Selfâ€Healing Materials and Batteries. ChemElectroChem, 2019, 6, 1605-1622.	1.7	41
528	Self-healing, antibacterial, and dual cross-linked multilayer films for microcapsule-based controllable drug release applications. Applied Surface Science, 2019, 476, 182-188.	3.1	17
529	Modular and Reconfigurable Stretchable Electronic Systems. Advanced Materials Technologies, 2019, 4, 1800417.	3.0	42
530	Strategies and progress on improving robustness and reliability of triboelectric nanogenerators. Nano Energy, 2019, 55, 203-215.	8.2	78
531	Mechanics of light-activated self-healing polymer networks. Journal of the Mechanics and Physics of Solids, 2019, 124, 643-662.	2.3	26
532	Dynamic covalent Schiff-base silicone polymers and elastomers. Polymer, 2019, 160, 282-290.	1.8	53
533	Thermally reversible polymer networks for scratch resistance and scratch healing in automotive clear coats. Progress in Organic Coatings, 2019, 127, 37-44.	1.9	21
534	Mimicking Dynamic Adhesiveness and Strain-Stiffening Behavior of Biological Tissues in Tough and Self-Healable Cellulose Nanocomposite Hydrogels. ACS Applied Materials & Interfaces, 2019, 11, 5885-5895.	4.0	171
535	Diels-Alder based epoxy matrix and interfacial healing of bismaleimide grafted GNP infused hybrid nanocomposites. Polymer Testing, 2019, 74, 138-151.	2.3	36
536	Anilinium Salts in Polymer Networks for Materials with Mechanical Stability and Mild Thermally Induced Dynamic Properties. ACS Macro Letters, 2019, 8, 95-100.	2.3	51
537	Synthesis of mechanically strong waterborne poly(urethane-urea)s capable of self-healing at elevated temperatures. European Polymer Journal, 2019, 112, 411-422.	2.6	30
538	Efficient intrinsic self-healing epoxy acrylate formed from host-guest chemistry. Polymer, 2019, 164, 79-85.	1.8	59
539	A mechanically robust double-network hydrogel with high thermal responses via doping hydroxylated boron nitride nanosheets. Journal of Materials Science, 2019, 54, 3368-3382.	1.7	27
540	Design of self-healable supramolecular hybrid network based on carboxylated styrene butadiene rubber and nano-chitosan. Carbohydrate Polymers, 2019, 205, 410-419.	5.1	74
541	Synergistic influence of keratin and TPU: An approach towards bioinspired artificial skin. Materials Chemistry and Physics, 2019, 223, 196-201.	2.0	7
542	High-Efficiency Construction of CO₂-Based Healable Thermoplastic Elastomers via a Tandem Synthetic Strategy. ACS Sustainable Chemistry and Engineering, 2019, 7, 1372-1380.	3.2	41
543	Mechanically magnified chitosan-based hydrogel as tissue adhesive and antimicrobial candidate. International Journal of Biological Macromolecules, 2019, 125, 109-115.	3.6	36

#	Article	IF	Citations
544	Alcohol-assisted self-healing network polymer based on vicinal tricarbonyl chemistry. Polymer, 2019, 161, 101-108.	1.8	13
545	Carboxymethylagarose-based multifunctional hydrogel with super stretchable, self-healable having film and fiber forming properties. Arabian Journal of Chemistry, 2020, 13, 1661-1668.	2.3	11
546	When Flexible Organic Fieldâ€Effect Transistors Meet Biomimetics: A Prospective View of the Internet of Things. Advanced Materials, 2020, 32, e1901493.	11.1	136
547	Supramolecular polymer chemistry: From structural control to functional assembly. Progress in Polymer Science, 2020, 100, 101167.	11.8	135
548	Development of selfâ€healing star metallopolymers by metalâ€“ligand crosslinking. Journal of Applied Polymer Science, 2020, 137, 48527.	1.3	6
549	Oilâ€Based Selfâ€Healing Barrier Coatings: To Flow and Not to Flow. Advanced Functional Materials, 2020, 30, 1906273.	7.8	24
550	Glassâ€transition temperature governs the thermal decrosslinking behavior of Dielsâ€“Alder crosslinked polymethacrylate networks. Journal of Polymer Science, 2020, 58, 193-203.	2.0	8
551	Polymernetzwerke: Von Kunststoffen und Gelen zu porÃ¶sen GerÃ¼sten. Angewandte Chemie, 2020, 132, 5054-5085.	1.6	16
552	Polymer Networks: From Plastics and Gels to Porous Frameworks. Angewandte Chemie - International Edition, 2020, 59, 5022-5049.	7.2	194
553	Highly tough, multi-stimuli-responsive, and fast self-healing supramolecular networks toward strain sensor application. Chemical Engineering Journal, 2020, 389, 123468.	6.6	50
554	Hydrogen bonding derived self-healing polymer composites reinforced with amidation carbon fibers. Nanotechnology, 2020, 31, 025704.	1.3	50
555	Directly printing of upconversion fluorescence-responsive elastomers for self-healable optical application. Chemical Engineering Journal, 2020, 384, 123375.	6.6	31
556	Recent progress in tactile sensors and their applications in intelligent systems. Science Bulletin, 2020, 65, 70-88.	4.3	132
557	Shape memory effects in self-healing polymers. Progress in Polymer Science, 2020, 102, 101208.	11.8	130
558	Palladium-bridged polymers as CO-biosignal-responsive self-healing hydrogels. Polymer Chemistry, 2020, 11, 779-783.	1.9	6
559	Time-controllable roll-up onset of polythiophene sheets into nanotubes that exhibit circularly polarized luminescence. Nanoscale, 2020, 12, 2999-3006.	2.8	14
560	Photo-switching and -cyclisation of hydrogen bonded liquid crystals based on resveratrol. Chemical Communications, 2020, 56, 1105-1108.	2.2	12
561	Synthesis of nanosensors for autonomous warning of damage and self-repairing in polymeric coatings. Nanoscale, 2020, 12, 3194-3204.	2.8	40

#	Article	IF	Citations
562	Ultrafast self-healing and highly transparent coating with mechanically durable icephobicity. Applied Materials Today, 2020, 19, 100542.	2.3	40
563	Novel series of thermal- and water-induced shape memory Eucommia ulmoides rubber composites. Polymer Testing, 2020, 81, 106212.	2.3	18
564	Mussel-Inspired Highly Stretchable, Tough Nanocomposite Hydrogel with Self-Healable and Near-Infrared Actuated Performance. Industrial & Engineering Chemistry Research, 2020, 59, 166-174.	1.8	18
565	Strengthened, Recyclable, Weldable, and Conducting-Controllable Biobased Rubber Film with a Continuous Water-Soluble Framework Network. ACS Sustainable Chemistry and Engineering, 2020, 8, 1285-1294.	3.2	33
566	Synthesis of a branched star copolymer by aqueous SET-LRP and its thermo-stimuli response. Journal of Macromolecular Science - Pure and Applied Chemistry, 2020, 57, 266-273.	1.2	3
567	Bulk network polymers with dynamic Bâ€“O bonds: healable and reprocessable materials. Materials Horizons, 2020, 7, 694-714.	6.4	151
568	Cashew nut shell liquid terminated self-healable polyurethane as an effective anticorrosive coating with biodegradable attribute. Progress in Organic Coatings, 2020, 139, 105472.	1.9	19
569	Dynamic plant-derived polysaccharide-based hydrogels. Carbohydrate Polymers, 2020, 231, 115743.	5.1	57
570	Multifunctional smart layers with self-cleaning, self-healing, and slow-release activities. , 2020, , 457-486.		3
571	Shape-memory coatings, polymers, and alloys with self-healing functionality for medical and industrial applications. , 2020, , 335-358.		2
572	The dynamic chain effect on healing performance and thermo-mechanical properties of a polyurethane network. Reactive and Functional Polymers, 2020, 146, 104444.	2.0	10
573	Sandwich-like polyvinyl alcohol (PVA) grafted graphene: A solid-inhibitors container for long term self-healing coatings. Chemical Engineering Journal, 2020, 383, 123203.	6.6	36
575	Robust Poly(urethane-amide) Protective Film with Fast Self-Healing at Room Temperature. ACS Applied Polymer Materials, 2020, 2, 285-294.	2.0	23
576	Self-healing of polymer materials and their composites. , 2020, , 103-121.		0
577	Self-healing composite coatings with protective and anticorrosion potentials: classification by healing mechanism. , 2020, , 123-162.		1
578	Enhancements in self-curing composites. , 2020, , 177-192.		0
579	Principal and mechanism of self-repair of polymer matrix composite materials. , 2020, , 193-208.		0
580	Composite for self-repairing covering to hinder corrosion. , 2020, , 209-224.		0

#	Article	IF	Citations
581	One-way thermo-responsive shape memory polymer nanocomposite derived from polycaprolactone and polystyrene-block-polybutadiene-block-polystyrene packed with carbon nanofiber. Materials Today Communications, 2020, 22, 100802.	0.9	18
582	Metal-crosslinked É›-poly-L-lysine tissue adhesives with high adhesive performance: Inspiration from mussel adhesive environment. International Journal of Biological Macromolecules, 2020, 153, 1251-1261.	3.6	8
583	Self-healing polymers with nanomaterials and nanostructures. Nano Today, 2020, 30, 100826.	6.2	68
584	Self-Healing of Materials under High Electrical Stress. Matter, 2020, 3, 989-1008.	5.0	47
585	Self-healable transparent polymer/salt hybrid adhesiveviaa ternary bonding effect. Journal of Materials Chemistry A, 2020, 8, 21812-21823.	5.2	11
586	Photothermal self-healing of gold nanoparticleâ€“polystyrene hybrids. Nanoscale, 2020, 12, 20726-20736.	2.8	8
587	Halide Perovskite Solar Cells with Biocompatibility. Advanced Energy and Sustainability Research, 2020, 1, 2000028.	2.8	10
588	A supramolecular silicone dielectric elastomer with a high dielectric constant and fast and highly efficient self-healing under mild conditions. Journal of Materials Chemistry A, 2020, 8, 23330-23343.	5.2	43
589	New Rod-Like H-Bonded Assembly Systems: Mesomorphic and Geometrical Aspects. Crystals, 2020, 10, 795.	1.0	7
590	Interfacial adhesion and self-healing kinetics of multi-stimuli responsive colorless polymer bilayers. Composites Part B: Engineering, 2020, 203, 108451.	5.9	23
591	Triple non-covalent dynamic interactions enabled a tough and rapid room temperature self-healing elastomer for next-generation soft antennas. Journal of Materials Chemistry A, 2020, 8, 25073-25084.	5.2	32
592	Organic Bioelectronics: From Functional Materials to Nextâ€Generation Devices and Power Sources. Advanced Materials, 2020, 32, e2001439.	11.1	101
593	High-Strength, Fast Self-Healing, Aging-Insensitive Elastomers with Shape Memory Effect. ACS Applied Materials & Interfaces, 2020, 12, 35445-35452.	4.0	35
594	Highly Robust and Self-Powered Electronic Skin Based on Tough Conductive Self-Healing Elastomer. ACS Nano, 2020, 14, 9066-9072.	7.3	90
595	Types of chemistries involved in self-healing polymeric systems. , 2020, , 17-73.		4
596	Shape memory-assisted self-healing polymer systems. , 2020, , 95-121.		2
597	Self-healing biomaterials based on polymeric systems. , 2020, , 167-207.		1
598	Self-healing polymeric coatings containing microcapsules filled with active materials. , 2020, , 235-258.		2

#	Article	IF	Citations
599	Self-healing materials utilizing supramolecular interactions. , 2020, , 293-367.		2
600	Self-healing fiber-reinforced polymer composites for their potential structural applications. , 2020, , 455-472.		8
601	Progress of 3D network binders in silicon anodes for lithium ion batteries. Journal of Materials Chemistry A, 2020, 8, 25548-25570.	5.2	88
602	A stretchable and self-healable organosilicon conductive nanocomposite for a reliable and sensitive strain sensor. Journal of Materials Chemistry C, 2020, 8, 17277-17288.	2.7	19
603	NIR driven fast macro-damage repair and shear-free reprocessing of thermoset elastomers via dynamic covalent urea bonds. Journal of Materials Chemistry A, 2020, 8, 25047-25052.	5.2	25
604	Challenges and Prospects of Bio-Inspired and Multifunctional Transparent Substrates and Barrier Layers for Optoelectronics. ACS Nano, 2020, 14, 16241-16265.	7.3	27
605	Fabrication and characterization of glycogen-based elastic, self-healable, and conductive hydrogels as a wearable strain-sensor for flexible e-skin. Polymer, 2020, 210, 122961.	1.8	35
606	Bio-based healable non-isocyanate polyurethanes driven by the cooperation of disulfide and hydrogen bonds. Polymer Chemistry, 2020, 11, 7524-7532.	1.9	52
607	Moistureâ€Enabled Electricity Generation: From Physics and Materials to Selfâ€Powered Applications. Advanced Materials, 2020, 32, e2003722.	11.1	175
608	Highly Transparent, Flexible, and Self-Healable Thermoacoustic Loudspeakers. ACS Applied Materials & Interfaces, 2020, 12, 53184-53192.	4.0	17
609	Bioinspiration in light harvesting and catalysis. Nature Reviews Materials, 2020, 5, 828-846.	23.3	136
610	A CO₂-responsive smart fluid based on supramolecular assembly structures varying reversibly from vesicles to wormlike micelles. RSC Advances, 2020, 10, 25311-25318.	1.7	13
611	Serial number restoration on polymer surfaces: A survey of recent literature. Forensic Chemistry, 2020, 20, 100267.	1.7	9
612	Self-Healing Mechanisms for 3D-Printed Polymeric Structures: From Lab to Reality. Polymers, 2020, 12, 1534.	2.0	36
613	Self-healable ZnO@ multiwalled carbon nanotubes (MWCNTs) /DA-PDMS nanocomposite via Diels-Alder chemistry as microwave absorber: A novel multifunctional material. Carbon, 2020, 169, 235-247.	5.4	33
614	Intrinsically Stretchable and Selfâ€Healing Electroconductive Composites Based on Supramolecular Organic Polymer Embedded with Copper Microparticles. Advanced Electronic Materials, 2020, 6, 2000527.	2.6	8
615	Blood Pressure Sensors: Materials, Fabrication Methods, Performance Evaluations and Future Perspectives. Sensors, 2020, 20, 4484.	2.1	27
616	Stimuli-Responsive Luminescent Solar Concentrators Based on Photoreversible Polymeric Systems. ACS Applied Polymer Materials, 2020, 2, 3828-3839.	2.0	12

#	Article	IF	Citations
617	Design Principles of Interfacial Dynamic Bonds in Selfâ€Healing Materials: What are the Parameters?. Chemistry - an Asian Journal, 2020, 15, 4215-4240.	1.7	13
618	Internal catalysis for dynamic covalent chemistry applications and polymer science. Chemical Society Reviews, 2020, 49, 8425-8438.	18.7	128
619	Inkjet printed self-healable strain sensor based on graphene and magnetic iron oxide nano-composite on engineered polyurethane substrate. Scientific Reports, 2020, 10, 18234.	1.6	18
620	Preparation of autonomously self-healing electrode based on double network supramolecular elastomer. , 2020, , .		0
622	Thermoresponsive self-healable and recyclable polymer networks based on a dynamic quinone methideâ€“thiol chemistry. Polymer Chemistry, 2020, 11, 6157-6162.	1.9	13
623	Self-Healing EPDM Rubbers with Highly Stable and Mechanically-Enhanced Urea-Formaldehyde (UF) Microcapsules Prepared by Multi-Step In Situ Polymerization. Polymers, 2020, 12, 1918.	2.0	5
624	Recent Progress in Nanomaterial Enabled Chemical Sensors for Wearable Environmental Monitoring Applications. Advanced Functional Materials, 2020, 30, 2005703.	7.8	85
625	A Dielectric Elastomer Actuator That Can Self-Heal Integrally. ACS Applied Materials & Interfaces, 2020, 12, 44137-44146.	4.0	41
626	Intrinsic self-healing polymers for advanced lithium-based batteries: Advances and strategies. Applied Physics Reviews, 2020, 7, .	5.5	58
627	Experimental and Computational Approaches of Newly Polymorphic Supramolecular H-Bonded Liquid Crystal Complexes. Frontiers in Chemistry, 2020, 8, 571120.	1.8	10
628	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
629	Ultrafast Self-Healing, Reusable, and Conductive Polysaccharide-Based Hydrogels for Sensitive Ionic Sensors. ACS Sustainable Chemistry and Engineering, 2020, 8, 18506-18518.	3.2	107
630	Highly Stretchable, Recyclable, and Fast Room Temperature Self-Healable Biobased Elastomers Using Polycondensation. Macromolecules, 2020, 53, 9847-9858.	2.2	65
631	Design of Self-Cross-Linkable Poly(n-butyl) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 227 Td (acrylate)-co-poly[N and Self-Healing Properties. ACS Applied Polymer Materials, 2020, 2, 5432-5443.	2.0	17
632	Rational Design of Musselâ€Inspired Hydrogels with Dynamic Catecholatoâ€“Metal Coordination Bonds. Macromolecular Rapid Communications, 2020, 41, e2000439.	2.0	26
633	Modulating the thermomechanical properties and self-healing efficiency of siloxane-based soft polymers through metalâ€“ligand coordination. New Journal of Chemistry, 2020, 44, 8977-8985.	1.4	20
634	Toward Easy-to-Assemble, Large-Area Smart Windows: All-in-One Cross-Linked Electrochromic Material and Device. ACS Applied Materials & Interfaces, 2020, 12, 27526-27536.	4.0	44
635	Photoâ€switchable Fluorescence in Hydrogenâ€Bonded Liquid Crystals. Chemistry - A European Journal, 2020, 26, 13347-13351.	1.7	6

#	Article	IF	Citations
636	Polymer actuators based on covalent adaptable networks. Polymer Chemistry, 2020, 11, 5297-5320.	1.9	39
637	Room-temperature autonomous self-healing glassy polymers with hyperbranched structure. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 11299-11305.	3.3	134
638	A facile fabrication of shape memory polymer nanocomposites with fast light-response and self-healing performance. Composites Part A: Applied Science and Manufacturing, 2020, 135, 105931.	3.8	75
639	Coupling Dynamic Covalent Bonds and Ionic Crosslinking Network to Promote Shape Memory Properties of Ethylene-vinyl Acetate Copolymers. Polymers, 2020, 12, 983.	2.0	12
640	Tough, self-healable and conductive elastomers based on freezing-thawing strategy. Chemical Engineering Journal, 2020, 402, 125421.	6.6	15
641	Synthesis and characterization of self-healing cross-linked non-isocyanate polyurethanes based on Diels-Alder reaction with unsaturated polyester. Materials Today Communications, 2020, 23, 101138.	0.9	21
642	Process regulation for encapsulating pure polyamine via integrating microfluidic <scp>Tâ€junction</scp> and interfacial polymerization. Journal of Polymer Science, 2020, 58, 1810-1824.	2.0	5
644	Adaptable Strategy to Fabricate Self-Healable and Reprocessable Poly(thiourethane-urethane) Elastomers via Reversible Thiolâ€“Isocyanate Click Chemistry. Macromolecules, 2020, 53, 4284-4293.	2.2	80
645	Catalytic effects of zirconium on scratch-healing and mechanical properties of urethaneâ€“acrylate automotive clearcoat. Progress in Organic Coatings, 2020, 148, 105813.	1.9	1
646	Mussel-inspired, self-healing polymer blends. Polymer, 2020, 198, 122528.	1.8	10
647	Self-healing polymers. Nature Reviews Materials, 2020, 5, 562-583.	23.3	684
648	Recent progress in self-healable ion gels. Science and Technology of Advanced Materials, 2020, 21, 388-401.	2.8	24
649	A healable waterborne polyurethane synergistically cross-linked by hydrogen bonds and covalent bonds for composite conductors. Journal of Materials Chemistry C, 2020, 8, 5280-5292.	2.7	49
650	Supramolecular self-healing materials from non-covalent cross-linking hostâ€“guest interactions. Chemical Communications, 2020, 56, 4381-4395.	2.2	107
651	Selfâ€Healing Materials for Energyâ€Storage Devices. Advanced Functional Materials, 2020, 30, 1909912.	7.8	121
652	Eco-friendly, self-healing, and stretchable graphene hydrogels functionalized with diol oligomer for wearable sensing applications. Sensors and Actuators B: Chemical, 2020, 321, 128507.	4.0	19
653	Injectable hydrogel-loaded nano-hydroxyapatite that improves bone regeneration and alveolar ridge promotion. Materials Science and Engineering C, 2020, 116, 111158.	3.8	51
654	A controllable oil-triggered actuator with aligned microchannel design for implementing precise deformation. Nanoscale, 2020, 12, 15426-15434.	2.8	3

#	Article	IF	Citations
655	Smart polymers and nanocomposites for 3D and 4D printing. Materials Today, 2020, 40, 215-245.	8.3	144
656	Self-Healing Thermoplastic Polyurethane Linked via Host-Guest Interactions. Polymers, 2020, 12, 1393.	2.0	35
657	Nanoscratch self-healing characteristics of polyvinyl polymer thin films embedded with Al2O3 nanoparticles with thermal and UV energy reactivity. Materials Today Communications, 2020, 25, 101375.	0.9	3
658	A facile approach to durable, transparent and self-healing coatings with enhanced hardness based on Diels-Alder polymer networks. Progress in Organic Coatings, 2020, 147, 105840.	1.9	17
659	Regular H-Bonding-Containing Polymers with Stretchability up to 100% External Strain for Self-Healable Plastic Transistors. Chemistry of Materials, 2020, 32, 1914-1924.	3.2	60
660	Bulk Copolymerization of Hostâ€“Guest Monomers with Liquid-Type Acrylamide Monomers for Supramolecular Materials Applications. ACS Applied Polymer Materials, 2020, 2, 1553-1560.	2.0	12
661	Entropy and interfacial energy driven self-healable polymers. Nature Communications, 2020, 11, 1028.	5.8	77
662	Collagen incorporation into waterborne polyurethane improves breathability, mechanical property, and self-healing ability. Composites Part A: Applied Science and Manufacturing, 2020, 133, 105854.	3.8	33
663	Design of a mechanically strong and highly stretchable thermoplastic silicone elastomer based on coulombic interactions. Journal of Materials Chemistry A, 2020, 8, 5943-5951.	5.2	46
664	A Skin-Conformal, Stretchable, and Breathable Fiducial Marker Patch for Surgical Navigation Systems. Micromachines, 2020, 11, 194.	1.4	4
665	Nanochitin/metal ion dual reinforcement in synthetic polyacrylamide network-based nanocomposite hydrogels. Carbohydrate Polymers, 2020, 236, 116061.	5.1	22
666	Vinyl Iodide Containing Polymers Directly Prepared via an Iodo-yne Polymerization. ACS Macro Letters, 2020, 9, 410-415.	2.3	7
667	Recent Advances in Mechano-Responsive Hydrogels for Biomedical Applications. ACS Applied Polymer Materials, 2020, 2, 1092-1107.	2.0	59
668	Emerging functional materials based on chemically designed molecular recognition. BMC Materials, 2020, 2, .	6.8	51
669	Flexible, Reconfigurable, and Self-Healing TPU/Vitrimer Polymer Blend with Copolymerization Triggered by Bond Exchange Reaction. ACS Applied Materials & Interfaces, 2020, 12, 8740-8750.	4.0	47
670	Selfâ€Healing Metalloâ€Supramolecular Amphiphilic Polymer Conetworks. Macromolecular Chemistry and Physics, 2020, 221, 1900432.	1.1	17
671	Self-Healable Hydrogelâ€“Liquid Metal Composite Platform Enabled by a 3D Printed Stamp for a Multimodular Sensor System. ACS Applied Materials & Interfaces, 2020, 12, 9824-9832.	4.0	56
672	Efficiently self-healing boronic ester crystals. Chemical Science, 2020, 11, 2606-2613.	3.7	42

#	Article	IF	Citations
674	Flourishing Selfâ€Healing Surface Materials: Recent Progresses and Challenges. Advanced Materials Interfaces, 2020, 7, 1901959.	1.9	30
675	Self-healing magnetic nanocomposites with robust mechanical properties and high magnetic actuation potential prepared from commodity monomers via graft-from approach. Polymer Chemistry, 2020, 11, 1292-1297.	1.9	12
676	A Self-Healing Polymer with Fast Elastic Recovery upon Stretching. Molecules, 2020, 25, 597.	1.7	12
677	Water-Enabled Room-Temperature Self-Healing and Recyclable Polyurea Materials with Super-Strong Strength, Toughness, and Large Stretchability. ACS Applied Materials & Interfaces, 2020, 12, 23484-23493.	4.0	84
678	Mechanics of bacteria-assisted extrinsic healing. Journal of the Mechanics and Physics of Solids, 2020, 139, 103938.	2.3	8
679	Citric Acid-Modified Cellulose-Based Tough and Self-Healable Composite Formed by Two Kinds of Noncovalent Bonding. ACS Applied Polymer Materials, 2020, 2, 2274-2283.	2.0	27
680	Investigation on Self-healing Property of Epoxy Resins Based on Disulfide Dynamic Links. Chinese Journal of Polymer Science (English Edition), 2020, 38, 932-940.	2.0	42
681	Research progress in bio-based self-healing materials. European Polymer Journal, 2020, 129, 109651.	2.6	71
682	Advances in intrinsic self-healing polyurethanes and related composites. RSC Advances, 2020, 10, 13766-13782.	1.7	72
683	New Symmetrical U- and Wavy-Shaped Supramolecular H-Bonded Systems; Geometrical and Mesomorphic Approaches. Molecules, 2020, 25, 1420.	1.7	19
684	Universally autonomous self-healing elastomer with high stretchability. Nature Communications, 2020, 11, 2037.	5.8	300
685	Developments and Challenges in Selfâ€Healing Antifouling Materials. Advanced Functional Materials, 2020, 30, 1908098.	7.8	110
686	Tattooing Plastics with Reversible and Irreversible Encryption. Advanced Science, 2020, 7, 1903785.	5.6	11
687	Alkylâ€Alkyl Interactions in the Periphery of Supramolecular Entities: From the Evaluation of Weak Forces to Applications. ChemPlusChem, 2020, 85, 715-724.	1.3	14
688	Ultraviolet and infrared two-wavelength modulated self-healing materials based on azobenzene-functionalized carbon nanotubes. Composites Communications, 2020, 19, 233-238.	3.3	21
689	Self-Healable Poly(vinyl alcohol) Photonic Crystal Hydrogel. ACS Applied Polymer Materials, 2020, 2, 2086-2092.	2.0	14
690	Multi-Functional Cardanol Triazine Schiff Base Polyimine Additives for Self-Healing and Super-Hydrophobic Epoxy of Steel Coating. Coatings, 2020, 10, 327.	1.2	19
691	Induced Phases of New H-bonded Supramolecular Liquid Crystal Complexes; Mesomorphic and Geometrical Estimation. Molecules, 2020, 25, 1549.	1.7	18

#	Article	IF	Citations
692	Preparation of hydrophilic polymeric materials with movable cross-linkers and their mechanical property. Polymer, 2020, 196, 122465.	1.8	20
693	Synergy between dynamic covalent boronic ester and boronâ€“nitrogen coordination: strategy for self-healing polyurethane elastomers at room temperature with unprecedented mechanical properties. Materials Horizons, 2021, 8, 216-223.	6.4	145
694	Self-healing Polyurethane Elastomer Based on Molecular Design: Combination of Reversible Hydrogen Bonds and High Segment Mobility. Journal of Inorganic and Organometallic Polymers and Materials, 2021, 31, 683-694.	1.9	28
695	A self-healing and recyclable polyurethane-urea Dielsâ€“Alder adduct synthesized from carbon dioxide and furfuryl amine. Green Chemistry, 2021, 23, 552-560.	4.6	76
696	Recent advances in fabricating durable superhydrophobic surfaces: a review in the aspects of structures and materials. Materials Chemistry Frontiers, 2021, 5, 1655-1682.	3.2	94
697	Self-healing and fatigue performance of poly 2-hydroxyethyl methacrylate modified bitumen. Construction and Building Materials, 2021, 273, 121688.	3.2	3
698	Preparation of chitosan-reduced graphene oxide (CS-RGO) microcapsules and its application in UV/moisture-induced self-healing coatings. Progress in Organic Coatings, 2021, 151, 106055.	1.9	6
699	Promoting healing progress in polymer composites based on <scp>Dielsâ€Alder</scp> reaction by constructing silver bridges. Polymers for Advanced Technologies, 2021, 32, 1239-1250.	1.6	11
700	Biomimetic design of photonic materials for biomedical applications. Acta Biomaterialia, 2021, 121, 143-179.	4.1	9
701	Molybdenum disulfide (MoS2) nanosheets-based hydrogels with light-triggered self-healing property for flexible sensors. Journal of Colloid and Interface Science, 2021, 586, 601-612.	5.0	40
702	Synthesis and properties of selfâ€healing crossâ€linked nonisocyanate polyurethanes from biobased diglycerol bis(cyclic carbonate). Polymer Engineering and Science, 2021, 61, 497-505.	1.5	6
703	Progress and Roadmap for Intelligent Selfâ€Healing Materials in Autonomous Robotics. Advanced Materials, 2021, 33, e2002800.	11.1	75
704	Hydrogels Generated from Cyclic Poly(2â€Oxazoline)s Display Unique Swelling and Mechanical Properties. Macromolecular Rapid Communications, 2021, 42, e2000658.	2.0	13
705	Facile immobilization of graphene nanosheets onto PBO fibers via MOF-mediated coagulation strategy: Multifunctional interface with self-healing and ultraviolet-resistance performance. Journal of Colloid and Interface Science, 2021, 587, 661-671.	5.0	33
706	Fused Filament Fabrication 4D Printing of a Highly Extensible, Self-Healing, Shape Memory Elastomer Based on Thermoplastic Polymer Blends. ACS Applied Materials & Interfaces, 2021, 13, 12777-12788.	4.0	64
707	A bioinspired mineral-organic composite hydrogel as a self-healable and mechanically robust bone graft for promoting bone regeneration. Chemical Engineering Journal, 2021, 413, 127512.	6.6	30
708	Solidâ€“Liquid Composites for Soft Multifunctional Materials. Advanced Functional Materials, 2021, 31, .	7.8	68
709	Progress and challenges in self-healing cementitious materials. Journal of Materials Science, 2021, 56, 201-230.	1.7	34

#	Article	IF	Citations
710	Photoinduced Healing of Mechanically Robust Polymers. Chemistry Letters, 2021, 50, 7-13.	0.7	6
711	Stretchable Electronics Based on PDMS Substrates. Advanced Materials, 2021, 33, e2003155.	11.1	319
712	Resent Advances in Self-healing Ion Gels. Nippon Gomu Kyokaishi, 2021, 94, 39-45.	0.0	0
713	Smart edible coating films based on chitosan and beeswaxâ€“pollen grains for the postharvest preservation of Le Conte pear. RSC Advances, 2021, 11, 9572-9585.	1.7	56
714	Progress and challenges in self-healing composite materials. Materials Advances, 2021, 2, 1896-1926.	2.6	51
715	Tuning the solid-state emission of liquid crystalline nitro-cyanostilbene by halogen bonding. Beilstein Journal of Organic Chemistry, 2021, 17, 124-131.	1.3	2
716	Plastics in Self-Healing Applications. , 2021, , .		0
717	Preparation of conductive self-healing hydrogels via an interpenetrating polymer network method. RSC Advances, 2021, 11, 6620-6627.	1.7	7
718	One-Step Conversion of Crab Shells to Levulinic Acid Catalyzed by Ionic Liquids: Self-Healing of Chitin Fraction. ACS Sustainable Chemistry and Engineering, 2021, 9, 1762-1771.	3.2	16
719	Spontaneously Self-Regenerative Hybrid Luminescent Hydrogel. ACS Applied Polymer Materials, 2021, 3, 604-609.	2.0	6
720	Wholly Biobased, Highly Stretchable, Hydrophobic, and Self-healing Thermoplastic Elastomer. ACS Applied Materials & Interfaces, 2021, 13, 6720-6730.	4.0	60
721	Functionalized Elastomers for Intrinsically Soft and Biointegrated Electronics. Advanced Healthcare Materials, 2021, 10, e2002105.	3.9	36
722	Advanced materials for geothermal energy applications. , 2021, , 53-124.		1
723	Insights of technologies for self-healing organic coatings. , 2021, , 37-65.		1
724	Self-healing and shape memory functions exhibited by supramolecular liquid-crystalline networks formed by combination of hydrogen bonding interactions and coordination bonding. Chemical Science, 2021, 12, 6091-6098.	3.7	27
725	Thermoresponsive Polymer Nanocomposites. , 2021, , 510-526.		1
726	Layered assembly of cationic and anionic supramolecular polymers. Chemical Communications, 2021, 57, 6648-6651.	2.2	0
727	A robust, freeze-resistant and highly ion conductive ionogel electrolyte towards lithium metal batteries workable at â˜’30 Â°C. Physical Chemistry Chemical Physics, 2021, 23, 6775-6782.	1.3	12

#	Article	IF	Citations
728	Self-Healing Polymer Nanocomposite Materials by Joule Effect. Polymers, 2021, 13, 649.	2.0	38
729	Synthesis, Selfâ€Assembly, and Nucleic Acid Recognition of an Acylhydrazoneâ€Conjugated Cationic Tetraphenylethene Ligand. European Journal of Organic Chemistry, 2021, 2021, 1123-1135.	1.2	4
731	Printable, Down/Upâ€Conversion Tripleâ€Mode Fluorescence Responsive and Colorless Selfâ€Healing Elastomers with Superior Toughness. Advanced Functional Materials, 2021, 31, 2100211.	7.8	51
732	Fully Organic Self-Powered Electronic Skin with Multifunctional and Highly Robust Sensing Capability. Research, 2021, 2021, 9801832.	2.8	9
733	Review of Self-Healing Polymers as Propituous Biomaterials. Current Smart Materials, 2021, 5, 38-53.	0.5	0
735	Recent progress in self-healing conductive materials and flexible sensors with desired functional repairability. Multifunctional Materials, 2021, 4, 012002.	2.4	2
736	A biobased self-healing thermoset coating with a dynamic photosensitive molecule. Polymer, 2021, 217, 123454.	1.8	6
737	A Short Review on Selfâ€Healing Thermoplastic Polyurethanes. Macromolecular Chemistry and Physics, 2021, 222, 2100002.	1.1	54
738	Autonomous Self-Healing Strategy for Stable Sodium-Ion Battery: A Case Study of Black Phosphorus Anodes. ACS Applied Materials & Interfaces, 2021, 13, 13170-13182.	4.0	31
739	A Fast Roomâ€Temperature Selfâ€Healing Glassy Polyurethane. Angewandte Chemie, 2021, 133, 8026-8034.	1.6	6
740	Synthesis and properties of strong and tough Dielsâ€“Alder self-healing crosslinked polyamides. Journal of Polymer Research, 2021, 28, 1.	1.2	9
741	Reconfigurable and Renewable Nanoâ€Microâ€Structured Plastics for Radiative Cooling. Advanced Functional Materials, 2021, 31, 2100535.	7.8	58
742	A Fast Roomâ€Temperature Selfâ€Healing Glassy Polyurethane. Angewandte Chemie - International Edition, 2021, 60, 7947-7955.	7.2	183
743	Hydrogen Bonding in Self-Healing Elastomers. ACS Omega, 2021, 6, 9319-9333.	1.6	79
744	Water-responsive shape memory PLLA via incorporating PCL-(PMVS-s-PAA)-PCL-PTMG-PCL-(PMVS-s-PAA)-PCL. European Polymer Journal, 2021, 147, 110252.	2.6	10
745	Designing Dynamic Materials from Dynamic Bonds to Macromolecular Architecture. Trends in Chemistry, 2021, 3, 231-247.	4.4	36
746	3D-printed self-healing hydrogels via Digital Light Processing. Nature Communications, 2021, 12, 2462.	5.8	122
747	Thermal and electroâ€induced shapeâ€memory <scp>Eucommia ulmoides</scp> gum composites filled with carbon nanotubes. Polymers for Advanced Technologies, 2021, 32, 3297-3308.	1.6	6

#	Article	IF	Citations
748	Ultra-tough and in-situ repairable carbon/epoxy composite with EMAA. Composites Part A: Applied Science and Manufacturing, 2021, 143, 106206.	3.8	12
749	Dynamics and healing behavior of metallosupramolecular polymers. Science Advances, 2021, 7, .	4.7	25
750	Self-healing flexible/stretchable energy storage devices. Materials Today, 2021, 44, 78-104.	8.3	85
751	Development of bioresorbable smart injectable hydrogels based on thermo-responsive copolymer integrated bovine serum albumin bioconjugates for accelerated healing of excisional wounds. Journal of Industrial and Engineering Chemistry, 2021, 96, 345-355.	2.9	22
752	Acceleration Effect of Dynamic Covalent Chains in a Hard Epoxy Resin on Its Thermally Induced Deformation and Healing Behavior. Macromolecular Materials and Engineering, 2021, 306, 2100037.	1.7	4
753	Advances in controlled release of microcapsules and promising applications in self-healing of asphalt materials. Journal of Cleaner Production, 2021, 294, 126270.	4.6	28
754	Organic montmorillonite and doped polyaniline-enhanced self-healing polydimethylsiloxane. Journal of Materials Research, 2021, 36, 1730-1739.	1.2	2
755	A review of vascular networks for self-healing applications. Smart Materials and Structures, 2021, 30, 063001.	1.8	42
756	Sticky Rouse Time Features the Self-Adhesion of Supramolecular Polymer Networks. Macromolecules, 2021, 54, 5053-5064.	2.2	12
757	Molecular simulation-guided and physics-informed mechanistic modeling of multifunctional polymers. Acta Mechanica Sinica/Lixue Xuebao, 2021, 37, 725-745.	1.5	6
758	Microencapsulation of reactive isocyanates for application in self-healing materials: a review. Journal of Microencapsulation, 2021, 38, 338-356.	1.2	18
760	Self-Healable Silicone Elastomer Based on the Synergistic Effect of the Coordination and Ionic Bonds. ACS Applied Polymer Materials, 2021, 3, 2667-2677.	2.0	21
761	Recent Developments in Polymeric Assemblies and Functional Materials by Halogen Bonding. ChemNanoMat, 2021, 7, 748-772.	1.5	17
762	Isotropic pressure promoted collective self-healing response in granular molecular crystals. Science China Materials, 2021, 64, 2086-2092.	3.5	4
763	Fabrication and Characterization of Autonomously Selfâ€Healable and Stretchable Soft Microfluidics. Advanced Sustainable Systems, 2022, 6, 2100074.	2.7	6
764	Dynamic Nanohybrid-Polysaccharide Hydrogels for Soft Wearable Strain Sensing. Sensors, 2021, 21, 3574.	2.1	11
765	Cyclodextrin-based molecules as hosts in the formation of supramolecular complexes and their practical applicationsâ€"A review. Journal of Carbohydrate Chemistry, 2021, 40, 135-155.	0.4	8
766	Development of a highly efficient extrinsic and autonomous self-healing polymeric system at low and ultra-low temperatures for high-performance applications. Composites Part A: Applied Science and Manufacturing, 2021, 145, 106335.	3.8	14

#	Article	IF	Citations
767	Thiol- and Disulfide-Based Stimulus-Responsive Soft Materials and Self-Assembling Systems. Molecules, 2021, 26, 3332.	1.7	29
768	Universal Self-Healing Poly(dimethylsiloxane) Polymer Crosslinked Predominantly by Physical Entanglements. ACS Applied Materials & Interfaces, 2021, 13, 31129-31139.	4.0	40
769	Bio-inspired flexible electronics for smart E-skin. Acta Biomaterialia, 2022, 139, 280-295.	4.1	48
770	Nanoâ€metal oxide fillers in thermoâ€responsive polycaprolactoneâ€based polymer nanocomposites smart materials: Impact on thermoâ€mechanical, and shape memory properties. Journal of Vinyl and Additive Technology, 2021, 27, 768-780.	1.8	9
771	Topological cyclodextrin nanoparticles as crosslinkers for self-healing tough hydrogels as strain sensors. Carbohydrate Polymers, 2021, 264, 117978.	5.1	25
772	Self-Healing Lamellar Silsesquioxane Thin Films. ACS Applied Polymer Materials, 2021, 3, 4118-4126.	2.0	6
773	Thermally conductive, self-healing, and elastic Polyimide@Vertically aligned carbon nanotubes composite as smart thermal interface material. Carbon, 2021, 179, 348-357.	5.4	114
774	A self-healing hydrogel electrolyte towards all-in-one flexible supercapacitors. Journal of Materials Science: Materials in Electronics, 2021, 32, 20445-20460.	1.1	14
775	Dragonfly wing-inspired architecture makes a stiff yet tough healable material. Matter, 2021, 4, 2474-2489.	5.0	63
776	Ion-conductive self-healing polymer network based on reversible imine bonding for Si electrodes. Journal of Power Sources, 2021, 499, 229968.	4.0	20
777	Versatile Applications of Metallopolymers. Progress in Polymer Science, 2021, 119, 101428.	11.8	29
778	Self-healing Ionic Liquid-based Electronics and Beyond. Chinese Journal of Polymer Science (English) Tj ETQq1 1 0.784314 rgBT /Overl	2.0	10
779	Effect of the Crosslinking Degree on Selfâ€healing Poly(1,2,3â€triazolium) Adhesive. Macromolecular Rapid Communications, 2021, , 2100236.	2.0	4
780	Mechanically Robust, Self-Healable Polymers Usable under High Humidity: Humidity-Tolerant Noncovalent Cross-Linking Strategy. Journal of the American Chemical Society, 2021, 143, 15279-15285.	6.6	49
781	Bioinspired hydrogels build a bridge from bench to bedside. Nano Today, 2021, 39, 101157.	6.2	28
782	Biological Tissue-Inspired Living Self-Healing Hydrogels Based on Cadherin-Mediated Specific Cellâ€“Cell Adhesion. ACS Macro Letters, 2021, 10, 1073-1079.	2.3	6
783	A Tough and Self-Healing Polymer Enabled by Promoting Bond Exchange in Boronic Esters with Neighboring Hydroxyl Groups. , 2021, 3, 1328-1338.		47
784	Preparation of room-temperature self-healing elastomers with high strength based on multiple dynamic bonds. European Polymer Journal, 2021, 156, 110614.	2.6	21

#	Article	IF	Citations
785	Tunable crossâ€linked copolymer networks for improvement of physical performance. Journal of Polymer Science, 2021, 59, 2094-2106.	2.0	1
786	Recent progress in self-healing polyurethanes based on Diels-Alder reaction. Journal of Physics: Conference Series, 2021, 1990, 012047.	0.3	2
787	A Sustainable and Flexible Microbrushâ€Faced Triboelectric Generator for Portable/Wearable Applications. Advanced Materials, 2021, 33, e2102530.	11.1	18
788	A highly stretchable and room temperature autonomous self-healing supramolecular organosilicon elastomer with hyperbranched structure. European Polymer Journal, 2021, 156, 110618.	2.6	20
789	Tracing evolutions in electro-activated shape memory polymer composites with 4D printing strategies: A systematic review. Composites Part A: Applied Science and Manufacturing, 2021, 147, 106444.	3.8	55
790	Gifts from Nature: Bioâ€Inspired Materials for Rechargeable Secondary Batteries. Advanced Materials, 2021, 33, e2006019.	11.1	30
791	Flexible Temperature Sensors. Frontiers in Chemistry, 2021, 9, 539678.	1.8	32
792	Super Tough and Spontaneous Waterâ€Assisted Autonomous Selfâ€Healing Elastomer for Underwater Wearable Electronics. Advanced Science, 2021, 8, e2102275.	5.6	69
793	Evaluation for the actuation performance of dielectric elastomer actuator using polyisoprene elastomer with dynamic ionic crosslinks. Sensors and Actuators A: Physical, 2021, 332, 113143.	2.0	1
794	Highly Stretchable Fully Biomass Autonomic Self-Healing Polyamide Elastomers and Their Foam for Selective Oil Absorption. Polymers, 2021, 13, 3089.	2.0	8
795	Multistage Reversible T_g Photomodulation and Hardening of Hydrazone-Containing Polymers. Journal of the American Chemical Society, 2021, 143, 16348-16353.	6.6	26
796	Polyurethane-based polymer electrolytes for lithium Batteries: Advances and perspectives. Chemical Engineering Journal, 2022, 430, 132659.	6.6	45
797	Novel titin-inspired high-performance polyurethanes with self-healing and recyclable capacities based on dual dynamic network. Polymer, 2021, 230, 124096.	1.8	22
798	A novel directional repairing rGO-Fe3O4/Oil coating with magnetic driving for metal protection and self-healing. Chemical Engineering Journal, 2021, 421, 129597.	6.6	18
799	Bio-based epoxy/imidoamine encapsulated microcapsules and their application for high performance self-healing coatings. Progress in Organic Coatings, 2021, 159, 106436.	1.9	9
800	A NIR laser induced self-healing PDMS/Gold nanoparticles conductive elastomer for wearable sensor. Journal of Colloid and Interface Science, 2021, 599, 360-369.	5.0	32
801	Bioinspired extremely rapid self-repairing coatings for long-life repeated features. Chemical Engineering Journal, 2021, 424, 130568.	6.6	7
802	Tough, stretchable and self-healing C-MXenes/PDMS conductive composites as sensitive strain sensors. Composites Science and Technology, 2021, 216, 109042.	3.8	37

#	Article	IF	Citations
803	Meta-analysis of the strategies for self-healing and resilience in power systems. Advances in Applied Energy, 2021, 4, 100036.	6.6	23
804	Mechanically robust, highly adhesive and autonomously low-temperature self-healing elastomer fabricated based on dynamic metalÂâ˜Âligand interactions tailored for functional energetic composites. Chemical Engineering Journal, 2021, 425, 130665.	6.6	32
805	Stimulus Responsive Zeolitic Imidazolate Framework to Achieve Corrosion Sensing and Active Protecting in Polymeric Coatings. ACS Applied Materials & Interfaces, 2021, 13, 4429-4441.	4.0	37
806	A hybrid polyvinyl alcohol/molybdenum disulfide nanosheet hydrogel with light-triggered rapid self-healing capability. Journal of Materials Chemistry B, 2021, 9, 2266-2274.	2.9	11
807	A novel self-healing triple physical cross-linked hydrogel for antibacterial dressing. Journal of Materials Chemistry B, 2021, 9, 6844-6855.	2.9	41
808	Recent Advances in Selfâ€Healable Intelligent Materials Enabled by Supramolecular Crosslinking Design. Advanced Intelligent Systems, 2021, 3, 2000183.	3.3	14
809	Optimizing the heterogeneous network structure to achieve polymer nanocomposites with excellent mechanical properties. Physical Chemistry Chemical Physics, 2021, 23, 4437-4452.	1.3	4
810	A combined experimental and molecular dynamics simulation study of an intrinsic self-healing polyurethane elastomer based on a dynamic non-covalent mechanism. Soft Matter, 2021, 17, 2191-2204.	1.2	14
811	Extremely tough and healable elastomer realized via reducing the crystallinity of its rigid domain. Polymer Chemistry, 2021, 12, 4778-4784.	1.9	4
812	Multifunctional Polymer Composites: Self-Healing, Shape Memory, 3D Printing, and Flame Retardancy. , 2021, , .		0
813	Self-healable functional polymers based on Dielsâ€“Alder â€˜click chemistryâ€™ involving substituted furan and triazolinedione derivatives: a simple and very fast approach. Polymer Chemistry, 2021, 12, 6283-6290.	1.9	4
814	An Extremely Stretchable and Self-Healable Supramolecular Polymer Network. ACS Applied Materials & Interfaces, 2021, 13, 4499-4507.	4.0	21
815	An autonomously ultrafast self-healing, highly colourless, tear-resistant and compliant elastomer tailored for transparent electromagnetic interference shielding films integrated in flexible and optical electronics. Materials Horizons, 2021, 8, 3356-3367.	6.4	74
817	UVâ€Light Responsive and Selfâ€Healable Ethylene/Propylene Copolymer Rubbers Based on Reversible [4 + 4] Cycloaddition of Anthracene Derivatives. Macromolecular Chemistry and Physics, 2020, 221, 2000096.	1.1	12
818	Glassâ€transition temperature governs the thermal decrosslinking behavior of Dielsâ€“Alder crosslinked polymethacrylate networks. Journal of Polymer Science, 2020, 58, 193-203.	2.0	1
819	Donorâ€“Acceptor Ï€â€“Ï€ Stacking Interactions: From Small Molecule Complexes to Healable Supramolecular Polymer Networks. Advances in Polymer Science, 2015, , 143-166.	0.4	17
820	Smart Hydrogels. , 2015, , 1-13.		3
821	Block Copolymers with Element Blocks: The Metal-Bisterpyridine Linkage. , 2019, , 307-346.		2

#	Article	IF	Citations
822	Self-antiglare waterborne coating with superior mechanical robustness and highly efficient room-temperature self-healing capability. Progress in Organic Coatings, 2020, 146, 105717.	1.9	21
823	Nearly Perfect 3D Structures Obtained by Assembly of Printed Parts of Polyamide Ionene Self-Healing Elastomer. ACS Applied Polymer Materials, 2020, 2, 4352-4359.	2.0	7
824	Dynamic covalent bonds in self-healing, shape memory, and controllable stiffness hydrogels. Polymer Chemistry, 2020, 11, 1410-1423.	1.9	157
825	Autonomous self-healing polyisoprene elastomers with high modulus and good toughness based on the synergy of dynamic ionic crosslinks and highly disordered crystals. Polymer Chemistry, 2020, 11, 6549-6558.	1.9	15
826	PMMA/MikrokÃ¼re/Montmorillonit Nanokompozit ve PMMA/MikrokÃ¼re/Halloysite Nanokompozitin Atom Transfer Radikal Polimerizasyon TekniÄŸi ile Ãœretilmesi ve Mekanik Ã–zelliklerinin KarÅŸÄ±laÅŸtÄ±rmalÄ± Olarak Ä°ncelenmesi. Journal of the Faculty of Engineering and Architecture of Gazi University, 2018, 2018, .	0.3	3
827	â€˜Containersâ€™ for self-healing epoxy composites and coating: Trends and advances. EXPRESS Polymer Letters, 2016, 10, 506-524.	1.1	52
828	Mechanically Strong and Highly Stiff Supramolecular Polymer Composites Repairable at Ambient Conditions. CCS Chemistry, 2020, 2, 280-292.	4.6	40
829	A Brief Overview on Preparation of Self-Healing Polymers and Coatings via Hydrogen Bonding Interactions. Macromol, 2021, 1, 18-36.	2.4	23
830	Synthesis and characterisation of an ironâ€ionâ€responsive coating with coreâ€“shell electrospun fibres containing a chelation agent. Materials and Corrosion - Werkstoffe Und Korrosion, 2022, 73, 242-253.	0.8	1
831	The Comparative Analysis of the Coatings Deposited on the Automotive Parts by the Cataphoresis Method. Materials, 2021, 14, 6155.	1.3	4
832	Self-healing capability of novel eco-epoxy adhesives based on the modified tannic acid on Al adherends tested in a single lap joint. International Journal of Adhesion and Adhesives, 2022, 117, 103013.	1.4	2
833	Chapter 8. Polymer Modifications. RSC Green Chemistry, 2015, , 171-191.	0.0	0
834	Advances in Molecular Design of Polymer Surfaces with Antimicrobial, Anticoagulant, and Antifouling Properties. , 2015, , 53-80.		1
835	Smart Hydrogels. , 2016, , 3735-3747.		1
836	CHAPTER 5. Intrinsic Self-Healing Polymeric Materials for Engineering and Environmental Applications. RSC Smart Materials, 2016, , 139-164.	0.1	0
837	Investigation on Improved-Durability Thermal Barrier Coatings. Advances in Chemical and Materials Engineering Book Series, 2018, , 60-78.	0.2	4
838	Effect of Incorporation of Self-Healing Microcapsules to Experimental Resin Composite on Some Mechanical Properties. Al-Azhar Dental Journal for Girls, 2018, 5, 567-575.	0.1	1
840	Sustainable Polymeric Nanocomposites for Multifaceted Advanced Applications. Materials Horizons, 2019, , 363-395.	0.3	0

#	Article	IF	Citations
841	Hylozoic by Design: Converging Material and Biological Complexities for Cellâ€Driven Living Materials with 4D Behaviors. Advanced Functional Materials, 2022, 32, 2108057.	7.8	9
842	Self-Healing Hydrogels: Preparation, Mechanism and Advancement in Biomedical Applications. Polymers, 2021, 13, 3782.	2.0	55
844	Basic Physicoâ€Chemical Processes Governing Selfâ€Healable Polymers â€. Polymer International, 0, , .	1.6	1
845	Supramonomers for controllable supramolecular polymerization and renewable supramolecular polymeric materials. Progress in Polymer Science, 2022, 124, 101486.	11.8	36
846	Synthesis and characterization of novel eco-epoxy adhesives based on the modified tannic acid for self-healing joints. Polymer Testing, 2022, 106, 107444.	2.3	10
847	Tough and Degradable Self-Healing Elastomer from Synergistic Softâ€“Hard Segments Design for Biomechano-Robust Artificial Skin. ACS Nano, 2021, 15, 20656-20665.	7.3	35
848	Ultrafast Photochromic Selfâ€Healing Polymer Gels with Tunable Fluorescence. Macromolecular Materials and Engineering, 2022, 307, .	1.7	4
849	Lead-Sealed Stretchable Underwater Perovskite-Based Optoelectronics via Self-Recovering Polymeric Nanomaterials. ACS Nano, 2021, 15, 20127-20135.	7.3	8
850	Preparation of self-healing shape memory polymer based on crystalline side chain. Materials Letters, 2021, 308, 131300.	1.3	3
851	Terpolymerization of Ethylene and Two Different Methoxyarylâ€Substituted Propylenes by Scandium Catalyst Makes Tough and Fast Selfâ€Healing Elastomers. Angewandte Chemie - International Edition, 2021, 60, 26192-26198.	7.2	35
852	Terpolymerization of Ethylene and Two Different Methoxyarylâ€Substituted Propylenes by Scandium Catalyst Makes Tough and Fast Selfâ€Healing Elastomers. Angewandte Chemie, 2021, 133, 26396-26402.	1.6	6
853	Complementary Dynamic Chemistries for Multifunctional Polymeric Materials. Advanced Functional Materials, 0, , 2108431.	7.8	24
854	Unravelling the effect of healing conditions and vulcanizing additives on the healing performance of rubber networks. Polymer, 2022, 238, 124399.	1.8	19
855	Synthesis of selfâ€healing supramolecular waterborne polyurethane with quadruple hydrogen bonds via ureidotriazine. Journal of Applied Polymer Science, 2022, 139, 51932.	1.3	4
856	Application of Steel Fibre to Improve the Self-Healing Mechanism of Bituminous Mixtures: A Review. IOP Conference Series: Earth and Environmental Science, 2021, 920, 012013.	0.2	0
857	Self-Healing Materials for Electronics Applications. International Journal of Molecular Sciences, 2022, 23, 622.	1.8	22
858	Hierarchical self-assembly of aromatic peptide conjugates into supramolecular polymers: it takes two to tango. Chemical Science, 2022, 13, 909-933.	3.7	9
859	Modified MXene-doped conductive organosilicon elastomer with high-stretchable, toughness, and self-healable for strain sensors. Composite Structures, 2022, 282, 115071.	3.1	14

#	Article	IF	Citations
860	Facile fabrication of bio-based Eucommia Ulmoides rubber shape memory foams. Polymer Testing, 2022, 106, 107455.	2.3	3
861	Maltotriose-based star polymers as self-healing materials. European Polymer Journal, 2022, 164, 110972.	2.6	1
862	Moisture-triggered self-healing of a polyurethane coating based on isocyanateâ€“oxazolidine-loaded microcapsules synthesized via thiol-ene photopolymerization without CO2 release. Progress in Organic Coatings, 2022, 163, 106687.	1.9	1
863	Topology reset, reshuffling, and reconstruction of synthetic elastomers. Materials Today Chemistry, 2022, 23, 100727.	1.7	1
864	A self-healing and recyclable poly(urea-imine) thermoset synthesized from CO₂. Green Chemistry, 2022, 24, 1561-1569.	4.6	21
865	Acylhydrazine-based reticular hydrogen bonds enable robust, tough, and dynamic supramolecular materials. Science Advances, 2022, 8, eabk3286.	4.7	58
866	Transparent, self-recoverable, highly tough, puncture and tear resistant polyurethane supramolecular elastomer with fast self-healing capacityviaâ€œhardâ€“softâ€•hard domain design. RSC Advances, 2022, 12, 2712-2720.	1.7	16
867	A Roadmap for Transforming Research to Invent the Batteries of the Future Designed within the European Large Scale Research Initiative BATTERY 2030+. Advanced Energy Materials, 2022, 12, .	10.2	70
868	Porous boron nitride nanofibers as effective nanofillers for poly(vinyl alcohol) composite hydrogels with excellent self-healing performances. Soft Matter, 2022, 18, 859-866.	1.2	8
869	Environment tolerant, adaptable and stretchable organohydrogels: preparation, optimization, and applications. Materials Horizons, 2022, 9, 1356-1386.	6.4	75
870	Dynamic and reconfigurable materials from reversible network interactions. Nature Reviews Materials, 2022, 7, 541-556.	23.3	105
871	Remendable conductive polyethylene composite with simultaneous restoration of electrical and mechanical behavior. Polymer Engineering and Science, 2022, 62, 991-998.	1.5	5
872	UVâ€Curable Polyurethane Elastomer with UVâ€Irradiation/Thermo Dualâ€Activated Selfâ€Healability. Macromolecular Materials and Engineering, 2022, 307, .	1.7	6
873	Progress in Utilizing Dynamic Bonds to Fabricate Structurally Adaptive Selfâ€Healing, Shape Memory, and Liquid Crystal Polymers. Macromolecular Rapid Communications, 2022, 43, e2100768.	2.0	18
874	Tuning Dual-Dynamic Network Materials through Polymer Architectural Features. ACS Applied Polymer Materials, 2022, 4, 1475-1486.	2.0	17
875	A phase-field approach for portlandite carbonation and application to self-healing cementitious materials. Materials and Structures/Materiaux Et Constructions, 2022, 55, 1.	1.3	0
876	Dynamic Covalent Bond Crossâ€Linked Luminescent Silicone Elastomer with Selfâ€Healing and Recyclable Properties. Macromolecular Rapid Communications, 2022, 43, e2100885.	2.0	26
877	Ultra-robust, self-healable and recyclable polyurethane elastomer via a combination of hydrogen bonds, dynamic chemistry, and microphase separation. Materials Today Chemistry, 2022, 23, 100708.	1.7	16

#	Article	IF	Citations
878	Asymmetric polymer materials: Synthesis, structure, and performance. Polymer, 2022, 242, 124607.	1.8	5
879	Self-healing polymer electrolyte for long-life and recyclable lithium-metal batteries. Materials Today Energy, 2022, 24, 100939.	2.5	15
880	Polymerizations of Activated Alkynes. Progress in Polymer Science, 2022, 126, 101503.	11.8	25
881	Development of semi-crystalline polyurethane with self-healing and body temperature-responsive shape memory properties. European Polymer Journal, 2022, 167, 111060.	2.6	12
882	Visible light triggered controlled formation of rapidly self-healing hydrogels based on thiolâ€“disulfide exchange. Soft Matter, 2022, 18, 3004-3012.	1.2	9
883	Recent Advances of Self-Healing Polymer Materials via Supramolecular Forces for Biomedical Applications. Biomacromolecules, 2022, 23, 641-660.	2.6	32
884	Advances in self-healing hydrogels to repair tissue defects. Polymer Bulletin, 2023, 80, 1155-1177.	1.7	4
885	Effects of network structure of main-chain liquid crystal elastomer on its thermal actuation performance. Journal of Industrial and Engineering Chemistry, 2022, , .	2.9	1
886	Conjugated Metalâ€“Organic Macrocycles: Synthesis, Characterization, and Electrical Conductivity. Journal of the American Chemical Society, 2022, 144, 4515-4521.	6.6	25
887	Self-healing oxygen evolution catalysts. Nature Communications, 2022, 13, 1243.	5.8	46
889	Simultaneously optimized healing efficiency and mechanical strength in polymer composites reinforced by ultrahigh loading fillers based on interfacial energy and dynamic disulfide bonds. Polymer, 2022, 251, 124711.	1.8	13
890	Facile modification of hydroxyl group containing macromolecules provides autonomously self-healing polymers through the formation of dynamic Schiff base linkages. European Polymer Journal, 2022, 168, 111086.	2.6	9
891	Blending polar rubber with polyurethane to construct self-healing rubber with multiple hydrogen bond networks. Polymer, 2022, 246, 124768.	1.8	15
892	Nano-engineered ZnO/CNF-based epoxidized natural rubber with enhanced strength for novel Self-healing glove fabrication. Chemical Engineering Journal, 2022, 437, 135440.	6.6	23
893	Visualizing polymer diffusion in hydrogel self-healing. , 2022, 1, 100009.		23
894	Mechanisms of Self-Diffusion of Linear Associative Polymers Studied by Brownian Dynamics Simulation. Macromolecules, 2021, 54, 11212-11227.	2.2	5
895	Ru(II) Catalyst Enables Dynamic Dualâ€Crossâ€Linked Elastomers with Nearâ€Infrared Selfâ€Healing toward Flexible Electronics. Advanced Functional Materials, 2022, 32, .	7.8	16
896	Ultrastretchable, Adhesive, Fast Self-Healable, and Three-Dimensional Printable Photoluminescent Ionic Skin Based on Hybrid Network Ionogels. ACS Applied Materials & Interfaces, 2022, 14, 2029-2037.	4.0	54

#	Article	IF	Citations
897	Skin bioelectronics towards long-term, continuous health monitoring. Chemical Society Reviews, 2022, 51, 3759-3793.	18.7	85
898	A self-healing and conductive ionic hydrogel based on polysaccharides for flexible sensors. Chinese Journal of Chemical Engineering, 2023, 53, 73-82.	1.7	9
899	Photo-responsive microcapsules by chemical stitching of graphene oxide for self-healing polymer coatings. Materials Letters, 2022, 319, 132273.	1.3	1
900	CHAPTER 1. Mechanochemistry: Inspiration from Biology. RSC Polymer Chemistry Series, 0, , 1-35.	0.1	0
901	Smart dielectric materials for next-generation electrical insulation. , 2022, 1, 19-49.		20
902	Stimulus-Responsive Macromolecules in Polymeric Coatings. Polymer Reviews, 2023, 63, 289-323.	5.3	6
903	The Final Frontier of Sustainable Materials: Current Developments in Self-Healing Elastomers. International Journal of Molecular Sciences, 2022, 23, 4757.	1.8	17
904	Building block 3D printing based on molecular self-assembly monolayer with self-healing properties. Scientific Reports, 2022, 12, 6806.	1.6	4
905	Concept of self-healing in polymeric materials. Materials Today: Proceedings, 2022, , .	0.9	2
906	Selfâ€Healing and Electrical Properties of Viscoelastic Polymerâ€“Carbon Blends. Macromolecular Rapid Communications, 2022, 43, e2200307.	2.0	4
907	Rapid self-healing in IR-responsive plasmonic indium tin oxide/polyketone nanocomposites. Journal of Materials Chemistry A, 2022, 10, 12957-12967.	5.2	7
908	Metalâ€Free Catalyst, Fast Curing, Stretchable, Selfâ€Healing Siloxane Modified Polyurea Elastomer with Tunable Properties Based on Hydrogen Bonds. ChemistrySelect, 2022, 7, .	0.7	0
909	Recent Progress in Functionalized Coatings for Corrosion Protection of Magnesium Alloysâ€”A Review. Materials, 2022, 15, 3912.	1.3	13
910	A focus review on 3D printing of wearable energy storage devices. , 2022, 4, 1242-1261.		23
912	Stretchable Selfâ€Healing Plastic Polyurethane with Superâ€High Modulus by Local Phaseâ€Lock Strategy. Macromolecular Rapid Communications, 2023, 44, .	2.0	7
913	Selfâ€Healable, Selfâ€Repairable, and Recyclable Electrically Responsive Artificial Muscles. Advanced Science, 2022, 9, .	5.6	13
914	Molecular Functionalization of Semiconductor Surfaces. Springer Handbooks, 2022, , 923-964.	0.3	2
915	Highly Thermally Conductive Polymer/Graphene Composites with Rapid Room-Temperature Self-Healing Capacity. Nano-Micro Letters, 2022, 14, .	14.4	54

#	Article	IF	Citations
916	A Highly Stretchable and Selfâ€Healing Composite Binder Based on the Hydrogenâ€Bond Network for Silicon Anodes in Highâ€Energyâ€Density Lithiumâ€Ion Batteries. ChemElectroChem, 2022, 9, .	1.7	6
917	Molecular Dynamics Simulations of Polymer Nanocomposites Welding: Interfacial Structure, Dynamics and Strength. Macromolecular Rapid Communications, 0, , 2200221.	2.0	1
918	Recent progress in stretchable and self-healable supercapacitors: active materials, mechanism, and device construction. Journal of Micromechanics and Microengineering, 2022, 32, 073001.	1.5	1
919	Non-Covalent Interaction on the Self-Healing of Mechanical Properties in Supramolecular Polymers. International Journal of Molecular Sciences, 2022, 23, 6902.	1.8	12
920	Synergism of Flameâ€Retardant, Selfâ€Healing, Highâ€Conductive and Polar to a Multiâ€Functional Binder for Lithiumâ€“Sulfur Batteries. Advanced Functional Materials, 2022, 32, .	7.8	45
921	Nanofibrous Scaffolds for the Management of Periodontal Diseases. Advances in Polymer Science, 2022, , .	0.4	0
922	Self-healing elastomers. , 2022, , 271-304.		5
923	Overview of crack self-healing. , 2022, , 1-26.		1
924	From stretchable and healable to self-healing semiconducting polymers: design and their TFT devices. Materials Advances, 2022, 3, 7154-7184.	2.6	6
925	Ion-cluster-mediated ultrafast self-healable ionoconductors for reconfigurable electronics. Nature Communications, 2022, 13, .	5.8	30
926	Stimuliâ€Responsive Electrochemical Energy Storage Devices. Chemical Record, 2022, 22, .	2.9	8
927	Selfâ€Healing of HTPB Based Polyurethane Binder via Ring Opening Metathesis Polymerization. Propellants, Explosives, Pyrotechnics, 2022, 47, .	1.0	3
928	Water-reducible and self-healing acrylic coatings based on Diels-Alder reversible reaction. Progress in Organic Coatings, 2022, 171, 107012.	1.9	4
929	Repulsive segregation of fluoroalkyl side chains turns a cohesive polymer into a mechanically tough, ultrafast self-healable, nonsticky elastomer. Scientific Reports, 2022, 12, .	1.6	4
930	Selfâ€Healing Fibrous Membranes. Angewandte Chemie, 2022, 134, .	1.6	16
931	Using Periodic Dynamic Polymers to Form Supramolecular Nanostructures. Accounts of Materials Research, 2022, 3, 948-959.	5.9	7
932	Ultra-stretchable and ultra-low temperature self-healing polyurethane enabled by dual dynamic bonds strategy. Reactive and Functional Polymers, 2022, 178, 105364.	2.0	4
933	Glycidyl Methacrylate-Based Copolymers as Healing Agents of Waterborne Polyurethanes. International Journal of Molecular Sciences, 2022, 23, 8118.	1.8	6

#	Article	IF	Citations
934	Selfâ€Healing Fibrous Membranes. Angewandte Chemie - International Edition, 2022, 61, .	7.2	58
935	Topologically Induced Heterogeneity in Gradient Copolymer Brush Particle Materials. Macromolecules, 2022, 55, 8846-8856.	2.2	8
936	Study of the Molecular Components and Rheological Properties of Asphalt after Long-Term Aging under the Action of Moisture. Sustainability, 2022, 14, 9080.	1.6	0
937	Triâ€state recyclable multifunctional hydrogel for flexible sensors. Journal of Applied Polymer Science, 2022, 139, .	1.3	6
938	Processable Conjugated Microporous Polymer Gels and Monoliths: Fundamentals and Versatile Applications. ACS Applied Materials & Interfaces, 2022, 14, 39701-39726.	4.0	11
939	Self-healing by Diels-Alder cycloaddition in advanced functional polymers: A review. Progress in Materials Science, 2023, 131, 101001.	16.0	48
942	Self-Healing Injectable Hydrogels for Tissue Regeneration. Chemical Reviews, 2023, 123, 834-873.	23.0	190
943	A molecular dynamics simulation on tunable and self-healing epoxy-polyimine network based on imine bond exchange reactions. Molecular Simulation, 2022, 48, 1605-1615.	0.9	2
944	Transparent and Selfâ€Healing Elastomers for Reconfigurable 3D Materials. Macromolecular Rapid Communications, 2022, 43, .	2.0	5
945	Tailor-Made Functional Polyolefins of Complex Architectures: Recent Advances, Applications, and Prospects. Macromolecules, 2022, 55, 6938-6972.	2.2	14
946	Synthesis of poly(ureaâ€“formaldehyde) microcapsules for the <scp>selfâ€healing</scp> system of silicone rubber insulating material. Journal of Applied Polymer Science, 2022, 139, .	1.3	5
947	From carbon nanotubes to ultra-sensitive, extremely-stretchable and self-healable hydrogels. European Polymer Journal, 2022, 178, 111485.	2.6	12
948	Electro and magnetoactive printed bi-functional actuators based on alginate hybrid hydrogels. International Journal of Biological Macromolecules, 2022, 219, 374-383.	3.6	4
949	Improved surface properties of a novel self-healing polyurethane-acrylate coating by in situ polymerizations of dihydroxy organo-montmorillonite on ancient wood. Progress in Organic Coatings, 2022, 172, 107134.	1.9	1
950	Cellulose nanocrystal nanocomposites capable of low-temperature and fast self-healing performance. Carbohydrate Polymers, 2022, 296, 119973.	5.1	12
951	Reversible electrical percolation in a stretchable and self-healable silver-gradient nanocomposite bilayer. Nature Communications, 2022, 13, .	5.8	12
952	A fast self-healing and mechanical-enhanced polyurethane via Cu-pyridine coordination. Polymer, 2022, 257, 125266.	1.8	5
953	Citric acid-induced room temperature self-healing polysiloxane elastomers with tunable mechanical properties and untraditional AIE fluorescence. Polymer Chemistry, 2022, 13, 5412-5421.	1.9	7

#	Article	IF	Citations
954	Strong, thermo-reversible salogels with boronate ester bonds as thermal energy storage materials. Journal of Materials Chemistry A, 2022, 10, 21622-21632.	5.2	5
955	Printed Electronics Applications: Conductive Tracks and Patterns, Printed Circuits, Functional Electrodes and Flexible Heaters. , 2022, , 327-384.		0
956	Advances and Challenges of Self-Healing Elastomers: A Mini Review. Materials, 2022, 15, 5993.	1.3	6
957	Highly Stretchable, Soft, Low-Hysteresis, and Self-Healable Ionic Conductive Elastomers Enabled by Long, Functional Cross-Linkers. Macromolecules, 2022, 55, 7845-7855.	2.2	20
958	Elastomeric Liquid-Free Conductor for Iontronic Devices. Langmuir, 2022, 38, 11994-12004.	1.6	4
960	An innovative approach to develop selfâ€healing materials from commercial tireâ€grade elastomers. Journal of Applied Polymer Science, 2022, 139, .	1.3	1
961	Rheology of vitrimers. Nature Communications, 2022, 13, .	5.8	29
964	Probing and Manipulating Noncovalent Interactions in Functional Polymeric Systems. Chemical Reviews, 2022, 122, 14594-14678.	23.0	74
965	Reactivity and Release of Isocyanates from Microcapsules Used in Self-Healing Materials. Environmental Science and Technology Letters, 2022, 9, 949-954.	3.9	0
966	Self-healing of reversibly cross-linked thermoplastic vulcanizates. Materials Chemistry and Physics, 2022, 292, 126804.	2.0	3
967	HEALING CARBON FIBER COMPOSITES WITH THERMOPLASTIC POLYMERS. Journal of Innovative Science and Engineering (JISE), 0, , .	0.7	0
968	Bio-inspired self-healing flexible films with pomegranate-shaped nanosphere loaded graphene for electromagnetic interference shielding and superhydrophobicity performances. Journal of Materials Chemistry A, 2022, 10, 24331-24344.	5.2	6
969	Photoresponsive Supramolecular Polymers: From Lightâ€Controlled Small Molecules to Smart Materials. Advanced Materials, 2023, 35, .	11.1	51
970	Stretchable and self-healable spoof plasmonic meta-waveguide for wearable wireless communication system. Light: Science and Applications, 2022, 11, .	7.7	15
971	Self-Healing Polymers for Electronics and Energy Devices. Chemical Reviews, 2023, 123, 558-612.	23.0	48
972	Self-Healable Lithium-Ion Batteries: A Review. Nanomaterials, 2022, 12, 3656.	1.9	3
973	Cyclodextrin Nanoâ€Assemblies Enabled Robust, Highly Stretchable, and Healable Elastomers with Dynamic Physical Network. Advanced Functional Materials, 2023, 33, .	7.8	18
974	N-Coordinated Organoboron in Polymer Synthesis and Material Science. ACS Polymers Au, 2023, 3, 5-27.	1.7	9

#	Article	IF	Citations
975	Roadmap on nanogenerators and piezotronics. APL Materials, 2022, 10, .	2.2	22
976	Self-healable printed magnetic field sensors using alternating magnetic fields. Nature Communications, 2022, 13, .	5.8	6
977	Research Progress of Self-Healing Solid-Solid Phase Change Materials. Hans Journal of Nanotechnology, 2022, 12, 311-329.	0.1	0
978	Synthesis and reaction mechanism of self-healing epoxy microcapsules. Shenzhen Daxue Xuebao (Ligong Ban)/Journal of Shenzhen University Science and Engineering, 2019, 36, 339-346.	0.1	0
979	Synergistic Effect of Cation Composition Engineering of Hybrid Cs_{1â^'x}FA_xPbBr₃ Nanocrystals for Selfâ€Healing Electronics Application. Advanced Materials, 2023, 35, .	11.1	19
980	A Metal Coordination-Based Supramolecular Elastomer with Shape Memory-Assisted Self-Healing Effect. Polymers, 2022, 14, 4879.	2.0	2
981	Ultraelastic and Highâ€Conductivity Multiphase Conductor with Universally Autonomous Selfâ€Healing. Advanced Science, 2022, 9, .	5.6	4
982	Selfâ€Healing Ability of Poly(PEGMAâ€5â€UPy) Evaluated by Thermomechanical Analysis. Macromolecular Materials and Engineering, 2023, 308, .	1.7	2
983	The role of organic polymer modifiers in cementitious systems towards durable and resilient infrastructures: A systematic review. Construction and Building Materials, 2022, 360, 129562.	3.2	10
984	Construction of a strong, fast self-healing adhesive for propellants based on the synergy of weak hydrogen bond array reorganization and disulfide exchange reactions. Polymer, 2023, 265, 125590.	1.8	5
985	Self-healing nanocomposites via N-doped GO promoted â€œclick chemistryâ€. Soft Matter, 2022, 19, 98-105.	1.2	3
986	Properties and mechanism of two-way shape memory polyurethane composite under stress-free condition. Advanced Composites and Hybrid Materials, 2023, 6, .	9.9	36
987	Effect of Junction Aggregation on the Dynamics of Supramolecular Polymers and Networks. Macromolecular Chemistry and Physics, 2023, 224, .	1.1	4
988	Double Modification of Poly(urethane-urea): Toward Healable, Tear-Resistant, and Mechanically Robust Elastomers for Strain Sensors. ACS Applied Materials & Interfaces, 2023, 15, 2134-2146.	4.0	14
989	Naturally Derived Carbon Dots In Situ Confined Self-Healing and Breathable Hydrogel Monolith for Anomalous Diffusion-Driven Phytomedicine Release. ACS Applied Bio Materials, 2022, 5, 5617-5633.	2.3	43
990	An injectable selfâ€healing hydrogel based on poly(acrylamideâ€coâ€Nâ€vinylimidazole) and laponite clay <scp>nanosheets</scp>. Journal of Applied Polymer Science, 2023, 140, .	1.3	1
991	Influence of quadruple hydrogen bonding on polyvinyl butyral resin properties. Polymer Degradation and Stability, 2023, 208, 110243.	2.7	4
992	Fast Healing of Covalently Cross-Linked Polymeric Hydrogels by Interfacially Ignited Fast Gelation. Macromolecules, 2023, 56, 49-58.	2.2	3

#	Article	IF	Citations
993	A Selfâ€Healing and Nonflammable Crossâ€Linked Network Polymer Electrolyte with the Combination of Hydrogen Bonds and Dynamic Disulfide Bonds for Lithium Metal Batteries. Energy and Environmental Materials, 2023, 6, .	7.3	4
994	Smart polymer with rapid self-healing and early corrosion reporting capabilities: Design, performance and mechanism. Chemical Engineering Journal, 2023, 456, 141159.	6.6	2
995	Self-Healing Polymeric Soft Actuators. Chemical Reviews, 2023, 123, 736-810.	23.0	21
996	Conductive and Self-Healing Carbon Nanotubeâ€“Polymer Composites for Mechanically Strong Smart Materials. ACS Applied Nano Materials, 2023, 6, 986-994.	2.4	6
997	Mechanoluminescent Device: In Situ Renewable Carbazole Derivatives Sandwiched by Self-Healing Disulfide-Containing Polyurethane for Mechanical Signals Detection. ACS Applied Materials & Interfaces, 2023, 15, 4623-4634.	4.0	4
998	Bio-Derived Self-healing Epoxy Resins. Engineering Materials, 2023, , 175-208.	0.3	0
999	Synthetic Design of Self-Healing Epoxy Systems. Engineering Materials, 2023, , 139-160.	0.3	0
1000	Biomimetic Hybrid Networks with Excellent Toughness and Self-Healing Ability in the Glassy State. Chemistry of Materials, 2023, 35, 682-691.	3.2	9
1001	Vascular smooth muscle-inspired architecture enables soft yet tough self-healing materials for durable capacitive strain-sensor. Nature Communications, 2023, 14, .	5.8	49
1002	Mechanism of Extrinsic and Intrinsic Self-healing in Polymer Systems. Engineering Materials, 2023, , 107-138.	0.3	3
1003	Debonding-on-demand adhesives based on photo-reversible cycloaddition reactions. Materials Advances, 2023, 4, 1289-1296.	2.6	6
1004	SoftSAR: The New Softer Side of Socially Assistive Robotsâ€”Soft Robotics with Social Humanâ€“Robot Interaction Skills. Sensors, 2023, 23, 432.	2.1	1
1005	Review on Self-healing Materials. , 2020, , 277-283.		0
1006	Room-Temperature Self-Healable Blends of Waterborne Polyurethanes with 2-Hydroxyethyl Methacrylate-Based Polymers. International Journal of Molecular Sciences, 2023, 24, 2575.	1.8	3
1007	Flexible Vitrimers for Selfâ€healable Triboelectric Nanogenerators. Advanced Materials Technologies, 2023, 8, .	3.0	4
1008	Dual crosslinking polymer networks: correlation between polymer topologies and self-healing efficiency. Polymer Chemistry, 2023, 14, 1184-1194.	1.9	3
1009	Self-Healing Multimodal Flexible Optoelectronic Fiber Sensors. Chemistry of Materials, 2023, 35, 1345-1354.	3.2	7
1010	Reversible Electrochromic Pattern in 3D Photonic Crystals Film from Thiolâ€Acrylateâ€Based Polymerâ€Stabilized Blue Phase Liquid Crystals. Advanced Optical Materials, 2023, 11, .	3.6	7

#	Article	IF	Citations
1011	Self-healing aeronautical nanocomposites. , 2023, , 263-296.		0
1012	Influence of Concentration of Thiol-Substituted Poly(dimethylsiloxane)s on the Properties, Phases, and Swelling Behaviors of Their Crosslinked Disulfides. Macromol, 2023, 3, 36-53.	2.4	0
1013	Key approaches and challenges in fabricating advanced flexible zinc-ion batteries with functional hydrogel electrolytes. Energy Storage Materials, 2023, 56, 351-393.	9.5	32
1014	Organicâ€'inorganic semi-interpenetrating networks with orthogonal light- and magnetic-responsiveness for smart photonic gels. Nature Communications, 2023, 14, .	5.8	19
1015	Recent development of sustainable self-healable electronic skin applications, a review with insight. Chemical Engineering Journal, 2023, 466, 142945.	6.6	13
1016	Self-healing fluorinated poly(urethane urea) for mechanically and environmentally stable, high performance, and versatile fully self-healing triboelectric nanogenerators. Nano Energy, 2023, 108, 108243.	8.2	16
1017	Liquid crystalline elastomer actuators with dynamic covalent bonding: Synthesis, alignment, reprogrammability, and self-healing. Current Opinion in Solid State and Materials Science, 2023, 27, 101076.	5.6	8
1018	Flexible self-healing phase change film with high transition enthalpy for thermal management. Journal of Energy Storage, 2023, 62, 106873.	3.9	2
1019	Photoactive materials and devices for energy-efficient soft wearable optoelectronic systems. Nano Energy, 2023, 110, 108379.	8.2	7
1020	Biobased Transesterification Vitrimers. Macromolecular Rapid Communications, 2023, 44, .	2.0	22
1021	Self-healing Materials. , 2016, , 348-402.		0
1022	Visible light laser direct-writing of high-resolution, biocompatible, super-multifunctional and tough hydrogels without photoinitiators in 30Âs. , 2023, 147, 213318.		1
1023	A rapid self-healing glassy polymer/metalâ€"organic-framework hybrid membrane at room temperature. Dalton Transactions, 2023, 52, 3148-3157.	1.6	0
1024	Bioinspired Selfâ€healing Soft Electronics. Advanced Functional Materials, 2023, 33, .	7.8	25
1025	A high strength, high toughness and transparent room-temperature self-healing elastomer based on the synergy effect of quadruple dynamic bonding structure. Reactive and Functional Polymers, 2023, 185, 105531.	2.0	5
1026	Intrinsically Nonswellable Multifunctional Hydrogel with Dynamic Nanoconfinement Networks for Robust Tissueâ€Adaptable Bioelectronics. Advanced Science, 2023, 10, .	5.6	12
1027	From vineyards to reshapable materials: Î±-CF₂ activation in 100% resveratrol-based catalyst-free vitrimers. Polymer Chemistry, 2023, 14, 1387-1395.	1.9	5
1028	Selfâ€Adhesive Selfâ€Healing Thermochromic Ionogels for Smart Windows with Excellent Environmental and Mechanical Stability, Solar Modulation, and Antifogging Capabilities. Advanced Materials, 2023, 35, .	11.1	25

#	Article	IF	Citations
1029	Application of RAFT in 3D Printing: Where Are the Future Opportunities?. Macromolecules, 2023, 56, 1778-1797.	2.2	12
1030	Electrothermal properties of short carbon fiber/<scp>PLA</scp> composite structure and its fast response behavior. Journal of Applied Polymer Science, 2023, 140, .	1.3	2
1031	Tough polyurethane elastomers with high strength and rapid healing ability. Materials Advances, 2023, 4, 1711-1719.	2.6	3
1032	Rising of Dynamic Polyimide Materials: A Versatile Dielectric for Electrical and Electronic Applications. Advanced Materials, 2023, 35, .	11.1	19
1034	New Self-Healing Metallosupramolecular Copolymers with a Complex of Cobalt Acrylate and 4â€²-Phenyl-2,2â€²:6â€²,2â€³-terpyridine. Polymers, 2023, 15, 1472.	2.0	1
1035	Imparting Reprocessability, Quadruple Shape Memory, Self-Healing, and Vibration Damping Characteristics to a Thermosetting Poly(urethane-urea). ACS Applied Polymer Materials, 2023, 5, 3079-3095.	2.0	3
1036	Intrinsic Self-Healing Chemistry for Next-Generation Flexible Energy Storage Devices. Nano-Micro Letters, 2023, 15, .	14.4	19
1037	Research progress of selfâ€healing polymer materials for flexible electronic devices. Journal of Polymer Science, 2023, 61, 1554-1571.	2.0	4
1038	New superhydrophobic composite coatings on Mg-Mn-Ce magnesium alloy. Journal of Magnesium and Alloys, 2023, 11, 1721-1739.	5.5	12
1039	Room-Temperature Self-Healing Glassy Luminescent Hybrid Film. Langmuir, 0, , .	1.6	0
1040	Self-Healing Binder for High-Voltage Batteries. ACS Applied Materials & Interfaces, 2023, 15, 21517-21525.	4.0	2
1046	Self-Healing Hydrogels: From Synthesis to Multiple Applications. , 2023, 5, 1787-1830.		23
1057	Service behavior of triboelectric nanogenerators: Bridging the gap between prototypes and applications. Nano Research, 0, , .	5.8	0
1058	Self-healing composite materials and their application in pipelines. , 2023, , 249-265.		0
1063	Self-healing polymers through hydrogen-bond cross-linking: synthesis and electronic applications. Materials Horizons, 2023, 10, 4000-4032.	6.4	9
1080	Covalent adaptive networks with repairable, reprocessable, reconfigurable, recyclable, and re-adhesive (5R) performance via dynamic isocyanate chemistry. Polymer Chemistry, 2023, 14, 4381-4406.	1.9	2
1081	Emerging trends in self-healable nanomaterials for triboelectric nanogenerators: A comprehensive review and roadmap. Frontiers in Energy, 2023, 17, 727-750.	1.2	3
1090	Research progress related to thermosensitive hydrogel dressings in wound healing: a review. Nanoscale Advances, 2023, 5, 6017-6037.	2.2	1

#	Article	IF	Citations
1098	Emerging research trends in the field of polyurethane and its nanocomposites: Chemistry, Synthesis, Characterization, Application in coatings and Future perspectives. Journal of Coatings Technology Research, 2024, 21, 137-172.	1.2	0
1116	Self-healing polymers for surface scratch regeneration. RSC Advances, 2023, 13, 35050-35064.	1.7	0
1130	Polymer-based self-healable materials for energy storage. , 2024, , 295-309.		0
1135	Thermo-growing ion clusters enabled healing strengthening and tough adhesion for highly reliable skin electronics. Materials Horizons, 0, , .	6.4	0