Min Zhi Rong

List of Publications by Year
in descending order

124 papers	6,193 citations	81900 39 h-index	74163 75 g-index
135 all docs	135 docs citations	135 times ranked	5446 citing authors

#	Article	IF	Citations
1	Highly thermally conductive flexible copper clad laminates based on sea-island structured boron nitride/polyimide composites. Composites Science and Technology, 2022, 230, 109087.	7.8	23
2	Improving creep resistance while maintaining reversibility of covalent adaptive networks via constructing reversibly interlocked polymer networks. Materials Today Chemistry, 2022, 23, 100687.	3.5	11
3	UVâ€Curable Polyurethane Elastomer with UVâ€Irradiation/Thermo Dualâ€Activated Selfâ€Healability. Macromolecular Materials and Engineering, 2022, 307, .	3.6	6
4	Enhancement of intrinsic thermal conductivity of liquid crystalline epoxy through the strategy of interlocked polymer networks. Materials Chemistry Frontiers, 2022, 6, 1137-1149.	5.9	12
5	A novel strategy for producing highâ€performance continuous regenerated fibers with woolâ€like structure. SusMat, 2022, 2, 90-103.	14.9	7
6	Controllable Depolymerization and Recovery of Interlocked Covalent Adaptable Networks via Cascading Reactions of the Built-In Reversible Bonds. Macromolecules, 2022, 55, 262-269.	4.8	11
7	Tailored modular assembly derived self-healing polythioureas with largely tunable properties covering plastics, elastomers and fibers. Nature Communications, 2022, 13, 2633.	12.8	19
8	Mechanical enhancement mechanism of interlocked polymer networks. Materials Today Physics, 2022, 27, 100768.	6.0	6
9	Adaptable Reversibly Interlocked Networks from Immiscible Polymers Enhanced by Hierarchy-Induced Multilevel Energy Consumption Mechanisms. Macromolecules, 2021, 54, 4802-4815.	4.8	27
10	Preparation of a water soluble aminated Î²â€1,<scp>3â€Ð</scp>â€glucan for gene carrier: The in vitro study of the antiâ€inflammatory activity and transfection efficiency. Journal of Biomedical Materials Research - Part A, 2021, 109, 2506-2515.	4.0	1
11	Dynamically Cross-Linked Polymeric Binder-Made Durable Silicon Anode of a Wide Operating Temperature Li-Ion Battery. ACS Applied Materials & Interfaces, 2021, 13, 28737-28748.	8.0	28
12	Thermally conductive glass fiber reinforced epoxy composites with intrinsic self-healing capability. Advanced Composites and Hybrid Materials, 2021, 4, 1048-1058.	21.1	60
13	The critical role of inter-component hydrogen bonds in the formation of reversibly interlocked polymer networks. Materials Chemistry Frontiers, 2021, 6, 52-62.	5.9	10
14	Topological rearrangement-derived homogeneous polymer networks capable of reversibly interlocking: From phantom to reality and beyond. Materials Today, 2020, 33, 45-55.	14.2	33
15	Adaptable Interlocking Macromolecular Networks with Homogeneous Architecture Made from Immiscible Single Networks. Macromolecules, 2020, 53, 584-593.	4.8	67
16	Improvement of multiple-responsive shape memory effects of wool through increasing the content of disulfide bonds. Polymer, 2020, 188, 122130.	3.8	9
17	Continuous High-Content Keratin Fibers with Balanced Properties Derived from Wool Waste. ACS Sustainable Chemistry and Engineering, 2020, 8, 18148-18156.	6.7	30
18	Implementation of the Pulley Effect of Polyrotaxane in Transparent Bulk Polymer for Simultaneous Strengthening and Toughening. Macromolecular Rapid Communications, 2020, 41, e2000371.	3.9	15

#	Article	IF	Citations
19	Reversibly Interlocked Macromolecule Networks with Enhanced Mechanical Properties and Wide pH Range of Underwater Self-Healability. ACS Applied Materials & Interfaces, 2020, 12, 27614-27624.	8.0	41
20	Photo-induced topological self-reorganization and self-growth of polymer based on dynamic reversible aromatic pinacol units. Polymer, 2020, 192, 122299.	3.8	8
21	Repeatedly Intrinsic Self-Healing of Millimeter-Scale Wounds in Polymer through Rapid Volume Expansion Aided Hostâ€“Guest Interaction. ACS Applied Materials & Interfaces, 2020, 12, 22534-22542.	8.0	29
22	External Stress-Free Reversible Multiple Shape Memory Polymers. ACS Applied Materials & Interfaces, 2019, 11, 31346-31355.	8.0	25
23	Imparting External Stress-Free Two-Way Shape Memory Effect to Commodity Polyolefins by Manipulation of Their Hierarchical Structures. ACS Macro Letters, 2019, 8, 1141-1146.	4.8	24
24	A facile and scalable process to synthesize flexible lithium ion conductive glass-ceramic fibers. RSC Advances, 2019, 9, 4157-4161.	3.6	16
25	A sunlight self-healable transparent strain sensor with high sensitivity and durability based on a silver nanowire/polyurethane composite film. Journal of Materials Chemistry A, 2019, 7, 2315-2325.	10.3	86
26	Selfâ€healable and thiolâ€“ene UVâ€curable waterborne polyurethane for anticorrosion coating. Journal of Applied Polymer Science, 2019, 136, 47700.	2.6	20
27	Mechanically Robust, Selfâ€Healable, and Highly Stretchable â€œLivingâ€•Crosslinked Polyurethane Based on a Reversible Cï£¿C Bond. Advanced Functional Materials, 2018, 28, 1706050.	14.9	155
28	Polymer engineering based on reversible covalent chemistry: A promising innovative pathway towards new materials and new functionalities. Progress in Polymer Science, 2018, 80, 39-93.	24.7	419
29	Repeated Intrinsic Self-Healing of Wider Cracks in Polymer via Dynamic Reversible Covalent Bonding Molecularly Combined with a Two-Way Shape Memory Effect. ACS Applied Materials & Interfaces, 2018, 10, 38538-38546.	8.0	101
30	Dynamic reversible bonds enable external stress-free two-way shape memory effect of a polymer network and the interrelated intrinsic self-healability of wider crack and recyclability. Journal of Materials Chemistry A, 2018, 6, 16053-16063.	10.3	68
31	A Very Simple Strategy for Preparing External Stressâ€Free Twoâ€Way Shape Memory Polymers by Making Use of Hydrogen Bonds. Macromolecular Rapid Communications, 2018, 39, e1700714.	3.9	33
32	Synergistic effect of dual targeting vaccine adjuvant with aminated Î²-glucan and CpG-oligodeoxynucleotides for both humoral and cellular immune responses. Acta Biomaterialia, 2018, 78, 211-223.	8.3	42
33	A Facile Approach Toward Scalable Fabrication of Reversible Shapeâ€Memory Polymers with Bonded Elastomer Microphases as Internal Stress Provider. Macromolecular Rapid Communications, 2017, 38, 1700124.	3.9	40
34	Self-Healing of Polymer in Acidic Water toward Strength Restoration through the Synergistic Effect of Hydrophilic and Hydrophobic Interactions. ACS Applied Materials & Interfaces, 2017, 9, 37300-37309.	8.0	39
35	Moisture Battery Formed by Direct Contact of Magnesium with Foamed Polyaniline. Angewandte Chemie - International Edition, 2016, 55, 1805-1809.	13.8	31
36	Self-healing of thermally molded commodity plastics based on heat-resistant and anti-aging healing systems. RSC Advances, 2016, 6, 93410-93418.	3.6	3

#	Article	IF	Citations
37	Self-healing, Reshaping, and Recycling of Vulcanized Chloroprene Rubber: A Case Study of Multitask Cyclic Utilization of Cross-linked Polymer. ACS Sustainable Chemistry and Engineering, 2016, 4, 2715-2724.	6.7	106
38	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.	10.3	75
39	Self-healing epoxy with a fast and stable extrinsic healing system based on BF3â€“amine complex. RSC Advances, 2016, 6, 100796-100803.	3.6	8
40	Moisture Battery Formed by Direct Contact of Magnesium with Foamed Polyaniline. Angewandte Chemie, 2016, 128, 1837-1841.	2.0	11
41	Sunlight driven self-healing, reshaping and recycling of a robust, transparent and yellowing-resistant polymer. Journal of Materials Chemistry A, 2016, 4, 10683-10690.	10.3	177
42	Preparation of graphene oxide and polymer-like quantum dots and their one- and two-photon induced fluorescence properties. Physical Chemistry Chemical Physics, 2016, 18, 4800-4806.	2.8	49
43	A thermally remendable and reprocessable crosslinked methyl methacrylate polymer based on oxygen insensitive dynamic reversible Câ€“ON bonds. RSC Advances, 2016, 6, 6350-6357.	3.6	32
44	A seawater triggered dynamic coordinate bond and its application for underwater self-healing and reclaiming of lipophilic polymer. Chemical Science, 2016, 7, 2736-2742.	7.4	97
45	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.	10.3	24
46	Catalyst-free dynamic exchange of aromatic Schiff base bonds and its application to self-healing and remolding of crosslinked polymers. Journal of Materials Chemistry A, 2015, 3, 19662-19668.	10.3	166
47	Selfâ€healing polymeric materials towards nonâ€structural recovery of functional properties. Polymer International, 2014, 63, 1741-1749.	3.1	49
48	Room-Temperature Self-Healable and Remoldable Cross-linked Polymer Based on the Dynamic Exchange of Disulfide Bonds. Chemistry of Materials, 2014, 26, 2038-2046.	6.7	459
49	Preparation of bifunctionalized phenylene-bridged periodic mesoporous organosilica for solid-phase microextraction. RSC Advances, 2014, 4, 168-174.	3.6	11
50	Application of alkoxyamine in self-healing of epoxy. Journal of Materials Chemistry A, 2014, 2, 6558-6566.	10.3	70
51	Strategy of fabrication of controlled thermosetting gel based on soybean oil towards supercritical carbon dioxide foaming. Green Chemistry, 2014, 16, 1225-1235.	9.0	6
52	Alkoxyamine with reduced homolysis temperature and its application in repeated autonomous self-healing of stiff polymers. Polymer Chemistry, 2013, 4, 4648.	3.9	124
53	Thermo-molded self-healing thermoplastics containing multilayer microreactors. Journal of Materials Chemistry A, 2013, 1, 7191.	10.3	51
54	Photo-stimulated self-healing polyurethane containing dihydroxyl coumarin derivatives. Polymer, 2012, 53, 2691-2698.	3.8	216

#	Article	IF	Citations
55	Theoretical consideration and modeling of selfâ€healing polymers. Journal of Polymer Science, Part B: Polymer Physics, 2012, 50, 229-241.	2.1	67
56	Self-Healing of Polymers via Synchronous Covalent Bond Fission/Radical Recombination. Chemistry of Materials, 2011, 23, 5076-5081.	6.7	198
57	A facile heteroaggregate-template route to hollow magnetic mesoporous spheres with tunable shell structures. Journal of Materials Chemistry, 2011, 21, 9020.	6.7	36
58	Synthesis and characterization of epoxy with improved thermal remendability based on Dielsâ€Alder reaction. Polymer International, 2010, 59, 1339-1345.	3.1	122
59	A dual mechanism single-component self-healing strategy for polymers. Journal of Materials Chemistry, 2010, 20, 6030.	6.7	103
60	Self-Healing of Thermoplastics via Living Polymerization. Macromolecules, 2010, 43, 595-598.	4.8	71
61	Imparting Ultraâ€Low Friction and Wear Rate to Epoxy by the Incorporation of Microencapsulated Lubricant?. Macromolecular Materials and Engineering, 2009, 294, 20-24.	3.6	76
62	Plant oilâ€based biofoam composites with balanced performance. Polymer International, 2009, 58, 403-411.	3.1	18
63	A thermally remendable epoxy resin. Journal of Materials Chemistry, 2009, 19, 1289.	6.7	237
64	A Comparative Study of Nanosilica/Poly(propylene) Composites Prepared by Reactive Compatibilization. Macromolecular Chemistry and Physics, 2008, 209, 1826-1835.	2.2	14
65	Interfacial effects in short sisal fiber/maleated castor oil foam composites. Composite Interfaces, 2008, 15, 95-110.	2.3	14
66	Self-Healing Polymeric Materials Using Epoxy/Mercaptan as the Healant. Macromolecules, 2008, 41, 5197-5202.	4.8	393
67	Performance Improvement of Nano-silica/Polypropylene Composites through in-situ Graft Modification of Nanoparticles during Melt Compounding. E-Polymers, 2007, 7, .	3.0	5
68	A Novel Self-Healing Epoxy System with Microencapsulated Epoxy and Imidazole Curing Agent. Advanced Composites Letters, 2007, 16, 096369350701600.	1.3	37
69	Tribological behavior of epoxy composites containing reactive SiC nanoparticles. Journal of Applied Polymer Science, 2007, 104, 2608-2619.	2.6	24
70	Localized compatibilization in immiscible blends of thermoplastic polyurethane and ethylene-octylene copolymer. Journal of Applied Polymer Science, 2007, 105, 1309-1315.	2.6	4
71	Role of reactive compatibilization in preparation of nanosilica/polypropylene composites. Polymer Engineering and Science, 2007, 47, 499-509.	3.1	43
72	Analysis of gas sensing behaviors of carbon black/waterborne polyurethane composites in low concentration organic vapors. Journal of Materials Science, 2007, 42, 4575-4580.	3.7	10

#	Article	IF	Citations
73	Polyurethane/Polyolefin Blends: Morphology, Compatibilization and Mechanical Properties. Polymers and Polymer Composites, 2006, 14, 1-11.	1.9	10
74	Effect of Soft Segments of Waterborne Polyurethane on Organic Vapor Sensitivity of Carbon Black Filled Waterborne Polyurethane Composites. Polymer Journal, 2006, 38, 799-806.	2.7	12
75	Effects of reactive compatibilization on the performance of nano-silica filled polypropylene composites. Journal of Materials Science, 2006, 41, 5767-5770.	3.7	29
76	Surface functionalization of Si3N4 nanoparticles by graft polymerization of glycidyl methacrylate and styrene. Journal of Applied Polymer Science, 2006, 102, 992-999.	2.6	4
77	Fabrication of Nanoparticle/Polymer Composites by In Situ Bubble-Stretching and Reactive Compatibilization. Macromolecular Chemistry and Physics, 2006, 207, 2093-2102.	2.2	16
78	Effect of Drawing Induced Dispersion of Nano-Silica on Performance Improvement of Poly(propylene)-Based Nanocomposites. Macromolecular Rapid Communications, 2006, 27, 581-585.	3.9	38
79	Electrical resistance response of poly(ethylene oxide)-based conductive composites to organic vapors: Effect of filler content, vapor species, and temperature. Journal of Applied Polymer Science, 2005, 98, 1517-1523.	2.6	3
80	Time dependent percolation of carbon black filled polymer composites in response to solvent vapor. Journal of Materials Science, 2005, 40, 2065-2068.	3.7	9
81	Irradiation-induced surface graft polymerization onto calcium carbonate nanoparticles and its toughening effects on polypropylene composites. Polymer Engineering and Science, 2005, 45, 529-538.	3.1	41
82	Organic Vapour Sensor from Carbon Black Filled Amorphous Polymer Composite: Effects of Processing, Carbon Fibres and Irradiation. Polymers and Polymer Composites, 2005, 13, 213-221.	1.9	1
83	Covalently Connecting Nanoparticles with Epoxy Matrix and its Effect on the Improvement of Tribological Performance of the Composites. Polymers and Polymer Composites, 2005, 13, 245-252.	1.9	23
84	Grafting of Poly(glycidyl methacrylate) onto Nano-SiO2 and Its Reactivity in Polymers. Polymer Journal, 2005, 37, 677-685.	2.7	9
85	The Preparation of Self-Reinforced Sisal Fiber Composites. Polymers and Polymer Composites, 2004, 12, 297-308.	1.9	20
86	Mechanical Properties of Nanocomposites from Ball Milling Grafted Nano-Silica/Polypropylene Block Copolymer. Polymers and Polymer Composites, 2004, 12, 257-268.	1.9	14
87	Polypropylene composites filled with in-situ grafting polymerization modified nano-silica particles. Journal of Materials Science, 2004, 39, 3475-3478.	3.7	36
88	Thermal stability of frictional surface layer and wear debris of epoxy nanocomposites in relation to the mechanism of tribological performance improvement. Journal of Materials Science, 2004, 39, 3817-3820.	3.7	12
89	Organic vapor sensibility of carbon black/polyethylene wax composites. Journal of Materials Science, 2004, 39, 5617-5620.	3.7	2
90	Thermally induced performance decay in conductive polymer composites. Polymer Composites, 2004, 25, 270-279.	4.6	6

#	Article	IF	Citations
91	Analysis of the interfacial interactions in polypropylene/silica nanocomposites. Polymer International, 2004, 53, 176-183.	3.1	137
92	In situ melt grafting in carbon black/polyolefin composites and its influence on conductive performance. Polymer International, 2004, 53, 944-950.	3.1	6
93	Surface grafting onto SiC nanoparticles with glycidyl methacrylate in emulsion. Journal of Polymer Science Part A, 2004, 42, 3842-3852.	2.3	30
94	Interfacial effects in polypropylene-silica nanocomposites. Journal of Applied Polymer Science, 2004, 92, 1771-1781.	2.6	104
95	Improvement of notch toughness of low nano-SiO2 filled polypropylene composites. Journal of Materials Science Letters, 2003, 22, 1027-1030.	0.5	22
96	Carbon black filled poly(2-ethylhexyl methacrylate) as a candidate for gas sensing material. Journal of Materials Science Letters, 2003, 22, 1057-1059.	0.5	18
97	A novel sensor for organic solvent vapors based on conductive amorphous polymer composites: carbon black/poly(butyl methacrylate). Polymer Bulletin, 2003, 50, 99-106.	3.3	30
98	Electrical Response to Organic Vapor of Conductive Composites from Amorphous Polymer/Carbon Black Prepared by Polymerization Filling. Macromolecular Materials and Engineering, 2003, 288, 103-107.	3.6	32
99	Preparation of Binary Conductive Polymer Composites with Very Low Percolation Threshold by Latex Blending. Macromolecular Rapid Communications, 2003, 24, 889-893.	3.9	61
100	Performance stabilization of conductive polymer composites. Journal of Applied Polymer Science, 2003, 89, 2438-2445.	2.6	16
101	Carbon black-filled polyolefins as positive temperature coefficient materials: The effect ofin situ grafting during melt compounding. Journal of Polymer Science, Part B: Polymer Physics, 2003, 41, 127-134.	2.1	15
102	Surface modification of magnetic metal nanoparticles and its influence on the performance of polymer composites. Journal of Polymer Science, Part B: Polymer Physics, 2003, 41, 1070-1084.	2.1	19
103	Enzyme degradability of benzylated sisal and its self-reinforced composites. Polymers for Advanced Technologies, 2003, 14, 676-685.	3.2	5
104	All-plant fiber composites. II: Water absorption behavior and biodegradability of unidirectional sisal fiber reinforced benzylated wood. Polymer Composites, 2003, 24, 367-379.	4.6	30
105	Mechanical properties of low nano-silica filled high density polyethylene composites. Polymer Engineering and Science, 2003, 43, 490-500.	3.1	124
106	Effects of Processing on Electric Response of Carbon Black Filled Poly(methyl methacrylate) Composites against Organic Solvent Vapors. Polymer Journal, 2003, 35, 1003-1008.	2.7	11
107	Highly Filled Nano-CdS/Polystyrene Nanocomposite Film with Self-Organization Behavior. Polymers and Polymer Composites, 2003, 11, 441-448.	1.9	1
108	Percolation and Gas Sensing Behaviours of Ternary Conductive Composites: Vapour-Grown Carbon Fibres/Carbon Black/Poly(Methyl Methacrylate). Advanced Composites Letters, 2003, 12, 096369350301200.	1.3	0

#	Article	IF	Citations
109	Gas Sensing Materials from Carbon Black/Poly(Methyl Methacrylate) Composites. Polymers and Polymer Composites, 2003, 11, 291-299.	1.9	15
110	Deformation Characteristics of Nano-SiO₂ Filled Polypropylene Composites. Polymers and Polymer Composites, 2003, 11, 559-562.	1.9	11
111	Nanostructured Silver/Polystyrene Composite Film: Preparation and Ultrafast Third-Order Optical Nonlinearity. Polymers and Polymer Composites, 2002, 10, 291-298.	1.9	5
112	Graft Polymerization of Vinyl Monomers onto Nanosized Silicon Carbide Particles. Polymers and Polymer Composites, 2002, 10, 531-540.	1.9	16
113	Improvement of Tribological Performance of Epoxy by the Addition of Irradiation Grafted Nano-Inorganic Particles. Macromolecular Materials and Engineering, 2002, 287, 111-115.	3.6	120
114	Improvement of conductive network quality in carbon black-filled polymer blends. Journal of Applied Polymer Science, 2002, 84, 2768-2775.	2.6	24
115	Interfacial interaction in sisal/epoxy composites and its influence on impact performance. Polymer Composites, 2002, 23, 182-192.	4.6	24
116	Viscoelasticity and flow behavior of irradiation grafted nano-inorganic particle filled polypropylene composites in the melt state. Science and Technology of Advanced Materials, 2002, 3, 111-116.	6.1	14
117	All-Plant Fibre Composites: Self Reinforced Composites Based on Sisal. Advanced Composites Letters, 2001, 10, 096369350101000.	1.3	13
118	Heat treatment-induced multiple melting behavior of carbon black-filled polymer blends in relation to the conductive performance stabilization. Journal of Applied Polymer Science, 2001, 80, 1267-1273.	2.6	11
119	Atomic force microscopy study on structure and properties of irradiation grafted silica particles in polypropylene-based nanocomposites. Journal of Applied Polymer Science, 2001, 80, 2218-2227.	2.6	69
120	Interfacial interaction in Ag/polymer nanocomposite films. Journal of Materials Science Letters, 2001, 20, 1473-1476.	0.5	40
121	Interfacial interaction in stainless steel fiber-filled polypropylene composites. Journal of Applied Polymer Science, 2000, 78, 2174-2179.	2.6	6
122	Title is missing!. Journal of Materials Science Letters, 2000, 19, 1159-1161.	0.5	99
123	Natural Vegetable Fibre / Plasticised Natural Vegetable Fibre - a Candidate for Low Cost and Fully Biodegradable Composite. Advanced Composites Letters, 1999, 8, 096369359900800.	1.3	18
124	Self-Healing Polymers and Polymer Composites. , 0, , 29-71.		4