Zhanhua Wang

List of Publications by Year
in descending order

81	4,153	87888 38	118850 62
papers	citations	h-index	g-index

81	81	81	4906
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Bioinspired Waterâ€Vaporâ€Responsive Organic/Inorganic Hybrid Oneâ€Dimensional Photonic Crystals with Tunable Fullâ€Color Stop Band. Advanced Functional Materials, 2010, 20, 3784-3790.	14.9	184
2	Suppression of the Coffee Ring Effect by Hydrosoluble Polymer Additives. ACS Applied Materials & Interfaces, 2012, 4, 2775-2780.	8.0	167
3	Preparation, characterization and properties of intrinsic self-healing elastomers. Journal of Materials Chemistry B, 2019, 7, 4876-4926.	5.8	141
4	Temporal Control in Mechanically Controlled Atom Transfer Radical Polymerization Using Low ppm of Cu Catalyst. ACS Macro Letters, 2017, 6, 546-549.	4.8	135
5	Ultrasonication-Induced Aqueous Atom Transfer Radical Polymerization. ACS Macro Letters, 2018, 7, 275-280.	4.8	125
6	4D Printing of a Liquid Crystal Elastomer with a Controllable Orientation Gradient. ACS Applied Materials & Interfaces, 2019, 11, 44774-44782.	8.0	116
7	Enhancing Mechanically Induced ATRP by Promoting Interfacial Electron Transfer from Piezoelectric Nanoparticles to Cu Catalysts. Macromolecules, 2017, 50, 7940-7948.	4.8	114
8	Dielsâ€“Alder dynamic crosslinked polyurethane/polydopamine composites with NIR triggered self-healing function. Polymer Chemistry, 2018, 9, 2166-2172.	3.9	111
9	One-dimensional photonic crystals: fabrication, responsiveness and emerging applications in 3D construction. RSC Advances, 2016, 6, 4505-4520.	3.6	110
10	Developments and Challenges in Selfâ€Healing Antifouling Materials. Advanced Functional Materials, 2020, 30, 1908098.	14.9	110
11	Realizing Crack Diagnosing and Selfâ€Healing by Electricity with a Dynamic Crosslinked Flexible Polyurethane Composite. Advanced Science, 2018, 5, 1800101.	11.2	109
12	Bioinspired silicon hollow-tip arrays for high performance broadband anti-reflective and water-repellent coatings. Journal of Materials Chemistry, 2009, 19, 1806.	6.7	104
13	Colorful detection of organic solvents based on responsive organic/inorganic hybrid one-dimensional photonic crystals. Journal of Materials Chemistry, 2011, 21, 1264-1270.	6.7	104
14	A facile dynamic crosslinked healable poly(oxime-urethane) elastomer with high elastic recovery and recyclability. Journal of Materials Chemistry A, 2018, 6, 18154-18164.	10.3	102
15	Dynamic covalent urea bonds and their potential for development of self-healing polymer materials. Journal of Materials Chemistry A, 2019, 7, 15933-15943.	10.3	101
16	Bioinspired Silica Surfaces with Near-Infrared Improved Transmittance and Superhydrophobicity by Colloidal Lithography. Langmuir, 2010, 26, 9842-9847.	3.5	99
17	Polydopamine Particles Reinforced Poly(vinyl alcohol) Hydrogel with NIR Light Triggered Shape Memory and Selfâ€Healing Capability. Macromolecular Rapid Communications, 2017, 38, 1700421.	3.9	97
18	pH and Ultrasound Dual-Responsive Polydopamine-Coated Mesoporous Silica Nanoparticles for Controlled Drug Delivery. Langmuir, 2018, 34, 9974-9981.	3.5	95

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19	A Facile Strategy for Selfâ€Healing Polyurethanes Containing Multiple Metalâ€“Ligand Bonds. Macromolecular Rapid Communications, 2018, 39, e1700678.	3.9	92
20	Biomimetic Surfaces for Highâ€Performance Optics. Advanced Materials, 2009, 21, 4731-4734.	21.0	84
21	Facile UV-healable polyethylenimineâ€“copper (C₂H₅Nâ€“Cu) supramolecular polymer networks. Polymer Chemistry, 2013, 4, 4897-4901.	3.9	82
22	Simultaneous realization of conductive segregation network microstructure and minimal surface porous macrostructure by SLS 3D printing. Materials and Design, 2019, 178, 107874.	7.0	68
23	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.	10.3	67
24	Self-Healing Superhydrophobic Fluoropolymer Brushes as Highly Protein-Repellent Coatings. Langmuir, 2016, 32, 6310-6318.	3.5	67
25	Selective Laser Sintering 3D Printing: A Way to Construct 3D Electrically Conductive Segregated Network in Polymer Matrix. Macromolecular Materials and Engineering, 2017, 302, 1700211.	3.6	67
26	Novel Poly(vinyl alcohol)/Chitosan/Modified Graphene Oxide Biocomposite for Wound Dressing Application. Macromolecular Bioscience, 2020, 20, e1900385.	4.1	65
27	Hierarchically reversible crosslinking polymeric hydrogels with highly efficient self-healing, robust mechanical properties, and double-driven shape memory behavior. Journal of Materials Chemistry A, 2021, 9, 5730-5739.	10.3	65
28	Acylsemicarbazide Moieties with Dynamic Reversibility and Multiple Hydrogen Bonding for Transparent, High Modulus, and Malleable Polymers. Macromolecules, 2020, 53, 7914-7924.	4.8	62
29	Avoiding coffee ring structure based on hydrophobic silicon pillar arrays during single-drop evaporation. Soft Matter, 2012, 8, 10448.	2.7	61
30	Water-repairable zwitterionic polymer coatings for anti-biofouling surfaces. Journal of Materials Chemistry B, 2017, 5, 6728-6733.	5.8	58
31	Polymer Bragg stack as color tunable photonic paper. Journal of Materials Chemistry, 2012, 22, 7887.	6.7	57
32	High performance dynamic covalent crosslinked polyacylsemicarbazide composites with self-healing and recycling capabilities. Journal of Materials Chemistry A, 2021, 9, 4055-4065.	10.3	53
33	Atom Transfer Radical Polymerization Enabled by Sonochemically Labile Cu-carbonate Species. ACS Macro Letters, 2019, 8, 161-165.	4.8	52
34	Polydimethylsiloxane incorporated with reduced graphene oxide (rGO) sheets for wound dressing application: Preparation and characterization. Colloids and Surfaces B: Biointerfaces, 2018, 166, 61-71.	5.0	50
35	Covalent adaptable networks of polydimethylsiloxane elastomer for selective laser sintering 3D printing. Chemical Engineering Journal, 2021, 412, 128675.	12.7	50
36	Improved light extraction efficiency of white organic light-emitting devices by biomimetic antireflective surfaces. Applied Physics Letters, 2010, 96, .	3.3	46

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37	Patterning Organic/Inorganic Hybrid Bragg Stacks by Integrating One-Dimensional Photonic Crystals and Macrocavities through Photolithography: Toward Tunable Colorful Patterns as Highly Selective Sensors. ACS Applied Materials & Interfaces, 2012, 4, 1397-1403.	8.0	43
38	Polyurethane-modified graphene oxide composite bilayer wound dressing with long-lasting antibacterial effect. Materials Science and Engineering C, 2020, 111, 110833.	7.3	41
39	Dual water-healable zwitterionic polymer coatings for anti-biofouling surfaces. Journal of Materials Chemistry B, 2018, 6, 6930-6935.	5.8	40
40	Self-healing fluoropolymer brushes as highly polymer-repellent coatings. Journal of Materials Chemistry A, 2016, 4, 2408-2412.	10.3	39
41	Organicâ€“inorganic hybrid photonic hydrogels as a colorful platform for visual detection of SCNâ^'. Chemical Communications, 2010, 46, 8636.	4.1	34
42	Dynamic healable polyurethane for selective laser sintering. Additive Manufacturing, 2020, 33, 101176.	3.0	32
43	Recent Advances of Self-Healing Polymer Materials via Supramolecular Forces for Biomedical Applications. Biomacromolecules, 2022, 23, 641-660.	5.4	32
44	Role of Diisocyanate Structure on Selfâ€Healing and Anticorrosion Properties of Waterborne Polyurethane Coatings. Advanced Materials Interfaces, 2021, 8, 2100117.	3.7	31
45	Antifouling Properties of Fluoropolymer Brushes toward Organic Polymers: The Influence of Composition, Thickness, Brush Architecture, and Annealing. Langmuir, 2016, 32, 6571-6581.	3.5	30
46	Pt Nanoparticle-Loaded Graphene Aerogel Microspheres with Excellent Methanol Electro-Oxidation Performance. Langmuir, 2019, 35, 3694-3700.	3.5	30
47	Polydopamine Particleâ€Filled Shapeâ€Memory Polyurethane Composites with Fast Nearâ€Infrared Light Responsibility. ChemPhysChem, 2018, 19, 2052-2057.	2.1	29
48	Constructing 3D Graphene Network in Rubber Nanocomposite via Liquid-Phase Redispersion and Self-Assembly. ACS Applied Materials & Interfaces, 2020, 12, 9682-9692.	8.0	29
49	Ultrasound Reversible Response Nanocarrier Based on Sodium Alginate Modified Mesoporous Silica Nanoparticles. Frontiers in Chemistry, 2019, 7, 59.	3.6	28
50	Biochemical-to-optical signal transduction by pH sensitive organicâ€“inorganic hybrid Bragg stacks with a full color display. Journal of Materials Chemistry C, 2013, 1, 977-983.	5.5	27
51	A novel self-catalytic cooperative multiple dynamic moiety: towards rigid and tough but more healable polymer networks. Journal of Materials Chemistry A, 2021, 9, 16759-16768.	10.3	27
52	Polystyrene@TiO2 coreâ€“shell microsphere colloidal crystals and nonspherical macro-porous materials. Journal of Colloid and Interface Science, 2008, 325, 567-572.	9.4	26
53	Morphology-controlled two-dimensional elliptical hemisphere arrays fabricated by a colloidal crystal based micromolding method. Journal of Materials Chemistry, 2010, 20, 152-158.	6.7	25
54	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.	10.3	25

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55	Ultralight NiCo@rGO aerogel microspheres with magnetic response for oil/water separation. Chemical Engineering Journal, 2022, 430, 132894.	12.7	25
56	Fabrication of Silicon/Polymer Composite Nanopost Arrays and Their Sensing Applications. Small, 2011, 7, 2769-2774.	10.0	24
57	Robust and recyclable graphene/chitosan composite aerogel microspheres for adsorption of oil pollutants from water. Carbohydrate Polymers, 2022, 290, 119416.	10.2	20
58	Fabrication of biomimetic high performance antireflective and antifogging film by spin-coating. Journal of Colloid and Interface Science, 2012, 374, 89-95.	9.4	18
59	Progress in Utilizing Dynamic Bonds to Fabricate Structurally Adaptive Selfâ€Healing, Shape Memory, and Liquid Crystal Polymers. Macromolecular Rapid Communications, 2022, 43, e2100768.	3.9	18
60	Preparation of hollow polyurethane microspheres with tunable surface structures via electrospraying technology. RSC Advances, 2017, 7, 49828-49837.	3.6	16
61	A novel method to prepare homogeneous biocompatible grapheneâ€based PDMS composites with enhanced mechanical, thermal and antibacterial properties. Polymer Composites, 2019, 40, E1397.	4.6	16
62	Low Electric Field Intensity and Thermotropic Tuning Surface Plasmon Band Shift of Gold Island Film by Liquid Crystals. Journal of Physical Chemistry C, 2012, 116, 2720-2727.	3.1	15
63	Full Color Plasmonic Nanostructured Surfaces and Their Sensor Applications. Journal of Physical Chemistry C, 2010, 114, 19908-19912.	3.1	13
64	Hybrid MXene/reduced graphene oxide aerogel microspheres for hydrogen evolution reaction. Ionics, 2021, 27, 3099-3108.	2.4	13
65	NIR light-triggered self-healing waterborne polyurethane coatings with polydopamine-coated reduced graphene oxide nanoparticles. Progress in Organic Coatings, 2021, 161, 106499.	3.9	13
66	Nitrogen-Doped Graphene Aerogel Microspheres Used as Electrocatalyst Supports for Methanol Oxidation. Industrial & Engineering Chemistry Research, 2022, 61, 1398-1407.	3.7	13
67	Bioinspired ultrasound-responsive fluorescent metalâ€“ligand cross-linked polymer assemblies. Polymer Chemistry, 2017, 8, 2581-2585.	3.9	12
68	Fluorinated alkyne-derived monolayers on oxide-free silicon nanowires via one-step hydrosilylation. Applied Surface Science, 2016, 387, 1202-1210.	6.1	11
69	Ultrathin stimuli-responsive polymer film-based optical sensor for fast and visual detection of hazardous organic solvents. Journal of Materials Chemistry C, 2018, 6, 10861-10869.	5.5	11
70	Hybrid Transition Metal Dichalcogenide/Graphene Microspheres for Hydrogen Evolution Reaction. Nanomaterials, 2020, 10, 2376.	4.1	10
71	High intensity focused ultrasound responsive release behavior of metallo-supramolecular block PPG-PEG copolymer micelles. Ultrasonics Sonochemistry, 2020, 68, 105217.	8.2	10
72	The Technological Design of Geometrically Complex Ti-6Al-4V Parts by Metal Injection Molding. Applied Sciences (Switzerland), 2019, 9, 1339.	2.5	9

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73	From 1D to 3D: a new route to fabricate tridimensional structures via photo-generation of silver networks. RSC Advances, 2015, 5, 28633-28642.	3.6	7
74	Highly Polymerâ€Repellent yet Atomically Flat Surfaces Based on Organic Monolayers with a Single Fluorine Atom. Advanced Materials Interfaces, 2016, 3, 1500514.	3.7	7
75	Powder quality and electrical conductivity of selective laser sintered polymer composite components. , 2020, , 149-185.		7
76	Selective Laser Sintering of Polydimethylsiloxane Composites. 3D Printing and Additive Manufacturing, 2023, 10, 684-696.	2.9	7
77	PbS nanoparticles/polymer composite aggregates through self-assembly of amphiphilic copolymer containing cross-linked hydrophilic block. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2007, 292, 159-164.	4.7	6
78	HIFU induced particles redistribution in polymer matrix via synchrotron radiation X-ray microtomography. Ultrasonics Sonochemistry, 2018, 49, 97-105.	8.2	5
79	The Effect of the 3D Nanoarchitecture and Niâ€Promotion on the Hydrogen Evolution Reaction in MoS₂/Reduced GO Aerogel Hybrid Microspheres Produced by a Simple Oneâ€Pot Electrospraying Procedure. Small, 2022, 18, e2105694.	10.0	5
80	High-intensity focused ultrasound selective annealing induced patterned and gradient crystallization behavior of polymer. Ultrasonics Sonochemistry, 2018, 40, 442-452.	8.2	3
81	Self-assembling Behavior of Amphiphilic Copolymer Containing Cross-linked Hydrophilic Block in Ethanol. Chemical Research in Chinese Universities, 2007, 23, 101-104.	2.6	1