

Wei Wang

List of Publications by Year in descending order

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105
papers

6,599
citations

71061

41
h-index

64755

79
g-index

106
all docs

106
docs citations

106
times ranked

7954
citing authors

#	ARTICLE	IF	CITATIONS
1	Autonomous Motion of Metallic Microrods Propelled by Ultrasound. <i>ACS Nano</i> , 2012, 6, 6122-6132.	7.3	597
2	Nano-structured smart hydrogels with rapid response and high elasticity. <i>Nature Communications</i> , 2013, 4, 2226.	5.8	560
3	Stimuli-responsive smart gating membranes. <i>Chemical Society Reviews</i> , 2016, 45, 460-475.	18.7	334
4	Poly(<i>N</i> -isopropylacrylamide)-Clay Nanocomposite Hydrogels with Responsive Bending Property as Temperature-Controlled Manipulators. <i>Advanced Functional Materials</i> , 2015, 25, 2980-2991.	7.8	314
5	Functional Polymeric Microparticles Engineered from Controllable Microfluidic Emulsions. <i>Accounts of Chemical Research</i> , 2014, 47, 373-384.	7.6	223
6	Reduced Graphene Oxide-Containing Smart Hydrogels with Excellent Electro-Response and Mechanical Properties for Soft Actuators. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 15758-15767.	4.0	207
7	Controllable microfluidic production of multicomponent multiple emulsions. <i>Lab on A Chip</i> , 2011, 11, 1587.	3.1	199
8	Near-Infrared Light-Responsive Poly(<i>N</i> -isopropylacrylamide)/Graphene Oxide Nanocomposite Hydrogels with Ultrahigh Tensibility. <i>ACS Applied Materials & Interfaces</i> , 2015, 7, 27289-27298.	4.0	182
9	Monodisperse core-shell chitosan microcapsules for pH-responsive burst release of hydrophobic drugs. <i>Soft Matter</i> , 2011, 7, 4821.	1.2	146
10	Multi-Stimuli-Responsive Microcapsules for Adjustable Controlled-Release. <i>Advanced Functional Materials</i> , 2014, 24, 3312-3323.	7.8	141
11	Graphene Oxide Membranes with Strong Stability in Aqueous Solutions and Controllable Lamellar Spacing. <i>ACS Applied Materials & Interfaces</i> , 2016, 8, 15557-15566.	4.0	138
12	Core-Shell Chitosan Microcapsules for Programmed Sequential Drug Release. <i>ACS Applied Materials & Interfaces</i> , 2016, 8, 10524-10534.	4.0	132
13	Dual temperature/pH-sensitive drug delivery of poly(<i>N</i> -isopropylacrylamide-co-acrylic acid) nanogels conjugated with doxorubicin for potential application in tumor hyperthermia therapy. <i>Colloids and Surfaces B: Biointerfaces</i> , 2011, 84, 447-453.	2.5	130
14	Hole-Shell Microparticles from Controllably Evolved Double Emulsions. <i>Angewandte Chemie - International Edition</i> , 2013, 52, 8084-8087.	7.2	121
15	Smart thermo-triggered squirting capsules for nanoparticle delivery. <i>Soft Matter</i> , 2010, 6, 3759.	1.2	118
16	Graphene-based membranes with uniform 2D nanochannels for precise sieving of mono-/multi-valent metal ions. <i>Journal of Membrane Science</i> , 2018, 550, 208-218.	4.1	116
17	Smart Hydrogels with Inhomogeneous Structures Assembled Using Nanoclay-Cross-Linked Hydrogel Subunits as Building Blocks. <i>ACS Applied Materials & Interfaces</i> , 2016, 8, 21721-21730.	4.0	98
18	Rapid Removal of Hg(II) from Aqueous Solutions Using Thiol-Functionalized Zn-Doped Biomagnetite Particles. <i>ACS Applied Materials & Interfaces</i> , 2012, 4, 4373-4379.	4.0	96

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19	Microfluidic fabrication of monodisperse microcapsules for glucose-response at physiological temperature. <i>Soft Matter</i> , 2013, 9, 4150.	1.2	95
20	Microfluidic Fabrication of Bio-Inspired Microfibers with Controllable Magnetic Spindle-Knots for 3D Assembly and Water Collection. <i>ACS Applied Materials & Interfaces</i> , 2015, 7, 17471-17481.	4.0	91
21	pH-responsive poly(ether sulfone) composite membranes blended with amphiphilic polystyrene-block-poly(acrylic acid) copolymers. <i>Journal of Membrane Science</i> , 2014, 450, 162-173.	4.1	90
22	Trojanâ€”Horseâ€”Like Stimuliâ€”Responsive Microcapsules. <i>Advanced Science</i> , 2018, 5, 1700960.	5.6	83
23	Simple and cheap microfluidic devices for the preparation of monodisperse emulsions. <i>Lab on A Chip</i> , 2011, 11, 3963.	3.1	80
24	Novel Intestinal-Targeted Ca-Alginate-Based Carrier for pH-Responsive Protection and Release of Lactic Acid Bacteria. <i>ACS Applied Materials & Interfaces</i> , 2014, 6, 5962-5970.	4.0	79
25	Ion-recognizable hydrogels for efficient removal of cesium ions from aqueous environment. <i>Journal of Hazardous Materials</i> , 2017, 323, 632-640.	6.5	79
26	β -Cyclodextrin-modified graphene oxide membranes with large adsorption capacity and high flux for efficient removal of bisphenol A from water. <i>Journal of Membrane Science</i> , 2020, 595, 117510.	4.1	77
27	Gating membranes for water treatment: detection and removal of trace Pb ²⁺ ions based on molecular recognition and polymer phase transition. <i>Journal of Materials Chemistry A</i> , 2013, 1, 9659.	5.2	75
28	Designable Polymeric Microparticles from Droplet Microfluidics for Controlled Drug Release. <i>Advanced Materials Technologies</i> , 2019, 4, 1800687.	3.0	73
29	Simple and Continuous Fabrication of Self-Propelled Micromotors with Photocatalytic Metalâ€”Organic Frameworks for Enhanced Synergistic Environmental Remediation. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 35120-35131.	4.0	67
30	A Novel Thermoâ€”Induced Selfâ€”Bursting Microcapsule with Magneticâ€”Targeting Property. <i>ChemPhysChem</i> , 2009, 10, 2405-2409.	1.0	66
31	Nanocomposite smart hydrogels with improved responsiveness and mechanical properties: A mini review. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 2018, 56, 1306-1313.	2.4	56
32	Microfluidic fabrication of chitosan microfibers with controllable internals from tubular to peapod-like structures. <i>RSC Advances</i> , 2015, 5, 928-936.	1.7	54
33	Controllable microfluidic strategies for fabricating microparticles using emulsions as templates. <i>Particuology</i> , 2016, 24, 18-31.	2.0	54
34	Microfluidic generation of hollow Ca-alginate microfibers. <i>Lab on A Chip</i> , 2016, 16, 2673-2681.	3.1	51
35	Uniform Microparticles with Controllable Highly Interconnected Hierarchical Porous Structures. <i>ACS Applied Materials & Interfaces</i> , 2015, 7, 13758-13767.	4.0	48
36	Controllable Multicompartmental Capsules with Distinct Cores and Shells for Synergistic Release. <i>ACS Applied Materials & Interfaces</i> , 2016, 8, 8743-8754.	4.0	47

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37	Microfluidic approach for encapsulation via double emulsions. <i>Current Opinion in Pharmacology</i> , 2014, 18, 35-41.	1.7	46
38	Novel Biocompatible Thermoresponsive Poly(<i>N</i> -vinyl Caprolactam)/Clay Nanocomposite Hydrogels with Macroporous Structure and Improved Mechanical Characteristics. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 21979-21990.	4.0	46
39	Chitosan microcapsule membranes with nanoscale thickness for controlled release of drugs. <i>Journal of Membrane Science</i> , 2019, 590, 117275.	4.1	44
40	Ultrasensitive microchip based on smart microgel for real-time online detection of trace threat analytes. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2016, 113, 2023-2028.	3.3	43
41	Smart gating membranes with in situ self-assembled responsive nanogels as functional gates. <i>Scientific Reports</i> , 2015, 5, 14708.	1.6	42
42	Fabrication and flow characteristics of monodisperse bullet-shaped microparticles with controllable structures. <i>Chemical Engineering Journal</i> , 2019, 370, 925-937.	6.6	41
43	A Novel Strategy to Fabricate Cation-Cross-linked Graphene Oxide Membrane with High Aqueous Stability and High Separation Performance. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 56269-56280.	4.0	41
44	Designable Micro-Nano-Structured Smart Polymeric Materials. <i>Advanced Materials</i> , 2022, 34, e2107877.	11.1	41
45	Ultrasensitive diffraction gratings based on smart hydrogels for highly selective and rapid detection of trace heavy metal ions. <i>Journal of Materials Chemistry C</i> , 2018, 6, 11356-11367.	2.7	39
46	Novel Multifunctional Stimuli-Responsive Nanoparticles for Synergetic Chemo-Photothermal Therapy of Tumors. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 28802-28817.	4.0	39
47	Plug-n-play microfluidic systems from flexible assembly of glass-based flow-control modules. <i>Lab on A Chip</i> , 2015, 15, 1869-1878.	3.1	38
48	Novel composite membranes for simultaneous catalytic degradation of organic contaminants and adsorption of heavy metal ions. <i>Separation and Purification Technology</i> , 2020, 237, 116364.	3.9	37
49	Graphene-based membranes for molecular and ionic separations in aqueous environments. <i>Chinese Journal of Chemical Engineering</i> , 2017, 25, 1598-1605.	1.7	34
50	Portable Diagnosis Method of Hyperkalemia Using Potassium-Recognizable Poly(<i>N</i> -isopropylacrylamide-co-benzo-15-crown-5-acrylamide) Copolymers. <i>Analytical Chemistry</i> , 2013, 85, 6477-6484.	3.2	33
51	Monodisperse Na ₂ SO ₄ ·10H ₂ O@SiO ₂ Microparticles against Supercooling and Phase Separation during Phase Change for Efficient Energy Storage. <i>Industrial & Engineering Chemistry Research</i> , 2017, 56, 3297-3308.	1.8	33
52	Microfluidic fabrication and thermal characteristics of core-shell phase change microfibers with high paraffin content. <i>Applied Thermal Engineering</i> , 2015, 87, 471-480.	3.0	31
53	Polymersomes with Rapid K ⁺ -Triggered Drug-Release Behaviors. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 19258-19268.	4.0	28
54	Controllable Microfluidic Fabrication of Magnetic Hybrid Microswimmers with Hollow Helical Structures. <i>Industrial & Engineering Chemistry Research</i> , 2018, 57, 9430-9438.	1.8	28

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55	A novel smart membrane with ion-recognizable nanogels as gates on interconnected pores for simple and rapid detection of trace lead(II) ions in water. <i>Journal of Membrane Science</i> , 2019, 575, 28-37.	4.1	28
56	Hydrogel-Based Microactuators with Remote-Controlled Locomotion and Fast Pb ²⁺ -Response for Micromanipulation. <i>ACS Applied Materials & Interfaces</i> , 2013, 5, 7219-7226.	4.0	26
57	pH-responsive controlled release characteristics of solutes with different molecular weights diffusing across membranes of Ca-alginate/protamine/silica hybrid capsules. <i>Journal of Membrane Science</i> , 2015, 474, 233-243.	4.1	26
58	Novel Membrane Detector Based on Smart Nanogels for Ultrasensitive Detection of Trace Threat Substances. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 36425-36434.	4.0	26
59	Facile Fabrication of Bubble-Propelled Micromotors Carrying Nanocatalysts for Water Remediation. <i>Industrial & Engineering Chemistry Research</i> , 2018, 57, 4562-4570.	1.8	25
60	Effect of Oxidized-Group-Supported Lamellar Distance on Stability of Graphene-Based Membranes in Aqueous Solutions. <i>Industrial & Engineering Chemistry Research</i> , 2018, 57, 9439-9447.	1.8	25
61	Bubble-Propelled Hierarchical Porous Micromotors from Evolved Double Emulsions. <i>Industrial & Engineering Chemistry Research</i> , 2019, 58, 1590-1600.	1.8	25
62	Microfluidic Fabrication of Structure-Controlled Chitosan Microcapsules via Interfacial Cross-Linking of Droplet Templates. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 57514-57525.	4.0	24
63	Transparent thermo-responsive poly(<i>N</i> -isopropylacrylamide)- <i>P</i> -poly(ethylene) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 2019, 43, 9507-9515.	1.4	23
64	Microfluidic Preparation of Multicompartment Microcapsules for Isolated Co-encapsulation and Controlled Release of Diverse Components. <i>International Journal of Nonlinear Sciences and Numerical Simulation</i> , 2012, 13, 325-332.	0.4	22
65	A novel membrane with ion-recognizable copolymers in graphene-based nanochannels for facilitated transport of potassium ions. <i>Journal of Membrane Science</i> , 2019, 591, 117345.	4.1	22
66	A Novel, Smart Microsphere with K ⁺ -Induced Shrinking and Aggregating Properties Based on a Responsive Host-Guest System. <i>ACS Applied Materials & Interfaces</i> , 2014, 6, 19405-19415.	4.0	21
67	GO/TiO ₂ -decorated electrospun polyvinylidene fluoride membrane prepared based on metal-polyphenol coordination network for oil-water separation and desalination. <i>Journal of Materials Science</i> , 2022, 57, 3452-3467.	1.7	21
68	The microfluidic synthesis of composite hollow microfibers for K ⁺ -responsive controlled release based on a host-guest system. <i>Journal of Materials Chemistry B</i> , 2016, 4, 3925-3935.	2.9	20
69	Nanostructured Thermoresponsive Surfaces Engineered via Stable Immobilization of Smart Nanogels with Assistance of Polydopamine. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 44092-44101.	4.0	20
70	Smart hydrogels: Network design and emerging applications. <i>Canadian Journal of Chemical Engineering</i> , 2018, 96, 2100-2114.	0.9	20
71	Injectable Temperature/Glucose Dual-Responsive Hydrogels for Controlled Release of Insulin. <i>Industrial & Engineering Chemistry Research</i> , 2021, 60, 8147-8158.	1.8	20
72	Continuous Synthesis of Nanodroplet-Templated, N-Doped Microporous Carbon Spheres in Microfluidic System for CO ₂ Capture. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 52571-52580.	4.0	20

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73	Novel Smart Microreactors Equipped with Responsive Catalytic Nanoparticles on Microchannels. ACS Applied Materials & Interfaces, 2017, 9, 33137-33148.	4.0	19
74	Controllable Microfluidic Fabrication of Microstructured Materials from Nonspherical Particles to Helices. Macromolecular Rapid Communications, 2017, 38, 1700429.	2.0	19
75	Smart Hydrogel Gratings for Sensitive, Facile, and Rapid Detection of Ethanol Concentration. Industrial & Engineering Chemistry Research, 2019, 58, 17833-17841.	1.8	19
76	A novel chemosensor for sensitive and facile detection of strontium ions based on ion-imprinted hydrogels modified with guanosine derivatives. Journal of Hazardous Materials, 2022, 421, 126801.	6.5	19
77	Monodisperse hybrid microcapsules with an ultrathin shell of submicron thickness for rapid enzyme reactions. Journal of Materials Chemistry B, 2015, 3, 796-803.	2.9	17
78	Nanocomposite Hydrogels with Opticâ€™Sonic Transparency and Hydroacoustic-Sensitive Conductivity for Potential Antiscouting Sonar. ACS Applied Materials & Interfaces, 2019, 11, 20386-20393.	4.0	17
79	Controllable microfluidic fabrication of microstructured functional materials. Biomicrofluidics, 2020, 14, 061501.	1.2	17
80	Fabrication of a thermo-responsive membrane with cross-linked smart gates via a â€™grafting-toâ€™™ method. RSC Advances, 2016, 6, 45428-45433.	1.7	16
81	A novel synthetic microfiber with controllable size for cell encapsulation and culture. Journal of Materials Chemistry B, 2016, 4, 2455-2465.	2.9	16
82	Controllable fabrication of polyethersulfone hollow fiber membranes with a facile double co-axial microfluidic device. Journal of Membrane Science, 2017, 526, 9-17.	4.1	16
83	Controllable Fabrication of Functional Microhelices with Droplet Microfluidics. ACS Applied Materials & Interfaces, 2019, 11, 46241-46250.	4.0	16
84	Facile Fabrication of Photocatalyst-Immobilized Gel Beads with Interconnected Macropores for the Efficient Removal of Pollutants in Water. Industrial & Engineering Chemistry Research, 2021, 60, 8762-8775.	1.8	16
85	Smart Hydrogel Grating Immunosensors for Highly Selective and Sensitive Detection of Human-IgG. Industrial & Engineering Chemistry Research, 2020, 59, 10469-10475.	1.8	14
86	Visual detection of trace lead(II) using a forward osmosis-driven device loaded with ion-responsive nanogels. Journal of Hazardous Materials, 2021, 404, 124157.	6.5	14
87	Hybrid Graphene Oxide/Laponite Layered Membranes with Stable Two-Dimensional Nanochannels for Efficient Separations in Aqueous Environments. Industrial & Engineering Chemistry Research, 2020, 59, 12441-12450.	1.8	13
88	Magnetic hierarchical porous SiO ₂ microparticles from droplet microfluidics for water decontamination. Soft Matter, 2020, 16, 2581-2593.	1.2	13
89	Capsule membranes encapsulated with smart nanogels for facile detection of trace lead(II) ions in water. Journal of Membrane Science, 2020, 613, 118523.	4.1	12
90	Smart microfluidic analogue of Wheatstone-bridge for real-time continuous detection with ultrasensitivity and wide dynamic range. Chemical Engineering Journal, 2021, 407, 127138.	6.6	12

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91	K ⁺ -Responsive Block Copolymer Micelles for Targeted Intracellular Drug Delivery. <i>Macromolecular Bioscience</i> , 2017, 17, 1700143.	2.1	11
92	Functional microparticles from multiscale regulation of multiphase emulsions for mass-transfer intensification. <i>Chemical Engineering Science</i> , 2021, 231, 116242.	1.9	10
93	Online monitoring of ethanol concentration using a responsive microfluidic membrane device. <i>Analytical Methods</i> , 2016, 8, 4028-4036.	1.3	9
94	An injectable hydrogel to reverse the adverse microenvironment of diabetic infarcted heart. <i>Materialia</i> , 2021, 15, 100957.	1.3	9
95	Functional Capsules Encapsulating Molecular-Recognizable Nanogels for Facile Removal of Organic Micro-Pollutants from Water. <i>Engineering</i> , 2021, 7, 636-646.	3.2	9
96	Microfluidic fabrication of hydrogel microparticles with MOF-armoured multi-enzymes for cascade biocatalytic reactions. <i>Reaction Chemistry and Engineering</i> , 2022, 7, 275-283.	1.9	8
97	Stimulus-Responsive Nanoparticle-Integrated Dissolving Microneedles for Synergetic Chemo-Photothermal Therapy of Superficial Skin Tumors. <i>Industrial & Engineering Chemistry Research</i> , 2022, 61, 7982-7995.	1.8	7
98	Smart membranes for biomedical applications. <i>Chinese Journal of Chemical Engineering</i> , 2022, 49, 34-45.	1.7	7
99	Smart hydrogels with wide visible color tunability. <i>NPG Asia Materials</i> , 2022, 14, .	3.8	6
100	The effect of particle size on the dynamics of self-electrophoretic Janus micromotors, sputtering distribution, and rectifying voltage. <i>Jcis Open</i> , 2022, 5, 100046.	1.5	5
101	Efficient Detection of Hyperkalemia with Highly Transparent and Ion-Recognizable Hydrogel Grating Sensors. <i>Industrial & Engineering Chemistry Research</i> , 2022, 61, 2483-2493.	1.8	5
102	Composite bilayer films with organic compound-triggered bending properties. <i>Chinese Journal of Chemical Engineering</i> , 2019, 27, 2587-2595.	1.7	4
103	Hierarchical porous metal-organic frameworks/polymer microparticles for enhanced catalytic degradation of organic contaminants. <i>Frontiers of Chemical Science and Engineering</i> , 2022, 16, 939-949.	2.3	4
104	Zinc-coordinated polydopamine surface with a nanostructure and superhydrophilicity for antibiofouling and antibacterial applications. <i>Materials Advances</i> , 2022, 3, 5476-5487.	2.6	3
105	Humidity-Responsive Actuators Based on Firm Heterojunction of Glycerol-Cross-linked Polyvinyl Alcohol and Porous Polyvinylidene Fluoride as Smart Gates for Anti-condensation. <i>Industrial & Engineering Chemistry Research</i> , 2022, 61, 8101-8111.	1.8	2