Weitai Wu

List of Publications by Year
in descending order

77 papers	3,662 citations	117453 34 h-index	133063 59 g-index
80 all docs	80 docs citations	80 times ranked	4218 citing authors

#	Article	IF	Citations
1	Multifunctional Hybrid Nanogel for Integration of Optical Glucose Sensing and Self-Regulated Insulin Release at Physiological pH. ACS Nano, 2010, 4, 4831-4839.	7.3	267
2	Coreâ€"shell hybrid nanogels for integration of optical temperature-sensing, targeted tumor cell imaging, and combined chemo-photothermal treatment. Biomaterials, 2010, 31, 7555-7566.	5.7	213
3	Chitosan-based responsive hybrid nanogels for integration of optical pH-sensing, tumor cell imaging and controlled drug delivery. Biomaterials, 2010, 31, 8371-8381.	5.7	199
4	In-situ immobilization of quantum dots in polysaccharide-based nanogels for integration of optical pH-sensing, tumor cell imaging, and drug delivery. Biomaterials, 2010, 31, 3023-3031.	5.7	192
5	Smart Coreâˆ'Shell Hybrid Nanogels with Ag Nanoparticle Core for Cancer Cell Imaging and Gel Shell for pH-Regulated Drug Delivery. Chemistry of Materials, 2010, 22, 1966-1976.	3.2	163
6	Optical detection of glucose by CdS quantum dots immobilized in smart microgels. Chemical Communications, 2009, , 4390.	2.2	119
7	Glucoseâ€Mediated Assembly of Phenylboronic Acid Modified CdTe/ZnTe/ZnS Quantum Dots for Intracellular Glucose Probing. Angewandte Chemie - International Edition, 2010, 49, 6554-6558.	7.2	118
8	Water-dispersible multifunctional hybrid nanogels for combined curcumin and photothermal therapy. Biomaterials, 2011, 32, 598-609.	5.7	115
9	Catalytic reduction of toxic dyes in the presence of silver nanoparticles impregnated core-shell composite microgels. Journal of Cleaner Production, 2019, 211, 855-864.	4.6	101
10	Specific glucose-to-SPR signal transduction at physiological pH by molecularly imprinted responsive hybrid microgels. Biomaterials, 2012, 33, 7115-7125.	5.7	100
11	Adsorptive removal of heavy metal ions using polystyrene-poly(N-isopropylmethacrylamide-acrylic) Tj ETQq1 1 0.784314 rgBT /Overlock 2019, 277, 522-531.	2.3	98
12	Multi-functional core-shell hybrid nanogels for pH-dependent magnetic manipulation, fluorescent pH-sensing, and drug delivery. Biomaterials, 2011, 32, 9876-9887.	5.7	96
13	Inorganic nanoparticles for reduction of hexavalent chromium: Physicochemical aspects. Journal of Hazardous Materials, 2021, 402, 123535.	6.5	95
14	A nanogel of on-site tunable pH-response for efficient anticancer drug delivery. Acta Biomaterialia, 2013, 9, 4546-4557.	4.1	92
15	Responsive Materials for Selfâ€<scp>R</scp>egulated Insulin Delivery. Macromolecular Bioscience, 2013, 13, 1464-1477.	2.1	73
16	Tunable Photoluminescence of Ag Nanocrystals in Multiple-Sensitive Hybrid Microgels. Chemistry of Materials, 2009, 21, 2851-2861.	3.2	70
17	Facile synthesis of silver nanoparticles in a crosslinked polymeric system by in situ reduction method for catalytic reduction of 4-nitroaniline. Environmental Technology (United Kingdom), 2019, 40, 2027-2036.	1.2	68
18	Construction of optical glucose nanobiosensor with high sensitivity and selectivity at physiological pH on the basis of organicâ€"inorganic hybrid microgels. Biosensors and Bioelectronics, 2010, 25, 2603-2610.	5.3	62

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19	Hybrid micro-/nanogels for optical sensing and intracellular imaging. Nano Reviews, 2010, 1, 5730.	3.7	61
20	A Multifuntional Nanoplatform Based on Responsive Fluorescent Plasmonic ZnOâ€Au@PEG Hybrid Nanogels. Advanced Functional Materials, 2011, 21, 2830-2839.	7.8	61
21	One-pot synthesis of responsive catalytic Au@PVP hybrid nanogels. Chemical Communications, 2012, 48, 11751.	2.2	57
22	Construction of near-infrared photonic crystal glucose-sensing materials for ratiometric sensing of glucose in tears. Biosensors and Bioelectronics, 2013, 48, 94-99.	5.3	57
23	Engineering of Phenylboronic Acid Based Glucoseâ€Sensitive Microgels with 4â€Vinylpyridine for Working at Physiological pH and Temperature. Macromolecular Chemistry and Physics, 2011, 212, 1510-1514.	1.1	52
24	Engineering oligo(ethylene glycol)-based thermosensitive microgels for drug delivery applications. Polymer, 2010, 51, 3926-3933.	1.8	50
25	Hybrid Microgels for Catalytic and Photocatalytic Removal of Nitroarenes and Organic Dyes From Aqueous Medium: A Review. Critical Reviews in Analytical Chemistry, 2020, 50, 513-537.	1.8	48
26	Advancement in Multi-Functional Poly(styrene)-Poly(N-isopropylacrylamide) Based Coreâ€"Shell Microgels and their Applications. Polymer Reviews, 2018, 58, 288-325.	5.3	47
27	Silver Nanoparticles Engineered Polystyreneâ€Poly(Nâ€isopropylmethacrylamideâ€acrylic acid) Core Shell Hybrid Polymer Microgels for Catalytic Reduction of Congo Red. Macromolecular Chemistry and Physics, 2018, 219, 1800211.	1.1	47
28	Graphene@Poly(phenylboronic acid)s Microgels with Selectively Glucose-Responsive Volume Phase Transition Behavior at a Physiological pH. Macromolecules, 2014, 47, 6055-6066.	2.2	46
29	Responsive Au@polymer hybrid microgels for the simultaneous modulation and monitoring of Au-catalyzed chemical reaction. Journal of Materials Chemistry A, 2014, 2, 9514.	5.2	46
30	Synthesis and characterization of poly(N-isopropylmethacrylamide-co-acrylic acid) microgels for in situ fabrication and stabilization of silver nanoparticles for catalytic reduction of o-nitroaniline in aqueous medium. Reactive and Functional Polymers, 2018, 132, 89-97.	2.0	44
31	Synthesis and volume phase transition of concanavalin A-based glucose-responsive nanogels. Polymer Chemistry, 2014, 5, 186-194.	1.9	43
32	A Fluorescent Responsive Hybrid Nanogel for Closed-Loop Control of Glucose. Journal of Diabetes Science and Technology, 2012, 6, 892-901.	1.3	39
33	Phenylboronic acid modified silver nanoparticles for colorimetric dynamic analysis of glucose. Biosensors and Bioelectronics, 2014, 52, 188-195.	5.3	39
34	Immobilization of sulfur in microgels for lithiumâ€"sulfur battery. Chemical Communications, 2016, 52, 4525-4528.	2.2	36
35	Polymer microgels for the stabilization of gold nanoparticles and their application in the catalytic reduction of nitroarenes in aqueous media. RSC Advances, 2022, 12, 5105-5117.	1.7	35
36	Engineering of responsive polymer based nano-reactors for facile mass transport and enhanced catalytic degradation of 4-nitrophenol. Journal of Environmental Sciences, 2018, 72, 43-52.	3.2	34

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37	Enhanced catalysis of gold nanoparticles in microgels upon on site altering the goldâ€“polymer interface interaction. Journal of Catalysis, 2019, 369, 462-468.	3.1	33
38	Optically pH and H₂O₂ Dual Responsive Composite Colloids through the Directed Assembly of Organic Dyes on Responsive Microgels. Chemistry of Materials, 2009, 21, 4905-4913.	3.2	27
39	Synthesis and characterization of poly(N-isopropylmethacrylamide-acrylic acid) smart polymer microgels for adsorptive extraction of copper(II) and cobalt(II) from aqueous medium: kinetic and thermodynamic aspects. Environmental Science and Pollution Research, 2020, 27, 28169-28182.	2.7	26
40	Tailoring the glucose-responsive volume phase transition behaviour of Ag@poly(phenylboronic acid) hybrid microgels: from monotonous swelling to monotonous shrinking upon adding glucose at physiological pH. Polymer Chemistry, 2014, 5, 2352.	1.9	25
41	Photothermal MÃ¶bius aromatic metallapentalenofuran and its NIR-responsive copolymer. Polymer Chemistry, 2018, 9, 2092-2100.	1.9	25
42	Stabilization of silver nanoparticles in crosslinked polymer colloids through chelation for catalytic degradation of p-nitroaniline in aqueous medium. Chemical Physics Letters, 2021, 763, 138263.	1.2	25
43	Glucose-responsive microgels based on apo-enzyme recognition. Polymer Chemistry, 2016, 7, 2847-2857.	1.9	23
44	A fluorescent double-network-structured hybrid nanogel as embeddable nanoglucometer for intracellular glucometry. Biomaterials Science, 2013, 1, 421.	2.6	22
45	Synthesis and Characterization of pH-Responsive Organicâ€“Inorganic Hybrid Material with Excellent Catalytic Activity. Journal of Inorganic and Organometallic Polymers and Materials, 2018, 28, 1872-1884.	1.9	22
46	Cylindrical NIR-Responsive Metallopolymer Containing MÃ¶bius Metalla-aromatics. ACS Macro Letters, 2018, 7, 1034-1038.	2.3	22
47	Zero valent iron nanoparticles as sustainable nanocatalysts for reduction reactions. Catalysis Reviews - Science and Engineering, 2022, 64, 286-355.	5.7	20
48	Coreâ€¢shell microgel stabilized silver nanoparticles for catalytic reduction of aryl nitro compounds. Applied Organometallic Chemistry, 2020, 34, e5742.	1.7	20
49	Fundamentals and applications of acrylamide based microgels and their hybrids: a review. RSC Advances, 2019, 9, 13838-13854.	1.7	19
50	A colloidal supra-structure of responsive microgels as a potential cell scaffold. Soft Matter, 2012, 8, 12034.	1.2	17
51	Synthesis and characterization of responsive poly(anionic liquid) microgels. Polymer Chemistry, 2016, 7, 5463-5473.	1.9	17
52	Systematic study of catalytic degradation of nitrobenzene derivatives using core@shell composite micro particles as catalyst. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2020, 594, 124646.	2.3	17
53	Glucose-mediated catalysis of Au nanoparticles in microgels. Chemical Communications, 2015, 51, 16068-16071.	2.2	15
54	Synthesis and characterization of CO₂-sensitive temperature-responsive catalytic poly(ionic liquid) microgels. Polymer Chemistry, 2018, 9, 2887-2896.	1.9	15

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55	Silver nanoparticles supported on smart polymer microgel system for highly proficient catalytic reduction of Cr⁺⁶ to Cr⁺³ with formic acid. Applied Organometallic Chemistry, 2021, 35, e6405.	1.7	15
56	Switchable glucose-responsive volume phase transition behavior of poly(phenylboronic acid) microgels. Polymer Chemistry, 2015, 6, 8306-8318.	1.9	14
57	Synthesis and characterization of ureido-derivatized UCST-type poly(ionic liquid) microgels. Polymer Chemistry, 2018, 9, 1439-1447.	1.9	12
58	Conjugated polymers based on metalla-aromatic building blocks. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, .	3.3	12
59	Copper on responsive polymer microgels: a recyclable catalyst exhibiting tunable catalytic activity. Chemical Communications, 2014, 50, 14217-14220.	2.2	11
60	Synthesis and Characterization of Dextranâ€"Tyramine-Based H2O2-Sensitive Microgels. Macromolecules, 2014, 47, 6067-6076.	2.2	11
61	Bioinspired synthesis of poly(phenylboronic acid) microgels with high glucose selectivity at physiological pH. Polymer Chemistry, 2016, 7, 6500-6512.	1.9	10
62	Flexible Prussian Blueâ€Au Fibers as Robust Peroxidase â€" Like Nanozymes for Wearable Hydrogen Peroxide and Uric Acid Monitoring. Electroanalysis, 2022, 34, 1763-1771.	1.5	10
63	Observation of Unusual Thermoresponsive Volume Phase Transition Behavior of Cubic Poly(<i>N</i>-isopropylacrylamide) Microgels. ACS Macro Letters, 2020, 9, 266-271.	2.3	9
64	Electrochemical synthesis of polymer microgels. Polymer Chemistry, 2015, 6, 3979-3987.	1.9	8
65	One-pot aqueous synthesis of sub-10 nm responsive nanogels. Chemical Communications, 2013, 49, 6534.	2.2	7
66	Highly efficient solid polymer electrolytes using ion containing polymer microgels. Polymer Chemistry, 2015, 6, 1052-1055.	1.9	7
67	Assembly of polythiophenes on responsive polymer microgels for the highly selective detection of ammonia gas. Polymer Chemistry, 2016, 7, 3179-3188.	1.9	7
68	Enhanced enzymatic hydrolysis of cellulose in microgels. Chemical Communications, 2015, 51, 10502-10505.	2.2	6
69	Salt-Enhanced CO₂-Responsiveness of Microgels. ACS Macro Letters, 2020, 9, 1611-1616.	2.3	6
70	Reversible Regulating the Substrate Specificity of Enzymes in Microgels by a Phase Transition in Polymer Networks. ACS Macro Letters, 2022, 11, 26-32.	2.3	6
71	Preparation of highly branched polyolefins by controlled chainâ€walking olefin polymerization. Applied Organometallic Chemistry, 2022, 36, .	1.7	6
72	Synthesis and characterization of ammonia-responsive polymer microgels. Polymer Chemistry, 2015, 6, 8331-8342.	1.9	5

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73	Light-mediated CO2-responsiveness of metallopolymer microgels. Chinese Chemical Letters, 2022, 33, 1445-1449.	4.8	4
74	Physicochemical aspects of inorganic nanoparticles stabilized in <i>N</i>-vinyl caprolactam based microgels for various applications. RSC Advances, 2021, 11, 978-995.	1.7	4
75	Synthesis of polymer macrogels with rapid and significant response to glucose concentration changes. RSC Advances, 2017, 7, 55945-55956.	1.7	3
76	One-pot HTST synthesis of responsive fluorescent ZnO@apo-enzyme composite microgels for intracellular glucometry. RSC Advances, 2020, 10, 26566-26578.	1.7	2
77	Tuning catalysis of boronic acids in microgels by in situ reversible structural variations. RSC Advances, 2020, 10, 3734-3744.	1.7	0