Jianbo Liu

List of Publications by Year
in descending order

114 papers	3,557 citations	109264 35 h-index	168321 53 g-index
115 all docs	115 docs citations	115 times ranked	4501 citing authors

#	Article	IF	Citations
1	Enzyme-Free Colorimetric Detection of DNA by Using Gold Nanoparticles and Hybridization Chain Reaction Amplification. Analytical Chemistry, 2013, 85, 7689-7695.	3.2	294
2	A DNA nanowire based localized catalytic hairpin assembly reaction for microRNA imaging in live cells. Chemical Science, 2018, 9, 7802-7808.	3.7	117
3	Hydrogen sulfide formation control and microbial competition in batch anaerobic digestion of slaughterhouse wastewater sludge: Effect of initial sludge pH. Bioresource Technology, 2018, 259, 67-74.	4.8	107
4	Enzyme-mediated nitric oxide production in vasoactive erythrocyte membrane-enclosed coacervate protocells. Nature Chemistry, 2020, 12, 1165-1173.	6.6	101
5	A switchable fluorescent quantum dot probe based on aggregation/disaggregation mechanism. Chemical Communications, 2011, 47, 935-937.	2.2	94
6	Possibility of sludge conditioning and dewatering with rice husk biochar modified by ferric chloride. Bioresource Technology, 2016, 205, 258-263.	4.8	93
7	Quorum quenching in anaerobic membrane bioreactor for fouling control. Water Research, 2019, 156, 159-167.	5.3	91
8	Denitrification of landfill leachate under different hydraulic retention time in a two-stage anoxic/oxic combined membrane bioreactor process: Performances and bacterial community. Bioresource Technology, 2018, 250, 110-116.	4.8	87
9	Giant Coacervate Vesicles As an Integrated Approach to Cytomimetic Modeling. Journal of the American Chemical Society, 2021, 143, 2866-2874.	6.6	82
10	Self-Assembled DNA Nanocentipede as Multivalent Drug Carrier for Targeted Delivery. ACS Applied Materials & Interfaces, 2016, 8, 25733-25740.	4.0	80
11	Visual and Portable Strategy for Copper(II) Detection Based on a Striplike Poly(Thymine)-Caged and Microwell-Printed Hydrogel. Analytical Chemistry, 2014, 86, 11263-11268.	3.2	77
12	Construction of coacervate-in-coacervate multi-compartment protocells for spatial organization of enzymatic reactions. Chemical Science, 2020, 11, 8617-8625.	3.7	73
13	Two-stage anoxic/oxic combined membrane bioreactor system for landfill leachate treatment: Pollutant removal performances and microbial community. Bioresource Technology, 2017, 243, 738-746.	4.8	72
14	Recent advances in fluorescent nucleic acid probes for living cell studies. Analyst, The, 2013, 138, 62-71.	1.7	62
15	Exciton Energy Transfer-Based Fluorescent Sensing through Aptamer-Programmed Self-Assembly of Quantum Dots. Analytical Chemistry, 2013, 85, 11121-11128.	3.2	54
16	Detection of Nucleic Acids in Complex Samples via Magnetic Microbead-Assisted Catalyzed Hairpin Assembly and â€œDDâ€“Aâ€•FRET. Analytical Chemistry, 2018, 90, 7164-7170.	3.2	54
17	Immunofluorescent labeling of cancer cells with quantum dots synthesized in aqueous solution. Analytical Biochemistry, 2006, 354, 169-174.	1.1	52
18	Label-free and non-enzymatic detection of DNA based on hybridization chain reaction amplification and dsDNA-templated copper nanoparticles. Analytica Chimica Acta, 2014, 827, 74-79.	2.6	51

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19	Comparison of various pretreatments for ethanol production enhancement from solid residue after rumen fluid digestion of rice straw. Bioresource Technology, 2018, 247, 147-156.	4.8	50
20	Hydrogelâ€Immobilized Coacervate Droplets as Modular Microreactor Assemblies. Angewandte Chemie - International Edition, 2020, 59, 6853-6859.	7.2	49
21	Programmable Self-Assembly of DNAâ€“Protein Hybrid Hydrogel for Enzyme Encapsulation with Enhanced Biological Stability. Biomacromolecules, 2016, 17, 1543-1550.	2.6	48
22	Scallop-Inspired DNA Nanomachine: A Ratiometric Nanothermometer for Intracellular Temperature Sensing. Analytical Chemistry, 2017, 89, 12115-12122.	3.2	48
23	Competitive Hostâ€“Guest Interaction between Î²-Cyclodextrin Polymer and Pyrene-Labeled Probes for Fluorescence Analyses. Analytical Chemistry, 2015, 87, 2665-2671.	3.2	47
24	Recyclable magnetite-enhanced electromethanogenesis for biomethane production from wastewater. Water Research, 2019, 166, 115095.	5.3	45
25	Self-Assembled Supramolecular Nanoprobes for Ratiometric Fluorescence Measurement of Intracellular pH Values. Analytical Chemistry, 2015, 87, 2459-2465.	3.2	43
26	Enhancing Sewage Sludge Dewaterability by a Skeleton Builder: Biochar Produced from Sludge Cake Conditioned with Rice Husk Flour and FeCl₃. ACS Sustainable Chemistry and Engineering, 2016, 4, 5711-5717.	3.2	43
27	Colorimetric detection of mercury ion based on unmodified gold nanoparticles and target-triggered hybridization chain reaction amplification. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2015, 136, 283-287.	2.0	42
28	A sensitive detection of T4 polynucleotide kinase activity based on Î²-cyclodextrin polymer enhanced fluorescence combined with an exonuclease reaction. Chemical Communications, 2015, 51, 1815-1818.	2.2	41
29	Influence of reflux ratio on two-stage anoxic/oxic with MBR for leachate treatment: Performance and microbial community structure. Bioresource Technology, 2018, 256, 69-76.	4.8	41
30	Enhanced Imaging of Specific Cell-Surface Glycosylation Based on Multi-FRET. Analytical Chemistry, 2018, 90, 6131-6137.	3.2	41
31	Fluorescent nanoparticles for chemical and biological sensing. Science China Chemistry, 2011, 54, 1157-1176.	4.2	40
32	Design and bioanalytical applications of DNA hairpin-based fluorescent probes. TrAC - Trends in Analytical Chemistry, 2014, 53, 11-20.	5.8	39
33	Real-Time Imaging of Protein Internalization Using Aptamer Conjugates. Analytical Chemistry, 2008, 80, 5002-5008.	3.2	38
34	Aggregation Control of Quantum Dots through Ion-Mediated Hydrogen Bonding Shielding. ACS Nano, 2012, 6, 4973-4983.	7.3	38
35	Exciton Energy Transfer-Based Quantum Dot Fluorescence Sensing Array: â€œChemical Nosesâ€•for Discrimination of Different Nucleobases. Analytical Chemistry, 2015, 87, 876-883.	3.2	37
36	A Simple, pH-Activatable Fluorescent Aptamer Probe with Ultralow Background for Bispecific Tumor Imaging. Analytical Chemistry, 2019, 91, 9154-9160.	3.2	34

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37	Recognition-Driven Remodeling of Dual-Split Aptamer Triggering In Situ Hybridization Chain Reaction for Activatable and Autonomous Identification of Cancer Cells. Analytical Chemistry, 2020, 92, 10839-10846.	3.2	34
38	Self-assembled DNA nanocentipedes as multivalent vehicles for enhanced delivery of CpG oligonucleotides. Chemical Communications, 2017, 53, 5565-5568.	2.2	33
39	Ultra-pH-responsive split i-motif based aptamer anchoring strategy for specific activatable imaging of acidic tumor microenvironment. Chemical Communications, 2018, 54, 10288-10291.	2.2	33
40	Quorum quenching altered microbial diversity and activity of anaerobic membrane bioreactor (AnMBR) and enhanced methane generation. Bioresource Technology, 2020, 315, 123862.	4.8	32
41	Effective decolorization of anthraquinone dye reactive blue 19 using immobilized Bacillus sp. JF4 isolated by resuscitation-promoting factor strategy. Water Science and Technology, 2020, 81, 1159-1169.	1.2	29
42	Use of mercaptophenylboronic acid functionalized gold nanoparticles in a sensitive and selective dynamic light scattering assay for glucose detection in serum. Analyst, The, 2013, 138, 5146.	1.7	28
43	Single-Walled Carbon Nanotubes (SWCNTs)-Assisted Cell-Systematic Evolution of Ligands by Exponential Enrichment (Cell-SELEX) for Improving Screening Efficiency. Analytical Chemistry, 2014, 86, 9466-9472.	3.2	28
44	High Signal-to-Background Ratio Detection of Cancer Cells with Activatable Strategy Based on Target-Induced Self-Assembly of Split Aptamers. Analytical Chemistry, 2017, 89, 9347-9353.	3.2	28
45	Liposomeâ€Boosted Peroxidaseâ€Mimicking Nanozymes Breaking the pH Limit. Chemistry - A European Journal, 2020, 26, 16659-16665.	1.7	28
46	A novel fluorescent detection for PDGF-BB based on dsDNA-templated copper nanoparticles. Chinese Chemical Letters, 2014, 25, 9-14.	4.8	27
47	Quantum dot/methylene blue FRET mediated NIR fluorescent nanomicelles with large Stokes shift for bioimaging. Chemical Communications, 2015, 51, 14357-14360.	2.2	27
48	Ratiometric Fluorescent DNA Nanostructure for Mitochondrial ATP Imaging in Living Cells Based on Hybridization Chain Reaction. Analytical Chemistry, 2021, 93, 6715-6722.	3.2	27
49	Temperature-responsive split aptamers coupled with polymerase chain reaction for label-free and sensitive detection of cancer cells. Chemical Communications, 2017, 53, 11889-11892.	2.2	26
50	Self-assembled DNA nanowires as quantitative dual-drug nanocarriers for antitumor chemophotodynamic combination therapy. Journal of Materials Chemistry B, 2017, 5, 7529-7537.	2.9	26
51	Combining physical embedding and covalent bonding for stable encapsulation of quantum dots into agarose hydrogels. Journal of Materials Chemistry, 2012, 22, 495-501.	6.7	24
52	Ratiometric determination of human papillomavirus-16 DNA by using fluorescent DNA-templated silver nanoclusters and hairpin-blocked DNAzyme-assisted cascade amplification. Mikrochimica Acta, 2019, 186, 613.	2.5	24
53	A recognition-before-labeling strategy for sensitive detection of lung cancer cells with a quantum dotâ€“aptamer complex. Analyst, The, 2015, 140, 6100-6107.	1.7	23
54	Red blood cell membrane-mediated fusion of hydrophobic quantum dots with living cell membranes for cell imaging. Journal of Materials Chemistry B, 2016, 4, 4191-4197.	2.9	22

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55	Single Nanoparticle Imaging and Characterization of Different Phospholipid-Encapsulated Quantum Dot Micelles. Langmuir, 2012, 28, 10602-10609.	1.6	21
56	Controlled dimerization of artificial membrane receptors for transmembrane signal transduction. Chemical Science, 2021, 12, 8224-8230.	3.7	21
57	Enhancing the Sensitivity of DNA and Aptamer Probes in the Dextran/PEG Aqueous Two-Phase System. Analytical Chemistry, 2021, 93, 8577-8584.	3.2	21
58	Sensitive detection of DNA methyltransferase activity based on rolling circle amplification technology. Chinese Chemical Letters, 2014, 25, 1047-1051.	4.8	20
59	Design of a Modular DNA Triangular-Prism Sensor Enabling Ratiometric and Multiplexed Biomolecule Detection on a Single Microbead. Analytical Chemistry, 2017, 89, 3590-3596.	3.2	20
60	Selfâ€Assembled Supramolecular Nanoparticles for Targeted Delivery and Combination Chemotherapy. ChemMedChem, 2018, 13, 2037-2044.	1.6	20
61	Near-infrared photothermal release of hydrogen sulfide from nanocomposite hydrogels for anti-inflammation applications. Chinese Chemical Letters, 2020, 31, 787-791.	4.8	20
62	Invasion and Defense Interactions between Enzymeâ€Active Liquid Coacervate Protocells and Living Cells. Small, 2020, 16, e2002073.	5.2	20
63	Chemical etching with tetrafluoroborate: a facile method for resizing of CdTe nanocrystals under mild conditions. Chemical Communications, 2009, , 6080.	2.2	19
64	G-quadruplex fluorescence quenching ability: a simple and efficient strategy to design a single-labeled DNA probe. Analytical Methods, 2012, 4, 895.	1.3	19
65	Development of Dual-Aptamers for Constructing Sandwich-Type Pancreatic Polypeptide Assay. ACS Sensors, 2017, 2, 308-315.	4.0	19
66	Uricase-containing coacervate microdroplets as enzyme active membrane-free protocells for detoxification of uric acid in serum. Chemical Communications, 2019, 55, 13880-13883.	2.2	19
67	Amplified fluorescence detection of adenosine via catalyzed hairpin assembly and hostâ€“guest interactions between Î²-cyclodextrin polymer and pyrene. Analyst, The, 2016, 141, 2502-2507.	1.7	18
68	Use of Î²-cyclodextrin-tethered cationic polymer based fluorescence enhancement of pyrene and hybridization chain reaction for the enzyme-free amplified detection of DNA. Analyst, The, 2017, 142, 224-228.	1.7	18
69	Solid-phase single molecule biosensing using dual-color colocalization of fluorescent quantum dot nanoprobes. Nanoscale, 2013, 5, 11257.	2.8	17
70	A light-up fluorescence assay for tumor cell detection based on bifunctional split aptamers. Analyst, The, 2018, 143, 3579-3585.	1.7	17
71	Butyrate can support PAOs but not GAOs in tropical climates. Water Research, 2021, 193, 116884.	5.3	17
72	Tuning Transport Selectivity of Ionic Species by Phosphoric Acid Gradient in Positively Charged Nanochannel Membranes. Analytical Chemistry, 2015, 87, 1544-1551.	3.2	15

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73	A multiple amplification strategy for nucleic acid detection based on hostâ€“guest interaction between the Î²-cyclodextrin polymer and pyrene. Analyst, The, 2015, 140, 2016-2022.	1.7	15
74	Pollutant removal from landfill leachate via two-stage anoxic/oxic combined membrane bioreactor: Insight in organic characteristics and predictive function analysis of nitrogen-removal bacteria. Bioresource Technology, 2020, 317, 124037.	4.8	15
75	Aptamer-mediated indirect quantum dot labeling and fluorescent imaging of target proteins in living cells. Nanotechnology, 2014, 25, 505502.	1.3	14
76	Lipophilic G-Quadruplex Isomers as Biomimetic Ion Channels for Conformation-Dependent Selective Transmembrane Transport. Analytical Chemistry, 2020, 92, 10169-10176.	3.2	14
77	Anomalous effects of water flow through charged nanochannel membranes. RSC Advances, 2014, 4, 26729-26737.	1.7	13
78	Biomimetic synthesis of highly biocompatible gold nanoparticles with amino acid-dithiocarbamate as a precursor for SERS imaging. Nanotechnology, 2016, 27, 105603.	1.3	13
79	A near-infrared light-responsive nanocomposite for photothermal release of H2S and suppression of cell viability. Journal of Materials Chemistry B, 2019, 7, 5992-5997.	2.9	13
80	Amplified fluorescence detection of DNA based on catalyzed dynamic assembly and hostâ€“guest interaction between Î²-cyclodextrin polymer and pyrene. Talanta, 2015, 144, 529-534.	2.9	12
81	pH and ion strength modulated ionic species loading in mesoporous silica nanoparticles. Nanotechnology, 2013, 24, 415501.	1.3	11
82	Steric hindrance regulated supramolecular assembly between Î²-cyclodextrin polymer and pyrene for alkaline phosphatase fluorescent sensing. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2016, 156, 131-137.	2.0	11
83	Controlled formation of Ag2S/Ag Janus nanoparticles using alkylamine as reductant surfactants. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2018, 544, 111-117.	2.3	11
84	Flexible Assembly of an Enzyme Cascade on a DNA Triangle Prism Nanostructure for the Controlled Biomimetic Generation of Nitric Oxide. ChemBioChem, 2018, 19, 2099-2106.	1.3	11
85	Single-stranded DNA designed lipophilic G-quadruplexes as transmembrane channels for switchable potassium transport. Chemical Communications, 2019, 55, 12004-12007.	2.2	11
86	Selection of Affinity Reagents to Neutralize the Hemolytic Toxicity of Melittin Based on a Self-Assembled Nanoparticle Library. ACS Applied Materials & Interfaces, 2020, 12, 16040-16049.	4.0	11
87	Intelligent Nucleic Acid Functionalized Dualâ€Responsive Gold Nanoflare: Logicâ€Gate Nanodevice Visualized by Singleâ€Nanoparticle Imaging. ChemistrySelect, 2016, 1, 347-353.	0.7	10
88	An ion transport switch based on light-responsive conformation-dependent G-quadruplex transmembrane channels. Chemical Communications, 2021, 57, 8214-8217.	2.2	10
89	Self-immobilization of coacervate droplets by enzyme-mediated hydrogelation. Chemical Communications, 2021, 57, 5438-5441.	2.2	9
90	Using personal uric acid meter and enzyme-DNA conjugate for portable and quantitative DNA detection. Sensors and Actuators B: Chemical, 2013, 186, 515-520.	4.0	8

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91	Integration of cell-free protein synthesis and purification in one microfluidic chip for on-demand production of recombinant protein. Biomicrofluidics, 2018, 12, 054102.	1.2	8
92	Mitochondria targeted self-assembled ratiometric fluorescent nanoprobes for pH imaging in living cells. Analytical Methods, 2019, 11, 2097-2104.	1.3	8
93	DNA supersandwich assemblies as artificial receptors to mediate intracellular delivery of catalase for efficient ROS scavenging. Chemical Communications, 2019, 55, 4242-4245.	2.2	8
94	Sensitive and specific detection of tumour cells based on a multivalent DNA nanocreeper and a multiplexed fluorescence supersandwich. Chemical Communications, 2020, 56, 3693-3696.	2.2	8
95	A simple and sensitive assay for apurinic/apyrimidinic endonuclease 1 activity based on host-guest interaction of Î²-cyclodextrin polymer and pyrene. Chinese Chemical Letters, 2018, 29, 973-976.	4.8	7
96	A self-assembled conformational switch: a hostâ€“guest stabilized triple stem molecular beacon via a photoactivated and thermal regeneration mode. Chemical Communications, 2014, 50, 7803-7805.	2.2	6
97	Metallurgical leaching of metal powder for facile and generalized synthesis of metal sulfide nanocrystals. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2016, 497, 344-351.	2.3	6
98	DNA-Silver Nanocluster Binary Probes for Ratiometric Fluorescent Detection of HPV-related DNA. Chemical Research in Chinese Universities, 2019, 35, 581-585.	1.3	6
99	Biomimetic nanochannel membrane for cascade response of borate and cis-hydroxyl compounds: An IMP logic gate device. Chinese Chemical Letters, 2019, 30, 1397-1400.	4.8	6
100	Preparation of luminescent CdTe quantum dots doped core-shell nanoparticles and their application in cell recognition. Science Bulletin, 2005, 50, 1703.	1.7	5
101	Protein- driven disassembly of surfactant- polyelectrolyte nanomicelles: Modulation of quantum dot/fluorochrome FRET for pattern sensing. Sensors and Actuators B: Chemical, 2018, 272, 393-399.	4.0	5
102	Phosphate modulated permeability of mesoporous silica spheres: a biomimetic ion channel decorated compartment model. Journal of Materials Chemistry B, 2015, 3, 323-329.	2.9	4
103	Selection of Aptamers for Hydrophobic Drug Docetaxel To Improve Its Solubility. ACS Applied Bio Materials, 2018, 1, 168-174.	2.3	4
104	Ion-mediated self-assembly of Cys-capped quantum dots for fluorescence detection of As(<scp>iii</scp>) in water. Analytical Methods, 2020, 12, 4229-4234.	1.3	4
105	Coacervate microdroplet protocell-mediated gene transfection for nitric oxide production and induction of cell apoptosis. Journal of Materials Chemistry B, 2021, 9, 9784-9793.	2.9	4
106	Acidic microenvironment triggered in situ assembly of activatable three-arm aptamer nanoclaw for contrast-enhanced imaging and tumor growth inhibition in vivo. Theranostics, 2022, 12, 3474-3487.	4.6	4
107	A facile approach toward multicolor polymers: Supramolecular self-assembly via hostâ€“guest interaction. Chinese Chemical Letters, 2014, 25, 1318-1322.	4.8	3
108	Dopamine modulated ionic permeability in mesoporous silica sphere based biomimetic compartment. Colloids and Surfaces B: Biointerfaces, 2016, 142, 266-271.	2.5	1

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109	Application of Nucleic Acid Aptamers in Polypeptides Researches. Chinese Journal of Analytical Chemistry, 2017, 45, 1795-1803.	0.9	1
110	Photothermally Activated Coacervate Model Protocells as Signal Transducers Endow Mammalian Cells with Light Sensitivity. Advanced Biology, 2021, 5, e2100695.	1.4	1
111	Enzyme-active liquid coacervate microdroplets as artificial membraneless organelles for intracellular ROS scavenging. Biomaterials Science, 2022, 10, 4588-4595.	2.6	1
112	Mutual Interaction Models: Invasion and Defense Interactions between Enzymeâ€Active Liquid Coacervate Protocells and Living Cells (Small 29/2020). Small, 2020, 16, 2070162.	5.2	0
113	Hydrogelâ€Immobilized Coacervate Droplets as Modular Microreactor Assemblies. Angewandte Chemie, 2020, 132, 6920-6926.	1.6	0
114	Innentitelbild: Hydrogelâ€Immobilized Coacervate Droplets as Modular Microreactor Assemblies (Angew. Chem. 17/2020). Angewandte Chemie, 2020, 132, 6698-6698.	1.6	0