Jiashu Sun

List of Publications by Year in descending order

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Version: 2024-02-01

106 papers	7,886 citations	31949 53 h-index	49868 87 g-index
110 all docs	110 docs citations	110 times ranked	9665 citing authors

#	Article	IF	Citations
1	Microfluidics for nanomaterial synthesis. , 2022, , 429-453.		1
2	Microfluidic technologies for nanoparticle formation. Lab on A Chip, 2022, 22, 512-529.	3.1	45
3	Impact of Chemical Design on the Molecular Orientation of Conjugated Donorâ€“Acceptor Polymers for Field-Effect Transistors. ACS Applied Polymer Materials, 2022, 4, 2233-2250.	2.0	17
4	Microfluidic Separation, Detection, and Engineering of Extracellular Vesicles for Cancer Diagnostics and Drug Delivery. Accounts of Materials Research, 2022, 3, 498-510.	5.9	27
5	Oneâ€Step Thermophoretic AND Gate Operation on Extracellular Vesicles Improves Diagnosis of Prostate Cancer. Angewandte Chemie, 2022, 134, .	1.6	3
6	A Tubular DNA Nanodevice as a siRNA/Chemoâ€Drug Coâ€delivery Vehicle for Combined Cancer Therapy. Angewandte Chemie - International Edition, 2021, 60, 2594-2598.	7.2	128
7	Nanosensors for Diagnosis of Infectious Diseases. ACS Applied Bio Materials, 2021, 4, 3863-3879.	2.3	34
8	Nucleic Acids Analysis. Science China Chemistry, 2021, 64, 171-203.	4.2	88
9	Multilayer Ratiometric Fluorescent Nanomachines for Imaging mRNA in Live Cells. Small Methods, 2021, 5, 2001047.	4.6	6
10	A DNA origami-based aptamer nanoarray for potent and reversible anticoagulation in hemodialysis. Nature Communications, 2021, 12, 358.	5.8	69
11	Molecular Identification of Tumor-Derived Extracellular Vesicles Using Thermophoresis-Mediated DNA Computation. Journal of the American Chemical Society, 2021, 143, 1290-1295.	6.6	127
12	Microfluidic devices for viral detection. , 2021, , 587-615.		0
13	Protein analysis of extracellular vesicles to monitor and predict therapeutic response in metastatic breast cancer. Nature Communications, 2021, 12, 2536.	5.8	147
14	Thermomicrofluidics for biosensing applications. View, 2021, 2, 20200148.	2.7	26
15	Rapid One-Step Detection of Viral Particles Using an Aptamer-Based Thermophoretic Assay. Journal of the American Chemical Society, 2021, 143, 7261-7266.	6.6	94
16	Ultrasensitive detection of mRNA in extracellular vesicles using DNA tetrahedron-based thermophoretic assay. Nano Today, 2021, 38, 101203.	6.2	47
17	<scp>Exosomeâ€Coated</scp> Zeolitic Imidazolate Framework Nanoparticles for Intracellular Detection of <scp>ATP</scp>^{â€}. Chinese Journal of Chemistry, 2021, 39, 2107-2112.	2.6	11
18	AI in Measurement Science. Annual Review of Analytical Chemistry, 2021, 14, 1-19.	2.8	11

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19	Enantiomorphic Microvortexâ€Enabled Supramolecular Sensing of Racemic Amino Acids by Using Achiral Building Blocks. Angewandte Chemie, 2020, 132, 3514-3518.	1.6	7
20	Enantiomorphic Microvortexâ€Enabled Supramolecular Sensing of Racemic Amino Acids by Using Achiral Building Blocks. Angewandte Chemie - International Edition, 2020, 59, 3486-3490.	7.2	34
21	Microfluidic Methods for Fabrication and Engineering of Nanoparticle Drug Delivery Systems. ACS Applied Bio Materials, 2020, 3, 107-120.	2.3	113
22	A fully automated centrifugal microfluidic system for sample-to-answer viral nucleic acid testing. Science China Chemistry, 2020, 63, 1498-1506.	4.2	63
23	Microfluidics, Nanofluidics, and Labâ€onâ€aâ€Chip in Asia 2019. Electrophoresis, 2020, 41, 757-757.	1.3	0
24	Improving Tumor Targeting of Exosomal Membrane-Coated Polymeric Nanoparticles by Conjugation with Aptamers. ACS Applied Bio Materials, 2020, 3, 2666-2673.	2.3	42
25	Thermophoretic Detection of Exosomal microRNAs by Nanoflares. Journal of the American Chemical Society, 2020, 142, 4996-5001.	6.6	187
26	ATP-responsive mitochondrial probes for monitoring metabolic processes of glioma stem cells in a 3D model. Chemical Science, 2020, 11, 2744-2749.	3.7	20
27	Microfluidic Sonication To Assemble Exosome Membrane-Coated Nanoparticles for Immune Evasion-Mediated Targeting. Nano Letters, 2019, 19, 7836-7844.	4.5	161
28	Low-cost thermophoretic profiling of extracellular-vesicle surface proteins for the early detection and classification of cancers. Nature Biomedical Engineering, 2019, 3, 183-193.	11.6	324
29	Microfluidic analysis of circulating tumor cells and tumor-derived extracellular vesicles. TrAC - Trends in Analytical Chemistry, 2019, 117, 128-145.	5.8	53
30	Profiling proteinâ€“protein interactions of single cancer cells with in situ lysis and co-immunoprecipitation. Lab on A Chip, 2019, 19, 1922-1928.	3.1	14
31	Manipulation of bio-micro/nanoparticles in non-Newtonian microflows. Microfluidics and Nanofluidics, 2019, 23, 1.	1.0	31
32	Î»-DNA- and Aptamer-Mediated Sorting and Analysis of Extracellular Vesicles. Journal of the American Chemical Society, 2019, 141, 3817-3821.	6.6	198
33	Lipid Nanovesicles by Microfluidics: Manipulation, Synthesis, and Drug Delivery. Advanced Materials, 2019, 31, e1804788.	11.1	62
34	Hand-powered centrifugal microfluidic platform inspired by the spinning top for sample-to-answer diagnostics of nucleic acids. Lab on A Chip, 2018, 18, 610-619.	3.1	81
35	Micro/nanofluidics-enabled single-cell biochemical analysis. TrAC - Trends in Analytical Chemistry, 2018, 99, 66-74.	5.8	43
36	Label-free isolation of rare tumor cells from untreated whole blood by interfacial viscoelastic microfluidics. Lab on A Chip, 2018, 18, 3436-3445.	3.1	81

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37	Control over the emerging chirality in supramolecular gels and solutions by chiral microvortices in milliseconds. Nature Communications, 2018, 9, 2599.	5.8	92
38	Real-time characterization of negative air ion-induced decomposition of indoor organic contaminants by mass spectrometry. Chemical Communications, 2018, 54, 10687-10690.	2.2	11
39	Reference channel-based microfluidic resistance sensing for single yeast cell volume growth measurement. Microfluidics and Nanofluidics, 2017, 21, 1.	1.0	4
40	Drug Delivery: Oneâ€Step Microfluidic Synthesis of Nanocomplex with Tunable Rigidity and Acidâ€Switchable Surface Charge for Overcoming Drug Resistance (Small 9/2017). Small, 2017, 13, .	5.2	1
41	Double-Enzymes-Mediated Bioluminescent Sensor for Quantitative and Ultrasensitive Point-of-Care Testing. Analytical Chemistry, 2017, 89, 5422-5427.	3.2	72
42	Streptavidin-biotin-peroxidase nanocomplex-amplified microfluidics immunoassays for simultaneous detection of inflammatory biomarkers. Analytica Chimica Acta, 2017, 982, 138-147.	2.6	66
43	An automated and portable microfluidic chemiluminescence immunoassay for quantitative detection of biomarkers. Lab on A Chip, 2017, 17, 2225-2234.	3.1	93
44	Oneâ€Step Microfluidic Synthesis of Nanocomplex with Tunable Rigidity and Acidâ€Switchable Surface Charge for Overcoming Drug Resistance. Small, 2017, 13, 1603109.	5.2	56
45	Stimulus-Responsive Plasmonic Chiral Signals of Gold Nanorods Organized on DNA Origami. Nano Letters, 2017, 17, 7125-7130.	4.5	109
46	Integrated Microfluidic Platform with Multiple Functions To Probe Tumorâ€“Endothelial Cell Interaction. Analytical Chemistry, 2017, 89, 10037-10044.	3.2	54
47	Point-of-care-testing of nucleic acids by microfluidics. TrAC - Trends in Analytical Chemistry, 2017, 94, 106-116.	5.8	129
48	Microfluidic co-flow of Newtonian and viscoelastic fluids for high-resolution separation of microparticles. Lab on A Chip, 2017, 17, 3078-3085.	3.1	77
49	Investigation of carbon deposition induced by pyrolytic decomposition of ethylene. RSC Advances, 2017, 7, 29639-29644.	1.7	2
50	Field-Free Isolation of Exosomes from Extracellular Vesicles by Microfluidic Viscoelastic Flows. ACS Nano, 2017, 11, 6968-6976.	7.3	369
51	Rotation-Facilitated Rapid Transport of Nanorods in Mucosal Tissues. Nano Letters, 2016, 16, 7176-7182.	4.5	140
52	Sheathless Focusing and Separation of Diverse Nanoparticles in Viscoelastic Solutions with Minimized Shear Thinning. Analytical Chemistry, 2016, 88, 12547-12553.	3.2	74
53	Nonspecific Organelle-Targeting Strategy with Coreâ€“Shell Nanoparticles of Varied Lipid Components/Ratios. Analytical Chemistry, 2016, 88, 7344-7351.	3.2	19
54	A dual-readout chemiluminescent-gold lateral flow test for multiplex and ultrasensitive detection of disease biomarkers in real samples. Nanoscale, 2016, 8, 15205-15212.	2.8	93

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55	Nanocrystalline Cellulose-Assisted Generation of Silver Nanoparticles for Nonenzymatic Glucose Detection and Antibacterial Agent. Biomacromolecules, 2016, 17, 2472-2478.	2.6	83
56	Quantitative Detection of MicroRNA in One Step via Next Generation Magnetic Relaxation Switch Sensing. ACS Nano, 2016, 10, 6685-6692.	7.3	127
57	Microfluidics-mediated assembly of functional nanoparticles for cancer-related pharmaceutical applications. Nanoscale, 2016, 8, 12430-12443.	2.8	105
58	A microfluidic indirect competitive immunoassay for multiple and sensitive detection of testosterone in serum and urine. Analyst, The, 2016, 141, 815-819.	1.7	22
59	A generalized formula for inertial lift on a sphere in microchannels. Lab on A Chip, 2016, 16, 884-892.	3.1	83
60	One-step detection of pathogens and cancer biomarkers by the naked eye based on aggregation of immunomagnetic beads. Nanoscale, 2016, 8, 1100-1107.	2.8	44
61	The biocompatibility evaluation of iron oxide nanoparticles synthesized by a one pot process for intravenous iron supply. RSC Advances, 2016, 6, 14329-14334.	1.7	14
62	Nanocrystalline Cellulose Improves the Biocompatibility and Reduces the Wear Debris of Ultrahigh Molecular Weight Polyethylene via Weak Binding. ACS Nano, 2016, 10, 298-306.	7.3	30
63	High-throughput sample-to-answer detection of DNA/RNA in crude samples within functionalized micro-pipette tips. Biosensors and Bioelectronics, 2016, 75, 28-33.	5.3	55
64	Barcoded Microchips for Biomolecular Assays. Analytical Chemistry, 2015, 87, 900-906.	3.2	34
65	Inertial focusing of spherical particles in rectangular microchannels over a wide range of Reynolds numbers. Lab on A Chip, 2015, 15, 1168-1177.	3.1	150
66	Microfluidic Synthesis of Rigid Nanovesicles for Hydrophilic Reagents Delivery. Angewandte Chemie - International Edition, 2015, 54, 3952-3956.	7.2	134
67	One-Step Detection of Pathogens and Viruses: Combining Magnetic Relaxation Switching and Magnetic Separation. ACS Nano, 2015, 9, 3184-3191.	7.3	182
68	Microfluidic based high throughput synthesis of lipid-polymer hybrid nanoparticles with tunable diameters. Biomicrofluidics, 2015, 9, 052604.	1.2	84
69	Surface modification of nano-silica on the ligament advanced reinforcement system for accelerated bone formation: primary human osteoblasts testing in vitro and animal testing in vivo. Nanoscale, 2015, 7, 8071-8075.	2.8	6
70	Microfluidic Synthesis of Hybrid Nanoparticles with Controlled Lipid Layers: Understanding Flexibility-Regulated Cellâ€“Nanoparticle Interaction. ACS Nano, 2015, 9, 9912-9921.	7.3	163
71	Label-Free Isolation and mRNA Detection of Circulating Tumor Cells from Patients with Metastatic Lung Cancer for Disease Diagnosis and Monitoring Therapeutic Efficacy. Analytical Chemistry, 2015, 87, 11893-11900.	3.2	101
72	Tunable Rigidity of (Polymeric Core)â€“(Lipid Shell) Nanoparticles for Regulated Cellular Uptake. Advanced Materials, 2015, 27, 1402-1407.	11.1	383

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73	Multiplexed microfluidic blotting of proteins and nucleic acids by parallel, serpentine microchannels. Lab on A Chip, 2015, 15, 105-112.	3.1	21
74	Inertial migration of deformable droplets in a microchannel. Physics of Fluids, 2014, 26, .	1.6	55
75	Recent advances in electrospinning technology and biomedical applications of electrospun fibers. Journal of Materials Chemistry B, 2014, 2, 2369.	2.9	108
76	Mesosilica-coated ultrafine fibers for highly efficient laccase encapsulation. Nanoscale, 2014, 6, 6468.	2.8	13
77	Integrated Microcapillary for Sample-to-Answer Nucleic Acid Pretreatment, Amplification, and Detection. Analytical Chemistry, 2014, 86, 10461-10466.	3.2	91
78	Colorimetric Logic Gates through Molecular Recognition and Plasmonic Nanoparticles. Small, 2014, 10, 4833-4838.	5.2	41
79	Point-of-Care Multiplexed Assays of Nucleic Acids Using Microcapillary-based Loop-Mediated Isothermal Amplification. Analytical Chemistry, 2014, 86, 7057-7062.	3.2	100
80	A microfluidic tubing method and its application for controlled synthesis of polymeric nanoparticles. Lab on A Chip, 2014, 14, 1673-1677.	3.1	75
81	Point-of-care biochemical assays using gold nanoparticle-implemented microfluidics. Chemical Society Reviews, 2014, 43, 6239-6253.	18.7	290
82	A microfluidic origami chip for synthesis of functionalized polymeric nanoparticles. Nanoscale, 2013, 5, 5262.	2.8	85
83	Enzymatic Assay for Cu(II) with Horseradish Peroxidase and Its Application in Colorimetric Logic Gate. Analytical Chemistry, 2013, 85, 7029-7032.	3.2	65
84	Stressâ€Induced Selfâ€Assembly of Complex Three Dimensional Structures by Elastic Membranes. Small, 2013, 9, 2410-2414.	5.2	29
85	An ultrasensitive, non-enzymatic glucose assay via gold nanorod-assisted generation of silver nanoparticles. Nanoscale, 2013, 5, 6303.	2.8	53
86	Culturing Primary Human Osteoblasts on Electrospun Poly(lactic-co-glycolic acid) and Poly(lactic-co-glycolic acid)/Nanohydroxyapatite Scaffolds for Bone Tissue Engineering. ACS Applied Materials & Interfaces, 2013, 5, 5921-5926.	4.0	61
87	Microfluidics for Manipulating Cells. Small, 2013, 9, 9-21.	5.2	175
88	Hydrodynamic Cell Enrichment in Double Spiral Microfluidic Channels. ECS Transactions, 2013, 50, 441-445.	0.3	5
89	Microfluidic devices for viral detection. , 2013, , 527-556.		5
90	A Microfluidic Cell Size/Density Sensor by Resistive Pulse Detection. Electroanalysis, 2013, 25, 1023-1028.	1.5	13

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91	Size-based hydrodynamic rare tumor cell separation in curved microfluidic channels. Biomicrofluidics, 2013, 7, 011802.	1.2	129
92	Recent research progress of nanocellulose crystal and its composites with polymers. Chinese Science Bulletin, 2013, 58, 2385-2392.	0.4	2
93	Inertial Microfluidics for Separation and Detection of Tumor Cells. , 2013, , .		0
94	Double spiral microchannel for label-free tumor cell separation and enrichment. Lab on A Chip, 2012, 12, 3952.	3.1	242
95	Highly Robust, Recyclable Displacement Assay for Mercuric Ions in Aqueous Solutions and Living Cells. ACS Nano, 2012, 6, 10999-11008.	7.3	62
96	Simultaneous On-Chip DC Dielectrophoretic Cell Separation and Quantitative Separation Performance Characterization. Analytical Chemistry, 2012, 84, 2017-2024.	3.2	42
97	A Highly Sensitive Goldâ€Nanoparticleâ€Based Assay for Acetylcholinesterase in Cerebrospinal Fluid of Transgenic Mice with Alzheimer's Disease. Advanced Healthcare Materials, 2012, 1, 90-95.	3.9	88
98	A compact microfluidic gradient generator using passive pumping. Microfluidics and Nanofluidics, 2012, 12, 887-895.	1.0	36
99	A Strategy for Depositing Different Types of Cells in Three Dimensions to Mimic Tubular Structures in Tissues. Advanced Materials, 2012, 24, 890-896.	11.1	222
100	Fabrication of one dimensional superfine polymer fibers by double-spinning. Journal of Materials Chemistry, 2011, 21, 13159.	6.7	51
101	Measurement of the volume growth rate of single budding yeast with the MOSFET-based microfluidic Coulter counter. Lab on A Chip, 2010, 10, 2986.	3.1	30
102	Experimental characterization of electrical current leakage in poly(dimethylsiloxane) microfluidic devices. Microfluidics and Nanofluidics, 2009, 6, 589-598.	1.0	14
103	Field-Effect Control of Electroosmotic Pumping Using Porous Siliconâ€“Silicon Nitride Membranes. Journal of Microelectromechanical Systems, 2009, 18, 1173-1183.	1.7	9
104	Measurement of the Volume Growth Rate of Single Budding Yeast. , 2009, , .		0
105	Electrical Leakage Through Thin PDMS Microchannel Walls and its Applications. , 2008, , .		0
106	Measurement of Budding Yeast Growth Rate With MOSFET-Based Microfluidic Coulter Counters. , 2008, , .		0