

Jiashu Sun

List of Publications by Year in descending order

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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	Tunable Rigidity of (Polymeric Core)â€“(Lipid Shell) Nanoparticles for Regulated Cellular Uptake. <i>Advanced Materials</i> , 2015, 27, 1402-1407.	11.1	383
2	Field-Free Isolation of Exosomes from Extracellular Vesicles by Microfluidic Viscoelastic Flows. <i>ACS Nano</i> , 2017, 11, 6968-6976.	7.3	369
3	Low-cost thermophoretic profiling of extracellular-vesicle surface proteins for the early detection and classification of cancers. <i>Nature Biomedical Engineering</i> , 2019, 3, 183-193.	11.6	324
4	Point-of-care biochemical assays using gold nanoparticle-implemented microfluidics. <i>Chemical Society Reviews</i> , 2014, 43, 6239-6253.	18.7	290
5	Double spiral microchannel for label-free tumor cell separation and enrichment. <i>Lab on A Chip</i> , 2012, 12, 3952.	3.1	242
6	A Strategy for Depositing Different Types of Cells in Three Dimensions to Mimic Tubular Structures in Tissues. <i>Advanced Materials</i> , 2012, 24, 890-896.	11.1	222
7	Î»-DNA- and Aptamer-Mediated Sorting and Analysis of Extracellular Vesicles. <i>Journal of the American Chemical Society</i> , 2019, 141, 3817-3821.	6.6	198
8	Thermophoretic Detection of Exosomal microRNAs by Nanoflakes. <i>Journal of the American Chemical Society</i> , 2020, 142, 4996-5001.	6.6	187
9	One-Step Detection of Pathogens and Viruses: Combining Magnetic Relaxation Switching and Magnetic Separation. <i>ACS Nano</i> , 2015, 9, 3184-3191.	7.3	182
10	Microfluidics for Manipulating Cells. <i>Small</i> , 2013, 9, 9-21.	5.2	175
11	Microfluidic Synthesis of Hybrid Nanoparticles with Controlled Lipid Layers: Understanding Flexibility-Regulated Cellâ€“Nanoparticle Interaction. <i>ACS Nano</i> , 2015, 9, 9912-9921.	7.3	163
12	Microfluidic Sonication To Assemble Exosome Membrane-Coated Nanoparticles for Immune Evasion-Mediated Targeting. <i>Nano Letters</i> , 2019, 19, 7836-7844.	4.5	161
13	Inertial focusing of spherical particles in rectangular microchannels over a wide range of Reynolds numbers. <i>Lab on A Chip</i> , 2015, 15, 1168-1177.	3.1	150
14	Protein analysis of extracellular vesicles to monitor and predict therapeutic response in metastatic breast cancer. <i>Nature Communications</i> , 2021, 12, 2536.	5.8	147
15	Rotation-Facilitated Rapid Transport of Nanorods in Mucosal Tissues. <i>Nano Letters</i> , 2016, 16, 7176-7182.	4.5	140
16	Microfluidic Synthesis of Rigid Nanovesicles for Hydrophilic Reagents Delivery. <i>Angewandte Chemie - International Edition</i> , 2015, 54, 3952-3956.	7.2	134
17	Size-based hydrodynamic rare tumor cell separation in curved microfluidic channels. <i>Biomicrofluidics</i> , 2013, 7, 011802.	1.2	129
18	Point-of-care-testing of nucleic acids by microfluidics. <i>TrAC - Trends in Analytical Chemistry</i> , 2017, 94, 106-116.	5.8	129

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19	A Tubular DNA Nanodevice as a siRNA/Chemotherapy Drug Co-delivery Vehicle for Combined Cancer Therapy. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 2594-2598.	7.2	128
20	Quantitative Detection of MicroRNA in One Step <i>via</i> Next Generation Magnetic Relaxation Switch Sensing. <i>ACS Nano</i> , 2016, 10, 6685-6692.	7.3	127
21	Molecular Identification of Tumor-Derived Extracellular Vesicles Using Thermophoresis-Mediated DNA Computation. <i>Journal of the American Chemical Society</i> , 2021, 143, 1290-1295.	6.6	127
22	Microfluidic Methods for Fabrication and Engineering of Nanoparticle Drug Delivery Systems. <i>ACS Applied Bio Materials</i> , 2020, 3, 107-120.	2.3	113
23	Stimulus-Responsive Plasmonic Chiral Signals of Gold Nanorods Organized on DNA Origami. <i>Nano Letters</i> , 2017, 17, 7125-7130.	4.5	109
24	Recent advances in electrospinning technology and biomedical applications of electrospun fibers. <i>Journal of Materials Chemistry B</i> , 2014, 2, 2369.	2.9	108
25	Microfluidics-mediated assembly of functional nanoparticles for cancer-related pharmaceutical applications. <i>Nanoscale</i> , 2016, 8, 12430-12443.	2.8	105
26	Label-Free Isolation and mRNA Detection of Circulating Tumor Cells from Patients with Metastatic Lung Cancer for Disease Diagnosis and Monitoring Therapeutic Efficacy. <i>Analytical Chemistry</i> , 2015, 87, 11893-11900.	3.2	101
27	Point-of-Care Multiplexed Assays of Nucleic Acids Using Microcapillary-based Loop-Mediated Isothermal Amplification. <i>Analytical Chemistry</i> , 2014, 86, 7057-7062.	3.2	100
28	Rapid One-Step Detection of Viral Particles Using an Aptamer-Based Thermophoretic Assay. <i>Journal of the American Chemical Society</i> , 2021, 143, 7261-7266.	6.6	94
29	A dual-readout chemiluminescent-gold lateral flow test for multiplex and ultrasensitive detection of disease biomarkers in real samples. <i>Nanoscale</i> , 2016, 8, 15205-15212.	2.8	93
30	An automated and portable microfluidic chemiluminescence immunoassay for quantitative detection of biomarkers. <i>Lab on A Chip</i> , 2017, 17, 2225-2234.	3.1	93
31	Control over the emerging chirality in supramolecular gels and solutions by chiral microvortices in milliseconds. <i>Nature Communications</i> , 2018, 9, 2599.	5.8	92
32	Integrated Microcapillary for Sample-to-Answer Nucleic Acid Pretreatment, Amplification, and Detection. <i>Analytical Chemistry</i> , 2014, 86, 10461-10466.	3.2	91
33	A Highly Sensitive Gold Nanoparticle-Based Assay for Acetylcholinesterase in Cerebrospinal Fluid of Transgenic Mice with Alzheimer's Disease. <i>Advanced Healthcare Materials</i> , 2012, 1, 90-95.	3.9	88
34	Nucleic Acids Analysis. <i>Science China Chemistry</i> , 2021, 64, 171-203.	4.2	88
35	A microfluidic origami chip for synthesis of functionalized polymeric nanoparticles. <i>Nanoscale</i> , 2013, 5, 5262.	2.8	85
36	Microfluidic based high throughput synthesis of lipid-polymer hybrid nanoparticles with tunable diameters. <i>Biomicrofluidics</i> , 2015, 9, 052604.	1.2	84

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37	Nanocrystalline Cellulose-Assisted Generation of Silver Nanoparticles for Nonenzymatic Glucose Detection and Antibacterial Agent. <i>Biomacromolecules</i> , 2016, 17, 2472-2478.	2.6	83
38	A generalized formula for inertial lift on a sphere in microchannels. <i>Lab on A Chip</i> , 2016, 16, 884-892.	3.1	83
39	Hand-powered centrifugal microfluidic platform inspired by the spinning top for sample-to-answer diagnostics of nucleic acids. <i>Lab on A Chip</i> , 2018, 18, 610-619.	3.1	81
40	Label-free isolation of rare tumor cells from untreated whole blood by interfacial viscoelastic microfluidics. <i>Lab on A Chip</i> , 2018, 18, 3436-3445.	3.1	81
41	Microfluidic co-flow of Newtonian and viscoelastic fluids for high-resolution separation of microparticles. <i>Lab on A Chip</i> , 2017, 17, 3078-3085.	3.1	77
42	A microfluidic tubing method and its application for controlled synthesis of polymeric nanoparticles. <i>Lab on A Chip</i> , 2014, 14, 1673-1677.	3.1	75
43	Sheathless Focusing and Separation of Diverse Nanoparticles in Viscoelastic Solutions with Minimized Shear Thinning. <i>Analytical Chemistry</i> , 2016, 88, 12547-12553.	3.2	74
44	Double-Enzymes-Mediated Bioluminescent Sensor for Quantitative and Ultrasensitive Point-of-Care Testing. <i>Analytical Chemistry</i> , 2017, 89, 5422-5427.	3.2	72
45	A DNA origami-based aptamer nanoarray for potent and reversible anticoagulation in hemodialysis. <i>Nature Communications</i> , 2021, 12, 358.	5.8	69
46	Streptavidin-biotin-peroxidase nanocomplex-amplified microfluidics immunoassays for simultaneous detection of inflammatory biomarkers. <i>Analytica Chimica Acta</i> , 2017, 982, 138-147.	2.6	66
47	Enzymatic Assay for Cu(II) with Horseradish Peroxidase and Its Application in Colorimetric Logic Gate. <i>Analytical Chemistry</i> , 2013, 85, 7029-7032.	3.2	65
48	A fully automated centrifugal microfluidic system for sample-to-answer viral nucleic acid testing. <i>Science China Chemistry</i> , 2020, 63, 1498-1506.	4.2	63
49	Highly Robust, Recyclable Displacement Assay for Mercuric Ions in Aqueous Solutions and Living Cells. <i>ACS Nano</i> , 2012, 6, 10999-11008.	7.3	62
50	Lipid Nanovesicles by Microfluidics: Manipulation, Synthesis, and Drug Delivery. <i>Advanced Materials</i> , 2019, 31, e1804788.	11.1	62
51	Culturing Primary Human Osteoblasts on Electrospun Poly(lactic-co-glycolic acid) and Poly(lactic-co-glycolic acid)/Nanohydroxyapatite Scaffolds for Bone Tissue Engineering. <i>ACS Applied Materials & Interfaces</i> , 2013, 5, 5921-5926.	4.0	61
52	One-Step Microfluidic Synthesis of Nanocomplex with Tunable Rigidity and Acid-Switchable Surface Charge for Overcoming Drug Resistance. <i>Small</i> , 2017, 13, 1603109.	5.2	56
53	Inertial migration of deformable droplets in a microchannel. <i>Physics of Fluids</i> , 2014, 26, .	1.6	55
54	High-throughput sample-to-answer detection of DNA/RNA in crude samples within functionalized micro-pipette tips. <i>Biosensors and Bioelectronics</i> , 2016, 75, 28-33.	5.3	55

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55	Integrated Microfluidic Platform with Multiple Functions To Probe Tumor-Endothelial Cell Interaction. <i>Analytical Chemistry</i> , 2017, 89, 10037-10044.	3.2	54
56	An ultrasensitive, non-enzymatic glucose assay via gold nanorod-assisted generation of silver nanoparticles. <i>Nanoscale</i> , 2013, 5, 6303.	2.8	53
57	Microfluidic analysis of circulating tumor cells and tumor-derived extracellular vesicles. <i>TrAC - Trends in Analytical Chemistry</i> , 2019, 117, 128-145.	5.8	53
58	Fabrication of one dimensional superfine polymer fibers by double-spinning. <i>Journal of Materials Chemistry</i> , 2011, 21, 13159.	6.7	51
59	Ultrasensitive detection of mRNA in extracellular vesicles using DNA tetrahedron-based thermophoretic assay. <i>Nano Today</i> , 2021, 38, 101203.	6.2	47
60	Microfluidic technologies for nanoparticle formation. <i>Lab on A Chip</i> , 2022, 22, 512-529.	3.1	45
61	One-step detection of pathogens and cancer biomarkers by the naked eye based on aggregation of immunomagnetic beads. <i>Nanoscale</i> , 2016, 8, 1100-1107.	2.8	44
62	Micro/nanofluidics-enabled single-cell biochemical analysis. <i>TrAC - Trends in Analytical Chemistry</i> , 2018, 99, 66-74.	5.8	43
63	Simultaneous On-Chip DC Dielectrophoretic Cell Separation and Quantitative Separation Performance Characterization. <i>Analytical Chemistry</i> , 2012, 84, 2017-2024.	3.2	42
64	Improving Tumor Targeting of Exosomal Membrane-Coated Polymeric Nanoparticles by Conjugation with Aptamers. <i>ACS Applied Bio Materials</i> , 2020, 3, 2666-2673.	2.3	42
65	Colorimetric Logic Gates through Molecular Recognition and Plasmonic Nanoparticles. <i>Small</i> , 2014, 10, 4833-4838.	5.2	41
66	A compact microfluidic gradient generator using passive pumping. <i>Microfluidics and Nanofluidics</i> , 2012, 12, 887-895.	1.0	36
67	Barcoded Microchips for Biomolecular Assays. <i>Analytical Chemistry</i> , 2015, 87, 900-906.	3.2	34
68	Enantiomorphic Microvortex-Enabled Supramolecular Sensing of Racemic Amino Acids by Using Achiral Building Blocks. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 3486-3490.	7.2	34
69	Nanosensors for Diagnosis of Infectious Diseases. <i>ACS Applied Bio Materials</i> , 2021, 4, 3863-3879.	2.3	34
70	Manipulation of bio-micro/nanoparticles in non-Newtonian microflows. <i>Microfluidics and Nanofluidics</i> , 2019, 23, 1.	1.0	31
71	Measurement of the volume growth rate of single budding yeast with the MOSFET-based microfluidic Coulter counter. <i>Lab on A Chip</i> , 2010, 10, 2986.	3.1	30
72	Nanocrystalline Cellulose Improves the Biocompatibility and Reduces the Wear Debris of Ultrahigh Molecular Weight Polyethylene via Weak Binding. <i>ACS Nano</i> , 2016, 10, 298-306.	7.3	30

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73	Stress-Induced Self-Assembly of Complex Three Dimensional Structures by Elastic Membranes. <i>Small</i> , 2013, 9, 2410-2414.	5.2	29
74	Microfluidic Separation, Detection, and Engineering of Extracellular Vesicles for Cancer Diagnostics and Drug Delivery. <i>Accounts of Materials Research</i> , 2022, 3, 498-510.	5.9	27
75	Thermomicrofluidics for biosensing applications. <i>View</i> , 2021, 2, 20200148.	2.7	26
76	A microfluidic indirect competitive immunoassay for multiple and sensitive detection of testosterone in serum and urine. <i>Analyst</i> , 2016, 141, 815-819.	1.7	22
77	Multiplexed microfluidic blotting of proteins and nucleic acids by parallel, serpentine microchannels. <i>Lab on A Chip</i> , 2015, 15, 105-112.	3.1	21
78	ATP-responsive mitochondrial probes for monitoring metabolic processes of glioma stem cells in a 3D model. <i>Chemical Science</i> , 2020, 11, 2744-2749.	3.7	20
79	Nonspecific Organelle-Targeting Strategy with Core-Shell Nanoparticles of Varied Lipid Components/Ratios. <i>Analytical Chemistry</i> , 2016, 88, 7344-7351.	3.2	19
80	Impact of Chemical Design on the Molecular Orientation of Conjugated Donor-Acceptor Polymers for Field-Effect Transistors. <i>ACS Applied Polymer Materials</i> , 2022, 4, 2233-2250.	2.0	17
81	Experimental characterization of electrical current leakage in poly(dimethylsiloxane) microfluidic devices. <i>Microfluidics and Nanofluidics</i> , 2009, 6, 589-598.	1.0	14
82	The biocompatibility evaluation of iron oxide nanoparticles synthesized by a one pot process for intravenous iron supply. <i>RSC Advances</i> , 2016, 6, 14329-14334.	1.7	14
83	Profiling protein-protein interactions of single cancer cells with in situ lysis and co-immunoprecipitation. <i>Lab on A Chip</i> , 2019, 19, 1922-1928.	3.1	14
84	A Microfluidic Cell Size/Density Sensor by Resistive Pulse Detection. <i>Electroanalysis</i> , 2013, 25, 1023-1028.	1.5	13
85	Mesoporous silica-coated ultrafine fibers for highly efficient laccase encapsulation. <i>Nanoscale</i> , 2014, 6, 6468.	2.8	13
86	Real-time characterization of negative air ion-induced decomposition of indoor organic contaminants by mass spectrometry. <i>Chemical Communications</i> , 2018, 54, 10687-10690.	2.2	11
87	Exosome-Coated Zeolitic Imidazolate Framework Nanoparticles for Intracellular Detection of ATP. <i>Chinese Journal of Chemistry</i> , 2021, 39, 2107-2112.	2.6	11
88	AI in Measurement Science. <i>Annual Review of Analytical Chemistry</i> , 2021, 14, 1-19.	2.8	11
89	Field-Effect Control of Electroosmotic Pumping Using Porous Silicon-Silicon Nitride Membranes. <i>Journal of Microelectromechanical Systems</i> , 2009, 18, 1173-1183.	1.7	9
90	Enantiomeric Microvortex-Enabled Supramolecular Sensing of Racemic Amino Acids by Using Achiral Building Blocks. <i>Angewandte Chemie</i> , 2020, 132, 3514-3518.	1.6	7

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91	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. <i>Nanoscale</i> , 2015, 7, 8071-8075.	2.8	6
92	Multilayer Ratiometric Fluorescent Nanomachines for Imaging mRNA in Live Cells. <i>Small Methods</i> , 2021, 5, 2001047.	4.6	6
93	Hydrodynamic Cell Enrichment in Double Spiral Microfluidic Channels. <i>ECS Transactions</i> , 2013, 50, 441-445.	0.3	5
94	Microfluidic devices for viral detection. , 2013, , 527-556.		5
95	Reference channel-based microfluidic resistance sensing for single yeast cell volume growth measurement. <i>Microfluidics and Nanofluidics</i> , 2017, 21, 1.	1.0	4
96	One-Step Thermophoretic AND Gate Operation on Extracellular Vesicles Improves Diagnosis of Prostate Cancer. <i>Angewandte Chemie</i> , 2022, 134, .	1.6	3
97	Investigation of carbon deposition induced by pyrolytic decomposition of ethylene. <i>RSC Advances</i> , 2017, 7, 29639-29644.	1.7	2
98	Recent research progress of nanocellulose crystal and its composites with polymers. <i>Chinese Science Bulletin</i> , 2013, 58, 2385-2392.	0.4	2
99	Drug Delivery: One-Step Microfluidic Synthesis of Nanocomplex with Tunable Rigidity and Acid-Switchable Surface Charge for Overcoming Drug Resistance (<i>Small</i> 9/2017). <i>Small</i> , 2017, 13, .	5.2	1
100	Microfluidics for nanomaterial synthesis. , 2022, , 429-453.		1
101	Electrical Leakage Through Thin PDMS Microchannel Walls and its Applications. , 2008, , .		0
102	Measurement of Budding Yeast Growth Rate With MOSFET-Based Microfluidic Coulter Counters. , 2008, , .		0
103	Microfluidics, Nanofluidics, and Lab-on-a-Chip in Asia 2019. <i>Electrophoresis</i> , 2020, 41, 757-757.	1.3	0
104	Microfluidic devices for viral detection. , 2021, , 587-615.		0
105	Measurement of the Volume Growth Rate of Single Budding Yeast. , 2009, , .		0
106	Inertial Microfluidics for Separation and Detection of Tumor Cells. , 2013, , .		0