

Weian Zhao

List of Publications by Year in descending order

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83
papers

9,094
citations

61984

43
h-index

58581

82
g-index

88
all docs

88
docs citations

88
times ranked

12430
citing authors

#	ARTICLE	IF	CITATIONS
1	Spatial transcriptomics using combinatorial fluorescence spectral and lifetime encoding, imaging and analysis. <i>Nature Communications</i> , 2022, 13, 169.	12.8	31
2	Epigenetic silencing directs expression heterogeneity of stably integrated multi-transcript unit genetic circuits. <i>Scientific Reports</i> , 2021, 11, 2424.	3.3	7
3	Î²-endorphin at the intersection of pain and cancer progression: Preclinical evidence. <i>Neuroscience Letters</i> , 2021, 744, 135601.	2.1	5
4	Therapeutic implications of transplanted-cell death. <i>Nature Biomedical Engineering</i> , 2021, 5, 379-384.	22.5	27
5	Exosome loaded immunomodulatory biomaterials alleviate local immune response in immunocompetent diabetic mice post islet xenotransplantation. <i>Communications Biology</i> , 2021, 4, 685.	4.4	24
6	Isolation and characterization of microvesicles from mesenchymal stem cells. <i>Methods</i> , 2020, 177, 50-57.	3.8	25
7	Rapid bacterial detection and antibiotic susceptibility testing in whole blood using one-step, high throughput blood digital PCR. <i>Lab on A Chip</i> , 2020, 20, 477-489.	6.0	75
8	A modular microarray imaging system for highly specific COVID-19 antibody testing. <i>Lab on A Chip</i> , 2020, 20, 3302-3309.	6.0	34
9	Rapid isolation of rare targets from large fluid volumes. <i>Scientific Reports</i> , 2020, 10, 12458.	3.3	4
10	CAR-T design: Elements and their synergistic function. <i>EBioMedicine</i> , 2020, 58, 102931.	6.1	144
11	Rapid Detection of Î²-Lactamase-Producing Bacteria Using the Integrated Comprehensive Droplet Digital Detection (IC 3D) System. <i>Sensors</i> , 2020, 20, 4667.	3.8	7
12	Controlled Release of Stem Cell Secretome Attenuates Inflammatory Response against Implanted Biomaterials. <i>Advanced Healthcare Materials</i> , 2020, 9, e1901874.	7.6	10
13	Optimization of a syngeneic murine model of bone metastasis. <i>Journal of Bone Oncology</i> , 2020, 23, 100298.	2.4	7
14	A rapid, point-of-care antibiotic susceptibility test for urinary tract infections. <i>Journal of Medical Microbiology</i> , 2020, 69, 52-62.	1.8	13
15	mRNA rescues neonatal acidemia while mice report no aftereffects. <i>EBioMedicine</i> , 2019, 46, 23-24.	6.1	0
16	Combinatorial targeting of cancer bone metastasis using mRNA engineered stem cells. <i>EBioMedicine</i> , 2019, 45, 39-57.	6.1	18
17	Meta-analysis of preclinical studies of mesenchymal stromal cells to treat rheumatoid arthritis. <i>EBioMedicine</i> , 2019, 47, 563-577.	6.1	32
18	An ultrasensitive test for profiling circulating tumor DNA using integrated comprehensive droplet digital detection. <i>Lab on A Chip</i> , 2019, 19, 993-1005.	6.0	42

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19	Stem Cell-Derived Exosomes as Nanotherapeutics for Autoimmune and Neurodegenerative Disorders. ACS Nano, 2019, 13, 6670-6688.	14.6	341
20	Transplantation of stem cells from umbilical cord blood as therapy for type I diabetes. Cell and Tissue Research, 2019, 378, 155-162.	2.9	22
21	A Simple DNAzyme-Based Fluorescent Assay for <i>Klebsiella pneumoniae</i> . ChemBioChem, 2019, 20, 906-910.	2.6	41
22	Fluorescence lifetime detection with particle counting devices. Biomedical Optics Express, 2019, 10, 1223.	2.9	3
23	Targeting Biophysical Cues: a Niche Approach to Study, Diagnose, and Treat Cancer. Trends in Cancer, 2018, 4, 268-271.	7.4	19
24	Functional TCR T cell screening using single-cell droplet microfluidics. Lab on A Chip, 2018, 18, 3733-3749.	6.0	132
25	Enhanced Therapeutic Effects of Mesenchymal Stem Cell-Derived Exosomes with an Injectable Hydrogel for Hindlimb Ischemia Treatment. ACS Applied Materials & Interfaces, 2018, 10, 30081-30091.	8.0	271
26	Emerging Microtechnologies and Automated Systems for Rapid Bacterial Identification and Antibiotic Susceptibility Testing. SLAS Technology, 2017, 22, 585-608.	1.9	81
27	Mechanoresponsive stem cells to target cancer metastases through biophysical cues. Science Translational Medicine, 2017, 9, .	12.4	74
28	A mathematical model of mechanotransduction reveals how mechanical memory regulates mesenchymal stem cell fate decisions. BMC Systems Biology, 2017, 11, 55.	3.0	48
29	Stem Cell Extracellular Vesicles: Extended Messages of Regeneration. Annual Review of Pharmacology and Toxicology, 2017, 57, 125-154.	9.4	223
30	The International Society for Extracellular Vesicles launches the first massive open online course on extracellular vesicles. Journal of Extracellular Vesicles, 2016, 5, 34299.	12.2	19
31	Elucidation of Exosome Migration Across the Blood-Brain Barrier Model In Vitro. Cellular and Molecular Bioengineering, 2016, 9, 509-529.	2.1	368
32	Tetrandrine identified in a small molecule screen to activate mesenchymal stem cells for enhanced immunomodulation. Scientific Reports, 2016, 6, 30263.	3.3	24
33	Mesenchymal stem cells engineered to express selectin ligands and IL-10 exert enhanced therapeutic efficacy in murine experimental autoimmune encephalomyelitis. Biomaterials, 2016, 77, 87-97.	11.4	76
34	138. Microencapsulated Aptamer Sensors for Digital Quantification of Blood Biomarkers. Molecular Therapy, 2015, 23, S56.	8.2	0
35	Floating Droplet Array: An Ultrahigh-Throughput Device for Droplet Trapping, Real-time Analysis and Recovery. Micromachines, 2015, 6, 1469-1482.	2.9	46
36	Exogenous marker-engineered mesenchymal stem cells detect cancer and metastases in a simple blood assay. Stem Cell Research and Therapy, 2015, 6, 181.	5.5	6

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37	Nucleic acid aptamers in cancer research, diagnosis and therapy. <i>Chemical Society Reviews</i> , 2015, 44, 1240-1256.	38.1	217
38	Constructing real-time, wash-free, and reiterative sensors for cell surface proteins using binding-induced dynamic DNA assembly. <i>Chemical Science</i> , 2015, 6, 5729-5733.	7.4	52
39	Digital quantification of miRNA directly in plasma using integrated comprehensive droplet digital detection. <i>Lab on A Chip</i> , 2015, 15, 4217-4226.	6.0	64
40	Facile Supermolecular Aptamer Inhibitors of L-Selectin. <i>PLoS ONE</i> , 2015, 10, e0123034.	2.5	11
41	Mesenchymal Stem Cell Biodistribution, Migration, and Homing <i>In Vivo</i> . <i>Stem Cells International</i> , 2014, 2014, 1-2.	2.5	34
42	Rapid detection of single bacteria in unprocessed blood using Integrated Comprehensive Droplet Digital Detection. <i>Nature Communications</i> , 2014, 5, 5427.	12.8	248
43	Meta-analysis of preclinical studies of mesenchymal stromal cells for ischemic stroke. <i>Neurology</i> , 2014, 82, 1277-1286.	1.1	179
44	Aptamer technology for tracking cells' status & function. <i>Molecular and Cellular Therapies</i> , 2014, 2, 33.	0.2	20
45	Rolling circle amplification: a versatile tool for chemical biology, materials science and medicine. <i>Chemical Society Reviews</i> , 2014, 43, 3324.	38.1	837
46	Bioengineering tools to elucidate and control the fate of transplanted stem cells. <i>Biochemical Society Transactions</i> , 2014, 42, 679-687.	3.4	12
47	Probe and Control of Cell-Cell Interactions Using Bioengineered Tools. , 2014, , 349-370.		0
48	Droplet microfluidics for single-molecule and single-cell analysis in cancer research, diagnosis and therapy. <i>TrAC - Trends in Analytical Chemistry</i> , 2014, 58, 145-153.	11.4	99
49	DNA-Scaffolded Multivalent Ligands to Modulate Cell Function. <i>ChemBioChem</i> , 2014, 15, 1268-1273.	2.6	43
50	A polyvalent aptamer system for targeted drug delivery. <i>Biomaterials</i> , 2013, 34, 9728-9735.	11.4	120
51	mRNA-engineered mesenchymal stem cells for targeted delivery of interleukin-10 to sites of inflammation. <i>Blood</i> , 2013, 122, e23-e32.	1.4	169
52	Opening windows on new biology and disease mechanisms: development of real-time in vivo sensors. <i>Interface Focus</i> , 2013, 3, 20130014.	3.0	8
53	Evidence for High Translational Potential of Mesenchymal Stromal Cell Therapy to Improve Recovery from Ischemic Stroke. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 2013, 33, 1322-1334.	4.3	119
54	From Blood to the Brain: Can Systemically Transplanted Mesenchymal Stem Cells Cross the Blood-Brain Barrier?. <i>Stem Cells International</i> , 2013, 2013, 1-7.	2.5	99

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55	Novel Molecular and Nanosensors for In Vivo Sensing. <i>Theranostics</i> , 2013, 3, 583-594.	10.0	74
56	Nanoparticle-based Monitoring of Stem Cell Therapy. <i>Theranostics</i> , 2013, 3, 616-617.	10.0	20
57	To grab the stroma by the horns: From biology to cancer therapy with mesenchymal stem cells. <i>Oncotarget</i> , 2013, 4, 651-664.	1.8	56
58	Bioinspired multivalent DNA network for capture and release of cells. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2012, 109, 19626-19631.	7.1	266
59	Colorimetric and Ultrasensitive Bioassay Based on a Dual-Amplification System Using Aptamer and DNAzyme. <i>Analytical Chemistry</i> , 2012, 84, 4711-4717.	6.5	203
60	Tracking Mesenchymal Stem Cells with Iron Oxide Nanoparticle Loaded Poly(lactide-co-glycolide) Microparticles. <i>Nano Letters</i> , 2012, 12, 4131-4139.	9.1	129
61	Cell-surface sensors: lighting the cellular environment. <i>Wiley Interdisciplinary Reviews: Nanomedicine and Nanobiotechnology</i> , 2012, 4, 547-561.	6.1	25
62	Cell-surface sensors for real-time probing of cellular environments. <i>Nature Nanotechnology</i> , 2011, 6, 524-531.	31.5	201
63	Nanoparticle-based monitoring of cell therapy. <i>Nanotechnology</i> , 2011, 22, 494001.	2.6	74
64	Cell Surface Engineering of Mesenchymal Stem Cells. <i>Methods in Molecular Biology</i> , 2011, 698, 505-523.	0.9	33
65	Engineered cell homing. <i>Blood</i> , 2011, 118, e184-e191.	1.4	187
66	Mimicking the inflammatory cell adhesion cascade by nucleic acid aptamer programmed cell-cell interactions. <i>FASEB Journal</i> , 2011, 25, 3045-3056.	0.5	43
67	Bioengineering nanotechnology: towards the clinic. <i>Nanotechnology</i> , 2011, 22, 490201-490201.	2.6	16
68	Engineered mesenchymal stem cells with self-assembled vesicles for systemic cell targeting. <i>Biomaterials</i> , 2010, 31, 5266-5274.	11.4	120
69	Chemistry and material science at the cell surface. <i>Materials Today</i> , 2010, 13, 14-21.	14.2	38
70	Controlling Cell Fate In Vivo. <i>ChemBioChem</i> , 2009, 10, 2308-2310.	2.6	9
71	Nanoantennas heat up. <i>Nature Materials</i> , 2009, 8, 453-454.	27.5	64
72	Enzymatic Cleavage of Nucleic Acids on Gold Nanoparticles: A Generic Platform for Facile Colorimetric Biosensors. <i>Small</i> , 2008, 4, 810-816.	10.0	136

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73	Design of Gold Nanoparticle-Based Colorimetric Biosensing Assays. <i>ChemBioChem</i> , 2008, 9, 2363-2371.	2.6	701
74	Rolling Circle Amplification: Applications in Nanotechnology and Biodetection with Functional Nucleic Acids. <i>Angewandte Chemie - International Edition</i> , 2008, 47, 6330-6337.	13.8	506
75	DNA Aptamer Folding on Gold Nanoparticles: From Colloid Chemistry to Biosensors. <i>Journal of the American Chemical Society</i> , 2008, 130, 3610-3618.	13.7	352
76	Lab on paper. <i>Lab on A Chip</i> , 2008, 8, 1988.	6.0	202
77	Paper-Based Bioassays Using Gold Nanoparticle Colorimetric Probes. <i>Analytical Chemistry</i> , 2008, 80, 8431-8437.	6.5	305
78	Periodic Assembly of Nanospecies on Repetitive DNA Sequences Generated on Gold Nanoparticles by Rolling Circle Amplification. <i>Methods in Molecular Biology</i> , 2008, 474, 79-90.	0.9	9
79	Simple and rapid colorimetric enzyme sensing assays using non-crosslinking gold nanoparticle aggregation. <i>Chemical Communications</i> , 2007, , 3729.	4.1	170
80	Simple and Rapid Colorimetric Biosensors Based on DNA Aptamer and Noncrosslinking Gold Nanoparticle Aggregation. <i>ChemBioChem</i> , 2007, 8, 727-731.	2.6	208
81	Wrapping single-walled carbon nanotubes with long single-stranded DNA molecules produced by rolling circle amplification. <i>Chemical Communications</i> , 2006, , 3582.	4.1	42
82	DNA Polymerization on Gold Nanoparticles through Rolling Circle Amplification: Towards Novel Scaffolds for Three-Dimensional Periodic Nanoassemblies. <i>Angewandte Chemie - International Edition</i> , 2006, 45, 2409-2413.	13.8	124
83	Comparative study of folate cofactor models. <i>International Journal of Quantum Chemistry</i> , 2002, 87, 152-157.	2.0	2