

# Chia-Hung Chen

## List of Publications by Year in descending order

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Version: 2024-02-01

66  
papers

3,065  
citations

147801  
31  
h-index

161849  
54  
g-index

72  
all docs

72  
docs citations

72  
times ranked

4835  
citing authors

#	ARTICLE	IF	CITATIONS
1	Gradient Porous Elastic Hydrogels with Shape-Memory Property and Anisotropic Responses for Programmable Locomotion. <i>Advanced Functional Materials</i> , 2015, 25, 7272-7279.	14.9	228
2	Janus Particles Templated from Double Emulsion Droplets Generated Using Microfluidics. <i>Langmuir</i> , 2009, 25, 4320-4323.	3.5	210
3	Droplet Microfluidics for Fabrication of Non-Spherical Particles. <i>Macromolecular Rapid Communications</i> , 2010, 31, 108-118.	3.9	208
4	Microfluidic Assembly of Magnetic Hydrogel Particles with Uniformly Anisotropic Structure. <i>Advanced Materials</i> , 2009, 21, 3201-3204.	21.0	196
5	Beating Poisson encapsulation statistics using close-packed ordering. <i>Lab on A Chip</i> , 2009, 9, 2628.	6.0	162
6	Heterogeneous multi-compartmental hydrogel particles as synthetic cells for incompatible tandem reactions. <i>Nature Communications</i> , 2017, 8, 663.	12.8	126
7	Upconversion amplification through dielectric superlensing modulation. <i>Nature Communications</i> , 2019, 10, 1391.	12.8	114
8	A flexible multiplexed immunosensor for point-of-care in situ wound monitoring. <i>Science Advances</i> , 2021, 7, .	10.3	106
9	Nanofluidic terahertz metasensor for sensing in aqueous environment. <i>Applied Physics Letters</i> , 2018, 113, .	3.3	97
10	Asymmetrical Deterministic Lateral Displacement Gaps for Dual Functions of Enhanced Separation and Throughput of Red Blood Cells. <i>Scientific Reports</i> , 2016, 6, 22934.	3.3	87
11	Jetting microfluidics with size-sorting capability for single-cell protease detection. <i>Biosensors and Bioelectronics</i> , 2015, 66, 19-23.	10.1	81
12	ADAM-10 and -17 regulate endometriotic cell migration via concerted ligand and receptor shedding feedback on kinase signaling. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2013, 110, E2074-83.	7.1	80
13	Enhancing Protease Activity Assay in Droplet-Based Microfluidics Using a Biomolecule Concentrator. <i>Journal of the American Chemical Society</i> , 2011, 133, 10368-10371.	13.7	77
14	Multiplexed Protease Activity Assay for Low-Volume Clinical Samples Using Droplet-Based Microfluidics and Its Application to Endometriosis. <i>Journal of the American Chemical Society</i> , 2013, 135, 1645-1648.	13.7	76
15	Real-time modulated nanoparticle separation with an ultra-large dynamic range. <i>Lab on A Chip</i> , 2016, 16, 75-85.	6.0	75
16	Single cell multiplexed assay for proteolytic activity using droplet microfluidics. <i>Biosensors and Bioelectronics</i> , 2016, 81, 408-414.	10.1	66
17	Remote modulation of neural activities via near-infrared triggered release of biomolecules. <i>Biomaterials</i> , 2015, 65, 76-85.	11.4	65
18	Ultrahigh-throughput droplet microfluidic device for single-cell miRNA detection with isothermal amplification. <i>Lab on A Chip</i> , 2018, 18, 1914-1920.	6.0	58

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19	Production of Hollow Bacterial Cellulose Microspheres Using Microfluidics to Form an Injectable Porous Scaffold for Wound Healing. <i>Advanced Healthcare Materials</i> , 2016, 5, 2983-2992.	7.6	57
20	NeuroArray: A Universal Interface for Patterning and Interrogating Neural Circuitry with Single Cell Resolution. <i>Scientific Reports</i> , 2014, 4, 4784.	3.3	54
21	Single Upconversion Nanoparticle- <i>Bacterium</i> Cotrapping for Single- <i>Bacterium</i> Labeling and Analysis. <i>Small</i> , 2017, 13, 1603418.	10.0	53
22	Smart Hydrogel Microfluidics for Single-Cell Multiplexed Secretomic Analysis with High Sensitivity. <i>Small</i> , 2018, 14, e1802918.	10.0	52
23	Near-Infrared Light Responsive Multi-Compartmental Hydrogel Particles Synthesized Through Droplets Assembly Induced by Superhydrophobic Surface. <i>Small</i> , 2014, 10, 4886-4894.	10.0	47
24	A turn on fluorescent sensor based on lanthanide coordination polymer nanoparticles for the detection of mercury( <i>II</i> ) in biological fluids. <i>RSC Advances</i> , 2016, 6, 17811-17817.	3.6	45
25	Photoresponsive microvalve for remote actuation and flow control in microfluidic devices. <i>Biomicrofluidics</i> , 2015, 9, 034114.	2.4	36
26	Near-infrared light triggerable deformation-free polysaccharide double network hydrogels. <i>Chemical Communications</i> , 2014, 50, 7052-7055.	4.1	35
27	Sustained release of hydrophobic drugs by the microfluidic assembly of multistage microgel/poly (lactic-co-glycolic acid) nanoparticle composites. <i>Biomicrofluidics</i> , 2015, 9, 052601.	2.4	35
28	Single cell kinase signaling assay using pinched flow coupled droplet microfluidics. <i>Biomicrofluidics</i> , 2014, 8, 034104.	2.4	34
29	Low-volume multiplexed proteolytic activity assay and inhibitor analysis through a pico-injector array. <i>Lab on A Chip</i> , 2015, 15, 1153-1159.	6.0	34
30	Near-infrared photothermal activation of microgels incorporating polypyrrole nanotransducers through droplet microfluidics. <i>Chemical Communications</i> , 2013, 49, 7887.	4.1	32
31	A convection-driven long-range linear gradient generator with dynamic control. <i>Lab on A Chip</i> , 2015, 15, 1445-1450.	6.0	32
32	Effective Light Directed Assembly of Building Blocks with Microscale Control. <i>Small</i> , 2017, 13, 1700684.	10.0	27
33	A Remotely Controlled Transformable Soft Robot Based on Engineered Cardiac Tissue Construct. <i>Small</i> , 2019, 15, e1900006.	10.0	27
34	Photothermal generation of programmable microbubble array on nanoporous gold disks. <i>Optics Express</i> , 2018, 26, 16893.	3.4	26
35	Functional reservoir microcapsules generated <i>via</i> microfluidic fabrication for long-term cardiovascular therapeutics. <i>Lab on A Chip</i> , 2020, 20, 2756-2764.	6.0	26
36	Single Cell Analysis of Leukocyte Protease Activity Using Integrated Continuous-Flow Microfluidics. <i>Analytical Chemistry</i> , 2016, 88, 11750-11757.	6.5	25

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37	Plasmonic droplet screen for single-cell secretion analysis. Biosensors and Bioelectronics, 2019, 144, 111639.	10.1	22
38	Dissolvable Gelatin-Based Microcarriers Generated through Droplet Microfluidics for Expansion and Culture of Mesenchymal Stromal Cells. Biotechnology Journal, 2021, 16, e2000048.	3.5	22
39	Buffer-free integrative nanofluidic device for real-time continuous flow bioassays by ion concentration polarization. Lab on A Chip, 2018, 18, 574-584.	6.0	19
40	Continuous-flow C. elegans fluorescence expression analysis with real-time image processing through microfluidics. Biosensors and Bioelectronics, 2016, 77, 428-434.	10.1	18
41	Ultrafast Single-Cell Level Enzymatic Tumor Profiling. Analytical Chemistry, 2019, 91, 1277-1285.	6.5	18
42	Hybrid hydrogel reactor with metal-organic framework for biomimetic cascade catalysis. Chemical Engineering Journal, 2021, 425, 131482.	12.7	16
43	Nano-Micro Smart Hydrogel Composite for a Rapid Sensitive Immunoassay. Advanced Healthcare Materials, 2019, 8, e1801277.	7.6	15
44	The Role of Single-Cell Technology in the Study and Control of Infectious Diseases. Cells, 2020, 9, 1440.	4.1	15
45	A Miniature On-Chip Methane Sensor Based on an Ultra-Low Loss Waveguide and a Micro-Ring Resonator Filter. Micromachines, 2017, 8, 160.	2.9	13
46	High-throughput functional profiling of single adherent cells via hydrogel drop-screen. Lab on A Chip, 2021, 21, 764-774.	6.0	13
47	A one-step hydrothermal route to programmable stimuli-responsive hydrogels. Chemical Communications, 2015, 51, 6617-6620.	4.1	10
48	Multiplexed Single-Cell Leukocyte Enzymatic Secretion Profiling from Whole Blood Reveals Patient-Specific Immune Signature. Analytical Chemistry, 2021, 93, 4374-4382.	6.5	10
49	Future foods: Design, fabrication and production through microfluidics. Biomaterials, 2022, 287, 121631.	11.4	10
50	Functional Stem Cell Sorting via Integrative Droplet Synchronization. Analytical Chemistry, 2020, 92, 7915-7923.	6.5	8
51	Microfluidic sample preparation for respiratory virus detection: A review. Biomicrofluidics, 2021, 15, 011503.	2.4	8
52	Microfluidic compartmentalization to identify gene biomarkers of infection. Biomicrofluidics, 2020, 14, 061502.	2.4	8
53	Intelligent optofluidic analysis for ultrafast single bacterium profiling of cellulose production and morphology. Lab on A Chip, 2020, 20, 626-633.	6.0	7
54	Nanoplasmon-enhanced drop-screen for high throughput single-cell nucleocytoplasmic miRNA profiling. Lab on A Chip, 2020, 20, 1939-1946.	6.0	7

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55	Monoglycerides in Oils. , 2011, , 173-201.		6
56	Sub-Micro Particle Matter Detection for Metal 3-D Printing Workshop. IEEE Sensors Journal, 2019, 19, 4932-4939.	4.7	6
57	Fast-responsive hydrogel as an injectable pump for rapid on-demand fluidic flow control. Biomicrofluidics, 2017, 11, 034107.	2.4	5
58	Rapid microfluidic platform for screening and enrichment of cells secreting virus neutralizing antibodies. Lab on A Chip, 2022, 22, 2578-2589.	6.0	4
59	Heterogeneous multi-compartmental DNA hydrogel particles prepared via microfluidic assembly for lymphocyte-inspired precision medicine. Nanoscale, 2021, 13, 20531-20540.	5.6	3
60	Drug Delivery: Near-Infrared Light Responsive Multi-Compartmental Hydrogel Particles Synthesized Through Droplets Assembly Induced by Superhydrophobic Surface (Small 23/2014). Small, 2014, 10, 4984-4984.	10.0	2
61	Organic nanoparticle-doped microdroplets as dual-modality contrast agents for ultrasound microvascular flow and photoacoustic imaging. Scientific Reports, 2020, 10, 17009.	3.3	1
62	Near-infrared photothermal activation of microgels incorporating polypyrrole nanotransducers through droplet microfluidics. , 2013, , .		0
63	Single-Cell Bacterium Analysis: Single Upconversion Nanoparticle-Cell Bacterium Cotrapping for Single-Cell Bacterium Labeling and Analysis (Small 14/2017). Small, 2017, 13, .	10.0	0
64	Tissue Engineering: Effective Light Directed Assembly of Building Blocks with Microscale Control (Small 24/2017). Small, 2017, 13, .	10.0	0
65	Single-cell assays using integrated continuous-flow microfluidics. Methods in Enzymology, 2019, 628, 59-94.	1.0	0
66	Intelligent Biohybrid Robotic Systems: A Remotely Controlled Transformable Soft Robot Based on Engineered Cardiac Tissue Construct (Small 18/2019). Small, 2019, 15, 1970095.	10.0	0