Po-Hsun Huang

List of Publications by Year
in descending order

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57	4,903	94433	138484
papers	citations	37 h-index	58 g-index

61	61	61	5241
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Isolation of exosomes from whole blood by integrating acoustics and microfluidics. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 10584-10589.	7.1	633
2	Acoustic separation of circulating tumor cells. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 4970-4975.	7.1	632
3	Rare cell isolation and analysis in microfluidics. Lab on A Chip, 2014, 14, 626.	6.0	273
4	An acoustofluidic micromixer based on oscillating sidewall sharp-edges. Lab on A Chip, 2013, 13, 3847.	6.0	220
5	A reliable and programmable acoustofluidic pump powered by oscillating sharp-edge structures. Lab on A Chip, 2014, 14, 4319-4323.	6.0	152
6	Wave numberâ€“spiral acoustic tweezers for dynamic and reconfigurable manipulation of particles and cells. Science Advances, 2019, 5, eaau6062.	10.3	146
7	Tunable Nanowire Patterning Using Standing Surface Acoustic Waves. ACS Nano, 2013, 7, 3306-3314.	14.6	142
8	Digital acoustofluidics enables contactless and programmable liquid handling. Nature Communications, 2018, 9, 2928.	12.8	134
9	Investigation of acoustic streaming patterns around oscillating sharp edges. Lab on A Chip, 2014, 14, 2824-2836.	6.0	126
10	A high-throughput acoustic cell sorter. Lab on A Chip, 2015, 15, 3870-3879.	6.0	126
11	Accelerating drug discovery via organs-on-chips. Lab on A Chip, 2013, 13, 4697.	6.0	117
12	Circulating Tumor Cell Phenotyping via Highâ€Throughput Acoustic Separation. Small, 2018, 14, e1801131.	10.0	115
13	Standing surface acoustic wave (SSAW)-based microfluidic cytometer. Lab on A Chip, 2014, 14, 916-923.	6.0	106
14	In Situ Fabrication of 3D Ag@ZnO Nanostructures for Microfluidic Surface-Enhanced Raman Scattering Systems. ACS Nano, 2014, 8, 12175-12184.	14.6	106
15	Investigation of micromixing by acoustically oscillated sharp-edges. Biomicrofluidics, 2016, 10, 024124.	2.4	96
16	Acoustofluidic Rotational Manipulation of Cells and Organisms Using Oscillating Solid Structures. Small, 2016, 12, 5120-5125.	10.0	95
17	Standing Surface Acoustic Wave (SSAW)â€Based Fluorescenceâ€Activated Cell Sorter. Small, 2018, 14, e1801996.	10.0	83
18	Separating extracellular vesicles and lipoproteinsviaacoustofluidics. Lab on A Chip, 2019, 19, 1174-1182.	6.0	81

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19	Surface Acoustic Waves Grant Superior Spatial Control of Cells Embedded in Hydrogel Fibers. Advanced Materials, 2016, 28, 8632-8638.	21.0	78
20	A disposable acoustofluidic chip for nano/microparticle separation using unidirectional acoustic transducers. Lab on A Chip, 2020, 20, 1298-1308.	6.0	76
21	Experimental and numerical studies on standing surface acoustic wave microfluidics. Lab on A Chip, 2016, 16, 515-524.	6.0	73
22	Surface acoustic waves enable rotational manipulation of Caenorhabditis elegans. Lab on A Chip, 2019, 19, 984-992.	6.0	69
23	Harmonic acoustics for dynamic and selective particle manipulation. Nature Materials, 2022, 21, 540-546.	27.5	66
24	Acoustofluidic Holography for Micro- to Nanoscale Particle Manipulation. ACS Nano, 2020, 14, 14635-14645.	14.6	62
25	Fabrication of large area resin microlens arrays using gas-assisted ultraviolet embossing. Optics Express, 2008, 16, 3041.	3.4	61
26	Probing Cell Deformability via Acoustically Actuated Bubbles. Small, 2016, 12, 902-910.	10.0	60
27	An acoustofluidic device for efficient mixing over a wide range of flow rates. Lab on A Chip, 2020, 20, 1238-1248.	6.0	56
28	High-throughput cell focusing and separation via acoustofluidic tweezers. Lab on A Chip, 2018, 18, 3003-3010.	6.0	55
29	An acoustofluidic sputum liquefier. Lab on A Chip, 2015, 15, 3125-3131.	6.0	51
30	A spatiotemporally controllable chemical gradient generator via acoustically oscillating sharp-edge structures. Lab on A Chip, 2015, 15, 4166-4176.	6.0	49
31	Acoustofluidic Synthesis of Particulate Nanomaterials. Advanced Science, 2019, 6, 1900913.	11.2	49
32	A sharp-edge-based acoustofluidic chemical signal generator. Lab on A Chip, 2018, 18, 1411-1421.	6.0	48
33	Cell lysisviaacoustically oscillating sharp edges. Lab on A Chip, 2019, 19, 4021-4032.	6.0	47
34	Fast fabrication of integrated surface-relief and particle-diffusing plastic diffuser by use of a hybrid extrusion roller embossing process. Optics Express, 2008, 16, 440.	3.4	42
35	Superhydrophobic surface enhanced Raman scattering sensing using Janus particle arrays realized by site-specific electrochemical growth. Journal of Materials Chemistry C, 2014, 2, 542-547.	5.5	41
36	On-chip stool liquefaction via acoustofluidics. Lab on A Chip, 2019, 19, 941-947.	6.0	38

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37	Electrochemical micro-aptasensors for exosome detection based on hybridization chain reaction amplification. Microsystems and Nanoengineering, 2021, 7, 63.	7.0	38
38	Direct fabrication of microstructures on metal roller using stepped rotating lithography and electroless nickel plating. Microelectronic Engineering, 2009, 86, 615-618.	2.4	37
39	Three-dimensional numerical simulation and experimental investigation of boundary-driven streaming in surface acoustic wave microfluidics. Lab on A Chip, 2018, 18, 3645-3654.	6.0	36
40	A single-layer, planar, optofluidic switch powered by acoustically driven, oscillating microbubbles. Applied Physics Letters, 2012, 101, 141101.	3.3	35
41	Plastic-based acoustofluidic devices for high-throughput, biocompatible platelet separation. Lab on A Chip, 2019, 19, 394-402.	6.0	34
42	Fabrication of microlens arrays using UV micro-stamping with soft roller and gas-pressurized platform. Microelectronic Engineering, 2008, 85, 603-609.	2.4	32
43	Acoustofluidic devices controlled by cell phones. Lab on A Chip, 2018, 18, 433-441.	6.0	32
44	Large-area and thin light guide plates fabricated using UV-based imprinting. Optics Express, 2008, 16, 15033.	3.4	31
45	Contactless, programmable acoustofluidic manipulation of objects on water. Lab on A Chip, 2019, 19, 3397-3404.	6.0	30
46	Acoustofluidic Transfer of Inflammatory Cells from Human Sputum Samples. Analytical Chemistry, 2016, 88, 5655-5661.	6.5	28
47	Open source acoustofluidics. Lab on A Chip, 2019, 19, 2404-2414.	6.0	28
48	Fluorescence-based sorting of Caenorhabditis elegans via acoustofluidics. Lab on A Chip, 2020, 20, 1729-1739.	6.0	27
49	Fabrication of tunable, high-molecular-weight polymeric nanoparticles via ultrafast acoustofluidic micromixing. Lab on A Chip, 2021, 21, 2453-2463.	6.0	27
50	Direct fabrication of rigid microstructures on a metallic roller using a dry film resist. Journal of Micromechanics and Microengineering, 2008, 18, 015004.	2.6	25
51	Low-frequency flexural wave based microparticle manipulation. Lab on A Chip, 2020, 20, 1281-1289.	6.0	21
52	Acoustofluidics: Acoustofluidic Rotational Manipulation of Cells and Organisms Using Oscillating Solid Structures (Small 37/2016). Small, 2016, 12, 5230-5230.	10.0	14
53	Point-of-Care Technologies for the Advancement of Precision Medicine in Heart, Lung, Blood, and Sleep Disorders. IEEE Journal of Translational Engineering in Health and Medicine, 2016, 4, 1-10.	3.7	10
54	Complete reversal imprinting for fabricating microlens arrays with faithful shape replication. Journal of Vacuum Science & Technology B, 2009, 27, 2781.	1.3	4

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55	Fluorescence-Activated Cell Sorters: Standing Surface Acoustic Wave (SSAW)-Based Fluorescence-Activated Cell Sorter (Small 40/2018). Small, 2018, 14, 1870185.	10.0	2
56	Bubble-free replication of large area microstructures using gas-assisted UV embossing with modified reversal imprinting and gap-retained vacuuming. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2013, 31, 031602.	1.2	1
57	Hydrogels: Surface Acoustic Waves Grant Superior Spatial Control of Cells Embedded in Hydrogel Fibers (Adv. Mater. 39/2016). Advanced Materials, 2016, 28, 8556-8556.	21.0	0