Po-Hsun Huang

List of Publications by Year
in descending order

57 papers	4,903 citations	94433 37 h-index	138484 58 g-index
61 all docs	61 docs citations	61 times ranked	5241 citing authors

#	Article	IF	Citations
1	Harmonic acoustics for dynamic and selective particle manipulation. Nature Materials, 2022, 21, 540-546.	27.5	66
2	Fabrication of tunable, high-molecular-weight polymeric nanoparticles <i>via</i> ultrafast acoustofluidic micromixing. Lab on A Chip, 2021, 21, 2453-2463.	6.0	27
3	Electrochemical micro-aptasensors for exosome detection based on hybridization chain reaction amplification. Microsystems and Nanoengineering, 2021, 7, 63.	7.0	38
4	Acoustofluidic Holography for Micro- to Nanoscale Particle Manipulation. ACS Nano, 2020, 14, 14635-14645.	14.6	62
5	Low-frequency flexural wave based microparticle manipulation. Lab on A Chip, 2020, 20, 1281-1289.	6.0	21
6	A disposable acoustofluidic chip for nano/microparticle separation using unidirectional acoustic transducers. Lab on A Chip, 2020, 20, 1298-1308.	6.0	76
7	An acoustofluidic device for efficient mixing over a wide range of flow rates. Lab on A Chip, 2020, 20, 1238-1248.	6.0	56
8	Fluorescence-based sorting of <i>Caenorhabditis elegans via</i> acoustofluidics. Lab on A Chip, 2020, 20, 1729-1739.	6.0	27
9	Acoustofluidic Synthesis of Particulate Nanomaterials. Advanced Science, 2019, 6, 1900913.	11.2	49
10	Contactless, programmable acoustofluidic manipulation of objects on water. Lab on A Chip, 2019, 19, 3397-3404.	6.0	30
11	On-chip stool liquefaction <i>via</i> acoustofluidics. Lab on A Chip, 2019, 19, 941-947.	6.0	38
12	Plastic-based acoustofluidic devices for high-throughput, biocompatible platelet separation. Lab on A Chip, 2019, 19, 394-402.	6.0	34
13	Open source acoustofluidics. Lab on A Chip, 2019, 19, 2404-2414.	6.0	28
14	Wave numberâ€“spiral acoustic tweezers for dynamic and reconfigurable manipulation of particles and cells. Science Advances, 2019, 5, eaau6062.	10.3	146
15	Surface acoustic waves enable rotational manipulation of <i>Caenorhabditis elegans</i>. Lab on A Chip, 2019, 19, 984-992.	6.0	69
16	Separating extracellular vesicles and lipoproteins<i>via</i>acoustofluidics. Lab on A Chip, 2019, 19, 1174-1182.	6.0	81
17	Cell lysis<i>via</i>acoustically oscillating sharp edges. Lab on A Chip, 2019, 19, 4021-4032.	6.0	47
18	A sharp-edge-based acoustofluidic chemical signal generator. Lab on A Chip, 2018, 18, 1411-1421.	6.0	48

#	Article	IF	Citations
19	Acoustofluidic devices controlled by cell phones. Lab on A Chip, 2018, 18, 433-441.	6.0	32
20	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
21	Fluorescence-Activated Cell Sorters: Standing Surface Acoustic Wave (SSAW)-Based Fluorescence-Activated Cell Sorter (Small 40/2018). Small, 2018, 14, 1870185.	10.0	2
22	Standing Surface Acoustic Wave (SSAW)â€Based Fluorescenceâ€Activated Cell Sorter. Small, 2018, 14, e1801996.	10.0	83
23	Circulating Tumor Cell Phenotyping via Highâ€Throughput Acoustic Separation. Small, 2018, 14, e1801131.	10.0	115
24	Digital acoustofluidics enables contactless and programmable liquid handling. Nature Communications, 2018, 9, 2928.	12.8	134
25	High-throughput cell focusing and separation <i>via</i> acoustofluidic tweezers. Lab on A Chip, 2018, 18, 3003-3010.	6.0	55
26	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
27	Probing Cell Deformability via Acoustically Actuated Bubbles. Small, 2016, 12, 902-910.	10.0	60
28	Investigation of micromixing by acoustically oscillated sharp-edges. Biomicrofluidics, 2016, 10, 024124.	2.4	96
29	Acoustofluidic Transfer of Inflammatory Cells from Human Sputum Samples. Analytical Chemistry, 2016, 88, 5655-5661.	6.5	28
30	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
31	Acoustofluidics: Acoustofluidic Rotational Manipulation of Cells and Organisms Using Oscillating Solid Structures (Small 37/2016). Small, 2016, 12, 5230-5230.	10.0	14
32	Acoustofluidic Rotational Manipulation of Cells and Organisms Using Oscillating Solid Structures. Small, 2016, 12, 5120-5125.	10.0	95
33	Surface Acoustic Waves Grant Superior Spatial Control of Cells Embedded in Hydrogel Fibers. Advanced Materials, 2016, 28, 8632-8638.	21.0	78
34	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
35	Experimental and numerical studies on standing surface acoustic wave microfluidics. Lab on A Chip, 2016, 16, 515-524.	6.0	73
36	A high-throughput acoustic cell sorter. Lab on A Chip, 2015, 15, 3870-3879.	6.0	126

#	Article	IF	Citations
37	An acoustofluidic sputum liquefier. Lab on A Chip, 2015, 15, 3125-3131.	6.0	51
38	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
39	A spatiotemporally controllable chemical gradient generator via acoustically oscillating sharp-edge structures. Lab on A Chip, 2015, 15, 4166-4176.	6.0	49
40	Standing surface acoustic wave (SSAW)-based microfluidic cytometer. Lab on A Chip, 2014, 14, 916-923.	6.0	106
41	Rare cell isolation and analysis in microfluidics. Lab on A Chip, 2014, 14, 626.	6.0	273
42	Investigation of acoustic streaming patterns around oscillating sharp edges. Lab on A Chip, 2014, 14, 2824-2836.	6.0	126
43	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
44	A reliable and programmable acoustofluidic pump powered by oscillating sharp-edge structures. Lab on A Chip, 2014, 14, 4319-4323.	6.0	152
45	<i>In Situ</i> Fabrication of 3D Ag@ZnO Nanostructures for Microfluidic Surface-Enhanced Raman Scattering Systems. ACS Nano, 2014, 8, 12175-12184.	14.6	106
46	An acoustofluidic micromixer based on oscillating sidewall sharp-edges. Lab on A Chip, 2013, 13, 3847.	6.0	220
47	Accelerating drug discovery via organs-on-chips. Lab on A Chip, 2013, 13, 4697.	6.0	117
48	Tunable Nanowire Patterning Using Standing Surface Acoustic Waves. ACS Nano, 2013, 7, 3306-3314.	14.6	142
49	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
50	A single-layer, planar, optofluidic switch powered by acoustically driven, oscillating microbubbles. Applied Physics Letters, 2012, 101, 141101.	3.3	35
51	Complete reversal imprinting for fabricating microlens arrays with faithful shape replication. Journal of Vacuum Science & Technology B, 2009, 27, 2781.	1.3	4
52	Direct fabrication of microstructures on metal roller using stepped rotating lithography and electroless nickel plating. Microelectronic Engineering, 2009, 86, 615-618.	2.4	37
53	Fabrication of microlens arrays using UV micro-stamping with soft roller and gas-pressurized platform. Microelectronic Engineering, 2008, 85, 603-609.	2.4	32
54	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

#	Article	IF	Citations
55	Fabrication of large area resin microlens arrays using gas-assisted ultraviolet embossing. Optics Express, 2008, 16, 3041.	3.4	61
56	Large-area and thin light guide plates fabricated using UV-based imprinting. Optics Express, 2008, 16, 15033.	3.4	31
57	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