Citation Report
List of articles citing

Acoustofluidic, label-free separation and simultaneous concentration of rare tumor cells from white blood cells

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#	Paper	IF	Citations
123	Microfluidic techniques for high throughput single cell analysis. **2016**, 40, 90-96		99
122	Microfluidics for High-Throughput Cellular Isolation and Analysis in Biomedicine. **2016**, 295-322		
121	Microfluidic Methods for Molecular Biology. **2016**,		3
120	Spatiotemporally controllable acoustothermal heating and its application to disposable thermochromic displays. **2016**, 6, 33937-33944		17
119	Highly Localized Acoustic Streaming and Size-Selective Submicrometer Particle Concentration Using High Frequency Microscale Focused Acoustic Fields. *Analytical Chemistry*, **2016**, 88, 5513-22	7.8	118
118	Circulating Tumor Cells Versus Circulating Tumor DNA in Colorectal Cancer: Pros and Cons. **2016**, 12, 151-161		42
117	Acoustics: Motion controlled by sound. **2016**, 537, 493-4		9
116	Virtual membrane for filtration of particles using surface acoustic waves (SAW). **2016**, 16, 3515-23		33
115	Mechanical Properties Based Particle Separation via Traveling Surface Acoustic Wave. *Analytical Chemistry*, **2016**, 88, 11844-11851	7.8	54
114	Recent insights into the development of nanotechnology to detect circulating tumor cells. **2016**, 82, 191-198		8
113	Circulating tumor cell technologies. **2016**, 10, 374-94		315
112	Highly focused high-frequency travelling surface acoustic waves (SAW) for rapid single-particle sorting. **2016**, 16, 471-9		113
111	Design and simulation of a MEMS based cell separator utilizing 3D travelling-wave dielectrophoresis. **2017**, 23, 1351-1360		4
110	Continuous flow microfluidic separation and processing of rare cells and bioparticles found in blood - A review. **2017**, 965, 9-35		111
109	Label-free single-cell separation and imaging of cancer cells using an integrated microfluidic system. **2017**, 7, 46507		54
108	Numerical model of the sorting of biological cells based on gravity-driven optoelectronic tweezers. **2017**, 31, 2451-2457		
107	Cell line dependent expression of EpCAM influences the detection of circulating tumor cells with CellSearch. **2017**, 2, 194-198		4

106	Acoustic impedance-based manipulation of elastic microspheres using travelling surface acoustic waves. **2017**, 7, 22524-22530		27
105	Isolation and Molecular Characterization of Circulating Tumor Cells. **2017**,		2
104	Strategies for Isolation and Molecular Profiling of Circulating Tumor Cells. **2017**, 994, 43-66		2
103	Effective cell trapping using PDMS microspheres in an acoustofluidic chip. **2017**, 157, 347-354		5
102	Clinical Applications of Circulating Tumor Cells in Pharmacotherapy: Challenges and Perspectives. **2017**, 92, 232-239		9
101	Acoustic Tweezing and Patterning of Concentration Fields in Microfluidics. *Physical Review Applied*, **2017**, 7,	4.3	20
100	Clinical-Scale Cell-Surface-Marker Independent Acoustic Microfluidic Enrichment of Tumor Cells from Blood. *Analytical Chemistry*, **2017**, 89, 11954-11961	7.8	31
99	Three-dimensional ultrasonic trapping of micro-particles in water with a simple and compact two-element transducer. **2017**, 111, 094101		40
98	Circulating tumor cells in prostate cancer: Precision diagnosis and therapy. **2017**, 14, 1223-1232		21
97	Localization of low-abundant cancer cells in a sharply expanded microfluidic step-channel using dielectrophoresis. **2017**, 11, 054114		8
96	Huygens-Fresnel Acoustic Interference and the Development of Robust Time-Averaged Patterns from Traveling Surface Acoustic Waves. **2017**, 118, 154501		37
95	Microtechnology for Cell Manipulation and Sorting. **2017**,		14
94	Acoustic Cell Manipulation. **2017**, 129-173		9
93	A rapid and meshless analytical model of acoustofluidic pressure fields for waveguide design. **2018**, 12, 024104		9
92	Whole-blood sorting, enrichment and in situ immunolabeling of cellular subsets using acoustic microstreaming. **2018**, 4,		38
91	Cellular dielectrophoresis coupled with single-cell analysis. **2018**, 410, 2499-2515		28
90	An improved bulk acoustic waves chip based on a PDMS bonding layer for high-efficient particle enrichment. **2018**, 22, 1		6
89	A Novel Macroscale Acoustic Device for Blood Filtration. **2018**, 12, 0110081-110087		1

88	Acoustofluidic separation: impact of microfluidic system design and of sample properties. **2018**, 22, 1		5
87	High-Throughput Isolation of Circulating Tumor Cells Using Cascaded Inertial Focusing Microfluidic Channel. *Analytical Chemistry*, **2018**, 90, 4397-4405	7.8	49
86	On-demand acoustic droplet splitting and steering in a disposable microfluidic chip. **2018**, 18, 422-432		39
85	A high-efficiency micromixing effect by pulsed AC electrothermal flow. **2018**, 37, 418-431		4
84	Separation efficiency maximization in acoustofluidic systems: study of the sample launch-position.. **2018**, 8, 38955-38964		2
83	Resonance control of acoustic focusing systems through an environmental reference table and impedance spectroscopy. **2018**, 13, e0207532		4
82	Key Enabling Technologies for Point-of-Care Diagnostics. **2018**, 18,		45
81	A Microfluidic Device for Simultaneous Extraction of Plasma, Red Blood Cells, and On-Chip White Blood Cell Trapping. **2018**, 8, 15345		31
80	Recent advances in microfluidic technology for manipulation and analysis of biological cells (2007-2017). **2018**, 1044, 29-65		47
79	Augmented longitudinal acoustic trap for scalable microparticle enrichment. **2018**, 12, 034110		5
78	Ultrasound-based cell sorting with microbubbles: A feasibility study. **2018**, 144, 41		3
77	Size-amplified acoustofluidic separation of circulating tumor cells with removable microbeads. **2018**, 2, 025004		12
76	Design of a Novel MEMS Microgripper with Rotatory Electrostatic Comb-Drive Actuators for Biomedical Applications. **2018**, 18,		23
75	Bulk-driven acoustic streaming at resonance in closed microcavities. **2019**, 100, 023104		12
74	Acoustophoretic rapid media exchange and continuous-flow electrotransfection of primary human T cells for applications in automated cellular therapy manufacturing. **2019**, 19, 2978-2992		12
73	Acoustofluidic methods in cell analysis. **2019**, 117, 280-290		27
72	Multifunctional Hybrid Magnetic Microgel Synthesis for Immune-Based Isolation and Post-Isolation Culture of Tumor Cells. **2019**, 11, 24945-24958		10
71	Cancer marker-free enrichment and direct mutation detection in rare cancer cells by combining multi-property isolation and microfluidic concentration. **2019**, 19, 757-766		9

70	Acoustophoresis-based biomedical device applications. **2019**, 123-144		1
69	Microfluidics for studying metastatic patterns of lung cancer. **2019**, 17, 71		37
68	Wave number-spiral acoustic tweezers for dynamic and reconfigurable manipulation of particles and cells. **2019**, 5, eaau6062		98
67	Acoustofluidic separation of cells and particles. **2019**, 5, 32		143
66	Relocation of coflowing immiscible liquids under acoustic field in a microchannel. **2019**, 125, 54002		9
65	Acoustofluidic Blood Component Sample Preparation and Processing in Medical Applications. **2019**, 1-25		1
64	Liquid Biopsy in Solid Malignancy. **2019**, 23, 284-296		10
63	High-throughput electrical position detection of single flowing particles/cells with non-spherical shape. **2019**, 19, 1818-1827		19
62	Differential impedance spectra analysis reveals optimal actuation frequency in bulk mode acoustophoresis. **2019**, 9, 19081		5
61	The acoustofluidic focusing and separation of rare tumor cells using transparent lithium niobate transducers. **2019**, 19, 3922-3930		10
60	Circulating tumor cells in precision oncology: clinical applications in liquid biopsy and 3D organoid model. **2019**, 19, 341		43
59	Applications of Acoustofluidics in Bioanalytical Chemistry. *Analytical Chemistry*, **2019**, 91, 757-767	7.8	52
58	Parallel Label-Free Isolation of Cancer Cells Using Arrays of Acoustic Microstreaming Traps. **2019**, 4, 1800374		22
57	Acoustic manipulation of particles in a cylindrical cavity: Theoretical and experimental study on the effects of boundary conditions. **2019**, 93, 18-25		14
56	Acoustophoretic purification of platelets: feasibility and impact on platelet activation and function. **2019**, 30, 174-180		2
55	Acoustic Microfluidic Separation Techniques and Bioapplications: A Review. **2020**, 11,		21
54	Antibody Conjugate Assembly on Ultrasound-Confined Microcarrier Particles. **2020**, 6, 6108-6116		6
53	Label-free Separation of Circulating Tumor Cells Using a Self-Amplified Inertial Focusing (SAIF) Microfluidic Chip. *Analytical Chemistry*, **2020**, 92, 16170-16179	7.8	9

52	Generating multifunctional acoustic tweezers in Petri dishes for contactless, precise manipulation of bioparticles. **2020**, 6,		29
51	Comparison of numerical models for bulk and surface acoustic wave-induced acoustophoresis in a microchannel. **2020**, 135, 1		2
50	Dexterous formation of unconventional Chladni patterns using standing bulk acoustic waves. **2020**, 117, 184101		5
49	Acoustic Microfluidics. **2020**, 13, 17-43		59
48	Acoustofluidic microdevice for precise control of pressure nodal positions. **2020**, 24, 1		1
47	Microfluidic-based cancer cell separation using active and passive mechanisms. **2020**, 24, 1		17
46	Numerical simulation of continuous separation of microparticles in two-stage acousto-microfluidic systems. **2020**, 83, 342-356		3
45	Two-dimensional concentration of microparticles using bulk acousto-microfluidics. **2020**, 116, 033104		7
44	Microfluidic Platform for the Isolation of Cancer-Cell Subpopulations Based on Single-Cell Glycolysis. *Analytical Chemistry*, **2020**, 92, 6949-6957	7.8	3
43	Ultrasound-induced molecular delivery to erythrocytes using a microfluidic system. **2020**, 14, 024114		8
42	Acoustophoresis Enables the Label-Free Separation of Functionally Different Subsets of Cultured Bone Marrow Stromal Cells. **2021**, 99, 476-487		9
41	Motile cells as probes for characterizing acoustofluidic devices. **2021**, 21, 521-533		7
40	Combined acoustic relocation and acoustophoretic migration for particle transfer between co-flowing fluids in a microchannel. **2021**, 6,		2
39	Controlled Manipulation and Active Sorting of Particles Inside Microfluidic Chips Using Bulk Acoustic Waves and Machine Learning. **2021**, 37, 4192-4199		10
38	High-throughput Double-mode Ultrasonic Micro-separator Based on 2D Normal Mode. **2021**, 64, 496-502		1
37	Theory and simulation of electroosmotic suppression of acoustic streaming. **2021**, 149, 3917		1
36	Detection of circulating tumor cells and single cell extraction technology: principle, effect and application prospect. **2021**, 5, 032002		1
35	Acoustic tweezer with complex boundary-free trapping and transport channel controlled by shadow waveguides. **2021**, 7,		7

34	Dynamic measurement of the acoustic streaming time constant utilizing an optical tweezer. **2021**, 104, 025104		0
33	Real-Time Detection and Control of Microchannel Resonance Frequency in Acoustic Trapping Systems by Monitoring Amplifier Supply Currents. **2021**, 6, 3765-3772		2
32	Acoustic tweezing of microparticles in microchannels with sinusoidal cross sections. **2021**, 11, 17902		3
31	Acoustic Cell Separation Based on Density and Mechanical Properties. **2020**, 142,		17
30	Focalization Performance Study of a Novel Bulk Acoustic Wave Device. **2021**, 11,		
29	Label-Free Isolation of Exosomes Using Microfluidic Technologies. **2021**,		7
28	Reduced acoustic resonator dimensions improve focusing efficiency of bacteria and submicron particles. **2021**,		1
27	Breast cancer circulating tumor cells with mesenchymal features-an unreachable target?. **2022**, 79, 81		3
26	Programmable motion control and trajectory manipulation of microparticles through tri-directional symmetrical acoustic tweezers.. **2022**,		4
25	Acoustic radiation force and radiation torque beyond particles: Effects of nonspherical shape and Willis coupling.. **2021**, 104, 065003		3
24	Effect of microchannel protrusion on the bulk acoustic wave-induced acoustofluidics: numerical investigation.. **2021**, 24, 7		0
23	Enhancement of Acoustic Energy Density in Bulk-Wave-Acoustophoresis Devices Using Side Actuation. *Physical Review Applied*, **2022**, 17,	4.3	0
22	Research on excitation technology of high-throughput ultrasonic micro-separator based on micro-nano fabrication. *Advances in Mechanical Engineering*, **2022**, 14, 168781322210962	1.2	1
21	A sound approach to advancing healthcare systems: the future of biomedical acoustics. *Nature Communications*, **2022**, 13,	17.4	4
20	Developing a Multi-Sample Acoustofluidic Device for High-Throughput Cell Aggregation. *SSRN Electronic Journal*,	1	
19	Applications of Microfluidics. **2022**, 15-50		1
18	Numerical Study on Separation of Circulating Tumor Cell Using Dielectrophoresis in a Four-Electrode Microfluidic Device. *Journal of Shanghai Jiaotong University (Science)*,	0.6	
17	Numerical simulation of blood cell separation in an acoustofluidic system. *Chemical Papers*,	1.9	

16	Recent advances in acoustofluidic separation technology in biology. **2022**, 8,	2
15	Biomarkers of gastric cancer: current advancement. **2022**, 8, e10899	0
14	New insights of liquid biopsy in ovarian cancer. **2022**, 5, 001-011	0
13	Willis Coupling-Induced Acoustic Radiation Force and Torque Reversal. **2022**, 129,	0
12	Label-free tumor cell screening based on IDO1-mediated tryptophan metabolism at single cell level. **2022**, 659, 114936	0
11	Recent advances in micro-/nanostructure array integrated microfluidic devices for efficient separation of circulating tumor cells. **2022**, 12, 34892-34903	0
10	Toward Personalized Nanomedicine: The Critical Evaluation of Micro and Nanodevices for Cancer Biomarker Analysis in Liquid Biopsy. 2205856	0
9	Image-based cell sorting using focused travelling surface acoustic waves. **2023**, 23, 372-387	0
8	Label-free microfluidic cell sorting and detection for rapid blood analysis.	1
7	Recent progress on nanostructure-based enrichment of circulating tumor cells and downstream analysis.	1
6	Transition from Boundary-Driven to Bulk-Driven Acoustic Streaming Due to Nonlinear Thermoviscous Effects at High Acoustic Energy Densities. **2023**, 130,	0
5	Microscale acoustic streaming for biomedical and bioanalytical applications. **2023**, 160, 116958	0
4	Label-Free Separation of Circulating Tumor Cells and Clusters by Alternating Frequency Acoustic Field in a Microfluidic Chip. **2023**, 24, 3338	0
3	Acoustofluidics □changing paradigm in tissue engineering, therapeutics development, and biosensing. **2023**, 23, 1300-1338	0
2	Modelling hybrid acoustofluidic devices for enhancing Nano- and Micro-Particle manipulation in microfluidics. **2023**, 205, 109258	0
1	Separation of Oil from an Oil/Water Mixed Drop under a Lamb Wave Field: A Review. **2023**, 10, 187	0