

Chia-Yuan Chen

List of Publications by Year in descending order

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Version: 2024-02-01

58
papers

925
citations

430754

18
h-index

501076

28
g-index

59
all docs

59
docs citations

59
times ranked

1097
citing authors

#	ARTICLE	IF	CITATIONS
1	Interaction between <i>alk1</i> and blood flow in the development of arteriovenous malformations. <i>Development (Cambridge)</i> , 2011, 138, 1573-1582.	1.2	184
2	Magnetically actuated artificial cilia for optimum mixing performance in microfluidics. <i>Lab on A Chip</i> , 2013, 13, 2834.	3.1	83
3	Cellular-level near-wall unsteadiness of high-hematocrit erythrocyte flow using confocal $\hat{1}/4$ PIV. <i>Experiments in Fluids</i> , 2011, 50, 887-904.	1.1	33
4	Effects of Intraluminal Thrombus on Patient-Specific Abdominal Aortic Aneurysm Hemodynamics via Stereoscopic Particle Image Velocity and Computational Fluid Dynamics Modeling. <i>Journal of Biomechanical Engineering</i> , 2014, 136, 031001.	0.6	33
5	Fabrication of PDMS passive micromixer by lost-wax casting. <i>International Journal of Precision Engineering and Manufacturing</i> , 2015, 16, 2033-2039.	1.1	29
6	Analysis of early embryonic great-vessel microcirculation in zebrafish using high-speed confocal $\hat{1}/4$ PIV. <i>Biorheology</i> , 2011, 48, 305-321.	1.2	28
7	Microfluidics Expands the Zebrafish Potentials in Pharmaceutically Relevant Screening. <i>Advanced Healthcare Materials</i> , 2014, 3, 940-945.	3.9	27
8	Experimental and computational investigation of the patient-specific abdominal aortic aneurysm pressure field. <i>Computer Methods in Biomechanics and Biomedical Engineering</i> , 2015, 18, 981-992.	0.9	27
9	Characterization of neonatal aortic cannula jet flow regimes for improved cardiopulmonary bypass. <i>Journal of Biomechanics</i> , 2013, 46, 362-372.	0.9	25
10	Inducing 3D vortical flow patterns with 2D asymmetric actuation of artificial cilia for high-performance active micromixing. <i>Experiments in Fluids</i> , 2014, 55, 1.	1.1	24
11	Extending Absorption Edge through the Hybrid Resonator-Based Absorber with Wideband and Near-Perfect Absorption in Visible Region. <i>Materials</i> , 2020, 13, 1470.	1.3	24
12	Hydrodynamic influences of artificial cilia beating behaviors on micromixing. <i>Chemical Engineering and Processing: Process Intensification</i> , 2016, 99, 33-40.	1.8	23
13	Characterization of zebrafish larvae suction feeding flow using $\hat{1}/4$ PIV and optical coherence tomography. <i>Experiments in Fluids</i> , 2016, 57, 1.	1.1	21
14	Inherent formation of porous p-type Si nanowires using palladium-assisted chemical etching. <i>Applied Surface Science</i> , 2017, 392, 498-502.	3.1	21
15	Microscale flow propulsion through bioinspired and magnetically actuated artificial cilia. <i>Biomicrofluidics</i> , 2015, 9, 034105.	1.2	20
16	Computational Fluid Dynamics Modeling of the Human Pulmonary Arteries with Experimental Validation. <i>Annals of Biomedical Engineering</i> , 2018, 46, 1309-1324.	1.3	20
17	Efficient micromixing through artificial cilia actuation with fish-schooling configuration. <i>Chemical Engineering Journal</i> , 2015, 259, 391-396.	6.6	19
18	Manipulation of zebrafish \hat{e} ™s orientation using artificial cilia in a microchannel with actively adaptive wall design. <i>Scientific Reports</i> , 2016, 6, 36385.	1.6	18

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19	Axial orientation control of zebrafish larvae using artificial cilia. <i>Microfluidics and Nanofluidics</i> , 2016, 20, 1.	1.0	18
20	Sperm activation through orbital and self-axis revolutions using an artificial cilia embedded serpentine microfluidic platform. <i>Scientific Reports</i> , 2018, 8, 4605.	1.6	18
21	Microfluidic retention of progressively motile zebrafish sperms. <i>Lab on A Chip</i> , 2019, 19, 4033-4042.	3.1	16
22	An artificial cilia-based micromixer towards the activation of zebrafish sperms. <i>Sensors and Actuators B: Chemical</i> , 2017, 244, 541-548.	4.0	15
23	An Integrated Artificial Cilia Based Microfluidic Device for Micropumping and Micromixing Applications. <i>Micromachines</i> , 2017, 8, 260.	1.4	15
24	A noninvasive light driven technique integrated microfluidics for zebrafish larvae transportation. <i>Biomicrofluidics</i> , 2018, 12, 021101.	1.2	14
25	Microfluidic Applications of Artificial Cilia: Recent Progress, Demonstration, and Future Perspectives. <i>Micromachines</i> , 2022, 13, 735.	1.4	14
26	Hemodynamics of the Hepatic Venous Three-Vessel Confluences Using Particle Image Velocimetry. <i>Annals of Biomedical Engineering</i> , 2011, 39, 2398-2416.	1.3	13
27	Time-resolved OCT-1/4PIV: a new microscopic PIV technique for noninvasive depth-resolved pulsatile flow profile acquisition. <i>Experiments in Fluids</i> , 2013, 54, 1.	1.1	13
28	Hydrodynamically efficient micropropulsion through a new artificial cilia beating concept. <i>Microsystem Technologies</i> , 2017, 23, 5893-5902.	1.2	9
29	Microfluidic Transportation Control of Larval Zebrafish through Optomotor Regulations under a Pressure-Driven Flow. <i>Micromachines</i> , 2019, 10, 880.	1.4	9
30	On the improvement of visible-responsive photodegradation through artificial cilia. <i>Sensors and Actuators A: Physical</i> , 2019, 285, 234-240.	2.0	9
31	Influences of textured substrates on the heart rate of developing zebrafish embryos. <i>Nanotechnology</i> , 2013, 24, 265101.	1.3	8
32	Real-Time Remote Control of Artificial Cilia Actuation Using Fingertip Drawing for Efficient Micromixing. <i>Journal of the Association for Laboratory Automation</i> , 2014, 19, 492-497.	2.8	8
33	Thrust and Hydrodynamic Efficiency of the Bundled Flagella. <i>Micromachines</i> , 2019, 10, 449.	1.4	8
34	The evaluation of zebrafish cardiovascular and behavioral functions through microfluidics. <i>Scientific Reports</i> , 2021, 11, 13801.	1.6	8
35	A Shape Memory Alloy-Based Miniaturized Actuator for Catheter Interventions. <i>Cardiovascular Engineering and Technology</i> , 2018, 9, 405-413.	0.7	7
36	Shape-programmable artificial cilia for microfluidics. <i>IScience</i> , 2021, 24, 103367.	1.9	7

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37	High-speed three-dimensional characterization of fluid flows induced by micro-objects in deep microchannels. <i>Biochip Journal</i> , 2013, 7, 95-103.	2.5	5
38	Comprehensive Hydrodynamic Investigation of Zebrafish Tail Beats in a Microfluidic Device with a Shape Memory Alloy. <i>Micromachines</i> , 2021, 12, 68.	1.4	5
39	A smart microfluidic-based fish farm for zebrafish screening. <i>Microfluidics and Nanofluidics</i> , 2021, 25, 1.	1.0	5
40	Endoleak Assessment Using Computational Fluid Dynamics and Image Processing Methods in Stented Abdominal Aortic Aneurysm Models. <i>Computational and Mathematical Methods in Medicine</i> , 2016, 2016, 1-9.	0.7	4
41	A Multi-Inlet Microfluidic Nozzle Head with Shape Memory Alloy-Based Switching for Biomaterial Printing with Precise Flow Control. <i>Biochip Journal</i> , 2020, 14, 340-348.	2.5	4
42	Hydrodynamic benefits of artificial cilia distribution towards photodegradation processes. <i>Sensors and Actuators A: Physical</i> , 2020, 313, 112184.	2.0	4
43	Edible additive effects on zebrafish cardiovascular functionality with hydrodynamic assessment. <i>Scientific Reports</i> , 2020, 10, 16243.	1.6	4
44	A non-invasive acoustic-trapping of zebrafish microfluidics. <i>Biomicrofluidics</i> , 2021, 15, 014109.	1.2	4
45	An aquatic microrobot for microscale flow manipulation. <i>Scientific Reports</i> , 2022, 12, 5041.	1.6	4
46	Simultaneous real-time quantification of blood flow and vascular growth in the chick embryo using optical coherence tomography. , 2014, , .		3
47	Orientation control of zebrafish embryos using artificial cilia in a 3D flow-through microchannel. , 2015, , .		3
48	Efficient metamaterial-based plasmonic sensors for micromixing evaluation. <i>Journal Physics D: Applied Physics</i> , 2016, 49, 035501.	1.3	2
49	Hemodynamic Flow Visualization of Early Embryonic Great Vessels Using $\hat{1}/4$ PIV. <i>Methods in Molecular Biology</i> , 2015, 1189, 17-30.	0.4	2
50	Title is missing!. <i>Journal of Medical and Biological Engineering</i> , 2013, , .	1.0	2
51	In Vivo Hemodynamic Performance of Wild-Type vs. Mutant Zebrafish Embryos Using High-Speed Confocal Micro-PIV. , 2010, , .		1
52	Device Specific Aortic Outflow Cannula Jets Studied Using 2D PIV and High-Performance 3D CFD Simulation. , 2012, , .		1
53	Fluid dynamics analysis of magnetically actuated ciliated nano/micro structures for flow mixing and propulsion applications. , 2013, , .		1
54	Hydrodynamic Investigation of a Wafer Rinse Process Through Numerical Modeling and Flow Visualization Methods. <i>Journal of Fluids Engineering, Transactions of the ASME</i> , 2018, 140, .	0.8	1

#	ARTICLE	IF	CITATIONS
55	Zebrafish sperm activation through an artificial cilia embedded serpentine microfluidic platform. , 2018, , .		1
56	Separation of Amino Acids by Aqueous Two-Phase Electrophoresis on the Micro-Pillar Chips. , 2006, , .		0
57	An artificial cilia based micromixer for superior zebrafish sperm activation. , 2017, , .		0
58	Enhanced Visible-Responsive Photodegradation Through SnFe ₂ O ₄ Nanoparticles with Modified Magnetic Artificial Cilia Actuation. , 2019, , .		0