

Rui Lima

List of Publications by Citations

Source: <https://exaly.com/author-pdf/8822201/rui-lima-publications-by-citations.pdf>

Version: 2024-04-28

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

102
papers

1,955
citations

25
h-index

42
g-index

119
ext. papers

2,397
ext. citations

2.6
avg, IF

5.15
L-index

#	Paper	IF	Citations
102	Biomedical microfluidic devices by using low-cost fabrication techniques: A review. <i>Journal of Biomechanics</i> , 2016 , 49, 2280-2292	2.9	178
101	In vitro blood flow in a rectangular PDMS microchannel: experimental observations using a confocal micro-PIV system. <i>Biomedical Microdevices</i> , 2008 , 10, 153-67	3.7	131
100	Confocal micro-PIV measurements of three-dimensional profiles of cell suspension flow in a square microchannel. <i>Measurement Science and Technology</i> , 2006 , 17, 797-808	2	127
99	Red blood cell motions in high-hematocrit blood flowing through a stenosed microchannel. <i>Journal of Biomechanics</i> , 2009 , 42, 838-43	2.9	80
98	Degradation of diphenhydramine by photo-Fenton using magnetically recoverable iron oxide nanoparticles as catalyst. <i>Chemical Engineering Journal</i> , 2015 , 261, 45-52	14.7	77
97	Radial dispersion of red blood cells in blood flowing through glass capillaries: the role of hematocrit and geometry. <i>Journal of Biomechanics</i> , 2008 , 41, 2188-96	2.9	71
96	In vitro confocal micro-PIV measurements of blood flow in a square microchannel: the effect of the haematocrit on instantaneous velocity profiles. <i>Journal of Biomechanics</i> , 2007 , 40, 2752-7	2.9	68
95	Human red blood cell behavior under homogeneous extensional flow in a hyperbolic-shaped microchannel. <i>Biomicrofluidics</i> , 2013 , 7, 54110	3.2	59
94	Asymmetry of red blood cell motions in a microchannel with a diverging and converging bifurcation. <i>Biomicrofluidics</i> , 2011 , 5, 44120-4412015	3.2	59
93	Measurement of individual red blood cell motions under high hematocrit conditions using a confocal micro-PTV system. <i>Annals of Biomedical Engineering</i> , 2009 , 37, 1546-59	4.7	54
92	Blood Cells Separation and Sorting Techniques of Passive Microfluidic Devices: From Fabrication to Applications. <i>Micromachines</i> , 2019 , 10,	3.3	52
91	A simple microfluidic device for the deformability assessment of blood cells in a continuous flow. <i>Biomedical Microdevices</i> , 2015 , 17, 108	3.7	50
90	Deformation of Red Blood Cells, Air Bubbles, and Droplets in Microfluidic Devices: Flow Visualizations and Measurements. <i>Micromachines</i> , 2018 , 9,	3.3	48
89	Multifunctional graphene-based magnetic nanocarriers for combined hyperthermia and dual stimuli-responsive drug delivery. <i>Materials Science and Engineering C</i> , 2018 , 93, 206-217	8.3	46
88	A microfluidic device for partial cell separation and deformability assessment. <i>Biochip Journal</i> , 2013 , 7, 367-374	4	44
87	A Rapid and Low-Cost Nonlithographic Method to Fabricate Biomedical Microdevices for Blood Flow Analysis. <i>Micromachines</i> , 2015 , 6, 121-135	3.3	44
86	Organ-on-a-Chip: A Preclinical Microfluidic Platform for the Progress of Nanomedicine. <i>Small</i> , 2020 , 16, e2003517	11	40

85	Extensional flow-based microfluidic device: deformability assessment of red blood cells in contact with tumor cells. <i>Biochip Journal</i> , 2014 , 8, 42-47	4	37
84	Haemocompatibility of iron oxide nanoparticles synthesized for theranostic applications: a high-sensitivity microfluidic tool. <i>Journal of Nanoparticle Research</i> , 2016 , 18, 1	2.3	35
83	Axisymmetric polydimethylsiloxane microchannels for in vitro hemodynamic studies. <i>Biofabrication</i> , 2009 , 1, 035005	10.5	35
82	particulate analogue fluids for experimental studies of rheological and hemorheological behavior of glucose-rich RBC suspensions. <i>Biomicrofluidics</i> , 2017 , 11, 054105	3.2	30
81	Generation of micro-sized PDMS particles by a flow focusing technique for biomicrofluidics applications. <i>Biomicrofluidics</i> , 2016 , 10, 014122	3.2	30
80	Properties and Applications of PDMS for Biomedical Engineering: A Review.. <i>Journal of Functional Biomaterials</i> , 2021 , 13,	4.8	28
79	Particulate Blood Analogues Reproducing the Erythrocytes Cell-Free Layer in a Microfluidic Device Containing a Hyperbolic Contraction. <i>Micromachines</i> , 2015 , 7,	3.3	27
78	Red blood cells radial dispersion in blood flowing through microchannels: The role of temperature. <i>Journal of Biomechanics</i> , 2016 , 49, 2293-2298	2.9	25
77	Assessment of the Deformability and Velocity of Healthy and Artificially Impaired Red Blood Cells in Narrow Polydimethylsiloxane (PDMS) Microchannels. <i>Micromachines</i> , 2018 , 9,	3.3	24
76	Blood Flow Behavior in Microchannels: Past, Current and Future Trends 2012 , 513-547		23
75	Wall expansion assessment of an intracranial aneurysm model by a 3D Digital Image Correlation System. <i>Measurement: Journal of the International Measurement Confederation</i> , 2016 , 88, 262-270	4.6	21
74	A Microfluidic Deformability Assessment of Pathological Red Blood Cells Flowing in a Hyperbolic Converging Microchannel. <i>Micromachines</i> , 2019 , 10,	3.3	21
73	Microbubble moving in blood flow in microchannels: effect on the cell-free layer and cell local concentration. <i>Biomedical Microdevices</i> , 2017 , 19, 6	3.7	20
72	Automatic tracking of labeled red blood cells in microchannels. <i>International Journal for Numerical Methods in Biomedical Engineering</i> , 2013 , 29, 977-87	2.6	20
71	In vitro blood flow and cell-free layer in hyperbolic microchannels: Visualizations and measurements. <i>Biochip Journal</i> , 2016 , 10, 9-15	4	19
70	3D Printing Techniques and Their Applications to Organ-on-a-Chip Platforms: A Systematic Review. <i>Sensors</i> , 2021 , 21,	3.8	18
69	3D manufacturing of intracranial aneurysm biomodels for flow visualizations: Low cost fabrication processes. <i>Mechanics Research Communications</i> , 2020 , 107, 103535	2.2	15
68	Low cost microfluidic device for partial cell separation: Micromilling approach 2015 ,		15

67	Biomechanical analysis of PDMS channels using different hyperelastic numerical constitutive models. <i>Mechanics Research Communications</i> , 2018 , 90, 26-33	2.2	13
66	In vitro blood flow visualizations and cell-free layer (CFL) measurements in a microchannel network. <i>Experimental Thermal and Fluid Science</i> , 2019 , 109, 109847	3	13
65	Shrinkage and colour in the production of micro-sized PDMS particles for microfluidic applications. <i>Journal of Micromechanics and Microengineering</i> , 2018 , 28, 075002	2	12
64	Visualization and Measurements of Blood Cells Flowing in Microfluidic Systems and Blood Rheology: A Personalized Medicine Perspective. <i>Journal of Personalized Medicine</i> , 2020 , 10,	3.6	12
63	Thermal Conductivity of Nanofluids: A Review on Prediction Models, Controversies and Challenges. <i>Applied Sciences (Switzerland)</i> , 2021 , 11, 2525	2.6	12
62	A Passive Microfluidic Device Based on Crossflow Filtration for Cell Separation Measurements: A Spectrophotometric Characterization. <i>Biosensors</i> , 2018 , 8,	5.9	12
61	3D Printed Biomodels for Flow Visualization in Stenotic Vessels: An Experimental and Numerical Study. <i>Micromachines</i> , 2020 , 11,	3.3	11
60	Hemodynamic study in 3D printed stenotic coronary artery models: experimental validation and transient simulation. <i>Computer Methods in Biomechanics and Biomedical Engineering</i> , 2021 , 24, 623-636	2.1	11
59	Polydimethylsiloxane Composites Characterization and Its Applications: A Review. <i>Polymers</i> , 2021 , 13,	4.5	10
58	Blood Flow Modeling in Coronary Arteries: A Review. <i>Fluids</i> , 2021 , 6, 53	1.6	10
57	In Vitro Blood Flow Behaviour in Microchannels with Simple and Complex Geometries 2012 ,		9
56	An In Vitro Experimental Evaluation of the Displacement Field in an Intracranial Aneurysm Model. <i>Mechanisms and Machine Science</i> , 2015 , 261-268	0.3	9
55	Blood Particulate Analogue Fluids: A Review. <i>Materials</i> , 2021 , 14,	3.5	9
54	Blood Flow Visualization and Measurements in Microfluidic Devices Fabricated by a Micromilling Technique. <i>Micro and Nanosystems</i> , 2016 , 7, 148-153	0.6	8
53	Bubbles Moving in Blood Flow in a Microchannel Network: The Effect on the Local Hematocrit. <i>Micromachines</i> , 2020 , 11,	3.3	8
52	Fast, flexible and low-cost multiphase blood analogue for biomedical and energy applications. <i>Experiments in Fluids</i> , 2020 , 61, 1	2.5	7
51	Composite Material of PDMS with Interchangeable Transmittance: Study of Optical, Mechanical Properties and Wettability. <i>Journal of Composites Science</i> , 2021 , 5, 110	3	7
50	Pool Boiling of Nanofluids on Biphilic Surfaces: An Experimental and Numerical Study. <i>Nanomaterials</i> , 2021 , 11,	5.4	7

49	Microfluidic Deformability Study of an Innovative Blood Analogue Fluid Based on Giant Unilamellar Vesicles. <i>Journal of Functional Biomaterials</i> , 2018 , 9,	4.8	7
48	Genetic algorithm and particle swarm optimization combined with Powell method 2013 ,		6
47	Microscale Flow Dynamics of Red Blood Cells in Microchannels: An Experimental and Numerical Analysis. <i>Computational Methods in Applied Sciences (Springer)</i> , 2011 , 297-309	0.4	6
46	Confocal Micro-PIV/PTV Measurements of the Blood Flow in Micro-channels 2013 , 131-151		5
45	Computational Simulations in Advanced Microfluidic Devices: A Review. <i>Micromachines</i> , 2021 , 12,	3.3	5
44	Hemozoin and hemoglobin characterization by optical absorption towards a miniaturized spectrophotometric malaria diagnostic system 2017 ,		4
43	Simple Methodology for the Quantitative Analysis of Fatty Acids in Human Red Blood Cells. <i>Chromatographia</i> , 2015 , 78, 1271-1281	2.1	4
42	Pollutant emissions from modern incinerators. <i>International Journal of Environment and Pollution</i> , 2002 , 18, 336	0.7	4
41	Applied Biological Engineering - Principles and Practice 2012 ,		4
40	Flow of Red Blood Cells Suspensions Through Hyperbolic Microcontractions. <i>Lecture Notes in Computational Vision and Biomechanics</i> , 2014 , 151-163	0.3	4
39	Numerical Optimization of a Microchannel Geometry for Nanofluid Flow and Heat Dissipation Assessment. <i>Applied Sciences (Switzerland)</i> , 2021 , 11, 2440	2.6	4
38	A Tailor-Made Protocol to Synthesize Yolk-Shell Graphene-Based Magnetic Nanoparticles for Nanomedicine. <i>Journal of Carbon Research</i> , 2018 , 4, 55	3.3	4
37	Organ-on-a-Chip Platforms for Drug Screening and Delivery in Tumor Cells: A Systematic Review.. <i>Cancers</i> , 2022 , 14,	6.6	4
36	Automatic tracking and deformation measurements of red blood cells flowing through a microchannel with a microstenosis: the keyhole model. <i>Computer Methods in Biomechanics and Biomedical Engineering: Imaging and Visualization</i> , 2016 , 4, 229-237	0.9	3
35	Microfluidic Devices Based on Biomechanics 2018 , 217-263		3
34	Recent Developments on the Thermal Properties, Stability and Applications of Nanofluids in Machining, Solar Energy and Biomedicine. <i>Applied Sciences (Switzerland)</i> , 2022 , 12, 1115	2.6	3
33	PDMS Anatomical Realistic Models for Hemodynamic Studies Using Rapid Prototyping Technology. <i>IFMBE Proceedings</i> , 2010 , 434-437	0.2	3
32	Smart devices 2017 , 331-369		2

31	Red Blood Cell Dispersion in 100 μ m Glass Capillaries: The Temperature Effect. <i>IFMBE Proceedings</i> , 2010 , 1067-1070	0.2	2
30	Technical Note: An effective thermal technology for the detoxification of MSW Fly ash. <i>International Journal of Environmental Technology and Management</i> , 2003 , 3, 212	0.6	2
29	Velocity measurements of blood flow in a rectangular PDMS microchannel assessed by confocal micro-PIV system 2007 , 283-286		2
28	Computation of a Three-Dimensional Flow in a Square Microchannel: A Comparison Between a Particle Method and a Finite Volume Method. <i>Micro and Nanosystems</i> , 2016 , 7, 142-147	0.6	2
27	Visualization and Measurement of the Cell-Free Layer (CFL) in a Microchannel Network. <i>Lecture Notes in Computational Vision and Biomechanics</i> , 2018 , 930-936	0.3	2
26	Manual and Automatic Image Analysis Segmentation Methods for Blood Flow Studies in Microchannels. <i>Micromachines</i> , 2021 , 12,	3.3	2
25	Fluid Flow and Structural Numerical Analysis of a Cerebral Aneurysm Model. <i>Fluids</i> , 2022 , 7, 100	1.6	2
24	Red blood cells deformability as a malaria biomarker 2017 ,		1
23	Cell-free layer analysis in a polydimethylsiloxane microchannel: a global approach. <i>International Journal of Medical Engineering and Informatics</i> , 2016 , 8, 196	0.5	1
22	A numerical and experimental study of acoustic micromixing in 3D microchannels for lab-on-a-chip devices. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference</i> , 2016 , 2016, 5660-5663	0.9	1
21	Automatic tracking of red blood cells in micro channels using OpenCV 2013 ,		1
20	Motion of Red Blood Cells in a Glass MicroChannel: A Global Optimization Approach 2009 ,		1
19	Spectrophotometric characterization of hemozoin as a malaria biomarker 2017 ,		1
18	Thermal Infrared Image Processing to Assess Heat Generated by Magnetic Nanoparticles for Hyperthermia Applications. <i>Lecture Notes in Computer Science</i> , 2015 , 25-34	0.9	1
17	Numerical Simulation of Hyperelastic Behaviour in Aneurysm Models. <i>Lecture Notes in Computational Vision and Biomechanics</i> , 2018 , 937-944	0.3	1
16	Cell-Free Layer (CFL) Measurements in Complex Geometries: Contractions and Bifurcations. <i>Lecture Notes in Computational Vision and Biomechanics</i> , 2014 , 119-132	0.3	1
15	Red Blood Cells (RBCs) Visualisation in Bifurcations and Bends. <i>Lecture Notes in Computational Vision and Biomechanics</i> , 2018 , 945-953	0.3	0
14	Hemodynamic Studies in Coronary Artery Models Manufactured by 3D Printing. <i>Lecture Notes in Mechanical Engineering</i> , 2022 , 191-200	0.4	0

13	Cell-Free Layer Measurements in a Network with Bifurcating Microchannels Using a Global Approach. <i>CIM Series in Mathematical Sciences</i> , 2015 , 53-65	0.8
12	A Comparative Study of Image Processing Methods for the Assessment of the Red Blood Cells Deformability in a Microfluidic Device. <i>Lecture Notes in Computational Vision and Biomechanics</i> , 2018 , 923-929	0.3
11	Blackburn Meadows wastewater treatment works. <i>International Journal of Water</i> , 2002 , 2, 35	0.9
10	Low-Cost Multifunctional Vacuum Chamber for Manufacturing PDMS Based Composites. <i>Machines</i> , 2022 , 10, 92	2.9
9	A203 Blood Cell Motions and Interactions in Microchannels. <i>Journal of the Visualization Society of Japan</i> , 2007 , 27, 141-142	0
8	P-01 OBSERVATION OF THE BLOOD FLOW IN MICROCHANNEL WITH STENOSIS BY CONFOCAL-MICRO-PIV. <i>The Proceedings of the Asian Pacific Conference on Biomechanics Emerging Science and Technology in Biomechanics</i> , 2007 , 2007.3, S89	
7	Tracking Red Blood Cells Flowing through a Microchannel with a Hyperbolic Contraction: An Automatic Method. <i>Lecture Notes in Computational Vision and Biomechanics</i> , 2015 , 105-119	0.3
6	Imaging of Healthy and Malaria-Mimicked Red Blood Cells in Polydimethylsiloxane Microchannels for Determination of Cells Deformability and Flow Velocity. <i>Lecture Notes in Computational Vision and Biomechanics</i> , 2018 , 915-922	0.3
5	Red blood cell motion in experimental micro-circulation and simulations 2013 , 375-376	
4	The Effect of a Static Magnetic Field on the Flow of Iron Oxide Magnetic Nanoparticles Through Glass Capillaries. <i>Lecture Notes in Computational Vision and Biomechanics</i> , 2014 , 181-196	0.3
3	Experimental Studies of the Sedimentation, Stability and Thermal Conductivity of Two Different Nanofluids. <i>Engineering Proceedings</i> , 2021 , 4, 35	0.5
2	Separation Microfluidic Device Fabricated by Micromilling Techniques. <i>Engineering Proceedings</i> , 2021 , 4, 37	0.5
1	Flow Visualizations in a PDMS Cerebral Aneurysm Biomodel. <i>Lecture Notes in Mechanical Engineering</i> , 2023 , 209-215	0.4