

Massimiliano Rossi

List of Publications by Year in descending order

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Version: 2024-02-01

40
papers

1,530
citations

361413

20
h-index

345221

36
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44
all docs

44
docs citations

44
times ranked

1798
citing authors

#	ARTICLE	IF	CITATIONS
1	Micro-Particle Image Velocimetry (μ PIV): Recent developments, applications, and guidelines. Lab on A Chip, 2009, 9, 2551.	6.0	313
2	Ultrasound-induced acoustophoretic motion of microparticles in three dimensions. Physical Review E, 2013, 88, 023006.	2.1	132
3	Surfactant-driven flow transitions in evaporating droplets. Soft Matter, 2016, 12, 1593-1600.	2.7	96
4	On the calibration of astigmatism particle tracking velocimetry for microflows. Measurement Science and Technology, 2011, 22, 015401.	2.6	94
5	General defocusing particle tracking. Lab on A Chip, 2015, 15, 3556-3560.	6.0	91
6	Kinematics of flagellar swimming in <i>Euglena gracilis</i> : Helical trajectories and flagellar shapes. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 13085-13090.	7.1	63
7	Tapered microfluidic chip for the study of biochemical and mechanical response at subcellular level of endothelial cells to shear flow. Lab on A Chip, 2009, 9, 1403.	6.0	59
8	On the effect of particle image intensity and image preprocessing on the depth of correlation in micro-PIV. Experiments in Fluids, 2012, 52, 1063-1075.	2.4	57
9	Clogging in constricted suspension flows. Physical Review E, 2018, 97, 021102.	2.1	55
10	Solutal Marangoni flow as the cause of ring stains from drying salty colloidal drops. Physical Review Fluids, 2019, 4, .	2.5	50
11	Three-Dimensional Phenomena in Microbubble Acoustic Streaming. Physical Review Applied, 2015, 3, .	3.8	48
12	A comparative analysis of the uncertainty of astigmatism- $\frac{1}{4}$ PTV, stereo- $\frac{1}{4}$ PIV, and $\frac{1}{4}$ PIV. Experiments in Fluids, 2012, 52, 605-615.	2.4	44
13	Optimization of astigmatic particle-tracking velocimeters. Experiments in Fluids, 2014, 55, 1.	2.4	39
14	Streaming flow by oscillating bubbles: quantitative diagnostics via particle tracking- $\frac{1}{4}$ velocimetry. Journal of Fluid Mechanics, 2017, 820, 529-548.	3.4	33
15	General defocusing particle tracking: fundamentals and uncertainty assessment. Experiments in Fluids, 2020, 61, 1.	2.4	33
16	Growth control of sessile microbubbles in PDMS devices. Lab on A Chip, 2015, 15, 4607-4613.	6.0	30
17	Collecting cometary dust particles on metal blacks with the COSIMA instrument onboard ROSETTA. Planetary and Space Science, 2014, 103, 309-317.	1.7	28
18	Numerical and experimental characterization of a novel modular passive micromixer. Biomedical Microdevices, 2012, 14, 849-862.	2.8	25

#	ARTICLE	IF	CITATIONS
19	Simultaneous three-dimensional temperature and velocity field measurements using astigmatic imaging of non-encapsulated thermo-liquid crystal (TLC) particles. Lab on A Chip, 2015, 15, 660-663.	6.0	25
20	Interfacial flows in sessile evaporating droplets of mineral water. Physical Review E, 2019, 100, 033103.	2.1	22
21	Non-encapsulated thermo-liquid crystals for digital particle tracking thermography/velocimetry in microfluidics. Microfluidics and Nanofluidics, 2013, 14, 445-456.	2.2	21
22	Formation of a Polymer Surface with a Gradient of Pore Size Using a Microfluidic Chip. Langmuir, 2013, 29, 3797-3804.	3.5	19
23	Three-dimensional streaming flow in confined geometries. Journal of Fluid Mechanics, 2015, 777, 408-429.	3.4	18
24	A fast and robust algorithm for general defocusing particle tracking. Measurement Science and Technology, 2020, 32, 014001.	2.6	18
25	Defocus particle tracking: a comparison of methods based on model functions, cross-correlation, and neural networks. Measurement Science and Technology, 2021, 32, 094011.	2.6	16
26	Synthetic image generator for defocusing and astigmatic PIV/PTV. Measurement Science and Technology, 2020, 31, 017003.	2.6	14
27	Optimization of multiplane $\frac{1}{4}$ PIV for wall shear stress and wall topography characterization. Experiments in Fluids, 2010, 48, 211-223.	2.4	13
28	Volumetric reconstruction of the 3D boundary of stream tubes with general topology using tracer particles. Measurement Science and Technology, 2011, 22, 105405.	2.6	12
29	Particle distribution and velocity in electrokinetically induced banding. Microfluidics and Nanofluidics, 2019, 23, 1.	2.2	12
30	Time-Resolved PIV Technique for High Temporal Resolution Measurement of Mechanical Prosthetic Aortic Valve Fluid Dynamics. International Journal of Artificial Organs, 2007, 30, 153-162.	1.4	11
31	<i>DefocusTracker</i>; A Modular Toolbox for Defocusing-based, Single-Camera, 3D Particle Tracking. Journal of Open Research Software, 2021, 9, 22.	5.9	10
32	PIV Measurements of Flows in Artificial Heart Valves. , 2007, , 55-72.		8
33	How <i>Euglena gracilis</i> swims: Flow field reconstruction and analysis. Physical Review E, 2021, 103, 023102.	2.1	6
34	Size-dependent particle migration and trapping in three-dimensional microbubble streaming flows. Physical Review Fluids, 2020, 5, .	2.5	6
35	Sensitivity to shear stress of non-encapsulated thermochromic liquid crystal (TLC) particles for microfluidic applications. Microfluidics and Nanofluidics, 2016, 20, 1.	2.2	3
36	Flow profiles near receding three-phase contact lines: influence of surfactants. Soft Matter, 2021, 17, 10090-10100.	2.7	2

#	ARTICLE	IF	CITATIONS
37	Experimental investigation of oscillation modes and streaming of an acoustically actuated bubble in a microchannel. , 2019, , .		1
38	Single-Camera 3D PTV Methods for Evaporation-Driven Liquid Flows in Sessile Droplets. Fluid Mechanics and Its Applications, 2020, , 225-236.	0.2	1
39	PIV Application to Fluid Dynamics ofÂBassÂReflexÂPorts. , 2007, , 259-270.		1
40	Microfluidic Chip for Generating Gradient Polymer Films for Biological Applications. Procedia Engineering, 2012, 47, 458-461.	1.2	0