## Pavlos P P Vlachos

List of Publications by Year in descending order

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215 papers

4,591 citations

34 h-index

117625

60 g-index

220 all docs 220 docs citations

times ranked

220

4509 citing authors

#	Article	IF	Citations
1	Review of Collagen I Hydrogels for Bioengineered Tissue Microenvironments: Characterization of Mechanics, Structure, and Transport. Tissue Engineering - Part B: Reviews, 2014, 20, 683-696.	4.8	410
2	Collaborative framework for PIV uncertainty quantification: comparative assessment of methods. Measurement Science and Technology, 2015, 26, 074004.	2.6	182
3	Estimation of uncertainty bounds for individual particle image velocimetry measurements from cross-correlation peak ratio. Measurement Science and Technology, 2013, 24, 065301.	2.6	171
4	Flow shear stress regulates endothelial barrier function and expression of angiogenic factors in a 3D microfluidic tumor vascular model. Cell Adhesion and Migration, 2014, 8, 517-524.	2.7	160
5	Main results of the 4th International PIV Challenge. Experiments in Fluids, 2016, 57, 1.	2.4	138
6	A method for automatic estimation of instantaneous local uncertainty in particle image velocimetry measurements. Experiments in Fluids, 2012, 53, 1133-1147.	2.4	128
7	Digital particle image velocimetry (DPIV) robust phase correlation. Measurement Science and Technology, 2009, 20, 055401.	2.6	125
8	Assessment of pressure field calculations from particle image velocimetry measurements. Measurement Science and Technology, 2010, 21, 105401.	2.6	121
9	Three-Dimensional Microfluidic Collagen Hydrogels for Investigating Flow-Mediated Tumor-Endothelial Signaling and Vascular Organization. Tissue Engineering - Part C: Methods, 2014, 20, 64-75.	2.1	115
10	Phase correlation processing for DPIV measurements. Experiments in Fluids, 2008, 45, 485-500.	2.4	95
11	Tunable Collagen I Hydrogels for Engineered Physiological Tissue Micro-Environments. PLoS ONE, 2015, 10, e0122500.	2.5	95
12	Assessment of advanced windowing techniques for digital particle image velocimetry (DPIV). Measurement Science and Technology, 2009, 20, 075402.	2.6	94
13	Vortices Formed on the Mitral Valve Tips Aid Normal Left Ventricular Filling. Annals of Biomedical Engineering, 2013, 41, 1049-1061.	2.5	90
14	Round gas jets submerged in water. International Journal of Multiphase Flow, 2013, 48, 46-57.	3.4	83
15	The Effect of Vortex Formation on Left Ventricular Filling and Mitral Valve Efficiency. Journal of Biomechanical Engineering, 2006, 128, 527.	1.3	68
16	Improvements on the accuracy of derivative estimation from DPIV velocity measurements. Experiments in Fluids, 2005, 39, 1040-1050.	2.4	65
17	Particle image velocimetry (PIV) uncertainty quantification using moment of correlation (MC) plane. Measurement Science and Technology, 2018, 29, 115301.	2.6	60
18	Particle image velocimetry correlation signal-to-noise ratio metrics and measurement uncertainty quantification. Measurement Science and Technology, 2014, 25, 115301.	2.6	58

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19	Loss of Adrenergic Augmentation of Diastolic Intra-LV Pressure Difference in Patients With Diastolic Dysfunction. JACC: Cardiovascular Imaging, 2012, 5, 861-870.	5.3	54
20	In Vitro, Time-Resolved PIV Comparison of the Effect of Stent Design on Wall Shear Stress. Annals of Biomedical Engineering, 2009, 37, 1310-1321.	2.5	53
21	Effects of Vessel Tortuosity on Coronary Hemodynamics: An Idealized and Patient-Specific Computational Study. Annals of Biomedical Engineering, 2016, 44, 2228-2239.	2.5	51
22	B fibers are the best predictors of cardiac activity during Vagus nerve stimulation. Bioelectronic Medicine, 2018, 4, 5.	2.3	49
23	A model for a laser-induced cavitation bubble. International Journal of Multiphase Flow, 2020, 132, 103433.	3.4	47
24	Adaptive gappy proper orthogonal decomposition for particle image velocimetry data reconstruction. Measurement Science and Technology, 2012, 23, 025303.	2.6	46
25	Axisymmetric wall jet development in confined jet impingement. Physics of Fluids, 2017, 29, .	4.0	45
26	Time-Resolved DPIV Analysis of Vortex Dynamics in a Left Ventricular Model Through Bileaflet Mechanical and Porcine Heart Valve Prostheses. Journal of Biomechanical Engineering, 2004, 126, 714-726.	1.3	44
27	A multi-parametric particle-pairing algorithm for particle tracking in single and multiphase flows. Measurement Science and Technology, 2011, 22, 105406.	2.6	44
28	Developing and fully developed turbulent flow in ribbed channels. Experiments in Fluids, 2011, 50, 1357-1371.	2.4	40
29	Aerodynamics of the flying snake <i>Chrysopelea paradisi</i> : how a bluff body cross-sectional shape contributes to gliding performance. Journal of Experimental Biology, 2014, 217, 382-394.	1.7	40
30	Multi-modality cerebral aneurysm haemodynamic analysis: <i>in vivo</i> 4D flow MRI, <i>in vitro</i> volumetric particle velocimetry and <i>in silico</i> computational fluid dynamics. Journal of the Royal Society Interface, 2019, 16, 20190465.	3.4	40
31	Non-equilibrium trajectory dynamics and the kinematics of gliding in a flying snake. Bioinspiration and Biomimetics, 2010, 5, 045002.	2.9	38
32	A comparative experimental evaluation of uncertainty estimation methods for two-component PIV. Measurement Science and Technology, 2016, 27, 094006.	2.6	38
33	Robust wall gradient estimation using radial basis functions and proper orthogonal decomposition (POD) for particle image velocimetry (PIV) measured fields. Measurement Science and Technology, 2009, 20, 045401.	2.6	37
34	Concept analysis and laboratory observations on a water piercing missile launcher. Ocean Engineering, 2010, 37, 959-965.	4.3	36
35	Stereo-particle image velocimetry uncertainty quantification. Measurement Science and Technology, 2017, 28, 015301.	2.6	36
36	Left ventricular vortex formation is unaffected by diastolic impairment. American Journal of Physiology - Heart and Circulatory Physiology, 2012, 303, H1255-H1262.	3.2	35

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37	Cavity ripple dynamics after pinch-off. Journal of Fluid Mechanics, 2018, 850, 611-623.	3.4	34
38	Density- and viscosity-matched Newtonian and non-Newtonian blood-analog solutions with PDMS refractive index. Experiments in Fluids, 2018, 59, 1.	2.4	33
39	The decay of confined vortex rings. Experiments in Fluids, 2012, 53, 163-171.	2.4	31
40	Pore-scale statistics of flow and transport through porous media. Physical Review E, 2018, 98, 013104.	2.1	31
41	Flow Control of a Sharp-Edged Airfoil. AIAA Journal, 2005, 43, 716-726.	2.6	30
42	Altered Spatial Distribution of the Diastolic Left Ventricular Pressure Difference in Heart Failure. Journal of the American Society of Echocardiography, 2015, 28, 597-605.e1.	2.8	30
43	The role of large-scale vortical structures in transient convective heat transfer augmentation. Journal of Fluid Mechanics, 2013, 718, 89-115.	3.4	28
44	Particle image pattern <i>mutual information</i> and uncertainty estimation for particle image velocimetry. Measurement Science and Technology, 2015, 26, 074001.	2.6	27
45	Uncertainty quantification in density estimation from background-oriented Schlieren measurements. Measurement Science and Technology, 2020, 31, 054002.	2.6	26
46	A direct-measurement thin-film heat flux sensor array. Measurement Science and Technology, 2010, 21, 105201.	2.6	25
47	Lift and wakes of flying snakes. Physics of Fluids, 2014, 26, .	4.0	25
48	Proper orthogonal decomposition truncation method for data denoising and order reduction. Experiments in Fluids, 2017, 58, 1.	2.4	25
49	Unsteady separated flows over three-dimensional slender bodies. Progress in Aerospace Sciences, 2004, 40, 291-320.	12.1	24
50	In Vitro Comparison of the Effect of Stent Configuration on Wall Shear Stress Using Time-resolved Particle Image Velocimetry. Annals of Biomedical Engineering, 2010, 38, 889-902.	2.5	24
51	Hemodynamics of Stent Implantation Procedures in Coronary Bifurcations: An In Vitro Study. Annals of Biomedical Engineering, 2017, 45, 542-553.	2.5	24
52	Methods for Digital Particle Image Sizing (DPIS): Comparisons and improvements. Flow Measurement and Instrumentation, 2009, 20, 207-219.	2.0	23
53	Hydrodynamic attraction of bacteria to gas and liquid interfaces. Physical Review E, 2019, 100, 062605.	2.1	23
54	Time-scale for critical growth of partial and supercavitation development over impulsively translating projectiles. International Journal of Multiphase Flow, 2012, 38, 73-86.	3.4	22

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55	Computation of finite-time Lyapunov exponents from time-resolved particle image velocimetry data. Experiments in Fluids, 2014, 55, 1.	2.4	22
56	4D Flow MRI Pressure Estimation Using Velocity Measurement-Error-Based Weighted Least-Squares. IEEE Transactions on Medical Imaging, 2020, 39, 1668-1680.	8.9	22
57	DPIV Measurements of Flow Disturbances in Stented Artery Models: Adverse affects of Compliance Mismatch. Journal of Biomechanical Engineering, 2004, 126, 559-566.	1.3	21
58	Volumetric particle tracking velocimetry (PTV) uncertainty quantification. Experiments in Fluids, 2020, 61, 1.	2.4	21
59	Performance characterization of spring actuated autoinjector devices for Emgality and Aimovig. Current Medical Research and Opinion, 2020, 36, 1343-1354.	1.9	21
60	To seal or not to seal: The closure dynamics of a splash curtain. Physical Review Fluids, 2020, 5, .	2.5	21
61	Dogs lap using acceleration-driven open pumping. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 15798-15802.	7.1	20
62	Multi-objective history matching of surfactant-polymer flooding. Fuel, 2018, 228, 418-428.	6.4	20
63	Fibronectin-Expressing Mesenchymal Tumor Cells Promote Breast Cancer Metastasis. Cancers, 2020, 12, 2553.	3.7	20
64	Hydrodynamic Effects of Compliance Mismatch in Stented Arteries. Journal of Biomechanical Engineering, 2011, 133, 021008.	1.3	19
65	Dot tracking methodology for background-oriented schlieren (BOS). Experiments in Fluids, 2019, 60, 1.	2.4	19
66	Disabledâ€2 modulates homotypic and heterotypic platelet interactions by binding to sulfatides. British Journal of Haematology, 2011, 154, 122-133.	2.5	18
67	Flow Measurements in a Blood-Perfused Collagen Vessel Using X-Ray Micro-Particle Image Velocimetry. PLoS ONE, 2013, 8, e81198.	2.5	18
68	Vortex Formation Time is Not an Index of Ventricular Function. Journal of Cardiovascular Translational Research, 2015, 8, 54-58.	2.4	18
69	Cardiac and respiratory-gated volumetric murine ultrasound. International Journal of Cardiovascular Imaging, 2018, 34, 713-724.	1.5	18
70	The Physical Mechanism of Heat Transfer Augmentation in Stagnating Flows Subject to Freestream Turbulence. Journal of Heat Transfer, 2011, 133, .	2.1	17
71	Structure, Sulfatide Binding Properties, and Inhibition of Platelet Aggregation by a Disabled-2 Protein-derived Peptide. Journal of Biological Chemistry, 2012, 287, 37691-37702.	3.4	17
72	A theoretical analysis of pitch stability during gliding in flying snakes. Bioinspiration and Biomimetics, 2014, 9, 025014.	2.9	17

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73	Evaluation of multiphase flotation models in grid turbulence via Particle Image Velocimetry. International Journal of Mineral Processing, 2006, 80, 133-143.	2.6	16
74	Improved accuracy of time-resolved micro-Particle Image Velocimetry using phase-correlation and confocal microscopy. Microfluidics and Nanofluidics, 2013, 14, 431-444.	2.2	15
75	Noncoalescence in the Oblique Collision of Fluid Jets. Physical Review Letters, 2013, 110, 124502.	7.8	15
76	Time-Resolved Particle Image Velocimetry Measurements with Wall Shear Stress and Uncertainty Quantification for the FDA Nozzle Model. Cardiovascular Engineering and Technology, 2016, 7, 7-22.	1.6	15
77	Measurement of the flow field induced by a spark plasma using particle image velocimetry. Experiments in Fluids, 2018, 59, 1.	2.4	15
78	Isogeometric analysis of subcutaneous injection of monoclonal antibodies. Computer Methods in Applied Mechanics and Engineering, 2021, 373, 113550.	6.6	15
79	Two regime cooling in flow induced by a spark discharge. Physical Review Fluids, 2020, 5, .	2.5	15
80	Post-Stall Flow Control of Sharp-Edged Wings via Unsteady Blowing. Journal of Aircraft, 2006, 43, 1738-1746.	2.4	14
81	The Effect of Free Surface on the Vortex Shedding From Inclined Circular Cylinders. Journal of Fluids Engineering, Transactions of the ASME, 2008, 130, .	1.5	14
82	Time-Resolved DPIV Investigation of Pulsatile Flow in Symmetric Stenotic Arteries—Effects of Phase Angle. Journal of Biomechanical Engineering, 2010, 132, 031010.	1.3	14
83	Stereo-PIV measurements of vapor-induced flow modifications in confined jet impingement boiling. International Journal of Multiphase Flow, 2016, 84, 19-33.	3.4	14
84	Pulsatile pipe flow transition: Flow waveform effects. Physics of Fluids, 2018, 30, .	4.0	14
85	Microscale, scanning defocusing volumetric particle-tracking velocimetry. Experiments in Fluids, 2019, 60, 1.	2.4	14
86	Using uncertainty to improve pressure field reconstruction from PIV/PTV flow measurements. Experiments in Fluids, 2020, $61$ , $1$ .	2.4	14
87	An experimentally validated dynamic model for spring-driven autoinjectors. International Journal of Pharmaceutics, 2021, 594, 120008.	<b>5.</b> 2	14
88	Flow field evolution and entrainment in a free surface plunging jet. Physical Review Fluids, 2019, 4, .	2.5	14
89	Local Blood Flow Patterns in Stented Coronary Bifurcations: An Experimental and Numerical Study. Journal of Applied Biomaterials and Functional Materials, 2015, 13, 116-126.	1.6	13
90	PIV/BOS synthetic image generation in variable density environments for error analysis and experiment design. Measurement Science and Technology, 2019, 30, 085302.	2.6	13

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91	Flexible Margin Kinematics and Vortex Formation of Aurelia aurita and Robojelly. PLoS ONE, 2014, 9, e98310.	2.5	13
92	The biomechanics of autoinjector-skin interactions during dynamic needle insertion. Journal of Biomechanics, 2022, 134, 110995.	2.1	13
93	Vortex rings in radially confined domains. Experiments in Fluids, 2012, 53, 1033-1044.	2.4	12
94	Experimental determination of three-dimensional finite-time Lyapunov exponents in multi-component flows. Experiments in Fluids, 2014, 55, 1.	2.4	12
95	A novel in vitro ischemia/reperfusion injury model. Archives of Pharmacal Research, 2009, 32, 421-429.	6.3	11
96	Assessment of Left Ventricular Diastolic Function Using 4-Dimensional Phase-Contrast Cardiac Magnetic Resonance. Journal of Computer Assisted Tomography, 2011, 35, 108-112.	0.9	11
97	Unstable Displacement of Non-aqueous Phase Liquids with Surfactant and Polymer. Transport in Porous Media, 2019, 126, 455-474.	2.6	11
98	A time-resolved DPIV study of the unsteady character of the flow over a surface-mounted prism. Journal of Wind Engineering and Industrial Aerodynamics, 2002, 90, 543-553.	3.9	10
99	Uncertainty-based weighted least squares density integration for background-oriented schlieren. Experiments in Fluids, 2020, $61,1.$	2.4	10
100	Vortex rings drive entrainment and cooling in flow induced by a spark discharge. Physical Review Fluids, 2020, 5, .	2.5	10
101	Laminar mixing using oscillating cantilevered ionic polymer actuators. Sensors and Actuators A: Physical, 2009, 153, 105-113.	4.1	9
102	Measurement of fluid rotation, dilation, and displacement in particle image velocimetry using a Fourier–Mellin cross-correlation. Measurement Science and Technology, 2015, 26, 035301.	2.6	9
103	Characterization of Fluid Motion Induced by Nanosecond Spark Plasmas: Using Particle Image Velocimetry and Background Oriented Schlieren. , 2018, , .		9
104	Assessment of methodologies to calculate intraventricular pressure differences in computational models and patients. Medical and Biological Engineering and Computing, 2018, 56, 469-481.	2.8	9
105	Estimation of the probability density function of random displacements from images. Physical Review E, 2020, 102, 033305.	2.1	9
106	Effect of surfactant on bubble collisions on a free surface. Physical Review Fluids, 2017, 2, .	2.5	9
107	Automatic Particle Image Velocimetry Uncertainty Quantification., 2010,,.		8
108	Application of singularity expansion method for monitoring the deployment of arterial stents. Microwave and Optical Technology Letters, 2012, 54, 2241-2246.	1.4	8

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109	Wall Shear Stress Measurements in an Arterial Flow Bioreactor. Cardiovascular Engineering and Technology, 2012, 3, 101-111.	1.6	8
110	Delay of left ventricular longitudinal expansion with diastolic dysfunction: impact on load dependence of eâ $\in$ 2 and longitudinal strain rate. Physiological Reports, 2014, 2, e12082.	1.7	8
111	Uncertainty amplification due to density/refractive index gradients in background-oriented schlieren experiments. Experiments in Fluids, 2020, 61, 1.	2.4	8
112	The Interface Motion and Hydrodynamic Shear of the Liquid Slosh in Syringes. Pharmaceutical Research, 2021, 38, 257-275.	3.5	8
113	The aerodynamics of flying snake airfoils in tandem configuration. Journal of Experimental Biology, 2021, 224, .	1.7	8
114	Modeling cavitation bubble dynamics in an autoinjector and its implications on drug molecules. International Journal of Pharmaceutics, 2021, 608, 121062.	5.2	8
115	Colour-Doppler echocardiography flow field velocity reconstruction using a streamfunction–vorticity formulation. Journal of the Royal Society Interface, 2020, 17, 20200741.	3.4	8
116	A New Particle Image Velocimetry Technique for Turbomachinery Applications. Journal of Turbomachinery, $2016,138,138$	1.7	7
117	A tomographic-PIV investigation of vapor-induced flow structures in confined jet impingement boiling. International Journal of Multiphase Flow, 2016, 84, 86-97.	3.4	7
118	Mixture theory modeling for characterizing solute transport in breast tumor tissues. Journal of Biological Engineering, 2019, 13, 46.	4.7	7
119	The Use of Active Ionic Polymers in Dynamic Skin Friction Measurements. , 2004, , 667.		6
120	A Scaling Parameter for Predicting Pressure Wave Reflection in Stented Arteries. Journal of Medical Devices, Transactions of the ASME, 2009, 3, .	0.7	6
121	A mechanism for mitigation of blade–vortex interaction using leading edge blowing flow control. Experiments in Fluids, 2009, 47, 411-426.	2.4	6
122	Calculating Intraventricular Pressure Difference Using a Multi-Beat Spatiotemporal Reconstruction of Color M-Mode Echocardiography. Annals of Biomedical Engineering, 2014, 42, 2466-2479.	2.5	6
123	Diastolic Intra–Left Ventricular Pressure Difference During Exercise: Strong Determinant and Predictor of Exercise Capacity in Patients With Heart Failure. Journal of Cardiac Failure, 2019, 25, 268-277.	1.7	6
124	Super Spatio-Temporal Resolution, Digital PIV System for Multi-Phase Flows With Phase Differentiation and Simultaneous Shape and Size Quantification., 2002,, 635.		5
125	High-Speed Digital-Particle-Image-Velocimetry Study of Vortex Breakdown. AIAA Journal, 2005, 43, 642-650.	2.6	5
126	Dispersion of ferrofluid aggregates in steady flows. Physics of Fluids, 2011, 23, 127102.	4.0	5

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127	Multispectral processing for color particle image velocimetry. Microfluidics and Nanofluidics, 2014, 17, 729-743.	2.2	5
128	Experimental and Numerical Study of Flow Induced by Nanosecond Repetitively Pulsed Discharges. , 2019, , .		5
129	Shock generated vorticity in spark discharges. Journal Physics D: Applied Physics, 2021, 54, 315202.	2.8	5
130	Divergence-Free Constrained Phase Unwrapping and Denoising for 4D Flow MRI Using Weighted Least-Squares. IEEE Transactions on Medical Imaging, 2021, 40, 3389-3399.	8.9	5
131	Uncertainty of PIV/PTV based Eulerian pressure estimation using velocity uncertainty. Measurement Science and Technology, 2022, 33, 065303.	2.6	5
132	Uncertainty estimation for ensemble particle image velocimetry. Measurement Science and Technology, 2022, 33, 085302.	2.6	5
133	On the Accuracy of Wall Shear Stress Using DPIV. , 2004, , 691.		4
134	Design and Wind Tunnel Performance Testing of a New Omnidirectional Roof Vent. Journal of Architectural Engineering, 2007, 13, 18-21.	1.6	4
135	Analysis of the Parallel Blade Vortex Interaction With Leading Edge Blowing Flow Control Using the Proper Orthogonal Decomposition., 2007,, 1523.		4
136	Development of ionic polymer transducers as flow shear stress sensors: effects of electrode architecture. , $2007$ , , .		4
137	Presence and Implication of Temporal Nonuniformity of Early Diastolic Left Ventricular Wall Expansion in Patients With Heart Failure. Journal of Cardiac Failure, 2016, 22, 945-953.	1.7	4
138	Development and Validation of a Phase-Filtered Moving Ensemble Correlation for Echocardiographic Particle Image Velocimetry. Ultrasound in Medicine and Biology, 2018, 44, 477-488.	1.5	4
139	Data assimilation for modeling cavitation bubble dynamics. Experiments in Fluids, 2021, 62, 1.	2.4	4
140	A method for direct estimation of left ventricular global longitudinal strain rate from echocardiograms. Scientific Reports, 2022, 12, 4008.	3.3	4
141	Comparative Study of Established DPIV Algorithms for Planar Velocity Measurements. , 2002, , 23.		3
142	Modeling Bias Error in 4D Flow MRI Velocity Measurements. IEEE Transactions on Medical Imaging, 2022, 41, 1802-1812.	8.9	3
143	Experimental Study of the Stability of a High-Speed Gas Jet Under the Influence of Liquid Cross-Flow., 2007,, 599.		2
144	Liquid Entrainment by Round Turbulent Gas Jets Submerged in Water., 2011,,.		2

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145	Numerical modeling and experiments of coarsening foam. International Journal of Mineral Processing, 2011, 98, 66-73.	2.6	2
146	Acoustic source separation for the detection of coronary artery sounds. Journal of the Acoustical Society of America, 2011, 130, 4158-4166.	1.1	2
147	Numerical investigation of pulsatile flow in endovascular stents. Physics of Fluids, 2013, 25, 091905.	4.0	2
148	PIV Uncertainty: Computational and Experimental Evaluation of the Peak Ratio Method., 2016,,.		2
149	Nanoparticle flow velocimetry with image phase correlation for confocal laser scanning microscopy. Measurement Science and Technology, 2016, 27, 104003.	2.6	2
150	Progression of left ventricular diastolic function in the neonate and early childhood from transmitral color M-mode filling analysis. Pediatric Research, 2021, 89, 987-995.	2.3	2
151	Filamentary surface plasma discharge flow length and time scales. Journal Physics D: Applied Physics, 2021, 54, 205201.	2.8	2
152	Stable Thermally-Modulated Nanodroplet Ultrasound Contrast Agents. Nanomaterials, 2021, 11, 2225.	4.1	2
153	Automated Peak Prominence-Based Iterative Dijkstra's Algorithm for Segmentation of B-Mode Echocardiograms. IEEE Transactions on Biomedical Engineering, 2022, 69, 1595-1607.	4.2	2
154	A multi-modality approach for enhancing 4D flow magnetic resonance imaging via sparse representation. Journal of the Royal Society Interface, 2022, 19, 20210751.	3.4	2
155	Determinants of altered left ventricular suction in pre-capillary pulmonary hypertension. European Heart Journal Cardiovascular Imaging, 2022, 23, 1399-1406.	1.2	2
156	$\mbox{\sc b}\mbox{\sc Spatiotemporal}$ Measurement of Concentration-Dependent Diffusion Coefficient $\mbox{\sc /b}\mbox{\sc .}$ Physics of Fluids, 0, , .	4.0	2
157	Time-Resolved Spray-Droplet Velocity and Size Measurements via Single Camera Laser Sheet Imaging and Planar DPIV., 2002,, 51.		1
158	Post-Stall Flow Control of Sharp-Edged Wings via Unsteady Blowing. , 2003, , .		1
159	A Time Resolved DPIV In-Vitro Evaluation of Coronary Stents in Realistic Conditions: Part I — Influence of Stent Configuration. , 2008, , .		1
160	Micro deposition method: a novel fabrication method for ionic polymer metallic composites. Proceedings of SPIE, 2008, , .	0.8	1
161	The Penetration of Submerged Round Turbulent Gas Jets in Water. , 2010, , .		1
162	Long Term Dynamics of Water-Entry Cavity. , 2010, , .		1

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163	Wall Shear Stress Measurements in an Arterial Flow Bioreactor. , 2011, , .		1
164	Non-equilibrium trajectory dynamics and the kinematics of gliding in a flying snake. Bioinspiration and Biomimetics, 2011, 6, 019501.	2.9	1
165	Estimation of Uncertainty Bounds From Cross Correlation Peak Ratio for Individual PIV Measurements. , 2012, , .		1
166	Multi-dimensional confocal laser scanning microscopy image correlation for nanoparticle flow velocimetry. Microfluidics and Nanofluidics, 2018, 22, $1$ .	2.2	1
167	Study of cooling and the effect of energy deposited in a single nanosecond spark plasma discharge using simultaneous 50 kHz PIV and BOS. , 2020, , .		1
168	Experimental Characterization of Flow Induced by a Nanosecond Surface Discharge. , 2020, , .		1
169	A Wavelet Approach to the Estimation of Left Ventricular Early Filling Wave Propagation Velocity from Color M-Mode Echocardiograms. Ultrasound in Medicine and Biology, 2021, 47, 1397-1407.	1.5	1
170	Meta-uncertainty for particle image velocimetry. Measurement Science and Technology, 2021, 32, 104002.	2.6	1
171	On flowing soap films as experimental models of 2D Navier–Stokes flows. Experiments in Fluids, 2021, 62, 1.	2.4	1
172	Improvements to the Dynamic Range of Velocity Measurements Using DPIV., 2006,,.		1
173	Biomedical research applications of a novel doubleâ€layer parallelâ€plate flow chamber. FASEB Journal, 2007, 21, A1219.	0.5	1
174	A multilayer design of parallelâ€plate flow chamber for studies of endothelial cell response to fluid shear stress. FASEB Journal, 2007, 21, A484.	0.5	1
175	Flow Control over Trapezoidal-Wing Planforms with Sharp Edges. , 2006, , .		O
176	New approaches in the measurement of shear stress and heat flux. , 2006, 6174, 610.		0
177	Phase Correlation Processing for DPIV Measurements: Part I — Spatial Domain Analysis. , 2007, , .		O
178	Mixing at Low Reynolds Numbers by Vibrating Cantilevered Ionic Polymers., 2007,,.		0
179	Compensating for the Phosphorescent Persistence in Intensified Cameras for Micro-PIV., 2008,,.		0
180	Analysis of Passive Wake Mixing Techniques Using Time Resolved Digital Particle Image Velocimetry. , 2008, , .		0

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181	Observation of a Critical Time Scale for Supercavitation Development and the Effect of Gas Leakage. , 2008, , .		О
182	Effect of Stent Design Parameters on Coronary Artery Flow., 2009,,.		0
183	Investigation of the Relationship Between Color M-Mode Early Diastolic Propagation Velocity and Left Ventricular Adverse Pressure Gradients. , 2010, , .		0
184	Organization of Cylinder Wake Using a Splitter-Plate Active Flow Control. , 2010, , .		0
185	Vortex Ring Formation in Wall-Bounded Domains. , 2010, , .		0
186	A Relationship Between Pressure Fields and Flow Patterns During Left Ventricular Diastolic Dysfunction Using 2D Phase Contrast MRI. , 2010, , .		0
187	The Effect of Mach Number and Aspect Ratio on the Interfacial Characteristics of a Submerged Rectangular Gas Jet. , 2010, , .		0
188	Parametric Investigation of Magnetic Particle Transport for Targeted Drug Delivery Applications. , 2011, , .		0
189	A Method for Identifying and Visualizing Foreign Particle Motion Using Time-Resolved Particle Tracking Velocimetry. Journal of Turbomachinery, $2011,133,.$	1.7	0
190	Experimental Investigation of the Local Blood Flow Pattern in Stented Coronary Bifurcations., 2011,,.		0
191	A Multi-Parametric Particle Pairing Algorithm for Particle Tracking Velocimetry in Single and Multiphase Flows. , $2011,\ldots$		0
192	Estimation of Left Ventricular Wall Stiffness by Analysis of Late Diastolic Pressure Components. , 2011, , .		0
193	Development of a 3D Microfluidic Culture Model to Study the Effect of Shear Stress on Tumor Angiogenesis. , $2011, \ldots$		0
194	Blood Flow Characterization in a Perfused Collagen Vessel Bioreactor Using X-Ray Micro-PIV., 2012,,.		0
195	Tissue Engineered Tumor Microvessels to Study the Role of Flow Shear Stress on Endothelial Barrier Function., 2013,,.		0
196	Visualization of Confined Jet Impingement With Boiling Using Time-Resolved Stereo-PIV., 2015,,.		0
197	PIV/BOS Synthetic Image Generation in Variable Density Environments for Error Analysis and Experiment Design. , $2017,\ldots$		0
198	Universality of vortex ring decay in the left ventricle. Journal of Biomechanics, 2020, 103, 109695.	2.1	0

#	Article	IF	Citations
199	Haemodynamic dependence of mechano-genetic evolution of the cardiovascular system in Japanese medaka. Journal of the Royal Society Interface, 2021, 18, 20210752.	3.4	O
200	Characterization of Hemodynamic Performance and Degree of Flow Redirection in the Left Ventricle Dependent on the Mitral Mechanical Heart Valve Orientation. , 2002, , .		0
201	High Spatio-Temporal Resolution Digital Particle Image Velocimetry Near Compliant, Dynamically Moving Boundaries. , 2002, , .		0
202	Automatic MRI Image Segmentation and Left Ventricle Surface Reconstruction for Characterizing Myocardial Muscle Function., 2002,,.		0
203	Application of Higher-Order Compact Finite Difference Schemes to Out of Plane Vorticity Measurements. , 2003, , .		0
204	Phase Correlation Processing for DPIV Measurements: Part II â€" Spectral Domain Analysis. , 2007, , .		0
205	Spatiotemporally-Resolved Dynamics of Dispersing Ferrofluid Aggregates. , 2008, , .		0
206	The Dynamics of Accumulating Ferrofluid Aggregates. , 2008, , .		0
207	Spatiotemporal Development of Transitional Wall Jets. , 2008, , .		0
208	Robust Gradient Estimation Schemes Using Radial Basis Functions. , 2008, , .		0
209	Time Resolved DPIV in a Transonic Turbine Cascade. , 2008, , .		0
210	Improved DPIV Accuracy Using Advanced Windowing Techniques. , 2008, , .		0
211	2D Analysis of Acoustic Transfer Through the Chest Cavity of Sounds Associated With Coronary Artery Disease. , 2009, , .		0
212	Left Ventricular Vortex Ring Dynamics and Their Association to Early Diastolic Filling., 2011,,.		0
213	Shear Stress Mediates Angiogenic Gene Expression in a Microfluidic Tumor Vascular Model. , 2012, , .		0
214	Uncertainty Estimations for Particle Image Velocimetry in a Medical Device Analog (Nozzle) Model., 2013,,.		0
215	Abstract 106: Characterizing Aortic Wall Dynamics in Murine Models of Abdominal Aortic Aneurysms Using Ultrasound Imaging. Arteriosclerosis, Thrombosis, and Vascular Biology, 2016, 36, .	2.4	0