Pavlos P P Vlachos

List of Publications by Year in descending order

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215 papers

4,591 citations

34 h-index 145109 60 g-index

220 all docs 220 docs citations

220 times ranked 5050 citing authors

#	Article	IF	CITATIONS
1	Automated Peak Prominence-Based Iterative Dijkstra's Algorithm for Segmentation of B-Mode Echocardiograms. IEEE Transactions on Biomedical Engineering, 2022, 69, 1595-1607.	2.5	2
2	A multi-modality approach for enhancing 4D flow magnetic resonance imaging via sparse representation. Journal of the Royal Society Interface, 2022, 19, 20210751.	1.5	2
3	Determinants of altered left ventricular suction in pre-capillary pulmonary hypertension. European Heart Journal Cardiovascular Imaging, 2022, 23, 1399-1406.	0.5	2
4	Modeling Bias Error in 4D Flow MRI Velocity Measurements. IEEE Transactions on Medical Imaging, 2022, 41, 1802-1812.	5.4	3
5	Uncertainty of PIV/PTV based Eulerian pressure estimation using velocity uncertainty. Measurement Science and Technology, 2022, 33, 065303.	1.4	5
6	A method for direct estimation of left ventricular global longitudinal strain rate from echocardiograms. Scientific Reports, 2022, 12, 4008.	1.6	4
7	The biomechanics of autoinjector-skin interactions during dynamic needle insertion. Journal of Biomechanics, 2022, 134, 110995.	0.9	13
8	Uncertainty estimation for ensemble particle image velocimetry. Measurement Science and Technology, 2022, 33, 085302.	1.4	5
9	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.	1.1	2
10	Isogeometric analysis of subcutaneous injection of monoclonal antibodies. Computer Methods in Applied Mechanics and Engineering, 2021, 373, 113550.	3.4	15
11	An experimentally validated dynamic model for spring-driven autoinjectors. International Journal of Pharmaceutics, 2021, 594, 120008.	2.6	14
12	The Interface Motion and Hydrodynamic Shear of the Liquid Slosh in Syringes. Pharmaceutical Research, 2021, 38, 257-275.	1.7	8
13	Filamentary surface plasma discharge flow length and time scales. Journal Physics D: Applied Physics, 2021, 54, 205201.	1.3	2
14	Data assimilation for modeling cavitation bubble dynamics. Experiments in Fluids, 2021, 62, 1.	1.1	4
15	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.	0.7	1
16	Shock generated vorticity in spark discharges. Journal Physics D: Applied Physics, 2021, 54, 315202.	1.3	5
17	Meta-uncertainty for particle image velocimetry. Measurement Science and Technology, 2021, 32, 104002.	1.4	1
18	The aerodynamics of flying snake airfoils in tandem configuration. Journal of Experimental Biology, 2021, 224, .	0.8	8

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19	On flowing soap films as experimental models of 2D Navier–Stokes flows. Experiments in Fluids, 2021, 62, 1.	1.1	1
20	Stable Thermally-Modulated Nanodroplet Ultrasound Contrast Agents. Nanomaterials, 2021, 11, 2225.	1.9	2
21	Modeling cavitation bubble dynamics in an autoinjector and its implications on drug molecules. International Journal of Pharmaceutics, 2021, 608, 121062.	2.6	8
22	Divergence-Free Constrained Phase Unwrapping and Denoising for 4D Flow MRI Using Weighted Least-Squares. IEEE Transactions on Medical Imaging, 2021, 40, 3389-3399.	5.4	5
23	Haemodynamic dependence of mechano-genetic evolution of the cardiovascular system in Japanese medaka. Journal of the Royal Society Interface, 2021, 18, 20210752.	1.5	0
24	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
25	4D Flow MRI Pressure Estimation Using Velocity Measurement-Error-Based Weighted Least-Squares. IEEE Transactions on Medical Imaging, 2020, 39, 1668-1680.	5.4	22
26	A model for a laser-induced cavitation bubble. International Journal of Multiphase Flow, 2020, 132, 103433.	1.6	47
27	Uncertainty-based weighted least squares density integration for background-oriented schlieren. Experiments in Fluids, 2020, $61,1.$	1.1	10
28	Volumetric particle tracking velocimetry (PTV) uncertainty quantification. Experiments in Fluids, 2020, 61, 1.	1.1	21
29	Estimation of the probability density function of random displacements from images. Physical Review E, 2020, 102, 033305.	0.8	9
30	Fibronectin-Expressing Mesenchymal Tumor Cells Promote Breast Cancer Metastasis. Cancers, 2020, 12, 2553.	1.7	20
31	Using uncertainty to improve pressure field reconstruction from PIV/PTV flow measurements. Experiments in Fluids, 2020, 61, 1.	1.1	14
32	Uncertainty amplification due to density/refractive index gradients in background-oriented schlieren experiments. Experiments in Fluids, 2020, 61 , 1 .	1.1	8
33	Performance characterization of spring actuated autoinjector devices for Emgality and Aimovig. Current Medical Research and Opinion, 2020, 36, 1343-1354.	0.9	21
34	Universality of vortex ring decay in the left ventricle. Journal of Biomechanics, 2020, 103, 109695.	0.9	0
35	Experimental Characterization of Flow Induced by a Nanosecond Surface Discharge. , 2020, , .		1
36	Uncertainty quantification in density estimation from background-oriented Schlieren measurements. Measurement Science and Technology, 2020, 31, 054002.	1.4	26

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37	Two regime cooling in flow induced by a spark discharge. Physical Review Fluids, 2020, 5, .	1.0	15
38	To seal or not to seal: The closure dynamics of a splash curtain. Physical Review Fluids, 2020, 5, .	1.0	21
39	Vortex rings drive entrainment and cooling in flow induced by a spark discharge. Physical Review Fluids, 2020, 5, .	1.0	10
40	Colour-Doppler echocardiography flow field velocity reconstruction using a streamfunction–vorticity formulation. Journal of the Royal Society Interface, 2020, 17, 20200741.	1.5	8
41	Dot tracking methodology for background-oriented schlieren (BOS). Experiments in Fluids, 2019, 60, 1.	1.1	19
42	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.	1.5	40
43	Microscale, scanning defocusing volumetric particle-tracking velocimetry. Experiments in Fluids, 2019, 60, 1.	1.1	14
44	Mixture theory modeling for characterizing solute transport in breast tumor tissues. Journal of Biological Engineering, 2019, 13, 46.	2.0	7
45	PIV/BOS synthetic image generation in variable density environments for error analysis and experiment design. Measurement Science and Technology, 2019, 30, 085302.	1.4	13
46	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.	0.7	6
47	Hydrodynamic attraction of bacteria to gas and liquid interfaces. Physical Review E, 2019, 100, 062605.	0.8	23
48	Experimental and Numerical Study of Flow Induced by Nanosecond Repetitively Pulsed Discharges. , 2019, , .		5
49	Unstable Displacement of Non-aqueous Phase Liquids with Surfactant and Polymer. Transport in Porous Media, 2019, 126, 455-474.	1.2	11
50	Flow field evolution and entrainment in a free surface plunging jet. Physical Review Fluids, 2019, 4, .	1.0	14
51	Cardiac and respiratory-gated volumetric murine ultrasound. International Journal of Cardiovascular Imaging, 2018, 34, 713-724.	0.7	18
52	Pulsatile pipe flow transition: Flow waveform effects. Physics of Fluids, 2018, 30, .	1.6	14
53	Development and Validation of a Phase-Filtered Moving Ensemble Correlation for Echocardiographic Particle Image Velocimetry. Ultrasound in Medicine and Biology, 2018, 44, 477-488.	0.7	4
54	Characterization of Fluid Motion Induced by Nanosecond Spark Plasmas: Using Particle Image Velocimetry and Background Oriented Schlieren. , 2018, , .		9

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55	B fibers are the best predictors of cardiac activity during Vagus nerve stimulation. Bioelectronic Medicine, 2018, 4, 5.	1.0	49
56	Assessment of methodologies to calculate intraventricular pressure differences in computational models and patients. Medical and Biological Engineering and Computing, 2018, 56, 469-481.	1.6	9
57	Measurement of the flow field induced by a spark plasma using particle image velocimetry. Experiments in Fluids, 2018, 59, 1.	1.1	15
58	Multi-dimensional confocal laser scanning microscopy image correlation for nanoparticle flow velocimetry. Microfluidics and Nanofluidics, 2018, 22, 1.	1.0	1
59	Density- and viscosity-matched Newtonian and non-Newtonian blood-analog solutions with PDMS refractive index. Experiments in Fluids, 2018, 59, 1.	1.1	33
60	Particle image velocimetry (PIV) uncertainty quantification using moment of correlation (MC) plane. Measurement Science and Technology, 2018, 29, 115301.	1.4	60
61	Multi-objective history matching of surfactant-polymer flooding. Fuel, 2018, 228, 418-428.	3.4	20
62	Cavity ripple dynamics after pinch-off. Journal of Fluid Mechanics, 2018, 850, 611-623.	1.4	34
63	Pore-scale statistics of flow and transport through porous media. Physical Review E, 2018, 98, 013104.	0.8	31
64	PIV/BOS Synthetic Image Generation in Variable Density Environments for Error Analysis and Experiment Design. , 2017, , .		0
65	Axisymmetric wall jet development in confined jet impingement. Physics of Fluids, 2017, 29, .	1.6	45
66	Proper orthogonal decomposition truncation method for data denoising and order reduction. Experiments in Fluids, 2017, 58, 1.	1.1	25
67	Stereo-particle image velocimetry uncertainty quantification. Measurement Science and Technology, 2017, 28, 015301.	1.4	36
68	Hemodynamics of Stent Implantation Procedures in Coronary Bifurcations: An In Vitro Study. Annals of Biomedical Engineering, 2017, 45, 542-553.	1.3	24
69	Effect of surfactant on bubble collisions on a free surface. Physical Review Fluids, 2017, 2, .	1.0	9
70	PIV Uncertainty: Computational and Experimental Evaluation of the Peak Ratio Method., 2016,,.		2
71	A New Particle Image Velocimetry Technique for Turbomachinery Applications. Journal of Turbomachinery, 2016, 138, .	0.9	7
72	Main results of the 4th International PIV Challenge. Experiments in Fluids, 2016, 57, 1.	1.1	138

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73	A comparative experimental evaluation of uncertainty estimation methods for two-component PIV. Measurement Science and Technology, 2016, 27, 094006.	1.4	38
74	Nanoparticle flow velocimetry with image phase correlation for confocal laser scanning microscopy. Measurement Science and Technology, 2016, 27, 104003.	1.4	2
75	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.	0.7	15
76	Stereo-PIV measurements of vapor-induced flow modifications in confined jet impingement boiling. International Journal of Multiphase Flow, 2016, 84, 19-33.	1.6	14
77	A tomographic-PIV investigation of vapor-induced flow structures in confined jet impingement boiling. International Journal of Multiphase Flow, 2016, 84, 86-97.	1.6	7
78	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.	0.7	4
79	Effects of Vessel Tortuosity on Coronary Hemodynamics: An Idealized and Patient-Specific Computational Study. Annals of Biomedical Engineering, 2016, 44, 2228-2239.	1.3	51
80	Abstract 106: Characterizing Aortic Wall Dynamics in Murine Models of Abdominal Aortic Aneurysms Using Ultrasound Imaging. Arteriosclerosis, Thrombosis, and Vascular Biology, 2016, 36, .	1.1	0
81	Visualization of Confined Jet Impingement With Boiling Using Time-Resolved Stereo-PIV., 2015, , .		0
82	Local Blood Flow Patterns in Stented Coronary Bifurcations: An Experimental and Numerical Study. Journal of Applied Biomaterials and Functional Materials, 2015, 13, 116-126.	0.7	13
83	Dogs lap using acceleration-driven open pumping. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 15798-15802.	3.3	20
84	Vortex Formation Time is Not an Index of Ventricular Function. Journal of Cardiovascular Translational Research, 2015, 8, 54-58.	1.1	18
85	Measurement of fluid rotation, dilation, and displacement in particle image velocimetry using a Fourier–Mellin cross-correlation. Measurement Science and Technology, 2015, 26, 035301.	1.4	9
86	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.	1.2	30
87	Tunable Collagen I Hydrogels for Engineered Physiological Tissue Micro-Environments. PLoS ONE, 2015, 10, e0122500.	1.1	95
88	Particle image pattern <i>mutual information</i> and uncertainty estimation for particle image velocimetry. Measurement Science and Technology, 2015, 26, 074001.	1.4	27
89	Collaborative framework for PIV uncertainty quantification: comparative assessment of methods. Measurement Science and Technology, 2015, 26, 074004.	1.4	182
90	A theoretical analysis of pitch stability during gliding in flying snakes. Bioinspiration and Biomimetics, 2014, 9, 025014.	1.5	17

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91	Particle image velocimetry correlation signal-to-noise ratio metrics and measurement uncertainty quantification. Measurement Science and Technology, 2014, 25, 115301.	1.4	58
92	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.	1.1	160
93	Delay of left ventricular longitudinal expansion with diastolic dysfunction: impact on load dependence of e′ and longitudinal strain rate. Physiological Reports, 2014, 2, e12082.	0.7	8
94	Calculating Intraventricular Pressure Difference Using a Multi-Beat Spatiotemporal Reconstruction of Color M-Mode Echocardiography. Annals of Biomedical Engineering, 2014, 42, 2466-2479.	1.3	6
95	Three-Dimensional Microfluidic Collagen Hydrogels for Investigating Flow-Mediated Tumor-Endothelial Signaling and Vascular Organization. Tissue Engineering - Part C: Methods, 2014, 20, 64-75.	1.1	115
96	Lift and wakes of flying snakes. Physics of Fluids, 2014, 26, .	1.6	25
97	Multispectral processing for color particle image velocimetry. Microfluidics and Nanofluidics, 2014, 17, 729-743.	1.0	5
98	Computation of finite-time Lyapunov exponents from time-resolved particle image velocimetry data. Experiments in Fluids, 2014, 55, 1.	1.1	22
99	Aerodynamics of the flying snake <i>Chrysopelea paradisi</i> contributes to gliding performance. Journal of Experimental Biology, 2014, 217, 382-394.	0.8	40
100	Experimental determination of three-dimensional finite-time Lyapunov exponents in multi-component flows. Experiments in Fluids, $2014, 55, 1.$	1.1	12
101	Review of Collagen I Hydrogels for Bioengineered Tissue Microenvironments: Characterization of Mechanics, Structure, and Transport. Tissue Engineering - Part B: Reviews, 2014, 20, 683-696.	2.5	410
102	Flexible Margin Kinematics and Vortex Formation of Aurelia aurita and Robojelly. PLoS ONE, 2014, 9, e98310.	1.1	13
103	Numerical investigation of pulsatile flow in endovascular stents. Physics of Fluids, 2013, 25, 091905.	1.6	2
104	Improved accuracy of time-resolved micro-Particle Image Velocimetry using phase-correlation and confocal microscopy. Microfluidics and Nanofluidics, 2013, 14, 431-444.	1.0	15
105	Vortices Formed on the Mitral Valve Tips Aid Normal Left Ventricular Filling. Annals of Biomedical Engineering, 2013, 41, 1049-1061.	1.3	90
106	Noncoalescence in the Oblique Collision of Fluid Jets. Physical Review Letters, 2013, 110, 124502.	2.9	15
107	The role of large-scale vortical structures in transient convective heat transfer augmentation. Journal of Fluid Mechanics, 2013, 718, 89-115.	1.4	28
108	Round gas jets submerged in water. International Journal of Multiphase Flow, 2013, 48, 46-57.	1.6	83

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109	Estimation of uncertainty bounds for individual particle image velocimetry measurements from cross-correlation peak ratio. Measurement Science and Technology, 2013, 24, 065301.	1.4	171
110	Tissue Engineered Tumor Microvessels to Study the Role of Flow Shear Stress on Endothelial Barrier Function. , 2013 , , .		0
111	Flow Measurements in a Blood-Perfused Collagen Vessel Using X-Ray Micro-Particle Image Velocimetry. PLoS ONE, 2013, 8, e81198.	1.1	18
112	Uncertainty Estimations for Particle Image Velocimetry in a Medical Device Analog (Nozzle) Model., 2013,,.		0
113	Adaptive gappy proper orthogonal decomposition for particle image velocimetry data reconstruction. Measurement Science and Technology, 2012, 23, 025303.	1.4	46
114	Structure, Sulfatide Binding Properties, and Inhibition of Platelet Aggregation by a Disabled-2 Protein-derived Peptide. Journal of Biological Chemistry, 2012, 287, 37691-37702.	1.6	17
115	Blood Flow Characterization in a Perfused Collagen Vessel Bioreactor Using X-Ray Micro-PIV., 2012,,.		0
116	Estimation of Uncertainty Bounds From Cross Correlation Peak Ratio for Individual PIV Measurements. , 2012, , .		1
117	Left ventricular vortex formation is unaffected by diastolic impairment. American Journal of Physiology - Heart and Circulatory Physiology, 2012, 303, H1255-H1262.	1.5	35
118	Loss of Adrenergic Augmentation of Diastolic Intra-LV Pressure Difference in Patients With Diastolic Dysfunction. JACC: Cardiovascular Imaging, 2012, 5, 861-870.	2.3	54
119	Vortex rings in radially confined domains. Experiments in Fluids, 2012, 53, 1033-1044.	1.1	12
120	A method for automatic estimation of instantaneous local uncertainty in particle image velocimetry measurements. Experiments in Fluids, 2012, 53, 1133-1147.	1.1	128
121	Application of singularity expansion method for monitoring the deployment of arterial stents. Microwave and Optical Technology Letters, 2012, 54, 2241-2246.	0.9	8
122	The decay of confined vortex rings. Experiments in Fluids, 2012, 53, 163-171.	1.1	31
123	Time-scale for critical growth of partial and supercavitation development over impulsively translating projectiles. International Journal of Multiphase Flow, 2012, 38, 73-86.	1.6	22
124	Wall Shear Stress Measurements in an Arterial Flow Bioreactor. Cardiovascular Engineering and Technology, 2012, 3, 101-111.	0.7	8
125	Shear Stress Mediates Angiogenic Gene Expression in a Microfluidic Tumor Vascular Model. , 2012, , .		0
126	Parametric Investigation of Magnetic Particle Transport for Targeted Drug Delivery Applications. , 2011, , .		0

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127	Assessment of Left Ventricular Diastolic Function Using 4-Dimensional Phase-Contrast Cardiac Magnetic Resonance. Journal of Computer Assisted Tomography, 2011, 35, 108-112.	0.5	11
128	Liquid Entrainment by Round Turbulent Gas Jets Submerged in Water., 2011,,.		2
129	A Method for Identifying and Visualizing Foreign Particle Motion Using Time-Resolved Particle Tracking Velocimetry. Journal of Turbomachinery, 2011, 133, .	0.9	0
130	Experimental Investigation of the Local Blood Flow Pattern in Stented Coronary Bifurcations., 2011,,.		0
131	Wall Shear Stress Measurements in an Arterial Flow Bioreactor., 2011,,.		1
132	Disabledâ€2 modulates homotypic and heterotypic platelet interactions by binding to sulfatides. British Journal of Haematology, 2011, 154, 122-133.	1.2	18
133	Dispersion of ferrofluid aggregates in steady flows. Physics of Fluids, 2011, 23, 127102.	1.6	5
134	Developing and fully developed turbulent flow in ribbed channels. Experiments in Fluids, 2011, 50, 1357-1371.	1.1	40
135	Numerical modeling and experiments of coarsening foam. International Journal of Mineral Processing, 2011, 98, 66-73.	2.6	2
136	A multi-parametric particle-pairing algorithm for particle tracking in single and multiphase flows. Measurement Science and Technology, 2011, 22, 105406.	1.4	44
137	Non-equilibrium trajectory dynamics and the kinematics of gliding in a flying snake. Bioinspiration and Biomimetics, 2011, 6, 019501.	1.5	1
138	A Multi-Parametric Particle Pairing Algorithm for Particle Tracking Velocimetry in Single and Multiphase Flows. , $2011, \ldots$		0
139	Estimation of Left Ventricular Wall Stiffness by Analysis of Late Diastolic Pressure Components. , 2011,		0
140	The Physical Mechanism of Heat Transfer Augmentation in Stagnating Flows Subject to Freestream Turbulence. Journal of Heat Transfer, 2011, 133, .	1.2	17
141	Hydrodynamic Effects of Compliance Mismatch in Stented Arteries. Journal of Biomechanical Engineering, 2011, 133, 021008.	0.6	19
142	Development of a 3D Microfluidic Culture Model to Study the Effect of Shear Stress on Tumor Angiogenesis. , $2011, \ldots$		0
143	Acoustic source separation for the detection of coronary artery sounds. Journal of the Acoustical Society of America, 2011, 130, 4158-4166.	0.5	2
144	Left Ventricular Vortex Ring Dynamics and Their Association to Early Diastolic Filling. , $2011, , .$		0

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145	Automatic Particle Image Velocimetry Uncertainty Quantification. , 2010, , .		8
146	Investigation of the Relationship Between Color M-Mode Early Diastolic Propagation Velocity and Left Ventricular Adverse Pressure Gradients. , $2010, , .$		0
147	The Penetration of Submerged Round Turbulent Gas Jets in Water. , 2010, , .		1
148	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.	1.3	24
149	Concept analysis and laboratory observations on a water piercing missile launcher. Ocean Engineering, 2010, 37, 959-965.	1.9	36
150	Long Term Dynamics of Water-Entry Cavity. , 2010, , .		1
151	Organization of Cylinder Wake Using a Splitter-Plate Active Flow Control. , 2010, , .		0
152	Vortex Ring Formation in Wall-Bounded Domains. , 2010, , .		0
153	A direct-measurement thin-film heat flux sensor array. Measurement Science and Technology, 2010, 21, 105201.	1.4	25
154	Assessment of pressure field calculations from particle image velocimetry measurements. Measurement Science and Technology, 2010, 21, 105401.	1.4	121
155	Non-equilibrium trajectory dynamics and the kinematics of gliding in a flying snake. Bioinspiration and Biomimetics, 2010, 5, 045002.	1.5	38
156	Time-Resolved DPIV Investigation of Pulsatile Flow in Symmetric Stenotic Arteries—Effects of Phase Angle. Journal of Biomechanical Engineering, 2010, 132, 031010.	0.6	14
157	A Relationship Between Pressure Fields and Flow Patterns During Left Ventricular Diastolic Dysfunction Using 2D Phase Contrast MRI. , 2010, , .		0
158	The Effect of Mach Number and Aspect Ratio on the Interfacial Characteristics of a Submerged Rectangular Gas Jet. , 2010 , , .		0
159	A Scaling Parameter for Predicting Pressure Wave Reflection in Stented Arteries. Journal of Medical Devices, Transactions of the ASME, 2009, 3, .	0.4	6
160	Digital particle image velocimetry (DPIV) robust phase correlation. Measurement Science and Technology, 2009, 20, 055401.	1.4	125
161	Assessment of advanced windowing techniques for digital particle image velocimetry (DPIV). Measurement Science and Technology, 2009, 20, 075402.	1.4	94
162	In Vitro, Time-Resolved PIV Comparison of the Effect of Stent Design on Wall Shear Stress. Annals of Biomedical Engineering, 2009, 37, 1310-1321.	1.3	53

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163	Laminar mixing using oscillating cantilevered ionic polymer actuators. Sensors and Actuators A: Physical, 2009, 153, 105-113.	2.0	9
164	Methods for Digital Particle Image Sizing (DPIS): Comparisons and improvements. Flow Measurement and Instrumentation, 2009, 20, 207-219.	1.0	23
165	A novel in vitro ischemia/reperfusion injury model. Archives of Pharmacal Research, 2009, 32, 421-429.	2.7	11
166	A mechanism for mitigation of blade–vortex interaction using leading edge blowing flow control. Experiments in Fluids, 2009, 47, 411-426.	1.1	6
167	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.	1.4	37
168	Effect of Stent Design Parameters on Coronary Artery Flow., 2009, , .		0
169	2D Analysis of Acoustic Transfer Through the Chest Cavity of Sounds Associated With Coronary Artery Disease. , 2009, , .		0
170	Phase correlation processing for DPIV measurements. Experiments in Fluids, 2008, 45, 485-500.	1.1	95
171	Compensating for the Phosphorescent Persistence in Intensified Cameras for Micro-PIV. , 2008, , .		0
172	A Time Resolved DPIV In-Vitro Evaluation of Coronary Stents in Realistic Conditions: Part I $\hat{a} \in$ " Influence of Stent Configuration. , 2008, , .		1
173	Micro deposition method: a novel fabrication method for ionic polymer metallic composites. Proceedings of SPIE, 2008, , .	0.8	1
174	The Effect of Free Surface on the Vortex Shedding From Inclined Circular Cylinders. Journal of Fluids Engineering, Transactions of the ASME, 2008, 130, .	0.8	14
175	Analysis of Passive Wake Mixing Techniques Using Time Resolved Digital Particle Image Velocimetry. , 2008, , .		0
176	Observation of a Critical Time Scale for Supercavitation Development and the Effect of Gas Leakage. , 2008, , .		0
177	Spatiotemporally-Resolved Dynamics of Dispersing Ferrofluid Aggregates. , 2008, , .		0
178	The Dynamics of Accumulating Ferrofluid Aggregates. , 2008, , .		0
179	Spatiotemporal Development of Transitional Wall Jets. , 2008, , .		0
180	Robust Gradient Estimation Schemes Using Radial Basis Functions. , 2008, , .		0

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181	Time Resolved DPIV in a Transonic Turbine Cascade. , 2008, , .		О
182	Improved DPIV Accuracy Using Advanced Windowing Techniques. , 2008, , .		0
183	Design and Wind Tunnel Performance Testing of a New Omnidirectional Roof Vent. Journal of Architectural Engineering, 2007, 13, 18-21.	0.8	4
184	Analysis of the Parallel Blade Vortex Interaction With Leading Edge Blowing Flow Control Using the Proper Orthogonal Decomposition. , 2007, , 1523.		4
185	Experimental Study of the Stability of a High-Speed Gas Jet Under the Influence of Liquid Cross-Flow., 2007,, 599.		2
186	Development of ionic polymer transducers as flow shear stress sensors: effects of electrode architecture. , 2007, , .		4
187	Phase Correlation Processing for DPIV Measurements: Part I — Spatial Domain Analysis. , 2007, , .		0
188	Mixing at Low Reynolds Numbers by Vibrating Cantilevered Ionic Polymers. , 2007, , .		0
189	Biomedical research applications of a novel doubleâ€layer parallelâ€plate flow chamber. FASEB Journal, 2007, 21, A1219.	0.2	1
190	Phase Correlation Processing for DPIV Measurements: Part II â€" Spectral Domain Analysis. , 2007, , .		0
191	A multilayer design of parallelâ€plate flow chamber for studies of endothelial cell response to fluid shear stress. FASEB Journal, 2007, 21, A484.	0.2	1
192	Flow Control over Trapezoidal-Wing Planforms with Sharp Edges. , 2006, , .		0
193	New approaches in the measurement of shear stress and heat flux., 2006, 6174, 610.		0
194	Evaluation of multiphase flotation models in grid turbulence via Particle Image Velocimetry. International Journal of Mineral Processing, 2006, 80, 133-143.	2.6	16
195	The Effect of Vortex Formation on Left Ventricular Filling and Mitral Valve Efficiency. Journal of Biomechanical Engineering, 2006, 128, 527.	0.6	68
196	Post-Stall Flow Control of Sharp-Edged Wings via Unsteady Blowing. Journal of Aircraft, 2006, 43, 1738-1746.	1.7	14
197	Improvements to the Dynamic Range of Velocity Measurements Using DPIV. , 2006, , .		1
198	Improvements on the accuracy of derivative estimation from DPIV velocity measurements. Experiments in Fluids, 2005, 39, 1040-1050.	1.1	65

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199	Flow Control of a Sharp-Edged Airfoil. AIAA Journal, 2005, 43, 716-726.	1.5	30
200	High-Speed Digital-Particle-Image-Velocimetry Study of Vortex Breakdown. AIAA Journal, 2005, 43, 642-650.	1.5	5
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