# Michael W Plesniak

List of Publications by Year
in descending order



| 73 | 1,641 | 304368 22 | 315357 38 |
|---|---|---|---|
| papers | citations | h-index | g-index |

| 75 | 75 | 75 | 1391 |
|---|---|---|---|
| all docs | docs citations | times ranked | citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | An in vitro analysis of the effect of geometry-induced flows on endothelial cell behavior in 3D printed small-diameter blood vessels. , 2022, 137, 212832. | | 9 |
| 2 | Dual 3D printing for vascularized bone tissue regeneration. Acta Biomaterialia, 2021, 123, 263-274. | 4.1 | 53 |
| 3 | The effect of entrance flow development on vortex formation and wall shear stress in a curved artery model. Physics of Fluids, 2021, 33, . | 1.6 | 14 |
| 4 | Effects of highly pulsatile inflow frequency on surface-mounted bluff body wakes. Journal of Fluid Mechanics, 2020, 904, . | 1.4 | 2 |
| 5 | 3D Bioprinting-Tunable Small-Diameter Blood Vessels with Biomimetic Biphasic Cell Layers. ACS Applied Materials & Interfaces, 2020, 12, 45904-45915. | 4.0 | 70 |
| 6 | Macro-Rheology Characterization of Gill Raker Mucus in the Silver Carp, Hypophthalmichthys molitrix. Journal of Visualized Experiments, 2020, , . | 0.2 | 0 |
| 7 | Formation and interaction of multiple secondary flow vortical structures in a curved pipe: transient and oscillatory flows. Journal of Fluid Mechanics, 2019, 876, 481-526. | 1.4 | 14 |
| 8 | An acoustic source model for asymmetric intraglottal flow with application to reduced-order models of the vocal folds. PLoS ONE, 2019, 14, e0219914. | 1.1 | 8 |
| 9 | Three-dimensional vortical structures and wall shear stress in a curved artery model. Physics of Fluids, 2019, 31, . | 1.6 | 29 |
| 10 | Insights on arterial secondary flow structures and vortex dynamics gained using the MRV technique. International Journal of Heat and Fluid Flow, 2018, 73, 143-153. | 1.1 | 11 |
| 11 | Secondary flow vortical structures in a <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msup><mml:mn>180</mml:mn><mml:mo>â˜</mml:mo></mml:msup> elastic curved vessel with torsion under steady and pulsatile inflow conditions. Physical Review Fluids, 2018, 3, . | 1.0 | 19 |
| 12 | PID controller design to generate pulsatile flow rate for in vitro experimental studies of physiological flows. Biomedical Engineering Letters, 2017, 7, 339-344. | 2.1 | 4 |
| 13 | Surface obstacles in pulsatile flow. Experiments in Fluids, 2017, 58, 1. | 1.1 | 2 |
| 14 | Integrating three-dimensional printing and nanotechnology for musculoskeletal regeneration. Nanotechnology, 2017, 28, 382001. | 1.3 | 22 |
| 15 | Morphology of Secondary Flows in a Curved Pipe With Pulsatile Inflow. Journal of Fluids Engineering, Transactions of the ASME, 2016, 138, . | 0.8 | 17 |
| 16 | On the rheology of refractive-index-matched, non-Newtonian blood-analog fluids for PIV experiments. Experiments in Fluids, 2016, 57, 1. | 1.1 | 32 |
| 17 | A high-order solver for unsteady incompressible Navierâ€“Stokes equations using the flux reconstruction method on unstructured grids with implicit dual time stepping. Journal of Computational Physics, 2016, 314, 414-435. | 1.9 | 26 |
| 18 | Experimental Investigation of Secondary Flow Structures Downstream of a Model Type IV Stent Failure in a 180° Curved Artery Test Section. Journal of Visualized Experiments, 2016, , . | 0.2 | 3 |

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|---|---|---|---|
| 19 | Evolution of vortical structures in a curved artery model with non-Newtonian blood-analog fluid under pulsatile inflow conditions. Experiments in Fluids, 2016, 57, 1. | 1.1 | 21 |
| 20 | A synergistic approach to the design, fabrication and evaluation of 3D printed micro and nano featured scaffolds for vascularized bone tissue repair. Nanotechnology, 2016, 27, 064001. | 1.3 | 126 |
| 21 | A flux reconstruction solver for unsteady incompressible viscous flow using artificial compressibility with implicit dual time stepping. , 2016, , . | | 2 |
| 22 | Three-dimensional flow separation over a surface-mounted hemisphere in pulsatile flow. Experiments in Fluids, 2016, 57, 1. | 1.1 | 16 |
| 23 | Shannon Entropy-Based Wavelet Transform Method for Autonomous Coherent Structure Identification in Fluid Flow Field Data. Entropy, 2015, 17, 6617-6642. | 1.1 | 19 |
| 24 | A High-Order Method for Solving Unsteady Incompressible Navier-Stokes Equations with Implicit Time Stepping on Unstructured Grids. , 2015, , . | | 1 |
| 25 | Flow field in the wake of a bluff body driven through a steady recirculating flow. Experiments in Fluids, 2015, 56, 1. | 1.1 | 7 |
| 26 | Non-Newtonian perspectives on pulsatile blood-analog flows in a 180Â° curved artery model. Physics of Fluids, 2015, 27, . | 1.6 | 45 |
| 27 | Determination of secondary flow morphologies by wavelet analysis in a curved artery model with physiological inflow. Experiments in Fluids, 2014, 55, 1. | 1.1 | 15 |
| 28 | Investigating the Three-dimensional Flow Separation Induced by a Model Vocal Fold Polyp. Journal of Visualized Experiments, 2014, , e51080. | 0.2 | 1 |
| 29 | A review of lumped-element models of voiced speech. Speech Communication, 2013, 55, 667-690. | 1.6 | 53 |
| 30 | A comparison of computational efficiencies of spectral difference method and correction procedure via reconstruction. Journal of Computational Physics, 2013, 239, 138-146. | 1.9 | 36 |
| 31 | Secondary flow morphologies due to model stent-induced perturbations in a 180Â° curved tube during systolic deceleration. Experiments in Fluids, 2013, 54, 1. | 1.1 | 21 |
| 32 | Fluid Dynamics of Human Phonation and Speech. Annual Review of Fluid Mechanics, 2013, 45, 437-467. | 10.8 | 119 |
| 33 | Response to â€œComments on â€˜A theoretical model of the pressure distributions arising from asymmetric intraglottal flows applied to a two-mass model of the vocal foldsâ€™â€•[J. Acoust. Soc. Am. 130, 389â€“403 (2011)]. Journal of the Acoustical Society of America, 2013, 134, 913-916. | 0.5 | 3 |
| 34 | A Wave Reflection Analog Extension for Reduced Order Vocal Fold Investigations With Asymmetric Intraglottal Flows. , 2012, , . | | 0 |
| 35 | Secondary flow structures under stent-induced perturbations for cardiovascular flow in a curved artery model. International Journal of Heat and Fluid Flow, 2012, 35, 76-83. | 1.1 | 27 |
| 36 | Three-dimensional laryngeal flow fields induced by a model vocal fold polyp. International Journal of Heat and Fluid Flow, 2012, 35, 93-101. | 1.1 | 14 |

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|---|---|---|---|
| 37 | Vortex dynamics and scalar transport in the wake of a bluff body driven through a steady recirculating flow. Experiments in Fluids, 2012, 53, 747-763. | 1.1 | 10 |
| 38 | Spectral Difference Solution of Incompressible Flow Over an Inline Tube Bundle With Oscillating Cylinder. , 2012, , . | | 1 |
| 39 | Nonlinear Vocal Fold Dynamics in a Two-Mass Model of Speech Arising From Asymmetric Intraglottal Flow. , 2011, , . | | 0 |
| 40 | Impact of scaling and body movement on contaminant transport in airliner cabins. Atmospheric Environment, 2011, 45, 6019-6028. | 1.9 | 69 |
| 41 | Nonlinear vocal fold dynamics resulting from asymmetric fluid loading on a two-mass model of speech. Chaos, 2011, 21, 033113. | 1.0 | 17 |
| 42 | Impact of wall rotation on supraglottal jet stability in voiced speech. Journal of the Acoustical Society of America, 2011, 129, EL64-EL70. | 0.5 | 13 |
| 43 | A theoretical model of the pressure field arising from asymmetric intraglottal flows applied to a two-mass model of the vocal folds. Journal of the Acoustical Society of America, 2011, 130, 389-403. | 0.5 | 29 |
| 44 | An investigation of asymmetric flow features in a scaled-up driven model of the human vocal folds. Experiments in Fluids, 2010, 49, 131-146. | 1.1 | 48 |
| 45 | Flow and contaminant transport in an airliner cabin induced by a moving body: Model experiments and CFD predictions. Atmospheric Environment, 2010, 44, 2830-2839. | 1.9 | 124 |
| 46 | Viscous flow features in scaled-up physical models of normal and pathological vocal phonation. International Journal of Heat and Fluid Flow, 2010, 31, 468-481. | 1.1 | 16 |
| 47 | Secondary Flow Structure Induced by Physiologically Relevant Waveform in a Curved Tube. , 2009, , . | | 0 |
| 48 | An Experimental Investigation of the Quasi-Steady Assumption in Speech. , 2009, , . | | 0 |
| 49 | The influence of inlet velocity profile and secondary flow on pulsatile flow in a model artery with stenosis. Journal of Fluid Mechanics, 2008, 616, 263-301. | 1.4 | 39 |
| 50 | Cavitation Structures in a Venturi Flow With Various Backward Facing Steps. Journal of Fluids Engineering, Transactions of the ASME, 2008, 130, . | 0.8 | 4 |
| 51 | Biomedical Fluid Dynamics: Rich Flow Physics in Pulsatile Flow (Keynote). , 2007, , . | | 0 |
| 52 | Near-Field Flow Measurements of a Cavitating Jet Emanating From a Crown-Shaped Nozzle. Journal of Fluids Engineering, Transactions of the ASME, 2007, 129, 605-612. | 0.8 | 5 |
| 53 | Flow structure and skin friction in the vicinity of a streamwise-angled injection hole fed by a short pipe. Experiments in Fluids, 2007, 43, 627-638. | 1.1 | 5 |
| 54 | EVOLUTION OF VORTICAL STRUCTURES IN INDETERMINATE-ORIGIN NOZZLE JETS. Journal of Flow Visualization and Image Processing, 2007, 14, 143-154. | 0.3 | 3 |

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|---|---|---|---|
| 55 | Compressible large eddy simulations of wall-bounded turbulent flows using a semi-implicit numerical scheme for low Mach number aeroacoustics. Journal of Computational Physics, 2006, 215, 526-551. | 1.9 | 19 |
| 56 | An investigation of bimodal jet trajectory in flow through scaled models of the human vocal tract. Experiments in Fluids, 2006, 40, 683-696. | 1.1 | 48 |
| 57 | An investigation of jet trajectory in flow through scaled vocal fold models with asymmetric glottal passages. Experiments in Fluids, 2006, 41, 735-748. | 1.1 | 34 |
| 58 | Noncanonical Short Hole Jets-in-Crossflow for Turbine Film Cooling. Journal of Applied Mechanics, Transactions ASME, 2006, 73, 474-482. | 1.1 | 14 |
| 59 | The occurrence of the Coanda effect in pulsatile flow through static models of the human vocal folds. Journal of the Acoustical Society of America, 2006, 120, 1000-1011. | 0.5 | 61 |
| 60 | Non-Uniform Flow Behavior in a Parallel Plate Flow Chamber Alters Endothelial Cell Responses. Annals of Biomedical Engineering, 2005, 33, 328-336. | 1.3 | 31 |
| 61 | Surface shear stress measurements around multiple jets in crossflow using the fringe imaging skin friction technique. Experiments in Fluids, 2004, 37, 497-503. | 1.1 | 9 |
| 62 | Transfer efficiency for airless painting systems. Journal of Coatings Technology Research, 2004, 1, 137-145. | 1.2 | 10 |
| 63 | Wall Shear Stress Measurements for Conventional Applications and Biomedical Flows (Invited). , 2004, , . | | 18 |
| 64 | Near-wall physics of a shear-driven three-dimensional turbulent boundary layer with varying crossflow. Journal of Fluid Mechanics, 2003, 484, 1-39. | 1.4 | 13 |
| 65 | Flow in a Co-Axial Control Valve. , 2003, , 457. | | 0 |
| 66 | Modification of Near-Wall Structure in a Shear-Driven 3-D Turbulent Boundary Layer. Journal of Fluids Engineering, Transactions of the ASME, 2002, 124, 118-126. | 0.8 | 4 |
| 67 | Structural features and surface heat transfer associated with a row of short-hole jets in crossflow. International Journal of Heat and Fluid Flow, 2000, 21, 542-553. | 1.1 | 23 |
| 68 | Curved two-stream turbulent mixing layers revisited. Experimental Thermal and Fluid Science, 1996, 13, 190-205. | 1.5 | 14 |
| 69 | The influence of interacting strain rates on turbulence in convex boundary layers. Physics of Fluids, 1996, 8, 3163-3171. | 1.6 | 6 |
| 70 | Evaluation of Vortex-Shedding Flow Meters for Monitoring Air Flows in HVAC Applications. HVAC and R Research, 1995, 1, 282-305. | 0.9 | 7 |
| 71 | Curved two-stream turbulent mixing layers: three-dimensional structure and streamwise evolution. Journal of Fluid Mechanics, 1994, 270, 1-50. | 1.4 | 32 |
| 72 | Spanwise averaging of plane mixing layer properties. AIAA Journal, 1992, 30, 835-837. | 1.5 | 19 |

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| 73 | Turbulent Surface Jet in Channel of Limited Depth. Journal of Hydraulic Engineering, 1989, 115, 1587-1606. | 0.7 | 27 |