Michael G Olsen

List of Publications by Year
in descending order

60 papers	1,477 citations	257101 24 h-index	329751 37 g-index
60 all docs	60 docs citations	60 times ranked	1065 citing authors

#	Article	IF	Citations
1	Coalescence-induced phase separation of an oil in water emulsion under controlled shear and temperature conditions. Chemical Engineering Research and Design, 2022, 182, 517-524.	2.7	1
2	Coherent structure characteristics of the swirling flow during turbulent mixing in a multi-inlet vortex reactor. Physics of Fluids, 2021, 33, .	1.6	2
3	Droplet coalescence and phase separation in a topical ointment: Effects of fluid shear and temperature. International Journal of Pharmaceutics, 2020, 591, 119872.	2.6	10
4	Jet breakup regimes in liquidâ€“liquid Taylor vortex flow. International Journal of Multiphase Flow, 2020, 131, 103401.	1.6	2
5	Evolution of bubble size distribution, number density, and shape in semiâ€batch vertical gasâ€“liquid Taylor vortex flow. AICHE Journal, 2020, 66, e17003.	1.8	2
6	Droplet size distributions in liquidâ€“liquid semi-batch Taylor vortex flow. AIP Advances, 2020, 10, 085316.	0.6	4
7	A delayed detached eddy simulation model with low Reynolds number correction for transitional swirling flow in a multi-inlet vortex nanoprecipitation reactor. Chemical Engineering Science, 2019, 193, 66-75.	1.9	11
8	Flow Regimes in Two-Phase Hexane/Water Semibatch Vertical Taylor Vortex Flow. Journal of Fluids Engineering, Transactions of the ASME, 2019, 141, .	0.8	5
9	Experimental characterization of turbulent mixing performance using simultaneous stereoscopic particle image velocimetry and planar laser-induced fluorescence. Experiments in Fluids, 2019, 60, 1.	1.1	12
10	Eulerian conditional statistics of turbulent flow in a macroscale multi-inlet vortex chemical reactor. Physics of Fluids, 2019, 31, 115106.	1.6	0
11	Detailed experimental and numerical investigation of fluidâ€“particle interactions of a fixed train of spherical particles inside a square duct. International Journal of Multiphase Flow, 2018, 103, 16-29.	1.6	5
12	An intelligent cooling system and control model for improved engine thermal management. Applied Thermal Engineering, 2018, 128, 253-263.	3.0	67
13	Experimental investigation of the effect of ethyl alcohol surfactant on oxygen mass transfer and bubble size distribution in an air-water multiphase Taylor-Couette vortex bioreactor. Chemical Engineering Journal, 2017, 319, 288-296.	6.6	34
14	Turbulent mixing in the confined swirling flow of a multiâ€inlet vortex reactor. AICHE Journal, 2017, 63, 2409-2419.	1.8	19
15	Dynamic delayed detached eddy simulation of a multiâ€inlet vortex reactor. AICHE Journal, 2016, 62, 2570-2578.	1.8	27
16	Experimental measurement of oxygen mass transfer and bubble size distribution in an airâ€“water multiphase Taylorâ€“Couette vortex bioreactor. Chemical Engineering Journal, 2015, 279, 286-296.	6.6	54
17	A Batchelor Vortex Model for Mean Velocity of Turbulent Swirling Flow in a Macroscale Multi-Inlet Vortex Reactor. Journal of Fluids Engineering, Transactions of the ASME, 2015, 137, .	0.8	16
18	Flow Characteristics in a Scaled-up Multi-inlet Vortex Nanoprecipitation Reactor. Industrial & Engineering Chemistry Research, 2015, 54, 4512-4525.	1.8	32

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19	Large eddy simulation of passive scalar transport in a high Schmidt number turbulent incompressible wake with experimental validation. Chemical Engineering Science, 2015, 137, 862-874.	1.9	5
20	An adaptive model for gasâ€“liquid mass transfer in a Taylor vortex reactor. International Journal of Heat and Mass Transfer, 2015, 91, 433-445.	2.5	17
21	Investigation of Pseudo Turbulent Scalar Transport in Two Phase Fluid Flow and Passive Scalar Mixing Using Simultaneous SPIV/PLIF. , 2014, , .		0
22	Micromixing visualization and quantification in a microscale multi-inlet vortex nanoprecipitation reactor using confocal-based reactive micro laser-induced fluorescence. Biomicrofluidics, 2014, 8, 044102.	1.2	6
23	Effect of inlet conditions on the accuracy of large eddy simulations of a turbulent rectangular wake. Chemical Engineering Journal, 2014, 250, 175-189.	6.6	9
24	Turbulence in Microchannels. , 2014, , 1-9.		0
25	Measurements of turbulence in a microscale multi-inlet vortex nanoprecipitation reactor. Journal of Micromechanics and Microengineering, 2013, 23, 075005.	1.5	23
26	Turbulence measurements in a rectangular mesoscale confined impinging jets reactor. Experiments in Fluids, 2012, 53, 1929-1941.	1.1	5
27	Confocal imaging of laminar and turbulent mixing in a microscale multi-inlet vortex nanoprecipitation reactor. Applied Physics Letters, 2011, 99, 204103.	1.5	17
28	Thermal comparison between ceiling diffusers and fabric ductwork diffusers for green buildings. Energy and Buildings, 2011, 43, 2973-2987.	3.1	27
29	Population, characteristics and kinematics of vortices in a confined rectangular jet with a co-flow. Experiments in Fluids, 2011, 50, 1473-1493.	1.1	8
30	Validation of LES predictions for turbulent flow in a Confined Impinging Jets Reactor. Applied Mathematical Modelling, 2011, 35, 1591-1602.	2.2	37
31	Investigation of the flow field in a three-dimensional Confined Impinging Jets Reactor by means of microPIV and DNS. Chemical Engineering Journal, 2011, 166, 294-305.	6.6	62
32	Visualization of turbulent reactive mixing in a planar microscale confined impinging-jet reactor. Journal of Micromechanics and Microengineering, 2011, 21, 115006.	1.5	8
33	Investigation of passive scalar mixing in a confined rectangular wake using simultaneous PIV and PLIF. Chemical Engineering Science, 2010, 65, 3372-3383.	1.9	13
34	Turbulent precipitation in micromixers: CFD simulation and flow field validation. Chemical Engineering Research and Design, 2010, 88, 1182-1193.	2.7	39
35	Depth of correlation reduction due to out-of-plane shear in microscopic particle image velocimetry. Measurement Science and Technology, 2010, 21, 105406.	1.4	11
36	Directional dependence of depth of correlation due to in-plane fluid shear in microscopic particle image velocimetry. Measurement Science and Technology, 2009, 20, 015402.	1.4	18

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37	Unsteady velocity field measurements at the outlet of an automotive supercharger using particle image velocimetry (PIV). Experimental Thermal and Fluid Science, 2009, 33, 405-423.	1.5	2
38	A microscale multi-inlet vortex nanoprecipitation reactor: Turbulence measurement and simulation. Applied Physics Letters, 2009, 94, 204104.	1.5	51
39	Turbulence in a microscale planar confined impinging-jets reactor. Lab on A Chip, 2009, 9, 1110.	3.1	45
40	Conditional statistics of passive-scalar mixing in a confined wake flow. Physics of Fluids, 2008, 20, 077105.	1.6	3
41	Random error due to Brownian motion in microscopic particle image velocimetry. Measurement Science and Technology, 2007, 18, 1963-1972.	1.4	4
42	Simultaneous velocity and concentration field measurements of passive-scalar mixing in a confined rectangular jet. Experiments in Fluids, 2007, 42, 847-862.	1.1	35
43	A Continuous-Flow Polymerase Chain Reaction Microchip With Regional Velocity Control. Journal of Microelectromechanical Systems, 2006, 15, 223-236.	1.7	61
44	Aspect Ratio Effects on Turbulent and Transitional Flow in Rectangular Microchannels as Measured With MicroPIV. Journal of Fluids Engineering, Transactions of the ASME, 2006, 128, 305.	0.8	41
45	Turbulent mixing in a confined rectangular wake. Chemical Engineering Science, 2006, 61, 6946-6962.	1.9	27
46	Examination of large-scale structures in turbulent microchannel flow. Experiments in Fluids, 2006, 40, 733-743.	1.1	21
47	MicroPIV measurements of turbulent flow in square microchannels with hydraulic diameters from 200Î¼m to 640Î¼m. International Journal of Heat and Fluid Flow, 2006, 27, 123-134.	1.1	49
48	The Depth of Correlation in Micro-PIV for High Numerical Aperture and Immersion Objectives. Journal of Fluids Engineering, Transactions of the ASME, 2006, 128, 883-886.	0.8	50
49	Conditional Statistics for Passive-Scalar Mixing in Confined Turbulent Shear Flows. , 2006, , .		0
50	Turbulent and transitional velocity measurements in a rectangular microchannel using microscopic particle image velocimetry. Experimental Thermal and Fluid Science, 2005, 29, 435-446.	1.5	52
51	Reappearance of azimuthal waves in turbulent Taylorâ€“Couette flow at large aspect ratio. Chemical Engineering Science, 2005, 60, 5555-5568.	1.9	30
52	Investigation of turbulent mixing in a confined planar-jet reactor. AICHE Journal, 2005, 51, 2649-2664.	1.8	64
53	Validation of an analytical solution for depth of correlation in microscopic particle image velocimetry. Measurement Science and Technology, 2004, 15, 318-327.	1.4	89
54	Planar velocity measurements in a weakly compressible mixing layer. Journal of Fluid Mechanics, 2003, 486, 51-77.	1.4	47

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55	Out-of-Plane Motion Effects in Microscopic Particle Image Velocimetry. Journal of Fluids Engineering, Transactions of the ASME, 2003, 125, 895-901.	0.8	45
56	Validation of Analytical Solution for Depth-of-Correlation in Microscopic Particle Image Velocimetry. , 2003, , 559.		0
57	Stochastic Estimation of Large Structures in an Incompressible Mixing Layer. AIAA Journal, 2002, 40, 2431-2438.	1.5	22
58	Measurement volume defined by peak-finding algorithms in cross-correlation particle image velocimetry. Measurement Science and Technology, 2001, 12, N14-N16.	1.4	14
59	Brownian motion and correlation in particle image velocimetry. Optics and Laser Technology, 2000, 32, 621-627.	2.2	110
60	Planar velocity measurements in a weakly compressible mixing layer. , 1999, , .		7