Andrew Ooi

List of Publications by Year
in descending order

80 papers	2,888 citations	236612 25 h-index	168136 53 g-index
83 all docs	83 docs citations	83 times ranked	2872 citing authors

#	Article	IF	Citations
1	Characteristics of a buoyant plume in a channel with cross-flow. International Journal of Heat and Fluid Flow, 2022, 93, 108899.	1.1	2
2	High endothelial shear stress and stress gradient at plaque erosion persist up to 12Âmonths. International Journal of Cardiology, 2022, 357, 1-7.	0.8	3
3	Investigating Shear-Layer Instabilities in Supersonic Impinging Jets Using Dual-Time Particle Image Velocimetry. AIAA Journal, 2022, 60, 3749-3759.	1.5	3
4	Two Dimensional Analysis and Optimization of Hybrid MDCD-TENO Schemes. Journal of Scientific Computing, 2022, 90, 1.	1.1	4
5	Non-Newtonian Endothelial Shear Stress Simulation: Does It Matter?. Frontiers in Cardiovascular Medicine, 2022, 9, 835270.	1.1	9
6	Computational fluid dynamic simulations informed by CT and 4D flow MRI for post-surgery aortic dissection â€“ A case study. International Journal of Heat and Fluid Flow, 2022, 96, 108986.	1.1	5
7	Analysis of sound pressure levels generated by nozzle-emitted large bubbles. JASA Express Letters, 2022, 2, 054002.	0.5	4
8	Numerical simulation of the blood flow through the coronary artery stenosis: Effects of varying eccentricity. Computers in Biology and Medicine, 2022, 146, 105672.	3.9	14
9	High spatial endothelial shear stress gradient independently predicts site of acute coronary plaque rupture and erosion. Cardiovascular Research, 2021, 117, 1974-1985.	1.8	45
10	Two Dimensional Analysis of Hybrid Spectral/Finite Difference Schemes for Linearized Compressible Navierâ€“Stokes Equations. Journal of Scientific Computing, 2021, 87, 1.	1.1	3
11	Evolution of a wall-attached buoyant plume in confined boxes: Direct numerical simulations, entrainment coefficient and an integral model. International Journal of Heat and Fluid Flow, 2021, 90, 108824.	1.1	1
12	Data-driven algebraic models of the turbulent Prandtl number for buoyancy-affected flow near a vertical surface. International Journal of Heat and Mass Transfer, 2021, 179, 121737.	2.5	5
13	Measurement and analysis of the shear layer instabilities in supersonic impinging jets. , 2020, , .		2
14	Receptivity characteristics of under-expanded supersonic impinging jets. Journal of Fluid Mechanics, 2020, 889, .	1.4	19
15	Sensitivity analysis of FDAÂ´s benchmark nozzle regarding in vitro imperfections - Do we need asymmetric CFD benchmarks?. Current Directions in Biomedical Engineering, 2020, 6, 78-81.	0.2	0
16	High-order accurate large-eddy simulations of compressible viscous flow in cylindrical coordinates. Computers and Fluids, 2019, 191, 104241.	1.3	13
17	Expert recommendations on the assessment of wall shear stress in human coronary arteries: existing methodologies, technical considerations, and clinical applications. European Heart Journal, 2019, 40, 3421-3433.	1.0	178
18	Computational particle tracking to model platelet behaviour near malapposed coronary stent struts. European Heart Journal, 2019, 40, 1890-1891.	1.0	2

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19	Numerical Study of Incomplete Stent Apposition Caused by Deploying Undersized Stent in Arteries With Elliptical Cross Sections. Journal of Biomechanical Engineering, 2019, 141, .	0.6	3
20	Endothelial Shear Stress andÂPlaqueÂErosion. JACC: Cardiovascular Imaging, 2019, 12, 374-375.	2.3	53
21	Early strut protrusion and late neointima thickness in the Absorb bioresorbable scaffold: a serial wall shear stress analysis up to five years. EuroIntervention, 2019, 15, e370-e379.	1.4	4
22	Bulk scaling in wall-bounded and homogeneous vertical natural convection. Journal of Fluid Mechanics, 2018, 841, 825-850.	1.4	21
23	Endothelial shear stress 5 years after implantation of a coronary bioresorbable scaffold. European Heart Journal, 2018, 39, 1602-1609.	1.0	33
24	Evaporation and dispersion of respiratory droplets from coughing. Indoor Air, 2017, 27, 179-190.	2.0	229
25	Computational fluid dynamics study of common stent models inside idealised curved coronary arteries. Computer Methods in Biomechanics and Biomedical Engineering, 2017, 20, 671-681.	0.9	18
26	Haemodynamic effects of incomplete stent apposition in curved coronary arteries. Journal of Biomechanics, 2017, 63, 164-173.	0.9	20
27	Coronary optical coherence tomography-derived virtual fractional flow reserve (FFR): anatomy and physiology all-in-one. European Heart Journal, 2017, 38, 3604-3605.	1.0	4
28	Changes in the boundary-layer structure at theÂedge of the ultimate regime in vertical natural convection. Journal of Fluid Mechanics, 2017, 825, 550-572.	1.4	37
29	Simulation of a Large-Eddy-Break-up Device (LEBU) in a Moderate Reynolds Number Turbulent Boundary Layer. Flow, Turbulence and Combustion, 2017, 98, 445-460.	1.4	15
30	Verification of a Lagrangian particle model for short-range firebrand transport. Fire Safety Journal, 2017, 91, 776-783.	1.4	20
31	Five-year follow-up of underexpanded and overexpanded bioresorbable scaffolds: self-correction and impact on shear stress. EuroIntervention, 2017, 12, 2158-2159.	1.4	6
32	The minimal channel: a fast and direct method for characterising roughness. Journal of Physics: Conference Series, 2016, 708, 012010.	0.3	3
33	Optimization Framework for Codesign of Controlled Aerodynamic Systems. AIAA Journal, 2016, 54, 3149-3159.	1.5	3
34	Decomposition of Radiating and Non-Radiating Linear Fluctuating Components in Compressible Flows. , 2016, , 388-396.		0
35	A systematic investigation of roughness height and wavelength in turbulent pipe flow in the transitionally rough regime. Journal of Fluid Mechanics, 2015, 771, 743-777.	1.4	140
36	A fast direct numerical simulation method for characterising hydraulic roughness. Journal of Fluid Mechanics, 2015, 773, 418-431.	1.4	77

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37	Aerodynamic Shape Optimization via Global Extremum Seeking. IEEE Transactions on Control Systems Technology, 2015, 23, 2336-2343.	3.2	6
38	Vertical natural convection: application of the unifying theory of thermal convection. Journal of Fluid Mechanics, 2015, 764, 349-361.	1.4	82
39	Reversal of flow between serial bifurcation lesions: insights from computational fluid dynamic analysis in a population-based phantom model. EuroIntervention, 2015, 11, e1-e3.	1.4	13
40	Reynolds number effects in DNS of pipe flow and comparison with channels and boundary layers. International Journal of Heat and Fluid Flow, 2014, 45, 33-40.	1.1	68
41	Adjoint assisted geometry design of a feedback controlled missile. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2014, 47, 451-456.	0.4	1
42	Effects of coupling, bubble size, and spatial arrangement on chaotic dynamics of microbubble cluster in ultrasonic fields. Journal of the Acoustical Society of America, 2013, 134, 3425-3434.	0.5	38
43	Quantitative Guidelines for the Prediction of Ultrasound Contrast Agent Destruction During Injection. Ultrasound in Medicine and Biology, 2013, 39, 1838-1847.	0.7	2
44	Is there a need for fully converged CFD solutions? Global extremum seeking applied to aerodynamic shape optimisation. , 2013, , .		3
45	An improved interpolation scheme for finite volume simulations on unstructured meshes. Mathematics of Computation, 2012, 82, 803-830.	1.1	0
46	Nonlinear dynamic behavior of microscopic bubbles near a rigid wall. Physical Review E, 2012, 85, 066309.	0.8	21
47	A new perspective on spectral analysis of numerical schemes. International Journal for Numerical Methods in Fluids, 2012, 68, 467-482.	0.9	3
48	The Role of Surfactant Headgroup, Chain Length, and Cavitation Microstreaming on the Growth of Bubbles by Rectified Diffusion. Journal of Physical Chemistry C, 2011, 115, 24310-24316.	1.5	53
49	Insonation frequency selection may assist detection and therapeutic delivery of targeted ultrasound contrast agents. Therapeutic Delivery, 2011, 2, 213-222.	1.2	6
50	Theoretical and experimental evaluation of microstreaming created by a single microbubble: Application to sonoporation. , 2011, , .		2
51	Cavitation microstreaming and material transport around microbubbles. Physics Procedia, 2010, 3, 427-432.	1.2	17
52	The effect of internal diffusion on an evaporating bio-oil droplet â€“ The chemistry free case. Biomass and Bioenergy, 2010, 34, 1134-1140.	2.9	15
53	Cavitation microstreaming and stress fields created by microbubbles. Ultrasonics, 2010, 50, 273-279.	2.1	243
54	Measurement of pressure on a surface using bubble acoustic resonances. Measurement Science and Technology, 2010, 21, 027002.	1.4	2

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55	Chaotic micromixing in open wells using audio-frequency acoustic microstreaming. BioTechniques, 2009, 47, 827-834.	0.8	23
56	Eigenmodal resonances of polydisperse bubble systems on a rigid boundary. Journal of the Acoustical Society of America, 2009, 126, 2929-2938.	0.5	13
57	The interaction of counter-rotating strained vortex pairs with a third vortex. Fluid Dynamics Research, 2009, 41, 035502.	0.6	4
58	A singularity-avoiding moving least squares scheme for two-dimensional unstructured meshes. Journal of Computational Physics, 2009, 228, 5592-5619.	1.9	10
59	BiGlobal stability analysis in curvilinear coordinates of massively separated lifting bodies. Journal of Computational Physics, 2009, 228, 7181-7196.	1.9	38
60	Analysis of time delay effects on a linear bubble chain system. Journal of the Acoustical Society of America, 2008, 124, 815-826.	0.5	25
61	Calculation of scalar structure functions from a vortex model of turbulent passive scalar transport. Physics of Fluids, 2008, 20, 025108.	1.6	0
62	Nonlinear oscillations of air bubbles near and on a rigid boundary with time delay effects. , 2008, , .		0
63	Cavitation microstreaming patterns in single and multiple bubble systems. Journal of Fluid Mechanics, 2007, 576, 191-233.	1.4	186
64	On the propagation of acoustic energy in the vicinity of a bubble chain. Journal of Sound and Vibration, 2007, 306, 507-523.	2.1	20
65	Passive Acoustic Determination of Wave-Breaking Events and Their Severity across the Spectrum. Journal of Atmospheric and Oceanic Technology, 2006, 23, 599-618.	0.5	56
66	Transitions between Turbulent and Laminar Superfluid Vorticity States in the Outer Core of a Neutron Star. Astrophysical Journal, 2006, 651, 1079-1091.	1.6	97
67	Numerical Modelling of Flow and Heat Transfer in the Rotating Disc Cavities of a Turboprop Engine. Annals of the New York Academy of Sciences, 2006, 934, 497-504.	1.8	1
68	Batchelorâ€™s spectrum from an axisymmetric strained scalar field. Physics of Fluids, 2006, 18, 065111.	1.6	3
69	Acoustic microstreaming applied to batch micromixing. , 2005, 6036, 485.		3
70	Global Threeâ€dimensional Flow of a Neutron Superfluid in a Spherical Shell in a Neutron Star. Astrophysical Journal, 2005, 635, 1224-1232.	1.6	70
71	CFD analysis of ejector in a combined ejector cooling system. International Journal of Refrigeration, 2005, 28, 1092-1101.	1.8	213
72	Computational aeroacoustics using the B-spline collocation method. Comptes Rendus - Mecanique, 2005, 333, 726-731.	2.1	3

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73	Symmetric mode resonance of bubbles attached to a rigid boundary. Journal of the Acoustical Society of America, 2005, 118, 2841-2849.	0.5	47
74	Measurement of microbubble-induced acoustic microstreaming using microparticle image velocimetry. , 2005, 5651, 336.		5
75	Time delays in coupled multibubble systems (L). Journal of the Acoustical Society of America, 2005, 117, 47-50.	0.5	43
76	Anisotropy in the sound field generated by a bubble chain. Journal of Sound and Vibration, 2004, 278, 807-823.	2.1	53
77	Reynolds averaged simulation of unsteady separated flow. International Journal of Heat and Fluid Flow, 2003, 24, 147-156.	1.1	201
78	The structure of an unstable circular vortex in a background straining flow. Journal of Fluid Mechanics, 2002, 462, 31-42.	1.4	4
79	Conjugate heat transfer predictions in two-dimensional ribbed passages. International Journal of Heat and Fluid Flow, 2002, 23, 340-345.	1.1	66
80	Reynolds averaged simulation of flow and heat transfer in ribbed ducts. International Journal of Heat and Fluid Flow, 2002, 23, 750-757.	1.1	118