David Newport

List of Publications by Year in descending order

59 papers	580 citations	687363 13 h-index	713466 21 g-index
61 all docs	61 docs citations	61 times ranked	528 citing authors

#	Article	IF	Citations
1	Influence of Wall Compliance on the Flow Patterns in a Patient-Specific Brachio-Cephalic Arterio-Venous Fistula. Biomechanics, 2022, 2, 158-173.	1.2	1
2	Natural convection cooling of aircraft wingbox structures during turnaround period. Applied Thermal Engineering, 2022, 215, 118844.	6.0	1
3	Experimental evaluation of a patient specific Brachio-Cephalic Arterio Venous Fistula (AVF): Velocity flow conditions under steady and pulsatile waveforms. Medical Engineering and Physics, 2022, 106, 103834.	1.7	1
4	O-295â€ƒPassive sperm sorting does not select for sperm with lower DNA fragmentation levels compared to density gradient centrifugation in split samples. Human Reproduction, 2022, 37, .	0.9	0
5	The influence of cell elastic modulus on inertial positions in Poiseuille microflows. Biophysical Journal, 2021, 120, 855-865.	0.5	7
6	Gradients in the in vivo intestinal stem cell compartment and their in vitro recapitulation in mimetic platforms. Cytokine and Growth Factor Reviews, 2021, 60, 76-88.	7.2	9
7	A Sensitive and Portable Deep-UV Absorbance Detector with a Microliter Gas Cell Compatible with Micro GC. Chemosensors, 2021, 9, 63.	3.6	4
8	Sperm selection by rheotaxis improves sperm quality and early embryo development. Reproduction, 2021, 161, 343-352.	2.6	17
9	Cell specific variation in viability in suspension in in vitro Poiseuille flow conditions. Scientific Reports, 2021, 11, 13997.	3.3	2
10	A review of optical interferometry techniques for VOC detection. Sensors and Actuators A: Physical, 2020, 302, 111782.	4.1	53
11	Characterization of a modular microfluidic photoionization detector. Sensors and Actuators B: Chemical, 2020, 324, 128667.	7.8	11
12	Low-volume PEEK gas cell for BTEX detection using portable deep-UV absorption spectrophotometry. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2020, 243, 118727.	3.9	10
13	The mechanical responses of advecting cells in confined flow. Biomicrofluidics, 2020, 14, 031501.	2.4	8
14	The in vitro inertial positions and viability of cells in suspension under different in vivo flow conditions. Scientific Reports, 2020, 10, 1711.	3.3	24
15	Micro Milled Microfluidic Photoionization Detector for Volatile Organic Compounds. Micromachines, 2019, 10, 228.	2.9	15
16	Development of a Toluene Detector Based on Deep UV Absorption Spectrophotometry Using Glass and Aluminum Capillary Tube Gas Cells with a LED Source. Micromachines, 2019, 10, 193.	2.9	16
17	Micro photoionization detectors. Sensors and Actuators B: Chemical, 2019, 287, 86-94.	7.8	36
18	Gas Detection Using Portable Deep-UV Absorption Spectrophotometry: A Review. Sensors, 2019, 19, 5210.	3.8	43

#	Article	IF	Citations
19	Arduino control of a pulsatile flow rig. Medical Engineering and Physics, 2018, 51, 67-71.	1.7	6
20	Hyperactivated stallion spermatozoa fail to exhibit a rheotaxis-like behaviour, unlike other species. Scientific Reports, 2018, 8, 16897.	3.3	13
21	Regional mechanical and biochemical properties of the porcine cortical meninges. Acta Biomaterialia, 2018, 80, 237-246.	8.3	31
22	Towards the prediction of flow-induced shear stress distributions experienced by breast cancer cells in the lymphatics. Biomechanics and Modeling in Mechanobiology, 2017, 16, 2051-2062.	2.8	6
23	Opportunities for Studying the Hydrodynamic Context for Breast Cancer Cell Spread Through Lymph Flow. Lymphatic Research and Biology, 2017, 15, 204-219.	1.1	4
24	Review of Experimental Modelling in Vascular Access for Hemodialysis. Cardiovascular Engineering and Technology, 2017, 8, 330-341.	1.6	7
25	Experimental and numerical analysis of thermally dissipating equipment in an aircraft confined compartment. Applied Thermal Engineering, 2014, 73, 869-878.	6.0	10
26	A Compact Modeling Approach to Enhance Collaborative Design of Thermal-Fluid Systems. Journal of Electronic Packaging, Transactions of the ASME, 2014, 136, .	1.8	3
27	Optimising the locations of thermally sensitive equipment in an aircraft crown compartment. Aerospace Science and Technology, 2013, 28, 391-400.	4.8	13
28	Development and validation of a compact thermal model for an aircraft compartment. Applied Thermal Engineering, 2013, 61, 65-74.	6.0	15
29	Transient natural convection in a conducting enclosure heated from above. Journal of Visualization, 2013, 16, 1-4.	1.8	2
30	Natural convection experiments on a heated horizontal cylinder in a differentially heated square cavity. Experimental Thermal and Fluid Science, 2013, 44, 199-208.	2.7	37
31	Development on Manufacturing Process for Integrating Glass Plates With Microchannel Walls Made by Micro Stereolithography. , 2013, , .		0
32	Development of Compact Thermalâ€“Fluid Models at the Electronic Equipment Level. Journal of Thermal Science and Engineering Applications, 2012, 4, .	1.5	9
33	Thermal Performance Characteristics of Integrated Cooling Solutions Consisting of Multiple Miniature Fans. Journal of Physics: Conference Series, 2012, 395, 012029.	0.4	2
34	Quantitative measurement of gas pressure drop along T-shaped micro channels by interferometry. Journal of Physics: Conference Series, 2012, 362, 012032.	0.4	1
35	Ventilation and internal structure effects on naturally induced flows in a static aircraft wing. Applied Thermal Engineering, 2012, 32, 49-58.	6.0	9
36	Development of Compact Thermal-Fluid Models at the Electronic Equipment Level. , 2011, , .		0

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37	Fabrication of Microchannels by Stereolithography for Optical Use. , 2011, , .		0
38	Gas Mass Flow Rate Measurement in T-Shaped Microchannels in Slip Flow Regime. , 2011, , .		0
39	An optical counting technique with vertical hydrodynamic focusing for biological cells. Biomicrofluidics, 2010, 4, 024110.	2.4	12
40	A heterodyne Mach-Zehnder Interferometer employing static and dynamic phase demodulation techniques for live-cell imaging. , 2010, , .		2
41	Digital MoirÃ© Subtraction Interferometry (DMS) for Electronics Cooling Applications in Enclosures. Journal of Electronic Packaging, Transactions of the ASME, 2010, 132, .	1.8	2
42	Digital interferometry: techniques and trends for fluid measurement. Heat and Mass Transfer, 2008, 44, 535-546.	2.1	25
43	Full field measurement at the micro-scale using micro-interferometry. Microfluidics and Nanofluidics, 2008, 5, 77-87.	2.2	10
44	Measurement of Transient Natural Convection in Non-Ventilated Aircraft Compartments. , 2008, , .		1
45	Thermally Induced Flow Structures in Aircraft Wing Compartments. , 2008, , .		0
46	An Analysis of Natural Convection in Leading Edge Wing Compartments. , 2008, , .		0
47	Influence of Concentration and Number of Image Pairs in Î¼-PIV Experiments. , 2007, , .		1
48	Utilising Î¼-PIV and pressure measurements to determine the viscosity of a DNA solution in a microchannel. Experimental Thermal and Fluid Science, 2006, 30, 843-852.	2.7	28
49	Microfluidique pour la dÃ©tection gÃ©nÃ©tique de cancers. Houille Blanche, 2006, 92, 26-33.	0.3	1
50	Full-field low-frequency heterodyne interferometry using CMOS and CCD cameras with online phase processing. , 2005, 5856, 23.		3
51	DEVELOPMENT OF INTERFEROMETRIC TEMPERATURE MEASUREMENT PROCEDURES FOR MICROFLUID FLOW. Microscale Thermophysical Engineering, 2004, 8, 141-154.	1.2	18
52	Liquid Diffusion Measurement in Micro/Mini Channels From Full-Field Digital Phase Measurement Interferometry (PMI). , 2004, , 429.		7
53	Thermal Analysis of a Micro-Polymerase Chain Reaction Device. , 2004, , .		0
54	Mixed convection cooling of horizontally mounted printed circuit board. IEEE Transactions on Components and Packaging Technologies, 2003, 26, 126-133.	1.3	16

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55	A Comparison of Micro-PIV Experiments in a Mini-Channel to Numerical and Analytical Solutions. , 2003, , 903.		3
56	Development of Interferometric Temperature Measurement Procedures for Microfluid Flow. , 2003, , 809.		1
57	Free Convection Thermal Interaction Between 2D Components Mounted on a Vertically Oriented PCB. , 2002, , .		2
58	On the Thermal Interaction Between an Isothermal Cylinder and Its Isothermal Enclosure for Cylinder Rayleigh Numbers of Order 104. Journal of Heat Transfer, 2001, 123, 1052-1061.	2.1	15
59	On Gaseous Free-Convection Heat Transfer With Well-Defined Boundary Conditions. Journal of Heat Transfer, 2000, 122, 661-668.	2.1	4