

StÃ©phane Colin

List of Publications by Year in descending order

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Version: 2024-02-01

80
papers

1,788
citations

394421

19
h-index

276875

41
g-index

89
all docs

89
docs citations

89
times ranked

1312
citing authors

#	ARTICLE	IF	CITATIONS
1	Jet impingement cooling using fluidic oscillators: an experimental study. <i>Journal of Physics: Conference Series</i> , 2021, 2116, 012028.	0.4	1
2	Adsorbent screening for airborne BTEX analysis and removal. <i>Journal of Environmental Chemical Engineering</i> , 2020, 8, 103563.	6.7	3
3	Miniaturization of fluorescence sensing in optofluidic devices. <i>Microfluidics and Nanofluidics</i> , 2020, 24, 1.	2.2	31
4	Optofluidic Formaldehyde Sensing: Towards On-Chip Integration. <i>Micromachines</i> , 2020, 11, 673.	2.9	6
5	Thermally driven pumps and diodes in multistage assemblies consisting of microchannels with converging, diverging and uniform rectangular cross sections. <i>Microfluidics and Nanofluidics</i> , 2020, 24, 1.	2.2	5
6	Velocity Measurements in Channel Gas Flows in the Slip Regime by means of Molecular Tagging Velocimetry. <i>Micromachines</i> , 2020, 11, 374.	2.9	6
7	Prototyping a Microfluidic Sensor for Real-Time Detection of Airborne Formaldehyde. <i>International Journal of Chemical Engineering and Applications (IJCEA)</i> , 2020, 11, 23-28.	0.3	5
8	Editorial for the Special Issue on Gas Flows in Microsystems. <i>Micromachines</i> , 2019, 10, 494.	2.9	0
9	On the modelling of the switching mechanisms of a Coanda fluidic oscillator. <i>Sensors and Actuators A: Physical</i> , 2019, 299, 111618.	4.1	30
10	Inertial lateral migration and self-assembly of particles in bidisperse suspensions in microchannel flows. <i>Microfluidics and Nanofluidics</i> , 2019, 23, 1.	2.2	25
11	Design Guidelines for Thermally Driven Micropumps of Different Architectures Based on Target Applications via Kinetic Modeling and Simulations. <i>Micromachines</i> , 2019, 10, 249.	2.9	13
12	Sub-ppb Level Detection of BTEX Gaseous Mixtures with a Compact Prototype GC Equipped with a Preconcentration Unit. <i>Micromachines</i> , 2019, 10, 187.	2.9	20
13	A time-dependent method for the measurement of mass flow rate of gases in microchannels. <i>International Journal of Heat and Mass Transfer</i> , 2018, 120, 422-434.	4.8	11
14	Molecular tagging velocimetry for confined rarefied gas flows: Phosphorescence emission measurements at low pressure. <i>Experimental Thermal and Fluid Science</i> , 2018, 99, 510-524.	2.7	8
15	Corrigendum to "Shear work contribution to convective heat transfer of dilute gases in slip flow regime", [Eur. J. Mech. B Fluids 64 (2017) 60-68]. <i>European Journal of Mechanics, B/Fluids</i> , 2018, 72, 467-470.	2.5	0
16	Molecular tagging velocimetry by direct phosphorescence in gas microflows: Correction of Taylor dispersion. <i>Experimental Thermal and Fluid Science</i> , 2017, 83, 177-190.	2.7	11
17	Computational investigation and parametrization of the pumping effect in temperature-driven flows through long tapered channels. <i>Microfluidics and Nanofluidics</i> , 2017, 21, 1.	2.2	15
18	Editorial for the special issue on non-equilibrium gas flows. <i>European Journal of Mechanics, B/Fluids</i> , 2017, 64, 1.	2.5	0

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19	Shear work contribution to convective heat transfer of dilute gases in slip flow regime. European Journal of Mechanics, B/Fluids, 2017, 64, 60-68.	2.5	10
20	Self-ordered particle trains in inertial microchannel flows. Microfluidics and Nanofluidics, 2017, 21, 1.	2.2	35
21	Analysis of flow induced by temperature fields in ratchet-like microchannels by Direct Simulation Monte Carlo. International Journal of Heat and Mass Transfer, 2016, 99, 672-680.	4.8	34
22	Slip length measurement of gas flow. Nanotechnology, 2016, 27, 374004.	2.6	17
23	Experimental and Numerical Study of the Frequency Response of a Fluidic Oscillator for Active Flow Control. , 2016, , .		5
24	Finite element modeling of nickel oxide film for Au-Ni contact of MEMS switches. , 2015, , .		3
25	Selected papers from the 3rd European Conference on Microfluidics: μ Flu TM 12. Microsystem Technologies, 2015, 21, 497-498.	2.0	0
26	Scaling laws based metamodels for the selection of the cooling strategy of electromechanical actuators in the early design stages. Mechatronics, 2015, 29, 67-77.	3.3	1
27	Role of diffusion on molecular tagging velocimetry technique for rarefied gas flow analysis. Microfluidics and Nanofluidics, 2015, 19, 1335-1348.	2.2	13
28	Experimental and computational study of gas flow delivered by a rectangular microchannels leak. Measurement: Journal of the International Measurement Confederation, 2015, 73, 551-562.	5.0	10
29	Micro molecular tagging velocimetry for analysis of gas flows in mini and micro systems. Microsystem Technologies, 2015, 21, 527-537.	2.0	14
30	Single-Phase Gas Flow in Microchannels. , 2014, , 11-102.		13
31	Selected papers from the 3 rd European Conference on Microfluidics - μ Flu'12. Experimental Heat Transfer, 2014, 27, 313-315.	3.2	0
32	Numerical design of a Knudsen pump with curved channels operating in the slip flow regime. Heat and Mass Transfer, 2014, 50, 1065-1080.	2.1	18
33	Finite element multi-physics modeling for ohmic contact of microswitches. , 2014, , .		5
34	Selected papers from the third European Conference on Microfluidics: μ Flu TM 12. Microfluidics and Nanofluidics, 2014, 16, 997-998.	2.2	0
35	Numerical study of thermal creep flow between two ratchet surfaces. Vacuum, 2014, 109, 294-301.	3.5	17
36	Heat Transfer in Microchannelsâ€™2012 Status and Research Needs. Journal of Heat Transfer, 2013, 135, .	2.1	207

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37	An Asperity-Based Finite Element Model for Electrical Contact of Microswitches. , 2013, , .		5
38	Pressure-Driven Single-Phase Gas Flows. , 2013, , 1-16.		0
39	Numerical analysis of thermal creep flow in curved channels for designing a prototype of Knudsen micropump. Journal of Physics: Conference Series, 2012, 362, 012004.	0.4	3
40	Finite Element Based Surface Roughness Study for Ohmic Contact of Microswitches. , 2012, , .		24
41	Gas Microflows in the Slip Flow Regime: A Critical Review on Convective Heat Transfer. Journal of Heat Transfer, 2012, 134, .	2.1	121
42	Numerical Simulation of Thermal Transpiration in the Slip Flow Regime With Curved Walls. , 2012, , .		0
43	Analysis of Gaseous Flows in Minichannels by Molecular Tagging Velocimetry. , 2012, , .		3
44	Design of Tree-Shaped Microchannel Networks Submitted to Simultaneous Pressure Driven and Electro-Osmotic Flows. , 2012, , .		1
45	1st European Conference on Gas Micro Flows (GasMems 2012). Journal of Physics: Conference Series, 2012, 362, 011001.	0.4	0
46	Flow rate measurements of binary gas mixtures through long trapezoidal microchannels. Journal of Physics: Conference Series, 2012, 362, 012003.	0.4	3
47	Quantitative measurement of gas pressure drop along T-shaped micro channels by interferometry. Journal of Physics: Conference Series, 2012, 362, 012032.	0.4	1
48	Velocity field measurements in gas phase internal flows by molecular tagging velocimetry. Journal of Physics: Conference Series, 2012, 362, 012026.	0.4	5
49	Design and optimization of electrochemical microreactors for continuous electrosynthesis. Journal of Applied Electrochemistry, 2012, 42, 667-677.	2.9	12
50	Optimal design of multi-channel microreactor for uniform residence time distribution. Microsystem Technologies, 2012, 18, 209-223.	2.0	22
51	Selected papers from the 2nd European conference on microfluidics: 1/4 Fluâ€™10. Microsystem Technologies, 2012, 18, 149-150.	2.0	0
52	Validation of Finite Element Structural Simulation for Ohmic Microcontact. Procedia Engineering, 2011, 25, 419-422.	1.2	2
53	DSMC Simulation of Pressure Driven Binary Rarefied Gas Flows Through Short Microtubes. , 2011, , .		0
54	A novel experimental setup for gas microflows. Microfluidics and Nanofluidics, 2010, 8, 57-72.	2.2	99

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55	Comparative study between computational and experimental results for binary rarefied gas flows through long microchannels. <i>Microfluidics and Nanofluidics</i> , 2010, 9, 1103-1114.	2.2	42
56	Gas Microflows in the Slip Flow Regime: A Review on Heat Transfer. , 2010, , .		1
57	Numerical and Experimental Analysis of Monostable Mini- and Micro-Oscillators. <i>Heat Transfer Engineering</i> , 2009, 30, 121-129.	1.9	23
58	Numerical and Experimental Analysis of Monostable Mini- and Micro-Oscillators. , 2007, , 717.		3
59	Behavior of a Mini Synthetic Jet in a Transverse Wall Flow: Experimental and Numerical Study. , 2007, , .		1
60	Experimental Analysis of Pressure Drop and Laminar to Turbulent Transition for Gas Flows in Smooth Microtubes. <i>Heat Transfer Engineering</i> , 2007, 28, 670-679.	1.9	45
61	Contrôle actif en aérodynamique au moyen de micro actionneurs fluidiques. <i>Houille Blanche</i> , 2007, 93, 110-116.	0.3	0
62	Coalescence instable lors du mélange de microgouttes aqueuses suspendues dans de l'huile silicone. <i>Houille Blanche</i> , 2007, 93, 104-109.	0.3	0
63	A novel fabrication method of flexible and monolithic 3D microfluidic structures using lamination of SU-8 films. <i>Journal of Micromechanics and Microengineering</i> , 2006, 16, 113-121.	2.6	165
64	Single-phase gas flow in microchannels. , 2006, , 9-86.		6
65	Effets de la double couche électrique sur un écoulement de Poiseuille. <i>Houille Blanche</i> , 2006, 92, 47-52.	0.3	0
66	Evaluation d'une méthode d'imagerie X en microfluidique: cas du remplissage de microcanaux en forme de «T». <i>Houille Blanche</i> , 2006, 92, 33-39.	0.3	0
67	Rarefaction and compressibility effects on steady and transient gas flows in microchannels. <i>Microfluidics and Nanofluidics</i> , 2005, 1, 268-279.	2.2	165
68	Liquid bridge instability applied to microfluidics. <i>Microfluidics and Nanofluidics</i> , 2005, 1, 336-345.	2.2	18
69	Validation of a Second-Order Slip Flow Model in Rectangular Microchannels. <i>Heat Transfer Engineering</i> , 2004, 25, 23-30.	1.9	216
70	Gaseous Flows in Rectangular Microchannels: Experimental Validation of a Second-Order Slip Flow Model. , 2003, , 433.		0
71	Analyse d'écoulements liquides ou gazeux en micro-conduites : découplage des incertitudes expérimentales. <i>Houille Blanche</i> , 2003, 89, 104-110.	0.3	1
72	Etude numérique de microdiodes de type convergent/divergent. <i>Houille Blanche</i> , 2003, 89, 43-48.	0.3	0

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73	Les microdiodes fluidiques : Une solution alternative aux microvalves Fluidic microdiodes: An alternative for microvalves. <i>Mecanique Et Industries</i> , 2001, 2, 349-354.	0.2	0
74	Mesure de débit de gaz dans les microsystèmes Gas flow measurement in microsystems. <i>Mecanique Et Industries</i> , 2001, 2, 355-362.	0.2	3
75	Analysis and testing of a fluidic vortex microdiode. <i>Journal of Micromechanics and Microengineering</i> , 2001, 11, 108-112.	2.6	22
76	HIGH-ORDER BOUNDARY CONDITIONS FOR GASEOUS FLOWS IN RECTANGULAR MICRODUCTS. <i>Microscale Thermophysical Engineering</i> , 2001, 5, 41-54.	1.2	116
77	An Improved Dynamic Model of Pneumatic Actuators. <i>International Journal of Fluid Power</i> , 2000, 1, 39-49.	0.7	15
78	Experimentation of electrostatically actuated monochip micropump for drug delivery. , 1999, , .		3
79	Unsteady gaseous flows in rectangular microchannels: frequency response of one or two pneumatic lines connected in series. <i>European Journal of Mechanics, B/Fluids</i> , 1998, 17, 79-104.	2.5	27
80	A New High Supply Pressure Pneumatic Flapper-Nozzle With Linear Behavior. <i>Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME</i> , 1996, 118, 259-266.	1.6	3