Juergen J Brandner

List of Publications by Year
in descending order

89	1,196	516710 16	414414 32
papers	citations	h-index	g-index

93	93	93	994
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Numerical Study of Perturbators Influence on Heat Transfer and Investigation of Collector Performance for a Micro-Combined Heat and Power System Application. Heat Transfer Engineering, 2021, 42, 456-478.	1.9	3
2	Toward a Compact Wireless Surface Acoustic Wave Pirani Microsensor with Extended Range and Sensitivity. Heat Transfer Engineering, 2021, 42, 565-578.	1.9	4
3	Efficiency Improvement of Miniaturized Heat Exchangers. Fluids, 2021, 6, 25.	1.7	3
4	Advanced Numerical Methodology to Analyze High-Temperature Wire-Net Compact Heat Exchangers For a Micro-Combined Heat and Power System Application. Heat Transfer Engineering, 2020, 41, 934-946.	1.9	7
5	Editorial for the Special Issue â€œSelected Papers from the ISTEGIMâ€™19â€”Thermal Effects in Gas Flow in Microscaleâ€• Micromachines, 2020, 11, 879.	2.9	0
6	Characterization of a modular microfluidic photoionization detector. Sensors and Actuators B: Chemical, 2020, 324, 128667.	7.8	11
7	Miniaturization of fluorescence sensing in optofluidic devices. Microfluidics and Nanofluidics, 2020, 24, 1.	2.2	31
8	Optofluidic Formaldehyde Sensing: Towards On-Chip Integration. Micromachines, 2020, 11, 673.	2.9	6
9	Numerical and Experimental Study of Microchannel Performance on Flow Maldistribution. Micromachines, 2020, 11, 323.	2.9	10
10	A review on emulsification via microfluidic processes. Frontiers of Chemical Science and Engineering, 2020, 14, 350-364.	4.4	25
11	A Hybrid Numerical Methodology Based on CFD and Porous Medium for Thermal Performance Evaluation of Gas to Gas Micro Heat Exchanger. Micromachines, 2020, 11, 218.	2.9	7
12	Numerical Thermal Analysis and 2-D CFD Evaluation Model for An Ideal Cryogenic Regenerator. Micromachines, 2020, 11, 361.	2.9	2
13	Prototyping a Microfluidic Sensor for Real-Time Detection of Airborne Formaldehyde. International Journal of Chemical Engineering and Applications (IJCEA), 2020, 11, 23-28.	0.3	5
14	Characterization of a Wireless Vacuum Sensor Prototype Based on the SAW-Pirani Principle. Processes, 2020, 8, 1685.	2.8	2
15	Design and Simulation of a Wireless SAWâ€“Pirani Sensor with Extended Range and Sensitivity. Sensors, 2019, 19, 2421.	3.8	7
16	Micro Milled Microfluidic Photoionization Detector for Volatile Organic Compounds. Micromachines, 2019, 10, 228.	2.9	15
17	In-Situ Measurements in Microscale Gas Flowsâ€”Conventional Sensors or Something Else?. Micromachines, 2019, 10, 292.	2.9	3
18	Numerical and experimental investigation of a wire-net compact heat exchanger performance for high-temperature applications. Applied Thermal Engineering, 2019, 154, 208-216.	6.0	5

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19	Micro photoionization detectors. Sensors and Actuators B: Chemical, 2019, 287, 86-94.	7.8	36
20	Spectrophotometric Determination of Molybdenum-Containing Compounds in Aqueous Glucose Solutions. Chemical Engineering and Technology, 2018, 41, 1776-1782.	1.5	0
21	Molecular tagging velocimetry by direct phosphorescence in gas microflows: Correction of Taylor dispersion. Experimental Thermal and Fluid Science, 2017, 83, 177-190.	2.7	11
22	Energy and resource efficient continuous production of a binder emulsion using microstructured devices. Chemical Engineering and Processing: Process Intensification, 2017, 122, 319-329.	3.6	5
23	Development of an efficient emulsification process using miniaturized process engineering equipment. Chemical Engineering Research and Design, 2016, 108, 23-29.	5.6	5
24	Investigation of process conditions for catalytic conversion of carbohydrates by epimerization using a microstructured reactor. Chemical Engineering and Processing: Process Intensification, 2016, 105, 103-109.	3.6	2
25	Heat transfer enhancement with gas-to-gas micro heat exchangers. Applied Thermal Engineering, 2016, 93, 1410-1416.	6.0	14
26	Selected papers from the 3rd European Conference on Microfluidics: ÂµFluâ€™12. Microsystem Technologies, 2015, 21, 497-498.	2.0	0
27	Novel windows for â€œsolar commoditiesâ€: a device for CO₂ reduction using plasmonic catalyst activation. Faraday Discussions, 2015, 183, 249-259.	3.2	11
28	Metal crack propagation monitoring by photoluminescence enhancement of quantum dots. Applied Optics, 2015, 54, 6498.	2.1	9
29	Novel microstructured evaporation device. Microsystem Technologies, 2015, 21, 549-560.	2.0	1
30	Micro molecular tagging velocimetry for analysis of gas flows in mini and micro systems. Microsystem Technologies, 2015, 21, 527-537.	2.0	14
31	Design and Characterization of Integrated Microsensors for Heat Transfer Studies in Microchannels. Experimental Heat Transfer, 2014, 27, 389-402.	3.2	3
32	Design and Experimental Investigation of a Gas-to-Gas Counter-Flow Micro Heat Exchanger. Experimental Heat Transfer, 2014, 27, 340-359.	3.2	17
33	Selected papers from the 3rdEuropean Conference on Microfluidics - Î¼Flu'12. Experimental Heat Transfer, 2014, 27, 313-315.	3.2	0
34	Experimental analysis of the influence of wall axial conduction on gas-to-gas micro heat exchanger effectiveness. International Journal of Heat and Mass Transfer, 2014, 69, 17-25.	4.8	27
35	Selected papers from the third European Conference on Microfluidics: ÂµFluâ€™12. Microfluidics and Nanofluidics, 2014, 16, 997-998.	2.2	0
36	Investigation of self-similar heat sinks for liquid cooled electronics. Applied Thermal Engineering, 2013, 59, 725-732.	6.0	19

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37	Development of a continuous emulsification process for a highly viscous dispersed phase using microstructured devices. Green Processing and Synthesis, 2013, 2, .	3.4	0
38	Vaporâ€“liquid phase separation in micro-/ministructured devices. Chemical Engineering Science, 2013, 93, 32-46.	3.8	10
39	Heat Transfer in Microchannelsâ€”2012 Status and Research Needs. Journal of Heat Transfer, 2013, 135, .	2.1	207
40	Prediction of micro surface cooler performance for different rectangular type microchannels dimensions. International Journal of Heat and Fluid Flow, 2013, 44, 644-651.	2.4	9
41	Reprint of: Measuring and modeling the residence time distribution of gas flows in multichannel microreactors. Chemical Engineering Journal, 2013, 227, 203-214.	12.7	11
42	Fabrication of Microreactors Made from Metals and Ceramic. , 2013, , 35-51.		3
43	Measuring and modeling the residence time distribution of gas flows in multichannel microreactors. Chemical Engineering Journal, 2013, 215-216, 449-460.	12.7	18
44	Microstructure devices for process intensification: Influence of manufacturing tolerances and design. Applied Thermal Engineering, 2013, 59, 745-752.	6.0	5
45	Experimental Investigation on Thermal Performance of Gas-to-Gas Micro Heat Exchanger With Three Flow Arrangements. , 2013, , .		1
46	Temperature Modulation. , 2013, , 435-462.		1
47	Development on Manufacturing Process for Integrating Glass Plates With Microchannel Walls Made by Micro Stereolithography. , 2013, , .		0
48	Parameter Optimization for a Better Heat Distribution in a Microchannel Surface Cooler. , 2012, , .		0
49	A New Microstructure Device for Efficient Evaporation of Liquids. Journal of Thermal Science and Technology, 2012, 7, 414-424.	1.1	2
50	Transitional and Turbulent Convective Heat Transfer of Compressible Gas Flows Through Microtubes. , 2012, , .		0
51	Hydraulic and thermal design of a gas microchannel heat exchanger. Journal of Physics: Conference Series, 2012, 362, 012023.	0.4	10
52	Integrated temperature microsensors for the characterization of gas heat transfer. Journal of Physics: Conference Series, 2012, 362, 012021.	0.4	1
53	Influence of Fluid Flow Distribution in Micro-Channel Arrays to Phase Transition Processes. Experimental Heat Transfer, 2012, 25, 172-180.	3.2	1
54	Microfabrication in metals, ceramics and polymers. Russian Journal of General Chemistry, 2012, 82, 2025-2033.	0.8	8

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55	Optical measurement of evaporation processes using microstructured evaporators. Flow Measurement and Instrumentation, 2012, 27, 2-7.	2.0	0
56	Index matched fluidic packaging of high power UV LED clusters on aluminum substrates for improved optical output power. , 2012, , .		4
57	A sensor-equipped microchannel system for the thermal characterization of rarefied gas flows. Experimental Thermal and Fluid Science, 2012, 41, 112-120.	2.7	6
58	Pre-Calculation of Evaporation of Water in Parallel Microchannels Using Measurable Fluid Inlet Conditions. , 2012, , .		0
59	A Microstructure Device for Single Phase Surface Cooling. , 2011, , .		3
60	Fabrication of Microchannels by Stereolithography for Optical Use. , 2011, , .		0
61	Microstructure devices for water evaporation. Applied Thermal Engineering, 2011, 31, 602-609.	6.0	11
62	Micro device for liquid cooling by evaporation of R134a. Chemical Engineering Journal, 2011, 167, 705-712.	12.7	14
63	Thermal improvements for high power UV LED clusters. , 2011, , .		5
64	Efficient Heat Transfer by Phase Transition in Microstructured Devices. , 2011, , .		0
65	Mikrostrukturapparate im verfahrens- und anlagentechnischen Praktikum. Chemie-Ingenieur-Technik, 2010, 82, 607-614.	0.8	3
66	A novel device for the optical investigation of phase transition in micro channel array evaporators. Applied Thermal Engineering, 2010, 30, 1872-1876.	6.0	16
67	Microstructure Devices for Water Evaporation. , 2010, , .		5
68	High power UV-LED-clusters on ceramic substrates. , 2010, , .		3
69	Gas Wall Interactions of Rarefied Gases in MEMS: A New Experimental Device With Integrated Sensors. , 2010, , .		1
70	Optical Studies of Evaporation in Microchannel Arrays. , 2010, , .		0
71	Forced periodic temperature cycling of chemical reactions in microstructure devices. Chemical Engineering Science, 2008, 63, 4955-4961.	3.8	17
72	Microstructure devices generation by selective laser melting. , 2007, 6459, 289.		11

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73	Low-Frequency Instabilities in the Operation of Metallic Multi-Microchannel Evaporators. Heat Transfer Engineering, 2007, 28, 834-841.	1.9	18
74	Enhanced Microstructured Reactor Performance under Forced Temperature Oscillations. International Journal of Chemical Reactor Engineering, 2007, 5, .	1.1	1
75	Assessing Uncertainties in Friction Factor Measurement as a Tool in Devising Experimental Set-Ups. , 2007, , .		0
76	Microstructure Heat Exchanger Applications in Laboratory and Industry. Heat Transfer Engineering, 2007, 28, 761-771.	1.9	42
77	Microstructure devices for efficient heat transfer. Microgravity Science and Technology, 2007, 19, 41-43.	1.4	8
78	Selective adsorption of solvents in a multiscale device. Microfluidics and Nanofluidics, 2007, 3, 299-305.	2.2	2
79	Optimization of Metallic Multi-Microchannel Array Evaporators. , 2006, , 1165.		0
80	Microstructure Heat Exchanger Applications in Laboratory and Industry. , 2006, , 1233.		3
81	Concepts and realization of microstructure heat exchangers for enhanced heat transfer. Experimental Thermal and Fluid Science, 2006, 30, 801-809.	2.7	107
82	Comparison of Crossflow Micro Heat Exchangers With Different Microstructure Designs. , 2005, , 493.		8
83	Fabrication and Testing of Microstructure Heat Exchangers for Thermal Applications. , 2005, , 657.		5
84	High-speed imaging of flow in microchannel array water evaporators. Microfluidics and Nanofluidics, 2005, 1, 128-136.	2.2	24
85	Comparison of Microchannel Array Water Evaporator Designs by High-Speed Videography. , 2005, , .		3
86	Characterisation of electrically powered micro-heat exchangers. Chemical Engineering Journal, 2004, 101, 339-345.	12.7	41
87	High-Speed Imaging of Flow in Microchannel Array Water Evaporators. , 2004, , .		2
88	MICROSTRUCTURE DEVICES FOR APPLICATIONS IN THERMAL AND CHEMICAL PROCESS ENGINEERING. Microscale Thermophysical Engineering, 2001, 5, 17-39.	1.2	200
89	Microfabrication for Energy Generating Devices and Fuel Processors. , 0, , 5-38.		0