Jakob WoisetschlÃ¤ger

List of Publications by Year
in descending order

59 papers	929 citations	516710 16 h-index	477307 29 g-index
60 all docs	60 docs citations	60 times ranked	471 citing authors

#	Article	IF	Citations
1	Enhanced Oxygen Volumetric Mass Transfer in a Geometrically Constrained Vortex. Water (Switzerland), 2022, 14, 771.	2.7	2
2	Seedingless measurement of density fluctuations and flow velocity using high-speed holographic interferometry in a swirl-stabilized flame. Optics and Lasers in Engineering, 2021, 139, 106481.	3.8	2
3	Electrically Induced Liquidâ€“Liquid Phase Transition in a Floating Water Bridge Identified by Refractive Index Variations. Water (Switzerland), 2021, 13, 602.	2.7	3
4	Heat transfer and film cooling measurements on aerodynamic geometries relevant for turbomachinery. SN Applied Sciences, 2021, 3, 1.	2.9	1
5	Numerical Steady and Transient Evaluation of a Confined Swirl Stabilized Burner. International Journal of Turbomachinery, Propulsion and Power, 2021, 6, 46.	1.1	0
6	Quantitative measurement of density fluctuations with a full-field laser interferometric vibrometer. Experiments in Fluids, 2020, 61, 9.	2.4	5
7	Nuclear Magnetic Relaxation Mapping of Spin Relaxation in Electrically Stressed Glycerol. ACS Omega, 2020, 5, 22057-22070.	3.5	3
8	Electrically induced liquidâ€“liquid phase transition in water at room temperature. Physical Chemistry Chemical Physics, 2019, 21, 18541-18550.	2.8	4
9	Solar Eclipses and the Surface Properties of Water. Earth, Moon and Planets, 2019, 123, 15-43.	0.6	3
10	Raman spectroscopy and shadowgraph visualization of excess protons in high-voltage electrolysis of pure water. Journal Physics D: Applied Physics, 2019, 52, 365302.	2.8	7
11	Discussion of laser interferometric vibrometry for the determination of heat release fluctuations in an unconfined swirl-stabilized flame. Combustion and Flame, 2019, 201, 315-327.	5.2	7
12	Experimental Investigation of Boundary Layer Relaminarization in Accelerated Flow. Journal of Fluids Engineering, Transactions of the ASME, 2018, 140, .	1.5	4
13	Prediction of Combustion Noise of a Swirl-Stabilized Flame Using Laser Interferometric Vibrometry Validated by Acoustic Measurements. , 2017, , .		3
14	Magnetic resonance imaging of flow and mass transfer in electrohydrodynamic liquid bridges. Journal of Visualization, 2017, 20, 97-110.	1.8	6
15	Non-invasive seedingless measurements of the flame transfer function using high-speed camera-based laser vibrometry. , 2017, , .		1
16	Detecting Transition in Flat Plate Flow With Laser Interferometric Vibrometry (LIV). , 2016, , .		1
17	Introduction of a Project-Based-Course in Turbine Stage Design for Undergraduate Students at Graz University of Technology. , 2016, , .		0
18	Comparison of Flame Transfer Functions Acquired by Chemiluminescence and Density Fluctuation. , 2016, , .		0

#	Article	IF	Citations
19	Analysis of Combustion Noise Using Locally Resolved Density Fluctuations and a Microphone Array. , 2016, , .		0
20	Non-equilibrium thermodynamics and collective vibrational modes of liquid water in an inhomogeneous electric field. Physical Chemistry Chemical Physics, 2016, 18, 16281-16292.	2.8	16
21	Analysis of Measured Flame Transfer Functions With Locally Resolved Density Fluctuation and OH-Chemiluminescence Data. Journal of Engineering for Gas Turbines and Power, 2016, 138, .	1.1	6
22	A floating water bridge produces water with excess charge. Journal Physics D: Applied Physics, 2016, 49, 125502.	2.8	14
23	A Quasi-Elastic Neutron Scattering Study of the Dynamics of Electrically Constrained Water. Journal of Physical Chemistry B, 2015, 119, 15892-15900.	2.6	17
24	Laser vibrometry for combustion diagnostics in thermoacoustic research. TM Technisches Messen, 2015, 82, 549-555.	0.7	2
25	Analysis of Measured Flame Transfer Functions With Locally Resolved Density Fluctuation and OH-Chemiluminescence Data. , 2015, , .		0
26	Interferometric Investigation of the Thermoacoustics in a Swirl Stabilized Methane Flame. , 2015, , .		0
27	Proton production, neutralisation and reduction in a floating water bridge. Journal Physics D: Applied Physics, 2015, 48, 415501.	2.8	15
28	The Armstrong experiment revisited. European Physical Journal: Special Topics, 2014, 223, 959-977.	2.6	14
29	The Preparation of Electrohydrodynamic Bridges from Polar Dielectric Liquids. Journal of Visualized Experiments, 2014, , e51819.	0.3	18
30	Frequency Resolved Density Fluctuation Measurements of Combustion Oscillations in a Model Combustor. , 2013, , .		0
31	Analysis of flow and density oscillations in a swirl-stabilized flame employing highly resolving optical measurement techniques. Experiments in Fluids, 2013, 54, 1.	2.4	11
32	Interferometric determination of heat release rate in a pulsated flame. Combustion and Flame, 2013, 160, 589-600.	5.2	23
33	Investigation of the mid-infrared emission of a floating water bridge. Journal Physics D: Applied Physics, 2012, 45, 475401.	2.8	24
34	Design and Validation of a Burner With Variable Geometry for Extended Combustion Range. , 2012, , .		5
35	Horizontal bridges in polar dielectric liquids. Experiments in Fluids, 2012, 52, 193-205.	2.4	35
36	The bioscope systemâ€"testing and validating a novel sensor for aqueous solutions. Journal of Water Chemistry and Technology, 2011, 33, 369-376.	0.6	0

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37	The behaviour of a floating water bridge under reduced gravity conditions. Journal Physics D: Applied Physics, 2011, 44, 025501.	2.8	8
38	Methanol, Ethanol and Propanol in EHD liquid bridging. Journal of Physics: Conference Series, 2011, 329, 012003.	0.4	10
39	Experiments in a floating water bridge. Experiments in Fluids, 2010, 48, 121-131.	2.4	53
40	Mass and charge transfer within a floating water bridge. , 2010, , .		7
41	Mapping the Density Fluctuations in a Pulsed Air-Methane Flame Using Laser-Vibrometry. Journal of Engineering for Gas Turbines and Power, 2010, 132, .	1.1	11
42	Neutron scattering of a floating heavy water bridge. Journal Physics D: Applied Physics, 2009, 42, 065502.	2.8	47
43	Dynamics of the floating water bridge. Journal Physics D: Applied Physics, 2008, 41, 185502.	2.8	52
44	The floating water bridge. Journal Physics D: Applied Physics, 2007, 40, 6112-6114.	2.8	108
45	Laserâ€“dopplerâ€“velocimetry measurements in a one and a half stage transonic test turbine with different angular statorâ€“stator positions. Experiments in Fluids, 2007, 43, 385-393.	2.4	6
46	Recent Applications of Particle Image Velocimetry to Flow Research in Thermal Turbomachinery. , 2007, , 311-331.		10
47	Frequency- and space-resolved measurement of local density fluctuations in air by laser vibrometry. Measurement Science and Technology, 2006, 17, 2835-2842.	2.6	11
48	Flow pattern and agglomeration in the dust outlet of a gas cyclone investigated by Phase Doppler Anemometry. Powder Technology, 2005, 156, 34-42.	4.2	34
49	Investigation of Stator-Rotor Interaction in a Transonic Turbine Stage Using Laser Doppler Velocimetry and Pneumatic Probes. Journal of Turbomachinery, 2004, 126, 297-305.	1.7	29
50	Investigation of the flow pattern in different dust outlet geometries of a gas cyclone by laser Doppler anemometry. Powder Technology, 2003, 138, 239-251.	4.2	85
51	Frequency analysis of turbulent compressible flows by laser vibrometry. Experiments in Fluids, 2001, 31, 153-161.	2.4	27
52	Novel Blade Cooling Engineering Solution. , 2000, , .		9
53	Investigation of the Flow Field in the Upper Part of a Cyclone with Laser and Phase Doppler Anemometry. Particle and Particle Systems Characterization, 2000, 17, 21-27.	2.3	9
54	Numerical and Experimental Investigation of the Wake Flow Downstream of a Linear Turbine Cascade. , 1998, , .		4

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55	The Influence of Pressure Pulses to an Innovative Turbine Blade Film Cooling System. , 1998, , .		4
56	Phase-shifting holographic interferometry for breast cancer detection. Applied Optics, 1994, 33, 5011.	2.1	17
57	Comparison of Different Methods of Abel Inversion Using Computer Simulated and Experimental Side-On Data. Zeitschrift Fur Naturforschung - Section A Journal of Physical Sciences, 1992, 47, 955-970.	1.5	100
58	Tomographic investigation of the particle density distribution of sodium atoms in a glow discharge using resonance heterodyne holographic interferometry. Physics Letters, Section A: General, Atomic and Solid State Physics, 1991, 152, 42-46.	2.1	11
59	Tomographic reconstruction of the temperature distribution in a convective heat flow using multidirectional holographic interferometry. Applied Optics, 1989, 28, 1508.	2.1	25