

# Jakob WoisetschlÄäger

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/5773426/publications.pdf>

Version: 2024-02-01

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	The floating water bridge. Journal Physics D: Applied Physics, 2007, 40, 6112-6114.	2.8	108
2	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
3	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
4	Experiments in a floating water bridge. Experiments in Fluids, 2010, 48, 121-131.	2.4	53
5	Dynamics of the floating water bridge. Journal Physics D: Applied Physics, 2008, 41, 185502.	2.8	52
6	Neutron scattering of a floating heavy water bridge. Journal Physics D: Applied Physics, 2009, 42, 065502.	2.8	47
7	Horizontal bridges in polar dielectric liquids. Experiments in Fluids, 2012, 52, 193-205.	2.4	35
8	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
9	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
10	Frequency analysis of turbulent compressible flows by laser vibrometry. Experiments in Fluids, 2001, 31, 153-161.	2.4	27
11	Tomographic reconstruction of the temperature distribution in a convective heat flow using multidirectional holographic interferometry. Applied Optics, 1989, 28, 1508.	2.1	25
12	Investigation of the mid-infrared emission of a floating water bridge. Journal Physics D: Applied Physics, 2012, 45, 475401.	2.8	24
13	Interferometric determination of heat release rate in a pulsated flame. Combustion and Flame, 2013, 160, 589-600.	5.2	23
14	The Preparation of Electrohydrodynamic Bridges from Polar Dielectric Liquids. Journal of Visualized Experiments, 2014, , e51819.	0.3	18
15	Phase-shifting holographic interferometry for breast cancer detection. Applied Optics, 1994, 33, 5011.	2.1	17
16	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
17	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
18	Proton production, neutralisation and reduction in a floating water bridge. Journal Physics D: Applied Physics, 2015, 48, 415501.	2.8	15

#	ARTICLE	IF	CITATIONS
19	The Armstrong experiment revisited. <i>European Physical Journal: Special Topics</i> , 2014, 223, 959-977.	2.6	14
20	A floating water bridge produces water with excess charge. <i>Journal Physics D: Applied Physics</i> , 2016, 49, 125502.	2.8	14
21	Tomographic investigation of the particle density distribution of sodium atoms in a glow discharge using resonance heterodyne holographic interferometry. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 1991, 152, 42-46.	2.1	11
22	Frequency- and space-resolved measurement of local density fluctuations in air by laser vibrometry. <i>Measurement Science and Technology</i> , 2006, 17, 2835-2842.	2.6	11
23	Mapping the Density Fluctuations in a Pulsed Air-Methane Flame Using Laser-Vibrometry. <i>Journal of Engineering for Gas Turbines and Power</i> , 2010, 132, .	1.1	11
24	Analysis of flow and density oscillations in a swirl-stabilized flame employing highly resolving optical measurement techniques. <i>Experiments in Fluids</i> , 2013, 54, 1.	2.4	11
25	Methanol, Ethanol and Propanol in EHD liquid bridging. <i>Journal of Physics: Conference Series</i> , 2011, 329, 012003.	0.4	10
26	Recent Applications of Particle Image Velocimetry to Flow Research in Thermal Turbomachinery. , 2007, , 311-331.		10
27	Novel Blade Cooling Engineering Solution. , 2000, , .		9
28	Investigation of the Flow Field in the Upper Part of a Cyclone with Laser and Phase Doppler Anemometry. <i>Particle and Particle Systems Characterization</i> , 2000, 17, 21-27.	2.3	9
29	The behaviour of a floating water bridge under reduced gravity conditions. <i>Journal Physics D: Applied Physics</i> , 2011, 44, 025501.	2.8	8
30	Mass and charge transfer within a floating water bridge. , 2010, , .		7
31	Raman spectroscopy and shadowgraph visualization of excess protons in high-voltage electrolysis of pure water. <i>Journal Physics D: Applied Physics</i> , 2019, 52, 365302.	2.8	7
32	Discussion of laser interferometric vibrometry for the determination of heat release fluctuations in an unconfined swirl-stabilized flame. <i>Combustion and Flame</i> , 2019, 201, 315-327.	5.2	7
33	Laser“doppler” velocimetry measurements in a one and a half stage transonic test turbine with different angular stator“stator positions. <i>Experiments in Fluids</i> , 2007, 43, 385-393.	2.4	6
34	Analysis of Measured Flame Transfer Functions With Locally Resolved Density Fluctuation and OH-Chemiluminescence Data. <i>Journal of Engineering for Gas Turbines and Power</i> , 2016, 138, .	1.1	6
35	Magnetic resonance imaging of flow and mass transfer in electrohydrodynamic liquid bridges. <i>Journal of Visualization</i> , 2017, 20, 97-110.	1.8	6
36	Design and Validation of a Burner With Variable Geometry for Extended Combustion Range. , 2012, , .		5

#	ARTICLE	IF	CITATIONS
37	Quantitative measurement of density fluctuations with a full-field laser interferometric vibrometer. <i>Experiments in Fluids</i> , 2020, 61, 9.	2.4	5
38	Numerical and Experimental Investigation of the Wake Flow Downstream of a Linear Turbine Cascade. , 1998, , .		4
39	Experimental Investigation of Boundary Layer Relaminarization in Accelerated Flow. <i>Journal of Fluids Engineering, Transactions of the ASME</i> , 2018, 140, .	1.5	4
40	Electrically induced liquidâ€“liquid phase transition in water at room temperature. <i>Physical Chemistry Chemical Physics</i> , 2019, 21, 18541-18550.	2.8	4
41	The Influence of Pressure Pulses to an Innovative Turbine Blade Film Cooling System. , 1998, , .		4
42	Prediction of Combustion Noise of a Swirl-Stabilized Flame Using Laser Interferometric Vibrometry Validated by Acoustic Measurements. , 2017, , .		3
43	Solar Eclipses and the Surface Properties of Water. <i>Earth, Moon and Planets</i> , 2019, 123, 15-43.	0.6	3
44	Nuclear Magnetic Relaxation Mapping of Spin Relaxation in Electrically Stressed Glycerol. <i>ACS Omega</i> , 2020, 5, 22057-22070.	3.5	3
45	Electrically Induced Liquidâ€“Liquid Phase Transition in a Floating Water Bridge Identified by Refractive Index Variations. <i>Water (Switzerland)</i> , 2021, 13, 602.	2.7	3
46	Laser vibrometry for combustion diagnostics in thermoacoustic research. <i>TM Technisches Messen</i> , 2015, 82, 549-555.	0.7	2
47	Seedingless measurement of density fluctuations and flow velocity using high-speed holographic interferometry in a swirl-stabilized flame. <i>Optics and Lasers in Engineering</i> , 2021, 139, 106481.	3.8	2
48	Enhanced Oxygen Volumetric Mass Transfer in a Geometrically Constrained Vortex. <i>Water (Switzerland)</i> , 2022, 14, 771.	2.7	2
49	Detecting Transition in Flat Plate Flow With Laser Interferometric Vibrometry (LIV). , 2016, , .		1
50	Non-invasive seedingless measurements of the flame transfer function using high-speed camera-based laser vibrometry. , 2017, , .		1
51	Heat transfer and film cooling measurements on aerodynamic geometries relevant for turbomachinery. <i>SN Applied Sciences</i> , 2021, 3, 1.	2.9	1
52	The bioscope systemâ€“testing and validating a novel sensor for aqueous solutions. <i>Journal of Water Chemistry and Technology</i> , 2011, 33, 369-376.	0.6	0
53	Frequency Resolved Density Fluctuation Measurements of Combustion Oscillations in a Model Combustor. , 2013, , .		0
54	Analysis of Measured Flame Transfer Functions With Locally Resolved Density Fluctuation and OH-Chemiluminescence Data. , 2015, , .		0

#	ARTICLE	IF	CITATIONS
55	Interferometric Investigation of the Thermoacoustics in a Swirl Stabilized Methane Flame. , 2015, , .		0
56	Introduction of a Project-Based-Course in Turbine Stage Design for Undergraduate Students at Graz University of Technology. , 2016, , .		0
57	Comparison of Flame Transfer Functions Acquired by Chemiluminescence and Density Fluctuation. , 2016, , .		0
58	Analysis of Combustion Noise Using Locally Resolved Density Fluctuations and a Microphone Array. , 2016, , .		0
59	Numerical Steady and Transient Evaluation of a Confined Swirl Stabilized Burner. International Journal of Turbomachinery, Propulsion and Power, 2021, 6, 46.	1.1	0