

Vladimir Dulin

List of Publications by Year in descending order

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69
papers

778
citations

623188

14
h-index

552369

26
g-index

72
all docs

72
docs citations

72
times ranked

371
citing authors

#	ARTICLE	IF	CITATIONS
1	Experimental study of an impinging jet with different swirl rates. International Journal of Heat and Fluid Flow, 2007, 28, 1340-1359.	1.1	112
2	Planar fluorescence for round bubble imaging and its application for the study of an axisymmetric two-phase jet. Experiments in Fluids, 2010, 48, 615-629.	1.1	75
3	Comparative analysis of low- and high-swirl confined flames and jets by proper orthogonal and dynamic mode decompositions. Physics of Fluids, 2014, 26, .	1.6	73
4	Flow Structure of Swirling Turbulent Propane Flames. Flow, Turbulence and Combustion, 2011, 87, 569-595.	1.4	46
5	Effect of axisymmetric forcing on the structure of a swirling turbulent jet. International Journal of Heat and Fluid Flow, 2008, 29, 1699-1715.	1.1	45
6	Effect of High-Amplitude Forcing on Turbulent Combustion Intensity and Vortex Core Precession in a Strongly Swirling Lifted Propane/Air Flame. Combustion Science and Technology, 2012, 184, 1862-1890.	1.2	38
7	Coherent structures in the near-field of swirling turbulent jets: A tomographic PIV study. International Journal of Heat and Fluid Flow, 2018, 70, 363-379.	1.1	32
8	Helical modes in low- and high-swirl jets measured by tomographic PIV. Journal of Turbulence, 2016, 17, 678-698.	0.5	28
9	Steam-enhanced regime for liquid hydrocarbons combustion: velocity distribution in the burner flame. Thermophysics and Aeromechanics, 2014, 21, 393-396.	0.1	22
10	PIV study of large-scale flow organisation in slot jets. International Journal of Heat and Fluid Flow, 2015, 51, 335-352.	1.1	20
11	PIV/PLIF investigation of unsteady turbulent flow and mixing behind a model gas turbine combustor. Experiments in Fluids, 2021, 62, 1.	1.1	19
12	Experimental investigation of turbulence modification in bubbly axisymmetric jets. Journal of Engineering Thermophysics, 2015, 24, 101-112.	0.6	15
13	On Impact of Helical Structures on Stabilization of Swirling Flames with Vortex Breakdown. Flow, Turbulence and Combustion, 2019, 103, 887-911.	1.4	15
14	Mass and momentum transport in the near field of swirling turbulent jets. Effect of swirl rate. International Journal of Heat and Fluid Flow, 2020, 83, 108539.	1.1	15
15	Assessment of single-shot temperature measurements by thermally-assisted OH PLIF using excitation in the A ² Σ ⁺ ← X ² Σ ⁺ (1-0) band. Proceedings of the Combustion Institute, 2021, 38, 1877-1883.	2.4	15
16	Combustion Regime Monitoring by Flame Imaging and Machine Learning. Optoelectronics, Instrumentation and Data Processing, 2018, 54, 513-519.	0.2	14
17	3D velocity measurements in a premixed flame by tomographic PIV. Measurement Science and Technology, 2015, 26, 064001.	1.4	13
18	Spatial and temporal resolution of the particle image velocimetry technique in flame speed measurements. Combustion, Explosion and Shock Waves, 2014, 50, 510-517.	0.3	12

#	ARTICLE	IF	CITATIONS
19	The optical principles of PFBI approach. AIP Conference Proceedings, 2012, , .	0.3	10
20	PIV and OH PLIF study of impinging propane-air jet-flames. Journal of Physics: Conference Series, 2016, 754, 072001.	0.3	10
21	A swirling jet with vortex breakdown: three-dimensional coherent structures. Thermophysics and Aeromechanics, 2016, 23, 301-304.	0.1	10
22	Experimental Modeling of the Structure of a Reacting Twisted Flow Behind a Swirl Burner. Heat Transfer Research, 2010, 41, 445-463.	0.9	8
23	Expanding the Stability Range of a Lifted Propane Flame by Resonant Acoustic Excitation. Combustion Science and Technology, 2013, 185, 1644-1666.	1.2	7
24	Influence of a Central Jet on Isothermal and Reacting Swirling Flow in a Model Combustion Chamber. Energies, 2022, 15, 1615.	1.6	7
25	Modal Decomposition of the Precessing Vortex Core in a Hydro Turbine Model. Applied Sciences (Switzerland), 2022, 12, 5127.	1.3	7
26	Experimental and numerical simulation for swirl flow in a combustor. Thermal Engineering (English) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50	0.4	6
27	Diagnostics of jet flows by using tomographic particle image velocimetry. Optoelectronics, Instrumentation and Data Processing, 2014, 50, 457-465.	0.2	6
28	A strategy for high specific power pyroelectric energy harvesting from a fluid source. Applied Physics Letters, 2017, 111, 233903.	1.5	6
29	Monitoring of combustion regimes based on the visualization of the flame and machine learning. Journal of Physics: Conference Series, 2018, 1128, 012138.	0.3	6
30	Modeling of the Tonal Noise Characteristics in a Foil Flow by using Machine Learning. Optoelectronics, Instrumentation and Data Processing, 2019, 55, 205-211.	0.2	6
31	On the Structure of an Impact Jet with Flow Swirling and Combustion. Combustion, Explosion and Shock Waves, 2020, 56, 131-136.	0.3	6
32	On the Flow Structure and Dynamics of Methane and Syngas Lean Flames in a Model Gas-Turbine Combustor. Energies, 2021, 14, 8267.	1.6	6
33	Determining instability modes in a gas flame. Technical Physics Letters, 2013, 39, 308-311.	0.2	5
34	Swirl effect on flow structure and mixing in a turbulent jet. Journal of Physics: Conference Series, 2018, 980, 012001.	0.3	5
35	Self-oscillations in a jet flow and gaseous flame with strong swirl. Thermophysics and Aeromechanics, 2018, 25, 379-386.	0.1	5
36	Control of the turbulent wake flow behind a circular cylinder by asymmetric sectoral hydrophobic coatings. Physics of Fluids, 2021, 33, .	1.6	5

#	ARTICLE	IF	CITATIONS
37	Study of vortex core precession in combustion chambers. Thermophysics and Aeromechanics, 2013, 20, 679-686.	0.1	4
38	Measurements of density field in a swirling flame by 2D spontaneous Raman scattering. AIP Conference Proceedings, 2016, , .	0.3	4
39	Turbulent transport in a swirling jet with vortex core breakdown. PIV/PLIF-measurement and numerical simulation. Thermophysics and Aeromechanics, 2019, 26, 351-359.	0.1	4
40	LES Simulation of a Model Gas-Turbine Lean Combustor: Impact of Coherent Flow Structures on the Temperature Field and Concentration of CO and NO. Energies, 2022, 15, 4362.	1.6	4
41	Effect of external periodic excitation on a swirling suspended flame. Technical Physics Letters, 2011, 37, 278-281.	0.2	3
42	Coherent Structures in the Near Field of Swirling Turbulent Jets and Flames Investigated by PIV and PLIF. , 2019, , .		3
43	Application of modern optical methods for detecting the spatial structure of turbulent flames. Optoelectronics, Instrumentation and Data Processing, 2012, 48, 235-243.	0.2	2
44	Mixing in a model gas turbine combustor studied by panoramic optical techniques. Thermophysics and Aeromechanics, 2017, 24, 347-353.	0.1	2
45	Planar Spontaneous Raman-Scattering Spectroscopy for Reacting Jet-Flow Diagnostics Using Lyotâ€™Ehman Tunable Filter. Technical Physics Letters, 2018, 44, 53-56.	0.2	2
46	Analysis of mean and fluctuating helicity measured by TomoPIV in swirling jet. EPJ Web of Conferences, 2018, 180, 02097.	0.1	2
47	On formation of a stagnation zone in the flow between conical flame and flat obstacle. Thermophysics and Aeromechanics, 2018, 25, 317-320.	0.1	2
48	Spatial Structure of a Reacting Turbulent Swirling Jet Flow with Combustion of a Propaneâ€™Air Mixture. Combustion, Explosion and Shock Waves, 2018, 54, 294-300.	0.3	2
49	TURBULENT ENERGY BALANCE IN FREE AND CONFINED JET FLOWS(Free and Confined Jet). The Proceedings of the International Conference on Jets Wakes and Separated Flows (ICJWSF), 2005, 2005, 281-286.	0.1	2
50	Testing Basic Gradient Turbulent Transport Models for Swirl Burners Using PIV and PLIF. Fluids, 2021, 6, 383.	0.8	2
51	On the efficiency of using different excitation lines of ($1\hat{\lambda}^*0$) two-line OH fluorescence for planar thermometry. Thermophysics and Aeromechanics, 2021, 28, 751-755.	0.1	2
52	Turbulent transport measurements in a cold model of GT-burner at realistic flow rates. EPJ Web of Conferences, 2016, 114, 02032.	0.1	1
53	Coherent Structures in a Turbulent Swirling Jet Under Vortex Breakdown. 3D PIV Measurements. Springer Proceedings in Physics, 2016, , 43-50.	0.1	1
54	PIV characterization of high-Reynolds flow in turbine test facility. AIP Conference Proceedings, 2016, , .	0.3	1

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55	Turbulent transport measurements in a model of GT-combustor. AIP Conference Proceedings, 2016, , .	0.3	1
56	HCHO PLIF Investigation of the Flame Shape in an Unsteady Swirling Jet Flow. Combustion, Explosion and Shock Waves, 2018, 54, 642-648.	0.3	1
57	Analysis of mean and fluctuating helicity measured by TomoPIV in swirling jet. EPJ Web of Conferences, 2018, 180, 02097.	0.1	1
58	Experimental diagnostics of the flow downstream the gas turbine premixer using planar optical methods. Journal of Physics: Conference Series, 2019, 1382, 012005.	0.3	1
59	Coherent Structures and Turbulent Transport in the Initial Region of Jets and Flame in Swirling Flow. Journal of Applied Mechanics and Technical Physics, 2020, 61, 350-358.	0.1	1
60	Application of particle image velocimetry technique for study of reacting jet flows. Proceedings of SPIE, 2008, , .	0.8	0
61	Acetone PLIF concentration measurements in a submerged round turbulent jet. AIP Conference Proceedings, 2016, , .	0.3	0
62	Combined application of OH PLIF, HCHO PLIF and stereo PIV to a turbulent premixed swirling flame. AIP Conference Proceedings, 2018, , .	0.3	0
63	Investigation of the flow structure and convective heat transfer in impinging swirling turbulent jets. AIP Conference Proceedings, 2018, , .	0.3	0
64	Structure of a swirling jet with vortex breakdown and combustion. Journal of Physics: Conference Series, 2018, 980, 012032.	0.3	0
65	Multi-spectral planar imaging using a tuneable Lyot-Ehman filter. Journal of Physics: Conference Series, 2019, 1382, 012039.	0.3	0
66	Optical Diagnosis of the Geometry of an Axisymmetric Controlled Nozzle of a Gas-Turbine Engine. Optoelectronics, Instrumentation and Data Processing, 2019, 55, 612-617.	0.2	0
67	On large-scale vortex structures and flame front corrugations in swirling jets with combustion. AIP Conference Proceedings, 2020, , .	0.3	0
68	Flow structure of a lifted premixed flame investigated by PIV. , 2012, , .		0
69	Study of vortex breakdown in swirling premixed flames by high-repetition stereoscopic PIV. , 2012, , .		0