

# Pavel A Kuibin

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/961495/publications.pdf>

Version: 2024-02-01

47  
papers

598  
citations

840119

11  
h-index

580395

25  
g-index

47  
all docs

47  
docs citations

47  
times ranked

306  
citing authors

#	ARTICLE	IF	CITATIONS
1	Helical vortices in swirl flow. <i>Journal of Fluid Mechanics</i> , 1999, 382, 195-243.	1.4	192
2	Experimental study and analytical reconstruction of precessing vortex in a tangential swirler. <i>International Journal of Heat and Fluid Flow</i> , 2013, 42, 251-264.	1.1	66
3	Self-induced motion and asymptotic expansion of the velocity field in the vicinity of a helical vortex filament. <i>Physics of Fluids</i> , 1998, 10, 607-614.	1.6	46
4	Estimation of the numerical values of the evaporation constants of water droplets moving in a high-temperature gas flow. <i>High Temperature</i> , 2015, 53, 254-258.	0.1	44
5	Swirling flow in a hydraulic turbine discharge cone at different speeds and discharge conditions. <i>Experimental Thermal and Fluid Science</i> , 2019, 100, 349-359.	1.5	36
6	Study of Pressure Shock Caused by a Vortex Ring Separated From a Vortex Rope in a Draft Tube Model. <i>Journal of Fluids Engineering, Transactions of the ASME</i> , 2017, 139, .	0.8	26
7	Vortex reconnection in a swirling flow. <i>JETP Letters</i> , 2016, 103, 455-459.	0.4	25
8	Pattern of vertical velocity in the Lofoten vortex (the Norwegian Sea). <i>Ocean Dynamics</i> , 2018, 68, 1711-1725.	0.9	20
9	On the vertical velocity component in the mesoscale Lofoten vortex of the Norwegian Sea. <i>Izvestiya - Atmospheric and Oceanic Physics</i> , 2017, 53, 641-649.	0.2	15
10	Study of the velocity distribution influence upon the pressure pulsations in draft tube model of hydro-turbine. <i>IOP Conference Series: Earth and Environmental Science</i> , 2016, 49, 082020.	0.2	14
11	On the development of the method of vortex particles as applied to the description of detached flows. <i>USSR Computational Mathematics and Mathematical Physics</i> , 1989, 29, 163-169.	0.0	11
12	The effect of air injection on the parameters of swirling flow in a Turbine-99 draft tube model. <i>Technical Physics Letters</i> , 2015, 41, 638-640.	0.2	9
13	Motion of fine-spray liquid droplets in hot gas flow. <i>Thermophysics and Aeromechanics</i> , 2014, 21, 609-616.	0.1	8
14	Two-phase models development for description of vortex-induced pulsation in Francis turbine. <i>IOP Conference Series: Earth and Environmental Science</i> , 2012, 15, 022001.	0.2	7
15	Weber numbers at various stages of water projectile transformation during free fall in air. <i>Technical Physics Letters</i> , 2015, 41, 1019-1022.	0.2	7
16	Study of aerodynamic structure of flow in a model of vortex furnace using Stereo PIV method. <i>Thermophysics and Aeromechanics</i> , 2016, 23, 621-624.	0.1	7
17	Experimental observation of the precessing-vortex-core reconnection phenomenon in a combined-flow turbine. <i>Technical Physics Letters</i> , 2017, 43, 969-971.	0.2	7
18	Simulation of Flow Structure in the Suction Pipe of a Hydroturbine by Integral Characteristics. <i>Heat Transfer Research</i> , 2006, 37, 675-684.	0.9	7

#	ARTICLE	IF	CITATIONS
19	Application of the theory of columnar Q-vortices with helical structure for the Lofoten vortex in the Norwegian Sea. Vestnik of Saint Petersburg University Earth Sciences, 2017, 62, .	0.1	7
20	Vortex Precession in a Gas-Liquid Flow. Heat Transfer Research, 2010, 41, 465-478.	0.9	6
21	A model for precessing helical vortex in the turbine discharge cone. IOP Conference Series: Earth and Environmental Science, 2014, 22, 022024.	0.2	5
22	A novel scenario of aperiodical impacts appearance in the turbine draft tube. IOP Conference Series: Earth and Environmental Science, 2016, 49, 082025.	0.2	5
23	Experimental Study of Liquid Drop Surface Transformation in Air Within a Group of Successive Deformation Cycles. Chemical and Petroleum Engineering (English Translation of Khimicheskoe i) Tj ETQq1 1 0.784614 rgBT #Overlock 1	0.784614	1
24	Oscillation of Cavitating Vortices in Draft Tubes of a Simplified Model Turbine and a Model Pumpâ€“Turbine. Energies, 2022, 15, 2965.	1.6	5
25	Features of water droplet deformation during motion in a gaseous medium under conditions of moderate and high temperatures. High Temperature, 2016, 54, 722-730.	0.1	4
26	Microgravity: Effect of a Moving Local Heater on Liquid Film Structure. Microgravity Science and Technology, 2008, 20, 237-241.	0.7	3
27	Thermal-wave-induced vorticity in a liquid film. Technical Physics Letters, 2008, 34, 848-850.	0.2	2
28	2D Flow Structure in a Thin Liquid Layer Under Thermal Wave Propagation. Microgravity Science and Technology, 2009, 21, 321-324.	0.7	2
29	Stability of axisymmetric swirl flows of viscous incompressible fluid. Thermophysics and Aeromechanics, 2013, 20, 317-326.	0.1	1
30	The ranges of the aerodynamic drag coefficient of water droplets moving through typical gas media. Journal of Engineering Thermophysics, 2016, 25, 32-44.	0.6	1
31	Vortex rope patterns at different load of hydro turbine model. MATEC Web of Conferences, 2017, 115, 06004.	0.1	1
32	Aperiodic pressure pulsation under non optimal hydraulic turbine regimes at low swirl number. Journal of Physics: Conference Series, 2017, 899, 022016.	0.3	1
33	On random pressure pulses in the turbine draft tube. Journal of Physics: Conference Series, 2017, 813, 012051.	0.3	1
34	Vortex rope instabilities in a model of conical draft tube. EPJ Web of Conferences, 2017, 159, 00048.	0.1	1
35	A model for description of the pressure field on a plate as the vortex ring passes. Journal of Physics: Conference Series, 2017, 891, 012082.	0.3	1
36	Gas burning in a spiral flow. Combustion, Explosion and Shock Waves, 1993, 29, 657-658.	0.3	0

#	ARTICLE	IF	CITATIONS
37	Effect of motion of a local heat source on thermocapillary deformation of a thin liquid film flowing down under the action of gravity. <i>Technical Physics Letters</i> , 2010, 36, 683-686.	0.2	0
38	Effects of Inertia and Thermocapillarity in Non-isothermal Film Flow. <i>Procedia IUTAM</i> , 2013, 8, 166-171.	1.2	0
39	Stability of Swirl Axisymmetric Incompressible Flow. <i>Procedia IUTAM</i> , 2013, 8, 13-21.	1.2	0
40	Thin helical vortex dynamics in low-viscosity liquid. <i>EPJ Web of Conferences</i> , 2014, 76, 01021.	0.1	0
41	Water droplet deformation under the motion in gas area with subsonic velocities. <i>EPJ Web of Conferences</i> , 2015, 82, 01002.	0.1	0
42	On the viscosity influence on a helical vortex filament evolution. <i>EPJ Web of Conferences</i> , 2015, 82, 01001.	0.1	0
43	The Difference between the Integral Characteristics of Two and Three Water Droplets Moving Sequentially through High-Temperature Combustion Products and Air. <i>MATEC Web of Conferences</i> , 2015, 23, 01062.	0.1	0
44	The effect of gas and water droplet temperature on characteristics of water-droplet deformation at moderate velocities of droplet movement. <i>Theoretical Foundations of Chemical Engineering</i> , 2016, 50, 746-756.	0.2	0
45	Kelvin waves on helical vortex tube in swirling flow. <i>Journal of Physics: Conference Series</i> , 2018, 980, 012003.	0.3	0
46	Waves on spiral precessing vortex core. <i>AIP Conference Proceedings</i> , 2018, , .	0.3	0
47	Parametric Description of the stationary Helical Vortex in a Hydrodynamic Vortex Chamber. <i>PrikladnaĀ Mehanika, TehniĀeskaĀ Fizika</i> , 2020, 61, 52-62.	0.0	0