

# Sergey Shtork

## List of Publications by Year in descending order

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Version: 2024-02-01

51  
papers

385  
citations

933447

10  
h-index

794594

19  
g-index

51  
all docs

51  
docs citations

51  
times ranked

167  
citing authors

#	ARTICLE	IF	CITATIONS
1	Unsteady regimes and pressure pulsations in draft tube of a model hydro turbine in a range of off-design conditions. <i>Experimental Thermal and Fluid Science</i> , 2018, 91, 410-422.	2.7	50
2	Flow Structure of Swirling Turbulent Propane Flames. <i>Flow, Turbulence and Combustion</i> , 2011, 87, 569-595.	2.6	46
3	Comparative analysis of twin vortex ropes in laboratory models of two hydro-turbine draft-tubes. <i>Journal of Hydraulic Research/De Recherches Hydrauliques</i> , 2016, 54, 450-460.	1.7	38
4	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.	2.7	36
5	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, .	1.5	26
6	Wave flow of rivulets on the outer surface of an inclined cylinder. <i>Physics of Fluids</i> , 1996, 8, 3288-3299.	4.0	25
7	Vortex reconnection in a swirling flow. <i>JETP Letters</i> , 2016, 103, 455-459.	1.4	25
8	Vortex ropes in draft tube of a laboratory Kaplan hydroturbine at low load: an experimental and LES scrutiny of RANS and DES computational models. <i>Journal of Hydraulic Research/De Recherches Hydrauliques</i> , 2017, 55, 668-685.	1.7	19
9	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.	0.3	14
10	Analyzing the aerodynamic structure of swirl flow in vortex burner models. <i>Thermal Engineering (English Translation of Teploenergetika)</i> , 2014, 61, 649-657.	0.9	11
11	Coherent Helical Structures in Swirl Flows. <i>Technical Physics Letters</i> , 2005, 31, 660.	0.7	10
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.	0.7	9
13	A Study of Transient Flow Modes in a Hydraulic Turbine Draft Tube Model. <i>Power Technology and Engineering</i> , 2016, 50, 1-5.	0.3	8
14	Physical and mathematical simulation of aerodynamics and combustion in the furnace chambers of power installations. <i>Thermal Engineering (English Translation of Teploenergetika)</i> , 2011, 58, 779-785.	0.9	7
15	Modal Decomposition of the Precessing Vortex Core in a Hydro Turbine Model. <i>Applied Sciences (Switzerland)</i> , 2022, 12, 5127.	2.5	7
16	Suppression of vortex core precession in a swirling reacting flow. <i>Thermophysics and Aeromechanics</i> , 2016, 23, 305-308.	0.5	6
17	The influence of the dispersed gaseous phase on characteristics of vortex precession in a swirling gas-liquid flow. <i>Technical Physics Letters</i> , 2015, 41, 844-846.	0.7	5
18	A novel scenario of aperiodical impacts appearance in the turbine draft tube. <i>IOP Conference Series: Earth and Environmental Science</i> , 2016, 49, 082025.	0.3	5

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19	Gas phase effect on characteristics of a precessing vortex in the axisymmetric hydrodynamic chamber. Thermophysics and Aeromechanics, 2014, 21, 771-774.	0.5	4
20	Experimental Study of Transient Flow Regimes in a Model Hydroturbine Draft Tube. Energies, 2021, 14, 1240.	3.1	4
21	Aerodynamic effect of icing/rain impacts on super-hydrophobic surfaces. AIP Conference Proceedings, 2018, , .	0.4	3
22	Measuring the velocity in pulverized-coal flame at co- and counter-swirl of combustion chamber stage. AIP Conference Proceedings, 2018, , .	0.4	3
23	Swirl number analysis in the air hydro-turbine model. AIP Conference Proceedings, 2018, , .	0.4	3
24	Prediction of vortex precession in the draft tube of a model hydro turbine using mean field stability theory and stochastic modelling. IOP Conference Series: Earth and Environmental Science, 2021, 774, 012003.	0.3	3
25	Laboratory modeling of flow regimes in a draft tube of Francis hydro-turbine. EPJ Web of Conferences, 2017, 143, 02103.	0.3	2
26	Investigation a single-spiral vortex in a swirl flow. MATEC Web of Conferences, 2017, 115, 02025.	0.2	2
27	EFFECT OF AIR SLIPPLY INTO VORTEX FLOW OF LIQUID WITH VARIOUS SWIRL PARAMETERS. Interfacial Phenomena and Heat Transfer, 2018, 6, 129-138.	0.8	2
28	Experimental study of precessing vortex core in two-phase flow. EPJ Web of Conferences, 2015, 92, 02107.	0.3	1
29	An experimental investigation of the interaction between a pair of precessing vortices in a tangential vortex chamber. Journal of Physics: Conference Series, 2016, 754, 022003.	0.4	1
30	Vortex rope patterns at different load of hydro turbine model. MATEC Web of Conferences, 2017, 115, 06004.	0.2	1
31	Aperiodic pressure pulsation under non optimal hydraulic turbine regimes at low swirl number. Journal of Physics: Conference Series, 2017, 899, 022016.	0.4	1
32	On random pressure pulses in the turbine draft tube. Journal of Physics: Conference Series, 2017, 813, 012051.	0.4	1
33	Vortex rope instabilities in a model of conical draft tube. EPJ Web of Conferences, 2017, 159, 00048.	0.3	1
34	The Effect of the Air-Delivery Method on Parameters of the Precessing Vortex Core in a Hydrodynamic Vortex Chamber. Technical Physics Letters, 2018, 44, 217-220.	0.7	1
35	Identification of geometrical vortex parameters in tangential swirler. Journal of Physics: Conference Series, 2018, 1105, 012099.	0.4	1
36	Determining the parameters of vortex structures in a hydrodynamic vortex chamber. Journal of Physics: Conference Series, 2018, 980, 012013.	0.4	1

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37	Integral Parameters of Gas-Liquid Flow in a Tangential Vortex Chamber. International Review of Mechanical Engineering, 2017, 11, 37.	0.2	1
38	The Influence of Transient Regimes on Unsteady Vortex Phenomena in the Model of the Draft Tube of the Hydraulic Turbine. Siberian Journal of Physics, 2020, 14, 55-68.	0.3	1
39	Laboratory Modeling of an Axial Flow Micro Hydraulic Turbine. Applied Sciences (Switzerland), 2022, 12, 573.	2.5	1
40	Three-dimensional standing waves on an obliquely flowing film. Journal of Applied Mechanics and Technical Physics, 1988, 28, 618-624.	0.5	0
41	Hydrodynamics of transverse flow past banks of tubes. Journal of Engineering Physics, 1990, 58, 1-6.	0.0	0
42	Regimes with periodical pressure pulsation in Francis draft tube. MATEC Web of Conferences, 2017, 115, 05013.	0.2	0
43	Investigation of aerodynamic structure of isothermal swirl flow in a two-stage burner. Journal of Physics: Conference Series, 2017, 899, 092015.	0.4	0
44	Isothermal modeling of aerodynamic structure of the swirling flow in a two-stage burner. EPJ Web of Conferences, 2017, 159, 00052.	0.3	0
45	Evaluation of the efficiency of using the swirl flow with the formation of helical vortices. Journal of Physics: Conference Series, 2017, 899, 022007.	0.4	0
46	Visualization of vortex structures and analysis of frequency of PVC. Journal of Physics: Conference Series, 2018, 980, 012014.	0.4	0
47	Experimental modeling of swirl flows in power plants. Journal of Physics: Conference Series, 2018, 980, 012038.	0.4	0
48	Kelvin waves on helical vortex tube in swirling flow. Journal of Physics: Conference Series, 2018, 980, 012003.	0.4	0
49	Waves on spiral precessing vortex core. AIP Conference Proceedings, 2018, , .	0.4	0
50	Isothermal modeling of an adaptive burner for low-grade fuel combustion. Journal of Physics: Conference Series, 2018, 1105, 012031.	0.4	0
51	Parametric Description of the stationary Helical Vortex in a Hydrodynamic Vortex Chamber. PrikladnaË Mehanika, TehniÄeskaË Fizika, 2020, 61, 52-62.	0.0	0