

# Joseph Katz

## List of Publications by Year in descending order

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242  
papers

10,655  
citations

28190

55  
h-index

38300

95  
g-index

245  
all docs

245  
docs citations

245  
times ranked

5442  
citing authors

#	ARTICLE	IF	CITATIONS
1	Scale-Invariance and Turbulence Models for Large-Eddy Simulation. Annual Review of Fluid Mechanics, 2000, 32, 1-32.	10.8	1,091
2	On the properties of similarity subgrid-scale models as deduced from measurements in a turbulent jet. Journal of Fluid Mechanics, 1994, 275, 83-119.	1.4	631
3	Applications of Holography in Fluid Mechanics and Particle Dynamics. Annual Review of Fluid Mechanics, 2010, 42, 531-555.	10.8	371
4	Digital holographic microscope for measuring three-dimensional particle distributions and motions. Applied Optics, 2006, 45, 3893.	2.1	364
5	Flow structure and modeling issues in the closure region of attached cavitation. Physics of Fluids, 2000, 12, 895-911.	1.6	267
6	Instantaneous pressure and material acceleration measurements using a four-exposure PIV system. Experiments in Fluids, 2006, 41, 227-240.	1.1	229
7	Drag and lift forces on microscopic bubbles entrained by a vortex. Physics of Fluids, 1995, 7, 389-399.	1.6	204
8	Five techniques for increasing the speed and accuracy of PIV interrogation. Measurement Science and Technology, 2001, 12, 238-245.	1.4	168
9	Turbulence Characteristics and Dissipation Estimates in the Coastal Ocean Bottom Boundary Layer from PIV Data. Journal of Physical Oceanography, 2001, 31, 2108-2134.	0.7	166
10	Turbulent flow measurement in a square duct with hybrid holographic PIV. Experiments in Fluids, 1997, 23, 373-381.	1.1	159
11	Statistical geometry of subgrid-scale stresses determined from holographic particle image velocimetry measurements. Journal of Fluid Mechanics, 2002, 457, 35-78.	1.4	154
12	Digital holographic microscopy reveals prey-induced changes in swimming behavior of predatory dinoflagellates. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 17512-17517.	3.3	144
13	Measurements of the tip leakage vortex structures and turbulence in the meridional plane of an axial water-jet pump. Experiments in Fluids, 2011, 50, 989-1003.	1.1	136
14	Effect of Modification to Tongue and Impeller Geometry on Unsteady Flow, Pressure Fluctuations, and Noise in a Centrifugal Pump. Journal of Turbomachinery, 1997, 119, 506-515.	0.9	131
15	A dinoflagellate exploits toxins to immobilize prey prior to ingestion. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 2082-2087.	3.3	124
16	The three-dimensional flow field generated by a feeding calanoid copepod measured using digital holography. Journal of Experimental Biology, 2003, 206, 3657-3666.	0.8	123
17	Using digital holographic microscopy for simultaneous measurements of 3D near wall velocity and wall shear stress in a turbulent boundary layer. Experiments in Fluids, 2008, 45, 1023-1035.	1.1	122
18	Near-wall turbulence statistics and flow structures over three-dimensional roughness in a turbulent channel flow. Journal of Fluid Mechanics, 2011, 667, 1-37.	1.4	107

#	ARTICLE	IF	CITATIONS
19	Three-dimensional flow structures and associated turbulence in the tip region of a waterjet pump rotor blade. <i>Experiments in Fluids</i> , 2011, 51, 1721-1737.	1.1	105
20	The Internal Structure of the Tip Leakage Vortex Within the Rotor of an Axial Waterjet Pump. <i>Journal of Turbomachinery</i> , 2012, 134, .	0.9	103
21	The Flow Structure During Onset and Developed States of Rotating Stall Within a Vaned Diffuser of a Centrifugal Pump. <i>Journal of Fluids Engineering, Transactions of the ASME</i> , 2001, 123, 490-499.	0.8	100
22	Quantitative Visualization of the Flow in a Centrifugal Pump With Diffuser Vanes: On Flow Structures and Turbulence. <i>Journal of Fluids Engineering, Transactions of the ASME</i> , 2000, 122, 97-107.	0.8	99
23	Single beam two-views holographic particle image velocimetry. <i>Applied Optics</i> , 2003, 42, 235.	2.1	95
24	Cavitation phenomena within regions of flow separation. <i>Journal of Fluid Mechanics</i> , 1984, 140, 397-436.	1.4	94
25	Wake-induced relative motion of bubbles rising in line. <i>International Journal of Multiphase Flow</i> , 1996, 22, 239-258.	1.6	94
26	Unobstructed particle image velocimetry measurements within an axial turbo-pump using liquid and blades with matched refractive indices. <i>Experiments in Fluids</i> , 2002, 33, 909-919.	1.1	94
27	Relationship Between Unsteady Flow, Pressure Fluctuations, and Noise in a Centrifugal Pump: Part B: Effects of Blade-Tongue Interactions. <i>Journal of Fluids Engineering, Transactions of the ASME</i> , 1995, 117, 30-35.	0.8	91
28	Title is missing!. <i>Measurement Science and Technology</i> , 1999, 10, 1142-1152.	1.4	88
29	Size Distribution and Dispersion of Droplets Generated by Impingement of Breaking Waves on Oil Slicks. <i>Journal of Geophysical Research: Oceans</i> , 2017, 122, 7938-7957.	1.0	86
30	Submersible holocamera for detection of particle characteristics and motions in the ocean. <i>Deep-Sea Research Part I: Oceanographic Research Papers</i> , 1999, 46, 1455-1481.	0.6	85
31	High-resolution velocity measurement in the inner part of turbulent boundary layers over super-hydrophobic surfaces. <i>Journal of Fluid Mechanics</i> , 2016, 801, 670-703.	1.4	83
32	On the refractive index of sodium iodide solutions for index matching in PIV. <i>Experiments in Fluids</i> , 2014, 55, 1.	1.1	79
33	Measurements of the flow structure and turbulence within a ship bow wave. <i>Physics of Fluids</i> , 1999, 11, 3512-3523.	1.6	77
34	Evolution and modelling of subgrid scales during rapid straining of turbulence. <i>Journal of Fluid Mechanics</i> , 1999, 387, 281-320.	1.4	77
35	Vortex-corner interactions in a cavity shear layer elucidated by time-resolved measurements of the pressure field. <i>Journal of Fluid Mechanics</i> , 2013, 728, 417-457.	1.4	76
36	The structure of a jet in cross flow at low velocity ratios. <i>Physics of Fluids</i> , 2004, 16, 2067-2087.	1.6	74

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37	On the Structure of Turbulence in the Bottom Boundary Layer of the Coastal Ocean. <i>Journal of Physical Oceanography</i> , 2005, 35, 72-93.	0.7	74
38	The Internal Structure of the Tip Leakage Vortex Within the Rotor of an Axial Waterjet Pump. , 2010, , .		74
39	Effects of small-scale turbulent motions on the filtered velocity gradient tensor as deduced from holographic particle image velocimetry measurements. <i>Physics of Fluids</i> , 2002, 14, 2456.	1.6	73
40	A comparative quadrant analysis of turbulence in a plant canopy. <i>Water Resources Research</i> , 2007, 43, .	1.7	72
41	Splash behaviour and oily marine aerosol production by raindrops impacting oil slicks. <i>Journal of Fluid Mechanics</i> , 2015, 780, 536-577.	1.4	72
42	Turbulent Shearing of Crude Oil Mixed with Dispersants Generates Long Microthreads and Microdroplets. <i>Physical Review Letters</i> , 2010, 104, 054501.	2.9	71
43	The flow structure in the near field of jets and its effect on cavitation inception. <i>Journal of Fluid Mechanics</i> , 1999, 398, 1-43.	1.4	70
44	Effect of entrained bubbles on the structure of vortex rings. <i>Journal of Fluid Mechanics</i> , 1999, 397, 171-202.	1.4	68
45	Geometry and scale relationships in high Reynolds number turbulence determined from three-dimensional holographic velocimetry. <i>Physics of Fluids</i> , 2000, 12, 941-944.	1.6	68
46	Large-eddy simulation of plant canopy flows using plant-scale representation. <i>Boundary-Layer Meteorology</i> , 2007, 124, 183-203.	1.2	67
47	Experimental Investigation of the Role of Large Scale Cavitating Vortical Structures in Performance Breakdown of an Axial Waterjet Pump. <i>Journal of Fluids Engineering, Transactions of the ASME</i> , 2015, 137, .	0.8	67
48	Pressure fluctuations and their effect on cavitation inception within water jets. <i>Journal of Fluid Mechanics</i> , 1994, 262, 223-263.	1.4	66
49	Relationship Between Unsteady Flow, Pressure Fluctuations, and Noise in a Centrifugal Pump Part A: Use of PDV Data to Compute the Pressure Field. <i>Journal of Fluids Engineering, Transactions of the ASME</i> , 1995, 117, 24-29.	0.8	66
50	PIV measurements in the bottom boundary layer of the coastal ocean. <i>Experiments in Fluids</i> , 2002, 33, 962-971.	1.1	66
51	Buffer layer structures associated with extreme wall stress events in a smooth wall turbulent boundary layer. <i>Journal of Fluid Mechanics</i> , 2009, 633, 17-60.	1.4	65
52	Near-field behavior of a tip vortex. <i>AIAA Journal</i> , 1993, 31, 112-118.	1.5	64
53	On the structure of bow waves on a ship model. <i>Journal of Fluid Mechanics</i> , 1997, 346, 77-115.	1.4	64
54	Turbulence Within the Tip-Leakage Vortex of an Axial Waterjet Pump. <i>AIAA Journal</i> , 2012, 50, 2574-2587.	1.5	61

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55	Quantitative Visualization of the Flow in a Centrifugal Pump With Diffuser Vanes: II: Addressing Passage-Averaged and Large-Eddy Simulation Modeling Issues in Turbomachinery Flows. <i>Journal of Fluids Engineering, Transactions of the ASME</i> , 2000, 122, 108-116.	0.8	57
56	Elimination of peak-locking error in PIV analysis using the correlation mapping method. <i>Measurement Science and Technology</i> , 2005, 16, 1605-1618.	1.4	57
57	Automated scanning and measurements of particle distributions within a holographic reconstructed volume. <i>Measurement Science and Technology</i> , 2004, 15, 601-612.	1.4	56
58	Quantitative Visualization of the Flow Within the Volute of a Centrifugal Pump. Part A: Technique. <i>Journal of Fluids Engineering, Transactions of the ASME</i> , 1992, 114, 390-395.	0.8	55
59	Characterization of biophysical interactions in the water column using in situ digital holography. <i>Marine Ecology - Progress Series</i> , 2013, 473, 29-51.	0.9	55
60	Cavitation in Large Scale Shear Flows. <i>Journal of Fluids Engineering, Transactions of the ASME</i> , 1986, 108, 373-376.	0.8	54
61	Experimental Investigation of Unsteady Flow Field Within a Two-Stage Axial Turbomachine Using Particle Image Velocimetry. <i>Journal of Turbomachinery</i> , 2002, 124, 542-552.	0.9	53
62	Algal Toxins Alter Copepod Feeding Behavior. <i>PLoS ONE</i> , 2012, 7, e36845.	1.1	53
63	Mean rise rate of droplets in isotropic turbulence. <i>Physics of Fluids</i> , 2002, 14, 3059-3073.	1.6	52
64	On the spatial distribution and nearest neighbor distance between particles in the water column determined from in situ holographic measurements. <i>Journal of Plankton Research</i> , 2006, 28, 149-170.	0.8	52
65	The response of microscopic bubbles to sudden changes in the ambient pressure. <i>Journal of Fluid Mechanics</i> , 1991, 224, 91-115.	1.4	49
66	Quantitative Visualization of the Flow Within the Volute of a Centrifugal Pump. Part B: Results and Analysis. <i>Journal of Fluids Engineering, Transactions of the ASME</i> , 1992, 114, 396-403.	0.8	47
67	Distribution of Energy Spectra, Reynolds Stresses, Turbulence Production, and Dissipation in a Tidally Driven Bottom Boundary Layer. <i>Journal of Physical Oceanography</i> , 2007, 37, 1527-1550.	0.7	46
68	Analysis of flow distribution from high-speed flow actuator using particle image velocimetry and digital speckle tomography. <i>Flow Measurement and Instrumentation</i> , 2010, 21, 443-453.	1.0	46
69	Scale interactions of turbulence subjected to a straining-relaxation-destraining cycle. <i>Journal of Fluid Mechanics</i> , 2006, 562, 123.	1.4	45
70	Turbulent kinetic energy budgets in a model canopy: comparisons between LES and wind-tunnel experiments. <i>Environmental Fluid Mechanics</i> , 2008, 8, 73-95.	0.7	45
71	Coherent structures and associated subgrid-scale energy transfer in a rough-wall turbulent channel flow. <i>Journal of Fluid Mechanics</i> , 2012, 712, 92-128.	1.4	45
72	Turbulent Flow Structure Inside a Canopy with Complex Multi-Scale Elements. <i>Boundary-Layer Meteorology</i> , 2015, 155, 435-457.	1.2	44

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73	A Submersible Particle Image Velocimetry System for Turbulence Measurements in the Bottom Boundary Layer. <i>Journal of Atmospheric and Oceanic Technology</i> , 1999, 16, 1635-1646.	0.5	40
74	The Effect of Inlet Guide Vanes Wake Impingement on the Flow Structure and Turbulence Around a Rotor Blade. <i>Journal of Turbomachinery</i> , 2006, 128, 82-95.	0.9	40
75	Near-Wake Turbulent Flow Structure and Mixing Length Downstream of a Fractal Tree. <i>Boundary-Layer Meteorology</i> , 2012, 143, 285-308.	1.2	40
76	PIV Measurements in the Atmospheric Boundary Layer within and above a Mature Corn Canopy. Part II: Quadrant-Hole Analysis. <i>Journals of the Atmospheric Sciences</i> , 2007, 64, 2825-2838.	0.6	39
77	A method for measuring the density of irregularly shaped biological aerosols such as pollen. <i>Journal of Aerosol Science</i> , 2004, 35, 1369-1384.	1.8	37
78	Flow Nonuniformities and Turbulent "Hot Spots" Due to Wake-Blade and Wake-Wake Interactions in a Multi-Stage Turbomachine. <i>Journal of Turbomachinery</i> , 2002, 124, 553-563.	0.9	36
79	Deformation of a compliant wall in a turbulent channel flow. <i>Journal of Fluid Mechanics</i> , 2017, 823, 345-390.	1.4	36
80	A laboratory study of particulate and gaseous emissions from crude oil and crude oil-dispersant contaminated seawater due to breaking waves. <i>Atmospheric Environment</i> , 2018, 179, 177-186.	1.9	36
81	Effect of Reynolds number and saturation level on gas diffusion in and out of a superhydrophobic surface. <i>Physical Review Fluids</i> , 2017, 2, .	1.0	36
82	A New Mechanism of Sediment Attachment to Oil in Turbulent Flows: Projectile Particles. <i>Environmental Science &amp; Technology</i> , 2017, 51, 11020-11028.	4.6	35
83	Effect of Gap Size on Tip Leakage Cavitation Inception, Associated Noise and Flow Structure. <i>Journal of Fluids Engineering, Transactions of the ASME</i> , 2002, 124, 994-1004.	0.8	34
84	Experimental Characterization of a Supersonic Flow Control Actuator. , 2006, , .		34
85	Experimental study of similarity subgrid-scale models of turbulence in the far-field of a jet. <i>Flow, Turbulence and Combustion</i> , 1995, 54, 177-190.	0.2	33
86	Statistical analysis of small bubble dynamics in isotropic turbulence. <i>Physics of Fluids</i> , 2007, 19, 065108.	1.6	33
87	PIV Measurements in the Atmospheric Boundary Layer within and above a Mature Corn Canopy. Part I: Statistics and Energy Flux. <i>Journals of the Atmospheric Sciences</i> , 2007, 64, 2805-2824.	0.6	33
88	The influence of local meteorological conditions on the circadian rhythm of corn ( <i>Zea mays</i> L.) pollen emission. <i>Agricultural and Forest Meteorology</i> , 2008, 148, 1078-1092.	1.9	33
89	Visualization and Time-Resolved Particle Image Velocimetry Measurements of the Flow in the Tip Region of a Subsonic Compressor Rotor. <i>Journal of Turbomachinery</i> , 2015, 137, .	0.9	33
90	Effect of roughness on rollup of tip vortices on a rectangular hydrofoil. <i>Journal of Aircraft</i> , 1989, 26, 247-253.	1.7	32

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91	Average Passage Flow Field and Deterministic Stresses in the Tip and Hub Regions of a Multistage Turbomachine. <i>Journal of Turbomachinery</i> , 2003, 125, 714-725.	0.9	32
92	A comparison of PIV measurements of canopy turbulence performed in the field and in a wind tunnel model. <i>Experiments in Fluids</i> , 2006, 41, 309-318.	1.1	31
93	Coherent structures in the inner part of a rough-wall channel flow resolved using holographic PIV. <i>Journal of Fluid Mechanics</i> , 2012, 711, 161-170.	1.4	30
94	Crude oil jets in crossflow: Effects of dispersant concentration on plume behavior. <i>Journal of Geophysical Research: Oceans</i> , 2016, 121, 4264-4281.	1.0	30
95	Experimental investigation of turbulent diffusion of slightly buoyant droplets in locally isotropic turbulence. <i>Physics of Fluids</i> , 2008, 20, .	1.6	29
96	On the role of copepod antennae in the production of hydrodynamic force during hopping. <i>Journal of Experimental Biology</i> , 2010, 213, 3019-3035.	0.8	29
97	Three-dimensional velocity measurements in a roughness sublayer using microscopic digital in-line holography and optical index matching. <i>Measurement Science and Technology</i> , 2013, 24, 024004.	1.4	29
98	On the flow structure and turbulence during sweep and ejection events in a wind-tunnel model canopy. <i>Boundary-Layer Meteorology</i> , 2007, 124, 205-233.	1.2	27
99	Cavitation phenomena occurring due to interaction of shear layer vortices with the trailing corner of a two-dimensional open cavity. <i>Physics of Fluids</i> , 2008, 20, .	1.6	27
100	Effect of mean and fluctuating pressure gradients on boundary layer turbulence. <i>Journal of Fluid Mechanics</i> , 2014, 748, 36-84.	1.4	27
101	Observations on the Development of a Tip Vortex on a Rectangular Hydrofoil. <i>Journal of Fluids Engineering, Transactions of the ASME</i> , 1988, 110, 208-215.	0.8	26
102	Rise Height for Negatively Buoyant Fountains and Depth of Penetration for Negatively Buoyant Jets Impinging an Interface. <i>Journal of Fluids Engineering, Transactions of the ASME</i> , 2000, 122, 779-782.	0.8	26
103	Single-Pulse Performance of the SparkJet Flow Control Actuator. , 2005, , .		26
104	Distortion of the Actin A-Triad Results in Contractile Disinhibition and Cardiomyopathy. <i>Cell Reports</i> , 2017, 20, 2612-2625.	2.9	26
105	Chaos in breaking waves. <i>Coastal Engineering</i> , 2018, 140, 272-291.	1.7	25
106	GPU-based, parallel-line, omni-directional integration of measured pressure gradient field to obtain the 3D pressure distribution. <i>Experiments in Fluids</i> , 2019, 60, 1.	1.1	25
107	The flow structure around a surface piercing strut. <i>Physics of Fluids</i> , 1997, 9, 1387-1399.	1.6	24
108	Dynamic testing of subgrid models in large eddy simulation based on the Germano identity. <i>Physics of Fluids</i> , 1999, 11, 245-247.	1.6	24

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109	Development of a Free-Drifting Submersible Digital Holographic Imaging System. , 0, , .		23
110	Numerical study of cavitation inception in the near field of an axisymmetric jet at high Reynolds number. <i>Physics of Fluids</i> , 2000, 12, 2444.	1.6	22
111	Decomposition of the spatially filtered and ensemble averaged kinetic energy, the associated fluxes and scaling trends in a rotor wake. <i>Physics of Fluids</i> , 2005, 17, 085102.	1.6	22
112	Visualizations of Flow Structures in the Rotor Passage of an Axial Compressor at the Onset of Stall. <i>Journal of Turbomachinery</i> , 2017, 139, .	0.9	22
113	A Review on Multiphase Underwater Jets and Plumes: Droplets, Hydrodynamics, and Chemistry. <i>Reviews of Geophysics</i> , 2020, 58, e2020RG000703.	9.0	22
114	The flow structure in the lee of an inclined 6:1 prolate spheroid. <i>Journal of Fluid Mechanics</i> , 1994, 269, 79-106.	1.4	21
115	Characterization of a High-Speed Flow Control Actuator Using Digital Speckle Tomography and PIV. , 2008, , .		21
116	The flow and mixing mechanisms caused by the impingement of an immiscible interface with a vertical jet. <i>Physics of Fluids</i> , 1999, 11, 2598-2606.	1.6	20
117	Implication of Mismatch Between Stress and Strain-Rate in Turbulence Subjected to Rapid Straining and Destraining on Dynamic LES Models. <i>Journal of Fluids Engineering, Transactions of the ASME</i> , 2005, 127, 840-850.	0.8	20
118	Experimental study of spectral energy fluxes in turbulence generated by a fractal, tree-like object. <i>Physics of Fluids</i> , 2013, 25, .	1.6	20
119	On the wave and current interaction with a rippled seabed in the coastal ocean bottom boundary layer. <i>Journal of Geophysical Research: Oceans</i> , 2015, 120, 4595-4624.	1.0	20
120	Conditional subgrid force and dissipation in locally isotropic and rapidly strained turbulence. <i>Physics of Fluids</i> , 1999, 11, 2317-2329.	1.6	19
121	Application of in-situ digital holography in the study of particles, organisms and bubbles within their natural environment. , 2012, , .		19
122	On the transport and modeling of dispersed oil under ice. <i>Marine Pollution Bulletin</i> , 2018, 135, 569-580.	2.3	19
123	Self-calibrated microscopic dual-view tomographic holography for 3D flow measurements. <i>Optics Express</i> , 2018, 26, 16708.	1.7	19
124	A Deterministic Stress Model for Rotor-Stator Interactions in Simulations of Average-Passage Flow. <i>Journal of Fluids Engineering, Transactions of the ASME</i> , 2002, 124, 550-554.	0.8	19
125	Aerosolization of Crude Oilâ€Dispersion Slicks Due to Bubble Bursting. <i>Journal of Geophysical Research D: Atmospheres</i> , 2019, 124, 5555-5578.	1.2	18
126	Prevention of Nozzle Wear in Abrasive Water Suspension Jets (AWSJ) Using Porous Lubricated Nozzles. <i>Journal of Tribology</i> , 2003, 125, 168-180.	1.0	17



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127	Investigation of Unsteady Flow Field in a Low-Speed One and a Half Stage Axial Compressor: Effects of Tip Gap Size on the Tip Clearance Flow Structure at Near Stall Operation. , 2014, , .		17
128	Integrating Mach-Zehnder interferometry with TPIV to measure the time-resolved deformation of a compliant wall along with the 3D velocity field in a turbulent channel flow. Experiments in Fluids, 2015, 56, 1.	1.1	17
129	Formation of compound droplets during fragmentation of turbulent buoyant oil jet in water. Journal of Fluid Mechanics, 2019, 878, 98-112.	1.4	17
130	A database of PIV measurements within a turbomachinery stage and sample comparisons with unsteady RANS. Journal of Turbulence, 2007, 8, N10.	0.5	16
131	Dynamics of cavitation clouds within a high-intensity focused ultrasonic beam. Physics of Fluids, 2013, 25, .	1.6	16
132	Pressure-Rate-of-Strain, Pressure Diffusion, and Velocity-Pressure-Gradient Tensor Measurements in a Cavity Flow. AIAA Journal, 2018, 56, 3897-3914.	1.5	16
133	On the mechanisms that sustain the inception of attached cavitation. Journal of Fluid Mechanics, 2020, 901, .	1.4	16
134	Reconstructing velocity and pressure from noisy sparse particle tracks using constrained cost minimization. Experiments in Fluids, 2021, 62, 1.	1.1	16
135	Turbulence Within a Turbomachine Rotor Wake Subject to Nonuniform Contraction. AIAA Journal, 2008, 46, 2687-2702.	1.5	15
136	Theoretical and experimental study of resonance of blobs in porous media. Geophysics, 2012, 77, EN61-EN71.	1.4	15
137	Separating twin images and locating the center of a microparticle in dense suspensions using correlations among reconstructed fields of two parallel holograms. Applied Optics, 2014, 53, G1.	0.9	15
138	Advanced Pediatric Neurosonography Techniques: Contrast-Enhanced Ultrasonography, Elastography, and Beyond. Journal of Neuroimaging, 2018, 28, 150-157.	1.0	15
139	Analysis of In-situ Microscopic Organism Behavior in Data Acquired Using a Free-drifting Submersible Holographic Imaging System. , 2007, , .		14
140	A Device for measuring the in-situ response of Human Bronchial Epithelial Cells to airborne environmental agents. Scientific Reports, 2019, 9, 7263.	1.6	14
141	Modeling oil dispersion under breaking waves. Part I: Wave hydrodynamics. Environmental Fluid Mechanics, 2020, 20, 1527-1551.	0.7	14
142	Impact of dispersant on crude oil content of airborne fine particulate matter emitted from seawater after an oil spill. Chemosphere, 2020, 256, 127063.	4.2	14
143	Experimental Investigations of Cavitation Performance Breakdown in an Axial Waterjet Pump. Journal of Fluids Engineering, Transactions of the ASME, 2020, 142, .	0.8	14
144	Cerebral microcirculation mapped by echo particle tracking velocimetry quantifies the intracranial pressure and detects ischemia. Nature Communications, 2022, 13, 666.	5.8	14

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145	Study of junction and tip vortices using particle displacement velocimetry. AIAA Journal, 1992, 30, 145-152.	1.5	13
146	Effect of Finite Spatial Resolution on the Turbulent Energy Spectrum Measured in the Coastal Ocean Bottom Boundary Layer. Journal of Atmospheric and Oceanic Technology, 2009, 26, 2610-2625.	0.5	13
147	Enhancement of channel wall vibration due to acoustic excitation of an internal bubbly flow. Journal of Fluids and Structures, 2010, 26, 994-1017.	1.5	13
148	Measurements of mean flow and turbulence characteristics in high-Reynolds number counter-rotating Taylor-Couette flow. Physics of Fluids, 2011, 23, .	1.6	13
149	The Three Dimensional Flow Structure and Turbulence in the Tip Region of an Axial Flow Compressor. , 2015, , .		13
150	Effects of Tip Clearance and Operating Conditions on the Flow Structure and Turbulence Within an Axial Compressor Rotor Passage. , 2016, , .		13
151	Modeling oil dispersion under breaking waves. Part II: Coupling Lagrangian particle tracking with population balance model. Environmental Fluid Mechanics, 2020, 20, 1553-1578.	0.7	12
152	Time Evolution and Effect of Dispersant on the Morphology and Viscosity of Water-In-Crude-Oil Emulsions. Langmuir, 2021, 37, 1725-1742.	1.6	12
153	Transport and Fate of Virus-Laden Particles in a Supermarket: Recommendations for Risk Reduction of COVID-19 Spreading. Journal of Environmental Engineering, ASCE, 2021, 147, .	0.7	12
154	On the Effects of Tip Clearance and Operating Condition on the Flow Structures Within an Axial Turbomachine Rotor Passage. Journal of Turbomachinery, 2019, 141, .	0.9	12
155	Investigation of Unsteady Tip Clearance Flow in a Low-Speed One and Half Stage Axial Compressor With LES and PIV. , 2015, , .		11
156	An Experimental Study of Stall Suppression and Associated Changes to the Flow Structures in the Tip Region of an Axial Low Speed Fan Rotor by Axial Casing Grooves. Journal of Turbomachinery, 2017, 139, .	0.9	11
157	Optimized Time-Resolved Echo Particle Image Velocimetry Particle Tracking Velocimetry Measurements Elucidate Blood Flow in Patients With Left Ventricular Thrombus. Journal of Biomechanical Engineering, 2018, 140, .	0.6	11
158	On the interaction of a compliant wall with a turbulent boundary layer. Journal of Fluid Mechanics, 2020, 899, .	1.4	11
159	The Effects of Inlet Guide Vane-Wake Impingement on the Boundary Layer and the Near-Wake of a Rotor Blade. Journal of Turbomachinery, 2010, 132, .	0.9	10
160	Field measurements of turbulence at an unstable interface between current and wave bottom boundary layers. Journal of Geophysical Research, 2011, 116, .	3.3	10
161	Measurements and Characterization of Turbulence in the Tip Region of an Axial Compressor Rotor. Journal of Turbomachinery, 2017, 139, .	0.9	10
162	Epithelial plasticity in COPD results in cellular unjamming due to an increase in polymerized actin. Journal of Cell Science, 2022, 135, .	1.2	10

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163	On the Interactions of a Rotor Blade Tip Flow With Axial Casing Grooves in an Axial Compressor Near the Best Efficiency Point. <i>Journal of Turbomachinery</i> , 2019, 141, .	0.9	9
164	Transport of oil droplets from a jet in crossflow: Dispersion coefficients and Vortex trapping. <i>Ocean Modelling</i> , 2021, 158, 101736.	1.0	9
165	Large eddy simulation and experiment of shear breakup in liquid-liquid jet: Formation of ligaments and droplets. <i>International Journal of Heat and Fluid Flow</i> , 2021, 89, 108810.	1.1	9
166	Visualization and Time Resolved PIV Measurements of the Flow in the Tip Region of a Subsonic Compressor Rotor. , 2014, , .		8
167	Flow Measurement Techniques in Turbomachinery. , 2007, , 919-957.		8
168	DROPLET FORMATION AND SIZE DISTRIBUTIONS FROM AN IMMISCIBLE INTERFACE IMPINGED WITH A VERTICAL NEGATIVELY BUOYANT JET. <i>Atomization and Sprays</i> , 2001, 11, 269-290.	0.3	8
169	Development of flow structures in the lee of an inclined body of revolution. <i>Journal of Aircraft</i> , 1989, 26, 198-206.	1.7	7
170	The effect of waves on subgrid-scale stresses, dissipation and model coefficients in the coastal ocean bottom boundary layer. <i>Journal of Fluid Mechanics</i> , 2007, 583, 133-160.	1.4	7
171	An Experimental Study of Stall Suppression and Associated Changes to the Flow Structures in the Tip Region of an Axial Low Speed Fan Rotor by Axial Casing Grooves. , 2017, , .		7
172	Experimental investigation of the three-dimensional flow structure around a pair of cubes immersed in the inner part of a turbulent channel flow. <i>Journal of Fluid Mechanics</i> , 2021, 918, .	1.4	7
173	Image shifting for PIV using birefringent and ferroelectric liquid crystals. <i>Experiments in Fluids</i> , 1996, 21, 341-346.	1.1	6
174	Experimental Study of the Structure of a Rotor Wake in a Complex Turbomachinery Flow. , 2003, , 1007.		6
175	Visualizations of Flow Structures in the Rotor Passage of an Axial Compressor at the Onset of Stall. , 2016, , .		6
176	Challenges in Modeling of Turbulence in the Tip Region of Axial Turbomachines. <i>Journal of Ship Research</i> , 2019, 63, 56-68.	0.5	6
177	Systematic Experimental Evaluations Aimed at Optimizing the Geometry of Axial Casing Groove in a Compressor. , 2019, , .		6
178	Spatiotemporal characterization of turbulent channel flow with a hyperelastic compliant wall. <i>Journal of Fluid Mechanics</i> , 2022, 942, .	1.4	6
179	Observations of nuclei in cavitating flows. <i>Flow, Turbulence and Combustion</i> , 1982, 38, 123-132.	0.2	5
180	Flow Visualization Using Cavitation Within Blade Passage of an Axial Waterjet Pump Rotor. , 2012, , .		5

#	ARTICLE	IF	CITATIONS
181	Effects of Tip Gap Size on the Flow Structure in the Tip Region of an Axial Turbomachine. , 2015, , .		5
182	Effect of Axial Casing Groove Geometry on Rotor-Groove Interactions in the Tip Region of a Compressor. Journal of Turbomachinery, 2021, 143, .	0.9	5
183	Impact of a jet orifice on the hydrodynamics and the oil droplet size distribution. International Journal of Multiphase Flow, 2022, 147, 103921.	1.6	5
184	Topology of the flow structures behind an inclined projectile: Part A. Journal of Aircraft, 1989, 26, 1016-1022.	1.7	4
185	PIV Measurements of the Flow in the Tip Region of a Compressor Rotor. , 2014, , .		4
186	Pressure Rate of Strain, Pressure Diffusion and Velocity Pressure Gradient Tensor Measurements in a Cavity Shear Layer Flow. , 2017, , .		4
187	Measurements and Characterization of Turbulence in the Tip Region of an Axial Compressor Rotor. , 2017, , .		4
188	Effects of Axial Casing Grooves on the Structure of Turbulence in the Tip Region of an Axial Turbomachine Rotor. Journal of Turbomachinery, 2021, 143, .	0.9	4
189	Topology of the flow structures behind an inclined projectile: Part B. Journal of Aircraft, 1989, 26, 1023-1031.	1.7	3
190	On the Flow and Turbulence Within the Wake and Boundary Layer of a Rotor Blade Located Downstream of an IGV. , 2003, , 505.		3
191	PIV MEASUREMENTS IN THE BOTTOM BOUNDARY LAYER OF THE COASTAL OCEAN. Series on Quality, Reliability and Engineering Statistics, 2004, , 51-79.	0.2	3
192	3D Structure of a Rotor Wake at Mid-span and Tip Regions. , 2004, , .		3
193	Measurements of Pressure Distribution in a Cavity Flow by Integrating the Material Acceleration. , 2004, , 621.		3
194	Numerical study on the motion of microscopic oil droplets in high intensity isotropic turbulence. Physics of Fluids, 2008, 20, 073301.	1.6	3
195	Cavitation in the Tip Region of the Rotor Blades Within a Waterjet Pump. , 2008, , .		3
196	Analysis of Turbulence in the Tip Region of a Waterjet Pump Rotor. , 2010, , .		3
197	On the Interactions of a Rotor Blade Tip Flow With Axial Casing Grooves in an Axial Compressor Near the Best Efficiency Point. , 2018, , .		3
198	Persistent thin water films encapsulate oil droplets crossing an oil-water interface. Chemical Engineering Journal, 2020, 387, 124075.	6.6	3

#	ARTICLE	IF	CITATIONS
199	Time-Resolved Echo-Particle Image/Tracking Velocimetry Measurement of Interactions Between Native Cardiac Output and Veno-Arterial ECMO Flows. <i>Journal of Biomechanical Engineering</i> , 2021, 143, .	0.6	3
200	Boundary layer separation and the vortex structures around an inclined body of revolution. , 1987, , .		2
201	Cavitation Phenomena and Their Impact on the Flow, Noise, and Performance of Hydraulic Machines. <i>Journal of Fluids Engineering, Transactions of the ASME</i> , 1997, 119, 741-741.	0.8	2
202	Flow Non-Uniformities and Turbulent “Hot Spots” Due to Wake-Blade and Wake-Wake Interactions in a Multistage Turbomachine. , 2002, , 1215.		2
203	Capillary Dynamics of Elastic-Wave-Enhanced Two-Phase Flow in Porous Media. <i>AIP Conference Proceedings</i> , 2006, , .	0.3	2
204	Measurements of Turbulent Flows. , 2007, , 745-855.		2
205	Stretching of turbulent eddies generates cavitation near a stagnation point. <i>Physics of Fluids</i> , 2010, 22, 041702.	1.6	2
206	Turbulence in Accelerating Boundary Layers. , 2011, , .		2
207	Space and Time Resolved Detection of Platelet Activation and von Willebrand Factor Conformational Changes in Deep Suspensions. <i>International Journal of Biomedical Imaging</i> , 2017, 2017, 1-13.	3.0	2
208	Formation of compound droplets during fragmentation of turbulent buoyant oil jet in “water” ADDENDUM. <i>Journal of Fluid Mechanics</i> , 2020, 884, .	1.4	2
209	Flow structure and turbulence in the near field of an immiscible buoyant oil jet. <i>Physical Review Fluids</i> , 2021, 6, .	1.0	2
210	Time Resolved Measurements of the Pressure Field Generated by Vortex-Corner Interactions in a Cavity Shear Layer. , 2011, , .		2
211	Rotor Boundary Layer Response to an Impinging Wake. , 2004, , .		2
212	Effect of the Axial Casing Groove Geometry on the Production and Distribution of Reynolds Stresses in the Tip Region of an Axial Compressor Rotor. <i>Journal of Turbomachinery</i> , 0, , 1-29.	0.9	2
213	Numerical Study of Shear-Induced Heating in High-Speed Nozzle Flow of Liquid Monopropellant. <i>Journal of Heat Transfer</i> , 1998, 120, 58-64.	1.2	1
214	Experimental Investigation of Unsteady Flow Field Within a Two Stage Axial Turbomachine Using Particle Image Velocimetry. , 2002, , 1201.		1
215	Flow Structure, Pressure Fluctuations and Resulting Vibrations Caused by the Interaction of a Turbulent Jet With Cross Flow Over a Flexible Flat Plate. , 2002, , 1191.		1
216	3D Measurements of the Mean Velocity and Turbulence Structure Within the Near Wake of a Rotor Blade. , 2005, , 1289.		1

#	ARTICLE	IF	CITATIONS
217	The Effect of IGV Wake Impingement on the Flow Structure and Turbulence Around a Rotor Blade. , 2005, , 1397.		1
218	The Effect of IGV Wake Impingement on a Rotor Boundary Layer. , 2006, , .		1
219	The Effects of IGV Wake Impingement on the Boundary Layer and the Near-Wake of a Rotor Blade. , 2008, , .		1
220	Generation and Transport of Bubbles in Intense Ultrasonic Fields. , 2012, , .		1
221	A Comparison of Cavitation Inception Index Measurements to the Spatial Pressure Distribution Within a 2D Cavity Shear Flow. , 2007, , .		1
222	Investigation of the Formation of Microbubbly Liquid Fuel. , 2009, , .		1
223	Study of Scale-Interactions in Strained and Destrained Turbulence. , 2004, , .		1
224	Effect of Oil Properties on the Generation of Nano-Aerosols During Bubble Bursting Through Crude Oilâ€“Dispersant Slicks. Langmuir, 2021, 37, 13365-13378.	1.6	1
225	The interaction between primary and secondary flow structures in the lee of an inclined body of revolution. , 1989, , .		0
226	Modeling of Cavitation and Multiphase Flows in Complex Environments. Journal of Fluids Engineering, Transactions of the ASME, 1998, 120, 654-654.	0.8	0
227	Average Passage Flow Field and Deterministic Stresses in the Tip and Hub Regions of a Multi-Stage Turbomachine. , 2003, , 975.		0
228	A Correlation Mapping Method to Eliminate the Peak-Locking Effect in PIV Analysis. , 2004, , 325.		0
229	Diesel Droplet Diffusion in Isotropic Turbulence With Digital Holographic Cinematography. , 2005, , 453.		0
230	On the Energy Flux between Large, Small, Mean and Fluctuating Parts of the Flow in a Turbomachinery Rotor Wake. , 2005, , .		0
231	Diffusion of Slightly Buoyant Droplets in Isotropic Turbulence. , 2006, , 177.		0
232	Vibration Behavior of a Channel Subjected to an Internal Two-Phase Flow. , 2007, , 117.		0
233	Structure of Turbulence Around the Trailing Edge of a Rotor Blade. , 2007, , 985.		0
234	Digital Holographic Microscopy Elucidates the Effects of Buffer Layer Flow Structures on Wall Shear Stress Distributions in a Turbulent Boundary Layer. , 2008, , .		0

#	ARTICLE	IF	CITATIONS
235	Near-Wall Stereo PIV Investigation of the Turbulent Channel Flow Over Rough-Walls. , 2008, , .		0
236	Effect of Internal Bubbly Flow on Channel Vibration: Comparison Between Experiment and Model. , 2008, , .		0
237	Effects of Fluctuating Pressure Gradients on Boundary Layer Turbulence. , 2013, , .		0
238	Time-Resolved Simultaneous Measurements of Flow Field and Surface Deformation of Turbulent Channel Flow Over a Compliant Wall. , 2014, , .		0
239	Investigation of the influence of subgrid-scale stress on the accuracy of non-intrusive spatial pressure measurement using a DNS channel flow database. , 2016, , .		0
240	Development of an In Vitro Exposure System for Live Visualization of the Health Impacts of Oily Marine Aerosol on the Human Respiratory System. International Oil Spill Conference Proceedings, 2017, 2017, 2017349.	0.1	0
241	Refractive index matched visualization and particle image velocimetry measurements of initial breakup of turbulent oil jet. International Oil Spill Conference Proceedings, 2017, 2017, 2017328.	0.1	0
242	Small Scale Physical and Bio-Chemical Processes Affecting the Transport of Oil after a Spill. International Oil Spill Conference Proceedings, 2021, 2021, .	0.1	0