## **Zdenek Travnicek**

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/5870783/publications.pdf

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72 papers

1,028 citations

489802 18 h-index 30 g-index

72 all docs 72 docs citations

times ranked

72

402 citing authors

#	Article	IF	CITATIONS
1	Control of a Round Jet Intermittency and Transition to Turbulence by Means of an Annular Synthetic Jet. Actuators, 2021, 10, 185.	1.2	3
2	Impingement heat transfer to the synthetic jet issuing from a nozzle with an oscillating cross section. International Journal of Thermal Sciences, 2020, 153, 106349.	2.6	13
3	Characterization of Impingement Heat/Mass Transfer to the Synthetic Jet Generated by a Biomimetic Actuator. Journal of Heat Transfer, 2019, 141, .	1.2	6
4	Synthetic and Continuous Jets Impinging on a Circular Cylinder. Heat Transfer Engineering, 2019, 40, 1111-1125.	1.2	10
5	A Synthetic Jet Issuing From a Bio-Inspired Actuator With an Oscillating Nozzle Lip. Journal of Fluids Engineering, Transactions of the ASME, 2018, 140, .	0.8	7
6	Novel Nozzle Shapes for Synthetic Jet Actuators Intended to Enhance Jet Momentum Flux. Actuators, 2018, 7, 53.	1.2	11
7	Non-harmonic excitation of synthetic jet actuators based on electrodynamic transducers. International Journal of Heat and Fluid Flow, 2018, 73, 154-162.	1.1	3
8	Energetic efficiencies of synthetic jet actuators: Commentary on the article by Gil and Strzelczyk. Experimental Thermal and Fluid Science, 2018, 98, 121-123.	1.5	7
9	Optimal diameter of nozzles of synthetic jet actuators based on electrodynamic transducers. Experimental Thermal and Fluid Science, 2017, 86, 281-294.	1.5	36
10	Comparison of synthetic jet actuators based on sharp-edged and round-edged nozzles. EPJ Web of Conferences, 2017, 143, 02053.	0.1	1
11	The predominant effect of stroke length on velocity profiles at the exit of axisymmetric synthetic jet actuators. International Journal of Heat and Fluid Flow, 2017, 66, 197-208.	1.1	9
12	PIV and LIF study of flow and thermal fields of twine plumes in water. EPJ Web of Conferences, 2017, 143, 02012.	0.1	0
13	Active control of the wake behind the cylinder. EPJ Web of Conferences, 2017, 143, 02011.	0.1	0
14	Jet flow issuing from an axisymmetric pipe-cavity-orifice nozzle. EPJ Web of Conferences, 2016, 114, 02006.	0.1	0
15	Experimental and numerical research of synthetic jet array. EPJ Web of Conferences, 2016, 114, 02014.	0.1	1
16	Maximization of integral outlet quantities of an axisymmetric synthetic jet actuator based on a loudspeaker. EPJ Web of Conferences, 2016, 114, 02152.	0.1	1
17	PIV and LIF study of slot continuous jet at low Reynolds number. EPJ Web of Conferences, 2016, 114, 02007.	0.1	1
18	A parameter map of synthetic jet regimes based on the Reynolds and Stokes numbers: Commentary on the article by Rimasauskiene et al Mechanical Systems and Signal Processing, 2016, 68-69, 620-623.	4.4	6

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19	Laser Doppler vibrometry experiment on a piezo-driven slot synthetic jet in water. EPJ Web of Conferences, 2015, 92, 02007.	0.1	1
20	Water Synthetic Jet Driven by a Piezoelectric Actuator $\hat{a}\in$ LIF and PIV Experiments. Advanced Materials Research, 2015, 1104, 45-50.	0.3	2
21	Impingement heat/mass transfer to hybrid synthetic jets and other reversible pulsating jets. International Journal of Heat and Mass Transfer, 2015, 85, 473-487.	2.5	33
22	Visualization study of hybrid synthetic jets. Journal of Visualization, 2015, 18, 581-593.	1.1	23
23	Numerical study of nozzle design for the hybrid synthetic jet actuator. Sensors and Actuators A: Physical, 2015, 232, 172-182.	2.0	7
24	Visualization of synthetic jet formation in air. Journal of Visualization, 2015, 18, 595-609.	1.1	16
25	Energetic efficiencies of synthetic and hybrid synthetic jet actuators driven by electrodynamic transducers. Experimental Thermal and Fluid Science, 2015, 69, 119-126.	1.5	13
26	Impinging jet-based fluidic diodes for hybrid synthetic jet actuators. Journal of Visualization, 2015, 18, 449-458.	1.1	6
27	A new method for fluid input into a hybrid synthetic jet actuator. EPJ Web of Conferences, 2014, 67, 02056.	0.1	1
28	Bubble dynamics in drinks. EPJ Web of Conferences, 2014, 67, 02011.	0.1	0
29	Annular Impinging Jet Controlled by Radial Synthetic Jets. Heat Transfer Engineering, 2014, 35, 1450-1461.	1.2	19
30	Viscosity Measurement Using Microcantilever Sensor. , 2014, , .		0
31	Laminar vortex shedding behind a cooled circular cylinder. Experiments in Fluids, 2014, 55, 1.	1.1	6
32	Novel methods for evaluation of the Reynolds number of synthetic jets. Experiments in Fluids, 2014, 55, 1.	1.1	11
33	Spontaneous development of rotating inertial gravity wave inside the cylindrical tank with combined in- and outflow. Thermophysics and Aeromechanics, 2013, 20, 133-138.	0.1	3
33	Spontaneous development of rotating inertial gravity wave inside the cylindrical tank with combined in- and outflow. Thermophysics and Aeromechanics, 2013, 20, 133-138.  Axisymmetric Synthetic Jet Actuators with Large Streamwise Dimensions. AIAA Journal, 2013, 51, 2862-2877.	0.1	3
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37	Novel Fluidic Diode for Hybrid Synthetic Jet Actuator. Journal of Fluids Engineering, Transactions of the ASME, 2013, 135, .	0.8	22
38	Holographic-Interferometric and Thermoanemometric Study of a Thermoacoustic Prime Mover. Journal of Mechanics, 2013, 29, 59-66.	0.7	1
39	Active control of the jet in coaxial arrangement. EPJ Web of Conferences, 2013, 45, 01016.	0.1	2
40	Experimental Investigation of a Synthetic Jet Array in a Laminar Channel Flow. EPJ Web of Conferences, 2013, 45, 01002.	0.1	7
41	Experimental Investigation of the Compressor Cascade under an Active Flow Control. EPJ Web of Conferences, 2013, 45, 01086.	0.1	6
42	Flow control in axial fan inlet guide vanes by synthetic jets. EPJ Web of Conferences, 2013, 45, 01021.	0.1	1
43	Valves with flow control by synthetic jets. EPJ Web of Conferences, 2012, 25, 01092.	0.1	5
44	Viscosity measurement using fiber bend loss sensor. , 2012, , .		4
45	Visualization of the hot chocolate sound effect by spectrograms. Journal of Sound and Vibration, 2012, 331, 5387-5392.	2.1	13
46	Formation Criterion for Axisymmetric Synthetic Jets at High Stokes Numbers. AIAA Journal, 2012, 50, 2012-2017.	1.5	38
47	The onset of oblique vortex shedding behind a heated circular cylinder in laminar wake regime. Physics of Fluids, 2012, 24, .	1.6	1
48	Numerical and experimental studies of a channel flow with multiple circular synthetic jets. EPJ Web of Conferences, 2012, 25, 01094.	0.1	7
49	Visualization of synthetic jets at higher Stokes numbers. EPJ Web of Conferences, 2012, 25, 01007.	0.1	2
50	Experimental investigation of a control synthetic jet. EPJ Web of Conferences, 2012, 25, 01059.	0.1	1
51	THE PERFORMANCE OF HEXAGONALLY ARRANGED HYBRID SYNTHETIC JETS. Journal of Flow Visualization and Image Processing, 2012, 19, 1-13.	0.3	8
52	Axisymmetric impinging jet excited by a synthetic jet system. International Journal of Heat and Mass Transfer, 2012, 55, 1279-1290.	2.5	35
53	On the effective temperature and Reynolds number concept for a heated circular cylinder: commentary of the article by Baranyi et al Journal of Mechanical Science and Technology, 2011, 25, 1881-1884.	0.7	3
54	On the effective temperature concept for liquid: Paradox of the similarity?. International Communications in Heat and Mass Transfer, 2011, 38, 852-854.	2.9	3

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55	Heat and Mass Transfer Caused by a Laminar Channel Flow Equipped With a Synthetic Jet Array. Journal of Thermal Science and Engineering Applications, 2010, 2, .	0.8	11
56	EXPERIMENTS ON RESONANCE FREQUENCIES OF SYNTHETIC JET ACTUATORS. Journal of Flow Visualization and Image Processing, 2010, 17, 203-214.	0.3	9
57	A channel flow controlled by a synthetic jet array. , 2009, , .		0
58	Excitational metamorphosis of surface flowfield under an impinging annular jet. Chemical Engineering Journal, 2008, 144, 312-316.	6.6	8
59	On the effective temperature concept in the problem of laminar vortex shedding behind a heated circular cylinder. Physics of Fluids, 2007, 19, 051701.	1.6	8
60	The influence of temperature gradient on the Strouhal–Reynolds number relationship for water and air. Experimental Thermal and Fluid Science, 2007, 31, 751-760.	1.5	21
61	Experimental investigation of a fluidic actuator generating hybrid-synthetic jets. Sensors and Actuators A: Physical, 2007, 138, 213-220.	2.0	31
62	Cool sound: the future of refrigeration? Thermodynamic and heat transfer issues in thermoacoustic refrigeration. Heat and Mass Transfer, 2006, 42, 492-500.	1,2	28
63	Hybrid synthetic jets as the nonzero-net-mass-flux synthetic jets. Physics of Fluids, 2006, 18, 081701.	1.6	55
64	HYBRID SYNTHETIC JET INTENDED FOR ENHANCED JET IMPINGEMENT HEAT/MASS TRANSFER. , 2006, , .		6
65	Enhancement of synthetic jets by means of an integrated valve-less pump. Sensors and Actuators A: Physical, 2005, 120, 232-240.	2.0	47
66	Enhancement of synthetic jets by means of an integrated valve-less pump. Sensors and Actuators A: Physical, 2005, 125, 50-58.	2.0	38
67	Annular impinging jet with recirculation zone expanded by acoustic excitation. International Journal of Heat and Mass Transfer, 2004, 47, 2329-2341.	2.5	35
68	Annular synthetic jet used for impinging flow mass-transfer. International Journal of Heat and Mass Transfer, 2003, 46, 3291-3297.	2.5	113
69	Aerodynamic and mass transfer characteristics of an annular bistable impinging jet with a fluidic flip–flop control. International Journal of Heat and Mass Transfer, 2003, 46, 1265-1278.	2.5	25
70	On the linear heat transfer correlation of a heated circular cylinder in laminar crossflow using a new representative temperature concept. International Journal of Heat and Mass Transfer, 2001, 44, 4635-4647.	2.5	29
71	On the relationship of effective Reynolds number and Strouhal number for the laminar vortex shedding of a heated circular cylinder. Physics of Fluids, 2000, 12, 1401-1410.	1.6	90
72	Impaktströmung und die zusammengesetzte Schlitzdüse. Heat and Mass Transfer, 1999, 35, 351-356.	1.2	6