Stefano Discetti

List of Publications by Year
in descending order

59 papers	1,351 citations	361413 20 h-index	345221 36 g-index
59 all docs	59 docs citations	59 times ranked	891 citing authors

#	Article	IF	Citations
1	Main results of the 4th International PIV Challenge. Experiments in Fluids, 2016, 57, 1.	2.4	138
2	POD-based background removal for particle image velocimetry. Experimental Thermal and Fluid Science, 2017, 80, 181-192.	2.7	102
3	Convolutional-network models to predict wall-bounded turbulence from wall quantities. Journal of Fluid Mechanics, 2021, 928, .	3.4	97
4	From coarse wall measurements to turbulent velocity fields through deep learning. Physics of Fluids, 2021, 33, .	4.0	69
5	Heat transfer enhancement of impinging jets with fractal-generated turbulence. International Journal of Heat and Mass Transfer, 2014, 75, 173-183.	4.8	63
6	Volumetric velocimetry for fluid flows. Measurement Science and Technology, 2018, 29, 042001.	2.6	60
7	On PIV random error minimization with optimal POD-based low-order reconstruction. Experiments in Fluids, 2015, 56, 1.	2.4	50
8	Ensemble 3D PTV for high resolution turbulent statistics. Measurement Science and Technology, 2016, 27, 124011.	2.6	49
9	Adverse-Pressure-Gradient Effects on Turbulent Boundary Layers: Statistics and Flow-Field Organization. Flow, Turbulence and Combustion, 2017, 99, 589-612.	2.6	48
10	On the identification of well-behaved turbulentÂboundaryÂlayers. Journal of Fluid Mechanics, 2017, 822, 109-138.	3.4	43
11	A fast multi-resolution approach to tomographic PIV. Experiments in Fluids, 2012, 52, 765-777.	2.4	41
12	Spatial filtering improved tomographic PIV. Experiments in Fluids, 2013, 54, 1.	2.4	39
13	Fast 3D PIV with direct sparse cross-correlations. Experiments in Fluids, 2012, 53, 1437-1451.	2.4	37
14	Three-dimensional organization of the flow structure in a non-reactive model aero engine lean burn injection system. Experimental Thermal and Fluid Science, 2014, 52, 164-173.	2.7	37
15	Revisiting History Effects in Adverse-Pressure-Gradient Turbulent Boundary Layers. Flow, Turbulence and Combustion, 2017, 99, 565-587.	2.6	32
16	Sensing the turbulent large-scale motions with their wall signature. Physics of Fluids, 2019, 31, .	4.0	29
17	Flow field topology of submerged jets with fractal generated turbulence. Physics of Fluids, 2015, 27, .	4.0	26
18	Estimation of time-resolved turbulent fields through correlation of non-time-resolved field measurements and time-resolved point measurements. Experimental Thermal and Fluid Science, 2018, 93, 119-130.	2.7	26

#	ARTICLE	IF	CITATIONS
19	PIV measurements of anisotropy and inhomogeneity in decaying fractal generated turbulence. Fluid Dynamics Research, 2013, 45, 061401.	1.3	25
20	Flow field features of fractal impinging jets at short nozzle to plate distances. Experimental Thermal and Fluid Science, 2016, 78, 334-344.	2.7	22
21	On the three-dimensional precessing jet flow past a sudden expansion. Experiments in Fluids, 2014, 55, 1.	2.4	19
22	Characterization of very-large-scale motions in high-Re pipe flows. Experimental Thermal and Fluid Science, 2019, 104, 1-8.	2.7	19
23	Machine-learning flow control with few sensor feedback and measurement noise. Physics of Fluids, 2022, 34, .	4.0	19
24	Experimental realisation of near-equilibrium adverse-pressure-gradient turbulent boundary layers. Experimental Thermal and Fluid Science, 2020, 112, 109975.	2.7	18
25	The detrimental effect of increasing the number of cameras on self-calibration for tomographic PIV. Measurement Science and Technology, 2014, 25, 084001.	2.6	17
26	Separating adverse-pressure-gradient and Reynolds-number effects in turbulent boundary layers. Physical Review Fluids, 2020, 5, .	2.5	17
27	On the onset of horizontal convection. International Journal of Thermal Sciences, 2016, 110, 96-108.	4.9	16
28	Smart Rotors: Dynamic-Stall Load Control by Means of an Actuated Flap. AIAA Journal, 2018, 56, 1388-1401.	2.6	16
29	Wake of tandem cylinders near a wall. Experimental Thermal and Fluid Science, 2016, 78, 354-369.	2.7	14
30	Towards enabling time-resolved measurements of turbulent convective heat transfer maps with IR thermography and a heated thin foil. International Journal of Heat and Mass Transfer, 2017, 108, 199-209.	4.8	14
31	Wall-mounted perforated cubes in a boundary layer: Local heat transfer enhancement and control. International Journal of Heat and Mass Transfer, 2018, 117, 498-507.	4.8	14
32	High accuracy measurement of magnification for monocular PIV. Measurement Science and Technology, 2012, 23, 117001.	2.6	13
33	Convergence enhancement of single-pixel PIV with symmetric double correlation. Experiments in Fluids, 2015, 56, 1.	2.4	12
34	Modal decomposition of flow fields and convective heat transfer maps: An application to wall-proximity square ribs. Experimental Thermal and Fluid Science, 2019, 102, 517-527.	2.7	12
35	Roadmap on signal processing for next generation measurement systems. Measurement Science and Technology, 2022, 33, 012002.	2.6	12
36	On a novel low cost high accuracy experimental setup for tomographic particle image velocimetry. Measurement Science and Technology, 2013, 24, 075302.	2.6	10

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37	Experimental assessment of a new heat flux sensor for measuring convective heat transfer coefficients. Quantitative InfraRed Thermography Journal, 2011, 8, 37-49.	4.2	8
38	Blob-enhanced reconstruction technique. Measurement Science and Technology, 2016, 27, 094011.	2.6	8
39	Flow organization in the wake of a rib in a turbulent boundary layer with pressure gradient. Experimental Thermal and Fluid Science, 2019, 108, 115-124.	2.7	8
40	Reducing turbulent convective heat transfer with streamwise plasma vortex generators. Experimental Thermal and Fluid Science, 2022, 134, 110596.	2.7	8
41	From sparse data to high-resolution fields: ensemble particle modes as a basis for high-resolution flow characterization. Experimental Thermal and Fluid Science, 2021, 120, 110178.	2.7	7
42	On the uncertainty of boundary-layer parameters from Ensemble PTV data. Measurement Science and Technology, 2021, 32, 084006.	2.6	6
43	Unsupervised modelling of a transitional boundary layer. Journal of Fluid Mechanics, 2021, 929, .	3.4	6
44	Pressure from data-driven-estimated velocity fields using snapshot PIV and fast probes. Experimental Thermal and Fluid Science, 2022, , 110647.	2.7	6
45	Adaptive ensemble PTV. Measurement Science and Technology, 2020, 31, 085301.	2.6	5
46	Evaluation of anisotropic tangential conduction in printed-circuit-board heated-thin-foil heat flux sensors. International Journal of Heat and Mass Transfer, 2018, 127, 1138-1146.	4.8	4
47	Assessing aerodynamic force estimation with experiments and simulations of flapping-airfoil flows on the verge of three-dimensionality. Proceedings of the Institution of Mechanical Engineers, Part G: Journal of Aerospace Engineering, 2020, 234, 428-444.	1.3	4
48	Data-driven identification of unsteady-aerodynamics phenomena in flapping airfoils. Experimental Thermal and Fluid Science, 2021, 124, 110234.	2.7	3
49	Special issue on uncertainty quantification in particle image velocimetry and Lagrangian particle tracking. Measurement Science and Technology, 2022, 33, 010201.	2.6	2
50	Inter-scale interaction in pipe flows at high Reynolds numbers. Experimental Thermal and Fluid Science, 2022, 131, 110529.	2.7	1
51	Smart rotor: controlling dynamic stall by means of an actuated flap. , 2016, , .		0
52	Low order modeling of forces and flow features in flapping wings. , 2016, , .		0
53	Flow Field Topology of Impinging Jets with Fractal Inserts. Springer Proceedings in Physics, 2016, , 243-248.	0.2	0
54	Advances in laser-based flow diagnostics for the measurement of velocity, pressure and temperature. Measurement Science and Technology, 2020, 31, 040101.	2.6	0

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55	13th International Symposium on Particle Image Velocimetry (ISPIV 2019). Measurement Science and Technology, 2021, 32, 060201.	2.6	0
56	Announcing the 2020 Measurement Science and Technology outstanding paper awards. Measurement Science and Technology, 2021, 32, 110101.	2.6	0
57	Identifying Well-Behaved Turbulent Boundary Layers. Springer Proceedings in Physics, 2017, , 67-72.	0.2	0
58	Identifying the Wall Signature of Large-Scale Motions with Extended POD. Springer Proceedings in Physics, 2019, , 75-80.	0.2	0
59	Large-Scale Energy in Turbulent Boundary Layers: Reynolds-Number and Pressure-Gradient Effects. Springer Proceedings in Physics, 2019, , 69-74.	0.2	0