

L De Luca

List of Publications by Year in descending order

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Version: 2024-02-01

78
papers

1,412
citations

257450

24
h-index

361022

35
g-index

80
all docs

80
docs citations

80
times ranked

779
citing authors

#	ARTICLE	IF	CITATIONS
1	Insights into low Reynolds flow past finite curved cylinders. <i>Physics of Fluids</i> , 2021, 33, .	4.0	5
2	Receptivity to forcing disturbances in subcritical liquid sheet flows. <i>Physics of Fluids</i> , 2021, 33, .	4.0	14
3	Modal analysis of actively controlled flow past a backward facing ramp. <i>Physical Review Fluids</i> , 2021, 6, .	2.5	4
4	Energy insights into the unsteady dynamics of a viscous gravitational liquid sheet. <i>Physics of Fluids</i> , 2021, 33, .	4.0	4
5	Modal decomposition analysis of unsteady viscous liquid sheet flows. <i>Physics of Fluids</i> , 2021, 33, .	4.0	10
6	Active control of separated flow over 2D back-facing ramp by an array of finite-span slotted synthetic jets. <i>Experimental Thermal and Fluid Science</i> , 2021, 129, 110475.	2.7	6
7	Experimental and CFD Characterization of a Double-Orifice Synthetic Jet Actuator for Flow Control. <i>Actuators</i> , 2021, 10, 326.	2.3	5
8	Receptivity to synthetic jet actuation in boundary layer flows. , 2020, , .		1
9	Modal analysis of actively controlled flow past a backward facing ramp. , 2020, , .		2
10	Global eigenmodes of thin liquid sheets by means of Volume-of-Fluid simulations. <i>Physics of Fluids</i> , 2020, 32, .	4.0	22
11	Flow control on a 2D back-facing ramp by Synthetic Jets. , 2020, , .		1
12	Flow characterization of an array of finite-span synthetic jets in quiescent ambient. <i>Experimental Thermal and Fluid Science</i> , 2020, 119, 110208.	2.7	5
13	Numerical Study on the Flow Field Generated by a Double-Orifice Synthetic Jet Device. <i>Lecture Notes in Mechanical Engineering</i> , 2020, , 45-56.	0.4	1
14	An Analysis of Time-Integration Errors in Large-Eddy Simulation of Incompressible Turbulent Flows. <i>ERCOTAC Series</i> , 2019, , 31-37.	0.1	0
15	Design approach to predict synthetic jet formation and resonance amplifications. <i>Experimental Thermal and Fluid Science</i> , 2019, 107, 79-87.	2.7	29
16	Discrete Energy-Conservation Properties in the Numerical Simulation of the Navier–Stokes Equations. <i>Applied Mechanics Reviews</i> , 2019, 71, .	10.1	31
17	The role of the critical layer in the channel flow transition revisited. <i>Meccanica</i> , 2019, 54, 2169-2182.	2.0	0
18	Comparative study of spectral-element and finite-volume solvers for direct numerical simulation of synthetic jets. <i>Computers and Fluids</i> , 2019, 179, 228-237.	2.5	24

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19	Numerically stable formulations of convective terms for turbulent compressible flows. Journal of Computational Physics, 2019, 382, 86-104.	3.8	66
20	Effects of the stroke length and nozzle-to-plate distance on synthetic jet impingement heat transfer. International Journal of Heat and Mass Transfer, 2018, 117, 1019-1031.	4.8	83
21	A Calibrated Lumped Element Model for the Prediction of PSJ Actuator Efficiency Performance. Actuators, 2018, 7, 10.	2.3	6
22	Measurements versus Numerical Simulations for Slotted Synthetic Jet Actuator. Actuators, 2018, 7, 59.	2.3	10
23	Plasma Synthetic Jet Actuators for Active Flow Control. Actuators, 2018, 7, 77.	2.3	47
24	Derivation of New Staggered Compact Schemes with Application to Navier-Stokes Equations. Applied Sciences (Switzerland), 2018, 8, 1066.	2.5	1
25	Numerical and experimental characterization of a double-orifice synthetic jet actuator. Meccanica, 2018, 53, 2883-2896.	2.0	13
26	Feasibility studies for the installation of Plasma Synthetic Jet Actuators on the skin of a morphing wing flap. , 2018, , .		4
27	Numerical and Experimental Frequency Response of Plasma Synthetic Jet Actuators. , 2017, , .		14
28	Unsteady critical liquid sheet flows. Journal of Fluid Mechanics, 2017, 821, 219-247.	3.4	20
29	Water Spray Flow Characteristics Under Synthetic Jet Driven By a Piezoelectric Actuator. Journal of Physics: Conference Series, 2017, 778, 012005.	0.4	5
30	Explicit Runge-Kutta schemes for incompressible flow with improved energy-conservation properties. Journal of Computational Physics, 2017, 328, 86-94.	3.8	56
31	LEM Characterization of Synthetic Jet Actuators Driven by Piezoelectric Element: A Review. Sensors, 2017, 17, 1216.	3.8	48
32	INFLUENCE OF PIEZO-DRIVEN SYNTHETIC JET ON WATER SPRAY BEHAVIOR. Atomization and Sprays, 2017, 27, 691-706.	0.8	13
33	Scaling properties of resonant cavities driven by piezo-electric actuators. Sensors and Actuators A: Physical, 2016, 247, 465-474.	4.1	24
34	Approximate Projection Method for the Incompressible Navier-Stokes Equations. AIAA Journal, 2016, 54, 2179-2182.	2.6	16
35	Some Experimental Investigations on Gas Turbine Cooling Performed with Infrared Thermography at Federico II. International Journal of Rotating Machinery, 2015, 2015, 1-16.	0.8	17
36	Characterization of Synthetic Jet Resonant Cavities. , 2015, , 101-118.		0

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37	Energy preserving turbulent simulations at a reduced computational cost. Journal of Computational Physics, 2015, 298, 480-494.	3.8	20
38	An efficient time advancing strategy for energy-preserving simulations. Journal of Computational Physics, 2015, 295, 209-229.	3.8	16
39	Modelling of efficiency of synthetic jet actuators. Sensors and Actuators A: Physical, 2015, 233, 512-521.	4.1	30
40	Heat Flux Sensors for Infrared Thermography in Convective Heat Transfer. Sensors, 2014, 14, 21065-21116.	3.8	12
41	Global dynamics analysis of nappe oscillation. Physics of Fluids, 2014, 26, .	4.0	15
42	Modeling and Experimental Validation of the Frequency Response of Synthetic Jet Actuators. AIAA Journal, 2014, 52, 1733-1748.	2.6	55
43	Lower incidence of macrovascular complications in patients on insulin glargine versus those on basal human insulins: A population-based cohort study in Italy. Nutrition, Metabolism and Cardiovascular Diseases, 2014, 24, 10-17.	2.6	30
44	Disturbance energy growth in core-annular flow. Journal of Fluid Mechanics, 2014, 747, 44-72.	3.4	6
45	Surface tension effects on the motion of a free-falling liquid sheet. Physics of Fluids, 2013, 25, .	4.0	8
46	Lower Rate of Cardiovascular Complications in Patients on Bolus Insulin Analogues: A Retrospective Population-Based Cohort Study. PLoS ONE, 2013, 8, e79762.	2.5	9
47	Global eigenmodes of free-interface vertical liquid sheet flows. WIT Transactions on Engineering Sciences, 2013, , .	0.0	3
48	Non-Modal Instability of Core-Annular Flow. International Journal of Nonlinear Sciences and Numerical Simulation, 2012, 13, .	1.0	1
49	SINGLE-WAVE KELVIN-HELMHOLTZ INSTABILITY IN NONPARALLEL CHANNEL FLOW. Atomization and Sprays, 2011, 21, 775-785.	0.8	3
50	Insights on the impact of a plane drop on a thin liquid film. Physics of Fluids, 2011, 23, .	4.0	53
51	Non-modal dynamics before flow-induced instability in fluid-structure interactions. Journal of Sound and Vibration, 2010, 329, 848-865.	3.9	6
52	The VOF method applied to the numerical simulation of a 2D liquid jet under gravity. WIT Transactions on Engineering Sciences, 2010, , .	0.0	7
53	Critical Discharge in Actively Cooled Wing Leading Edge of a Reentry Vehicle. Journal of Thermophysics and Heat Transfer, 2008, 22, 677-684.	1.6	2
54	Flash Evaporation Phenomena in Actively Cooled Wing Leading Edge of Re-Entry Vehicles. , 2007, , .		0

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55	On transient growth oscillations in linear models. Physics of Fluids, 2006, 18, 078104.	4.0	13
56	Energy growth of initial perturbations in two-dimensional gravitational jets. Physics of Fluids, 2002, 14, 289-299.	4.0	9
57	Experimental investigation of the global instability of plane sheet flows. Journal of Fluid Mechanics, 1999, 399, 355-376.	3.4	34
58	Instability of a spatially developing liquid sheet. Journal of Fluid Mechanics, 1997, 331, 127-144.	3.4	65
59	Goertler-type vortices in hypersonic flows: the ramp problem. Experimental Thermal and Fluid Science, 1997, 15, 69-81.	2.7	38
60	Evolution of a wave packet in nonuniform liquid sheets. , 1996, , .		0
61	Influence of shear layer dynamics on impingement heat transfer. Experimental Thermal and Fluid Science, 1996, 13, 29-37.	2.7	47
62	Azimuthal instability in an impinging jet: adiabatic wall temperature distribution. Experiments in Fluids, 1995, 18, 303-310.	2.4	32
63	Two-dimensional flow of a liquid sheet under gravity. Computers and Fluids, 1995, 24, 401-414.	2.5	7
64	Experimental analysis of surface flow on a delta wing by infrared thermography. AIAA Journal, 1995, 33, 1510-1512.	2.6	26
65	Viscous interaction phenomena in hypersonic wedge flow. AIAA Journal, 1995, 33, 2293-2298.	2.6	52
66	Surfactant effects on the dynamics of a thin liquid sheet. Journal of Fluid Mechanics, 1995, 300, 71-85.	3.4	26
67	Goertler instability of a hypersonic boundary layer. Experiments in Fluids, 1993, 16, 10-16.	2.4	40
68	FLOW VISUALIZATION AND HEAT TRANSFER MEASUREMENT IN A HYPERSONIC WIND TUNNEL. Experimental Heat Transfer, 1992, 5, 65-78.	3.2	27
69	<title>Experimental analysis of Goertler vortices in hypersonic wedge flow</title>. , 1992, 1682, 271.		1
70	Modulation transfer function cascade model for a sampled IR imaging system. Applied Optics, 1991, 30, 1659.	2.1	28
71	Boundary layer diagnostics by means of an infrared scanning radiometer. Experiments in Fluids, 1990, 9, 121-128.	2.4	58
72	Theoretical and experimental analysis of the modulation response of a sampled IR imaging system. , 1990, 1313, 259.		3

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73	Image restoration in thermo-fluid-dynamic applications of IR digital imagery. , 1990, , .		3
74	Downward-deployed tethered platforms for high-enthalpy aerothermodynamic research. Journal of Spacecraft and Rockets, 1990, 27, 216-221.	1.9	10
75	Characterization Of Boundary Layer Conditions In Wind Tunnel Tests Through Ir Thermography Imaging. Proceedings of SPIE, 1988, , .	0.8	4
76	INSTABILITY OF A THIN LIQUID SHEET IN THE GRAVITATIONAL FIELD. , 1988, , 213-218.		1
77	Numerical Approach to the Design of a Diesel Engine Injection System by an Optimization Technique. , 1985, , .		4
78	Goertler Vortices in Hypersonic Flow Detected by IR Thermography. , 0, , .		0