

Alessandro Corsini

List of Publications by Year in descending order

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128
papers

1,496
citations

331670

21
h-index

377865

34
g-index

129
all docs

129
docs citations

129
times ranked

797
citing authors

#	ARTICLE	IF	CITATIONS
1	Deep anomaly detection in horizontal axis wind turbines using Graph Convolutional Autoencoders for Multivariate Time series. <i>Energy and AI</i> , 2022, 8, 100145.	10.6	28
2	Optimization of a Tip Appendage for the Control of Tip Leakage Vortices in Axial Flow Fans. <i>Journal of Turbomachinery</i> , 2022, 144, .	1.7	0
3	Machine-learnt topology of complex tip geometries in gas turbine rotors. <i>Proceedings of the Institution of Mechanical Engineers, Part A: Journal of Power and Energy</i> , 2021, 235, 383-392.	1.4	1
4	Machine learnt prediction method for rain erosion damage on wind turbine blades. <i>Wind Energy</i> , 2021, 24, 917-934.	4.2	8
5	Design of a Tip Appendage for the Control of Tip Leakage Vortices in Axial Flow Fans. <i>Journal of Turbomachinery</i> , 2021, 143, .	1.7	4
6	Assessment of MULTALL as Computational Fluid Dynamics Code for the Analysis of Tube-Axial Fans. <i>Journal of Turbomachinery</i> , 2021, 143, .	1.7	2
7	Anomaly Detection in Photovoltaic Production Factories via Monte Carlo Pre-Processed Principal Component Analysis. <i>Energies</i> , 2021, 14, 3951.	3.1	8
8	Energy profiling of end-users in service and industry sectors with use of Complex Network Analysis. <i>E3S Web of Conferences</i> , 2021, 312, 10001.	0.5	1
9	FSI analysis and simulation of flexible blades in a Wells turbine for wave energy conversion. <i>E3S Web of Conferences</i> , 2020, 197, 11008.	0.5	1
10	Computational analysis of particle-laden-airflow erosion and experimental verification. <i>Computational Mechanics</i> , 2020, 65, 1549-1565.	4.0	11
11	Time Series Clustering: A Complex Network-Based Approach for Feature Selection in Multi-Sensor Data. <i>Modelling</i> , 2020, 1, 1-21.	1.4	6
12	Simulation of the Deposit Evolution on a Fan Blade for Tunnel Ventilation. <i>Journal of Engineering for Gas Turbines and Power</i> , 2020, 142, .	1.1	4
13	Assessment of a Machine-Learnt Adaptive Wall-Function in a Compressor Cascade With Sinusoidal Leading Edge. <i>Journal of Engineering for Gas Turbines and Power</i> , 2020, 142, .	1.1	2
14	Numerical investigation of CSP air cooled condenser fan. <i>E3S Web of Conferences</i> , 2020, 197, 11010.	0.5	2
15	Numerical Simulation of the Blade Aging Process in an Induced Draft Fan Due to Long Time Exposition to Fly Ash Particles. <i>Journal of Engineering for Gas Turbines and Power</i> , 2019, 141, .	1.1	13
16	Gen-Set Control in Stand-Alone/RES Integrated Power Systems. <i>Energies</i> , 2019, 12, 3353.	3.1	3
17	19th International Conference on Finite Elements in Flow Problems. <i>Computers and Fluids</i> , 2019, 179, 702-703.	2.5	0
18	Complex Network Analysis of Photovoltaic Plant Operations and Failure Modes. <i>Energies</i> , 2019, 12, 1995.	3.1	6

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19	Exploration of Axial Fan Design Space with Data-Driven Approach. International Journal of Turbomachinery, Propulsion and Power, 2019, 4, 11.	1.1	0
20	A stabilized ALE method for computational fluid-structure interaction analysis of passive morphing in turbomachinery. Mathematical Models and Methods in Applied Sciences, 2019, 29, 967-994.	3.3	40
21	Computational analysis of performance deterioration of a wind turbine blade strip subjected to environmental erosion. Computational Mechanics, 2019, 64, 1133-1153.	4.0	37
22	Assessment of a Machine-Learnt Adaptive Wall-Function in a Compressor Cascade With Sinusoidal Leading Edge. , 2019, , .		1
23	Simulation of the Deposit Evolution on a Fan Blade for Tunnel Ventilation. , 2019, , .		1
24	A Multi-Dimensional Extension of Balje Chart for Axial Flow Turbomachinery Using Artificial Intelligence Based Meta-Models. , 2019, , .		1
25	Identification of Poorly Ventilated Zones in Gas-Turbine Enclosures With Machine Learning. , 2019, , .		0
26	Modelling of Sonic Jets for Gas Leak Applications. , 2019, , .		0
27	Numerical Testing of a Trailing Edge Passive Morphing Control for Large Axial Fan Blades. Journal of Engineering for Gas Turbines and Power, 2018, 140, .	1.1	2
28	Numerical Simulation of the Blade Aging Process in an Induced Draft Fan due to Long Time Exposition to Fly Ash Particles. , 2018, , .		2
29	A Meta-Model for Aerodynamic Properties of a Reversible Profile in Cascade With Variable Stagger and Solidity. , 2018, , .		2
30	Sea-Water Desalination for Load Levelling of Gen-Sets in Small Off-Grid Islands. Energies, 2018, 11, 2068.	3.1	9
31	On Surrogate-Based Optimization of Truly Reversible Blade Profiles for Axial Fans. Designs, 2018, 2, 19.	2.4	6
32	Internal Combustion Engine sensor network analysis using graph modeling. Energy Procedia, 2017, 126, 907-914.	1.8	5
33	Energy rating of a water pumping station using multivariate analysis. Energy Procedia, 2017, 126, 385-391.	1.8	0
34	Optimization of an axial fan for air cooled condensers. Energy Procedia, 2017, 126, 754-761.	1.8	11
35	Development and Validation of a Novel Synthetic Blade Model for Axial Flow Fans in Unsteady CFD. , 2017, , .		3
36	Design of a Single Stage Variable Pitch Axial Fan. , 2017, , .		4

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37	Numerical Simulation With Adaptive Boundary Method for Predicting Time Evolution of Erosion Processes. , 2017, , .		8
38	The influence of water desalination systems on load levelling of gen-set in small off-grid islands. Energy Procedia, 2017, 142, 2230-2235.	1.8	4
39	Modelling of Particle Transport, Erosion and Deposition in Power Plant Gas Paths. , 2016, , .		8
40	Experimental Investigation on Double Anti-Stall Ring Effects on Reversible Ventilation Fan Performance. , 2016, , .		0
41	Fouling Detection in Low Speed Fan Using Near-Field DIY Sound Pressure Sensors. , 2016, , .		0
42	Modelling of Axial Fan and Anti-Stall Ring on a Virtual Test Rig for Air Performance Evaluation. , 2016, , .		0
43	Flow Survey of a Forward Curved Blades Centrifugal Fan for HVAC Applications. , 2016, , .		3
44	Derivative Design of Axial Fan Range: From Academia to Industry. , 2016, , .		2
45	Multivariate KPI for Energy Management of Cooling Systems in Food Industry. Energy Procedia, 2016, 101, 297-304.	1.8	4
46	Performance Analysis of a Common-rail Diesel Engine Fuelled with Different Blends of Waste Cooking oil and Gasoil. Energy Procedia, 2016, 101, 606-613.	1.8	10
47	Implementation of an acoustic stall detection system using near-field DIY pressure sensors. Proceedings of the Institution of Mechanical Engineers, Part A: Journal of Power and Energy, 2016, 230, 487-501.	1.4	3
48	Computational analysis of wind-turbine blade rain erosion. Computers and Fluids, 2016, 141, 175-183.	2.5	61
49	Flow analysis of a wave-energy air turbine with the SUPG/PSPG stabilization and Discontinuity-Capturing Directional Dissipation. Computers and Fluids, 2016, 141, 184-190.	2.5	18
50	SUPG/PSPG Computational Analysis of Rain Erosion in Wind-Turbine Blades. Modeling and Simulation in Science, Engineering and Technology, 2016, , 77-96.	0.6	14
51	Flow Analysis of a Wave-Energy Air Turbine with the SUPG/PSPG Method and DCDD. Modeling and Simulation in Science, Engineering and Technology, 2016, , 39-53.	0.6	2
52	Multivariate Key Performance Indicator of Baking Process. Energy Procedia, 2015, 82, 554-561.	1.8	2
53	Assessment of a Diagnostic Procedure for the Monitoring and Control of Industrial Processes. Energy Procedia, 2015, 75, 1772-1778.	1.8	7
54	A CFD-based Virtual Test-rig for Rotating Heat Exchangers. Energy Procedia, 2015, 82, 245-251.	1.8	9

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55	Industrial Energy Management Systems in Italy: State of the Art and Perspective. Energy Procedia, 2015, 82, 562-569.	1.8	21
56	Vegetable Oils as Fuels in Diesel Engine. Engine Performance and Emissions. Energy Procedia, 2015, 81, 942-949.	1.8	69
57	Unsteady End-wall Pressure Measurements Using Near-field DIY Sensors on Fouled Fan Rotor Blades. Energy Procedia, 2015, 82, 237-244.	1.8	2
58	Preliminary Assessment of Wave Energy Use in an Off-grid Minor Island Desalination Plant. Energy Procedia, 2015, 82, 789-796.	1.8	23
59	Numerical Assessment of Fan-Ducting Coupling for Gas Turbine Ventilation Systems. , 2015, , .		1
60	Unsteady Pressure Interaction of an Axial Flow Fan With a Stabilization Ring in Tunnel and Metro Applications. , 2015, , .		1
61	Axial Flow Fan Design Experience for a Project Based Turbomachinery Class. , 2015, , .		0
62	Pollutant Emissions in Common-rail Diesel Engines in Extraurban Cycle: Rapeseed Oils vs Diesel Fuel. Energy Procedia, 2015, 82, 141-148.	1.8	10
63	Modeling of Rain Drop Erosion in a Multi-MW Wind Turbine. , 2015, , .		18
64	Particle tracking and particleâ€š shock interaction in compressible-flow computations with the V-SGS stabilization and $\$Y Z \hat{I}^2$ shock-capturing. Computational Mechanics, 2015, 55, 1201-1209.	4.0	65
65	Stall Detection Using Pseudo-Acoustic Pressure Modulation in Industrial Fans. Periodica Polytechnica, Mechanical Engineering, 2015, 59, 153-163.	1.4	0
66	Predicting the Performance of an Industrial Centrifugal Fan Incorporating Cambered Plate Impeller Blades. Periodica Polytechnica, Mechanical Engineering, 2014, 58, 15-25.	1.4	9
67	A Critical Review of Passive Noise Control Techniques in Industrial Fans. Journal of Engineering for Gas Turbines and Power, 2014, 136, .	1.1	10
68	Simulation of Particle-Laden Flows in a Large Centrifugal Fan for Erosion Prediction. , 2014, , .		10
69	The application of sinusoidal blade-leading edges in a fan-design methodology to improve stall resistance. Proceedings of the Institution of Mechanical Engineers, Part A: Journal of Power and Energy, 2014, 228, 255-271.	1.4	25
70	The role of variable pitch in motion blades and variable rotational speed in an industrial fan stall. Proceedings of the Institution of Mechanical Engineers, Part A: Journal of Power and Energy, 2014, 228, 272-284.	1.4	0
71	A numerical investigation into the aerodynamic effect of pressure pulses on a tunnel ventilation fan. Proceedings of the Institution of Mechanical Engineers, Part A: Journal of Power and Energy, 2014, 228, 285-299.	1.4	6
72	A variational multiscale method for particle-cloud tracking in turbomachinery flows. Computational Mechanics, 2014, 54, 1191-1202.	4.0	45

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73	Investigation on Anti-Stall Ring Aerodynamic Performance in an Axial Flow Fan. , 2014, , .		2
74	Large-Eddy Simulation of a Tunnel Ventilation Fan. Journal of Fluids Engineering, Transactions of the ASME, 2013, 135, .	1.5	12
75	Aerodynamic Simulation of a High-Pressure Centrifugal Fan for Process Industries. , 2013, , .		2
76	A Critical Review of Passive Noise Control Techniques in Industrial Fans. , 2013, , .		0
77	Leading Edge Bumps in Ventilation Fans. , 2013, , .		6
78	On the Role of Leading-Edge Bumps in the Control of Stall Onset in Axial Fan Blades. Journal of Fluids Engineering, Transactions of the ASME, 2013, 135, .	1.5	63
79	Numerical Simulation of Coal Fly-Ash Erosion in an Induced Draft Fan. Journal of Fluids Engineering, Transactions of the ASME, 2013, 135, .	1.5	21
80	A Co-Powered Biomass and Concentrated Solar Power Rankine Cycle Concept for Small Size Combined Heat and Power Generation. Energies, 2013, 6, 1478-1496.	3.1	9
81	Demonstration of a stall detection system for induced draft fans. Proceedings of the Institution of Mechanical Engineers, Part A: Journal of Power and Energy, 2013, 227, 272-284.	1.4	12
82	A Critical Review of Stall Control Techniques in Industrial Fans. ISRN Mechanical Engineering, 2013, 2013, 1-18.	0.9	21
83	Experiments on the Use of Signal Visualization Technique for In-Service Stall Detection in Industrial Fans. Advances in Acoustics and Vibration, 2013, 2013, 1-10.	0.5	3
84	A Critical Review of Computational Methods and Their Application in Industrial Fan Design. ISRN Mechanical Engineering, 2013, 2013, 1-20.	0.9	13
85	Large-Eddy Simulation of the Aerodynamic and Aeroacoustic Performance of a Ventilation Fan. Advances in Acoustics and Vibration, 2013, 2013, 1-10.	0.5	0
86	Fan Conceptual Design as Applied to the Marmaray Tunnel Ventilation System. , 2013, , .		0
87	End-plate for noise-by-flow control in axial fans. Periodica Polytechnica, Mechanical Engineering, 2013, 57, 3.	1.4	7
88	Experimental study on the self-noise of a turbulent round jet investing a cambered aerofoil. Periodica Polytechnica, Mechanical Engineering, 2013, 57, 45.	1.4	1
89	Predicting Blade Leading Edge Erosion in an Axial Induced Draft Fan. Journal of Engineering for Gas Turbines and Power, 2012, 134, .	1.1	28
90	Stall Inception, Evolution and Control in a Low Speed Axial Fan With Variable Pitch in Motion. Journal of Engineering for Gas Turbines and Power, 2012, 134, .	1.1	10

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91	Stall Control and Recovery in a Low-Speed Axial Fan Through the Use of Variable Pitch in Motion Blades. , 2012, , .		0
92	Large-Eddy Simulation of the Aerodynamic and Aero-Acoustic Performance of an Industrial Fan Designed for Tunnel Ventilation. , 2012, , .		1
93	Numerical Simulation of Coal Fly-Ash Erosion in an Induced Draft Fan. , 2012, , .		1
94	Numerical Modelling of Erosion in Highly-Loaded Axial Flow Fans. , 2012, , .		0
95	Experimental and computational investigation of a new solar integrated collector storage system. Applied Energy, 2012, 97, 982-989.	10.1	22
96	Computational analysis of noise reduction devices in axial fans with stabilized finite element formulations. Computational Mechanics, 2012, 50, 695-705.	4.0	45
97	Synergistic Noise-By-Flow Control Design of Blade-Tip in Axial Fans: Experimental Investigation. , 2012, , .		0
98	An Acoustic-Based Stall-Warning System for Application in Induced-Draft Boiler Fans. , 2012, , .		0
99	Stall Inception, Evolution and Control in a Low Speed Axial Fan With Variable Pitch in Motion. , 2011, , .		2
100	Predicting Blade Leading Edge Erosion in an Axial Induced Draft Fan. , 2011, , .		0
101	The Impact of an Anti-Stall Stabilisation Ring on Industrial Fan Performance: Implications for Fan Selection. , 2011, , .		3
102	Stall Warning in a Low-Speed Axial Fan by Visualization of Sound Signals. Journal of Engineering for Gas Turbines and Power, 2011, 133, .	1.1	21
103	Far-Field Radiation of Tip Aerodynamic Sound Sources in Axial Fans Fitted With Passive Noise Control Features. Journal of Vibration, Acoustics, Stress, and Reliability in Design, 2011, 133, 051001.	2.0	5
104	Detection of Stall Regions in a Low-Speed Axial Fan: Part II – Stall Warning by Visualisation of Sound Signals. , 2010, , .		0
105	Detection of Stall Regions in a Low-Speed Axial Fan: Part I – Azimuthal Acoustic Measurements. , 2010, , .		5
106	A DRD finite element formulation for computing turbulent reacting flows in gas turbine combustors. Computational Mechanics, 2010, 46, 159-167.	4.0	61
107	Shaping of Tip End-Plate to Control Leakage Vortex Swirl in Axial Flow Fans. Journal of Turbomachinery, 2010, 132, .	1.7	18
108	Experimental Aeroacoustic Studies on Improved Tip Configurations for Passive Control of Noise Signatures in Low-Speed Axial Fans. Journal of Vibration and Acoustics, Transactions of the ASME, 2009, 131, .	1.6	4

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109	Aerodynamic Performance of Blade Tip End-Plates Designed for Low-Noise Operation in Axial Flow Fans. <i>Journal of Fluids Engineering, Transactions of the ASME</i> , 2009, 131, .	1.5	18
110	Experimental development of a measurement technique to resolve the radial distribution of fan aero-acoustic emissions. <i>Noise Control Engineering Journal</i> , 2009, 57, 360.	0.3	9
111	Assessment of H ₂ - and H ₂ O-based renewable energy-buffering systems in minor islands. <i>Renewable Energy</i> , 2009, 34, 279-288.	8.9	30
112	Far-Field Radiation of Aerodynamic Sound Sources in Axial Fans Fitted With Passive Noise Control Features. , 2009, , .		0
113	Experimental Aeroacoustic Studies on Improved Tip Geometries for Passive Noise Signature Control in Low-Speed Axial Fan. , 2008, , .		3
114	Near Field Aeroacoustic Experimental Investigation in Low Speed Axial Fans. , 2008, , .		0
115	Shaping of Tip End-Plate to Control Leakage Vortex Swirl in Axial Flow Fans. , 2008, , .		2
116	Aerodynamic Workings of Blade Tip End-Plates Designed for Low-Noise Operation in Axial Flow Fans. , 2007, , 159.		6
117	Computation of inviscid compressible flows with the V-SGS stabilization and γ^2 shock-capturing. <i>International Journal for Numerical Methods in Fluids</i> , 2007, 54, 695-706.	1.6	56
118	Finite element computation of turbulent flows with the discontinuity-capturing directional dissipation (DCDD). <i>Computers and Fluids</i> , 2007, 36, 121-126.	2.5	90
119	Improved Discontinuity-capturing Finite Element Techniques for Reaction Effects in Turbulence Computation. <i>Computational Mechanics</i> , 2006, 38, 356-364.	4.0	74
120	Investigation on Improved Blade Tip Concept for Axial Flow Fan. , 2006, , 313.		6
121	Assessment of Renewable Energy Solutions in an Italian Small Island Energy System Using a Transient Simulation Model. <i>Journal of Solar Energy Engineering, Transactions of the ASME</i> , 2006, 128, 237-244.	1.8	5
122	Quadratic Petrov-Galerkin finite elements for advective-reactive features in turbomachinery CFD. <i>International Journal of Numerical Methods for Heat and Fluid Flow</i> , 2005, 15, 894-925.	2.8	1
123	Flow analyses in a high-pressure axial ventilation fan with a non-linear eddy-viscosity closure. <i>International Journal of Heat and Fluid Flow</i> , 2005, 26, 349-361.	2.4	29
124	A variational multiscale higher-order finite element formulation for turbomachinery flow computations. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2005, 194, 4797-4823.	6.6	40
125	The Aerodynamic Interaction of Tip Leakage and Mainstream Flows in a Fully-Ducted Axial Fan. , 2004, , 405.		0
126	A finite element overlapping scheme for turbomachinery flows on parallel platforms. <i>Computers and Fluids</i> , 2003, 32, 1017-1047.	2.5	29

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127	Anisotropic Turbulence Modelling of Near Wall Effects Pertinent to Turbomachinery Flows. , 2002, , 963.		4
128	MORPHING OF REVERSIBLE AXIAL FAN BLADE: A FSI-FEM STUDY. Journal of Turbomachinery, 0, , 1-9.	1.7	1