

# Mirko Morini

## List of Publications by Year in descending order

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107  
papers

1,789  
citations

279778  
23  
h-index

330122  
37  
g-index

109  
all docs

109  
docs citations

109  
times ranked

1355  
citing authors

#	ARTICLE	IF	CITATIONS
1	A control-oriented scalable model for demand side management in district heating aggregated communities. Applied Thermal Engineering, 2022, 201, 117681.	6.0	9
2	Analysis of the Status of Research and Innovation Actions on Electrofuels under Horizon 2020. Energies, 2022, 15, 618.	3.1	8
3	Predictive control of a combined heat and power plant for grid flexibility under demand uncertainty. Applied Energy, 2022, 314, 118934.	10.1	12
4	Smart management of integrated energy systems through co-optimization with long and short horizons. Energy, 2022, 250, 123748.	8.8	14
5	Difficulties in the Management of Placenta Accreta Spectrum in Hospitals with Limited Resources. Revista Brasileira De Ginecologia E Obstetricia, 2022, 44, 467-474.	0.8	9
6	Enabling smart control by optimally managing the State of Charge of district heating networks. Applied Energy, 2021, 283, 116286.	10.1	12
7	Integrated optimization of Multi-Energy System operation and thermal comfort management for buildings. Computer Aided Chemical Engineering, 2021, 50, 1587-1592.	0.5	1
8	Robust control of a cogeneration plant supplying a district heating system to enable grid flexibility. E3S Web of Conferences, 2021, 238, 05001.	0.5	1
9	Optimal design and energy management of a renewable energy plant with seasonal energy storage. E3S Web of Conferences, 2021, 238, 02002.	0.5	1
10	Sizing and Operation of a Hybrid Energy Plant Composed of Industrial Gas Turbines, Renewable Energy Systems, and Energy Storage Technologies. Journal of Engineering for Gas Turbines and Power, 2021, 143, .	1.1	5
11	Optimization of energy and economic scheduling of a hybrid energy plant by using a dynamic programming approach. Applied Thermal Engineering, 2021, 187, 116577.	6.0	10
12	Co-optimization of multi-energy system operation, district heating/cooling network and thermal comfort management for buildings. Applied Energy, 2021, 302, 117480.	10.1	41
13	Inventory scaling, life cycle impact assessment and design optimization of distributed energy plants. Applied Energy, 2021, 304, 117701.	10.1	4
14	Simultaneous optimization of the design and operation of multi-generation energy systems based on life cycle energy and economic assessment. Energy Conversion and Management, 2021, 249, 114883.	9.2	25
15	Development, analysis and application of a predictive controller to a small-scale district heating system. Applied Thermal Engineering, 2020, 165, 114558.	6.0	29
16	Setup and testing of smart controllers for small-scale district heating networks: An integrated framework. Energy, 2020, 205, 118054.	8.8	28
17	The Status of Research and Innovation on Heating and Cooling Networks as Smart Energy Systems within Horizon 2020. Energies, 2020, 13, 2835.	3.1	12
18	Deposition of syngas tar in fuel supplying duct of a biomass gasifier: A numerical study. Fuel, 2020, 273, 117579.	6.4	12

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19	A New Index to Evaluate the Potential Damage of a Surge Event: The Surge Severity Coefficient. Journal of Engineering for Gas Turbines and Power, 2019, 141, .	1.1	3
20	Optimization of a hybrid energy plant by integrating the cumulative energy demand. Applied Energy, 2019, 253, 113484.	10.1	32
21	Development and application of a Predictive Controller to a mini district heating network fed by a biomass boiler. Energy Procedia, 2019, 159, 48-53.	1.8	11
22	Development of a Model-based Predictive Controller for a heat distribution network. Energy Procedia, 2019, 158, 2896-2901.	1.8	11
23	Optimal design of a hybrid energy plant by accounting for the cumulative energy demand. Energy Procedia, 2019, 158, 2834-2840.	1.8	4
24	An Advanced Surge Dynamic Model for Simulating Emergency Shutdown Events and Comparing Different Antisurge Strategies. Journal of Engineering for Gas Turbines and Power, 2019, 141, .	1.1	3
25	Dynamic programming based methodology for the optimization of the sizing and operation of hybrid energy plants. Applied Thermal Engineering, 2019, 160, 113967.	6.0	23
26	k-MILP: A novel clustering approach to select typical and extreme days for multi-energy systems design optimization. Energy, 2019, 181, 1051-1063.	8.8	72
27	Development and Analysis of a Multi-Node Dynamic Model for the Simulation of Stratified Thermal Energy Storage. Energies, 2019, 12, 4275.	3.1	13
28	A model for the simulation of the gas cleaning system in a syngas-fed CHP plant. AIP Conference Proceedings, 2019, , .	0.4	1
29	Gas Turbine Fouling: A Comparison Among 100 Heavy-Duty Frames. Journal of Engineering for Gas Turbines and Power, 2019, 141, .	1.1	2
30	Stall and Surge in Wet Compression: Test Rig Development and Experimental Results. Journal of Engineering for Gas Turbines and Power, 2019, 141, .	1.1	6
31	Quantitative Computational Fluid Dynamics Analyses of Particle Deposition in a Heavy-Duty Subsonic Axial Compressor. Journal of Engineering for Gas Turbines and Power, 2018, 140, .	1.1	4
32	Experimental Investigation of Vibrational and Acoustic Phenomena for Detecting the Stall and Surge of a Multistage Compressor. Journal of Engineering for Gas Turbines and Power, 2018, 140, .	1.1	17
33	Measurement and Prediction of Centrifugal Compressor Axial Forces During Surge”Part I: Surge Force Measurements. Journal of Engineering for Gas Turbines and Power, 2018, 140, .	1.1	11
34	Measurement and Prediction of Centrifugal Compressor Axial Forces During Surge”Part II: Dynamic Surge Model. Journal of Engineering for Gas Turbines and Power, 2018, 140, .	1.1	16
35	A non-stoichiometric equilibrium model for the simulation of the biomass gasification process. Applied Energy, 2018, 227, 119-127.	10.1	71
36	An Advanced Surge Dynamic Model for Simulating ESD Events and Comparing Different Anti-Surge Strategies. , 2018, , .		1

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37	A model for filter diagnostics in a syngas-fed CHP plant. Energy Procedia, 2018, 148, 400-407.	1.8	5
38	A Model-in-the-Loop application of a Predictive Controller to a District Heating system. Energy Procedia, 2018, 148, 352-359.	1.8	13
39	Gas Turbine Fouling: A Comparison Among One Hundred Heavy-Duty Frames. , 2018, , .		0
40	A New Index to Evaluate the Potential Damage of a Surge Event: The Surge Severity Coefficient. , 2018, , .		3
41	Stall and Surge in Wet Compression: Test Rig Development and Experimental Results. , 2018, , .		5
42	Development of Reliable NARX Models of Gas Turbine Cold, Warm, and Hot Start-Up. Journal of Engineering for Gas Turbines and Power, 2018, 140, .	1.1	6
43	TOWARDS THE OPTIMAL DESIGN AND OPERATION OF MULTI-ENERGY SYSTEMS: THE "EFFICITY" PROJECT. Environmental Engineering and Management Journal, 2018, 17, 2409-2419.	0.6	23
44	A Compressor Fouling Review Based on an Historical Survey of ASME Turbo Expo Papers. Journal of Turbomachinery, 2017, 139, .	1.7	40
45	Estimation of the Particle Deposition on a Subsonic Axial Compressor Blade. Journal of Engineering for Gas Turbines and Power, 2017, 139, .	1.1	9
46	An Innovative Method for the Evaluation of Particle Deposition Accounting for Rotor/Stator Interaction. Journal of Engineering for Gas Turbines and Power, 2017, 139, .	1.1	6
47	Experimental Investigation of Stall and Surge in a Multistage Compressor. Journal of Engineering for Gas Turbines and Power, 2017, 139, .	1.1	22
48	A Model for the Prediction of Pollutant Species Production in the Biomass Gasification Process. Energy Procedia, 2017, 105, 700-705.	1.8	9
49	Real Gas Expansion with Dynamic Mesh in Common Positive Displacement Machines. Energy Procedia, 2017, 129, 248-255.	1.8	3
50	Measurement and Prediction of Centrifugal Compressor Axial Forces During Surge: Part 2 – Dynamic Surge Model. , 2017, , .		7
51	Experimental Investigation of Vibrational and Acoustic Phenomena for Detecting the Stall and Surge of a Multistage Compressor. , 2017, , .		8
52	Quantitative CFD Analyses of Particle Deposition in a Heavy-Duty Subsonic Axial Compressor. , 2017, , .		2
53	The Effects of Third Substances at the Particle/Surface Interface in Compressor Fouling. , 2017, , .		3
54	Development of Reliable NARX Models of Gas Turbine Cold, Warm and Hot Start-Up. , 2017, , .		3

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55	Measurement and Prediction of Centrifugal Compressor Axial Forces During Surge: Part 1 – Surge Force Measurements. , 2017, , .		5
56	A Library for the Simulation of Smart Energy Systems: The Case of the Campus of the University of Parma. Energy Procedia, 2017, 105, 1776-1781.	1.8	24
57	Experimental Investigation and Modeling of Surge in a Multistage Compressor. Energy Procedia, 2017, 105, 1751-1756.	1.8	15
58	An Innovative Method for the Evaluation of Particle Deposition Accounting for the Rotor/Stator Interaction. , 2016, , .		3
59	Estimation of the Particle Deposition on a Transonic Axial Compressor Blade. Journal of Engineering for Gas Turbines and Power, 2016, 138, .	1.1	10
60	Experimental Investigation of Stall and Surge in a Multistage Compressor. , 2016, , .		17
61	Estimation of the Particle Deposition on a Subsonic Axial Compressor Blade. , 2016, , .		1
62	Quantitative Computational Fluid Dynamics Analyses of Particle Deposition on a Subsonic Axial Compressor Blade. Journal of Engineering for Gas Turbines and Power, 2016, 138, .	1.1	13
63	NARX models for simulation of the start-up operation of a single-shaft gas turbine. Applied Thermal Engineering, 2016, 93, 368-376.	6.0	94
64	An Interdisciplinary Approach to Study the Fouling Phenomenon. Energy Procedia, 2015, 82, 280-285.	1.8	3
65	Concurrent Optimization of Size and Switch-on Priority of a Multi-source Energy System for a Commercial Building Application. Energy Procedia, 2015, 81, 45-54.	1.8	7
66	Optimization of Load Allocation Strategy of a Multi-source Energy System by Means of Dynamic Programming. Energy Procedia, 2015, 81, 30-39.	1.8	7
67	Quantitative CFD Analyses of Particle Deposition on a Subsonic Axial Compressor Blade. , 2015, , .		3
68	Estimation of the Particle Deposition on a Transonic Axial Compressor Blade. , 2015, , .		2
69	Quantitative Computational Fluid Dynamic Analyses of Particle Deposition on a Transonic Axial Compressor Blade – Part II: Impact Kinematics and Particle Sticking Analysis. Journal of Turbomachinery, 2015, 137, .	1.7	18
70	Quantitative Computational Fluid Dynamics Analyses of Particle Deposition on a Transonic Axial Compressor Blade – Part I: Particle Zones Impact. Journal of Turbomachinery, 2015, 137, .	1.7	25
71	Analysis of a scroll machine for micro ORC applications by means of a RE/CFD methodology. Applied Thermal Engineering, 2015, 80, 132-140.	6.0	45
72	Feasibility analysis of gas turbine inlet air cooling by means of liquid nitrogen evaporation for IGCC power augmentation. Applied Thermal Engineering, 2015, 80, 168-177.	6.0	16

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73	Modeling and Simulation of the Start-Up Operation of a Heavy-Duty Gas Turbine by Using NARX Models. , 2014, , .		7
74	Quantitative CFD Analyses of Particle Deposition on a Transonic Axial Compressor Blade: Part II “Impact Kinematics and Particle Sticking Analysis. , 2014, , .		4
75	Quantitative CFD Analyses of Particle Deposition on a Transonic Axial Compressor Blade: Part I “Particle Zones Impact. , 2014, , .		5
76	Methodology for estimating biomass energy potential and its application to Colombia. Applied Energy, 2014, 136, 781-796.	10.1	61
77	Performance Evaluation of Nonuniformly Fouled Axial Compressor Stages by Means of Computational Fluid Dynamics Analyses. Journal of Turbomachinery, 2014, 136, .	1.7	37
78	Optimal sizing of a multi-source energy plant for power heat and cooling generation. Applied Thermal Engineering, 2014, 71, 736-750.	6.0	50
79	Experimental Analysis of a Micro Gas Turbine Fuelled with Vegetable Oils from Energy Crops. Energy Procedia, 2014, 45, 91-100.	1.8	26
80	Analysis of Inlet Air Cooling for IGCC Power Augmentation. Energy Procedia, 2014, 45, 1265-1274.	1.8	13
81	Numerical Analysis of the Effects of Surface Roughness Localization on the Performance of an Axial Compressor Stage. Energy Procedia, 2014, 45, 1057-1066.	1.8	16
82	Methodology for biomass energy potential estimation: Projections of future potential in Colombia. Renewable Energy, 2014, 69, 488-505.	8.9	26
83	Cross Validation of Multistage Compressor Map Generation by Means of Computational Fluid Dynamics and Stage-Stacking Techniques. , 2014, , .		1
84	Optimal allocation of thermal, electric and cooling loads among generation technologies in household applications. Applied Energy, 2013, 112, 205-214.	10.1	18
85	Performance Evaluation of Non-Uniformly Fouled Axial Compressor Stages by Means of Computational Fluid Dynamic Analyses. , 2013, , .		2
86	An Innovative Inlet Air Cooling System for IGCC Power Augmentation: Part III “Computational Fluid Dynamic Analysis of Syngas Combustion in Nitrogen-Enriched Air. , 2013, , .		2
87	Performance Evaluation of the Integration Between a Thermo-Photo-Voltaic Generator and an Organic Rankine Cycle. Journal of Engineering for Gas Turbines and Power, 2012, 134, .	1.1	15
88	Compressor Fouling Modeling: Relationship Between Computational Roughness and Gas Turbine Operation Time. Journal of Engineering for Gas Turbines and Power, 2012, 134, .	1.1	17
89	Performance Evaluation of the Integration Between a Thermo-Photo-Voltaic Generator and an Organic Rankine Cycle. , 2012, , .		3
90	Analysis of Some Sources of Numerical Uncertainty Applied to a Transonic Compressor Stage. , 2012, , .		0

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91	Integration between a thermophotovoltaic generator and an Organic Rankine Cycle. Applied Energy, 2012, 97, 695-703.	10.1	47
92	Influence of the thermal energy storage on the profitability of micro-CHP systems for residential building applications. Applied Energy, 2012, 97, 714-722.	10.1	173
93	Development of an equilibrium model for the simulation of thermochemical gasification and application to agricultural residues. Renewable Energy, 2012, 46, 248-254.	8.9	72
94	An Innovative Inlet Air Cooling System for IGCC Power Augmentation: Part I – Analysis of IGCC Plant Components. , 2012, , .		3
95	An Innovative Inlet Air Cooling System for IGCC Power Augmentation: Part II – Thermodynamic Analysis. , 2012, , .		1
96	Compressor Fouling Modeling: Relationship Between Computational Roughness and Gas Turbine Operation Time. , 2011, , .		5
97	Erratum to “Numerical analyses of high Reynolds number flow of high pressure fuel gas through rough pipes” [Int J Hydrogen Energy 35 (2010) 7568–7579]. International Journal of Hydrogen Energy, 2011, 36, 15455.	7.1	0
98	Development of a Model for the Simulation of Organic Rankine Cycles Based on Group Contribution Techniques. , 2011, , .		6
99	Numerical Analysis of the Effects of Nonuniform Surface Roughness on Compressor Stage Performance. Journal of Engineering for Gas Turbines and Power, 2011, 133, .	1.1	49
100	Evaluation of the Performance of a Sirocco Fan Driven by a Diesel Engine in Mist Sprayer Applications. , 2011, , .		0
101	Numerical analyses of high Reynolds number flow of high pressure fuel gas through rough pipes. International Journal of Hydrogen Energy, 2010, 35, 7568-7579.	7.1	22
102	Computational Fluid Dynamics Simulation of Fouling on Axial Compressor Stages. Journal of Engineering for Gas Turbines and Power, 2010, 132, .	1.1	48
103	Numerical Analysis of the Effects of Non-Uniform Surface Roughness on Compressor Stage Performance. , 2010, , .		8
104	Numerical Analyses of High Reynolds Number Flow of High Pressure Fuel Gas Through Rough Pipes. , 2009, , .		1
105	Analysis of biogas compression system dynamics. Applied Energy, 2009, 86, 2466-2475.	10.1	28
106	CFD Simulation of Fouling on Axial Compressor Stages. , 2009, , .		6
107	A Model for the Simulation of Large-Size Single-Shaft Gas Turbine Start-Up Based on Operating Data Fitting. , 2007, , 1849.		8