

# Daniele Testi

## List of Publications by Year in descending order

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75  
papers

1,206  
citations

430874

18  
h-index

434195

31  
g-index

75  
all docs

75  
docs citations

75  
times ranked

1043  
citing authors

#	ARTICLE	IF	CITATIONS
1	Energy and geotechnical behaviour of energy piles for different design solutions. Applied Thermal Engineering, 2015, 86, 199-213.	6.0	137
2	Optimal integrated sizing and operation of a CHP system with Monte Carlo risk analysis for long-term uncertainty in energy demands. Energy Conversion and Management, 2018, 157, 307-316.	9.2	103
3	Model predictive control of a hybrid heat pump system and impact of the prediction horizon on cost-saving potential and optimal storage capacity. Applied Thermal Engineering, 2019, 148, 524-535.	6.0	58
4	Thermodynamic and economic analysis of the integration of high-temperature heat pumps in trigeneration systems. Applied Energy, 2019, 238, 516-533.	10.1	49
5	Mapping the energy flexibility potential of single buildings equipped with optimally-controlled heat pump, gas boilers and thermal storage. Sustainable Cities and Society, 2019, 50, 101689.	10.4	47
6	Multi-objective optimization of HVAC control in museum environment for artwork preservation, visitors' thermal comfort and energy efficiency. Building and Environment, 2020, 180, 107018.	6.9	43
7	Multi-objective optimization of microclimate in museums for concurrent reduction of energy needs, visitors' discomfort and artwork preservation risks. Applied Energy, 2018, 224, 147-159.	10.1	42
8	Revised heat transfer modeling of double-U vertical ground-coupled heat exchangers. Applied Thermal Engineering, 2016, 106, 1257-1267.	6.0	40
9	EHD enhanced heat transfer in a vertical annulus. International Communications in Heat and Mass Transfer, 2005, 32, 748-757.	5.6	37
10	A Proposal for New Microclimate Indexes for the Evaluation of Indoor Air Quality in Museums. Buildings, 2016, 6, 41.	3.1	36
11	A Comprehensive Methodology for the Integrated Optimal Sizing and Operation of Cogeneration Systems with Thermal Energy Storage. Energies, 2019, 12, 875.	3.1	32
12	Heat Transfer Enhancement by Electric Fields in Several Heat Exchange Regimes. Annals of the New York Academy of Sciences, 2006, 1077, 527-569.	3.8	28
13	Integrated maps of risk assessment and minimization of multiple risks for artworks in museum environments based on microclimate control. Building and Environment, 2017, 123, 585-600.	6.9	23
14	Stochastic optimal integration of decentralized heat pumps in a smart thermal and electric micro-grid. Energy Conversion and Management, 2020, 210, 112734.	9.2	23
15	Heat transfer enhancement on the upper surface of a horizontal heated plate in a pool by ion injection from a metallic point. Journal of Electrostatics, 2006, 64, 574-580.	1.9	20
16	Cost-optimal Sizing of Solar Thermal and Photovoltaic Systems for the Heating and Cooling Needs of a Nearly Zero-energy Building: Design Methodology and Model Description. Energy Procedia, 2016, 91, 517-527.	1.8	19
17	Cost-Benefit Analysis of Hybrid Photovoltaic/Thermal Collectors in a Nearly Zero-Energy Building. Energies, 2019, 12, 1582.	3.1	19
18	Cost-optimal Sizing of Solar Thermal and Photovoltaic Systems for the Heating and Cooling Needs of a Nearly Zero-Energy Building: The Case Study of a Farm Hostel in Italy. Energy Procedia, 2016, 91, 528-536.	1.8	18

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19	An operational optimization method for a complex polygeneration plant based on real-time measurements. <i>Energy Conversion and Management</i> , 2018, 170, 50-61.	9.2	18
20	HVAC Energy Saving Strategies for Public Buildings Based on Heat Pumps and Demand Controlled Ventilation. <i>Energies</i> , 2021, 14, 5541.	3.1	18
21	Heat transfer enhancement in a vertical annulus by electrophoretic forces acting on a dielectric liquid. <i>International Journal of Thermal Sciences</i> , 2005, 44, 1072-1077.	4.9	17
22	Heat transfer enhancement by an impinging ionic jet in a viscous transformer coolant. <i>International Communications in Heat and Mass Transfer</i> , 2018, 91, 256-261.	5.6	17
23	Integration of reversible absorption heat pumps in cogeneration systems: Exergy and economic assessment. <i>Energy Conversion and Management</i> , 2019, 200, 112062.	9.2	17
24	Multi-Objective Optimization of Off-Grid Hybrid Renewable Energy Systems in Buildings with Prior Design-Variable Screening. <i>Energies</i> , 2019, 12, 3026.	3.1	17
25	Heat Transfer Augmentation by Ion Injection in an Annular Duct. <i>Journal of Heat Transfer</i> , 2006, 128, 283-289.	2.1	15
26	Heat Transfer Correlations for Turbulent Mixed Convection in the Entrance Region of a Uniformly Heated Horizontal Tube. <i>Journal of Heat Transfer</i> , 2006, 128, 1103-1107.	2.1	15
27	Calibration of a sheet of thermosensitive liquid crystals viewed non-orthogonally. <i>Measurement: Journal of the International Measurement Confederation</i> , 2007, 40, 898-903.	5.0	15
28	Optimized Energy and Air Quality Management of Shared Smart Buildings in the COVID-19 Scenario. <i>Energies</i> , 2021, 14, 2124.	3.1	15
29	Criticalities in the NZEB retrofit of scholastic buildings: analysis of a secondary school in Centre Italy. <i>Energy Procedia</i> , 2017, 140, 252-264.	1.8	14
30	Building Energy Simulation by an In-house Full Transient Model for Radiant Systems Coupled to a Modulating Heat Pump. <i>Energy Procedia</i> , 2015, 78, 1135-1140.	1.8	12
31	Enhanced nucleate boiling and CHF on a small horizontal plate under ionic jet impingement. <i>International Communications in Heat and Mass Transfer</i> , 2016, 79, 67-73.	5.6	12
32	Ion Injection as an Effective Technique of Heat Transfer Enhancement in Space. <i>Journal of Thermophysics and Heat Transfer</i> , 2007, 21, 431-436.	1.6	11
33	Synthesis and Optimal Operation of Smart Microgrids Serving a Cluster of Buildings on a Campus with Centralized and Distributed Hybrid Renewable Energy Units. <i>Energies</i> , 2019, 12, 745.	3.1	11
34	Optimal Working Fluid and Electrode Configuration for EHD-Enhanced Single-Phase Heat Transfer. <i>Journal of Enhanced Heat Transfer</i> , 2007, 14, 161-173.	1.1	11
35	Analysis of thermodynamic losses in ground source heat pumps and their influence on overall system performance. <i>Journal of Physics: Conference Series</i> , 2014, 547, 012006.	0.4	10
36	Transient forced convection from an infinite cylindrical heat source in a saturated Darcian porous medium. <i>International Journal of Heat and Mass Transfer</i> , 2018, 117, 154-166.	4.8	10

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37	A new hydrodynamic approach for jet impingement boiling CHF. <i>International Communications in Heat and Mass Transfer</i> , 2019, 104, 83-88.	5.6	10
38	Experimental Analysis of an Air Heat Pump for Heating Service Using a "Hardware-In-The-Loop" System. <i>Energies</i> , 2020, 13, 4498.	3.1	10
39	Multi-Objective Optimization of HVAC Operation for Balancing Energy Use and Occupant Comfort in Educational Buildings. <i>Energies</i> , 2021, 14, 2847.	3.1	10
40	Electrohydrodynamic Convective Heat Transfer in a Square Duct. <i>Annals of the New York Academy of Sciences</i> , 2009, 1161, 452-462.	3.8	9
41	A multi-objective methodology for evaluating the investment in building-integrated hybrid renewable energy systems. <i>Journal of Cleaner Production</i> , 2021, 329, 129780.	9.3	9
42	On sustainable and efficient design of ground-source heat pump systems. <i>Journal of Physics: Conference Series</i> , 2015, 655, 012003.	0.4	8
43	Energy Intensity Reduction in Large-Scale Non-Residential Buildings by Dynamic Control of HVAC with Heat Pumps. <i>Energies</i> , 2021, 14, 3878.	3.1	8
44	A method for optimal operation of HVAC with heat pumps for reducing the energy demand of large-scale non residential buildings. <i>Journal of Building Engineering</i> , 2021, 43, 103175.	3.4	8
45	Developing upward flow in a uniformly heated circular duct under transitional mixed convection. <i>International Journal of Thermal Sciences</i> , 2006, 45, 932-937.	4.9	7
46	Quantitative measurements in thermo-fluid dynamics based on colour processing. <i>Optics and Laser Technology</i> , 2011, 43, 381-393.	4.6	7
47	A novel correlation for azimuthal and longitudinal distributions of heat transfer coefficients in developing horizontal pipe flow under transitional mixed convection. <i>International Journal of Heat and Mass Transfer</i> , 2013, 60, 221-229.	4.8	7
48	Parabolic flight results of electrohydrodynamic heat transfer enhancement in a square duct. <i>International Journal of Thermal Sciences</i> , 2017, 117, 1-13.	4.9	7
49	Economic assessment of flexibility offered by an optimally controlled hybrid heat pump generator: a case study for residential building. <i>Energy Procedia</i> , 2018, 148, 1222-1229.	1.8	7
50	A procedure for identifying chemical and biological risks for books in historic libraries based on microclimate analysis. <i>Journal of Cultural Heritage</i> , 2019, 37, 155-165.	3.3	7
51	Augmentation of Heat Transfer on the Downward Surface of a Heated Plate by Ion Injection. <i>Annals of the New York Academy of Sciences</i> , 2006, 1077, 602-612.	3.8	6
52	Evaluation of two RANS turbulence models in predicting developing mixed convection within a heated horizontal pipe. <i>International Journal of Computational Fluid Dynamics</i> , 2007, 21, 267-276.	1.2	6
53	Induction of waves on a horizontal water film by an impinging corona wind. <i>IEEE Transactions on Dielectrics and Electrical Insulation</i> , 2009, 16, 377-385.	2.9	6
54	Thermo-Fluid Dynamics of an Array of Impinging Ionic Jets in a Crossflow. <i>Journal of Heat Transfer</i> , 2013, 135, .	2.1	5

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55	Validation of Seas, a Quasi-Steady-State Tool for Building Energy Audits. Energy Procedia, 2015, 78, 3192-3197.	1.8	5
56	A visitorsâ€™ presence model for a museum environment: Description and validation. Building Simulation, 2017, 10, 977-987.	5.6	5
57	FORCE FIELDS EFFECTS ON POOL BOILING HEAT TRANSFER. Journal of Enhanced Heat Transfer, 2014, 21, 141-182.	1.1	5
58	Environmental monitoring of a Sardinian earthen dwelling during the summer season. Journal of Physics: Conference Series, 2014, 547, 012009.	0.4	4
59	Integration of Reversible Heat Pumps in Trigeneration Systems for Low-Temperature Renewable District Heating and Cooling Microgrids. Applied Sciences (Switzerland), 2019, 9, 3194.	2.5	3
60	Data of temperature and relative humidity in a historic library in Portugal. Data in Brief, 2019, 24, 103788.	1.0	3
61	A design methodology for thermal storages in heat pump systems to reduce partial-load losses. Applied Thermal Engineering, 2022, 215, 118971.	6.0	3
62	Development of a High-Performance Heat Sink for the International Space Station: Hydraulic and Thermostructural Analysis. , 2006, , 315.		2
63	Energy retrofit of an office building by substitution of the generation system: performance evaluation via dynamic simulation versus current technical standards. Journal of Physics: Conference Series, 2014, 547, 012018.	0.4	2
64	Optimal Operation of Low-Capacity Heat Pump Systems for Residential Buildings through Thermal Energy Storage. Sustainability, 2021, 13, 7200.	3.2	2
65	Clustering of educational building load data for defining healthy and energy-efficient management solutions of integrated HVAC systems. E3S Web of Conferences, 2020, 197, 03001.	0.5	2
66	Optimal synthesis, design and operation of smart microgrids serving a cluster of buildings in a campus with centralized and decentralized hybrid renewable energy systems. AIP Conference Proceedings, 2019, , .	0.4	1
67	Thermal Characterization of Energy Pile Dynamics. Springer Series in Geomechanics and Geoengineering, 2019, , 123-131.	0.1	1
68	A Fast Analytical Method for the Dynamic Energy Simulation of Energy Piles With Short Time Resolution. Journal of Heat Transfer, 2021, 143, .	2.1	1
69	Heat Transfer Augmentation by Ion Injection in an Annular Duct. , 2004, , .		1
70	32nd UIT (Italian Union of Thermo-fluid-dynamics) Heat Transfer Conference. Journal of Physics: Conference Series, 2014, 547, 011001.	0.4	0
71	Control of natural circulation loops by electrohydrodynamic pumping. Journal of Physics: Conference Series, 2014, 501, 012006.	0.4	0
72	Mapping the Thickness of Falling Liquid Films under Ionic Wind by a Light Absorption Technique. , 2019, , .		0

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73	Heat Transfer Enhancement in a Dielectric Coolant by Electroconvection in Point-Plane Geometry. , 2019, , .		0
74	Optimal sizing of an integrated energy system for a nearly zero-energy residential building. Journal of Physics: Conference Series, 2021, 1868, 012025.	0.4	0
75	Thermo-Fluid Dynamics of an Array of Impinging Ionic Jets in a Crossflow. , 2010, , .		0