

# Ilinca Nastase

## List of Publications by Year in descending order

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80  
papers

929  
citations

516215

16  
h-index

525886

27  
g-index

83  
all docs

83  
docs citations

83  
times ranked

508  
citing authors

#	ARTICLE	IF	CITATIONS
1	Thermal comfort models for indoor spaces and vehiclesâ€”Current capabilities and future perspectives. <i>Renewable and Sustainable Energy Reviews</i> , 2015, 44, 304-318.	8.2	97
2	Vortex dynamics and mass entrainment in turbulent lobed jets with and without lobe deflection angles. <i>Experiments in Fluids</i> , 2010, 48, 693-714.	1.1	61
3	Passive mixing control for innovative air diffusion terminal devices for buildings. <i>Building and Environment</i> , 2010, 45, 2679-2688.	3.0	54
4	Lobed grilles for high mixing ventilation â€” An experimental analysis in a full scale model room. <i>Building and Environment</i> , 2011, 46, 547-555.	3.0	48
5	Primary and secondary vortical structures contribution in the entrainment of low Reynolds number jet flows. <i>Experiments in Fluids</i> , 2008, 44, 1027-1033.	1.1	42
6	Comparison of turbulence models in simulating jet flow from a cross-shaped orifice. <i>European Journal of Mechanics, B/Fluids</i> , 2014, 44, 100-120.	1.2	40
7	Wall shear rates and mass transfer in impinging jets: Comparison of circular convergent and cross-shaped orifice nozzles. <i>International Journal of Heat and Mass Transfer</i> , 2012, 55, 282-293.	2.5	37
8	A comparison of three turbulence models for the prediction of parallel lobed jets in perforated panel optimization. <i>Building and Environment</i> , 2011, 46, 2203-2219.	3.0	34
9	Thermodynamic investigation on an innovative unglazed transpired solar collector. <i>Solar Energy</i> , 2016, 131, 21-29.	2.9	33
10	Indoor Environmental Quality in Operating Rooms: An European Standards Review with Regard to Romanian Guidelines. <i>Energy Procedia</i> , 2016, 85, 375-382.	1.8	29
11	On the Possibility of CFD Modeling of the Indoor Environment in a Vehicle. <i>Energy Procedia</i> , 2017, 112, 656-663.	1.8	26
12	Flow dynamics and mass transfer in impinging circular jet at low Reynolds number. Comparison of convergent and orifice nozzles. <i>International Journal of Heat and Mass Transfer</i> , 2013, 67, 25-45.	2.5	25
13	Effect of phase change material wall on natural convection heat transfer inside an air filled enclosure. <i>Applied Thermal Engineering</i> , 2017, 126, 305-314.	3.0	22
14	CFD simulation of a cabin thermal environment with and without human body â€” thermal comfort evaluation. <i>E3S Web of Conferences</i> , 2018, 32, 01018.	0.2	20
15	Improved inhaled air quality at reduced ventilation rate by control of airflow interaction at the breathing zone with lobed jets. <i>HVAC and R Research</i> , 2014, 20, 238-250.	0.9	17
16	Flow and wall shear rate analysis for a cruciform jet impacting on a plate at short distance. <i>Progress in Computational Fluid Dynamics</i> , 2020, 20, 169.	0.1	17
17	Average permeability measurements for an individual dwelling in Romania. <i>Building and Environment</i> , 2011, 46, 1115-1124.	3.0	16
18	Image processing analysis of vortex dynamics of lobed jets from three-dimensional diffusers. <i>Fluid Dynamics Research</i> , 2011, 43, 065502.	0.6	16

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19	Thermal Evaluation of an Innovative Type of Unglazed Solar Collector for Air Preheating. Energy Procedia, 2016, 85, 149-155.	1.8	16
20	Accumulation and spatial distribution of CO <sub>2</sub> in the astronaut's crew quarters on the International Space Station. Building and Environment, 2020, 185, 107278.	3.0	16
21	Passive control of jet flows using lobed nozzle geometries. Mecanica Et Industries, 2007, 8, 101-109.	0.2	13
22	Optimization of Lobed Perforated Panel Diffuser: Numerical Study of Orifice Geometry. Modern Applied Science, 2012, 6, .	0.4	13
23	Thermal Comfort in a Romanian Passive House. Preliminary Results. Energy Procedia, 2016, 85, 575-583.	1.8	12
24	A Questioning of the Thermal Sensation Vote Index Based on Questionnaire Survey for Real Working Environments. Energy Procedia, 2016, 85, 366-374.	1.8	12
25	The influence of the Inlet angle of vehicle air diffuser on the thermal comfort of passengers. , 2017, , .		11
26	Experimental investigation of the mixing performance of a lobed jet flow. Journal of Engineering Physics and Thermophysics, 2008, 81, 106-111.	0.2	10
27	Passive control strategy for mixing ventilation in heating mode using lobed inserts. Energy and Buildings, 2016, 133, 512-528.	3.1	10
28	First adaptive thermal comfort equation for naturally ventilated buildings in Bucharest, Romania. International Journal of Ventilation, 2018, 17, 149-165.	0.2	10
29	Experimental study of thermal comfort in a vehicle cabin during the summer season. E3S Web of Conferences, 2019, 111, 01048.	0.2	10
30	Experimental and numerical study of the air distribution inside a car cabin. E3S Web of Conferences, 2019, 85, 02014.	0.2	9
31	Numerical Study for Open-channel Flow over Rows of Hemispheres. Energy Procedia, 2016, 85, 260-265.	1.8	8
32	Numerical model of a solar ventilated facade element: experimental validation, final parameters and results. E3S Web of Conferences, 2019, 85, 02013.	0.2	8
33	Personalized ventilation solutions for reducing CO <sub>2</sub> levels in the crew quarters of the International Space Station. Building and Environment, 2021, 204, 108150.	3.0	8
34	Preliminary research on virtual thermal comfort of automobile occupants. E3S Web of Conferences, 2018, 32, 01022.	0.2	7
35	Assessment of virtual thermal manikins for thermal comfort numerical studies. Verification and validation. Science and Technology for the Built Environment, 0, , 1-21.	0.8	7
36	VORTICAL STRUCTURES ANALYSIS IN JET FLOWS USING A CLASSICAL 2D-PIV SYSTEM AND TIME RESOLVED VISUALIZATION IMAGE PROCESSING. Journal of Flow Visualization and Image Processing, 2008, 15, 275-300.	0.3	7

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37	Personalized Ventilation as a Possible Strategy for Reducing Airborne Infectious Disease Transmission on Commercial Aircraft. Applied Sciences (Switzerland), 2022, 12, 2088.	1.3	7
38	Optimization of a Lobed Perforated Panel Diffuser - A Numerical Study of Orifice Arrangement. International Journal of Ventilation, 2012, 11, 255-270.	0.2	6
39	An Experimental Approach Regarding the Sewage Self-Cleansing Conditions. Energy Procedia, 2016, 85, 266-272.	1.8	6
40	A new adaptive thermal comfort model for the Romanian climate. Proceedings of the Institution of Civil Engineers: Engineering Sustainability, 2020, 173, 151-159.	0.4	6
41	Advanced Thermal Manikin for Thermal Comfort Assessment in Vehicles and Buildings. Applied Sciences (Switzerland), 2022, 12, 1826.	1.3	6
42	Real scale experimental study for performance evaluation of unidirectional air diffuser perforated panels. E3S Web of Conferences, 2018, 32, 01014.	0.2	5
43	Study on Energy Efficiency of an Off-Grid Vending Machine with Compact Heat Exchangers and Low GWP Refrigerant Powered by Solar Energy. Energies, 2022, 15, 4433.	1.6	5
44	A Numerical Analysis of the Air Distribution System for the Ventilation of the Crew Quarters on board of the International Space Station. E3S Web of Conferences, 2018, 32, 01006.	0.2	4
45	Assessment of virtual thermal manikins for thermal comfort numerical studies. Verification and validation. E3S Web of Conferences, 2019, 111, 02018.	0.2	4
46	Local and general ventilation system for an operating room with surgeons and patient. E3S Web of Conferences, 2019, 111, 06081.	0.2	4
47	Experimental investigation of thermal vehicular environment during the summer season. Science and Technology for the Built Environment, 2022, 28, 42-54.	0.8	4
48	Experimental and numerical study on the thermal plumes of a standing and lying human in an operating room. Science and Technology for the Built Environment, 2022, 28, 2-20.	0.8	4
49	Multi-criteria Design and Impact on Energy Consumption of a Residential House – A Parametric Study. Energy Procedia, 2016, 85, 141-148.	1.8	3
50	A Critical Regard on Romanian Regulations Related to Indoor Environment Quality in Operating Rooms and a Technical Case Study. Energy Procedia, 2016, 85, 511-520.	1.8	3
51	General Ventilation System Optimization Study for Environment Improvement of Sludge Dewatering Area from a Wastewater Treatment Plant. Energy Procedia, 2017, 112, 640-649.	1.8	3
52	Numerical and experimental study for the development of an advanced model of an operating room with surgeons and patient. , 2017, , .		3
53	Experimental and numerical investigation on the convective thermal plume around the head of the standing and lying human body. E3S Web of Conferences, 2019, 85, 02016.	0.2	3
54	Numerical and experimental study of the International Space Station crew quarters ventilation. Journal of Building Engineering, 2021, 41, 102714.	1.6	3

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55	Experimental and Numerical Study for a Novel Arrangement of a SuperCapacitors Stack to Improve Heat Transfer. Applied Sciences (Switzerland), 2022, 12, 662.	1.3	3
56	Numerical Model Development of the Air Temperature Variation in a Room Set on Fire for Different Ventilation Scenarios. Applied Sciences (Switzerland), 2021, 11, 11698.	1.3	3
57	Experimental Study for the Integration of an Innovative Air Distribution System in Operating Rooms. Energy Procedia, 2017, 112, 613-620.	1.8	2
58	A state of the art regarding urban air quality prediction models. E3S Web of Conferences, 2018, 32, 01010.	0.2	2
59	Impinging jets " a short review on strategies for heat transfer enhancement. E3S Web of Conferences, 2018, 32, 01013.	0.2	2
60	Numerical models development for unidirectional air flow diffusers with lobed and circular orifices. E3S Web of Conferences, 2019, 111, 01049.	0.2	2
61	Interaction between a local and a general ventilation system for an operating room with patient. , 2019, , .		2
62	Operating room ventilation with laminar air flow ceiling and a local laminar air flow system near the operating table for the patient. IOP Conference Series: Materials Science and Engineering, 2019, 609, 032014.	0.3	2
63	Experimental Validation of the Human Thermal Plume of the Driver Inside a Vehicle Cabin. , 2021, , .		2
64	Experimental investigation of jets from rectangular six-lobed and round orifices at very low Reynolds number. Meccanica, 2014, 49, 2419-2437.	1.2	1
65	Numerical study of the air distribution in the Crew Quarters on board of the International Space Station. E3S Web of Conferences, 2019, 85, 02015.	0.2	1
66	The stability of the radiative regime in Bucharest during 2017-2018. E3S Web of Conferences, 2019, 85, 04001.	0.2	1
67	Recent Advances in Solar Drying Technologies- A Short Review. , 2019, , .		1
68	Real time monitoring network demonstrator for air quality management. , 2019, , .		1
69	Cross and clover shaped orifice jets analysis at low Reynolds number. Thermal Science, 2015, 19, 2139-2150.	0.5	1
70	Experimental Study on the Thermal Environment Inside a Vehicle Cabin with Innovative Air Diffusers. , 2021, , .		1
71	Preliminary Results Concerning the Thermal Comfort in a Romanian Passive House. , 2015, , 779-790.		0
72	Preliminary Study on a Reduced Scaled Model Regarding the Air Diffusion inside a Crew Quarter on Board of the ISS. E3S Web of Conferences, 2018, 32, 01015.	0.2	0

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73	Fire modeling in a nonventilated corridor. E3S Web of Conferences, 2018, 32, 01011.	0.2	0
74	Design of a Small-Scale Experimental Model of the International Space Station Crew Quarters for a PIV Flow Field Study. E3S Web of Conferences, 2019, 111, 01045.	0.2	0
75	Numerical Prediction of Carbon Dioxide Accumulation in the International Space Station Crew Quarters. , 2019, , .		0
76	Experimental Study of Carbon Dioxide Accumulation on a Model of the Crew Quarters on the ISS. , 2019, , .		0
77	Optimization process for an industrial ventilation system installed inside a sludge dehydration hall. , 2019, , .		0
78	An alternative air distribution solution for better environmental quality in the ISS crew quarters. International Journal of Ventilation, 2023, 22, 24-39.	0.2	0
79	Experimental and Numerical Investigation of Heat Transfer Inside an Air Cavity with a Phase Change Material Side. , 2017, , .		0
80	Numerical Study of Personalized Ventilation Impact on Occupant Comfort in Enclosed Spaces. , 2021, , .		0