

PERSONAL INFORMATION

Cristiana-Verona CROITORU, Habil. PhD. MSc. Eng.



 4, Barajul Cucuteni Alley, Bucharest, Romania

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 www.cambi.ro

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Sex F | Date of birth 24.08.1983 | Nationality Romanian

WORK EXPERIENCE

2008 – now Associate Professor at Technical University of Civil Engineering

Assistant, Lecturer and Associate Professor at Technical University of Civil Engineering, Faculty of Building Services

- Senior researcher and teaching duties: courses, seminars, laboratories, technical projects (Ventilation and Air Conditioning, Ecology, Sustainability, CO2 Reduction in Atmosphere)
- Coordinator/Responsible for 11 research projects, more than **2.2 mil euro** funded

March 2021- Sept 2021

Advisor of President of National Institute of Administration

National Institute of Administration

2018-2020

Member of the Civil Engineering and Management Commission of the National Council for the Certification of Titles, Diplomas and University Certificates (**CNATDCU**) within the Ministry of National Education

2024- now

2016- now

Projects evaluation expert for the European Commission

- Energy and Sustainability expert for **Horizon 2020 / Horizon Europe Calls**

April 2012- October 2015

Associated Researcher at Politehnica University Bucharest

Politehnica University Bucharest, Faculty of Mechanics and Mechatronics, Principal investigator for smart building facade research **postdoctoral fellowship**

2019- 2024

World Bank expert- Energy Efficiency Improvement through Renovation of Buildings Romanian Strategy, **Safer, Inclusive and Sustainable Schools** Project, **TA Renovation Wave, Country Climate and Development Report (CCDR)** for Romania and Azerbaijan

2020-201

International Consultant for UNDP - United Nations Development Programme

International **Consultant in Green Urban Design** Code in Moldova Sustainable Green Cities Project

2020- 2024

Member of the Board of Directors of Pro-nZEB Cluster Association

2023-now

Member of the body of experts from the National Register of Experts for certification of research and development activity

Field of smart specialisation at national level: **3. Energy and mobility**

2024-now

Expert for “Commission des titres d’ingénieur”- France

Audit missions of French engineering schools (and foreign on request) for accreditation

2024-2025

Expert for Positive Clean Energy Districts Smart Cities and Communities

Enabling and upscaling Positive Clean Energy District (PECD) for Support for the Smart Cities and Communities Lighthouse project group <https://smart-cities-marketplace.ec.europa.eu/insights/publications/scalable-cities-expert-report-enabling-and-upscaling-pceds>

- 2023-now** **Projects evaluation expert for Climate-KIC Holding B.V., Driving Urban Transitions**
NetZeroCities Pilot Cities Programme, Pathways2Resilience, Positive Energy Districts DUT

EDUCATION AND TRAINING

- 2022** **ONE Click LCA, Life Cycle Analysis**
- June 2021 **Habilitation thesis**
"Urban Synergies for the built environment"
- October 2015 **Sustainability Manager**
European Certification and Qualification Association, Krems, Austria
▪ Certified Sustainability Manager
- January 2014 **BREEAM In Use International Auditor**
Building Research Establishment, UK
▪ BREEAM In-Use Auditor helps building managers and owners to reduce the running costs and to improve the environmental performance of existing buildings.
- December 2013 **Romanian Building Energy Efficiency Auditor, degree I**
Development Ministry, Romania
▪ Energy efficiency assessment of buildings for envelope and building services.
- September 2013 **Training and specialization research stage in optical methods of investigation**
University of La Rochelle, France
▪ Particle Image Velocimetry systems.
- July 2012 **Project manager**
Labour and family Ministry, Romania
▪ Scientific and technical projects coordination, writing proposal, team coordination etc.
- March 2012 **BREEAM International Assessor**
Building Research Establishment, UK
▪ BREEAM International certification provides a multi-criteria approach to the environmental aspects associated with the construction and renovation of a building. Points are awarded for each of these aspects on the basis of performance achieved, and a weighting system is used to aggregate these scores to obtain an overall final score .
- 2011– 2014 **Post-doctoral researcher**
Technical University of Civil Engineering Bucharest, Romania
▪ CFD; Thermal Comfort; Indoor Quality, Building Energy Efficiency
- 2008 – 2011 **PhD**
Technical University of Civil Engineering Bucharest, Romania
▪ Thesis title: "*Numeric and experimental studies regarding the influence of turbulence intensity on thermal comfort of the occupants in ventilated buildings*"
- March-July 2010 **PhD research stage**
Royal Military Academy Brussels, Mechanics Department- Belgium
▪ Doctoral research scholarship at Royal Military Academy Brussels- Belgium : "*Numerical investigation with CFD methods*"
- 2008-2009 **Pedagogical formation certificate**
Technical University of Civil Engineering Bucharest, Romania
- 2007 – 2008 **Master**

Technical University of Civil Engineering Bucharest, Romania

- Master in Comfort and Energy Efficiency

2004-2005 **Master**

University of La Rochelle, France

- Master 1 *Equipements Techniques et Energétiques*, University of La Rochelle, Erasmus scholarship

2002 – 2007 **License**

Technical University of Civil Engineering Bucharest, Romania

- Building services engineering; Thermal Comfort; Indoor Air Quality, Building energy efficiency, Sustainable buildings

PERSONAL SKILLS

Mother tongue(s)

Romanian

Other language(s)

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	C2	C2	C1	C1	C2
French	C1	C2	C1	C1	C2

Language certificate issued by University of La Rochelle, France

Levels: A1/A2: Basic user - B1/B2: Independent user - C1/C2 Proficient user
[Common European Framework of Reference for Languages](#)

Communication skills

- good communication skills gained through my experience as lecturer and conference speaker

Organisational / managerial skills

- leadership skills; project management;
- team work- I have worked in different research teams
- organisational skills- Member of Young Researchers Conference from TUCEB, www.yrc.utcb.ro organizing Committee of **EENVIRO** 2013-2024, www.eenviro.ro and **CLIMA 2019**
- member of Scientific Committee of **EENVIRO** 2016-2024 International Conference and International Conference – Towards a Sustainable Urban Environment (EBUILT-2016), CIEM 2017, ROOMVENT 2018, 2022, 2024, CLIMA 2019

Job-related skills

- International Relations responsible for Faculty of Building Services
- In charge with CSR and sustainability management for Faculty of Building Services
- Responsible for vocational trainings
- Funding applications consultant

Digital competence

SELF-ASSESSMENT				
Information processing	Communication	Content creation	Safety	Problem solving
Proficient user	Proficient user	Proficient user	Independent user	Independent user

Levels: Basic user - Independent user - Proficient user
[Digital competences - Self-assessment grid](#)

Computer operator diploma

- good command of office suite (word processor, spread sheet, presentation software, access)
- good command of photo editing software : Adobe Illustrator
- computer skills: Windows, MSOffice, ANSYS Fluent, Mathcad, ACAD, Pascal, Visual Basic, C++; Design Builder, IES VE, ENVI-MET
- web-design (WYSIWYG, WIX)

Driving licence B since 2002.

ADDITIONAL INFORMATION

Publications and other indices :

30+ ISI Journal Papers, 20+ ISI Conference Proceedings, 1 Patent, 25+ IDB Journal Papers,
Reviewer at 5 ISI indexed journals: Indoor and Built Environment, Applied Thermal Engineering, Journal of Thermal Biology, ASHRAE Transactions,
Journal of Energy Engineering; **Hirsch Index – Web of Science: 11, Scopus: 14, Google Scholar: 17**

Association affiliation:

American ASHRAE Society; **REHVA Committee Member**; ISIAQ :AIIR ; RoGBC; ZERO WASTE ROMANIA ; Pro-nZEB Cluster, Sigma XI
Pro-nZEB Cluster- Member in the advisory Board

Journal Publications
(Selection)

Research papers cited in Web Of Science:

1. Thermal comfort models for indoor spaces and vehicles—Current capabilities and future perspectives C Croitoru, I Nastase, F Bode, A Meslem, A Dogeanu Renewable and Sustainable Energy Reviews 44, 304-318 101 2015
2. Comparison of turbulence models in simulating jet flow from a cross-shaped orifice, A Meslem, F Bode, C Croitoru, I Nastase European Journal of Mechanics-B/Fluids 44, 100-120 40 2014
3. Thermodynamic investigation on an innovative unglazed transpired solar collector, CV Croitoru, I Nastase, FI Bode, A Meslem Solar Energy 131, 21-29 33 2016
4. Flow dynamics and mass transfer in impinging circular jet at low Reynolds number. Comparison of convergent and orifice nozzles, A Meslem, V Sobolik, F Bode, K Sodjavi, Y Zaouali, I Nastase, C Croitoru International Journal of Heat and Mass Transfer 67, 25-45
5. Experimental investigation of transpired solar collectors with/without phase change materials AS Bejan, C Teodosiu, CV Croitoru, T Catalina, I Nastase Solar Energy 214, 478-490

Conferences
(Selection)

1. C. CROITORU, F. BODE, I. NASTASE, A. DOGEANU, A. MESLEM, Innovative solar wall performance study for low energy buildings applications(2014) International Multidisciplinary Scientific GeoConference Surveying Geology and Mining Ecology Management, SGEM, 1 (4), pp. 307-314.
2. C. CROITORU, A. DOGEANU, F. BODE, I. NASTASE, A. MESLEM, Heat transfer analysis for a transpired solar collector numerical model (2015) international Multidisciplinary Scientific GeoConference Surveying Geology and Mining Ecology Management, SGEM, 1 (4), pp. 939-944.
3. C. CROITORU, I. NASTASE, M. SANDU, C. LUNGU, Multi-criteria Design and Impact on Energy Consumption of a Residential House—A Parametric Study, Energy Procedia 85, 141-148, 2016
4. C. CROITORU, I. NASTASE, I. VOICU, A. MESLEM, M. SANDU, Thermal Evaluation of an Innovative Type of Unglazed Solar Collector for Air Preheating, Energy Procedia 85, 149-155, 2016
5. C. CROITORU, I. NASTASE, R. CRUTESCU, V. BADESCU, Thermal Comfort in a Romanian Passive House. Preliminary Results, Energy Procedia 85, 575-583, 2016

Research projects
Director/Team Responsible

1. -SOLAIR- 88 din 30/04/2013 (PN-II-RU-PD-2012-3-0144) Innovative ventilated envelope elements for solar heat recovery in low energy buildings – Principal Investigator, 75.000 Euro
2. -SOLECT- 67BG din 30/09/2016 (PN-III-P2-2.1-BG-2016-0158), Environment improvement of Sludge dewatering from the wastewater treatment system of SEAU Glina by Optimizing the Local Effluent Capture and Treatment– Principal Investigator, 100.000 Euro
3. -SCOPE- 83PED din 03/01/2017 (PN-III-P2-2.1-PED-2016-1154) intelligent Solar COLlector with Phase change materials intEgration– Principal Investigator, 133.000 Euro
4. -CIA-CLIM, 30PCCDI / 2018 (PN-III-P1-1.2-PCCDI-2017-0391), Smart Buildings Adaptable to the Climate Change Effects UTCB team leader, 200.000 Euro;
5. -BISCUIT - 436PED din 23/10/2020 (PN-III-P2-2.1-PED-2019-4165) Building integrated solar crop dryer for food preservation in urban farming applications Principal Investigator, 133.000 Euro;
6. -DivAirCity- Ctr 101003799 Horizon 2020 H2020-LC-CLA-2018-2019-2020 project; Improving Air Quality in Cities through Social Inclusion and Nature Based Solutions, UTCB team leader; 479.000 Euro
7. -nanoSUN- 716PED din 24/06/2022 (PN-III-P2-2.1-PED-2021-1903)– "Adaptive air solar collector with integrated nano-enhanced phase changing materials" 125.000 euro
8. -nZEB ready (H2020-LC-SC3-EE-2020-2) – Ctr 101033733 "Improving market readiness for the implementation of the nZEB concept"- partner responsible 100.400 euro
9. -BUS4RoBOOST (LIFE-2021-CET)- Ctr 101076873 "BUILD Up Skills for mainstreaming long-term renovation of Romanian building stock" - partner responsible 100.000 euro
10. -WeGenerate- Horizon Europe project Grant agreement ID: 101123546 -Co-creating People-Centric Sustainable Neighbourhoods through Urban Regeneration, partner responsible 588 000 euro
11. -ReGreenation- Horizon Europe project, Grant agreement ID: 101139636 - The next generation of green, resilient and socially inclusive smart cities technical leader, 240 000 euro
12. -UrbanWISE- NetZeroCities Pilot- Urban Regeneration and Administrative Capacity Building for Sustainable Development and Emissions Reduction, partner responsible 136 250 euro

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6. Thermal comfort models for indoor spaces and vehicles—Current capabilities and future perspectives C Croitoru, I Nastase, F Bode, A Meslem, A Dogeanu Renewable and Sustainable Energy Reviews 44, 304-318 101 2015
7. Comparison of turbulence models in simulating jet flow from a cross-shaped orifice, A Meslem, F Bode, C Croitoru, I Nastase European Journal of Mechanics-B/Fluids 44, 100-120 40 2014
8. Thermodynamic investigation on an innovative unglazed transpired solar collector, CV Croitoru, I Nastase, FI Bode, A Meslem Solar Energy 131, 21-29 33 2016
9. Flow dynamics and mass transfer in impinging circular jet at low Reynolds number. Comparison of convergent and orifice nozzles, A Meslem, V Sobolik, F Bode, K Sodjavi, Y Zaouali, I Nastase, C Croitoru International Journal of Heat and Mass Transfer 67, 25-45
10. Experimental investigation of transpired solar collectors with/without phase change materials AS Bejan, C Teodosiu, CV Croitoru, T Catalina, I Nastase Solar Energy 214, 478-490

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6. C. CROITORU, F. BODE, I. NASTASE, A. DOGEANU, A. MESLEM, Innovative solar wall performance study for low energy buildings applications(2014) International Multidisciplinary Scientific GeoConference Surveying Geology and Mining Ecology Management, SGEM, 1 (4), pp. 307-314.
7. C. CROITORU, A. DOGEANU, F. BODE, I. NASTASE, A. MESLEM, Heat transfer analysis for a transpired solar collector numerical model (2015) international Multidisciplinary Scientific GeoConference Surveying Geology and Mining Ecology Management, SGEM, 1 (4), pp. 939-944.
8. C. CROITORU, I. NASTASE, M. SANDU, C. LUNGU, Multi-criteria Design and Impact on Energy Consumption of a Residential House—A Parametric Study, Energy Procedia 85, 141-148, 2016
9. C. CROITORU, I. NASTASE, I. VOICU, A. MESLEM, M. SANDU, Thermal Evaluation of an Innovative Type of Unglazed Solar Collector for Air Preheating, Energy Procedia 85, 149-155, 2016
10. C. CROITORU, I. NASTASE, R. CRUTESCU, V. BADESCU, Thermal Comfort in a Romanian Passive House. Preliminary Results, Energy Procedia 85, 575-583, 2016
11. I. NASTASE, C. CROITORU, A. VARTIRES, L. TATARANU, Indoor Environmental Quality in Operating Rooms: An European Standards Review with Regard to Romanian Guidelines, Energy Procedia 85, 375-382, 2016
12. I. NASTASE, C. CROITORU, C. LUNGU, A Questioning of the Thermal Sensation Vote Index Based on Questionnaire Survey for Real Working Environments, Energy Procedia 85, 366-374, 2016

Research projects
Director/Team Responsible

13. -SOLAIR- 88 din 30/04/2013 (PN-II-RU-PD-2012-3-0144) Innovative ventilated envelope elements for solar heat recovery in low energy buildings – Principal Investigator, 75.000 Euro
14. -SOLECT- 67BG din 30/09/2016 (PN-III-P2-2.1-BG-2016-0158), Environment improvement of Sludge dewatering from the wastewater treatment system of SEAU Glina by Optimizing the Local Effluent Capture and Treatment– Principal Investigator, 100.000 Euro
15. -SCOPE- 83PED din 03/01/2017 (PN-III-P2-2.1-PED-2016-1154) intelligent Solar COllector with Phase change materials intEgration– Principal Investigator, 133.000 Euro
16. -CIA-CLIM, 30PCCDI / 2018 (PN-III-P1-1.2-PCCDI-2017-0391), Smart Buildings Adaptable to the Climate Change Effects UTCB team leader, 200.000 Euro;
17. -BISCUIT - 436PED din 23/10/2020 (PN-III-P2-2.1-PED-2019-4165) Building integrated solar crop dryer for food preservation in urban farming applications Principal Investigator, 133.000 Euro;
18. -DivAirCity- Ctr 101003799 Horizon 2020 H2020-LC-CLA-2018-2019-2020 project; Improving Air Quality in Cities through Social Inclusion and Nature Based Solutions, UTCB team leader; 479.000 Euro
19. -nanoSUN- 716PED din 24/06/2022 (PN-III-P2-2.1-PED-2021-1903)– "Adaptive air solar collector with integrated nano-enhanced phase changing materials" 125.000 euro
20. -nZEB ready (H2020-LC-SC3-EE-2020-2) – Ctr 101033733 "Improving market readiness for the implementation of the nZEB concept"- partner responsible 100.400 euro
21. -BUS4RoBOOST (LIFE-2021-CET)- Ctr 101076873 "BUILD Up Skills for mainstreaming long-term renovation of Romanian building stock" - partner responsible 100.000 euro
22. -WeGenerate- Horizon Europe project Grant agreement ID: 101123546 -Co-creating People-Centric Sustainable Neighbourhoods through Urban Regeneration, partner responsible 588 000 euro
23. -ReGreeneration- Horizon Europe project, Grant agreement ID: 101139636 - The next generation of green, resilient and socially inclusive smart cities technical leader, 240 000 euro
24. -UrbanWISE- NetZeroCities Pilot- Urban Regeneration and Administrative Capacity Building for Sustainable Development and Emissions Reduction, partner responsible 136 250 euro

ANNEX- list of publications

A. PhD thesis or theses

A1. PhD thesis: "The influence of air turbulence intensity on thermal comfort" PhD thesis in civil engineering, 2011, UTCB.

A2. Habilitation thesis: "Urban synergies in the built environment", Civil Engineering and Installations; 2021, UTCB

B. Patents and other intellectual property titles

B1. A 2018 00463 Solar faade (Ventilated opaque faade element for passive solar energy absorption with integrated phase change materials), Assignee: UNIV BUCURESTI TEHNICA CONSTR, Inventor(s): Cristiana Verona Croitoru, Florin Ioan Bode, Ilinca Nastase, Mihnea Sandu, Angel Mădălin Dogeanu, Andrei Stelian Bejan

B2. 2021/00306: Ilinca Nastase, Paul Danca, Florin Bode Cristiana Croitoru, Mihnea Sandu; Difuzor orientabil, cu inducție sporită prin control pasiv al curgerii, pentru utilizarea la ventilarea autovehiculelor (Orientable diffuser, with increased induction by passive flow control, for use in the ventilation of motor vehicles).

B3. 2021/00307: Mihnea Sandu, Paul Danca, Florin Bode, Cristiana Croitoru, Ilinca Nastase, Dispozitiv pentru recuperarea caldurii din apele gri cu aplicatie la sistemele de canalizare menajera (Heat recovery device from waste-water sewage system)

C. Books and book chapters

(Ca) – books printed by central publishing houses (EDP, ET, EAR, etc.).

Ca1. I. Nastase, C. Croitoru, Equipements et systèmes de ventilation et climatisation – travaux pratiques, Editura Universitară 2011, ISBN 978-606-591-331-8

Ca2 I. Nastase, C. Croitoru, Echipamente și sisteme pentru ventilarea și climatizarea clădirilor, Editura Universitară 2012, ISBN : 978-606-591-515-2

Ca3. I. Nastase, C. Croitoru, Equipements et systèmes pour la ventilation et climatisation des bâtiments, Editura Printech 2021, ISBN) : 978-606-23-1248-0

(Cb) – books printed by local printers (institutions).

Cb1. Cătălin Teodosiu, Vlad Iordache, Mihnea Sandu, Cristiana Croitoru, Florin Bode, Ilinca Năstase, Scientific research methodology for PhD, Conspress 2021, ISBN: 978-973-100-521-8

Cb2. C. Croitoru, I. Nastase, F. Bode, Ambient quality in the built indoor environment - Comfort, assessment methods, principles of air distribution, Conspress, 2021, ISBN: 978-973-100-522-5

(Cc)- Book chapters

Cc1. I. Udrea, C. Croitoru, I Nastase, R. Crutescu, V. Badescu, Springer Book Chapter- Mediterranean Green Buildings and Renewable Energy, 921-930, 2017, ISBN: 978-3-319-30746-6

Cc2. R. Crutescu, I. Udrea, I Nastase, C. Croitoru, V. Badescu, Springer Book Chapter Renewable- Energy in the Service of Mankind Vol I, 779-790, 2015, ISBN: 978-3-319-17777-9

(Cd)- editor

Cd1. Editor volum Energy Procedia, Vol 112C (2017), ISSN 1876-6102

Cd1. Editor for E3S Web of Conferences Volume 85 (2019) ISSN 22671242

D. Articles / studies in extenso, published in journals from the main international scientific stream;

Bejan, A.-S., C. Croitoru, F. Bode, C. Teodosiu and T. Catalina (2022). "Experimental investigation of an enhanced transpired air solar collector with embodied phase changing materials." *Journal of Cleaner Production* 336: 130398.

Bejan, A., M. Sandu, L. Tacutu, C. Croitoru and I. Nastase (2018). "AIRFLOW STUDY INSIDE AN ENCLOSURE WITH A PCM WALL AND A SOLAR COLLECTOR." *Proceedings of Roomvent & Ventilation*.

Bejan, A., C. Teodosiu, C. Croitoru, T. Catalina and I. Nastase (2021). "Experimental investigation of transpired solar collectors with/without phase change materials." *Solar Energy* 214: 478-490.

Berville, C., F. Bode and C. Croitoru (2022). "Numerical Simulation Investigation of a Double Skin Transpired Solar Air Collector." *Applied Sciences* 12(1): 520.

Bode, F., A. Meslem and C. Croitoru (2013). "Numerical simulation of a very low Reynolds cross-shaped jet." *Mechanics* 19(5): 512-517.

Bode, F., I. Nastase and C. Croitoru (2011). "Mesh dependence study using large eddy simulation of a very low Reynolds cross-shaped jet." *Mathematical Modelling in Civil Engineering–Scientific Journal* 7(4): 7.

BODE, F., I. NASTASE and C. CROITORU (2012). "RANS MODELS COMPARISON FOR A CROSS-SHAPED JET FLOW WITH STRAIGHT LOBES." *Mathematical Modeling in Civil Engineering*(4).

Bode, F., I. Nastase, C. Croitoru, M. Sandu, A. Dogeanu and I. Ursu (2018). "Preliminary numerical studies for the improvement of the ventilation system of the crew quarters on board of the international space station." *INCAS Bulletin* 10(2): 137-143.

Croitoru, C., A. Meslem and R. Atta (2015). "Etude thermique d'un capteur solaire innovant à circulation d'air/Thermal study of a innovative solar coletor with air circulation." *Revista Romana de Inginerie Civila* 6(2): 101.

Croitoru, C., I. Nastase and F. Bode (2011). "The Influence of the Geometric Form of the Virtual Thermal Manikin on Convective Flow." *Mathematical Modelling* 7(4): 16-22.

Croitoru, C., I. Nastase, F. Bode, A. Meslem and A. Dogeanu (2015). "Thermal comfort models for indoor spaces and vehicles—Current capabilities and future perspectives." *Renewable and Sustainable Energy Reviews* 44: 304-318.

Croitoru, C., I. Nastase, F. Bode and M. Sandu (2022). "Assessment of virtual thermal manikins for thermal comfort numerical studies. Verification and validation." *Science and Technology for the Built Environment* 28(1): 21-41.

CROITORU, C., E. RÂȘTEI and I. NĂSTASE (2015). "Scheme de evaluare voluntară pentru clădiri existente - Studiu de caz." *Romanian Journal of Building Services* 1(1).

Croitoru, C. V., I. Nastase, F. I. Bode and A. Meslem (2016). "Thermodynamic investigation on an innovative unglazed transpired solar collector." *Solar Energy* 131: 21-29.

Crutescu, R., I. Udrea, I. Nastase, C. Croitoru and V. Badescu (2015). *Preliminary Results Concerning the Thermal Comfort in a Romanian Passive House. Renewable Energy in the Service of Mankind Vol I*, Springer, Cham: 779-790.

Danca, P., F. Bode, A. Meslem, C. Croitoru, M. Sandu, I. Nastase, C. Lungu and L. Batali (2022). "Experimental investigation of thermal vehicular environment during the summer season." *Science and Technology for the Built Environment* 28(1): 42-54.

- Dogeanu, A., A. Iatan, F. Bode, C. Croitoru and I. Nastase (2014). "Conception of a simplified seated thermal manikin for CFD validation purposes." *Romanian Journal of Civil Engineering* 5(1): 27.
- Ion-Guță, D. D., I. Ursu, A. Toader, D. Enciu, P. A. Dancă, I. Nastase, C. V. Croitoru, F. I. Bode and M. Sandu (2022). "Advanced thermal manikin for thermal comfort assessment in vehicles and buildings." *Applied Sciences* 12(4): 1826.
- Labihi, A., F. Aitlahbib, H. Chehouani, B. Benhamou, M. Ouikhalfan, C. Croitoru and I. Nastase (2017). "Effect of phase change material wall on natural convection heat transfer inside an air filled enclosure." *Applied Thermal Engineering* 126: 305-314.
- Alboiu, F., M. Sandu, N. Alboiu, C. Croitoru and A. Dogeanu (2016). "WATER REUSE APPLIED TO FAMILY HOUSES IN ROMANIA." *International Multidisciplinary Scientific GeoConference: SGEM 2*: 925-932.
- Bejan, A.-S., F. Bode, C. Teodosiu, C. V. Croitoru and I. Năstase (2019). Numerical model of a solar ventilated facade element: experimental validation, final parameters and results. *E3S Web of Conferences*, EDP Sciences.
- Bejan, A.-S., C. V. Croitoru and F. Bode (2019). Preliminary numerical studies conducted for the numerical model of a real transpired solar collector with integrated phase changing materials. *E3S Web of Conferences*, EDP Sciences.
- Bejan, A.-S., C. V. Croitoru, D. Bordianu, A. Labihi and H. Chehouani (2017). Transpired solar collectors energy efficiency improvement using inertial materials. *2017 International Conference on ENERGY and ENVIRONMENT (CIEM)*, IEEE.
- Bejan, A.-S., A. Labihi, C.-V. Croitoru, F. Bode and M. Sandu (2017). "Experimental investigation of the performance of a transpired solar collector acting as a solar wall." *Proceedings of SWC2017/SHC2017*: 1-10.
- Bejan, A.-S., A. Labihi, C. Croitoru and T. Catalina (2018). Air solar collectors in building use-A review. *E3S web of conferences*, EDP Sciences.
- Bejan, A., C. Croitoru, M. Sandu, I. Nastase and F. Bode (2018). Solar ventilated faade with PCM integration for air preheating. *Healt. Build. Conf.*
- Bejan, A. S., A. Labihi, C. V. Croitoru, T. Catalina, H. Chehouani and B. Benhamou (2018). Experimental investigation of the charge/discharge process for an organic PCM macroencapsulated in an aluminium rectangular cavity. *E3S Web of Conferences*, EDP Sciences.
- Berville, C., C.-V. Croitoru and I. Nastase (2019). Recent Advances in Solar Drying Technologies-A Short Review. *2019 International Conference on ENERGY and ENVIRONMENT (CIEM)*, IEEE.
- Berville, C., C. Croitoru and F. Bode (2021). Investigation of the Air Layer Thickness Influence for a Novel Double Skin Transpired Solar Collector. *2021 10th International Conference on ENERGY and ENVIRONMENT (CIEM)*, IEEE.
- Berville, C., A. T. Fokone, C.-I. Sima and C.-V. Croitoru (2021). Mesh independency study for an unglazed transpired solar collector. *IOP Conference Series: Earth and Environmental Science*, IOP Publishing.
- Bode, F., M.-R. Georgescu, A. Meslem, I. Nastase, M. Sandu and C. V. Croitoru (2018). Numerical Study for the Improvement of the Ventilation System of the Crew Quarters on Board the International Space Station. *Roomvent & Ventilation 2018*.
- Bode, F., I. Nastase, C. V. Croitoru, M. Sandu and A. Dogeanu (2018). 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*, EDP Sciences.
- Bode, F., I. Nastase, A. Meslem and C. Croitoru (2012). "RANS AND LES MODELS COMPARISON FOR A CROSS-SHAPED JET FLOW WITH APPLICATION IN PERSONALIZED VENTILATION."
- Bode, F., I. Nastase, M. Sandu, C. Croitoru and H. Petran (2022). A New Learning Programme to Facilitate nZEB Implementation. *CLIMA 2022 conference*.

- Bode, F., L. Tacutu, C. Croitoru and I. Nastase (2017). Numerical and experimental study for the development of an advanced model of an operating room with surgeons and patient. 2017 International Conference on ENERGY and ENVIRONMENT (CIEM), IEEE.
- Budea, S., V. Bădescu, A. Ciocănea, C. V. Croitoru and I. Năstase (2019). The stability of the radiative regime in Bucharest during 2017-2018. E3S Web of Conferences, EDP Sciences.
- Chitaru, G.-M., M. Sandu, C. V. Croitoru and F. Bode (2019). Local exhaust ventilation solutions for an industrial hall– Part 1 CFD analysis of the local exhaust systems. E3S Web of Conferences, EDP Sciences.
- Chitaru, G., C. Croitoru, M. Sandu, I. Nastase, F. Bode and A. Dogeanu (2019). Optimization process for an industrial ventilation system installed inside a sludge dehydration hall. 2019 International Conference on ENERGY and ENVIRONMENT (CIEM), IEEE.
- Colda, I., A. Damian and C. Croitoru (2009). Summer electrical energy consumption for different cooling systems. 2009 8th International Symposium on Advanced Electromechanical Motion Systems & Electric Drives Joint Symposium, IEEE.
- Croitoru, C.-V. (2010). "AIRFLOW AND HEAT TRANSFER MODELING FOR A HUMAN BODY BY COMPUTATIONAL FLUID DYNAMICS."
- Croitoru, C., F. Bode, I. Nastase, A. Dogeanu and A. Meslem (2014). Innovative solar wall performance study for low energy buildings applications. 14th International Multidisciplinary Scientific GeoConference SGEM 2014.
- Croitoru, C., F. Bode, I. Nastase, M. Sandu, A. Vasilescu and L. Tacutu (2017). "General ventilation system optimization study for environment improvement of sludge dewatering area from a wastewater treatment plant." Energy Procedia 112: 640-649.
- Croitoru, C., A. Dogeanu, F. Bode, A. Meslem and A. Vartires (2015). Heat Transfer Analysis for a Transpired Solar Collector Numerical Model. 15th International Multidisciplinary Scientific GeoConference SGEM 2015.
- Croitoru, C. and I. Nastase (2018). A state of the art regarding urban air quality prediction models. E3S Web of Conferences, EDP Sciences.
- Croitoru, C., I. Nastase, R. Crutescu and V. Badescu (2016). "Thermal comfort in a Romanian passive house. Preliminary results." Energy Procedia 85: 575-583.
- Croitoru, C., I. Nastase, A. Iatan, V. Iordache, A. Meslem and I. Colda (2011). "Numerical and experimental modeling of airflow and heat transfer of a human body."
- Croitoru, C., I. Nastase, M. Sandu and C. Lungu (2016). "Multi-criteria Design and Impact on Energy Consumption of a Residential House–A Parametric Study." Energy Procedia 85: 141-148.
- Croitoru, C., I. Nastase, I. Voicu, A. Meslem and M. Sandu (2016). "Thermal evaluation of an innovative type of unglazed solar collector for air preheating." Energy Procedia 85: 149-155.
- CROITORU, C., A. VARTIRES, F. BODE and A. DOGEANU (2013). "Survey Evaluation of the Indoor Environment Quality in a Large Romanian Hospital."
- Danca, P., F. Bode, A. Dogeanu, C. Croitoru, M. Sandu, A. Meslem and I. Nastase (2019). Experimental study of thermal comfort in a vehicle cabin during the summer season. E3S Web of Conferences, EDP Sciences.
- Danca, P., I. Nastase, F. Bode, C. Croitoru, A. Dogeanu and A. Meslem (2019). Evaluation of the thermal comfort for its occupants inside a vehicle during summer. IOP Conference Series: Materials Science and Engineering, IOP Publishing.
- Danca, P., I. Nastase, C. Croitoru, F. Bode and M. Sandu (2021). Thermal comfort evaluation inside a car parked under sun and shadow using a thermal manikin. IOP Conference Series: Earth and Environmental Science, IOP Publishing.
- Dancă, P., F. Bode, I. Năstase, C. V. Croitoru and A. Meslem (2019). Experimental and numerical study of the air distribution inside a car cabin. E3S Web of conferences, EDP Sciences.

- Dogeanu, A., A. Iatan, C. Croitoru and I. Nastase (2012). Conception of a real human shaped thermal manikin for comfort assesment. PhD & DLA Symposium Pesc, Hungary.
- Dogeanu, A., I. Nastase, I. Ursu, D. Enciu, F. Bode, M. Sandu, C. Croitoru, S. Zaharia and G. Iana (2019). Real time monitoring network demonstrator for air quality management. 2019 International Conference on ENERGY and ENVIRONMENT (CIEM), IEEE.
- DOLINSKI, R., F. BODE, I. NASTASE, A. MESLEM and C. CROITORU (2013). "Influence of the choice of the inlet turbulence intensity on the performance of numerically simulated moderate Reynolds jet flows–Part 1–the near exit region of the jet."
- Ioan, B. F., C. C. Verona, D. A. Madalin and N. Ilinca (2013). "THERMAL COMFORT AND IEQ ASSESSMENT OF AN UNDER-FLOOR AIR DISTRIBUTION SYSTEM."
- Meliță, L. and C. Croitoru (2019). Aerogel, a high performance material for thermal insulation-A brief overview of the building applications. E3S web of conferences, EDP Sciences.
- Meslem, A., F. Bode, C. Croitoru and I. Nastase (2014). "Comparison of turbulence models in simulating jet flow from a cross-shaped orifice." *European Journal of Mechanics-B/Fluids* 44: 100-120.
- Meslem, A., V. Sobolik, F. Bode, K. Sodjavi, Y. Zaouali, I. Nastase and C. Croitoru (2013). "Flow dynamics and mass transfer in impinging circular jet at low Reynolds number. Comparison of convergent and orifice nozzles." *International Journal of Heat and Mass Transfer* 67: 25-45.
- Mira, M., C. V. Croitoru and I. Nastase (2017). "Thermal evaluation of a perforated panel for solar collector model for air pre-heating." *Revista Romana de Inginerie Civila* 8(4).
- Nastase, I., P. Danca, F. Bode, C. Croitoru, L. Fechete, M. Sandu and C. I. Coșoiu (2022). "A regard on the thermal comfort theories from the standpoint of Electric Vehicle design—Review and perspectives." *Energy Reports* 8: 10501-10517.
- Pop, O., C. Berville, F. Bode and C. Croitoru (2022). "Numerical investigation of cascaded phase change materials use in transpired solar collectors." *Energy Reports* 8: 184-193.
- Sadrizadeh, S., A. Aganovic, A. Bogdan, C. Wang, A. Afshari, A. Hartmann, C. Croitoru, A. Khan, M. Kriegel and M. Lind (2021). "A systematic review of operating room ventilation." *Journal of Building Engineering* 40: 102693.
- Sadrizadeh, S., R. Yao, F. Yuan, H. Awbi, W. Bahnfleth, Y. Bi, G. Cao, C. Croitoru, R. de Dear and F. Haghghat (2022). "Indoor air quality and health in schools: A critical review for developing the roadmap for the future school environment." *Journal of Building Engineering*: 104908.
- Tacutu, L., F. Bode, I. Năstase, C. Croitoru and A. Dogeanu (2022). "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* 28(1): 2-20.
- Teodosiu, C. I., C. Sima, C. Croitoru and F. Bode (2022). "Experimental Investigation and Optimization of a Glazed Transpired Solar Collector." *Applied Sciences* 12(22): 11392.
- Udrea, I., C. Croitoru, I. Nastase, R. Crutescu and V. Badescu (2017). An adaptive thermal comfort model for the romanian climate. *Mediterranean Green Buildings & Renewable Energy*, Springer, Cham: 921-930.
- Udrea, I., C. Croitoru, I. Nastase, R. Crutescu and V. Badescu (2018). "First adaptive thermal comfort equation for naturally ventilated buildings in Bucharest, Romania." *International Journal of Ventilation* 17(3): 149-165.
- Udrea, I., C. Croitoru, I. Nastase, R. Crutescu and V. Badescu (2018). A new adaptive thermal comfort model for the Romanian climate. *Proceedings of the Institution of Civil Engineers-Engineering Sustainability*, Thomas Telford Ltd.
- Udrea, I., C. Croitoru, I. Nastase, A. Dogeanu and V. Badescu (2014). "Thermal comfort analyses in naturally ventilated buildings." *Mathematical Modeling in Civil Engineering* 10: 1-7.

UDREA, I., C. CROITORU, I. NĂSTASE, R. CRUȚESCU and V. BĂDESCU (2015). "Experimental and theoretical thermal comfort analyses in higher education buildings in Bucharest." UPB Scientific Bulletin, Series D 77(2): 145-156.

Vartires, A., I. Colda and C. Croitoru (2012). "Renewable source solutions for energy efficient buildings." Mathematical Modelling in Civil Engineering 3: 31-38.

VERONA CROITORU, C., I. NASTASE and F. BODE (2012). "THERMAL COMFORT ASSESEMNT FOR DIFFERENT VENTILATION STRATEGIES USING A CFD APPROACH." Mathematical Modeling in Civil Engineering(4).

Yuan, F., R. Yao, S. Sadrizadeh, B. Li, G. Cao, S. Zhang, S. Zhou, H. Liu, A. Bogdan and C. Croitoru (2022). "Thermal comfort in hospital buildings–A literature review." Journal of Building Engineering 45: 103463.