

## Lista completă de lucrări

### a). Lista celor maximum 10 lucrări considerate de candidat a fi cele mai relevante pentru domeniul disciplinelor postului pentru care candidează :

1. Bode F., Joldos T., Sirbu G.M., Danca P., Nastase I., Coșoiu C., *Impact of realistic boundary conditions on CFD simulations: A case study of vehicle ventilation*, (2025) Building and Environment, 267, art. no. 112264, DOI: 10.1016/j.buildenv.2024.112264, Jurnal, Indexare ISI, WOS:001354979900001, IF 7.6;
2. Danca P., Bunea B., Bode F., Nicolae S., *Evaluation of the flow induced by different shrouds geometries*, (2023), Journal of Science and Arts, Issue: 1, pages: 281-288, ISSN: 1844-9581, DOI:10.46939/J.Sci.Arts-23.1-c03, Jurnal, Indexare ISI, WOS:000967778700023, IF 0.3;
3. Danca P.A., Simionescu S.-M., Cîrciumaru G., Nistoran D.-E.G., Chihaiia R.A., Babutanu C., *Fish guidance system for a river water intake - Experimental and numerical study*, (2023) IOP Conference Series: Earth and Environmental Science, 1185 (1), art. no. 012018, DOI: 10.1088/1755-1315/1185/1/012018; Conference proceeding, Indexare ISI, WOS:001007152800018;
4. Danca P.A., Al Bayati A., Nastase I., Sandu M., Ivanov M., Terziev A., Mijorsk S., *Advanced solutions to improve heat recovery from wastewater in a double heat exchanger*, (2023) IOP Conference Series: Earth and Environmental Science, 1128 (1), art. no. 012008, DOI: 10.1088/1755-1315/1128/1/012008, Conference proceeding, Indexare BDI;
5. Danca P., Bunea F., Babutanu C., Nedelcu A., Grecu I.S., *Experimental study of the flow induced by an axial hydrokinetic turbine*, (2023) IOP Conference Series: Earth and Environmental Science, 1136 (1), art. no. 012058, DOI: 10.1088/1755-1315/1136/1/012058, Conference proceeding, Indexare BDI;
6. Danca, P., Băbuțanu, C., Bunea, F. and Nedelcu, A., *Mixing Flow Characteristics in cylindrical tank*. IOP Conference Series: Earth and Environmental Science, 2021. 664(1): p. 012060, doi:10.1088/1755-1315/664/1/012060, Conference proceeding, Indexare BDI;
7. Bode F., Dogeanu A., Tăcutu L., Nastase I., Dancă P., Ene A., *Experimental study of an innovative perforated air diffuser at real scale conditions*, (2022), Energy Reports, Volume 8, Supplement 9, 2022, Pages 1479-1490, ISSN 2352-4847, WOS:000865783500008, <https://doi.org/10.1016/j.egyr.2022.09.001>, Conference proceeding, Indexare ISI, - IF 5.1;
8. Dancă P., Jamin A., Nastase I., Janssens B., Bosschaerts W., Coșoiu C., *Experimental and numerical study of the flow dynamics and thermal behavior inside a car cabin: Innovative air diffusers and human body plumes interactions*, (2022), Energy Reports, Volume 8, Supplement 9, 2022, Pages 992-1002, ISSN 2352-4847, <https://doi.org/10.1016/j.egyr.2022.07.133>. - Conference proceeding, Indexare ISI, WOS:000841651400047, IF 5.1;
9. Sandu, M., Bode, F., Danca, P., and Voicu, I., *Water flow structure optimization between the screenings and grit removals in a wastewater plant*, Proceedings of the 8th International Conference on ENERGY and ENVIRONMENT (CIEM), Bucharest, 2017, pp 101-104, ISBN:978-1-5386-3943-6, DOI: 10.1109/CIEM.2017.8720839, Conference proceeding, Indexare ISI, WOS:000427610300022;

**b). Teza de doctorat**

Cu titlul: Strategii de ventilare pentru ameliorarea calității mediului interior în autovehicule

**c). brevete de invenție și alte titluri de proprietate industrială și intelectuală**

**d). cărți și capitole în cărți**

**Cb** - Cărți de specialitate publicate în edituri recunoscute (autor, coautor, editor).

Cb – 1. Florentina Bunea, Paul Alexandru Dancă, Ilinca Năstase – Determinarea vitezelor de curgeri cu ajutorul imaginilor de particule – PIV. Noțiuni generale și aplicații. 2021, ediție electronică, 152p, Biblioteca Națională a României, ISBN 978-973-0-34566-7

**e) articole/studii in extenso, publicate în reviste din fluxul științific internațional principal**

**Ris** - Reviste de specialitate de circulație internațională recunoscute (cotate / indexate in *Baza de date ISI*, sau indexate în alte Baze de Date Internationale - BDI specifice domeniului, care fac un proces de selecție a revistelor pe baza unor criterii de performanță). *Se menționează la fiecare lucrare includerea în Baza ISI [Accession Number, WOS, ultimul Factor Impact, ISSN] și/sau denumirea altei BDI.*

- Ris – 1. Bode F., Joldos T., Sirbu G.M., Danca P., Nastase I., Coșoiu C., *Impact of realistic boundary conditions on CFD simulations: A case study of vehicle ventilation*, (2025) Building and Environment, 267, art. no. 112264, DOI: 10.1016/j.buildenv.2024.112264, Indexare ISI, WOS:001354979900001, IF 7.6;
- Ris – 2. Danca P., Bunea F., Lungulescu M., Enache A.A., Rădoi A.E., Nicula N., *Water Sterilization using Ultraviolet Light-Emitting Diodes*, (2024) EEA - Electrotehnica, Electronica, Automatica, 72 (1), pp. 23 - 29, DOI: 10.46904/eea.24.72.1.1108003, Indexare BDI Scopus;
- Ris – 3. Bode F.I., Joldos T.O., Sirbu G.M., Danca P., Cosoiu C., Nastase I., *Innovative High-Induction Air Diffuser for Enhanced Air Mixing in Vehicles and Personalized Ventilation Applications* (2024) Energies , 17 (12), art. no. 2930, DOI: 10.3390/en17122930, Indexare ISI, WOS:001256349100001, IF 3.2;
- Ris – 4. Danca P., Bunea B., Bode F., Nicolae S., *Evaluation of the flow induced by different shrouds geometries*, (2023), Journal of Science and Arts, Issue: 1, pages: 281-288, ISSN: 1844-9581, DOI:10.46939/J.Sci.Arts-23.1-c03, Indexare ISI, WOS:000967778700023, IF 0.3;
- Ris – 5. Florin Ioan Bode, Angel Dogeanu, Laurențiu Tăcutu, Ilinca Nastase, Paul Alexandru Danca, Alexandra Ene (Angelescu), *Experimental study of an innovative perforated air diffuser at real scale conditions*, (2022), Energy Reports, Volume 8, Supplement 9, pages 1479-1490, ISSN 2352-4847, <https://doi.org/10.1016/j.egyr.2022.09.001>, Indexare ISI, WOS:000865783500008, IF 5.1
- Ris – 6. Nastase I., Danca P., Bode F., Croitoru C., Fechete L., Sandu M., Coșoiu C. I., *A regard on the thermal comfort theories from the standpoint of Electric Vehicle design — Review and perspectives*, (2022), Energy Reports, Volume 8, Pages 10501-10517, ISSN 2352-4847, <https://doi.org/10.1016/j.egyr.2022.08.186>, Indexare ISI, WOS:000861226700015 IF 5.1;
- Ris – 7. Dancă P., Jamin A., Nastase I., Janssens B., Bosschaerts W., Coșoiu C., Costin Coșoiu, *Experimental and numerical study of the flow dynamics and thermal behavior inside a car cabin: Innovative air diffusers and human body plumes interactions*, (2022) Energy Reports, Volume 8,

Supplement 9, , Pages 992-1002, ISSN 2352-4847, <https://doi.org/10.1016/j.egy.2022.07.133>, Indexare ISI, WOS:000841651400047, IF 5.1;

- Ris – 8. Dancă P., Coșoiu C.I., Nastase I., Bode F., Georgescu M.R., *Personalized Ventilation as a Possible Strategy for Reducing Airborne Infectious Disease Transmission on Commercial Aircraft*, (2022) Applied Sciences 12, no. 4: 2088. eISSN: 2076-3417, <https://doi.org/10.3390/app12042088>, Indexare ISI, WOS:000763191200001, IF 2.5;
- Ris – 9. Ion-Guță D.D., Ursu I., Toader A., Enciu D., Dancă P., Nastase I., Croitoru C.V., Bode F., Sandu M., *Advanced Thermal Manikin for Thermal Comfort Assessment in Vehicles and Buildings*, (2022) Applied Sciences 12, no. 4: 1826, eISSN: 2076-3417, <https://doi.org/10.3390/app12041826>, Indexare ISI, WOS:000763043300001, IF 2.5;
- Ris – 10. Danca, P., Bode, F., Meslem, A., Sandu, M., Croitoru C., Nastase, I., Lungu, C., and Batali, L., *Experimental Investigation of Thermal Vehicular Environment during the Summer Season*, (2022) Science and Technology for the Built Environment 28 (1), pages 42–54. doi:10.1080/23744731.2021.1911157, Indexare ISI, WOS:000643844600001, IF 1.6
- Ris – 11. Dan, M., Danca, P., Ursu, I., Nastase, I., *Advanced thermal manikin with neuro-fuzzy control*, Romanian Journal of Civil Engineering Volume 8 (2017), Nr. 4, ISSN 2068-3987, eISSN 2559-748, Indexare BDI Scopus;
- Ris – 12. Ouhimi, P., Lechartier, T., Danca, P., and Fabian, C, *Thermal comfort evaluation inside vehicles with classical indices - experimental approach*, Romanian Journal of Civil Engineering Volume 7 (2016), Nr. 2, ISSN 2068-3987, eISSN 2559-748, Indexare BDI Scopus;

**f). publicații în extenso, apărute în lucrări ale principalelor conferințe internaționale de specialitate**

- Vis-** Volumele unor manifestări științifice internaționale recunoscute, organizate în țară și străinătate, indexate ISI Reuters sau indexate în alte Baze de Date Internaționale - BDI specifice domeniului, care fac un proces de selecție a publicațiilor pe baza unor criterii de performanță. Se menționează la fiecare lucrare includerea în Baza ISI [ISI Proceedings, Accession Number, WOS, ISSN] și/sau denumirea altei BDI.
- Vis – 1. Paul Alexandru Danca, Florin Bode, Alexandru Cernei, Ilinca Nastase, Lucian Fechet Tutunaru, Nicoleta Tanase, *Innovative Seat Heating System for Electric Vehicles*, (2026), Proceedings of the 15th REHVA HVAC World Congress - CLIMA 2025 Lecture Notes in Civil Engineering, 763 LNCE, pp. 772 - 780, Springer, Cham. ISBN 978-3-032-06809-5 [https://doi.org/10.1007/978-3-032-06810-1\\_77](https://doi.org/10.1007/978-3-032-06810-1_77) – indexare BDI Scopus;
- Vis – 2. Paul Alexandru Danca, Corina Babutanu, Florentina Bunea, *Harnessing Waste Heat from Air Conditioning Units with Thermoelectric Generators*, (2025) Proceedings of the 15th REHVA HVAC World Congress - CLIMA 2025 , Lecture Notes in Civil Engineering, 762 LNCE, pp. 206 – 212, Springer, Cham. ISBN 978-3-032-06805-7 [https://doi.org/10.1007/978-3-032-06806-4\\_20](https://doi.org/10.1007/978-3-032-06806-4_20) indexare BDI Scopus;
- Vis – 3. Matei Georgescu, Paul Alexandru Danca, Alexandru Cernei, Frédéric Thevenet, Marie Verrielle and Ilinca Nastase, *Innovative thermal manikin for assessing local thermal comfort - development of a new hardware architecture*, (2025), 17th ROOMVENT Conference, E3S Web of Conferences 672, 01059, ISSN 2267-1242, DOI10.1051/e3sconf/202567201059, WOS:001740143800059 Indexare ISI;
- Vis – 4. Paul Alexandru Danca and Alexandru Cernei, *A comparative study of classical and*

- innovative lobbed air diffusers using temperature sensors for thermal environment/comfort in vehicle cabins*, (2025) 9th Conference of the Sustainable Solutions for Energy and Environment, EENVIRO 2024, E3S Web Conf., art. no. 608 02003, ISSN 2555-0403# DOI: <https://doi.org/10.1051/e3sconf/202560802003> indexare BDI Scopus;
- Vis – 5. Matei-Razvan Georgescu, Paul Alexandru Danca, Costin Cosoiu, Florin Ioan Bode, Ilinca Nastase, *Seat-integrated Personalized Ventilation Diffuser for Improving Air Quality Aboard Commercial Aircraft* (2025), 9th Conference of the Sustainable Solutions for Energy and Environment, EENVIRO 2024, E3S Web of Conferences, 608, art. no. 02006, ISSN 2555 0403, DOI: [10.1051/e3sconf/202560802006](https://doi.org/10.1051/e3sconf/202560802006) indexare BDI Scopus;
- Vis – 6. Alexandru Cernei, Tom Lacassagne, Thomas Fagniez, Paul Alexandru Danca, Matei-Răzvan Georgescu, Frédéric Thevenet, Marie Verrielle, Ilinca Nastase, *Exploring the impact of clothing insulation on thermal comfort evaluation using thermal manikins*, (2025), 9th Conference of the Sustainable Solutions for Energy and Environment, EENVIRO 2024, E3S Web of Conferences, 608, art. no. 02005, ISSN 2555-0403, <https://doi.org/10.1051/e3sconf/202560802005> indexare BDI Scopus;
- Vis – 7. Titus Otniel Joldos, Paul Alexandru Danca and Alexandru Cernei, *Comparative acoustic analysis of standard and innovative air diffusers with enhanced mixing capabilities*, 9th Conference of the Sustainable Solutions for Energy and Environment, EENVIRO 2024, E3S Web of Conferences, 608, art. no. 02002, ISSN 2555-0403, <https://doi.org/10.1051/e3sconf/202560802002> indexare BDI Scopus;
- Vis – 8. Emil Iakabos, Paul Alexandru Danca, Florea Chiriac, Anica Ilie, Alina Girip and Madalina Teodora Nichita, *Enhancing the performance of a heating, ventilation, and air conditioning system using ice slurry*, (2025) 9th Conference of the Sustainable Solutions for Energy and Environment, EENVIRO 2024, E3S Web of Conferences, 608, art. no. 01006, ISSN 2555-0403, <https://doi.org/10.1051/e3sconf/202560801006> indexare BDI Scopus;
- Vis – 9. Paul Alexandru Danca, Alexandru-Ionel Constantin, Corina Babutanu, Florentina Bunea, Nicoleta Tanase, Anca Manolescu, *Energy Recovery from Residential Air Conditioning Systems with a Thermoelectric Generator*, (2025) 12th International Conference on ENERGY and ENVIRONMENT (CIEM), Bucharest, Romania, 2025, pp. 1-4, ISBN:979-8-3315-9528-9, Doi: [10.1109/CIEM67454.2025.11284597](https://doi.org/10.1109/CIEM67454.2025.11284597) indexare BDI Scopus;
- Vis – 10. Paul Alexandru Danca, Alexandru Cernei, Ilinca Nastase, Mihnea Sandu, Nicoleta Tanase, Anca Manolecu, Florin Bode, *Seat Heating Technologies in Vehicles: A Comparative Performance Study*, (2025) 12th International Conference on ENERGY and ENVIRONMENT (CIEM), Bucharest, Romania, 2025, pp. 1-5, ISBN:979-8-3315-9528-9, doi: [10.1109/CIEM67454.2025.11284672](https://doi.org/10.1109/CIEM67454.2025.11284672) indexare BDI Scopus;
- Vis – 11. Florin Bode, Ilinca Nastase and Paul Alexandru Danca, *Reducing Indoor Air Pollution through Personalized Ventilation for Occupants in Office Environments and Confined Spaces*, (2024) 10th International Conference on Environment and Renewable Energy (ICERE 2024), E3S Web of Conferences, 514, art. no. 04004, ISSN 2555-0403, <https://doi.org/10.1051/e3sconf/202451404004> indexare BDI Scopus;
- Vis – 12. Paul Alexandru Danca, Florin Bode, Matei Razvan Georgescu, Cristiana Croitoru, Mihnea Sandu, Ilinca Nastase, *Advanced Personalized Ventilation strategies in aircraft cabins for enhanced protection against airborne pathogens*, (2024) 18th Conference of the International Society of Indoor Air Quality and Climate, INDOOR AIR 2024 - Conference Program and Proceedings, ISBN 979-833130681-6 indexare BDI Scopus;

- Vis – 13. Costin Cosoiu, George Chitaru, Ilinca Nastase, Matei Georgescu, Mihnea Sandu, Paul Alexandru Danca, Florin Bode, *An Overview of the Airplanes Cabin Ventilation Problems and Possible Directions for Mitigation*, (2023) 11th International Conference on ENERGY and ENVIRONMENT (CIEM), Bucharest, Romania, 2023, pp. 1-7, ISBN 979-835034078-5, Doi: [10.1109/CIEM58573.2023.10349791](https://doi.org/10.1109/CIEM58573.2023.10349791) indexare BDI Scopus;
- Vis – 14. Paul Alexandru Danca, Stefan-Mugur Simionescu, Gabriela Cîrciumaru, Daniela-Elena Gogoășe Nistoran, Rares Andrei Chihaiia and Corina Babutanu, *Fish guidance system for a river water intake - Experimental and numerical study*, (2023), 8th Conference of the SustainableE Solutions for Energy and Environment EENVIRO, IOP Conference Series: Earth and Environmental Science, 1185 (1), art. no. 012018, ISSN 1755-1307, DOI: [10.1088/1755-1315/1185/1/012018](https://doi.org/10.1088/1755-1315/1185/1/012018), WOS:001007152800018 indexare ISI;
- Vis – 15. Lucian Fechete , Florin Bode, Ilinca Năstase, Paul Alexandru Danca, Croitoru Cristiana, Sandu Mihnea, *Thermal Sensitivity Maps of the Human Body for Vehicle Personal Comfort System Design—Preliminary Results*, (2023) Environmental Science and Engineering, pp. 2413 - 2421, DOI: [10.1007/978-981-19-9822-5\\_260](https://doi.org/10.1007/978-981-19-9822-5_260) Indexare BDI;
- Vis – 16. Danca P.A., Babutanu C., Bunea F., Dogeanu A., *A possibility of harnessing the heat discarded into the environment using thermoelectric generators*, (2023) IOP Conference Series: Earth and Environmental Science, 1234 (1), art. no. 012006, DOI: [10.1088/1755-1315/1234/1/012006](https://doi.org/10.1088/1755-1315/1234/1/012006) indexare BDI Scopus;
- Vis – 17. Georgescu M.-R., Cernei A., Nastase I., Danca P., Guta D., Ursu I., *Development and Use of a New Architecture of Thermal Manikin for Assessing Local Thermal Comfort* (2023) 2023 11th International Conference on ENERGY and ENVIRONMENT, CIEM 2023, DOI: [10.1109/CIEM58573.2023.10349780](https://doi.org/10.1109/CIEM58573.2023.10349780) indexare BDI Scopus;
- Vis – 18. Danca P., Bunea F., Babutanu C., Nedelcu A., Grecu I.S., *Experimental study of the flow induced by an axial hydrokinetic turbine*, (2023) IOP Conference Series: Earth and Environmental Science, 1136 (1), art. no. 012058, DOI: [10.1088/1755-1315/1136/1/012058](https://doi.org/10.1088/1755-1315/1136/1/012058) indexare BDI Scopus;
- Vis – 19. Nedelcu A., Danca P.A., Babutanu C., Nicolaie S., Bunea F., *Energy Harvesting Using Thermoelectric Generators – Case Study*, (2023) International Multidisciplinary Scientific GeoConference Surveying Geology and Mining Ecology Management, SGEM, 23 (4.1), pp. 59 - 65, DOI: [10.5593/sgem2023/4.1/s17.08](https://doi.org/10.5593/sgem2023/4.1/s17.08) indexare BDI Scopus;
- Vis – 20. Danca P.A., Al Bayati A., Nastase I., Sandu M., Ivanov M., Terziev A., Mijorsk S., *Advanced solutions to improve heat recovery from wastewater in a double heat exchanger*, (2023) IOP Conference Series: Earth and Environmental Science, 1128 (1), art. no. 012008, DOI: [10.1088/1755-1315/1128/1/012008](https://doi.org/10.1088/1755-1315/1128/1/012008) indexare BDI Scopus;
- Vis – 21. Sandu, M., A. Albaiyati, I. Nastase, P. Danca, F. Bode, C. Croitoru, *Advanced solutions to improve heat recovery from wastewater in a double heat exchanger* , Proceedings CLIMA2022 | 14th REHVA HVAC World Congress, 22-25 May 2022, Rotterdam, DOI: <https://doi.org/10.34641/mg.33>, ISBN: 978-94-6366-564-3 indexare BDI Scopus;
- Vis – 22. Jamin, A., P. Danca, B. Janssens, F. Bode, I. Nastase, W. Bosschaerts, *Experimental and CFD comparison of driver's thermal plume with classical air diffusers*, Proceedings CLIMA2022 | 14th REHVA HVAC World Congress, 22-25 May 2022, Rotterdam, DOI: <https://doi.org/10.34641/mg.33>, ISBN: 978-94-6366-564-3 indexare BDI Scopus;
- Vis – 23. Danca, P., Nastase, I. and Bode, F., *The influence of different air flows introduced on the thermal comfort of car passengers during the cooling period – Numerical Study*. IOP Conference

- Series: Earth and Environmental Science, 2021. 664(1): p. 012112, doi:10.1088/1755-1315/664/1/012112 indexare BDI Scopus;
- Vis – 24. Danca, P., Nastase, I., Croitoru, C., Bode, F. and Sandu, M., *Thermal comfort evaluation inside a car parked under sun and shadow using a thermal manikin*. IOP Conference Series: Earth and Environmental Science, 2021. 664(1): p. 012064, doi:10.1088/1755-1315/664/1/012064 indexare BDI Scopus;
- Vis – 25. Albaiyati, M.S.A., Danca, P. and Sandu, M., *Improving the efficiency of energy recovery from wastewater by using a double heat exchanger to protect the environment*. IOP Conference Series: Earth and Environmental Science, 2021. 664(1): p. 012063, doi:10.1088/1755-1315/664/1/012063 indexare BDI Scopus;
- Vis – 26. Nedelcu, A., Bunea, F., Danca, P., Chihaiia, R., Babutanu, C., Marin, D., and Ciocan, G. D., *Experimental research on a hydrokinetic turbine model*. IOP Conference Series: Earth and Environmental Science, 2021. 664(1): p. 012061, doi:10.1088/1755-1315/664/1/012061 indexare BDI Scopus;
- Vis – 27. Danca, P., Băbuțanu, C., Bunea, F. and Nedelcu, A., *Mixing Flow Characteristics in cylindrical tank*. IOP Conference Series: Earth and Environmental Science, 2021. 664(1): p. 012060, doi:10.1088/1755-1315/664/1/012060 indexare BDI Scopus;
- Vis – 28. Danca, P., Nastase, I., Bode, F., Croitoru C., Dogeanu, A., and Meslem, A. *Evaluation of the thermal comfort for its occupants inside a vehicle during summer*, Materials Science and Engineering 595 (2019) 012027 IOP Publishing doi:10.1088/1757-899X/595/1/012027 indexare BDI Scopus;
- Vis – 29. Bode, F., Danca, P., Nastase, I., Meslem, A., Croitoru, C. and Dogeanu, A. - *Developing a realistic CFD model of the air distribution inside a vehicle cockpit*, Proceedings of Roomvent&Ventilation 2018: Excellent Indoor Climate and High Performing Ventilation, ISBN 978-952-5236-48-4 indexare BDI Scopus,
- Vis – 30. Paul Alexandru Danca, Florin Bode, Ilinca Năstase, Cristiana Verona Croitoru and Amina Meslem, *A Experimental and numerical study of the air distribution inside a car cabin*, (2019), Proceedings of the Proceedings of the EENVIRO 2018 Conference, E3S Web of Conferences 85, 02014, pp. 1-6, 6 pg. ISSN: 2267-1242 <https://doi.org/10.1051/e3sconf/20198502014>, WOS:000468021200026 indexare ISI;
- Vis – 31. Danca, P., Bode, F., Dogeanu, A., Croitoru C., Sandu, M., Meslem, A., and Nastase, I., *Experimental study of thermal comfort in a vehicle cabin during the summer season*, Proceedings of the 13th Clima2019 Conference, E3S Web of Conferences 111, 01048 (2019) DOI: <https://doi.org/10.1051/e3sconf/201911101048> indexare BDI Scopus;
- Vis – 32. Danca, P., Bode, F., Nastase, I., and Meslem, A., *CFD simulation of a cabin thermal environment with and without human body – thermal comfort evaluation*, Advances in Heat and Transfer in Built Environment, Bucharest, E3S Web Conf., 32 (2018) 01022, pp 111-118, ISBN: 978-1-5108-5878-7, DOI: 10.1051/e3sconf/20183201018 indexare BDI Scopus;
- Vis – 33. Horobet, T., Danca, P., Nastase, I., and Bode, F., *Preliminary research on virtual thermal comfort of automobile occupants*, Advances in Heat and Transfer in Built Environment, Bucharest, E3S Web Conf., 32 (2018) 01022, pp136-140, ISBN: 978-1-5108-5878-7, DOI: 10.1051/e3sconf/20183201022 indexare BDI Scopus;
- Vis – 34. Mihnea Sandu, Florin Bode, Paul Alexandru Danca and Ionut Voicu, *Water flow structure optimization between the screenings and grit removals in a wastewater plant*, (2017) Proceedings of the 8th International Conference on ENERGY and ENVIRONMENT (CIEM), Bucharest, pp.

- 101-104, 4 pg, ISBN:978-1-5386-3943-6, DOI: 10.1109/ CIEM.2017.8720839, WOS:000427610300022 indexare ISI;
- Vis – 35. Florin Bode, Ilinca Nastase, Paul Alexandru Danca and Amina Meslem, *The influence of the inlet angle of vehicle air diffuser on the thermal comfort of passengers*, (2017) Proceedings of the 8th International Conference on ENERGY and ENVIRONMENT (CIEM), Bucharest, pp. 442-446, 5 pg. ISBN:978-1-5386-3943-6, DOI: 10.1109/CIEM. 2017.8720839, WOS:000427610300094 indexare ISI;
- Vis – 36. Paul Alexandru Danca, Florin Bode, Ilinca Nastase, Amina Meslem, *On the possibility of CFD modeling of the indoor environment in a vehicle*, (2017), Conference on Sustainable Solutions for Energy and Environment (EENVIRO), Energy Procedia 112, pp 656-663, 8 pg., ISSN: 1876-6102, DOI: 10.1016/j.egypro. 2017.03.1086, WOS:000404848300081 indexare ISI;
- Vis – 37. Paul Alexandru Danca, Andreea Vartires and Angel Dogeanu, *An overview of current methods for thermal comfort assessment in vehicle cabin*, (2016), Conference on Sustainable Solutions for Energy and Environment (EENVIRO - YRC)Energy Procedia 85 pp 162-169, 8 pg., ISSN: 1876-6102, DOI: 10.1016/ j.egypro.2015.12.322, WOS:000377911100020 indexare ISI;
- Vis – 38. Andreea Vartires, Angel Dogeanu and Paul Alexandru Danca, *The human thermal comfort evaluation inside the passenger compartment*, Proceedings of the 15th International Multidisciplinary Scientific Geoconference (SGEM), Bulgaria, 2015, pp. 1113-1120, 8 pg. ISSN: 1314-2704, ISBN:978-619-7105-38-4, DOI:10.5593/SGEM2015/B41/S19, WOS:000371056000143 indexare ISI;

#### **g). alte lucrări și contribuții științifice**

- P** – Proiecte de cercetare-dezvoltare – inovare obținute prin competiție, pe bază de contract/grant, în țară/străinătate (**Pn** – naționale, **Pi** - internaționale).
- Pi-1. **EU-CONEXUS ENABLES**: Promoting excellence through innovative eco-systems- HORIZONWIDERA-2023-ACCESS-03 – 2024-2029 - membru în echipa de cercetare
- Pi-2. **NetZeRoCities** - National Competence Center and solutions for the development of Climate Neutral and Smart Cities, ctr. nr. 760007/30.12.2022, PNRR-III-C9-2022 - I5, (2022-2025) - membru în echipa de cercetare
- Pi-3. **„Prototiparea unui manechin termic multi-instrumentat”** – Ctr. Cercetare 160/2021 cu Institut Mines Télécom Nord Europe (50keuro) - responsabil de obiectiv;
- Pi-4. EU-CONEXUS RESEARCH FOR SOCIETY - EU-CONEXUS-RFS Call: H2020-IBA-SwafS-Support-1-2020 (Support for the Research and Innovation Dimension of European Universities) 2021-2025 - responsabil de obiectiv;
- Pi-5. **Nzeb Ready** - Enhancing Market Readiness For Nzeb Implementation - H2020-LC-SC3-EE-2020-2, “Stimulating demand for sustainable energy skills in the construction sector”, 2021-2023 - membru în echipa de cercetare;
- Pi-6. **World Bank Energy and Extractives Global Practice ECA** region Project - Energy Efficiency Improvement through Renovation of Buildings, Romania's buildings stock data collection and verification 2019 (10 kEuro) - membru în echipa de cercetare;
- Pn-1. **DeMicUV** - Stand pentru decontaminare microbiană a apei utilizând diode emițătoare de raze UVC, P\_40\_432 / 105567, Contract nr. 126/2016 - responsabil de proiect

- Pn-2. **i-Turb** sistem inteligent integrat pentru obținerea celui mai bun echilibru între potențialul ecologic al apei și randamentul turbinei, PN-III-CERC-CO-PTE-2-2019, 2022-2024 - membru în echipa de cercetare
- Pn-3. **INNOVENT** - Innovative high induction air diffusers for improved indoor environmental quality in vehicles - PN-III-P2-2.1-PED-2021-0559, 2022-2024, (110 kEuro) - responsabil de obiectiv;
- Pn-4. **SAFE** - Innovative seating system to reduce SARS-CoV-2 transmission on board of commercial aircrafts - PN-III-P2-2.1-PED-2021-2265, 2022-2024, (110 kEuro) - responsabil de obiectiv;
- Pn-5. **ECO-WIBB** - Priza de apă ecologică hibridă, cu barieră comportamentală, pentru reducerea impactului asupra faunei piscicole și morfologiei raurilor - PN-III-P2-2.1-PED-2019-1444, 2020-2022 (100 kEuro) - membru în echipa de cercetare;
- Pn-6. **HyPER** - Hydrokinetic eco - Power System for Ultra Low Head Water Streams - PN-III-P2-2.1-PED-2019-3247 (100 kEuro) - membru în echipa de cercetare;
- Pn-7. **XTREME** - Innovative system to extend the range of electric vehicles at improved thermal comfort - PN-III-P2-2.1-PED-2019-4249 - (100 kEuro) - membru în echipa de cercetare;
- Pn-8. **POC2014-2020**, Turbină hidrocinetică pretabilă cursurilor de ape naturale și artificiale, cu cădere mică, *contract subsidiar* de cercetare industrială și/sau dezvoltare experimentală în colaborare efectivă între organizația de cercetare și întreprindere, în cadrul contractului, ctr. Nr.126-D4/2020, (1804000 RON) - membru în echipa de cercetare;
- Pn-8. **PN3, Program Nucleu 2019-2022, Creșterea eficienței echipamentelor de producere a energiei din surse regenerabile prin utilizarea a noi metode de caracterizare a curgerii fluidelor de lucru**, contract nr. 46N/2019 – PN19310201, (1037615 RON) - membru în echipa de cercetare;
- Pn-9. **Contract burse doctorale și postdoctorale INCAS**, contract nr. 133/30.10.2018 - Activități de cercetare-dezvoltare în domeniul mecanicii fluidelor, furnizarea de servicii tehnice specializate și consultanță, activități de proiectare și teste în instalații specializate efectuate de Furnizor în cadrul Departamentului de Hidraulică și Protecția Mediului al Facultății de Hidrotehnică, în cadrul programelor de Doctorat și postdoctorat, (2018-2021);
- Pn-10. **SmartMonWater** -Sistem inteligent de monitorizare în timp real a calității apei, PN-III-P2-2.1-PTE-2019- 0394, 2020-2022, (100k Euro) - membru în echipa de cercetare;
- Pn-11. **CIA-CLIM**, Intelligent buildings adaptable to the effects of climate change PN-III-P1-1.2-PCCDI-2017-0391, 2018-2021, (1000 kEuro) - membru în echipa de cercetare;
- Pn-12. **CONTUR**, Emerging technologies for counteracting effects induced by turbulent flows of fluid media, PN-III-P1-1.2-PCCDI-2017-0868, 2018-2021, (1000 kEuro) - membru în echipa de cercetare;
- Pn-13. **QUEST** -Advanced air diffusion system of the crew quarters for the ISS and deep space habitation systems, STAR-CDI-C3-2016-577, (450 kEuro) - membru în echipa de cercetare;
- Pn-14. **SCOPE**-intelligent Solar COLlector with Phase change materials intEgration– PN-III-P2-2.1-PED-2016-1154 (100 kEuro) - membru în echipa de cercetare;
- Pn-15. **SOLECT** - Environment improvement of Sludge dewatering from the wastewater treatment system of SEAU Glina by Optimizing the Local Effluent Capture and Treatment, PN-III-P2-2.1-BG-2016-0158 (100 kEuro) - membru în echipa de cercetare;
- Pn-16. **PHANTOM** - Passive flow control for heat and mass transfer enhancement of impinging jets PN-III-P4-ID-PCE-2016-0758, 2017-2019, (200 kEuro) - membru în echipa de cercetare;

- Pn-17. **SMARTSENSE** - Real time SMART application for urban air quality management respecting the SENSitive categories of population, PN-III-P2-2.1-PED-2016-1285, 2017-2018 (150 kEuro) - membru în echipa de cercetare;
- Pn-18. **INSIDE** Innovative strategies of HVAC systems for high indoor environmental quality in vehicles PN II PT PCCA 2013 4 0569 (350 kEuro) - membru în echipa de cercetare;

#### **Lucrări prezentate la diferite seminarii/expoziții, conferințe, etc.**

- E – 1. Danca P.A., Nicolae S., Bode F., Bunea F., *Experimental and numerical investigation of hydrokinetic turbine shrouds*, proceeding of XXIIInd International Multidisciplinary Scientific GeoConference Surveying, Geology and Mining, Ecology and Management – SGEM 2022, 2 - 11 July, 2022;
- E – 2. Danca P.A., Simionescu SM, Cîrciumaru G, Gogoășe-Nistoran DE, Chihaia RA, Babutanu C *Fish guidance system for a river water intake - experimental and numerical study*, 8th Conference of the Sustainable Solutions for Energy and Environment, EENVIRO 2022, Bucharest, 16-20 October;
- E – 3. Danca PA, Al Bayati A, Nastase I, Sandu M, Ivanov M, Terziev A, Advanced solutions to improve heat recovery from wastewater in a double heat exchanger, 27th Power Engineering and Power Machines Conference - PEPM 2022, Sofia, Bulgaria, 16-19 Septembrie, 2022;
- E – 4. Danca PA, Dogeanu A, Tacutu L, Cosoiu C and Nastase I, Experimental study of an innovative perforated air diffuser at real scale conditions, 8th European-African Conference on Wind Engineering, 8EACWE 2022, Bucharest, Romania, 20-23 Septembrie, 2022;
- E – 5. Paul Alexandru Danca, Ilinca Nastase, Mihnea Sandu, Matei Georgescu, Cristiana Croitoru Consideration on the role ventilation and air conditioning systems during COVID-19 times: source control, ventilation, air distribution, International Scientific Conference on SOCIAL SCIENCES - ISCSS2023, 20-25 august 2023, Varna, Bulgaria;
- E – 6. Florin Bode, Titus Joldos, Gabriel Mihai Sirbu, Paul Danca, Ilinca Nastase, Novel air diffuser with increased induction of ambient air for ventilation in vehicles, 11th International Conference on Sustainable Development in the Building and Environment, SuDBE2023 14 - 18 august 2023, Alto, Finlanda;
- E – 7. Costin Cosoiu, George Chitaru, Ilinca Nastase, Matei Georgescu, Mihnea Sandu, Paul Danca, Florin Bode, An overview of the airplanes cabin ventilation problems and possible directions for mitigation, 11th International Conference on ENERGY and ENVIRONMENT CIEM 2023, 26 – 27 octombrie 2023, București, România.

#### **OBSERVAȚII**

a) - În categoriile II, III și IV se includ numai lucrările deja publicate sau aflate în procesare în edituri, respectiv nu se includ lucrările în manuscris sau alte lucrări (comunicări, referate tematice, etc.). Articolele/studiile în curs de publicare, justificate cu documente, nu vor depăși 10% din total.

b) Lucrările reeditate care nu includ contribuții noi ale candidatului și lucrarea de bază (inițială) se înregistrează sub același indicativ, precizându-se la fiecare numărul ediției.

c) Articolele/studiile publicate în reviste sau volumele unor manifestări științifice, reluate de alte publicații, vor fi înregistrate o singură dată, la poziția inițială, cu menționarea reluărilor/reeditărilor.

d) Recenziile/rezumatul unor lucrări, apărute în alte publicații, vor fi înregistrate la poziția lucrării inițiale, cu menționarea acestora (nu vor fi poziții separate).

e) Fiecare lucrare este descrisă în limba în care a fost realizată (publicată, prezentată), titlul fiind scris italic

f) Autorii vor fi prezentați, în totalitate, în ordinea din publicație, cu sublinierea ***candidatului***.

g) Se vor specifica editura, revista sau manifestarea și/sau alte elemente de localizare, cu menționarea intervalului de pagini din publicație, numărul total de pagini sau alte date similare (după caz), anul sau perioada de realizare.