

Universitatea Națională de Știință și Tehnologie POLITEHNICA București

Facultatea de Energetică

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Gradul didactic: Șef de lucrări

L I S T A

lucrărilor științifice în domeniul disciplinelor din postul didactic

A. Teza de doctorat

Titlul: *Influența suprafețelor structurate asupra aerodinamicii jeturilor înecate*; domeniul de studii doctorale: inginerie energetică; data susținerii publice a tezei: 18 octombrie 2018.

B. Cărți și capitole în cărți publicate în ultimii 10 ani

1. **Simionescu Ș.-M.**, Gogoșe Nistoran D.-E., 2022. Mecanica fluidelor - Îndrumar de laborator, Editura Politehnica Press, ISBN 978-606-515-999-0;
2. Bălan C., Tănase N.-O., Nistoran D.-E., **Simionescu Ș.-M.**, Damian I.-R., 2018. Mecanica fluidelor - Vizualizarea curgerii, Editor-coordonator Corneliu Bălan, grup REOROM, Album, editura Politehnica Press, București, ISBN 6065157945, ISSN 978-606-515-794-1.

C. Lucrări indexate ISI/BDI publicate în ultimii 10 ani

1. Cîrciumaru G., Chihăia R.-A., Voinea A., Gogoșe Nistoran D.-E., **Simionescu Ș.-M.**, El-Leathey L.-A., Măndrea L., *Experimental Analysis of a Fish Guidance System for a River Water Intake*, Water vol. 14, issue 3, Feb. 2022, DOI: 10.3390/w14030370, WOS: 000755284100001, eISSN: 2073-4441, IDS Number: YZ2AL;
2. Dancă P.-A., **Simionescu Ș.-M.**, Cîrciumaru G., Gogoșe-Nistoran D.-E., Chihăia R.-A., Băbuțanu C., *Fish guidance system for a river water intake - experimental and numerical study*, IOP Conference Series: Earth and Environmental Science, Vol. 1185, The 8th Conference of the Sustainable Solutions for Energy and Environment EENVIRO 2022, Bucharest, Romania, 012018, DOI: 10.1088/1755-1315/1185/1/012018, WOS: 001007152800018, ISSN: 1755-1307, IDS Number: BV2KU;
3. Gogoșe Nistoran D.-E., Ionescu C.-S., **Simionescu Ș.-M.**, *Influence of dam break scenarios on flood wave characteristics. Case study – Paltinu Dam, Romania*, IOP Conference Series: Earth and Environmental Science; Vol. 1136, Issue 1, Jan 2023, 14th International Conference on Hydroinformatics 04/07/2022 - 08/07/2022 Bucharest, Romania, 012031, DOI: 10.1088/1755-1315/1136/1/012031;
4. **Simionescu Ș.-M.**, Gogoșe D.-E., Cîrciumaru G., Chihăia R.-A., *Numerical Simulation of Water Flow through an Ecological River Intake*, "HIDRAULICA" Magazine of Hydraulics, Pneumatics, Tribology, Ecology, Sensorics, Mechatronics, No. 2/2022, pp. 45-54;

5. Gogoșe Nistoran D.-E., **Simionescu Ș.-M.**, Cîrciumaru G., Chihăia R.-A., *Numerical simulations of flow over a side weir for diversion structures and water intakes*, IOP Conference Series. Earth and Environmental Science Vol. 1136, Issue 1, Jan. 2023, 14th International Conference on Hydroinformatics 04/07/2022 - 08/07/2022, Bucharest, Romania, 012035, DOI: 10.1088/1755-1315/1136/1/012035
6. Budea, S., **Simionescu Ș.-M.**, *Experimental research on Darrieus type H wind turbines with semi-open blades*, Proceedings of International Conference on energy and Environment (CIEM 2019, Timișoara, România), pp. 157-161, 2019, ISBN: 978-1-7281-1532-0, DOI: 10.1109/CIEM46456.2019.8937691, WOS: 000630902700034;
7. **Simionescu, Ș.-M.**, Bălan, C., *On the turbulence generated by air jets impinging on structured solid walls*, Proceedings of International Conference on energy and Environment (CIEM 2019, Timișoara, România), pp. 195-199, 2019, ISBN: 978-1-7281-1532-0, DOI: 10.1109/CIEM46456.2019.8937585, WOS: 000630902700042;
8. Nistoran, D.E.G., Ionescu, C.S., **Simionescu, Ș.-M.**, Opriș I., *Design and calibration of a linear proportional weir for flow control facilities*, Proceedings of International Conference on energy and Environment (CIEM 2019, Timișoara, România), pp. 200-204, 2019, ISBN: 978-1-7281-1532-0, DOI: 10.1109/CIEM46456.2019.8937698, WOS: 000630902700043;
9. Dhondoo, N., **Simionescu, Ș.-M.**, Bălan, C., *Impinging jets array: an experimental investigation and numerical modeling*, Proceedings of Sustainable Solutions for Energy and Environment (EENVIRO 2018), E3S Web of Conferences, Volume 85, Article Number 05004, ISSN: 2267-1242, DOI: 10.1051/e3sconf/20198505004, WOS: 000468021200044;
10. **Simionescu, Ș.-M.**, Dhondoo, N., Bălan, C., *Influence of surface structure on impinging jets aerodynamics*, Proceedings of the 8th International Conference on Energy and Environment (CIEM), Bucharest, 2017, pp. 419-423, ISBN 978-1-5386-3943-6, DOI: 10.1109/CIEM.2017.8120839, WOS: 000427610300089;
11. Broboană, D., Ionescu, C.S., **Simionescu, Ș.-M.**, Bălan, C., *Jetting flow and diffusion process in the vicinity of convex surfaces*, Proceedings of the 8th International Conference on Energy and Environment (CIEM), Bucharest, 2017, pp. 414-418, ISBN 978-1-5386-3943-6, DOI: 10.1109/CIEM.2017.8120827, WOS: 000427610300088;
12. **Simionescu, Ș.-M.**, Tănase, N.-O., Broboană, D., Bălan, C., *Impinging air jets on flat surfaces at low Reynolds numbers*, Energy Procedia 112 (2017), pp. 194-203, ISSN 1876-6102, DOI: 10.1016/j.egypro.2017.03.1083, WOS: 000404848300024;
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14. **Simionescu, Ș.-M.**, Bălan, C., *CFD study on convective heat exchange between impinging gas jets and solid surfaces*, Energy Procedia 85 (2016), pp. 481-488, ISSN 1876-6102, DOI: 10.1016/j.egypro.2015.12.231, WOS 000377911100059;
15. **Simionescu, Ș.-M.**, Düzel Ü., Esposito, C., Ilich, Z., Bălan, C., *Heat transfer coefficient measurements using infrared thermography technique*, Proceedings of the 9th International Symposium on Advanced Topics in Electrical Engineering ATEE, May 7-9, 2015, Bucharest,

- Romania, pp. 591-596, ISSN 2068-7966, DOI: 10.1109/ATEE.2015.7133875, WOS 000368159800112;
16. Omocea, I. L., Damian, I. R., **Simionescu, Ș. M.**, Bălan, C., Mihăilescu, M., *Time evolution of dimethyl carbinol in water vortex rings*, Proc. SPIE vol. 9258, Advanced Topics in Optoelectronics, Microelectronics and Nanotechnologies VII, 92582P (February 21, 2015), ISSN: 0277-786X, DOI:10.1117/12.2072347, WOS 000354179700097;
 17. Tănase, N.-O., **Simionescu, Ș.-M.**, Păduroiu, M. M., Bălan, C., *Determination of the separation points for the flow around blunt bodies: experimental and numerical studies*, The 7th Conference of the Sustainable Solutions for Energy and Environment, EENVIRO 2020, 21 - 23 October Bucharest, Online Platform, IOP Conference Series: Earth and Environmental Science, 664(1), 012015, Scopus;
 18. Ciocănea, A., Budea, S., **Simionescu, Ș.-M.**, Lambescu, O., *Experimental research on increasing the static torque for a small Savonius rotor of helical type*, The 7th Conference of the Sustainable Solutions for Energy and Environment, EENVIRO 2020, 21 - 23 October Bucharest, Online Platform, IOP Conference Series: Earth and Environmental Science, 664(1), 012033;
 19. Nistoran, D.-E.G., **Simionescu, Ș.-M.**, Tănase, N.-O., *Experiments and numerical simulations of water flow over a slit weir for measuring very small discharges at river intakes*, Proceedings of 2021 10th International Conference on ENERGY and ENVIRONMENT, CIEM 2021;
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 21. Ionescu, C. S., Gogoșe Nistoran, D. E., Opreș, I., **Simionescu, Ș.-M.**, *Sensitivity Analysis of Sharp-Crested Weirs as a Function of Shape Opening, for Small Discharges*, "HIDRAULICA" Magazine of Hydraulics, Pneumatics, Tribology, Ecology, Sensorics, Mechatronics, No. 2/2019, pp. 43-51, ISSN: 1453-7303;
 22. **Simionescu, Ș.-M.**, Dhondoo, N., Bălan, C., *Study of an array of two circular jets impinging on a flat surface*, Article number 01021, E3S Web of Conferences Volume 32, eISSN: 2267-1242, 2018;
 23. **Simionescu, Ș.-M.**, Düzel, Ü., Esposito, C., Ilich, Z., Broboană, D., *Particle Image Velocimetry measurements on a turbulent air jet over a flat plate*, U.P.B. Scientific Bulletin, Series D – Mechanical Engineering, Vol. 78, Issue 3, pp. 143-152, 2016, ISSN 1454-2358;
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 25. **Simionescu, Ș.-M.**, Anton, C.-R., Tănase, N.-O., *Vortex rings in a Hele-Shaw cell. Numerical simulations and experiments*, Mathematical Modelling in Civil Engineering, Special Issue, pp. 114-118, November 2014, ISSN 2066-6926, eISSN 2066-6934;

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27. Budea, S., **Simionescu, Ș.-M.**, Cazacu, M. D., *Experimental research on viscous fluid flow through sealing labiriths*, „HIDRAULICA” Magazine of Hydraulics, Pneumatics, Tribology, Ecology, Sensorics, Mechatronics, No. 4/2014, pp. 18-21, ISSN: 1453-7303;
28. Budea, S., **Simionescu, Ș.-M.**, *Numerical modeling of viscous fluid flow by sealing labyrinths*, “HIDRAULICA” Magazine of Hydraulics, Pneumatics, Tribology, Ecology, Sensorics, Mechatronics, No. 1/2014, pp. 32-38, ISSN: 1453-7303.

D. Lucrări publicate în ultimii 10 anii în reviste și volume de conferințe cu referenți (neindexate)

1. Tănase, N.-O., Damian, I. R., Omocea, I. L., **Simionescu, Ș.-M.**, Broboană, D., *Soluții ale ecuației de mișcare pe linii de curent*, Conferința „High Performance Engineering Solution”, Sinaia, Romania, ISBN 978-973-0-16952-2, 2014, published on conference CD.

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