

**Activitate stiintifica**  
**Prof. dr. Teodor Grosan**

**A. Articole publicate cotate ISI**

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- 15) C. Revnic, T. Grosan, J. Merkin and I. Pop, Mixed convection near an axisymmetric stagnation point on a vertical cylinder, *Journal of Engineering Mathematics*, Vol. 64, pp. 1-13, 2009.
- 16) C.Revnic, T.Grosan, I.Pop and D.B. Ingham, Free convection in a square cavity filled with a bidisperse porous medium, *Int. J. Thermal Sciences*, Vol. 48, pp. 1876-1883, 2009.
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- 46) T. Grosan, M. Sheremet, I. Pop, S. Pop, Double-Diffusive Natural Convection in a Differentially Heated Wavy Cavity Under Thermophoresis Effect, *Journal of Thermophysics and Heat Transfer*, Vol. 32, No. 4 (2018), pp. 1045-1058, <https://doi.org/10.2514/1.T5389>
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#### **E. Cărți si capitole publicate/editate în edituri naționale și internaționale**

1. T. Grosan, *Transfer Convectiv și Radiativ de Căldură în Medii Poroase*, Casa Cărții de Știință, Cluj-Napoca, 2004 (ISBN: 973-686-651-3, 176 pag.)
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3. *Proceedings of the 5<sup>th</sup> International Conference on Applications of Porous Media*, 25-28 August, 2013, Cluj-Napoca, Romania, (I. Pop, A.A. Mohamad, R. Trîmbițaș, T. Grosan), Presa Universitară Clujeană, Cluj-Napoca, 2013.
4. T. Grosan, M.A. Sheremet, I. Pop, Heat Transfer Enhancement in Cavities Filled with Nanofluids. In: *Advances in New Heat Transfer Fluids: From numerical to*

Experimental Techniques (ed. A. A. Minea), CRC Press, Boca Raton, 2017, pp. 267-286.

5. T. Grosan, F.O. Patrulescu, C. Revnic, Transport Phenomena in Nanofluids, Porous Media and Bidisperse Porous Media, Casa Cărții de Știință, Cluj-Napoca, 2021 (ISBN: 978-606-17-1806-1, 206 pag.)
6. J. H. Merkin, I. Pop, Y. Y. Lok, T. Grosan, Similarity Solutions for the Boundary Layer Flow and Heat Transfer of Viscous Fluids, Nanofluids, Porous Media, and Micropolar Fluids, Elsevier, 2021 (will appear in Spetember) (ISBN: 978-012-82-1188-5, 362 pag.)

## **F. Conferințe**

1. National Conference of Fluid Mechanics, Brașov, September, 1999, Romania
2. National Conference of Fluid Mechanics, București, October, 2001, Romania
3. Fourth Joint Conference on Mathematics and Computer Science. Felix, June 2001, Romania
4. International Summer School of Porous Media, 29.06.2001-05.07.2001, Neptun, Romania
5. ISS 2002 Multiscale Problems, 24.04.2002-27.04.2002, Heidelberg, Germania
6. Emerging Technologies and Techniques in Porous Media, 09.07.2003-20.07.2003, Neptun-Olimp, Romania
7. Fluent CFD Konferenz, Bingen (Germany), 29-30 September 2004, A Fast Radiative Heat Transfer Model for Semitransparent Materials
8. Glass Days 2005, Kaiserslautern, 14-15 Aprilie, 2005, Fluent implementation of formal solution approximation (FSA) for radiative heat transfer
9. National Conference of Fluid Mechanics, October 2006, Brașov (Romania)
10. 6-th CONGRESS OF ROMANIAN MATHEMATICIANS, June 28 - July 4, 2007, Bucharest, Romania
11. Stochastic Phenomena, Workshop and summer school, Babes-Bolyai University, Cluj-Napoca, May 26-31, 2008
12. MACS - 7th Joint Conference on Mathematics and Computer Science, Babes-Bolyai University, Cluj-Napoca, July 3-6, 2008
13. 2008 IEEE International Conference on Automation, Quality and Testing, Robotics (AQTR 2008) THETA 16th ed, May 22-25, Cluj-Napoca, Romania
14. 2010 IEEE International Conference on Automation, Quality and Testing, Robotics (AQTR 2010) THETA 17th ed., May 28-30, Cluj-Napoca, Romania
15. 5th WSEAS International Conference on Environmental and Geological Science and Engineering, Vienna, November 10-12, 2012
16. 5th International Conference on Applications of Porous Media 2013, August 25-28, Cluj-Napoca, Romania
17. 3rd International Eurasian Conference on Mathematical Sciences & Applications, 25-28 August 2014, Vienna, Austria
18. 15th (WSEAS) International Conference on FLUID MECHANICS (FLUIDS '19), Athens, Greece, December 8-10, 2019

19. 14th Joint Conference on Mathematics and Computer Science (MaCS) 2022, November 24–27, Babeş–Bolyai University, Cluj-Napoca, Romania. T. Grosan, F. Patrulescu, *Natural convection in a bidisperse porous medium. Effect of internal heat generation*,
20. 14th International Conference on Computational Heat and Mass Transfer (ICCHMT 2023), 4-8 September 2023, Düsseldorf, Germany. C. Berghian - Grosan, T. Grosan, *Effect of Heat Generated by an Exothermic Chemical Reaction on the Mixed Convection Flow in a Vertical Porous Channel*, Paper Number 225
21. The 31st Conference on Applied and Industrial Mathematics, CAIM 2024, Oradea, September 19-22, 2024. C. Berghian - Grosan, T. Grosan, *Natural Convection in a Square Cavity Filled by an Encapsulated Phase Change Material Porous Medium*
22. International Conference on Applied Science and Engineering, November 7-8, 2024, Viena, Austria. (T. Grosan, I. Pop, C. Revnic, Dual solutions of tri-hybrid nanofluids stagnation point over a linearly shrinking sheet)

**G. Director al granturilor de cercetare:**

1. Convection problems in porous media saturated by non-Newtonian fluids, 2001, code B09, ANSTI (Romanian government)
2. Transfer phenomena in porous media and viscous fluids with variable physical properties, code CEEEX -ET-90, UEFISCU (Romanian government), <https://math.ubbcluj.ro/~tgrosan/ceex90.html>
3. Transfer phenomena in nanofluids and nanofluids saturated porous media, PN-II-RU-TE-2011-3-0013, UEFISCDI, (Romanian government), <https://math.ubbcluj.ro/~tgrosan/TE0013.html>
4. Transfer phenomena in special porous media (SpePoM), Project code: PN-III-P4-PCE-2021-0993, Contract: PCE 69/2022, UEFISCDI (Romanian government), <https://math.ubbcluj.ro/spepom/>

**H. Doctoranzi activi**

1. Basulescu Mircea George, din octombrie 2025, <https://scholar.google.com/citations?user=4koh1bEAAA&hl=ro>

Data,  
13.02.2026

Prof.dr. Grosan Teodor Silviu,