

## Listă lucrărilor publicate

Asist. univ. dr. Oana Brandibur

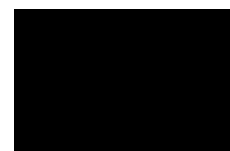
### i) Titlul tezei de doctorat

Systems of fractional-order differential equations and applications in Neuroscience

Coordonator științific: Conf. univ. dr. Eva Kaslik

### ii) Lista articolelor publicate în reviste din fluxul științific internațional principal

1. Oana Brandibur, Eva Kaslik, Stability properties of a two-dimensional system involving one Caputo derivative and applications to the investigation of a fractional-order Morris-Lecar neuronal model, *Nonlinear Dynamics*, 90(4)(2017), 2371-2386. (articol premiat UEFISCDI)
2. Oana Brandibur, Eva Kaslik, Stability of two-component incommensurate fractional-order systems and applications to the investigation of a FitzHugh-Nagumo neuronal model, *Mathematical Methods in the Applied Sciences*, 41(17)(2018), 7182–7194.
3. Oana Brandibur, Eva Kaslik, Dorota Mozyrska, Malgorzata Wyrwas, Stability results for two-dimensional systems of fractional-order difference equations, *Mathematics*, 8(10)(2020), 1751. (articol premiat UEFISCDI)
4. Gheorghe Țigan, Oana Brandibur, Emanuel Attila Kokovics, Loredana Flavia Vesa, Analysis of degenerate Chenciner bifurcation revisited, *International Journal of Bifurcation and Chaos*, 31(10)(2021), 2150160. (articol premiat UEFISCDI)
5. Oana Brandibur, Eva Kaslik, Exact stability and instability regions for two-dimensional linear autonomous systems of fractional-order differential equations, *Fractional Calculus and Applied Analysis*, 24(1)(2021), 225–253. (articol premiat UEFISCDI)
6. Oana Brandibur, Eva Kaslik, Stability analysis of multi-term fractional-differential equations with three fractional derivatives, *Journal of Mathematical Analysis and Applications*, 495(2)(2021), 124751. (articol premiat UEFISCDI)
7. Oana Brandibur, Roberto Garrappa, Eva Kaslik, Stability of Systems of Fractional-Order Differential Equations with Caputo Derivatives, *Mathematics*, 9(8)(2021), 914. (articol premiat UEFISCDI)
8. Oana Brandibur, Eva Kaslik, Stability Analysis for a Fractional-Order Coupled FitzHugh–Nagumo-Type Neuronal Model, *Fractal and Fractional*, 6(5)(2022), 257.
9. Gheorghe Moza, Oana Brandibur, Ariana Găină, Dynamics of a four-dimensional economic model, *Mathematics*, 11(4)(2023), 797.
10. Oana Brandibur, Eva Kaslik, Stability Properties of Multi-Term Fractional-Differential Equations, *Fractal and Fractional*, 7(2)(2023), 117.



### **iii) Lista publicațiilor in extenso, apărute în lucrări ale principalelor conferințe internaționale de specialitate**

11. Oana Brandibur, Eva Kaslik, Stability analysis of two-component incommensurate fractional-order systems and applications to the FitzHugh-Nagumo model, Proceedings of the 17th International Conference on Computational and Mathematical Methods in Science and Engineering, 2 (2017), 405-414, ISBN: 978-84-617-8694-7.
12. Teodora Selea, Anca Vulpe, Oana Brandibur, Mădălina Erașcu, Eva Kaslik, Daniela Zaharie, Marc Frîncu, Benchmarking numerical libraries for flight software prequalification, AIP Conference Proceedings 1978 (2018), 470073.
13. Oana Brandibur, Eva Kaslik, Dorota Mozyrska, Malgorzata Wyrwas, Stability of systems of fractional-order difference equations and applications to a Rulkov-type neuronal model, New Trends in Nonlinear Dynamics, Springer, Cham, (2020), 305-314.
14. Oana Brandibur, Eva Kaslik, Dorota Mozyrska, Malgorzata Wyrwas, Stability of Caputo-type fractional variable-order biquadratic difference equations, New Trends in Nonlinear Dynamics, Springer, Cham, (2020), 295-303.
15. Oana Brandibur, Eva Kaslik, Stability Analysis for a Fractional-Order Coupled Stability Results for Two-Term Fractional-Order Difference Equations, International workshop on Advanced Theory and Applications of Fractional Calculus. Springer, Cham, (2022), 225-230.

### **iv) Lista brevetelor de invenție și a altor titluri de proprietate industrială**

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### **v) Lista cărților**

16. O. Brandibur, E. Kaslik, M. Neamtu, Ecuatii caracteristice în studiul sistemelor de ecuații diferențiale cu memorie, Mirton, 2022, 134 pages, ISBN 978-973-52-2018-1.

### **vi) Lista capitolelor de cărți**

17. Oana Brandibur, Eva Kaslik, Stability analysis of two-dimensional incommensurate systems of fractional-order differential equations, Fractional Calculus and Fractional Differential Equations. Springer - Trends in Mathematics (2019), 77-92.
18. Oana Brandibur, Eva Kaslik, Dorota Mozyrska, Malgorzata Wyrwas, A Rulkov Neuronal Model with Caputo Fractional Variable-Order Differences of Convolution Type, Perspectives in Dynamical Systems II: Mathematical and Numerical Approaches, DSTA 2019 Proceedings, 2021, 227-235.

### **vii) Alte lucrări și contribuții științifice**

19. Gheorghe Țigan, Emanuel Cismaș, Stelian Mihalaș, Oana Brandibur, On the normal form of double-Hopf bifurcation, Scientific Bulletin of the Politehnica University of Timișoara, România, Transactions on Mathematics and Physics, 64(78)(2)(2019), 4-17.

