

# Bohdan Datsko

## List of Publications by Year in descending order

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Version: 2024-02-01

24  
papers

627  
citations

687220

13  
h-index

839398

18  
g-index

25  
all docs

25  
docs citations

25  
times ranked

336  
citing authors

| #  | ARTICLE                                                                                                                                                                                             | IF  | CITATIONS |
|----|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----------|
| 1  | Mathematical modeling of time fractional reaction-diffusion systems. Journal of Computational and Applied Mathematics, 2008, 220, 215-225.                                                          | 1.1 | 179       |
| 2  | Mathematical modeling of different types of instabilities in time fractional reaction-diffusion systems. Computers and Mathematics With Applications, 2010, 59, 1101-1107.                          | 1.4 | 69        |
| 3  | Analysis of the solutions of coupled nonlinear fractional reaction-diffusion equations. Chaos, Solitons and Fractals, 2009, 41, 1095-1104.                                                          | 2.5 | 67        |
| 4  | Pattern formation in a fractional reaction-diffusion system. Physica A: Statistical Mechanics and Its Applications, 2006, 365, 300-306.                                                             | 1.2 | 66        |
| 5  | Stability analysis and limit cycle in fractional system with Brusselator nonlinearities. Physics Letters, Section A: General, Atomic and Solid State Physics, 2008, 372, 4902-4904.                 | 0.9 | 36        |
| 6  | Complex nonlinear dynamics in subdiffusive activator-inhibitor systems. Communications in Nonlinear Science and Numerical Simulation, 2012, 17, 1673-1680.                                          | 1.7 | 26        |
| 7  | Analysis of fractional order Bonhoeffer-van der Pol oscillator. Physica A: Statistical Mechanics and Its Applications, 2008, 387, 418-424.                                                          | 1.2 | 25        |
| 8  | Complex spatio-temporal solutions in fractional reaction-diffusion systems near a bifurcation point. Fractional Calculus and Applied Analysis, 2018, 21, 237-253.                                   | 1.2 | 22        |
| 9  | PATTERN FORMATION IN FRACTIONAL REACTION-DIFFUSION SYSTEMS WITH MULTIPLE HOMOGENEOUS STATES. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2012, 22, 1250087. | 0.7 | 21        |
| 10 | Analysis of data clusters obtained by self-organizing methods. Physica A: Statistical Mechanics and Its Applications, 2004, 341, 547-555.                                                           | 1.2 | 19        |
| 11 | Solitary travelling auto-waves in fractional reaction-diffusion systems. Communications in Nonlinear Science and Numerical Simulation, 2015, 23, 378-387.                                           | 1.7 | 19        |
| 12 | Different Types of Instabilities and Complex Dynamics in Reaction-Diffusion Systems With Fractional Derivatives. Journal of Computational and Nonlinear Dynamics, 2012, 7, .                        | 0.7 | 17        |
| 13 | Time-Fractional Diffusion-Wave Equation with Mass Absorption in a Sphere under Harmonic Impact. Mathematics, 2019, 7, 433.                                                                          | 1.1 | 16        |
| 14 | Recent advances in numerical methods for partial fractional differential equations. , 2014, , .                                                                                                     |     | 10        |
| 15 | Inhomogeneous oscillatory solutions in fractional reaction-diffusion systems and their computer modeling. Applied Mathematics and Computation, 2008, 198, 251-260.                                  | 1.4 | 9         |
| 16 | Chaotic dynamics in Bonhoffer-van der Pol fractional reaction-diffusion system. Signal Processing, 2011, 91, 452-460.                                                                               | 2.1 | 8         |
| 17 | Mathematical modelling of pattern formation in activator-inhibitor reaction-diffusion systems with anomalous diffusion. Journal of Mathematical Chemistry, 2020, 58, 612-631.                       | 0.7 | 8         |
| 18 | Inhomogeneous oscillatory structures in fractional reaction-diffusion systems. Physics Letters, Section A: General, Atomic and Solid State Physics, 2008, 372, 619-622.                             | 0.9 | 7         |

| #  | ARTICLE                                                                                                                                                                                 | IF  | CITATIONS |
|----|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----------|
| 19 | Mathematical modeling of complex spatio-temporal dynamics in autocatalytic reaction-diffusion systems with anomalous diffusion. Computational and Mathematical Methods, 2021, 3, e1112. | 0.3 | 2         |
| 20 | Bifurcation characteristics of fractional reaction-diffusion systems. , 2012, , .                                                                                                       |     | 1         |
| 21 | Interface dynamics for quasi-stationary Stefan problem. Mathematical and Computer Modelling, 2007, 45, 892-898.                                                                         | 2.0 | 0         |
| 22 | Complex Dynamics in Basic Two-Component Auto-Oscillation Systems with Fractional Derivatives of Different Orders. Lecture Notes in Electrical Engineering, 2020, , 99-112.              | 0.3 | 0         |
| 23 | New explicit high-order one-step methods for singular initial value problems. Computational and Mathematical Methods, 2021, 3, e1099.                                                   | 0.3 | 0         |
| 24 | Different Types of Instabilities and Complex Dynamics in Fractional Reaction-Diffusion Systems. , 2009, , .                                                                             |     | 0         |