# Dmitry Lukyanenko

## List of Publications by Year in descending order



| | | 758635 | 794141 |
|---|---|---|---|
| 58 | 526 | 12 | 19 |
| papers | citations | h-index | g-index |

| | | | |
|---|---|---|---|
| 67 | 67 | 67 | 100 |
| all docs | docs citations | times ranked | citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Numerical simulation of front dynamics in a nonlinear singularly perturbed reactionâ€“diffusion problem. Journal of Computational and Applied Mathematics, 2022, 412, 114294. | 1.1 | 3 |
| 2 | Features of Numerical Reconstruction of a Boundary Condition in an Inverse Problem for a Reactionâ€“Diffusionâ€“Advection Equation with Data on the Position of a Reaction Front. Computational Mathematics and Mathematical Physics, 2022, 62, 441-451. | 0.2 | 1 |
| 3 | Use of asymptotic analysis for solving the inverse problem of source parameters determination of nitrogen oxide emission in the atmosphere. Inverse Problems in Science and Engineering, 2021, 29, 365-377. | 1.2 | 11 |
| 4 | Inverse Problem of Recovering the Initial Condition for a Nonlinear Equation of the Reactionâ€“Diffusionâ€“Advection Type by Data Given on the Position of a Reaction Front with a Time Delay. Mathematics, 2021, 9, 342. | 1.1 | 12 |
| 5 | Reconstruction algorithm of 3D surface in scanning electron microscopy with backscattered electron detector. Journal of Inverse and Ill-Posed Problems, 2021, 29, 753-758. | 0.5 | 1 |
| 6 | The Problem of the Non-Uniqueness of the Solution to the Inverse Problem of Recovering the Symmetric States of a Bistable Medium with Data on the Position of an Autowave Front. Symmetry, 2021, 13, 860. | 1.1 | 9 |
| 7 | Solving coefficient inverse problems for nonlinear singularly perturbed equations of the reaction-diffusion-advection type with data on the position of a reaction front. Communications in Nonlinear Science and Numerical Simulation, 2021, 99, 105824. | 1.7 | 25 |
| 8 | Inverse Problem for an Equation of the Reaction-Diffusion-Advection Type with Data on the Position of a Reaction Front: Features of the Solution in the Case of a Nonlinear Integral Equation in a Reduced Statement. Mathematics, 2021, 9, 2342. | 1.1 | 5 |
| 9 | Comparative Analysis of Algorithms for Solving Inverse Problems Related to Monochromatic Monitoring the Deposition of Multilayer Optical Coatings. Computational Mathematics and Mathematical Physics, 2021, 61, 1504-1510. | 0.2 | 4 |
| 10 | Three-Dimensional Scanning Electron Microscopy of Surface Topography with Consideration of the Effect of the Response Function of the Detector System. Moscow University Physics Bulletin (English) Tj ETQq0 0 0 rgBT /Overlock 10 Tf | 0 | 0 |
| 11 | Recovering the Magnetic Image of Mars from Satellite Observations. Journal of Imaging, 2021, 7, 234. | 1.7 | 4 |
| 12 | On Some Features of the Numerical Solving of Coefficient Inverse Problems for an Equation of the Reaction-Diffusion-Advection-Type with Data on the Position of a Reaction Front. Mathematics, 2021, 9, 2894. | 1.1 | 6 |
| 13 | Determination of the Parameters of the First Coating Layer Using Broadband Optical Monitoring of the Deposition Process. Moscow University Physics Bulletin (English Translation of Vestnik) Tj ETQq1 1 0.784314 rgBT /Overlock 10 T | 0 | 0 |
| 14 | Self-compensation of errors in optical coating production with monochromatic monitoring. Optics Express, 2021, 29, 44275. | 1.7 | 7 |
| 15 | Raising the Accuracy of Monitoring the Optical Coating Deposition by Application of a Nonlocal Algorithm of Data Analysis. Journal of Applied and Industrial Mathematics, 2020, 14, 330-339. | 0.1 | 6 |
| 16 | Reconstruction of Magnetic Susceptibility Using Full Magnetic Gradient Data. Computational Mathematics and Mathematical Physics, 2020, 60, 1000-1007. | 0.2 | 5 |
| 17 | Blowâ€up for Josephâ€“Egri equation: Theoretical approach and numerical analysis. Mathematical Methods in the Applied Sciences, 2020, 43, 6771-6800. | 1.2 | 3 |
| 18 | Local solvability and a priori estimates for classical solutions to an equation of Benjaminâ€Bonaâ€Mahonyâ€BÃ¼rgers type. Mathematical Methods in the Applied Sciences, 2020, 43, 9829-9873. | 1.2 | 0 |

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|---|---|---|---|
| 19 | Some features of solving an inverse backward problem for a generalized Burgersâ€™ equation. Journal of Inverse and Ill-Posed Problems, 2020, 28, 641-649. | 0.5 | 13 |
| 20 | Stable Method for Optical Monitoring the Deposition of Multilayer Optical Coatings. Computational Mathematics and Mathematical Physics, 2020, 60, 2056-2063. | 0.2 | 6 |
| 21 | Correlation of Errors in Monochromatic Monitoring of Optical Coatings Deposition. Moscow University Physics Bulletin (English Translation of Vestnik Moskovskogo Universiteta, Fizika), 2020, 75, 578-584. | 0.1 | 3 |
| 22 | Analytical-Numerical Study of Finite-Time Blow-up of the Solution to the Initial-Boundary Value Problem for the Nonlinear Kleinâ€“Gordon Equation. Computational Mathematics and Mathematical Physics, 2020, 60, 1452-1460. | 0.2 | 2 |
| 23 | On Phase Correction in Tomographic Research. Journal of Applied and Industrial Mathematics, 2020, 14, 802-810. | 0.1 | 3 |
| 24 | Magnetic susceptibility inversion method with full tensor gradient data using low-temperature SQUIDs. Petroleum Science, 2019, 16, 794-807. | 2.4 | 7 |
| 25 | Asymptotic analysis of solving an inverse boundary value problem for a nonlinear singularly perturbed time-periodic reaction-diffusion-advection equation. Journal of Inverse and Ill-Posed Problems, 2019, 27, 745-758. | 0.5 | 30 |
| 26 | 3D surface topography imaging in SEM with improved backscattered electron detector: Arrangement and reconstruction algorithm. Ultramicroscopy, 2019, 207, 112830. | 0.8 | 5 |
| 27 | Application of Asymptotic Analysis for Solving the Inverse Problem of Determining the Coefficient of Linear Amplification in Burgersâ€™ Equation. Moscow University Physics Bulletin (English Translation of) Tj ETQq1 1 0.784314 rgBT /Ov | 0.1 | 1 |
| 28 | Comparison of Algorithms for Determining the Thickness of Optical Coatings Online. Computational Mathematics and Mathematical Physics, 2019, 59, 465-474. | 0.2 | 2 |
| 29 | Analytical-Numerical Approach to Describing Time-Periodic Motion of Fronts in Singularly Perturbed Reactionâ€“Advectionâ€“Diffusion Models. Computational Mathematics and Mathematical Physics, 2019, 59, 46-58. | 0.2 | 15 |
| 30 | Some Features of the Asymptotic-Numerical Method for the Moving Fronts Description in Two-Dimensional Reaction-Diffusion Problems. Lecture Notes in Computer Science, 2019, , 612-620. | 1.0 | 0 |
| 31 | Blow-Up of Fronts in Burgers Equation with Nonlinear Amplification: Asymptotics and Numerical Diagnostics. Lecture Notes in Computer Science, 2019, , 72-79. | 1.0 | 0 |
| 32 | Solving of the coefficient inverse problem for a nonlinear singularly perturbed two-dimensional reactionâ€“diffusion equation with the location of moving front data. Computers and Mathematics With Applications, 2019, 77, 1245-1254. | 1.4 | 33 |
| 33 | Magnetic parameters inversion method with full tensor gradient data. Inverse Problems and Imaging, 2019, 13, 745-754. | 0.6 | 8 |
| 34 | Diagnostics of Instant Decomposition of Solution in the Nonlinear Equation of Theory of Waves in Semiconductors. Bulletin of the South Ural State University, Series: Mathematical Modelling, Programming and Computer Software, 2019, 12, 104-113. | 0.1 | 0 |
| 35 | On the blowâ€up phenomena for a 1â€dimensional equation of ion sound waves in a plasma: Analytical and numerical investigation. Mathematical Methods in the Applied Sciences, 2018, 41, 2906-2929. | 1.2 | 19 |
| 36 | Solving of the coefficient inverse problems for a nonlinear singularly perturbed reaction-diffusion-advection equation with the final time data. Communications in Nonlinear Science and Numerical Simulation, 2018, 54, 233-247. | 1.7 | 39 |

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|---|---|---|---|
| 37 | Instantaneous blow-up versus local solvability for one problem of propagation of nonlinear waves in semiconductors. Journal of Mathematical Analysis and Applications, 2018, 459, 159-181. | 0.5 | 25 |
| 38 | Application of a Three-Dimensional Radiative Transfer Model to Retrieve the Species Composition of a Mixed Forest Stand from Canopy Reflected Radiation. Remote Sensing, 2018, 10, 1661. | 1.8 | 7 |
| 39 | Online Characterization Algorithms for Optical Coating Production with Broadband Monitoring. Coatings, 2018, 8, 323. | 1.2 | 2 |
| 40 | Improving the Accuracy of Broad-Band Monitoring of Optical Coating Deposition. Moscow University Physics Bulletin (English Translation of Vestnik Moskovskogo Universiteta, Fizika), 2018, 73, 382-387. | 0.1 | 3 |
| 41 | Blow-up of solutions of a full non-linear equation of ion-sound waves in a plasma with non-coercive non-linearities. Izvestiya Mathematics, 2018, 82, 283-317. | 0.1 | 11 |
| 42 | Analyticâ€“Numerical Investigation of Combustion in a Nonlinear Medium. Computational Mathematics and Mathematical Physics, 2018, 58, 1499-1509. | 0.2 | 5 |
| 43 | REGULARIZING ALGORITHMS FOR THE DETERMINATION OF THICKNESS OF DEPOSITED LAYERS IN OPTICAL COATING PRODUCTION. Eurasian Journal of Mathematical and Computer Applications, 2018, , 38-47. | 0.2 | 0 |
| 44 | Algorithms for solving inverse problems in the optics of layered media based on comparing the extrema of spectral characteristics. Computational Mathematics and Mathematical Physics, 2017, 57, 867-875. | 0.2 | 7 |
| 45 | Blowâ€up phenomena in the model of a space charge stratification in semiconductors: analytical and numerical analysis. Mathematical Methods in the Applied Sciences, 2017, 40, 2336-2346. | 1.2 | 26 |
| 46 | Use of Asymptotics for New Dynamic Adapted Mesh Construction for Periodic Solutions with an Interior Layer of Reaction-Diffusion-Advection Equations. Lecture Notes in Computer Science, 2017, , 107-118. | 1.0 | 12 |
| 47 | Front Dynamics in an Activator-Inhibitor System of Equations. Lecture Notes in Computer Science, 2017, , 492-499. | 1.0 | 13 |
| 48 | Asymptotic-Numerical Method for the Location and Dynamics of Internal Layers in Singular Perturbed Parabolic Problems. Lecture Notes in Computer Science, 2017, , 721-729. | 1.0 | 7 |
| 49 | Dynamically Adapted Mesh Construction for the Efficient Numerical Solution of a Singular Perturbed Reaction-diffusion-advection Equation. Modelirovanie I Analiz Informacionnyh Sistem, 2017, 24, 322-338. | 0.1 | 7 |
| 50 | Local Solvability and Decay of the Solution of an Equation with Quadratic Noncoercive Nonlineatity. Bulletin of the South Ural State University, Series: Mathematical Modelling, Programming and Computer Software, 2017, 10, 107-123. | 0.1 | 5 |
| 51 | Blow-up for one Sobolev problem: Theoretical approach and numerical analysis. Journal of Mathematical Analysis and Applications, 2016, 442, 451-468. | 0.5 | 30 |
| 52 | Using Lagrange principle for solving two-dimensional integral equation with a positive kernel. Inverse Problems in Science and Engineering, 2016, 24, 811-831. | 1.2 | 6 |
| 53 | Analytic-Numerical Approach to Solving Singularly Perturbed Parabolic Equations with the Use of Dynamic Adapted Meshes. Modelirovanie I Analiz Informacionnyh Sistem, 2016, 23, 334-341. | 0.1 | 8 |
| 54 | SOME METHODS FOR SOLVING OF 3D INVERSE PROBLEM OF MAGNETOMETRY. Eurasian Journal of Mathematical and Computer Applications, 2016, 4, 4-14. | 0.2 | 2 |

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|---|---|---|---|
| 55 | An optimal regularization method for convolution equations on the sourcewise represented set. Journal of Inverse and Ill-Posed Problems, 2015, 23, 465-475. | 0.5 | 8 |
| 56 | Inverse problem of determining the thickness of optical coatings layers from the data of monochromatic control. Moscow University Computational Mathematics and Cybernetics, 2015, 39, 1-5. | 0.1 | 1 |
| 57 | Recovering aerosol particle size distribution function on the set of bounded piecewise-convex functions. Inverse Problems in Science and Engineering, 2013, 21, 339-354. | 1.2 | 13 |
| 58 | Application of inversion methods in solving ill-posed problems for magnetic parameter identification of steel hull vessel. Journal of Inverse and Ill-Posed Problems, 2011, 18, 1013-1029. | 0.5 | 12 |