# Larisa Beilina

List of Publications by Year
in descending order

| 67 | 1,092 | 430874 | 477307 |
|----|-------|--------|--------|
| papers | citations | 18 | 29 |
| | | h-index | g-index |

| 77 | 77 | 77 | 255 |
|----|----|----|-----|
| all docs | docs citations | times ranked | citing authors |

| # | Article | IF | Citations |
|---|---------|----|-----------|
| 1 | Time-Adaptive Determination of Drug Efficacy in Mathematical Model of HIV Infection. Differential Equations and Dynamical Systems, 2024, 32, 313-347. | 1.0 | 0 |
| 2 | An adaptive finite element method for solving 3D electromagnetic volume integral equation with applications in microwave thermometry. Journal of Computational Physics, 2022, 459, 111122. | 3.8 | 3 |
| 3 | An Adaptive Finite Element/Finite Difference Domain Decomposition Method for Applications in Microwave Imaging. Electronics (Switzerland), 2022, 11, 1359. | 3.1 | 8 |
| 4 | Convergence of Stabilized P1 Finite Element Scheme for Time Harmonic Maxwell's Equations. Springer Proceedings in Mathematics and Statistics, 2020, , 33-43. | 0.2 | 1 |
| 5 | Convergence of Explicit $$P_1$$ Finite-Element Solutions to Maxwell's Equations. Springer Proceedings in Mathematics and Statistics, 2020, , 91-103. | 0.2 | 3 |
| 6 | Microwave thermometry with potential application in non-invasive monitoring of hyperthermia. Journal of Inverse and Ill-Posed Problems, 2020, 28, 739-750. | 1.0 | 6 |
| 7 | Determining the conductivity for a nonautonomous hyperbolic operator in a cylindrical domain. Mathematical Methods in the Applied Sciences, 2018, 41, 2012-2030. | 2.3 | 2 |
| 8 | Lipschitz stability for an inverse hyperbolic problem of determining two coefficients by a finite number of observations. Inverse Problems, 2018, 34, 015001. | 2.0 | 17 |
| 9 | Uniqueness, Stability and Numerical Reconstruction of a Time and Space-Dependent Conductivity for an Inverse Hyperbolic Problem. Springer Proceedings in Mathematics and Statistics, 2018, , 133-145. | 0.2 | 0 |
| 10 | An Adaptive Finite Element Method in Quantitative Reconstruction of Small Inclusions from Limited Observations. Applied Mathematics and Information Sciences, 2018, 12, 1-19. | 0.5 | 13 |
| 11 | Numerical Studies of the Lagrangian Approach for Reconstruction of the Conductivity in a Waveguide. Springer Proceedings in Mathematics and Statistics, 2018, , 93-117. | 0.2 | 0 |
| 12 | Numerical Linear Algebra: Theory and Applications. , 2017, , . | | 12 |
| 13 | Finite element schemes for Fermi equation. AIP Conference Proceedings, 2017, , . | 0.4 | 0 |
| 14 | Adaptive finite element method in nanophotonic simulations. AIP Conference Proceedings, 2017, , . | 0.4 | 0 |
| 15 | Reconstruction of annular bi-layered media in cylindrical waveguide section. Journal of Mathematics in Industry, 2017, 7, . | 1.2 | 1 |
| 16 | Preface for the session "Recent Progress in Electromagnetic Field Theory and New Trends in Inverse Problems". AIP Conference Proceedings, 2017, , . | 0.4 | 0 |
| 17 | Iterative regularization and adaptivity for an electromagnetic coefficient inverse problem. AIP Conference Proceedings, 2017, , . | 0.4 | 2 |
| 18 | Application of the finite element method in a quantitative imaging technique. Journal of Computational Methods in Sciences and Engineering, 2017, 16, 755-771. | 0.2 | 1 |

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|---|---------|-----|-----------|
| 19 | Quantitative imaging technique using the layer-stripping algorithm. AIP Conference Proceedings, 2017, , . | 0.4 | 0 |
| 20 | Adaptive finite element method for the solution of electromagnetic inverse problem using limited observations. , 2016, , . | | 0 |
| 21 | Adaptive optimization algorithm for the computational design of nanophotonic structures. , 2016, , . | | 1 |
| 22 | An adaptive finite element method in reconstruction of coefficients in Maxwell's equations from limited observations. Applications of Mathematics, 2016, 61, 253-286. | 0.9 | 11 |
| 23 | Domain decomposition finite element/finite difference method for the conductivity reconstruction in a hyperbolic equation. Communications in Nonlinear Science and Numerical Simulation, 2016, 37, 222-237. | 3.3 | 15 |
| 24 | Globally convergent and adaptive finite element methods in imaging of buried objects from experimental backscattering radar measurements. Journal of Computational and Applied Mathematics, 2015, 289, 371-391. | 2.0 | 20 |
| 25 | Imaging of Buried Objects from Experimental Backscattering Time-Dependent Measurements Using a Globally Convergent Inverse Algorithm. SIAM Journal on Imaging Sciences, 2015, 8, 757-786. | 2.2 | 37 |
| 26 | Globally strongly convex cost functional for a coefficient inverse problem. Nonlinear Analysis: Real World Applications, 2015, 22, 272-288. | 1.7 | 36 |
| 27 | Time-adaptive FEM for distributed parameter identification in mathematical model of HIV infection with drug therapy. Springer Proceedings in Mathematics and Statistics, 2015, , 111-124. | 0.2 | 1 |
| 28 | Optimization approach for the simultaneous reconstruction of the dielectric permittivity and magnetic permeability functions from limited observations. Inverse Problems and Imaging, 2015, 9, 1-25. | 1.1 | 12 |
| 29 | Methods of Quantitative Reconstruction of Shapes and Refractive Indices from Experimental data. Springer Proceedings in Mathematics and Statistics, 2015, , 13-41. | 0.2 | 0 |
| 30 | Reconstruction of the Refractive Index from Experimental Backscattering Data Using a Globally Convergent Inverse Method. SIAM Journal of Scientific Computing, 2014, 36, B273-B293. | 2.8 | 37 |
| 31 | Reconstruction of shapes and refractive indices from backscattering experimental data using the adaptivity. Inverse Problems, 2014, 30, 105007. | 2.0 | 30 |
| 32 | Reconstruction of Dielectric Constants of Core and Cladding of Optical Fibers Using Propagation Constants Measurements. Research Letters in Physics, 2014, 2014, 1-9. | 0.2 | 5 |
| 33 | Reconstruction from blind experimental data for an inverse problem for a hyperbolic equation. Inverse Problems, 2014, 30, 025002. | 2.0 | 18 |
| 34 | Relaxation property for the adaptivity for ill-posed problems. Applicable Analysis, 2014, 93, 223-253. | 1.3 | 7 |
| 35 | An adaptive finite element method for Fredholm integral equations of the first kind and its verification on experimental data. Open Mathematics, 2013, 11, . | 1.0 | 6 |
| 36 | Quantitative Image Recovery From Measured Blind Backscattered Data Using a Globally Convergent Inverse Method. IEEE Transactions on Geoscience and Remote Sensing, 2013, 51, 2937-2948. | 6.3 | 8 |

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|---|---------|----|-----------|
| 37 | Energy estimates and numerical verification of the stabilized Domain Decomposition Finite Element/Finite Difference approach for time-dependent Maxwellâ€™s system. Open Mathematics, 2013, 11, . | 1.0 | 25 |
| 38 | Approximate Global Convergence in Imaging of Land Mines from Backscattered Data. Springer Proceedings in Mathematics and Statistics, 2013, , 15-36. | 0.2 | 2 |
| 39 | Time-Adaptive FEM for Distributed Parameter Identification in Biological Models. Springer Proceedings in Mathematics and Statistics, 2013, , 37-50. | 0.2 | 2 |
| 40 | A Posteriori Error Estimates for Fredholm Integral Equations of the First Kind. Springer Proceedings in Mathematics and Statistics, 2013, , 75-93. | 0.2 | 5 |
| 41 | Approximate Globally Convergent Algorithm with Applications in Electrical Prospecting. Springer Proceedings in Mathematics and Statistics, 2013, , 29-40. | 0.2 | 0 |
| 42 | Adaptive Approximate Globally Convergent Algorithm with Backscattered Data. Springer Proceedings in Mathematics and Statistics, 2013, , 1-20. | 0.2 | 0 |
| 43 | Blind backscattering experimental data collected in the field and an approximately globally convergent inverse algorithm. Inverse Problems, 2012, 28, 095007. | 2.0 | 46 |
| 44 | A new approximate mathematical model for global convergence for a coefficient inverse problem with backscattering data. Journal of Inverse and Ill-Posed Problems, 2012, 20, 513-565. | 1.0 | 28 |
| 45 | The philosophy of the approximate global convergence for multidimensional coefficient inverse problems. Complex Variables and Elliptic Equations, 2012, 57, 277-299. | 0.8 | 8 |
| 46 | Approximate global convergence and quasireversibility for a coefficient inverse problem with backscattering data. Journal of Mathematical Sciences, 2012, 181, 126-163. | 0.4 | 5 |
| 47 | Approximate Global Convergence and Adaptivity for Coefficient Inverse Problems. , 2012, , . | | 192 |
| 48 | Why a minimizer of the Tikhonov functional is closer to the exact solution than the first guess. Journal of Inverse and Ill-Posed Problems, 2011, 19, 83-105. | 1.0 | 22 |
| 49 | New a posteriori error estimates for adaptivity technique and global convergence for the hyperbolic coefficient inverse problem. Journal of Mathematical Sciences, 2011, 172, 449-476. | 0.4 | 6 |
| 50 | Adaptive finite element method for a coefficient inverse problem for Maxwell's system. Applicable Analysis, 2011, 90, 1461-1479. | 1.3 | 25 |
| 51 | Synthesis of global convergence and adaptivity for a hyperbolic coefficient inverse problem in 3D. Journal of Inverse and Ill-Posed Problems, 2010, 18, . | 1.0 | 31 |
| 52 | Adaptivity with relaxation for ill-posed problems and global convergence for a coefficient inverse problem. Journal of Mathematical Sciences, 2010, 167, 279-325. | 0.4 | 61 |
| 53 | Globally Convergent Numerical Methods for Coefficient Inverse Problems for Imaging Inhomogeneities. Computing in Science and Engineering, 2010, , . | 1.2 | 2 |
| 54 | Picosecond scale experimental verification of a globally convergent algorithm for a coefficient inverse problem. Inverse Problems, 2010, 26, 045003. | 2.0 | 40 |

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|---|---------|----|-----------|
| 55 | *A posteriori* error estimates for the adaptivity technique for the Tikhonov functional and global convergence for a coefficient inverse problem. Inverse Problems, 2010, 26, 045012. | 2.0 | 37 |
| 56 | *A posteriori* error estimates in a globally convergent FEM for a hyperbolic coefficient inverse problem. Inverse Problems, 2010, 26, 115007. | 2.0 | 15 |
| 57 | Reconstruction of dielectrics from experimental data via a hybrid globally convergent/adaptive inverse algorithm. Inverse Problems, 2010, 26, 125009. | 2.0 | 36 |
| 58 | Recent Advances in Numerical Methods for Inverse Problems Resolution. , 2010, , . | | 0 |
| 59 | Global convergence for Inverse Problems. , 2010, , . | | 0 |
| 60 | Adaptive Finite Element Method for an Electromagnetic Coefficient Inverse Problem. , 2010, , . | | 0 |
| 61 | Hybrid Discontinuous Finite Elementâ€•Finite Difference Method for Maxwellâ€™s Equations. , 2010, , . | | 0 |
| 62 | Adaptive algorithm for an inverse electromagnetic scattering problem. Applicable Analysis, 2009, 88, 15-28. | 1.3 | 2 |
| 63 | A Globally Convergent Numerical Method for a Coefficient Inverse Problem. SIAM Journal of Scientific Computing, 2008, 31, 478-509. | 2.8 | 80 |
| 64 | A POSTERIORI ERROR ESTIMATION IN BIOMEDICAL IMAGING. , 2007, , . | | 0 |
| 65 | An Adaptive Hybrid FEM/FDM Method for an Inverse Scattering Problem in Scanning Acoustic Microscopy. SIAM Journal of Scientific Computing, 2006, 28, 382-402. | 2.8 | 36 |
| 66 | Nonobtuse Tetrahedral Partitions that Refine Locally Towards Fichera-Like Corners. Applications of Mathematics, 2005, 50, 569-581. | 0.9 | 7 |
| 67 | A POSTERIORI ERROR ESTIMATION IN COMPUTATIONAL INVERSE SCATTERING. Mathematical Models and Methods in Applied Sciences, 2005, 15, 23-35. | 3.3 | 49 |