# Anatoly A Alikhanov

List of Publications by Year
in descending order



| 26 | 1,259 | 840585 11 | 580701 25 |
|---|---|---|---|
| papers | citations | h-index | g-index |

| 32 | 32 | 32 | 468 |
|---|---|---|---|
| all docs | docs citations | times ranked | citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | A new difference scheme for the time fractional diffusion equation. Journal of Computational Physics, 2015, 280, 424-438. | 1.9 | 554 |
| 2 | A priori estimates for solutions of boundary value problems for fractional-order equations. Differential Equations, 2010, 46, 660-666. | 0.1 | 196 |
| 3 | Fast Iterative Method with a Second-Order Implicit Difference Scheme for Time-Space Fractional Convectionâ€“Diffusion Equation. Journal of Scientific Computing, 2017, 72, 957-985. | 1.1 | 84 |
| 4 | The Temporal Second Order Difference Schemes Based on the Interpolation Approximation for Solving the Time Multi-term and Distributed-Order Fractional Sub-diffusion Equations. Journal of Scientific Computing, 2017, 73, 93-121. | 1.1 | 81 |
| 5 | Numerical methods of solutions of boundary value problems for the multi-term variable-distributed order diffusion equation. Applied Mathematics and Computation, 2015, 268, 12-22. | 1.4 | 60 |
| 6 | Boundary value problems for the diffusion equation of the variable order in differential and difference settings. Applied Mathematics and Computation, 2012, 219, 3938-3946. | 1.4 | 59 |
| 7 | Boundary value problems for certain classes of loaded differential equations and solving them by finite difference methods. Computational Mathematics and Mathematical Physics, 2008, 48, 1581-1590. | 0.2 | 40 |
| 8 | Temporal second order difference schemes for the multi-dimensional variable-order time fractional sub-diffusion equations. Computers and Mathematics With Applications, 2020, 79, 2952-2972. | 1.4 | 35 |
| 9 | Numerical analysis of multi-term time-fractional nonlinear subdiffusion equations with time delay: What could possibly go wrong?. Communications in Nonlinear Science and Numerical Simulation, 2021, 96, 105672. | 1.7 | 22 |
| 10 | On the stability and convergence of nonlocal difference schemes. Differential Equations, 2010, 46, 949-961. | 0.1 | 14 |
| 11 | A Time-Fractional Diffusion Equation with Generalized Memory Kernel in Differential and Difference Settings with Smooth Solutions. Computational Methods in Applied Mathematics, 2017, 17, 647-660. | 0.4 | 14 |
| 12 | A high-order L2 type difference scheme for the time-fractional diffusion equation. Applied Mathematics and Computation, 2021, 411, 126545. | 1.4 | 13 |
| 13 | A Difference Method for Solving the Steklov Nonlocal Boundary Value Problem of Second Kind for the Time-Fractional Diffusion Equation. Computational Methods in Applied Mathematics, 2017, 17, 1-16. | 0.4 | 11 |
| 14 | The Crank-Nicolson Type Compact Difference Schemes for a Loaded Time-Fractional Hallaire Equation. Fractional Calculus and Applied Analysis, 2021, 24, 1231-1256. | 1.2 | 11 |
| 15 | Nonlocal boundary value problems in differential and difference settings. Differential Equations, 2008, 44, 952-959. | 0.1 | 10 |
| 16 | Stability and Convergence of Difference Schemes Approximating a Two-Parameter Nonlocal Boundary Value Problem for Time-Fractional Diffusion Equation. Computational Mathematics and Modeling, 2015, 26, 252-272. | 0.2 | 10 |
| 17 | Stable numerical schemes for time-fractional diffusion equation with generalized memory kernel. Applied Numerical Mathematics, 2022, 172, 546-565. | 1.2 | 10 |
| 18 | A multi-domain spectral collocation method for Volterra integral equations with a weakly singular kernel. Applied Numerical Mathematics, 2021, 167, 218-236. | 1.2 | 9 |

| # | Article | IF | Citations |
|---|---|---|---|
| 19 | Stability and convergence of difference schemes for boundary value problems for the fractional-order diffusion equation. Computational Mathematics and Mathematical Physics, 2016, 56, 561-575. | 0.2 | 8 |
| 20 | Stability and convergence of difference schemes approximating a two-parameter nonlocal boundary value problem. Differential Equations, 2013, 49, 796-806. | 0.1 | 6 |
| 21 | A class of time-fractional diffusion equations with generalized fractional derivatives. Journal of Computational and Applied Mathematics, 2022, 414, 114424. | 1.1 | 5 |
| 22 | Simulation of drift-diffusion transport of charge carriers in semiconductor layers with a fractal structure in an alternating electric field. Semiconductors, 2017, 51, 755-759. | 0.2 | 3 |
| 23 | Stability and convergence of difference schemes approximating a nonlocal Steklov boundary value problem of the second class. Differential Equations, 2015, 51, 94-106. | 0.1 | 2 |
| 24 | Contribution of Surface Photons to the Thermal Emission of Graphene. Journal of Surface Investigation, 2018, 12, 332-335. | 0.1 | 1 |
| 25 | Local One-Dimensional Scheme for the First Initial-Boundary Value Problem for the Multidimensional Fractional-Order Convectionâ€“Diffusion Equation. Computational Mathematics and Mathematical Physics, 2021, 61, 1075-1093. | 0.2 | 0 |
| 26 | Application of nonlinear voxel distribution grid for computational speed-up for linear tomosynthesis reconstruction. , 2018, , . | | 0 |