Igor Prokhorov

List of Publications by Year in Descending Order

38 papers	186 citations	9 h-index	11 g-index
54 ext. papers	273 ext. citations	0.7 avg, IF	3.4 L-index

#	Paper	IF	Citations
38	Determination of the Attenuation Coefficient for the Nonstationary Radiative Transfer Equation. *Computational Mathematics and Mathematical Physics*, **2021**, 61, 2088-2101	0.9	
37	Modelling and Simulation of Compton Scatter Image Formation in Positron Emission Tomography. *Journal of Inverse and Ill-Posed Problems*, **2020**, 28, 923-932	1.3	
36	Reconstruction of the Lambert Curve in a Scattering Medium by Using Pulsed Sounding. *Journal of Applied and Industrial Mathematics*, **2020**, 14, 321-329	0.6	
35	The Cauchy Problem for the Radiation Transfer Equation with Fresnel and Lambert Matching Conditions. *Mathematical Notes*, **2019**, 105, 80-90	0.5	2
34	Theoretical and Numerical Analysis of an Initial-Boundary Value Problem for the Radiative Transfer Equation with Fresnel Matching Conditions. *Computational Mathematics and Mathematical Physics*, **2018**, 58, 735-749	0.9	4
33	Determination of Refractive Indices of a Layered Medium under Pulsed Irradiation. *Optics and Spectroscopy (English Translation of Optika I Spektroskopiya)*, **2018**, 124, 567-574	0.7	2
32	Initial boundary value problem for the radiative transfer equation with diffusion matching conditions. *Journal of Applied and Industrial Mathematics*, **2017**, 11, 115-124	0.6	7
31	Effects of polarization of optical radiation in the problem for finding refractive indices of layered medium **2016**,		1
30	Monte Carlo method for non-stationary radiative transfer equation in inhomogeneous media **2016**,		2
29	Imaging Based on Signal from Side-Scan Sonar. *Applied Mechanics and Materials*, **2015**, 756, 678-682	0.3	6
28	Modelling of Material Composition in X-Ray Diagnostics. *Applied Mechanics and Materials*, **2015**, 749, 116-120	0.3	
27	Simulation of Sonar Signal Propagation in a Fluctuating Ocean. *Physics Procedia*, **2015**, 70, 690-694		1
26	On the problem of reconstructing the floor topography of a fluctuating ocean. *Journal of Applied and Industrial Mathematics*, **2015**, 9, 412-422	0.6	1
25	On the well-posedness of the Cauchy problem for the equation of radiative transfer with Fresnel matching conditions. *Siberian Mathematical Journal*, **2015**, 56, 736-745	0.5	7
24	Studying the problem of acoustic sounding of the seabed using methods of radiative transfer theory. *Acoustical Physics*, **2015**, 61, 368-375	1.1	10
23	An integrodifferential indicator for the problem of single beam tomography. *Journal of Applied and Industrial Mathematics*, **2014**, 8, 301-306	0.6	2
22	Construction of sonar images based on the received signal side-scan sonar **2014**,		1

(2000-2013)

#	Reference		
21	The cauchy problem for the radiative transfer equation with generalized conjugation conditions. *Computational Mathematics and Mathematical Physics*, **2013**, 53, 588-600	0.9	12
20	On the efficiency of the maximum cross section method in radiation transport theory. *Computer Research and Modeling*, **2013**, 5, 573-582	1	1
19	Solvability of the initial-boundary value problem for an integrodifferential equation. *Siberian Mathematical Journal*, **2012**, 53, 301-309	0.5	14
18	Some Inverse Problem for the Polarized-Radiation Transfer Equation **2012**, 207-217		
17	The problem of single-beam probing of an unknown medium. *Journal of Applied and Industrial Mathematics*, **2011**, 5, 500-505	0.6	2
16	A boundary-value problem for the polarized-radiation transfer equation with Fresnel interface conditions for a layered medium. *Journal of Computational and Applied Mathematics*, **2011**, 235, 2006-2014	2.4	16
15	Algorithm of finding a body projection within an absorbing and scattering medium. *Journal of Inverse and Ill-Posed Problems*, **2011**, 18,	1.3	2
14	Analysis of the tomographic contrast during the immersion bleaching of layered biological tissues. *Quantum Electronics*, **2010**, 40, 77-82	1.8	2
13	Advanced Computing Method for Solving of the Polarized-Radiation Transfer Equation. *Lecture Notes in Computer Science*, **2010**, 268-276	0.9	12
12	On the structure of the continuity set of the solution to a boundary-value problem for the radiation transfer equation. *Mathematical Notes*, **2009**, 86, 234-248	0.5	9
11	▯▯▯▯▯▯▯ ▯*Mathematical Notes*, **2009**, 86, 256-272	0.4	3
10	Optical tomography problems at layered media. *Inverse Problems*, **2008**, 24, 025019	2.3	8
9	Numerical solution of the inverse problem for the polarized-radiation transfer equation. *Numerical Analysis and Applications*, **2008**, 1, 46-57	0.6	5
8	Optical tomography problems: Investigation by the methods of the radiation transport theory. *Optics and Spectroscopy (English Translation of Optika I Spektroskopiya)*, **2006**, 101, 769-776	0.7	8
7	Choice of optimal radiation energy in X-ray flaw detection. *Doklady Mathematics*, **2006**, 73, 449-452	0.7	
6	The statement and numerical solution of an optimization problem in X-ray tomography. *Computational Mathematics and Mathematical Physics*, **2006**, 46, 16-22	0.9	1
5	On the solubility of the boundary-value problem of radiation transport theory with generalized conjugation conditions on the interfaces. *Izvestiya Mathematics*, **2003**, 67, 1243-1266	0.7	16
4	Boundary value problem of radiation transfer in an inhomogeneous medium with reflection conditions on the boundary. *Differential Equations*, **2000**, 36, 943-948	0.7	10

3   Tomography Through the Transport Equation. *The IMA Volumes in Mathematics and Its Applications*, **1999**, 33-44   0.5   5

2   Investigation of scattering and absorbing media by the methods of X-ray tomography. *Journal of Inverse and Ill-Posed Problems*, **1993**, 1,   1.3   12

1   Linear waves in a fluid flow with constant vorticity located under an ice blanket. *Prikladnaya Matematika I Mekhanika*, **1991**, 55, 193-200