

Anatoly G Yagola

List of Publications by Year in descending order

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87
papers

820
citations

623188

14
h-index

610482

24
g-index

99
all docs

99
docs citations

99
times ranked

377
citing authors

#	ARTICLE	IF	CITATIONS
1	Calculation of the gradient of Tikhonov's functional in solving coefficient inverse problems for linear partial differential equations. Journal of Inverse and Ill-Posed Problems, 2022, 30, 23-34.	0.5	0
2	Solution of the three-dimensional inverse elastography problem for parametric classes of inclusions. Inverse Problems in Science and Engineering, 2021, 29, 1055-1069.	1.2	2
3	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
4	Optical monitoring of coating production: correlation of errors and errors self-compensation. , 2021, , .		8
5	Recovering the Magnetic Image of Mars from Satellite Observations. Journal of Imaging, 2021, 7, 234.	1.7	4
6	Piecewise uniform regularization for the inverse problem of microtomography with a-posteriori error estimate. Inverse Problems in Science and Engineering, 2020, 28, 448-458.	1.2	4
7	Correlation of errors in inverse problems of optical coatings monitoring. Journal of Inverse and Ill-Posed Problems, 2020, 28, 915-921.	0.5	12
8	Convergent numerical methods for parabolic equations with reversed time via a new Carleman estimate. Inverse Problems, 2019, 35, 115012.	1.0	16
9	Strategies of Broadband Monitoring Aimed at Minimizing Deposition Errors. Coatings, 2019, 9, 809.	1.2	12
10	Magnetic parameters inversion method with full tensor gradient data. Inverse Problems and Imaging, 2019, 13, 745-754.	0.6	8
11	Mathematical investigation of the error self-compensation mechanism in optical coating technology. Inverse Problems in Science and Engineering, 2018, 26, 1214-1229.	1.2	17
12	Solution of the inverse elastography problem for parametric classes of inclusions with a posteriori error estimate. Journal of Inverse and Ill-Posed Problems, 2018, 26, 493-499.	0.5	2
13	Online Characterization Algorithms for Optical Coating Production with Broadband Monitoring. Coatings, 2018, 8, 323.	1.2	2
14	A posteriori error estimates for numerical solutions to inverse problems of elastography. Inverse Problems in Science and Engineering, 2017, 25, 114-128.	1.2	6
15	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
16	An error self-compensation mechanism for deposition of optical coatings with broadband optical monitoring. Moscow University Physics Bulletin (English Translation of Vestnik Moskovskogo) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 137		
17	Error self-compensation mechanism in the optical coating production with direct broad band monitoring. Optics Express, 2017, 25, 27225.	1.7	6
18	In celebration of the 60th birthday of Professor Alemdar HasanoÄŸlu (Hasanov). Journal of Inverse and Ill-Posed Problems, 2016, 24, .	0.5	0

#	ARTICLE	IF	CITATIONS
19	Numerical solution of an ill-posed Cauchy problem for a quasilinear parabolic equation using a Carleman weight function. <i>Journal of Inverse and Ill-Posed Problems</i> , 2016, 24, 761-776.	0.5	12
20	Using Lagrange principle for solving two-dimensional integral equation with a positive kernel. <i>Inverse Problems in Science and Engineering</i> , 2016, 24, 811-831.	1.2	6
21	Recursive SURE for iterative reweighted least square algorithms. <i>Inverse Problems in Science and Engineering</i> , 2016, 24, 625-646.	1.2	12
22	An optimal regularization method for convolution equations on the sourcewise represented set. <i>Journal of Inverse and Ill-Posed Problems</i> , 2015, 23, 465-475.	0.5	8
23	Recovering aerosol particle size distribution function on the set of bounded piecewise-convex functions. <i>Inverse Problems in Science and Engineering</i> , 2013, 21, 339-354.	1.2	13
24	Error Estimation in Ill-Posed Problems in Special Cases. <i>Springer Proceedings in Mathematics and Statistics</i> , 2013, , 155-164.	0.1	1
25	Making use of a partial order in solving inverse problems. <i>Inverse Problems</i> , 2013, 29, 095012.	1.0	4
26	Parameter identification problem for a parabolic equation application to the Black-Scholes option pricing model. <i>Journal of Inverse and Ill-Posed Problems</i> , 2012, 20, 327-337.	0.5	5
27	On inverse problems in partially ordered spaces with a priori information. <i>Journal of Inverse and Ill-Posed Problems</i> , 2012, 20, 567-573.	0.5	5
28	Reconstructing the energy spectra of backscattered electrons with allowance for the spectrometer's response function. <i>Bulletin of the Russian Academy of Sciences: Physics</i> , 2012, 76, 959-964.	0.1	1
29	Error Estimations in Linear Inverse Problems With a Priori Information. , 2011, , .		0
30	Michael V. Klibanov. <i>Journal of Inverse and Ill-Posed Problems</i> , 2011, 19, .	0.5	0
31	Application of inversion methods in solving ill-posed problems for magnetic parameter identification of steel hull vessel. <i>Journal of Inverse and Ill-Posed Problems</i> , 2011, 18, 1013-1029.	0.5	12
32	Increasing spatial resolution in the backscattered electron mode of scanning electron microscopy. <i>Bulletin of the Russian Academy of Sciences: Physics</i> , 2011, 75, 1181-1184.	0.1	3
33	Ring artefact suppression in real-time x-ray tomography. <i>Moscow University Physics Bulletin (English)</i> Tj ETQq1 1 0.784314 rgBT /Overlo	0.1	8
34	An analytical formula for ring artefact suppression in X-ray tomography. <i>Applied Mathematics Letters</i> , 2010, 23, 1489-1495.	1.5	36
35	Ill-Posed Problems and Methods for Their Numerical Solution. , 2010, , 17-34.		3
36	Analysis of point-target detection performance based on ATF and TSF. <i>Infrared Physics and Technology</i> , 2009, 52, 166-173.	1.3	13

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37	Energy spectra of electrons backscattered from bulk solid targets. Moscow University Physics Bulletin (English Translation of Vestnik Moskovskogo Universiteta, Fizika), 2009, 64, 503-506.	0.1	1
38	Error estimation for ill-posed problems on piecewise convex functions and sourcewise represented sets. Journal of Inverse and Ill-Posed Problems, 2008, 16, .	0.5	11
39	Solution of ill-posed problems on sets of functions convex along all lines parallel to coordinate axes. Journal of Inverse and Ill-Posed Problems, 2008, 16, .	0.5	0
40	Optimal recovery in problems of solving linear integral equations with a priori information. Journal of Inverse and Ill-Posed Problems, 2007, 15, .	0.5	3
41	Using a priori information about a solution of an ill-posed problem for constructing regularizing algorithms and their applications. Inverse Problems in Science and Engineering, 2007, 15, 3-17.	1.2	4
42	Analysis of the Q2237+0305 light-curve variability with regularization technique. Monthly Notices of the Royal Astronomical Society, 2007, 381, 1655-1662.	1.6	10
43	Symmetric velocity profiles reconstruction in channels with a circular cross-section by ultrasonic flow measurements. Inverse Problems in Science and Engineering, 2006, 14, 711-723.	1.2	1
44	Linear ill-posed problems on sets of convex functions on two-dimensional sets. Journal of Inverse and Ill-Posed Problems, 2006, 14, 735-750.	0.5	7
45	Image reconstruction technique and optical monitoring of the QSO2237+0305 from Maidanak Observatory in 2002-2003. Monthly Notices of the Royal Astronomical Society, 2005, 356, 323-330.	1.6	25
46	An Error Estimation for a Solution of Abel Equation. Numerical Functional Analysis and Optimization, 2005, 25, 259-269.	0.6	1
47	Determination of catalyst active sites distributions in ionic polymerization. Inverse Problems in Science and Engineering, 2005, 13, 101-107.	1.2	1
48	Two-stage algorithm for reconstructing the images of the gravitational lens QSO 2237+0305. Astronomy Reports, 2004, 48, 826-833.	0.2	3
49	The method of extending compacts and a posteriori error estimates for nonlinear ill-posed problems. Journal of Inverse and Ill-Posed Problems, 2004, 12, 627-636.	0.5	6
50	Error Estimation of the Reconstruction of Symmetry Velocity Profiles Using Abel Type Integral Equation. , 2003, , 465-474.		0
51	Large Molecular Systems: Computational Modeling of Geometry, Force Field Parameters and Intermolecular Potential on a Base of Stable Numerical Methods. , 2003, , 495-502.		0
52	A Priori Information in Image Reconstruction. , 2003, , 477-483.		1
53	Linear Ill-Posed Problems on Sets of Functions Convex Along all Lines Parallel to Coordinate Axes. , 2003, , 437-446.		0
54	Data Errors and an Error Estimation for Ill-Posed Problems. Inverse Problems in Science and Engineering, 2002, 10, 117-129.	0.5	38

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55	Cauchy Problems for Laplace Equation on Compact Sets. Inverse Problems in Science and Engineering, 2002, 10, 235-254.	0.5	9
56	The equilibrium structure of thiophene by the combined use of electron diffraction, vibrational spectroscopy and microwave spectroscopy guided by theoretical calculations. Journal of Molecular Structure, 2001, 567-568, 29-40.	1.8	46
57	Image reconstruction for the Einstein cross gravitational lens QSO 2237+0305. Astronomy Reports, 2001, 45, 759-768.	0.2	3
58	A Posteriori Error Estimation for the Sourcewise Represented Solution with Application to the Problem of Heat Conductivity. , 2001, , 88-97.		0
59	The use of ab initio anharmonic force fields in experimental studies of equilibrium molecular geometry. Journal of Molecular Structure, 2000, 550-551, 429-438.	1.8	24
60	Extension of a regularizing algorithm for the determination of equilibrium geometry and force field of free molecules from joint use of electron diffraction, molecular spectroscopy and ab initio data on systems with large-amplitude oscillatory motion. Journal of Molecular Structure, 1999, 485-486, 421-443.	1.8	37
61	New approaches for molecular conformer force field analysis in combination with ab initio results. Journal of Molecular Structure, 1999, 509, 255-263.	1.8	5
62	Regularizing algorithm for determination of equilibrium geometry and harmonic force field of free molecules from joint use of electron diffraction, vibrational spectroscopy and ab initio data with application to benzene. Journal of Molecular Structure, 1998, 445, 243-258.	1.8	47
63	Special regularizing methods for ill-posed problems with sourcewise represented solutions. Inverse Problems, 1998, 14, 1539-1550.	1.0	18
64	Velocity Law in the Extended Photosphere of the WN5 Star in the Eclipsing Binary V444 Cygni. Astrophysics and Space Science, 1997, 254, 111-131.	0.5	12
65	Microlensing by Non-compact Invisible Bodies. Astrophysics and Space Science, 1997, 252, 365-368.	0.5	0
66	A priori constraints in the force field calculations of polyatomic molecules. Journal of Structural Chemistry, 1997, 38, 181-194.	0.3	16
67	Microlensing by the non-compact invisible bodies. Physics Letters, Section A: General, Atomic and Solid State Physics, 1996, 219, 199-204.	0.9	12
68	Searching normal solution of inverse vibrational problem by the method of Monte-Carlo. Journal of Molecular Structure, 1995, 348, 147-150.	1.8	3
69	Joint treatment of ab initio and experimental data in molecular force field calculations with Tikhonov's method of regularization. Journal of Chemical Physics, 1994, 100, 1414-1424.	1.2	52
70	Regularizing algorithms for molecular force field calculations. Journal of Molecular Structure, 1992, 272, 13-33.	1.8	8
71	A method of regularization for solving inconsistent non-linear operator equations. USSR Computational Mathematics and Mathematical Physics, 1987, 27, 91-92.	0.0	0
72	Stable numerical methods of solving certain inverse problems of vibrational spectroscopy. USSR Computational Mathematics and Mathematical Physics, 1987, 27, 33-40.	0.0	15

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73	Calculation of force fields of chromium, molybdenum and tungsten hexafluorides and dioxodifluorides by means of the Tikchonov regularization method. <i>Spectrochimica Acta Part A: Molecular Spectroscopy</i> , 1985, 41, 185-189.	0.1	14
74	A generalized discrepancy principle for solving incompatible equations. <i>USSR Computational Mathematics and Mathematical Physics</i> , 1984, 24, 78-80.	0.0	6
75	A stable method for the calculation of the force fields of polyatomic molecules in dependent coordinates. <i>Theoretical and Experimental Chemistry</i> , 1984, 20, 66-72.	0.2	2
76	Force fields and mean amplitudes of vibration of chromium, molybdenum and tungsten oxotetrafluorides. <i>Computational and Theoretical Chemistry</i> , 1984, 106, 355-360.	1.5	9
77	A modification of the generalized discrepancy principle. <i>USSR Computational Mathematics and Mathematical Physics</i> , 1983, 23, 10-13.	0.0	0
78	On the choice of regularization parameter when solving ill-posed problems in reflexive spaces. <i>USSR Computational Mathematics and Mathematical Physics</i> , 1980, 20, 40-52.	0.0	10
79	Application of the method of regularizing incorrectly formulated problems to the study of the electronic spectra of diatomic molecules. <i>Journal of Applied Spectroscopy</i> , 1978, 29, 1273-1274.	0.3	0
80	Applicability of the disparity principle in the case of non-linear incorrectly posed problems, and a new regularizing algorithm for solving them. <i>USSR Computational Mathematics and Mathematical Physics</i> , 1975, 15, 8-16.	0.0	0
81	The regularization of incorrect problems with an approximately specified operator. <i>USSR Computational Mathematics and Mathematical Physics</i> , 1974, 14, 195-201.	0.0	1
82	Finite-difference approximation of linear incorrectly posed problems. <i>USSR Computational Mathematics and Mathematical Physics</i> , 1974, 14, 14-23.	0.0	2
83	A generalized discrepancy principle. <i>USSR Computational Mathematics and Mathematical Physics</i> , 1973, 13, 25-37.	0.0	39
84	Some estimates of the rate of convergence of regularized approximations for equations of the convolution type. <i>USSR Computational Mathematics and Mathematical Physics</i> , 1972, 12, 243-254.	0.0	6
85	A regularizing algorithm for incorrectly formulated problems with an approximately specified operator. <i>USSR Computational Mathematics and Mathematical Physics</i> , 1972, 12, 286-290.	0.0	5
86	Some algorithms for finding the approximate solution of incorrect problems in a set of monotonic functions. <i>USSR Computational Mathematics and Mathematical Physics</i> , 1972, 12, 1-18.	0.0	2
87	Solution of two-dimensional Fredholm equations of the first kind with a kernel depending on the difference of arguments. <i>USSR Computational Mathematics and Mathematical Physics</i> , 1971, 11, 253-260.	0.0	3