

B Tomas Johansson

List of Publications by Year in descending order

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90
papers

1,444
citations

361413

20
h-index

377865

34
g-index

92
all docs

92
docs citations

92
times ranked

462
citing authors

#	ARTICLE	IF	CITATIONS
1	Boundary Integrals for Data Reconstruction on an Elastostatic Crack. International Journal of Applied and Computational Mathematics, 2022, 8, 1.	1.6	0
2	An inverse elastodynamic data reconstruction problem. Journal of Engineering Mathematics, 2022, 134, .	1.2	1
3	A method of fundamental solutions with time-discretisation for wave motion from lateral Cauchy data. SN Partial Differential Equations and Applications, 2022, 3, 1.	0.6	2
4	Solution of the Cauchy problem for the wave equation using iterative regularization. Inverse Problems in Science and Engineering, 2021, 29, 2757-2771.	1.2	3
5	On non-denseness for a method of fundamental solutions with source points fixed in time for parabolic equations. Comptes Rendus Mathematique, 2021, 359, 733-738.	0.3	0
6	Numerical simulations in 3-dimensions of reaction-diffusion models for brain tumour growth. International Journal of Computer Mathematics, 2020, 97, 1151-1169.	1.8	8
7	On a boundary integral solution of a lateral planar Cauchy problem in elastodynamics. Journal of Computational and Applied Mathematics, 2020, 367, 112463.	2.0	1
8	Construction of sundials via vectors. International Journal of Mathematical Education in Science and Technology, 2019, 50, 617-628.	1.4	0
9	Wave propagation from lateral Cauchy data using a boundary element method. Wave Motion, 2019, 91, 102385.	2.0	6
10	On the alternating method and boundary-domain integrals for elliptic Cauchy problems. Computers and Mathematics With Applications, 2019, 78, 3514-3526.	2.7	2
11	A Boundary-Domain Integral Equation Method for an Elliptic Cauchy Problem with Variable Coefficients. Trends in Mathematics, 2019, , 493-501.	0.1	0
12	Numerical reconstruction of brain tumours. Inverse Problems in Science and Engineering, 2019, 27, 278-298.	1.2	10
13	Integral equations for biharmonic data completion. Inverse Problems and Imaging, 2019, 13, 1095-1111.	1.1	2
14	An iterative method for the Cauchy problem for second-order elliptic equations. International Journal of Mechanical Sciences, 2018, 142-143, 216-223.	6.7	4
15	A boundary integral equation method for numerical solution of parabolic and hyperbolic Cauchy problems. Applied Numerical Mathematics, 2018, 129, 104-119.	2.1	19
16	An elementary algorithm to evaluate trigonometric functions to high precision. International Journal of Mathematical Education in Science and Technology, 2018, 49, 131-137.	1.4	0
17	Identification of a multi-dimensional space-dependent heat source from boundary data. Applied Mathematical Modelling, 2018, 54, 202-220.	4.2	9
18	An iterative regularizing method for an incomplete boundary data problem for the biharmonic equation. ZAMM Zeitschrift Fur Angewandte Mathematik Und Mechanik, 2018, 98, 2010-2021.	1.6	3

#	ARTICLE	IF	CITATIONS
19	An integral equation method for the numerical solution of a Dirichlet problem for second-order elliptic equations with variable coefficients. <i>Journal of Engineering Mathematics</i> , 2018, 112, 63-73.	1.2	11
20	Determination of an additive time- and space-dependent coefficient in the heat equation. <i>International Journal of Numerical Methods for Heat and Fluid Flow</i> , 2018, 28, 1352-1373.	2.8	14
21	Leak identification in a saturated unsteady flow via a Cauchy problem. <i>Applied Mathematical Modelling</i> , 2017, 41, 25-36.	4.2	1
22	The method of fundamental solutions for problems in static thermo-elasticity with incomplete boundary data. <i>Inverse Problems in Science and Engineering</i> , 2017, 25, 652-673.	1.2	4
23	Numerical solution of the Dirichlet initial boundary value problem for the heat equation in exterior 3-dimensional domains using integral equations. <i>Journal of Engineering Mathematics</i> , 2017, 103, 23-37.	1.2	6
24	Properties of a method of fundamental solutions for the parabolic heat equation. <i>Applied Mathematics Letters</i> , 2017, 65, 83-89.	2.7	10
25	Inverse space-dependent force problems for the wave equation. <i>Journal of Computational and Applied Mathematics</i> , 2016, 306, 10-39.	2.0	25
26	Source Localization of Reaction-Diffusion Models for Brain Tumors. <i>Lecture Notes in Computer Science</i> , 2016, , 414-425.	1.3	3
27	Numerical solution of an elliptic 3-dimensional Cauchy problem by the alternating method and boundary integral equations. <i>Journal of Inverse and Ill-Posed Problems</i> , 2016, 24, .	1.0	7
28	Identification of a time-dependent bio-heat blood perfusion coefficient. <i>International Communications in Heat and Mass Transfer</i> , 2016, 75, 218-222.	5.6	18
29	Uniqueness and counterexamples in some inverse source problems. <i>Applied Mathematics Letters</i> , 2016, 58, 56-61.	2.7	6
30	Numerical solution of a Cauchy problem for Laplace equation in 3-dimensional domains by integral equations. <i>Inverse Problems in Science and Engineering</i> , 2016, 24, 1550-1568.	1.2	1
31	Calculating the derivative of piecewise functions. <i>International Journal of Mathematical Education in Science and Technology</i> , 2016, 47, 144-148.	1.4	0
32	Reconstruction of a spacewise-dependent heat source in a time-dependent heat diffusion process. <i>IMA Journal of Applied Mathematics</i> , 2014, 79, 33-53.	1.6	30
33	On the use of an integral equation approach for the numerical solution of a Cauchy problem for Laplace equation in a doubly connected planar domain. <i>Inverse Problems in Science and Engineering</i> , 2014, 22, 130-149.	1.2	13
34	Solvability and asymptotics of the heat equation with mixed variable lateral conditions and applications in the opening of the exocytotic fusion pore in cells. <i>IMA Journal of Applied Mathematics</i> , 2014, 79, 377-392.	1.6	2
35	A meshless method for an inverse two-phase one-dimensional nonlinear Stefan problem. <i>Mathematics and Computers in Simulation</i> , 2014, 101, 61-77.	4.4	12
36	The method of fundamental solutions for the two-dimensional inverse Stefan problem. <i>Inverse Problems in Science and Engineering</i> , 2014, 22, 112-129.	1.2	9

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37	The development of a wax layer on the interior wall of a circular pipe transporting heated oil. Quarterly Journal of Mechanics and Applied Mathematics, 2014, 67, 93-125.	1.3	5
38	Numerical solution of parabolic Cauchy problems in planar corner domains. Mathematics and Computers in Simulation, 2014, 101, 1-12.	4.4	3
39	A meshless method for an inverse two-phase one-dimensional linear Stefan problem. Inverse Problems in Science and Engineering, 2013, 21, 17-33.	1.2	21
40	The method of fundamental solutions for a time-dependent two-dimensional Cauchy heat conduction problem. Engineering Analysis With Boundary Elements, 2013, 37, 569-578.	3.7	12
41	A projected iterative method based on integral equations for inverse heat conduction in domains with a cut. Inverse Problems, 2013, 29, 065003.	2.0	4
42	On the Alternating Method for Cauchy Problems and Its Finite Element Discretisation. Springer Proceedings in Mathematics and Statistics, 2013, , 183-197.	0.2	7
43	A Meshless Regularization Method for a Two-Dimensional Two-Phase Linear Inverse Stefan Problem. Advances in Applied Mathematics and Mechanics, 2013, 5, 825-845.	1.2	12
44	A method of fundamental solutions for radially symmetric and axisymmetric backward heat conduction problems. International Journal of Computer Mathematics, 2012, 89, 1555-1568.	1.8	12
45	A direct boundary integral equation method for the numerical construction of harmonic functions in three-dimensional layered domains containing a cavity. International Journal of Computer Mathematics, 2012, 89, 1448-1462.	1.8	5
46	On the numerical solution of a Cauchy problem for the Laplace equation via a direct integral equation approach. Inverse Problems and Imaging, 2012, 6, 25-38.	1.1	19
47	A boundary element method for a multi-dimensional inverse heat conduction problem. International Journal of Computer Mathematics, 2012, 89, 1540-1554.	1.8	27
48	A method of fundamental solutions for the radially symmetric inverse heat conduction problem. International Communications in Heat and Mass Transfer, 2012, 39, 887-895.	5.6	19
49	The method of fundamental solutions for the identification of a sound-soft obstacle in inverse acoustic scattering. Applied Numerical Mathematics, 2012, 62, 1767-1780.	2.1	30
50	A comparative study on applying the method of fundamental solutions to the backward heat conduction problem. Mathematical and Computer Modelling, 2011, 54, 403-416.	2.0	18
51	A method of fundamental solutions for the one-dimensional inverse Stefan problem. Applied Mathematical Modelling, 2011, 35, 4367-4378.	4.2	64
52	A method of fundamental solutions for two-dimensional heat conduction. International Journal of Computer Mathematics, 2011, 88, 1697-1713.	1.8	36
53	Numerical approximation of the one-dimensional inverse Cauchy-Stefan problem using a method of fundamental solutions. Inverse Problems in Science and Engineering, 2011, 19, 659-677.	1.2	27
54	Fast reconstruction of harmonic functions from Cauchy data using the Dirichlet-to-Neumann map and integral equations. Inverse Problems in Science and Engineering, 2011, 19, 717-727.	1.2	2

#	ARTICLE	IF	CITATIONS
55	Recovering boundary data in planar heat conduction using a boundary integral equation method. <i>Electronic Journal of Boundary Elements</i> , 2011, 9, .	0.3	1
56	A Variational Method and Approximations of a Cauchy Problem for Elliptic Equations. <i>Journal of Algorithms and Computational Technology</i> , 2010, 4, 89-119.	0.7	20
57	Determining the temperature from Cauchy data in corner domains. <i>International Journal of Computing Science and Mathematics</i> , 2010, 3, 122.	0.3	3
58	Determining Planar Multiple Sound-Soft Obstacles from Scattered Acoustic Fields. <i>Journal of Mathematical Imaging and Vision</i> , 2010, 36, 185-199.	1.3	18
59	A relaxation method of an alternating iterative algorithm for the Cauchy problem in linear isotropic elasticity. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2010, 199, 3179-3196.	6.6	25
60	Relaxation procedures for an iterative MFS algorithm for the stable reconstruction of elastic fields from Cauchy data in two-dimensional isotropic linear elasticity. <i>International Journal of Solids and Structures</i> , 2010, 47, 3462-3479.	2.7	17
61	Fast reconstruction of harmonic functions from Cauchy data using integral equation techniques. <i>Inverse Problems in Science and Engineering</i> , 2010, 18, 381-399.	1.2	18
62	A method for identifying a spacewise-dependent heat source under stochastic noise interference. <i>Inverse Problems in Science and Engineering</i> , 2010, 18, 51-63.	1.2	4
63	Reconstruction of an unsteady flow from incomplete boundary data: Part I. Theory. <i>International Journal of Numerical Methods for Heat and Fluid Flow</i> , 2009, 19, 53-63.	2.8	0
64	An alternating boundary integral based method for a Cauchy problem for the Laplace equation in a quadrant. <i>Inverse Problems in Science and Engineering</i> , 2009, 17, 871-883.	1.2	1
65	Quasi-separation of the biharmonic partial differential equation. <i>IMA Journal of Applied Mathematics</i> , 2009, 74, 685-709.	1.6	4
66	The method of fundamental solutions for free surface Stefan problems. <i>Engineering Analysis With Boundary Elements</i> , 2009, 33, 529-538.	3.7	33
67	A method of fundamental solutions for transient heat conduction in layered materials. <i>Engineering Analysis With Boundary Elements</i> , 2009, 33, 1362-1367.	3.7	38
68	The method of fundamental solutions for detection of cavities in EIT. <i>Journal of Integral Equations and Applications</i> , 2009, 21, .	0.6	32
69	An iterative method based on boundary integrals for elliptic Cauchy problems in semi-infinite domains. <i>Electronic Journal of Boundary Elements</i> , 2009, 7, .	0.3	0
70	A method of fundamental solutions for transient heat conduction. <i>Engineering Analysis With Boundary Elements</i> , 2008, 32, 697-703.	3.7	57
71	A procedure for determining a spacewise dependent heat source and the initial temperature. <i>Applicable Analysis</i> , 2008, 87, 265-276.	1.3	74
72	Boundary integral equations for acoustical inverse sound-soft scattering. <i>Journal of Inverse and Ill-Posed Problems</i> , 2008, 16, .	1.0	10

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73	An alternating method for Cauchy problems for Helmholtz-type operators in non-homogeneous medium. IMA Journal of Applied Mathematics, 2008, 74, 62-73.	1.6	12
74	An Alternating Potential-Based Approach To The Cauchy Problem For The Laplace Equation In A Planar Domain With A Cut. Computational Methods in Applied Mathematics, 2008, 8, 315-335.	0.8	12
75	An alternating boundary integral based method for a Cauchy problem for the Laplace equation in semi-infinite regions. Inverse Problems and Imaging, 2008, 2, 317-333.	1.1	13
76	Reconstruction of an acoustically sound-soft obstacle from one incident field and the far-field pattern. IMA Journal of Applied Mathematics, 2007, 72, 96-112.	1.6	79
77	A variational method for identifying a spacewise-dependent heat source. IMA Journal of Applied Mathematics, 2007, 72, 748-760.	1.6	107
78	A procedure for the reconstruction of a stochastic stationary temperature field. IMA Journal of Applied Mathematics, 2007, 73, 641-650.	1.6	1
79	Nonlinear Integral Equation Methods for the Reconstruction of an Acoustically Sound-soft Obstacle. Journal of Integral Equations and Applications, 2007, 19, 289.	0.6	40
80	A procedure for the temperature reconstruction in corner domains from Cauchy data. Inverse Problems, 2007, 23, 357-372.	2.0	4
81	An iterative method for the reconstruction of a stationary flow. Numerical Methods for Partial Differential Equations, 2007, 23, 998-1017.	3.6	11
82	Determining the temperature from incomplete boundary data. Mathematische Nachrichten, 2007, 280, 1765-1779.	0.8	7
83	Determination of a spacewise dependent heat source. Journal of Computational and Applied Mathematics, 2007, 209, 66-80.	2.0	140
84	Reconstruction of a stationary flow from incomplete boundary data using iterative methods. European Journal of Applied Mathematics, 2006, 17, 651.	2.9	11
85	An alternating method for the stationary Stokes system. ZAMM Zeitschrift Fur Angewandte Mathematik Und Mechanik, 2006, 86, 268-280.	1.6	28
86	An iterative method for a Cauchy problem for the heat equation. IMA Journal of Applied Mathematics, 2006, 71, 262-286.	1.6	14
87	A variational conjugate gradient method for determining the fluid velocity of a slow viscous flow. Applicable Analysis, 2006, 85, 1327-1341.	1.3	9
88	An iterative method for reconstruction of temperature. Journal of Inverse and Ill-Posed Problems, 2006, 14, 267-278.	1.0	0
89	An iterative procedure for solving a Cauchy problem for second order elliptic equations. Mathematische Nachrichten, 2004, 272, 46-54.	0.8	25
90	A method of fundamental solutions for heat and wave propagation from lateral Cauchy data. Numerical Algorithms, 0, , 1.	1.9	8