YAMAMOTO, Masahiro

Position
Professor, Ph.D.
Department of Mathematical Sciences, the University of Tokyo
3-8-1 Komaba Meguro Tokyo 153-8914 Japan

Date and place of birth

Nationality

Education
1965–1977 ; school (12 years)
April 1977 ; entered the University of Tokyo
March 1981 ; graduated with the degree of Bachelor of Science
March 1983 ; obtained the degree of Master of Science from the University of Tokyo (supervisor: Prof. Hiroshi Fujita)
March 1988 ; received Ph. D. from the University of Tokyo for a thesis entitled "Inverse Spectral Problem for Systems of Ordinary Differential Equations" (supervisor: Prof. Hiroshi Fujita)

Occupation
April 1985 – March 1990; Research Associate at the Department of Mathematics, College of Arts and Sciences, the University of Tokyo
April 1990 – March 1992; Associate Professor at the Department of Mathematics, College of Arts and Sciences, the University of Tokyo
April 1992 – March 2010; Associate Professor at the Department of Mathematical Sciences, the University of Tokyo
April 2010 – ; Professor at the Department of Mathematical Sciences, the University of Tokyo

Long academic stay places (longer than one month)
the Research Institute for Mathematical Sciences of Kyoto University
Technische Universität München (Germany) as Alexander von Humboldt Fellow
Freie Universität Berlin (Germany) as guest researcher
Weierstrass Institute für Angewandte Analysis und Stochastik in Berlin (Germany) as guest researcher
Université de Franche-Comté, Besançon (France) as as Maître de Conférence
Université de Metz (France) as Professeur Invité
Université de Strasbourg (France) as Professeur Invité
Université de Marseille (France) as Professeur Invité

Short academic stay places
Bulgaria: Bulgarian Academy of Sciences, University of Plovidiv
China : Fudan University, Shanghai University, Peking University, Zhejiang University, South-

East University Nanjing, East China Institute of Technology, The Chinese University of Hong Kong, The City University of Hong Kong, Southeast University Nanjing
France : Université Montpellier, Université Paris XI, École Polytechnique, Université de Versailles, Université Grenoble, INRIA
Germany: Technische Universität Chemnitz-Zwickau, Technische Universität Berlin, Universität Frankfurt, Technische Universität Bergakademie Freiberg, Universität Göttingen, Universität Hamburg, Universität Gesamt-Hochschule Siegen, Universität Potsdam
Austria: Universität Linz, Universität Graz
England: Brunel University, Bath University, University of Oxford
Italy: Università Milano, Politecnico di Milano, University of Catania
Switzerland: École Polytechnique Fédérale de Lausanne
Greece: Athens University of Economics, University of Crete
USA : Humboldt State University, University of Delaware, UCLA, University of Colorado, Boulder, University of Minnesota
Russia: Sobolev Institute of Mathematics of Siberian Branch of Russian Academy of Sciences (Novosibirsk), Moscow State University, Euler Institute (St. Petersburg)
Korea: Pusan National University, Masan University, Seoul National University, Yonsei University
Vietnam: HoChiMinh City University, Polytecnic University of Hanoi Institute of Applied Mechanics (HoChiMinh City)

Research Topics

1. coefficient inverse problems by Carleman estimate
2. inverse boundary value problems
3. determination of shapes
4. fractional partial differential equations
5. optimal control

Industrial partners with joint research projects

1. Nippon Steel & Sumitomo Metal
2. Kao Corporation
3. Nikon Corporation
4. Towa Seiki Corporation

List of patents

- Application number: 2000-344334 (application date: 2000/11/10)
  Publicity number: 2002-148073 (publicity date: 2002/05/22).
- Application number: 2004-297778 (application date: 2004/10/12)
  Publicity number: 2005-134383 (publicity date: 2005/5/26)
- Application number: 2005-258822 (application date: 2005/9/7)
- Application number: 2006-239413 (application date: 2006/9/4)

- Application number: 2006-239412 (application date: 2006/9/4)
- Application number: 2007-240052 (application date: 2007/9/14)
- Application number: 2007-240053 (application date: 2007/9/14)
- Application number: 2008-037965 (application date: 2008/2/19)
- International Patent Number:PCT/JP2009/062035 (application date: 2009/7/1), international publicity Number:WO/2010/001925 (publicity date: 2010/7/1)
- Application number: 2010-111255 (application date: 2010/5/13)
- Application number: 2010-120874 (application date: 2010/5/26)

Editors

1. Editorial board "Journal of Inverse and Ill-posed Problems"
2. Editorial board of "Numerical Methods and Programming"
3. Editorial board of "Journal of the China Society of Industrial and Applied Mathematics (J. of Chinese SIAM)"
4. "Editorial board of "Applicable Analysis"
5. Board of "The Journal of World Mathematical Review"
6. Editorial Board of "IAENG International Journal of Applied Mathematics"
7. Board of "Inverse Problems in Science and Engineering"
8. Editorial Board of "Nonlinear Analysis: Real World Applications"

Honors

- Vice President of Inverse Problems International Association
- Honorary professor of East China Institute of Technology (China)
- Guest Professor of Southeast University (Nanjing, China)

Awards

- The Gold Medal 2012 for Great Contributions in Mathematics, Sobolev Institute of Mathematics of the Siberian Branch of the Russian Academy of Sciences,
- the 2014 William F. Ames JMAA Best Paper Award

List of Publications
YAMAMOTO, Masahiro

Professor, Ph.D.
Department of Mathematical Sciences, the University of Tokyo
3-8-1 Komaba Meguro Tokyo 153-8914 Japan

Monograph in English

∗ *I omitted monographs in Japanese.*

[1] Bellassoued, Mourad and Yamamoto, Masahiro, Carleman Estimates and Applications to Inverse Problems for Hyperbolic Systems, Springer-Japan, Tokyo, 2017, 260pp.

Articles with peer reviewing

Year 2018

1. Kubica, Adam; Yamamoto, Masahiro; Initial-boundary value problems for fractional diffusion equations with time-dependent coefficients, Fract. Calc. Appl. Anal. **21** (2018) 276-311.
2. Yu, Jie; Liu, Yikan; Yamamoto, Masahiro Theoretical stability in coefficient inverse problems for general hyperbolic equations with numerical reconstruction, Inverse Problems **34** (2018) 045001, 30 pp.
3. Luchko, Yuri and Yamamoto, Masahiro, Maximum principles for the time-fractional diffusion equations, Chapter 10 of "Frontiers in Fractional Calculus", Bentham Science Publishers, Chiba, Japan, 2018.
4. Yamamoto, Masahiro, Weak solutions to non-homogeneous boundary value problems for time-fractional diffusion equations. J. Math. Anal. Appl. 460 (2018), 365-381.
5. Kian, Y.; Oksanen, L.; Soccorsi, E.; Yamamoto, M. Global uniqueness in an inverse problem for time fractional diffusion equations. J. Differential Equations 264 (2018), 1146-1170.
6. Beilina, L.; Cristofol, M.; Li, S.; Yamamoto, M., Lipschitz stability for an inverse hyperbolic problem of determining two coefficients by a finite number of observations. Inverse Problems 34 (2018), 015001, 27 pp.

Year 2017

7. Loreti, Paola; Sforza, Daniela; Yamamoto, Masahiro, Carleman estimates for integro-differential parabolic equations with singular memory kernels. J. Elliptic Parabol. Equ. 3 (2017), 53-64.
8. Loreti, Paola; Sforza, Daniela; Yamamoto, Masahiro Carleman estimate and application to an inverse source problem for a viscoelasticity model in anisotropic case. Inverse Problems 33 (2017), 125014, 28 pp.
9. Luchko, Yuri; Yamamoto, Masahiro, On the maximum principle for a time-fractional diffusion equation. Fract. Calc. Appl. Anal. 20 (2017), 1131-1145.

10. Lorenzi, Alfredo; Lorenzi, Luca; *Yamamoto, Masahiro, Continuous dependence and uniqueness for lateral Cauchy problems for linear integro-differential parabolic equations. J. Inverse Ill-Posed Probl. 25 (2017), 617-631.

11. Hussein, S. O.; Lesnic, D.; Yamamoto, M. Reconstruction of space-dependent potential and/or damping coefficients in the wave equation. Comput. Math. Appl. 74 (2017), 1435-1454.

12. Amirov, Arif; Golgeleyen, Fikret; Yamamoto, Masahiro, Uniqueness in an integral geometry problem and an inverse problem for the kinetic equation. Appl. Anal. 96 (2017), 2236-2249.

13. Jiang, Daijun; Li, Zhiyuan; Liu, Yikan; Yamamoto, Masahiro, Weak unique continuation Property and a related inverse source problem for time-fractional diffusion-advection equations. Inverse Problems 33 (2017), 055013, 22 pp.

14. Li, Zhiyuan; Luchko, Yuri; Yamamoto, Masahiro Analyticity of solutions to a distributed order time-fractional diffusion equation and its application to an inverse problem. Comput. Math. Appl. 73 (2017), 1041-1052.

15. Cheng, Xing; Li, Zhiyuan; Yamamoto, Masahiro, Asymptotic behavior of solutions to space-time fractional diffusion-reaction equations. Math. Methods Appl. Sci. 40 (2017), 1019-1031.

16. Alabau-Boussouira, Fatiha; Cannarsa, Piermarco; Yamamoto, Masahiro, Source reconstruction by partial measurements for a class of hyperbolic systems in cascade. Mathematical paradigms of climate science, 35-50, Springer INdAM Ser., 15, Springer, 2017.

17. Jiang, Daijun; Liu, Yikan; Yamamoto, Masahiro; Inverse source problem for the hyperbolic equation with a time-dependent principal part. J. Differential Equations 262 (2017), 653-681.

18. Imanuvilov, Oleg; Yamamoto, Masahiro; On Calderń's problem for a system of elliptic equations. Publ. Res. Inst. Math. Sci. 53 (2017), 141-186.

19. Kian, Yavar; Yamamoto, Masahiro; On existence and uniqueness of solutions for semilinear fractional wave equations. Fract. Calc. Appl. Anal. 20 (2017), no. 1, 117-138.

Year 2016

20. Luchko, Yuri; Yamamoto, Masahiro General time-fractional diffusion equation: some uniqueness and existence results for the initial-boundary-value problems. Fract. Calc. Appl. Anal. 19 (2016), no. 3, 676-695.

21. Liu, Yikan; Rundell, William; Yamamoto, Masahiro, Strong maximum principle for fractional diffusion equations and an application to an inverse source problem. Fract. Calc. Appl. Anal. 19 (2016), no. 4, 888-906.

22. Gölgeleyen, Fikret; Yamamoto, Masahiro, Stability for some inverse problems for transport equations. SIAM J. Math. Anal. 48 (2016), no. 4, 2319-2344.

23. Imanuvilov, Oleg Y.; Yamamoto, Masahiro Calderón problem for Maxwell's equations in two dimensions. J. Inverse Ill-Posed Probl. 24 (2016), no. 3, 351-355.

24. Bellassoued, Mourad; Imanuvilov, Oleg; Yamamoto, Masahiro Carleman estimate for the Navier-Stokes equations and an application to a lateral Cauchy problem. Inverse Problems 32 (2016), no. 2, 025001, 23 pp.

25. Liu, J. J.; Yamamoto, M.; Yan, L. L. On the reconstruction of unknown time-dependent boundary sources for time fractional diffusion process by distributing measurement. Inverse Problems 32 (2016), no. 1, 015009, 25 pp.

26. Li, Zhiyuan; Imanuvilov, Oleg Yu.; Yamamoto, Masahiro Uniqueness in inverse boundary value problems for fractional diffusion equations. Inverse Problems 32 (2016), no. 1, 015004, 16 pp.

27. Uesaka, Masaaki; Yamamoto, Masahiro Carleman estimate and unique continuation for a structured population model. Appl. Anal. 95 (2016), no. 3, 599-614.

Year 2015

28. Liu, Yikan; Jiang, Daijun; Yamamoto, Masahiro Inverse source problem for a double hyperbolic equation describing the three-dimensional time cone model. SIAM J. Appl. Math. 75 (2015), no. 6, 2610-2635.

29. Hu, Guanghui; Yamamoto, Masahiro Hölder stability estimate of Robin coefficient in corrosion detection with a single boundary measurement. Inverse Problems 31 (2015), no. 11, 115009, 20 pp.

30. Blåsten, Eemeli; Imanuvilov, Oleg Yu.; Yamamoto, Masahiro, Stability and uniqueness for a two-dimensional inverse boundary value problem for less regular potentials. Inverse Probl. Imaging 9 (2015), no. 3, 709-723.

31. Imanuvilov, O. Yu.; Yamamoto, M. Remark on boundary data for inverse boundary value problems for the Navier-Stokes equations [Addendum to MR3319370]. Inverse Problems 31 (2015), no. 10, 109401, 4 pp.

32. Baudouin, Lucie; Yamamoto, Masahiro, Inverse problem on a tree-shaped network: unified approach for uniqueness. Appl. Anal. 94 (2015), no. 11, 2370-2395.

33. Imanuvilov, O. Yu.; Yamamoto, M., Calderón problem for Maxwell's equations in the waveguide. Spectral theory and partial differential equations, 137-168, Contemp. Math., 640, Amer. Math. Soc., Providence, RI, 2015.

34. Gölgeleyen, Fikret; Yamamoto, Masahiro, An inverse problem for the Vlasov-Poisson system. J. Inverse Ill-Posed Probl. 23 (2015), no. 4, 363-372.

35. Imanuvilov, O. Yu.; Uhlmann, Gunther; Yamamoto, M. The Neumann-to-Dirichlet map in two dimensions. Adv. Math. 281 (2015), 578-593.

36. Gorenflo, Rudolf; Luchko, Yuri; Yamamoto, Masahiro Time-fractional diffusion equation in the fractional Sobolev spaces. Fract. Calc. Appl. Anal. 18 (2015), no. 3, 799-820.

37. Li, Zhiyuan; Liu, Yikan; Yamamoto, Masahiro Initial-boundary value problems for multi-term time-fractional diffusion equations with positive constant coefficients. Appl. Math. Comput. 257 (2015), 381-397.

38. Imanuvilov, O. Yu.; Yamamoto, M., Global uniqueness in inverse boundary value problems for the Navier-Stokes equations and Lamé system in two dimensions. Inverse Problems 31 (2015), no. 3, 035004, 46 pp.

39. Li, Zhiyuan; Yamamoto, Masahiro Uniqueness for inverse problems of determining orders of multi-term time-fractional derivatives of diffusion equation. Appl. Anal. 94 (2015), no. 3, 570-579.

40. Elschner, Johannes; Hu, Guanghui; Yamamoto, Masahiro Uniqueness in inverse elastic scattering from unbounded rigid surfaces of rectangular type. Inverse Probl. Imaging 9 (2015), no. 1, 127-141.

41. Liu, J. J.; Yamamoto, M.; Yan, L. On the uniqueness and reconstruction for an inverse problem of the fractional diffusion process. Appl. Numer. Math. 87 (2015), 1-19.

Year 2014

42. Imanuvilov, Oleg Yu.; Yamamoto, Masahiro Calderon problem for Maxwell's equations in cylindrical domain. Inverse Probl. Imaging 8 (2014), no. 4, 1117-1137.

43. Fujishiro, Kenichi; Yamamoto, Masahiro Approximate controllability for fractional diffusion equations by interior control. Appl. Anal. 93 (2014), no. 9, 1793-1810.

44. Li, Zhiyuan; Luchko, Yuri; Yamamoto, Masahiro Asymptotic estimates of solutions to initial-boundary-value problems for distributed order time-fractional diffusion equations. Fract. Calc. Appl. Anal. 17 (2014), no. 4, 1114-1136.

45. Imanuvilov, Oleg Yu.; Yamamoto, Masahiro Conditional stability in a backward parabolic system. Appl. Anal. 93 (2014), no. 10, 2174-2198.

46. Golgeleyen, Fikret; Yamamoto, Masahiro Stability of inverse problems for ultrahyperbolic equations. Chin. Ann. Math. Ser. B 35 (2014), no. 4, 527-556.

47. Wang, Wenyan; Yamamoto, Masahiro; Han, Bo Two-dimensional parabolic inverse source problem with final overdetermination in reproducing kernel space. Chin. Ann. Math. Ser. B 35 (2014), no. 3, 469-482.

48. Liu, Yikan; Yamamoto, Masahiro On the multiple hyperbolic systems modelling phase transformation kinetics. Appl. Anal. 93 (2014), no. 6, 1297-1318.

49. Machida, Manabu; Yamamoto, Masahiro Global Lipschitz stability in determining coefficients of the radiative transport equation. Inverse Problems 30 (2014), no. 3, 035010, 16 pp.

50. Hömberg, Dietmar; Lu, Shuai; Sakamoto, Kenichi; Yamamoto, Masahiro Parameter identification in non-isothermal nucleation and growth processes. Inverse Problems 30 (2014), no. 3, 035003, 24 pp.

51. Beauchard, K.; Cannarsa, P.; Yamamoto, M. Inverse source problem and null controllability for multidimensional parabolic operators of Grushin type. Inverse Problems 30 (2014), no. 2, 025006, 26 pp.

52. Hömberg, Dietmar; Lu, Shuai; Sakamoto, Kenichi; Yamamoto, Masahiro, Nucleation rate identification in binary phase transition. The impact of applications on mathematics, 227-243, Math. Ind. (Tokyo), 1, Springer, Tokyo, 2014.

Year 2013

53. Li, Shumin; Yamamoto, Masahiro An inverse problem for Maxwell's equations in isotropic and non-stationary media. Appl. Anal. 92 (2013), no. 11, 2335-2356.

54. Choulli, Mourad; Imanuvilov, Oleg Yu.; Puel, Jean-Pierre; Yamamoto, Masahiro Inverse source problem for linearized Navier-Stokes equations with data in arbitrary sub-domain. Appl. Anal. 92 (2013), no. 10, 2127-2143.

55. Imanuvilov, Oleg Y.; Yamamoto, Masahiro Uniqueness for inverse boundary value problems by Dirichlet-to-Neumann map on subboundaries. Milan J. Math. 81 (2013), no. 2, 187-258.

56. Bellassoued, Mourad; Yamamoto, Masahiro Carleman estimate and inverse source problem for Biot's equations describing wave propagation in porous media. Inverse Problems 29 (2013), no. 11, 115002, 20 pp.

57. Wang, Wenyan; Yamamoto, Masahiro; Han, Bo Numerical method in reproducing kernel space for an inverse source problem for the fractional diffusion equation. Inverse Problems 29 (2013), no. 9, 095009, 15 pp.

58. Ling, Leevan; Yamamoto, Masahiro Numerical simulations for space-time fractional diffusion equations. Int. J. Comput. Methods 10 (2013), no. 2, 1341001, 13 pp.

59. Miller, Luc; Yamamoto, Masahiro Coefficient inverse problem for a fractional diffusion equation. Inverse Problems 29 (2013), no. 7, 075013, 8 pp.

60. Hatano, Yuko; Nakagawa, Junichi; Wang, Shengzhang; Yamamoto, Masahiro Determination of order in fractional diffusion equation. J. Math-for-Ind. 5A (2013), 51-57.

61. Wen, Jin; Yamamoto, Masahiro; Wei, Ting Simultaneous determination of a time-dependent heat source and the initial temperature in an inverse heat conduction problem. Inverse Probl. Sci. Eng. 21 (2013), no. 3, 485-499.

62. Luchko, Yuri; Rundell, William; Yamamoto, Masahiro; Zuo, Lihua Uniqueness and reconstruction of an unknown semilinear term in a time-fractional reaction- diffusion equation. Inverse Problems 29 (2013), no. 6, 065019, 16 pp.

63. Li, Gongsheng; Zhang, Dali; Jia, Xianzheng; Yamamoto, Masahiro Simultaneous inversion for the space-dependent diffusion coefficient and the fractional order in the time-fractional diffusion equation. Inverse Problems 29 (2013), no. 6, 065014, 36 pp.

64. Imanuvilov, O. Yu.; Yamamoto, M. Inverse boundary value problem for the Schrodinger equation in a cylindrical domain by partial boundary data. Inverse Problems 29 (2013), no. 4, 045002, 8 pp.

65. Imanuvilov, Oleg; Yamamoto, Masahiro Unique determination of potentials and semilinear terms of semilinear elliptic equations from partial Cauchy data. J. Inverse Ill-Posed Probl. 21 (2013), no. 1, 85-108.

66. Wang, Wenyan; Han, Bo; Yamamoto, Masahiro Inverse heat problem of determining time-dependent source parameter in reproducing kernel space. Nonlinear Anal. Real World Appl. 14 (2013), no. 1, 875-887.

Year 2012

67. Imanuvilov, Oleg; Uhlmann, Gunther; Yamamoto, Masahiro Partial Cauchy data for general second order elliptic operators in two dimensions. Publ. Res. Inst. Math. Sci. 48 (2012), no. 4, 971-1055.

68. Imanuvilov, Oleg Yu.; Uhlmann, Gunther; Yamamoto, Masahiro On uniqueness of Lame coefficients from partial Cauchy data in three dimensions. Inverse Problems 28 (2012), no. 12, 125002, 5 pp.

69. Kawamoto, Atsushi; Yamamoto, Masahiro Determination of an electromagnetic potential for the Dirac equation. Inverse Problems 28 (2012), no. 11, 115012, 26 pp.

70. Yamamoto, Masahiro; Zhang, Ying Conditional stability in determining a zeroth-order coefficient in a half-order fractional diffusion equation by a Carleman estimate. Inverse Problems 28 (2012), no. 10, 105010, 10 pp.

71. Cristofol, Michel; Gaitan, Patricia; Ramoul, Hichem; Yamamoto, Masahiro Identification of two coefficients with data of one component for a nonlinear parabolic system. Appl. Anal. 91 (2012), no. 11, 2073-2081.

72. Imanuvilov, O. Yu.; Yamamoto, M. Inverse boundary value problem for Schrodinger equation in two dimensions. SIAM J. Math. Anal. 44 (2012), no. 3, 1333-1339.

73. Imanuvilov, O. Yu.; Yamamoto, M. Inverse problem by Cauchy data on an arbitrary subboundary for systems of elliptic equations. Inverse Problems 28 (2012), no. 9, 095015, 30 pp.

74. Liu, Yikan; Xu, Xiang; Yamamoto, Masahiro Growth rate modeling and identification in the crystallization of polymers. Inverse Problems 28 (2012), no. 9, 095008, 13 pp.

75. Cannarsa, Piermarco; Tort, Jacques; Yamamoto, Masahiro Unique continuation and approximate controllability for a degenerate parabolic equation. Appl. Anal. 91 (2012), no. 8, 1409-1425.

76. Cheng, Jin; Lu, Shuai; Yamamoto, Masahiro Reconstruction of the Stefan-Boltzmann coefficients in a heat-transfer process. Inverse Problems 28 (2012), no. 4, 045007, 17 pp.

77. Bellassoued, Mourad; Yamamoto, Masahiro Carleman estimate with second large parameter for second order hyperbolic operators in a Riemannian manifold and applications in thermoelasticity cases. Appl. Anal. 91 (2012), no. 1, 35-67.

Year 2011

78. Choulli, Mourad; Yamamoto, Masahiro Global existence and stability for an inverse coefficient problem for a semilinear parabolic equation. Arch. Math. (Basel) 97 (2011), no. 6, 587-597.

79. Sakamoto, Kenichi; Yamamoto, Masahiro Inverse source problem with a final overdetermination for a fractional diffusion equation. Math. Control Relat. Fields 1 (2011), no. 4, 509-518.

80. Imanuvilov, Oleg Yu.; Yamamoto, Masahiro On reconstruction of Lame coefficients from partial Cauchy data. J. Inverse Ill-Posed Probl. 19 (2011), no. 6, 881-891.

81. Cipolatti, Rolci; Yamamoto, Masahiro An inverse problem for a wave equation with arbitrary initial values and a finite time of observations. Inverse Problems 27 (2011), no. 9, 095006, 15 pp.

82. Xu, Xiang; Cheng, Jin; Yamamoto, Masahiro Carleman estimate for a fractional diffusion equation with half order and application. Appl. Anal. 90 (2011), no. 9, 1355-1371.

83. Imanuvilov, Oleg Yu.; Uhlmann, Gunther; Yamamoto, Masahiro Inverse boundary value problem by measuring Dirichlet data and Neumann data on disjoint sets. Inverse Problems 27 (2011), no. 8, 085007, 26 pp.

84. Sakamoto, Kenichi; Yamamoto, Masahiro Initial value/boundary value problems for fractional diffusion-wave equations and applications to some inverse problems. J. Math. Anal. Appl. 382 (2011), no. 1, 426-447.

85. Imanuvilov, Oleg Y.; Uhlmann, Gunther; Yamamoto, Masahiro Determination of second-order elliptic operators in two dimensions from partial Cauchy data. Proc. Natl. Acad. Sci. USA 108 (2011), no. 2, 467-472.

86. Bellassoued, Mourad; Choulli, Mourad; Yamamoto, Masahiro Stability estimate for a multi-dimensional inverse spectral problem with partial spectral data. J. Math. Anal. Appl. 378 (2011), no. 1, 184-197.

87. Bellassoued, Mourad; Yamamoto, Masahiro Carleman estimates and an inverse heat source problem for the thermoelasticity system. Inverse Problems 27 (2011), no. 1, 015006, 18 pp.

Year 2010

88. Imanuvilov, Oleg Yu.; Uhlmann, Gunther; Yamamoto, Masahiro The Calderon problem with partial data in two dimensions. J. Amer. Math. Soc. 23 (2010), no. 3, 655-691.

89. Liu, J. J.; Yamamoto, M. A backward problem for the time-fractional diffusion equation. Appl. Anal. 89 (2010), no. 11, 1769-1788.

90. Hofmann, Bernd; Yamamoto, Masahiro On the interplay of source conditions and variational inequalities for nonlinear ill-posed problems. Appl. Anal. 89 (2010), no. 11, 1705-1727.

91. Cannarsa, P.; Tort, J.; Yamamoto, M. Determination of source terms in a degenerate parabolic equation. Inverse Problems 26 (2010), no. 10, 105003, 20 pp.

92. Brunner, Hermann; Ling, Leevan; Yamamoto, Masahiro Numerical simulations of 2D fractional subdiffusion problems. J. Comput. Phys. 229 (2010), no. 18, 6613-6622.

93. Chen, Wenbin; Cheng, Jin; Yamamoto, Masahiro; Zhang, Weili The monotone Robin-Robin domain decomposition methods for the elliptic problems with Stefan-Boltzmann conditions. Commun. Comput. Phys. 8 (2010), no. 3, 642-662.

94. Wang, Y. B.; Cheng, J.; Nakagawa, J.; Yamamoto, M. A numerical method for solving the inverse heat conduction problem without initial value. Inverse Probl. Sci. Eng. 18 (2010), no. 5, 655-671.

95. Yuan, Ganghua; Yamamoto, Masahiro Carleman estimates for the Schrodinger equation and applications to an inverse problem and an observability inequality. Chin. Ann. Math. Ser. B 31 (2010), no. 4, 555-578.

96. Nakagawa, Junichi; Sakamoto, Kenichi; Yamamoto, Masahiro Overview to mathematical analysis for fractional diffusion equations-new mathematical aspects motivated by industrial collaboration. J. Math-for-Ind. 2A (2010), 99-108.

97. Elschner, Johannes; Yamamoto, Masahiro Uniqueness in inverse elastic scattering with finitely many incident waves. Inverse Problems 26 (2010), no. 4, 045005, 8 pp.

98. Romanov, V. G.; Yamamoto, M. Recovering a Lame kernel in a viscoelastic equation by a single boundary measurement. Appl. Anal. 89 (2010), no. 3, 377-390.

Year 2009

99. M. Yamamoto, Carleman estimates for parabolic equations and applications. Inverse Problems, 25 (2009), 123013 (75pp).

100. Wei, T.; Yamamoto, M. Reconstruction of a moving boundary from Cauchy data in one-dimensional heat equation. Inverse Probl. Sci. Eng. 17 (2009), no. 4, 551-567.

101. Anikonov, Yu. E.; Yamamoto, M. Analytic representations of solutions to inverse problems for nonlinear equations. J. Inverse Ill-Posed Probl. 17 (2009), no. 7, 695-701.

102. Cheng, Jin; Nakagawa, Junichi; Yamamoto, Masahiro; Yamazaki, Tomohiro Uniqueness in an inverse problem for a one-dimensional fractional diffusion equation. Inverse Problems 25 (2009), no. 11, 115002, 16 pp.

103. Sakamoto, Kenichi; Yamamoto, Masahiro Inverse heat source problem from time distributing overdetermination. Appl. Anal. 88 (2009), no. 5, 735-748.

104. Imanuvilov, Oleg Yu.; Yamamoto, Masahiro An inverse problem and an observability inequality for the Lame system with stress boundary condition. Appl. Anal. 88 (2009), no. 5, 711-733.

105. Benabdallah, Assia; Cristofol, Michel; Gaitan, Patricia; Yamamoto, Masahiro Inverse problem for a parabolic system with two components by measurements of one component. Appl. Anal. 88 (2009), no. 5, 683-709.

106. Hömberg, Dietmar; Togobytska, Nataliya; Yamamoto, Masahiro On the evaluation of dilatometer experiments. Appl. Anal. 88 (2009), no. 5, 669-681.

107. Imanuvilov, Oleg Yu.; Isakov, Victor; Yamamoto, Masahiro New realization of the pseudoconvexity and its application to an inverse problem. Appl. Anal. 88 (2009), no. 5, 637-652.

108. Imanuvilov, Oleg Yu.; Puel, Jean Pierre; Yamamoto, Masahiro Carleman estimates for parabolic equations with nonhomogeneous boundary conditions. Chin. Ann. Math. Ser. B 30 (2009), no. 4, 333-378.

109. Yuan, Ganghua; Yamamoto, Masahiro Lipschitz stability in the determination of the principal part of a parabolic equation. ESAIM Control Optim. Calc. Var. 15 (2009), no. 3, 525-554.

110. Bellassoued, Mourad; Choulli, Mourad; Yamamoto, Masahiro Stability estimate for an inverse wave equation and a multidimensional Borg-Levinson theorem. J. Differential Equations 247 (2009), no. 2, 465-494.

111. Liu, Hongyu; Yamamoto, Masahiro; Zou, Jun New reflection principles for Maxwell's equations and their applications. Numer. Math. Theory Methods Appl. 2 (2009), no. 1, 1-17.

112. Li, Jingzhi; Yamamoto, Masahiro; Zou, Jun Conditional stability and numerical reconstruction of initial temperature. Commun. Pure Appl. Anal. 8 (2009), no. 1, 361-382.

113. Li, Shumin; Miara, Bernadette; Yamamoto, Masahiro A Carleman estimate for the linear shallow shell equation and an inverse source problem. Discrete Contin. Dyn. Syst. 23 (2009), no. 1-2, 367-380.

Year 2008

114. Yamazaki, T.; Yamamoto, M. Inverse problems for vibrating systems of first order. J. Inverse Ill-Posed Probl. 16 (2008), no. 9, 887-936.

115. Bellassoued, M.; Jellali, D.; Yamamoto, M. Lipschitz stability in an inverse problem for a hyperbolic equation with a finite set of boundary data. Appl. Anal. 87 (2008), no. 10-11, 1105-1119.

116. Choulli, Mourad; Yamamoto, Masahiro Uniqueness and stability in determining the heat radiative coefficient, the initial temperature and a boundary coefficient in a parabolic equation. Nonlinear Anal. 69 (2008), no. 11, 3983-3998.

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