

List of Main Publications of Sergo Kharibegashvili

(i) monographs

1. Goursat and Darboux type problems for linear hyperbolic partial differential equations and systems. *Mem. Differential Equations Math. Phys.* **4**(1995), 1-127.
2. Some multidimensional problems for hyperbolic partial differential equations and systems. *Mem. Differential Equations Math. Phys.* **37** (2006), 1-136.
3. Boundary value problems for some classes of nonlinear wave equations. *Mem. Differential Equations Math. Phys.* **46** (2009), 1-114.
4. Some local and nonlocal multidimensional problems for a class of semilinear hyperbolic equations and systems. *Mem. Differential Equations Math. Phys.* **75** (2018), 1-91.

(ii) papers

1. The characteristic problem for hyperbolic second order systems with constant coefficients. (Russian) *Differentsial'nye Uravneniya* **14**(1978), No. 1, 123-135; English transl.: *Differ. Equations* **14**(1978), No. 1, 87-96.
2. The characteristic problem for second order strictly hyperbolic systems with two independent variables. (Russian) *Differentsial'nye Uravneniya* **15**(1979), No. 1, 142-152; English transl.: *Differ. Equations* **15**(1979), No. 1, 99-106.
3. A characteristic problem for linear nonstrictly hyperbolic systems. (Russian) *Soobshch. Akad. Nauk Gruz. SSR* **93** (1979), No. 3, 553-556.
4. A problem of Goursat type for a certain class of hyperbolic systems. (Russian) *Differentsial'nye Uravneniya* **17**(1981), No. 1, 157-164; English transl.: *Differ. Equations* **17**(1981), No. 1, 110-115.
5. Goursat problem for a class of systems of second order hyperbolic equations. (Russian) *Differentsial'nye Uravneniya* **18**(1982), No. 1, 152-166; English transl.: *Differ. Equations* **18**(1982), No. 1, 131-142.
6. Solvability of a Goursat problem for second order normally hyperbolic systems with variable coefficients. (Russian) *Differentsial'nye Uravneniya* **19**(1983), No. 1, 137-145; English transl.: *Differ. Equations* **19**(1983), No. 1, 114-123.
7. On some boundary value problem for normally hyperbolic systems of second order. (Russian) *Soobshch. Akad. Nauk Gruz. SSR* **116**(1984), No. 2, 269-272.
8. About the solvability of some boundary value problem for linear normally hyperbolic second order systems with variable coefficients. (Russian) *Soobshch. Akad. Nauk Gruz. SSR* **116**(1984), No. 3, 477-480.
9. On some higher dimensional problem of Goursat type for strictly hyperbolic systems of second order. (Russian) *Soobshch. Akad. Nauk Gruz. SSR* **117**(1985), No. 1, 37-40.
10. Characteristic problem for a class of second order hyperbolic systems with parabolic degeneration. (Russian) *Soobshch. Akad. Nauk Gruz. SSR* **117**(1985), No. 2, 261-263.
11. On the solvability of a class of degenerate functional equations. (Russian) *Soobshch. Akad. Nauk Gruz. SSR* **117**(1985), No. 3, 497-499.
12. On a boundary value problem for a second order hyperbolic equation. (Russian) *Dokl. Akad. Nauk SSSR* **280**(1985), No. 6, 1313-1316; English transl.: *Sov. Math., Dokl.* **31**(1985), 250-252.

13. A boundary value problem for second order normally hyperbolic systems with variable coefficients. (Russian) *Differentsial'nye Uravneniya* **21**(1985), No. 1, 149-155; English transl.: *Differ. Equations* **21**(1985), No. 1, 121-126.
14. A characteristic problem for a class of second order hyperbolic systems with a parabolic degeneration. (Russian) *Differentsial'nye Uravneniya* **22**(1986), No. 1, 153-164; English transl.: *Differ. Equations* **22**(1986), No. 1, 122-131.
15. Solvability of a boundary value problem for second order hyperbolic equations. (Russian) *Trudy Inst. Prikl. Mat. Im. I. N. Vekua* **19**(1987), 122-173.
16. Solvability of a characteristic problem for degenerate second order hyperbolic systems. (Russian) *Differentsial'nye Uravneniya* **25**(1989), No. 1, 154-162; English transl.: *Differ. Equations* **25**(1989), No.1, 123-131.
17. The characteristic problem for a class of second order hyperbolic systems with degeneration of the type and order. (Russian) *Soobshch. Akad. Nauk Gruz. SSR* **135**(1989), No. 2, 269-271.
18. On the solvability of a characteristic problem for second order degenerate hyperbolic systems. (Russian) *Rep. Enlarged Sess. Semin. I. Vekua Inst. Appl. Math.* **4** (1989), No. 1, 116-119.
19. Characteristic problem for a class of second order hyperbolic systems with type-changes on characteristics. (Russian) *Differentsial'nye Uravneniya* **26**(1990), No. 2, 305-313; English transl.: *Differ. Equations* **26**(1990), No. 2, 235-242.
20. On a characteristic problem for second order hyperbolic systems with degeneration of type and order. (Russian) *Soobshch. Akad. Nauk Gruz. SSR* **140**(1990), No. 1, 29-31.
21. On the solvability of a characteristic problem for second order normal hyperbolic systems with degeneration of type and order. (Russian) *Rep. Enlarged Sess. Semin. I. Vekua Inst. Appl. Math.* **6** (1991), No. 1, 77-80.
22. On a spatial problem for high order strictly hyperbolic systems in several independent variables. (Russian) *Bull. Georgian Acad. Sci.* **146**(1992), No. 1, 478-481.
23. On a characteristic problem for the wave equation. *Tbiliss. Gos. Univ. Inst. Prikl. Mat. Trudy* **47** (1992), 76-82.
24. On the correct formulation of one multidimensional problem for strictly hyperbolic equations of higher order. *Proc. Georgian Acad. Sci., Math.* **1**(1993), No. 2, 159-169.
25. On a problem of Darboux type for second order hyperbolic equation. (Russian) *Rep. Enlarged Sess. Semin. I. Vekua Inst. Appl. Math.* **8** (1993), No. 1, 41-42.
26. On the correct formulation of a multidimensional problem for strictly hyperbolic equations of higher order. *Georgian Math. J.* **1**(1994), No. 2, 141-150.
27. On a spatial problem of Darboux type for a second order hyperbolic equation. *Georgian Math. J.* **2**(1995), No. 3, 299-311.
28. On the solvability of a spatial problem of Darboux type for the wave equation. *Georgian Math. J.* **2**(1995), No. 4, 385-394.
29. On a non-characteristic multidimensional problem of Darboux type for the wave equation. (Russian) *Rep. Enlarged Sess. Semin. I. Vekua Inst. Appl. Math.* **10** (1995), No. 1, 43-45.
30. On the solvability of a Darboux type non-characteristic spatial problem for the wave equation. *Georgian Math. J.* **3**(1996), No. 1, 59-68.
31. On a Darboux type multidimensional problem for second order hyperbolic systems. *Georgian Math. J.* **3**(1996), No. 4, 363-378.
32. On the solvability of the multidimensional version of the first Darboux problem for a model second-order degenerating hyperbolic equation. *Georgian Math. J.* **4**(1997), No. 4, 341-354.

33. On the solvability of a multidimensional version of the Goursat problem for a second order hyperbolic equation with characteristic degeneration. *Mem. Differential Equations Math. Phys.* **11**(1997), 89-103.
34. To the theory of boundary value problems for hyperbolic type equations and systems (with J. Gvazava). *Mem. Differential Equations Math. Phys.* **12**(1997), 68-75.
35. On some multidimensional versions of a characteristic problem for second order degenerating hyperbolic equations. *Georgian Math. J.* **5**(1998), No. 2, 139-156.
36. On some boundary value problems for an ultrahyperbolic equation. *Georgian Math. J.* **5**(1998), No. 4, 341-360.
37. Boundary value problems for a class of systems of second order partial differential equations. (Russian) *Differentsial'nye Uravneniya* **34**(1998), No. 1, 114-122; English transl.: *Differ. Equations* **34**(1998), No. 1, 117-125.
38. On the solvability of some multidimensional versions of the Goursat problem for a first order hyperbolic system. (Russian) *Differentsial'nye Uravneniya* **35**(1999), No. 8, 1112-1121.
39. On the formulation of characteristic problems for first order symmetric hyperbolic systems. (Russian) *Differentsial'nye Uravneniya* **36**(2000), No. 8, 1113-1122.
40. Direct and inverse fluid-structure interaction problems (with D. Natroshvili and Z. Tediashvili). *Rend. Mat. Appl. (7)* **20**(2000), 57-92.
41. On a vibration of elastic cusped burs (with G. Jaiani). *Bull. TICMI* **4**(2000), 24-28.
42. A multidimensional version of the first Darboux problem for a second order degenerating hyperbolic equation. *Appl. Math. Inform.* **5** (2000), No. 1, 66-76.
43. Some mathematical problems related to the first approximation of I. Vekua's theory for cusped prismatic shells (with G. Devdariani, G. Jaiani, D. Natroshvili). *Appl. Math. Inform.* **5**(2000), No. 2, 26-46.
44. Dynamical problems in the (0,0) and (1,0) approximations of a mathematical model of cusped bars (with G. Jaiani). *Functional-analytic and Complex Methods, Interactions, and Applications to Partial Differential Equations. Proceedings of the International Graz Workshop (Graz, Austria, 12-16, February)*, 188-247, World Scientific, 2001.
45. On the solvability of some boundary value problems for symmetric first order hyperbolic systems in a dihedral angle. *Mem. Differential Equations Math. Phys.* **27**(2002), 115-144.
46. On the correct formulation of some nonlocal problems for the wave equations. (Russian) *Differentsial'nye Uravneniya* **39**(2003), No. 4, 539-553.
47. On the correct formulation of some boundary value problems for symmetric hyperbolic systems of first order in a dihedral angle. *Mem. Differential Equations Math. Phys.* **29**(2003), 1-30.
48. Hierarchical models for elastic cusped plates and beams (with G. Jaiani, D. Natroshvili, and W. L. Wendland). *Lect. Notes TICMI* **4** (2003), 1-121.
49. A multidimensional version of the Darboux problem for a model degenerating second order hyperbolic equation. (Russian) *Differentsial'nye Uravneniya* **40** (2004), No. 4, 565-573; English transl.: *Differential Equations* **40** (2004), No. 4, 610-619.
50. On some nonlocal problems for a hyperbolic equation of second order on a plane (with G. Bogveradze). *Proc. A. Razmadze Math. Inst.* **136** (2004), 1-36.
51. Two-dimensional hierarchical models for prismatic shells with thickness vanishing at the boundary (with G. Jaiani, D. Natroshvili and W. L. Wendland). *Journal of Elasticity* **77** (2004), No. 2, 95-122.

52. On some boundary value problems for a class of hyperbolic systems of second order in a conic domains. *I. Inequal. Appl.* **2005**, No. 5, 547-567.
53. On the existence or the absence of global solutions of the Cauchy characteristic problem for some nonlinear hyperbolic equations. *J. Boundary Value Problems* **2005**, No. 3, 359-376.
54. Some traits of the creative portrait of Andro Bitsadze (with J. Gvazava and O. Jokhadze). *Proceedings of I. Javakhishvili Tbilisi State University* **354** (2005), 128-143.
55. On the nonexistence of global solutions of the characteristic Cauchy problem for a nonlinear wave equation on a conical domain. (Russian) *Differentsial'nye Uravneniya* **42** (2006), No. 2, 261-271; English transl.: *Differential Equations* **42** (2006), No. 2, 279-290.
56. On some problems with integral restrictions for hyperbolic second order equations and systems on a plane (with G. Bogveradze). *Proc. A. Razmadze Math. Inst.* **140** (2006), 17-48.
57. On the global and local solution of the multidimensional Darboux problem for some nonlinear wave equations (with G. Bogveradze). *Georgian Math. J.* **14** (2007), No. 1, 65-80.
58. On the existence or absence of global solutions for the multidimensional version of the second Darboux problem for some nonlinear hyperbolic equations. (English) *Differential Equations* **43** (2007), No. 3, 402-416. Translated from *Differentsial'nye Uravneniya*, **43** (2007), No. 3, 388-401.
59. On the global solvability of the Cauchy characteristic problem for one nonlinear wave equation in a light cone of the future. *Mem. Differential Equations Math. Phys.* **42** (2007), 49-68.
60. On the existence and nonexistence of global solutions of the characteristic Cauchy and Darboux problems for the multidimensional nonlinear wave equations. (Russian) *AMIM* **12** (2007), No. 1, 80-86.
61. On the solvability of one multidimensional version of the first Darboux problem for some nonlinear wave equations. *J. Nonlinear Analysis: Theory, Methods & Applications* **68** (2008), 912-924.
62. On the Solvability of the Cauchy characteristic problem for a nonlinear equation with iterated wave operator in the principal part. *J. Math. Anal. Appl.* **338** (2008), 71-84.
63. On the solvability of the Cauchy characteristic problem for some nonlinear wave equations in a light cone of the future. *Differential Equations* **44**(2008), No.1, 135-146. Translated from *Differentsial'nye Uravneniya* **44** (2008), No.1, 129-139.
64. On existence and absence of global solutions of the first Darboux problem for nonlinear wave equations (with G. K. Berikelashvili, O. Jokhadze and B. G. Midodashvili). *Differential Equations*, **44**(2008), No. 3, 1-16. Translated from *Differentsial'nye Uravnenia* **44**(2008), No. 3, 359-372.
65. First Darboux problem for nonlinear hyperbolic equations of second order (with O.M. Dzhokhadze) (Russian). *Mat. Zametki* **84** (2008), No.5, 693-712.
66. Solvability of characteristic boundary-value problems for nonlinear equations with iterated wave operator in the principal part (with B. Midodashvili). *Electron. J. Differential Equations* **2008**, No. 72, 1-12.
67. On one boundary value problem for a nonlinear equation with iterated wave operator in the principal part (with B. Midodashvili). *Georgian Math. J.* **15** (2008), No. 3, 541-554.
68. Existence and uniqueness theorems for cusped prismatic shells in the N-th hierarchical model (with N. Chinchaladze, R. Gilbert, G. Jaiani, D. Natroshvili). *Math. Methods Appl. Sci.* **31** (2008), No.11, 1345-1367.

69. On some three-dimensional variants of Goursat and Darboux problems for higher-order hyperbolic equations with dominating principal parts (with B. Midodashvili). *J. Math. Sci. (New York)* **157** (2009), No. 1, 119-139.
70. Finite-difference method of solving the Darboux problem for nonlinear Klein-Gordon equation (with G. Berikelashvili, O. Jokhadze, B. Midodashvili). *Mem. Differential Equations Math. Phys.* **47** (2009), 123-132.
71. Finite difference scheme for one mixed problem with integral condition (with G. Berikelashvili and D. Gordeziani). *Proceedings of the 2nd WSEAS Int. Conf. on "Finite Differences, Finite Elements, Finite Volumes, Boundary Elements"* (F-and-B'09), 118-120, 2009.
72. Cusped elastic beams under the action of stresses and concentrated forces (with N. Chinchaladze, R. Gilbert, G. Jaiani, D. Natroshvili). *Appl. Anal.* **89** (2010), No. 5, 757-774.
73. Some nonlocal problems for second order strictly hyperbolic systems on the plane (with B. Midodashvili). *Georgian Math. J.* **17** (2010), No. 2, 287-303.
74. Some properties and applications of the Riemann and Green-Hadamard functions for linear second-order hyperbolic equations (with O.M. Jokhadze). *Differential Equations* **47** (2011), No.4, 471-487. Translated from *Differentsial'nye Uravneniya* **47** (2011), No.4, 477-492.
75. Cauchy problem for a generalized nonlinear Liouville equation (with O. M. Jokhadze). *Differential Equations* **47**(2011), No.12, 1763-1775. Translated from *Differentsial'nye Uravneniya* **47** (2011), No.12, 1741-1753.
76. Finite difference solution of a nonlinear Klein-Gordon equation with an external source (with G. Berikelashvili, O. Jokhadze, B. Midodashvili). *Math. Comput.* **80** (2011), No. 274, 847-862..
77. On the solvability of one boundary value problem for some semilinear wave equations with source terms (with B. Midodashvili). *Nonlinear Differential Equations and Applications* **18** (2011), 117-138.
78. Global solvability of the Cauchy characteristic problem for one class of nonlinear second order hyperbolic systems. *J. Math. Anal. Appl.* **89** (2011), No. 5, 757-774.
79. The boundary value problem for wave equations with nonlinear dissipative and source terms (with O. Jokhadze). *Int. J. Dynamical Systems and Differential Equations* **3** (2011), No. 3, 328-248.
80. On the Global Solvability of the Cauchy Characteristic Problem for One Class of Nonlinear Second Order Hyperbolic Systems. *Proc. A. Razmadze Math. Inst.* **155** (2011), 145-146.
81. Initial-boundary value problems for solid-fluid composite structures (with N. Chinchaladze, R. Gilbert, G. Jaiani, D. Natroshvili). *Z. Angew. Math. Phys.* **63** (2012), No. 4, 625-653, DOI:10.1007/s00033-011-0181-9.
82. Solvability of nonlocal problems for semilinear one-dimensional wave equations (with B. Midodashvili). *Electron. J. Differential Equations* **2012**, No. 28, 1-16.
83. The Cauchy multidimensional characteristic problem for one class of the second order nonlinear hyperbolic systems. *Proc. A. Razmadze Math. Inst.* **159** (2012), 152-154.
84. One multidimensional version of the Darboux first problem for one class of semilinear second order hyperbolic systems (with B. Midodashvili). *Nonlinear Differential Equations and Applications* **20** (2013), No. 3, 595-619; DOI:10.1007/s00030-012-0170-5.

85. Investigation of hyperbolic systems with order degeneration arising in I. Vekua's hierarchical models (with D. Natroshvili). *Appl. Anal.* **92** (2013), No. 12, 2508-2525; DOI: 10.1080/00036811, 2012.746961.
86. On the solvability of one boundary value problem for one class of semilinear second order hyperbolic systems (with B. Midodashvili). *J. Math. Anal. Appl.* **400** (2013), 345-362.
87. The Cauchy-Goursat multidimensional problem for one class of nonlinear hyperbolic systems. *Proc. A. Razmadze Math. Inst.* **162** (2013), 141-143
88. The Cauchy-Darboux problem for the one-dimensional wave equation with power nonlinearity (with O. M. Jokhadze). *Siberian Math. J.* **54** (2013), No. 6, 1120-1136.
89. The second Darboux problem for the wave equation with a power-law nonlinearity (with O. M. Jokhadze). *Differential Equations* **49** (2013), No.12, 1577-1595. Translated from *Differentsial'nye Uravneniya* **49** (2013), No. 12, 1623-1640.
90. The Cauchy-Goursat problem for wave equations with nonlinear dissipative term (with O. Jokhadze) (Russian). *Math. Notes* **94** (2013), No. 6, 913-929. Translated from *Mat. Zametki* **94** (2013), No. 6, 889-907; DOI: 10.4213/mzm5617.
91. Global and blowup solutions of a mixed problem with nonlinear boundary conditions for a one-dimensional semilinear wave equation (with O. Jokhadze) (Russian). *Mat. Sb.* **205** (2014), no. 4, 121-148; translation in *Sb. Math.* **205** (2014), no. 4, 573-599.
92. Boundary value problem for a wave equation with power nonlinearity in the angular domains (with O. Jokhadze). *Proc. A. Razmadze Math. Inst.* **164** (2014), 116-120.
93. On the Cauchy and Cauchy-Darboux problems for semilinear wave equations (with O. Jokhadze). *Georgian Math. J.* **22** (2015), No. 1, 81-104.
94. On the solvability of a problem nonlocal in time for a semilinear multidimensional wave equations (with B. Midodashvili). *Ukrainian Math. J.* **67** (2015), No. 1, 82-105..
95. On a Zaremba type problem for nonlinear wave equations in the angular domains (with O. Jokhadze). *Proc. A. Razmadze Math. Inst.* **167** (2015), 130-135.
96. The time-periodic problem for weekly nonlinear telegraph equation with oblique derivative in the boundary condition (with O. M. Jokhadze). *Differential Equations* **51** (2015), No.10, 1369-1386. Translated from *Differentsial'nye Uravneniya* **51** (2015), No. 10, 1376-1392.
97. The existence of solutions of one nonlocal in time problem for multidimensional wave equations with power nonlinearity. *Mem. Differential Equations Math. Phys.* **66** (2015), 83-101.
98. On solvability of a periodic problem for a nonlinear telegraph equation (with O. M. Jokhadze). *Siberian Math. J.* **57** (2016), No. 4, 735-743.
99. On the solvability of a boundary value problems for nonlinear wave equations in angular domains (with O. M. Jokhadze). *Differential Equations* **52** (2016), No. 5, 644-666. Translated from *Differentsial'nye Uravneniya* **52** (2016), No. 5, 665-686.
100. A short survey of scientific results of academician A. V. Bitsadze (with O. M. Jokhadze). *Mem. Differential Equations Math. Phys.* **69** (2016), 1-14.
101. The Cauchy-Darboux problem for wave equations with a nonlinear dissipative term (with O. M. Jokhadze). *Mem. Differential Equations Math. Phys.* **69** (2016), 53-75.
102. On the occasion of Andro Bitsadze's 100th birthday anniversary (May 22, 1916 - September 6, 1994) (with V. Kokilashvili and T. Jangveladze). *Trans. A. Razmadze Math. Inst.* **170** (2016), No. 3, 297-299.

103. The second Darboux problem for the wave equation with integral nonlinearity (with O. M. Jokhadze). *Trans. A. Razmadze Math. Inst.* **170** (2016), No. 3, 385-394.
104. An approximate solution of one class of singular integro-differential equations (with N. Shavlakadze and O. Jokhadze). *Trans. A. Razmadze Math. Inst.* **170** (2016), no. 3, 420-426.
105. One nonlocal problem in time for a semilinear multidimensional wave equation (with B. Midodashvili). *Lithuanian Math. J.* **57** (2017), no. 3, 331-350.
106. On the global solvability of the first Darboux problem for one class of nonlinear second order hyperbolic systems (with G. Dekanoidze). *Mem. Differential Equations Math. Phys.* **71** (2017), 51-68.
107. Approximate and exact solution of a singular integro-differential equation related to contact problem of elasticity theory (with O. Jokhadze and N. Shavlakadze). *Prikl. Mat. i Mekh.* **82** (2018), no. 1, 114-124; translation in *J. Appl. Math. Mech.* **82** (2018), no. 1, 114-124. ISSN 00328235
108. On the solvability of a mixed problem for an one-dimensional semilinear wave equation with a nonlinear boundary condition (with O. M. Jokhadze and N. Shavlakadze). *J. Contemp. Math. Anal.* **53** (2018), no. 5, 247-259. DOI: 10.3101/S1068362318050011.
109. A boundary value problem for higher-order semilinear partial differential equations (with B. Midodashvili). *Complex Variables and Elliptic Equations* **64** (2019), no 5, 766–776; DOI: 10.1080/17476933.2018.1508286.
110. Contact interaction of the plate with a nonlinear elastic stringer (with O. Jokhadze and N. Shavlakadze). *Izv. Ross. Akad. Nauk, MTT* **2** (2019), 101-110; Eng. Transl.: *Mechanic of Solids*, DOI. 10.1134/S0572329919010033.
111. The adhesive contact problems in the plane theory of elasticity (with O. Jokhadze and N. Shavlakadze). *Trans. A. Razmadze Math. Inst.* **173** (2019), no. 2, 165-168. ISSN 2346-8092.
112. On the existence, uniqueness, and nonexistence of solutions of one boundary-value problem for a semilinear hyperbolic equation (with B. Midodashvili). *Ukr. Mat. Zh.* **71** (2019), no. 8, 1123-1132; DOI 10.1007/s11253-019-01713-9.
113. Solvability of a Mixed Problem with Nonlinear Boundary Condition for a One-Dimensional Semilinear Wave Equation (with O. M. Jokhadze). *Mat. Zametki* **108** (2020), no. 1, 137–152 (in Russian). DOI: 10.1134/S0001434620070123; English transl.: *Math. Notes* **108** (2020), no. 1, 123–136.
114. The contact problem for elastic plate, on the border which is adhered nonlinearly deformable stringer of finite length (with O. M. Jokhadze and N. N. Shavlakadze). (Russian) *Prikl. Mat. i Mekh.* **84** (2020), no. 5, 640-649. Eng. transl.: *J. Appl. Math. Mech.* **84** (2020).
115. On the solvability of one boundary value problem for a class of higher-order nonlinear partial differential equations. *Mediterr. J. Math.* **18** (2021), no. 4, Paper No. 131, 18 pp. <https://doi.org/10.1007/s00009-021-01752-2>
116. The boundary value problem for one class of higher-order nonlinear partial differential equations (with B. Midodashvili). *Georgian Math. J.* **29** (2022), no.3, 387-395.
117. On the Solvability of a Special Boundary Value Problem in a Cylindrical Domain for a Class of Nonlinear Systems of Partial Differential Equations (with B. Midodashvili). *Differential Equations*, **58** (2022), no.1, 8191. DOI: 10.1134/S0012266122010098
118. On the solvability of one boundary value problem for one class of higher-order semilinear hyperbolic systems (with B. Midodashvili). *Lith. Math. J.* **62** (2022). 360–371. <https://doi.org/10.1007/s10986-022-09566-9>.

119. Boundary-Value Problem for a Class of Nonlinear Systems of Partial Differential Equations of Higher Orders (with B. Midodashvili). *Ukrains'kyi Matematychnyi Zhurnal*, **74** (2022), no. 6, 856-868. doi:10.37863/umzh.v74i6.6968
120. The boundary value problem for one class of nonlinear systems of partial differential equations. *Reports of QUALITDE 1* (2022), 117-120.
121. Darboux type problem for one nonlinear hyperbolic equation of the fourth order (with T. Bibilashvili T). Reports of Enlarged Session of the Seminar of I. Vekua Institute of Applied Mathematics Volume 36, 2022, 11-14.
122. Darboux type problem for a class of fourth – order nonlinear hyperbolic equations(with T. Bibilashvili). Mem. Differential Equations Math. Phys. **89**(2023), 39-59.
123. The boundary value problem for one class of higher – order semilinear partial differential equations(with B. Midodashvili). Proceedings of the Institute of Mathematics and Mechanics, National Academy of Sciences of Azerbaijan, Volume 49, Number 1, 2023, Pages 154–171. <https://doi.org/10.30546/2409-4994.2023.49.1.154>
124. A mixed problem for one class of second-order nonlinear hyperbolic systems with Dirichlet and Poincaré boundary conditions (with O. M. Jokhadze and N. N. Shavlakadze). Mathematical Notes, vol. 114, no. 5, November, 2023, 702 – 720. DOI: <https://doi.org/10.4213/mzm13738>
125. Antiperiodic Problem for One Class of Nonlinear Partial Differential Equations. *Reports of QUALITDE 2* (2023), 87-90.
126. On the Solvability of a Periodic Problem in an Infinite Stripe for Second Order Hyperbolic Equations(with O.Jokhadze). *Reports of QUALITDE 2* 2023, 77-79.
127. Solution of some problems for the string vibration equation in a half-strip by quadratures (with O.Jokhadze). *Differential Equations* **60** (2024), no.2, pp.169-179.
128. On the solvability of a boundary value problem for one class of nonlinear systems of high-order partial differential equations (with B. Midodashvili). *Sb. Math.* **215**(2024), no.6, 131-150. DOI: <https://doi.org/10.4213/sm10029e>
129. On the solvability of the boundary value problem for one class of higher-order nonlinear hyperbolic systems(with T.Bibilashvili). *Transactions of A. Razmadze Mathematical Institute* **178** (2024), no. 2, 317–319.
130. Dirichlet boundary value problem for the inhomogeneous equation of string oscillation in a square(with O.Jokhadze). *Reports of QUALITDE 3* (2024), 107-111.
131. Antiperiodic in time boundary value problem for one class of nonlinear high-order partial differential equations. *Reports of QUALITDE 3* (2024), 129-132.
132. Time-antiperiodic and space-periodic boundary value problem for class of semilinear partial differential equations (with B. Midodashvili). *Georgian Math. J.* **32**(2025), no. 2, 279-286.
133. Boundary value problem with Dirichlet, Neumann and Robin conditions on separate parts of the boundary for an inhomogeneous equation of string vibration (with O. Jokhadze). *Georgian Mathematical Journal*, 2025. <https://doi.org/10.1515/gmj-2025-2058>
134. On an initial-boundary value problem for second-order partial differential equations with time involution (with A. Ashyralyev and O. Jokhadze). *Lithuanian Mathematical Journal* (submitted).
135. On the solvability of the Dirichlet problem for one class of fourth-order nonlinear hyperbolic systems (with T. Bibilashvili). *Transactions of A. Razmadze Mathematical Institute* **179** (2025), no. 2, 293-295.

136. Periodic problem with respect to a spatial variable for a semilinear wave equation (with O. Jokhadze). *Transactions of A. Razmadze Mathematical Institute* **179** (2025), no. 2, 257-265.