

C U R R I C U L U M V I T A E

Professor, Doctor DAVID NATROSHVILI

PERMANENT ADDRESS:

Prof. D.Natroshvili
Georgian Technical University
Department of Mathematics (99)
77, M. Kostava st.
0175, Tbilisi
Republic of Georgia
E-mail: natrosh@hotmail.com
Fax: +995 (32) 942033

LAST NAME: Natroshvili

FIRST NAME: David

DATE OF BIRTH: 3.08. 1948 000001

PLACE OF BIRTH: Zemo-Machkhaani, Republic of Georgia

MARITAL STATUS: Married, Two children

EDUCATION:

School in Zemo-Machkhaani - 1955-1965. Graduated from the Tbilisi State University in June 1970, Diploma (M.D.) in Mathematics. Post graduate study in Tbilisi State University and I.Vekua Institute of Applied Mathematics (Tbilisi) 1970-1973. Ph.D. (Candidate of Sciences) in Equations of Mathematical Physics and Theory of Elasticity, Tbilisi State University, 1973: "Explicit Solutions of Boundary Value and Contact Problems of the Elasticity Theory" (under supervision prof. M.Basheleishvili). Doctor (Doctor of Physical and Mathematical Sciences) in Equations of Mathematical Physics, Tbilisi Mathematical Institute of Georgian Academy of Sciences, 1985. Thesis: "Investigation of Boundary Value and Initial Boundary Value Problems of the Theory of Elasticity and Thermoelasticity for Anisotropic Bodies by Means of Potential Methods". The full list of publications comprises more than 200 scientific papers, 5 monographs, and 7 text books. Supervisor of 12 PhD and 2 Doctor of Science dissertations.

LANGUAGES SPOKEN: Georgian (native), English, Russian.

EMPLOYMENT:

1973-1974	Junior researcher at the I.Vekua Institute of Applied Mathematics, Tbilisi.
1974-1985	Senior researcher at the I.Vekua Institute of Applied Mathematics, Tbilisi.
1985-1987	Chief researcher at the I.Vekua Institute of Applied Mathematics, Tbilisi.
1987-2007	Head of the Chair of Mathematics (99) at the Georgian Technical University, Tbilisi.
2007-present	Head of the Department of Mathematics at the Georgian Technical University, Tbilisi.

Simultaneously:

1973-1985	Part-time assistant professor at the Tbilisi State University (Faculty of Mathematics).
1985-1987	Part-time professor (half of the full staff) at the Georgian Technical University, Tbilisi.
1987-present	Chief researcher at the I.Vekua Institute of Applied Mathematics (half of the full-staff).
2004-2006	Honorary Visiting Professor (UK, Glasgow Caledonian University, School of Computing and Mathematical Sciences)

VISITED POSITIONS AND INVITED TALKS:

Conferences on Problems and Methods in Mathematical Physics, Mechanics, Differential Equations, Boundary Element Methods and Potential Theory:

CHEMNITZ (Germany) - 1983, 1988, 1993, 1999; SOFIA (Bulgaria)- 1977, ROUSSE (Bulgaria)- 1989, SAPPORO (Japan) - 1990, TULSA (USA) - 1991, BRAUNSCHWEIG (Germany) - 1993, SCHWERTE (Germany) - 1993, TEHERAN (Iran) - 1994, LISBOA (Portugal) - 1994, OBERWOLFACH (Germany) - 1994, STUTTGART (Germany) - 1996, 1999, FREUDENSTADT (Germany) - 1996, WARSAW (Poland)-1996, PARIS (France) - 1996, NEWARK (USA) - 1997, ROCHESTER (USA) - 1997, MANCHESTER (UK)

- 1997, HOUGHTON (USA) - 1998, STUTTGART (Germany) - 1999, BATH (UK) - 2000, KARLSRUHE (Germany) - 2000, SAINT ETIENNE (France) - 2002, READING (UK) - 2004, AVEIRO (Portugal) - 2005, HIRSCHGEGG (Austria) - 2006, Reading (UK) - 2007, Ankara (Turkey)-2007, Plovdiv (Bulgaria) - 2007, Rome (Italy) - 2008, Santander (Spain)- 2008, Athens-Poros (Greece) - 2009, London (UK) - 2009, Lisbon (Portugal) - 2009, Brighton (UK) - 2010, Berlin (Germany) - 2010.

Participant and speaker at:

the Third and Sixth International Congresses on Industrial and Applied Mathematics (ICIAM) –

HAMBURG (Germany) - 1995,

ZURICH (Switzerland) - 2007.

the First European Congress – PARIS (France) - 1992,

the International Congresses of Mathematicians – ZURICH (Switzerland) - 1994,

BERLIN (Germany) - 1998,

BEIJING (China) - 2002,

MADRID (Spain) - 2006.

The 14-th and 15-th General Assembly of the International Mathematical Union

– SHANGHAI (China) - 2002,

– SANTIAGO DE COMPOSTELA (Spain) - 2006.

Invited lectures:

Guest of the DFG (Deutscher Forschungsgemeinschaft - Germany), SFB 404 (Sonderforschungsbereich - Germany), and DAAD (Germany):

CHEMNITZ (1988, 1992, 1993, 1994, 1995, 1996, 1998),

STUTTGART (1992, 1994, 1995, 1996, 1997, 1998, 1999, 2003, 2004, 2005, 2006),

DARMSTADT (1992, 1994, 1996),

GÖTTINGEN (1994, 1998),

BERLIN (1994, 1995, 1996, 1997),

KARLSRUHE (2004),

POTSDAM (2004),

SAARBRÜCKEN (2005),

MÜNCHEN (2005).

Guest of the London Mathematical Society (UK): Universities of BATH, SALFORD (MANCHESTER), STRATHCLIDE (GLASGOW) (1997).

Guest of the Manchester Metropolitan University (UK):
MANCHESTER (1998).

Guest of the Glasgow Caledonian University (UK):
GLASGOW (2004, 2006).

Guest of the Royal Society (UK):
BRUNEL university (Uxbridge), Universities of BATH and LEEDS (2000-2001),
BRUNEL university (Uxbridge) (2007, 2008).

Guest of the Stuttgart University (GERMANY) (NATO Collaborative Linkage grant):
STUTTGART (2000), STUTTGART (2002).

Guest of the University of Athens (Greece): ATHENS (2001, 2004, 2006, 2009, 2010).

Guest of the Delaware University (USA) (CRDF&GRDF grant) - Newark (2007),

Guest of the University of Rome "LA SAPIENZA" (Italy) - Rome (2008),

Guest of the University of Lisbon and Aveiro (Portugal) - Lisbon and Aveiro (2009).

GRANTS:

Long-term research grant of ISF (USA) (MXG200) – 1994–1996.

DFG (Deutscher Forschungsgemeinschaft - Germany) grants(1992–2005):

(Je 166/1-2, We 659/16-3, 436 GEO 113/2/0, 436 GEO 17/2/95, 436 GEO 17/4/96,
436 GEO 17/2/97, FSB 404, 436 GEO 113/8/0-1).

DAAD (Germany) grant (1997).

NATO Collaborative Linkage grant (2001-2002) – NATO PST.CLG 976426/5437.

Grant of the London Mathematical Society – 1997.

Grant of the Royal Society – 2000-2001.

Honorary Visiting Professor (Glasgow Caledonian University, School of Computing and Mathematical Sciences, UK) (2004-2006).

Grant of the Royal Society (2005/R4-JP) – 2006-2008.

Grants of the Georgian National Science Foundation: GNSF/1.01.78(2005), GNSF/ST06/3-001 (2006-2007), GNSF/ST07/3-170 (2008-2010), GNSF/ST07/3-175 (2008-2010).

The U.S. Civilian Research and Development Foundation and the Georgian Research and Development Foundation (CRDF&GRDF) grant: No. GEP1-3339-TB-06, 2007 - 2009.

FIELDS OF RESEARCH:

Integral and Differential Equations of Mathematical Physics, Boundary Value and Initial Boundary Value Problems of Solid Mechanics, Direct and inverse problems of Mathematical Physics.

At present time I am investigating:

- 1) Problems of the steady state oscillation theory of anisotropic elastic bodies;
- 2) Regularity properties of solutions of the crack type problems for anisotropic elastic bodies;
- 3) Direct and inverse problems of mathematical physics, in particular, wave scattering problems;
- 4) Boundary variational inequalities: non-classical problems of mathematical physics and elasticity;
- 5) Reduction of three-dimensional problems to two-dimensional ones (Boundary value problems for cusped plates);
- 6) Boundary value problems for domains with non-compact (unbounded) rough boundaries and with non-smooth boundaries;
- 7) Boundary value and initial boundary value problems of the theory of hemitropic elasticity;
- 8) Boundary value and initial boundary value problems of the theory of thermoelectroelasticity (piezoelectric materials).

EDITORIAL BOARD of international journals

- a) *"Memoirs on Differential Equations and Mathematical Physics"*,
- b) *"Applied Mathematics, Informatics and Mechanics"*,
- c) *"Mathematical Methods and Physicomechanical Fields"*,
- d) *"Bulletin of TICMI"*,
- e) *"Tbilisi Mathematical Journal"*,
- f) *"Georgian International Journal of Science, Technology and Medicine"*,
- g) *"Advances in Mathematical Science Journal"* (AMSJ), Chief Editor.

REFEREE (REVIEWER) for international journals

- a) *"Georgian Mathematical Journal"*,
- b) *"Quarterly Journal of Mechanics and Applied Mathematics"*,
- c) *"International Journal of Mathematics and Mathematical Sciences"*,
- d) *"Mathematical Methods in the Applied Sciences"*,
- e) *"European Journal of Mechanics"*,

- f) *“Journal of Mathematical Analysis and Applications”*,
- g) *“Proceedings of the Royal Society, A: Mathematical Physics and Engineering Sciences”*,
- h) *“Applicable Analysis”*,
- i) *“SIAM Journal of Applied Mathematics”*,
- j) *“Complex Variables and Elliptic Equations”*.

REVIEWER for the American Mathematical Society Journal:
“Mathematical Reviews”.

PROFESSIONAL ACTIVITY:

International expert of the *SOROS Scientific and Educational Foundation in Georgia* (1995-2005).

President of the *Georgian Mathematical Union* (1993-1998).

Chairman of the *National Committee of the Georgian Mathematical Union* (2001-2006),
 2010-2013.

CURRENT PROFESSIONAL MEMBERSHIP:

Member of:

- the American Mathematical Society,*
- the European Mathematical Society,*
- the International Society for the Interaction of the Mechanics and Mathematics,*
- the International Society for Boundary Elements,*
- the International Scientific Committee of the TICMI (Tbilisi International Centre of Mathematics and Informatics)*
- the Academy of the Natural Sciences of Georgia.*

Professor, Dr. David Natroshvili

FULL LIST OF PUBLICATIONS

I. Scientific works

1. D.Natroshvili, *Explicit solutions to the basic boundary value problems of elastostatics for an isotropic ball*. Tr. In-ta Prikl. Mat. Tbilis. Univ., 3, 1972, 127-140.
2. D.Natroshvili, *Explicit solutions to the third and the fourth boundary value problems of elastostatics for a ball*. Soobshch. Akad. Nauk Gruz. SSR. 63(3), 1972, 557-560.
3. D.Natroshvili, *Some fundamental and mixed type boundary value problems for a semi-ball*. Annot. Dokl. Sem. In-ta Prikl. Mat. Tbilis. Univ., 8, 1973, 9-18.
4. D.Natroshvili, *The basic contact problem for a sphere*. Annot. Dokl. Sem. In-ta Prikl. Mat. Tbilis. Univ., 8, 1973, 19-22.
5. D.Natroshvili, *Explicit solutions to boundary and boundary-contact value problems of elastostatics*. Candidate Thesis. Tbilisi University, 1973, 140pp.
6. D.Natroshvili, *Explicit solutions to the basic three-dimensional statical problems of thermoelasticity for concrete domains*. Konferenz. Molod. Uch. Aspirant. In-ta Prikl. Mat. Tbilis. Univ., 1974, 107-108.
7. D.Natroshvili, *Explicit solutions to the basic boundary value problems of the non-symmetric theory of elasticity for a half-space*. Soobshch. Akad. Nauk Gruz. SSR, 76(1), 1974, 57-60.
8. D.Natroshvili, *Analogies of Poisson and Dini formulas in the thermoelasticity for a sphere*. Annot. Dokl. In-ta Prikl. Mat. Tbilis. Univ., 10, 1975, 55-58.
9. D.Natroshvili, A. Djagmaidze, *Solutions to the basic boundary value problems of statics of the non-symmetric theory of elasticity for a ball*. Annot. Dokl. In-ta Prikl. Mat. Tbilis. Univ., 10, 1975, 49-53.
10. D.Natroshvili, M. Bacheleishvili, *On the uniqueness of solutions to the Cauchy problem in the non-symmetric theory of elasticity*. Nekot. Zad. Teor. Uprug., Sbornik Tr., Tbilisi, 1975, 21-28.

11. D.Natroshvili, A.Djagmaidze, *General representation of a solution to the static equations of non-symmetric theory of elasticity and some applications*. Nekot. Zad. Teor. Upr., Sbornik Tr., Tbilisi, 1975, 93-112.
12. D.Natroshvili, *Explicit solutions to the basic boundary value problems for the bi-harmonic equation in exterior to a circle and a ball by means of Green's functions*. Tr. Tbilis. Univ., 166, 1976, 30-35.
13. D.Natroshvili, *Solution to the Cauchy problem of the equations of the non-symmetric theory of elasticity*. Annot. Dokl. Sem. In-ta Prikl. Mat. Tbilis. Univ., 11, 1976, 45-50.
14. D.Natroshvili, M.Basheleishvili, *Existence theorems of solutions to the basic boundary value problems of elasticity for transversally isotropic bodies*. Dokl. Akad. Nauk. SSSR, 231(1), 1976.53-57.
15. D.Natroshvili, *Solutions to the basic boundary value problems of statics of the non-symmetric theory of elasticity for a half-space by Fourier method*. Annot. Dokl. Sem. In-ta Prikl. Mat. Tbilis. Univ., 11, 1976, 5-18.
16. D.Natroshvili, *On the uniqueness theorem of solutions to the Cauchy problem in anisotropic elasticity*. Soobshch. Akad. Nauk Gruz. SSR, 85(2), 1977, 321-324.
17. D.Natroshvili, *Solution to the Cauchy problem in the anisotropic elasticity*. Soobshch. Akad. Nauk Gruz. SSR, 85(1), 1977, 49-52.
18. D.Natroshvili, A.Djagmaidze, *Some static and dynamic problems of the theory of elasticity for piecewise homogeneous bodies*. The Third National Congress in Theoretical and Applied Mechanics, Varna 13-16 Sept., Proc. I, Sophia, 1977, 551-555.
19. D.Natroshvili, *General representation of solutions to the steady state oscillation equations of the non-symmetric theory of elasticity and applications in dynamic Problems*. Tr. In-ta Prikl. Mat. Tbilis. Univ., 5-6, 1978, 225-234.
20. D.Natroshvili, *Estimate of Green's tensors of the theory of elasticity*. Differentsial'nye Uravnenia, XIV, 7, 1978, 1272-1284.
21. D.Natroshvili, *Maximum principle in the non-symmetric theory of elasticity*. Differentsial'nye Uravnenia, XIV, 9, 1978, 1649-1658.
22. D.Natroshvili, A.Djagmaidze, *Dynamic problems of the theory of elasticity for piecewise homogeneous bodies*. Tbilisi University, Tbilisi, 1978, 64pp.

23. D.Natroshvili, *Estimate of Green's tensors of the theory of elasticity and their applications*. Tbilisi University, Tbilisi, 1978, 135pp.
24. D.Natroshvili, M.Basheleishvili, *Dynamic problems of the theory of elasticity for homogeneous anisotropic bodies*. Tr. Tbilis. Univ., 204, 1978, 24-46.
25. D.Natroshvili, *On fundamental matrices of steady state oscillation and pseudo-oscillation equations of anisotropic elasticity*. Soobshch. Akad. Nauk Gruz. SSR, 96(1), 1979, 49-52.
26. D.Natroshvili, *Limiting absorption principle in the anisotropic elasticity*. Soobshch. Akad. Nauk Gruz. SSR, 96(2), 1979, 309-312.
27. D.Natroshvili, A.Djagmaidze, M.Svanadze, *Some contact problems for piecewise homogeneous bodies*. All-Union Conf. in the Theory of Elasticity. Abstracts. Erevan, 13-16 November, 1979, 242-245.
28. D.Natroshvili, M.Basheleishvili, *Application of the singular integral equation method in the boundary value problems of the theory of elasticity for transversally isotropic bodies*. In: Differential and Integral Equations, Boundary Value Problems. Tbilisi University, Tbilisi, 1979, 11-32.
29. D.Natroshvili, *Solutions of dynamic problems for a ball*. Nekot. Zad. Teor. Upr., Sbornik Tr., Tbilisi, 1980, 72-88.
30. D.Natroshvili, A.Djagmaidze, *Solutions to the basic dynamic problems of the non-symmetric theory of elasticity for a ball and spherical layer*. Nekot. Zad. Teor. Upr., Sbornik Tr., Tbilisi, 1980, 89-104.
31. D.Natroshvili, A. Djagmaidze, M. Svanadze, *Boundary-contact value problems of the elasticity theory*. Tbilisi University, Tbilisi, 1980, 88pp.
32. D.Natroshvili, M.Svanadze, *Dynamic problems of coupled thermoelasticity for piecewise homogeneous bodies*. Tr. In-ta Prikl. Mat. Tbilis. Univ., 10, 1981, 99-190.
33. D.Natroshvili, *On the alternative version of proving the existence theorems in exterior problems of the steady state oscillation theory*. Tr. In-ta Prikl. Mat. Tbilis. Univ., 10, 1981, 90-98.
34. D.Natroshvili, *On an integral equation of the first kind*. Soobshch. Akad. Nauk Gruz. SSR, 102(3), 1981, 565-568.
35. D.Natroshvili, *Properties of fundamental solutions to the steady state oscillation equations of anisotropic elasticity*. Soobshch. Akad. Nauk Gruz. SSR, 104(3), 1981, 557-560.

36. D.Natroshvili, M. Svanadze, *Basic boundary and boundary-contact value problems of anisotropic elastostatics*. Tbilisi University, Tbilisi, 1981, 84pp.
37. D.Natroshvili, M.Svanadze, *Explicit solutions to the dynamic problems of the anisotropic elasticity theory*. Soobshch. Akad. Nauk Gruz. SSR, 104(2), 1981, 313-316.
38. D.Natroshvili, M.Svanadze, *Dynamic contact problems of the elasticity theory for piecewise homogeneous bodies*. Conf. in: Mechanics and Theory of Elasticity, Telavi, 30 Sept.-5 Oct., 1981, Abstracts, Tbilisi, 1981, 62-63.
39. D.Natroshvili, A.Djagmaidze, *Investigation of boundary-contact value problems of statics of the non-symmetric theory of elasticity*. Conf. in Mechanics and Theory of Elasticity, Telavi, 30 Sept. – 5 Oct., 1981. Abstracts, Tbilisi, 1981, 62-63.
40. D.Natroshvili, *Uniqueness theorems in exterior problems of steady state oscillation theory for anisotropic medium*. Soobshch. Akad. Nauk Gruz. SSR, 105(2), 1982, 261-264.
41. D.Natroshvili, *Existence theorems in the exterior problems of steady state oscillation theory for anisotropic medium*. Soobshch. Akad. Nauk Gruz. SSR, 106(1), 1982, 33-36.
42. D.Natroshvili, *Basic dynamic problems of the thermoelasticity theory for anisotropic layer*. Conf. in Applied Mathematics and Mechanics, 19-20 Novemb., 1981, Abstracts, Tbilisi, 1983, 129-134.
43. D.Natroshvili, A.Djagmaidze, *Boundary-contact value problems of the non-symmetric theory of elasticity*. Tr. In-ta Prikl. Mat. Tbilis. Univ., 12, 1983, 69-90.
44. D.Natroshvili, *Potential method in the anisotropic thermoelasticity*. 8 Tagung Uber Probleme und Methoden der Mathematische Physik. Vortragsauszuge 8 TMP. Technische Hochschule Karl-Marx-Stadt. 1983, 37.
45. D.Natroshvili, A.Djagmaidze, *Initial boundary-contact problems in the non-symmetric theory of elasticity*. X Conf. of Mathematicians of Georgia, Telavi, 9-12 November, 1983. Abstracts, Tbilisi, 1983, 113.
46. D.Natroshvili, *Dynamic problems of the anisotropic thermoelasticity theory*, Differentsial'nye Uravnenia, XX, 1, 1984, 87-98.
47. D.Natroshvili, *Boundary value problems of statics of the linear theory of elastic mixtures*. The II All- Union Conf. in the Theory of Elasticity, 8-10 Dec., 1984, Abstracts, Tbilisi University, Tbilisi. 1984, 202-203.

48. D.Natroshvili, *Investigation of boundary value and initial boundary value problems of the mathematical theory of anisotropic elasticity and thermoelasticity by potential method*. Doctor thesis, Tbilisi Institute of Mathematics (Georgian Academy of Sciences), Tbilisi, 1984, 325pp.
49. D.Natroshvili, *Equilibrium of a half-space with a spherical cavity*. Tr. In-ta Prikl. Mat. Tbilisi. Univ., 16, 1985, 149-154.
50. D.Natroshvili, *On the regularization of an integral equation of the first kind*. Soobshch. Akad. Nauk Gruz. SSR, 117(3), 1985, 501-504.
51. D.Natroshvili, A.Djagmaidze, *Dynamic problems of the non-symmetric theory of elasticity for piecewise homogeneous bodies*. Tr. In-ta Prikl. Mat. Tbilisi. Univ. 16, 1985, 155-181.
52. D.Natroshvili, *On some boundary-value problems of the theory of elastic mixtures*. Tr. Sem. I. Vekua In-ta Prikl. Mat. Tbilisi. Univ. 22-25 Apr., 1986. Tbilisi, 1986, 87-90.
53. D.Natroshvili, A.Djagmaidze, M.Svanadze, *Dynamic problems of the theory of elastic mixtures and constructing the explicit solutions to the static problems*. XI Conf. of Mathematicians of Georgia, Kutaisi, 28-30 May, 1986. Kutaisi, 1986, 213.
54. D.Natroshvili, A.Djagmaidze, M.Svanadze, *Problems of the linear theory of elastic mixtures*. Tbilisi University, Tbilisi, 1986, 215pp.
55. D.Natroshvili, *The third and the fourth boundary value problems of the theory of elasticity for anisotropic bodies*. Tr. In-ta Prikl. Mat. Tbilisi. Univ., 23, 1988 89-104.
56. D.Natroshvili, *Investigation of the third and the fourth boundary value problems of the anisotropic elasticity*. All-Union Symposium: "Modern Problems of Mathematical Physics", Tbilisi, 22-24 April, 1987. Proceedings, Vol. 2, Tbilisi, 1988, 285-294.
57. D.Natroshvili, *Potential methods in the theory of elastic mixtures*. 9 Tagung Über Probleme und Methoden der Mathematischen Physik. Autorreferate der Kurzvorträge. Karl-Marx-Stadt, 1988, 30.
58. D.Natroshvili, M.Svanadze, *Potential method in the problems of linear theory of elastic mixtures*. In: *Problems and Methods in Mathematical Physics*. 9 TMP, Karl-Marx-Stadt, 1988. Proc., Teubner Texte zur Mathematik, 1988, 199-206.

59. D.Natroshvili, A.Djagmaidze, L.Giorgashvili, Sh.Zazashvili, M. Usanetashvili, *Boundary-contact value problems of dynamics and steady state oscillations of linear theory of elastic mixtures*. Conf. Dynamical Problems of Mechanics, Krasnodar, 1988, 105-106.
60. D.Natroshvili, R. Duduchava, E.Shargorodsky, *On continuity of generalized solutions to the boundary value problems of the mathematical theory of cracks*. Soobshch. Akad. Nauk Gruz. SSR, 135(3), 1989, 497-500.
61. D.Natroshvili, R.Duduchava, E.Shargorodsky, *Basic boundary value problems of the mathematical theory of cracks for anisotropic medium*. Proc. of Seminar of I.Vekua Institute of Tbilisi University, Tbilisi, 1989, 87-90.
62. D.Natroshvili, *Exterior boundary-contact value problems of steady state oscillations of anisotropic bodies*. IV Conf. on Differential Equations and Applications, 13-19 Aug., 1989, Rousse, Abstracts, 211.
63. D.Natroshvili, *Exterior boundary value problems for differential equations of steady state oscillations of anisotropic elasticity*. Proc. of the International Conf. on Differential Equations and Applications held in Rousse, Bulgaria, 13-19 Aug., 1989, Rousse, 1991, 444-455.
64. D.Natroshvili, *Method of generalized series in anisotropic elasticity*. Tr. In-ta Prikl. Mat. Tbilisi. Univ. , 39, 1990, 110-132.
65. D.Natroshvili, R.Duduchava, E.Shargorodsky, *Boundary value problems of the mathematical theory of cracks*. Tr. In-ta Prikl. Mat. Tbilisi. Univ., 39, 1990, 68-84.
66. D.Natroshvili, O.Chkadua, E.Shargorodsky, *Mixed type boundary value problems of the anisotropic elasticity*. Tr. In-ta Prikl. Mat. Tbilisi Univ., 39, 1990 133-181.
67. D.Natroshvili, E.Shargorodsky, *Three-dimensional problems of dynamics for elastic bodies with cuts*. Soobshch. Akad. Nauk Gruz.SSR, 140(2), 1990, 281-284.
68. D.Natroshvili, E.Shargorodsky, *Mixed type boundary value problems of steady state oscillations for anisotropic bodies*. Conf. in: Dynamics of Solid Bodies and Stability of Motion, 1990, Donetsk, 57-58.
69. D.Natroshvili, *Non-classical contact problems for anisotropic bodies*. Reports of Enlarged Session of the Seminar of I. Vekua Institute of Tbilisi University, Tbilisi State University, Vol.6, No.2, 116-119, 1991.
70. D.Natroshvili, *Stability of solution to the first boundary value problem with respect to variation of domain*. Soobshch. Akad. Nauk Gruz. SSR, 142(2), 1991, 289-292.

71. D.Natroshvili, *Crack problems in the anisotropic thermoelasticity*. Abstracts: Continuum Mechanics and Related Problems of Analysis. Symposium Dedicated to the Centenary of Academician N. Muskhelishvili. Tbilisi, 1991, 103.
72. D.Natroshvili, R.Duduchava, E. Shargorodsky, *Mixed boundary-contact value problems for piecewise homogeneous anisotropic bodies*. Abstracts: Mechanics of Non-homogeneous Structures. The Third Conference, 17-19 Sept., 1991, Lvov, 110.
73. D.Natroshvili, *Mathematical problems of the theory of elasticity of an anisotropic medium*. Proceedings of I.Vekua Inst. of Applied Mathematics, Tbilisi State University, 46, 1992, 147-159.
74. D.Natroshvili, *Boundary-contact problems of the steady state oscillation theory for piecewise homogeneous elastic medium*. Proceedings of I.Vekua Inst. of Applied Mathematics, Tbilisi State University, 46, 1992, 134-146.
75. D.Natroshvili, G.Arsenashvili, *Interface problems of the theory of elastic mixtures*. Reports of Enlarged Session of the Seminar of I.Vekua Inst. of Applied Mathematics, Tbilisi State University, Vol.8, No.2, 8-11, 1993.
76. D.Natroshvili, I.Sigua, *Interface problems of the theory of thermoelasticity for anisotropic bodies*. Reports of Enlarged Session of the Seminar of I.Vekua Inst. of Applied Mathematics, Tbilisi State University, Vol.8, No.2, 72-75, 1993.
77. D.Natroshvili, R.Duduchava, E. Shargorodsky, *Mathematical problems of thermoelasticity for bodies with cuts*. Extended Abstracts. International Symposium on Boundary Element Methods, IABEM 93, August 16-19, 1993, Braunschweig.
78. D.Natroshvili, *Mathematical problems of the anisotropic elasticity for piecewise homogeneous bodies*. In: Jentsch, Tröltzsch (eds.), Problems and Methods in Mathematical Physics, Teubner-Texte Zur Mathematik, Band 134, Stuttgart-Leipzig, 1994, 100-110.
79. D.Natroshvili, L.Jentsch, *Non-classical interface problems for piecewise homogeneous anisotropic elastic bodies*, Mathematical Methods in the Applied Sciences, vol. 18, 1995, 27-49.
80. D.Natroshvili, *Mixed interface problems for anisotropic elastic bodies*. Georgian Mathematical Journal, Vol. 2, No. 6, 631-652, 1995.
81. D.Natroshvili, *Two-dimensional steady state oscillation problems of anisotropic elasticity*. Georgian Mathematical Journal, Vol. 3, No. 3, 239-262, 1996.

82. D.Natroshvili, *Boundary integral equation method in the mixed type interface problems of the anisotropic elasticity*. Abstracts, STAMM-94, Symposium on Trends in Applications of Mathematics to Mechanics, Lisboa, 23-30, July, 1994.
83. D.Natroshvili, R.Duduchava, E.Shargorodsky, *Basic boundary value problems of thermoelasticity for anisotropic bodies with cuts*, I, Georgian Mathematical Journal, Vol. 2, No. 2, 1995, 123-140 .
84. D.Natroshvili, R.Duduchava, E.Shargorodsky, *Basic boundary value problems of thermoelasticity for anisotropic bodies with cuts*, II. Georgian Mathematical Journal, Vol. 2, No. 3, 1995, 259-276.
85. D.Natroshvili, G.Sadunishvili, *Interaction of elastic and scalar fields*, Math. Methods in Applied Sciences, Vol. 19, No. 18, (1996), 1445–1469.
86. D.Natroshvili, L.Jentsch, *Non-classical mixed interface problems for anisotropic bodies*. DFG - Schwerpunkt. Randelementmethoden. Bericht Nr. 94-17. Mathematisches Institute A, Stuttgart Universitt, 1994. Mathematische Nachrichten, Vol.179 (1996), 161–186.
87. D.Natroshvili, G.Arsenashvili, *Transmission problems of the linear theory of elastic mixtures*, Applied Mathematics and Informatics, 1, 1, 1-23, 1996.
88. D.Natroshvili, *Boundary integral equation method in the steady state oscillation problems for anisotropic bodies* (a talk given at the Oberwolfach conference "Randelementmethoden: Anwendungen und Fehleranalysis", 02.10-08.10, 1994.) Math. Methods in Applied Sciences, Vol. 20, No. 2, 95-119, 1997.
89. D.Natroshvili, L. Jentsch, W. Wendland, *General transmission problems in the theory of elastic oscillations of anisotropic bodies*, Mathematisches Institut A, Stuttgart University, Bericht Nr. 95-7, 1-42.
90. D.Natroshvili, R.Duduchava, *Mixed crack type problem of anisotropic elasticity*, Mathematische Nachrichten, **191**, 1, 83-107, 1998.
91. D.Natroshvili, R.Duduchava, E.Shargorodsky, *Pseudodifferential Equations on Manifolds with Boundary: Theory and Applications*,
(in preparation)
92. D.Natroshvili, L.Jentsch, *Thermoelastic oscillations of anisotropic bodies*. TU Chemnitz-Zwickau, Fakultät für Mathematik, Preprint 96–1, 1996.
93. D.Natroshvili, *Steady-state oscillation problems in anisotropic elasticity*, (ICIAM/GAMM 95, 3-7 July, 1995, Hamburg, The Third International Congress on Industrial and Applied Mathematics , Book of Abstracts, p.189.) ZAMM, 76 (1996), S2, 125–128.

94. D.Natroshvili, L.Jentsch, I.Sigua, *Sommerfeld-Kupradze type radiation conditions in the theory of thermoelastic vibrations of anisotropic bodies*, Symposium on trends in applications of mathematics to mechanics, STAMM-96, Warsaw, 2–7 September, 1996. Book of Abstracts, Inst. of fundamental Technical Research Polish Academy of Sciences, Warsaw, 1996, p. 56.
95. D.Natroshvili, L.Jentsch, *Steady state thermoelastic oscillation problems for anisotropic bodies*. ECCOMAS 96, 3–13 September, 1996, Paris, Maison de la Chimie, Paris, 1996, 51–52.
96. D.Natroshvili, L.Jentsch, I.Sigua, *Thermoelastic oscillation problems for piecewise homogeneous anisotropic bodies*. Modern Mathematical Methods in Diffraction Theory and its Applications in Engineering, Abstracts of Sommerfeld'96–Workshop, Freudenstadt, 30 September–4 October, 1996, TH Darmstadt, Preprint 1868, p.31, 1996.
97. D.Natroshvili, L.Jentsch, *Thermoelastic oscillations of anisotropic bodies*; Modern Mathematical Methods in Diffraction Theory and its Applications in Engineering, Abstracts of Sommerfeld'96–Workshop, Freudenstadt, 30 September–4 October, 1996, TH Darmstadt, Preprint 1868, p.4, 1996.
98. D.Natroshvili, R.Duduchava, *Mixed crack type problems in anisotropic elasticity*, Modern Mathematical Methods in Diffraction Theory and its Applications in Engineering, Abstracts of Sommerfeld'96–Workshop, Freudenstadt, 30 September–4 October, 1996, TH Darmstadt, Preprint 1868, p.19–20, 1996.
99. D.Natroshvili, G.Arsenashvili, *Boundary value problems of the linear theory of two-component composites*. Conference on Analysis, Numerics and Application of Differential and Integral equations, Stuttgart, October 9–11, 1996, Abstracts, University of Stuttgart, 1996.
100. D.Natroshvili, L.Jentsch, W.L.Wendland, *General transmission problems in the theory of elastic oscillations of anisotropic bodies*, Conference on Analysis, Numerics and Application of Differential and Integral equations, Stuttgart, October 9–11, 1996, Abstracts, University of Stuttgart, 1996.
101. D.Natroshvili, *Thermoelastic oscillations of anisotropic bodies*, Sommerfeld'96–Workshop, TU Chemnitz-Zwickau, Fakultät für Mathematik, Preprint 96–13, 1996. Published in: E.Meister (Ed.), *Methoden und Verfahren der mathematischen Physik*, Band 42, Peter Lang, Frankfurt am Main, Berlin, New York, Paris, Wien, 68–87, 1997. (L. Jentsch)
102. D.Natroshvili, L.Jentsch, I.Sigua, *Mixed interface problems of thermoelastic pseudo-oscillations*. TU Chemnitz-Zwickau, Fakultät für Mathematik, Preprint 97–1, 1997.

103. D.Natroshvili, L.Jentsch, *Interaction between thermoelastic and scalar oscillation fields*, Integral Equations and Operator Theory, 28(1997), 261–288.
104. D.Natroshvili, L.Jentsch, *Interaction between thermoelastic and scalar oscillation fields*. General anisotropic case. TU Chemnitz-Zwickau, Fakultät für Mathematik, Preprint 97–5, 1997.
105. D.Natroshvili, L.Jentsch, W.L.Wendland, *Basic and mixed interface problems in the theory of elastic oscillations of anisotropic bodies*. In: M.Bach, C.Constanda, G.C.Hsiao, A.-M.Sändig, P.Werner (Eds.) Analysis, Numerics and Application of Differential and Integral equations, (Proceedings of the conference held in Stuttgart, October 9–11, 1996), Longman, Dorset, 116–121, 1998.
106. D.Natroshvili, L.Jentsch, *Mathematical problems of the thermoelasticity theory of anisotropic bodies*. In: Thermal Stresses'97, Proceedings of the Second International Symposium on Thermal Stresses and Related Topics (held in Rochester Institute of Technology, USA, June 8–11, 1997), Rochester Institute of Technology, Rochester, 513–516, 1997.
107. D.Natroshvili, *Mathematical problems of thermoelastic vibrations*. Abstracts, The International ISAAC'97 Congress, USA, University of Delaware, Newark, June 3–7, 1997.
108. D.Natroshvili, *Boundary integral equations method in the theory of thermoelastic vibrations*. Abstracts, Conference on Boundary Integral Methods: Theory and Applications, UK, University of Salford, Manchester, September 15–18, 1997.
109. D.Natroshvili, I.Sigua, *The mixed boundary value problem of the thermoelastic pseudo-oscillations*, Bulletin of the Georgian Academy of Sciences, 155, 1, 31–36, 1997.
110. D.Natroshvili, L.Jentsch, *Non-local approach in mathematical problems of fluid-structure interaction*, (TU Chemnitz, Fakultät für Mathematik, Preprint 98-1, 1998) Mathematical Methods in the Applied Sciences, 22, 13–42, 1999.
111. D.Natroshvili, L.Jentsch, *Three-dimensional mathematical problems of thermoelasticity of anisotropic bodies*, TU Chemnitz, Fakultät für Mathematik, Preprint 98-3, 1998.
112. D.Natroshvili, Sh.Zazashvili, *The interface crack problems for anisotropic bodies*, TU Chemnitz, Fakultät für Mathematik, Preprint 98-4, 1998. (Proceedings of I.Vekua Institute of Applied Mathematics v. 49, 1999, 54–75.

113. D.Natroshvili, L.Jentsch, W.Wendland, *General transmission problems in the theory of elastic oscillations of anisotropic bodies (Basic interface problems)*, I, Journal of Mathematical Analysis and Applications, 220, 397-433, 1998.
114. D.Natroshvili, L.Jentsch, W.Wendland, *General transmission problems in the theory of elastic oscillations of anisotropic bodies (Mixed interface problems)*, II, Journal of Mathematical Analysis and Applications, 235, 418-434, 1999.
115. D.Natroshvili, *Interface crack problem for a piecewise homogeneous anisotropic plane*, 5-th International Conference on Integral Methods in Science and Engineering (IMSE'98), August 10-13, 1998, Michigan Tech., Houghton, USA, Abstracts of IMSE'98, p. 98. [Also: International Conference on Multi-field Problems, October 6-8, 1999, University of Stuttgart, Germany. Book of abstracts, Bericht 99/12, p. 93]
116. D.Natroshvili, Sh.Zazashvili, *Interface crack problem for a piecewise homogeneous anisotropic plane*. In: B.Bertram, C.Constanda and A.Struthers (eds.), Integral Methods in Science and engineering. Chapman & Hall/CRC, London, 2000. 252-257.
117. D.Natroshvili, *Interaction between vector and scalar fields in anisotropic medium*, 5-th International Conference on Integral Methods in Science and Engineering (IMSE'98), August 10-13, 1998, Michigan Tech., Houghton, USA, Abstracts of IMSE'98, p. 57.
118. D.Natroshvili, *Direct and inverse problems of fluid-structure interaction*, International Congress of Mathematicians (ICM 1998), August 18-27, 1998, Berlin, Abstracts of Short Communications and Poster Sessions, pp. 241-242.
119. D.Natroshvili, A.-M.Sändig and W.L.Wendland, *Fluid-structure interaction problems*, In: M.Bonet, A.-M.Sändig and W.L.Wendland (Eds.), Mathematical aspects of boundary element methods, Chapman & Hall/CRC, Research Notes in Mathematics, 252-262, 1999. (IABEM98 conference in Palaiseau, Ecole Polytechnique, Paris, 25-29 May, 1998. Minisymposium: Mathematical Aspects of Boundary Element Methods, dedicated to Vladimir Maz'ya on the occasion of his 60th birthday).
120. D.Natroshvili, *Uniqueness theorems for inverse fluid-solid interaction problems*, Abstracts p. 34, 11.TMP, International Conference on Recent Advances in Analytical and Numerical Treatment of Operator Equations (in memory of Prof S.Prössdorf), March 25-28, 1999, Chemnitz, Germany.
121. D.Natroshvili, L.Jentsch, *Three-dimensional mathematical problems of thermoelasticity of anisotropic bodies*. Part I, Memoirs on Differential Equations and Mathematical Physics, v. 17, 1999, 7-126.

122. D.Natroshvili, L.Jentsch, *Three-dimensional mathematical problems of thermoelasticity of anisotropic bodies*, Part II, *Memoirs on Differential Equations and Mathematical Physics*, v. 18, 1999, 1-50.
123. D.Natroshvili, S.Kharibegashvili, Z.Tediashvili, *Direct and inverse fluid-structure interaction problems*, *Rendiconti di Matematica, Serie VII*, vol. 20, Roma, 2000, 57-92.
124. D.Natroshvili, Z.Tediashvili, *Mixed type direct and inverse scattering problems*, *Operator Theory: Advances and Applications*, Vol. 121, 2001, 366-389. (In memory of Professor S. Prössdorf)
125. D.Natroshvili, A.Gachechiladze, *Boundary variational inequality approach in the elasticity for the Signorini problem*, *Georgian Mathematical Journal*, Vol. 8, No. 3 (2001), 469–492.
126. D.Natroshvili, G.Karseladze, *Uniqueness results for fluid-solid interaction problems* *Bulletin of the Georgian Academy of Sciences*, v. 164, 3(2001), 454–457.
127. D.Natroshvili, W.L.Wendland, *Boundary variational inequalities in the theory of interface crack problems*, Stuttgart University, SFB 404, Preprint No. 2002/12, 2002.
128. D.Natroshvili, T.Arens, S.N. Chandler-Wilde, *Uniqueness, existence, and integral equation formulation for interface scattering problems*, *Memoirs on Differential Equations and Mathematical Physics*, Vol. 30 (2003), 105-146
129. D.Natroshvili, S.N.Chandler-Wilde *The Dirichlet metaharmonic Green's function for unbounded regions*, *Memoirs on Differential Equations and Mathematical Physics*, Vol. 30 (2003), 51-103.
130. D.Natroshvili, G.Jaiani, S.Kharibegashvili, W.L.Wendland, *Hierarchical models for cusped plates*, Stuttgart University, SFB 404, Preprint No. 2002/13, 2002.
131. D.Natroshvili, *Interface scattering problems*, *International Congress of Mathematicians*, Beijing 2002, August 20–28, Abstracts of Short Communications and Poster Sessions, Higher Educational Press, Beijing, 2002, p. 227
132. D.Natroshvili, G.Devdariani, G.Jaiani, S.Kharibegashvili, *The Dirichlet's boundary value problem for the system of cusped prismatic shells*, *Applied Mathematics and Informatics*, **5**, No.2 (2000), 26-46
133. D.Natroshvili, L.Giorgashvili, I.Stratis, *Mathematical problems of the theory of elasticity of chiral materials*, *Applied Mathematics, Informatics, and Mechanics*, **8**, No.1 (2003), 47-103.

134. D.Natroshvili, *Crack problems and boundary variational inequalities*, In: C.Constanda, etc. (eds), *Integral Methods in Science and Engineering*, Birkhäuser-Verlag, Boston, Basel, Berlin, 2004, 168-174. (Proceedings of the International Conference IMSE 2002, Saint-Etienne (France), August 7-10, 2002).
135. D.Natroshvili, G.Jaiani, S.Kharibegashvili, W.L.Wendland, *Hierarchical models for cusped plates and bars*, *Lecture Notes of TICMI* (Tbilisi University Press, Tbilisi), Vol. 4, 2003.
136. D.Natroshvili, I.Stratis, *Mathematical problems of the theory of elasticity of chiral materials for Lipschitz domains*, *Mathematical Methods in the Applied Sciences*, **29**, Issue 4 (2006), 445-478.
137. D.Natroshvili, O.Chkadua, S.Mikhailov, *Analysis of direct boundary-domain integral equations for a mixed BVP with variable coefficient, I: Equivalence and Invertibility*, *Journal of Integral Equations and Applications*, **21**, No. 4, Winter (2009), 499-543.
138. D.Natroshvili, O.Chkadua, S.Mikhailov, *Analysis of direct boundary-domain integral equations for a mixed BVP with variable coefficient, II: Solution regularity and asymptotics*, *Journal of Integral Equations and Applications*, **22**, No. 1, Spring (2010), 19-37.
139. D.Natroshvili, W.L.Wendland, *Boundary variational inequalities in the theory of interface crack problems*. In: *Operator Theory: Advances and Applications*, Vol. 147, *Operator Theoretical Methods and Applications to Mathematical Physics* (Erhard Meister Memorial Volume), Birkhäuser Verlag, Basel-Boston-Berlin, 2004, 387-402.
140. D.Natroshvili, *Mathematical problems of the theory of elasticity of chiral materials*, Third International Conference on Boundary Integral Methods: Theory and Applications, University of Reading, UK, 2004, 14-18 September, Abstracts, p.17.
141. D.Natroshvili, T.Buchukuri, O.Chkadua, A.-M. Sändig, *Solvability and regularity results to boundary-transmission problems for metallic and piezoelectric elastic materials*. Stuttgart University, Institut für Angewandte Analysis und Numerische Simulation, Preprint No.004, 2005, pp.1-56.
Math. Nachr., **282**, No. 8 (2009), 1079-1110.
142. D.Natroshvili, G.Jaiani, S.Kharibegashvili, W.L.Wendland, *Two-dimensional hierarchical models for prismatic shells with thickness vanishing at the boundary*, *Journal of Elasticity*, **77**, No. 2 (2004), 95-122.
143. D.Natroshvili, G.Sadunishvili, I.Sigua, *Some remarks concerning Jones eigenfrequencies and Jones modes*, *Georgian Mathematical Journal*, **12**, No. 2 (2005), 337-348.

144. D.Natroshvili, G.Sadunishvili, I.Sigua, Z.Tediashvili, *Fluid-solid interaction: acoustic scattering by an elastic obstacle with Lipschitz boundary*, *Memoirs on Differential Equations and Mathematical Physics*, **35** (2005), 91-127.
145. D.Natroshvili, L.Giorgashvili, Sh.Zazashvili, *Steady state oscillation problems in the theory of elasticity for chiral materials*, *Journal of Integral Equations and Applications*, **17**, No. 1, Spring (2005), 19-69.
146. D.Natroshvili, *Boundary integral equations method in the elasticity theory of hemitropic materials*, *International Conference on Operator Theory, Function Spaces and Applications*, Aveiro (Portugal), 7-9 July, 2005, Book of Abstracts, University of Aveiro, 2005, p. 21.
147. D.Natroshvili, L.Giorgashvili, I.Stratis, *Representation formulae of general solutions in the theory of hemitropic elasticity*, *Quarterly Journal of Mechanics and Applied Mathematics*, Vol. 59, Part 4 (2006), 451-474.
148. D.Natroshvili, L.Castro, I.Stratis, *Wave scattering by an elastic obstacle with interior cuts*, *Math. Nachr.*, **280**, No.9-10 (2007), 996-1013.
149. D.Natroshvili, L.Castro, *The potential method for the reactance wave diffraction problem in a scale of spaces*, *Georgian Mathematical Journal*, **13**, No. 2 (2006), 251-260.
150. D.Natroshvili, L.Castro, *The reactance wave diffraction problem by a strip in a scale of Bessel potential spaces*, *Opuscula Mathematica*, **26**, No. 2 (2006), 289-303.
151. D.Natroshvili, R.Gachechiladze, I.Gwinner, *A boundary variational inequality approach to unilateral contact with hemitropic materials*, *Memoirs on Differential Equations and Mathematical Physics*, **39** (2006), 69-103.
152. D.Natroshvili, Sh.Zazashvili, *Mixed type boundary value problems in the linear theory of elastic mixtures for bodies with interior cuts*, *Memoirs on Differential Equations and Mathematical Physics*, Vol. 42, 2007, 69-91.
153. D.Natroshvili, T.Buchukuri, O.Chkadua, *Mathematical modelling and analysis of interaction problems for metallic-piezoelectric structures with regard to thermal stresses*, *Second International Workshop: Direct and Inverse Problems in Piezoelectricity*, Hirschegg (Kleinwalsertal), Austria, July 16-19, 2006. W. Geis, A.-M. Sändig (eds.), Book of abstracts, Stuttgart University, 2006, p. 14. (See also: University of Stuttgart, IANS, Preprint 2006/008, pp. 1-64)
154. D.Natroshvili, T.Buchukuri, O.Chkadua, *Three-dimensional finite element modelling of a piezoelectric actuator with regard to thermal effects*, *Second International*

Workshop: Direct and Inverse Problems in Piezoelectricity, Hirschegg (Kleinwalsertal), Austria, July 16-19, 2006. W. Geis, A.-M. Sändig (eds.), Book of abstracts, Stuttgart University, p. 4.

155. D.Natroshvili, T.Buchukuri, O.Chkadua, *The solvability and asymptotics of solutions of crack-type boundary value problems of thermopiezoelectricity*, Second International Workshop: Direct and Inverse Problems in Piezoelectricity, Hirschegg (Kleinwalsertal), Austria, July 16-19, 2006. W. Geis, A.-M. Sändig (eds.), Book of abstracts, Stuttgart University, p. 5.
156. D.Natroshvili, *Transmission problems related to the interaction of metallic and piezoelectric materials*. International Congress of Mathematicians (ICM 2006), Madrid, Spain, 22 August - 30 August, 2006. Book of Abstracts: Posters, Short Communications, Mathematical Software, Other Activities. European Mathematical Society, 2006, p. 423.
157. D.Natroshvili, T.Buchukuri, O.Chkadua, *Mathematical modelling and analysis of interaction problems for piezoelectric composites*. Rendiconti Accademia Nazionale delle Scienze detta dei XL, Memorie di Matematica e Applicazioni 124° (2006), Vol. XXX, fasc. 1, 159-190.
158. D.Natroshvili, *Mathematical problems for piezoelectric-metallic composites: Existence and regularity results*. Book of Abstracts of ICIAM 2007 (the 6th INTERNATIONAL CONGRESS ON INDUSTRIAL AND APPLIED MATHEMATICS, 16-20 July, 2007, Zurich, Switzerland), University of Zurich and ETH Zurich, 2007, p. 499.
159. D.Natroshvili, T.Buchukuri, O.Chkadua, *Mathematical problems for piezoelectric-metallic composites: Existence and stress singularity analysis*. Proceedings of WAVES 2007 (the 8th International Conference on Mathematical and Numerical Aspects of waves, 23-27 July, 2007, Reading, UK), University of Reading, 2007, 324-326.
160. D.Natroshvili, T. Buchukuri, O.Chkadua, *Application of pseudodifferential equations in the theory of piezoelectric-metallic composites*. The 6th INTERNATIONAL ISAAC CONGRESS, 13-18 August, 2007, Middle East Technical University, Ankara, Turkey. Book of Abstracts, METU, Ankara, 2007, p. 90.
161. D.Natroshvili, L.Giorgashvili, S.Zazashvili, *General representation of solutions to the system of differential equations of hemitropic elasticity and its applications*. The 6th INTERNATIONAL ISAAC CONGRESS, 13-18 August, 2007, Middle East Technical University, Ankara, Turkey,. Book of Abstracts, METU, Ankara, 2007, pp. 90-91.

162. D.Natroshvili, T.Buchukuri, O.Chkadua, *Mathematical problems for piezoelectric-metallic composites*, Fourth International Conference of Applied Mathematics and Computing, August 12-18, 2007, Plovdiv, Bulgaria, Book of Abstracts, Volume 4, p.423.
163. D.Natroshvili, O.Chkadua, S.Mikhailov, *About analysis of some localized boundary-domain integral equations for variable-coefficient BVPs*. Advances in Boundary Integral Methods, Proceedings of the Sixth UK Conference on Boundary Integral Methods, Edited by J.Trevelyan, Durham University Publ., UK, ISBN 978-0-9535558-3-3, 2007, 291-302.
164. D.Natroshvili, A.Gachechiladze, R.Gachechiladze, I.Stratis, *Transmission problems in the theory of elastic hemitropic materials*, Applicable Analysis, **86**, 12 (2007), 1463-1508
165. D.Natroshvili, N.Chinchaladze, R.Gilbert, G.Jaiani, S.Kharibegashvili, *Existence and Uniqueness Theorems for Cusped Prismatic Shells in the N-th Hierarchical Model*. Mathematical Methods in the Applied Sciences, **31**, No. 11 (2008), 1345-1367.
166. D.Natroshvili, T.Buchukuri, O.Chkadua, A.-M.Sändig, *Interaction problems of metallic and piezoelectric elastic materials with regard to thermal stresses*. Memoirs on Differential Equations and Mathematical Physics, Vol. 45, 2008, 7-74.
167. D.Natroshvili, T.Buchukuri, O.Chkadua, *Mixed boundary value problems of thermopiezoelectricity for solids with interior cracks*, Integral Equations and Operator Theory, **64**, 4 (2009), 495-537.
168. D.Natroshvili, I.Stratis, S.Zazashvili, *Boundary integral equation methods in the theory of elasticity of hemitropic materials : a brief review*. Journal of Computational and Applied Mathematics (JCAM), **234** (2010), 1622-1630.
169. D.Natroshvili, O.Chkadua, S.Mikhailov, *Analysis of some localized boundary-domain integral equations*, Journal of Integral Equations and Applications, **21**, No. 3 (2009), 405-445.
170. D.Natroshvili, L. Giorgashvili, *Representation formulas of general solutions to the static equations of the hemitropic elasticity theory*, Memoirs on Differential Equations and Mathematical Physics, **46** (2009), 129-146.
171. D.Natroshvili, R.Gachechiladze, I.Stratis, *Transmission and crack problems in the theory of elastic hemitropic materials*, 79-th Annual Meeting of the International Association of Applied Mathematics and Mechanics, 31 March-4 April, 2008, Bremen, Germany (Book of Abstracts, web-page: www.zarm.uni-bremen.de/gamm2008).

172. D.Natroshvili, *Stress singularity analysis in mathematical problems for piezoelectric-metallic composites*, International Workshop: Analysis, Partial Differential Equations and Applications, On the occasion of the 70th birthday of Vladimir Maz'ya, Rome, Italy, June 30- July 3, 2008. Book of Abstracts, Istituto Nazionale di Alta Matematica Francesco Severi, University of Rome, 2008, p. 39.
173. D.Natroshvili, O.Chkadua, *Stress singularity analysis for piezoelectric-metallic composite structures*, The 10th International Conference on Integral Methods in Science and Engineering, IMSE2008, Santander, Spain, 7-10 July, 2008. Book of Abstracts, Universidad de Cantabria, 2008, p. 149.
174. D.Natroshvili, I.Stratis, S.Zazashvili, *Interface crack problems for metallic-piezoelectric composite structures*, Mathematical Methods in the Applied Sciences, **33**, 4 (2010), 539-562.
175. D.Natroshvili, T.Buchukuri, O.Chkadua, R.Duduchava, *Interface cracks problems in composites with piezoelectric and thermal effects*, Proceedings of the 2009 ASME International Mechanical Engineering Congress & Exposition, November 13-19, 2009, Lake Buena Vista, Florida, USA, 1-10.
176. D.Natroshvili, A.Gachechiladze, R.Gachechiladze, *Unilateral contact problems with friction for hemitropic elastic solids*, Georgian Mathematical Journal, **16**, No. 4 (2009), 629-650.
177. D.Natroshvili, C.E.Athanasiadis, V.Sevrouglou, I.G.Stratis, *A boundary integral equations approach for mixed impedance problems in elasticity*
Accepted for publication in: Integral Equations and Applications
178. D.Natroshvili, *Mixed interface crack problems for composed solid structures*, The International Conference on Modern Problems in Applied Mathematics (dedicated to the 90-th anniversary of Iv. Javakhishvili Tbilisi State University and 40-th anniversary of I. Vekua Institute of Applied Mathematics of TSU), Book of Abstracts, Tbilisi, University Press, 2008, p. 72.
179. D.Natroshvili, O.Chkadua, T.Buchukuri, *Mixed boundary value problems of piezoelectricity for solids with cracks*. The International Conference on Modern Problems in Applied Mathematics (dedicated to the 90-th anniversary of Iv. Javakhishvili Tbilisi State University and 40-th anniversary of I. Vekua Institute of Applied Mathematics of TSU), Book of Abstracts, Tbilisi, University Press, 2008, p. 71.
180. D.Natroshvili, N.Chinchaladze, R.P.Gilbert, G.Jaiani, S.Kharibegashvili, *Cusped Elastic Beams under the Action of Stresses and Concentrated Forces*, Applicable Analysis, **89**, 5 (2010), 757-774.

181. D.Natroshvili, Z.Tediashvili, *Crack Problems for Composite Structures*, Operator Theory: Advances and Applications, Vol. 193, 2009, 227-243. (The volume Dedicated to Professor V.G. Maz'ya on the occasion of his 70th birthday).
182. D.Natroshvili, L.Giorgashvili, S.Zazashvili, *Mathematical problems of thermoelasticity for hemitropic solids*, Memoirs on Differential Equations and Mathematical Physics, **48**(2009), 97-174.
183. D.Natroshvili, A.Gachechiladze, R.Gachechiladze, J.Gwinner, *Contact problems with friction for hemitropic solids: boundary variational inequality approach*, Applicable Analysis, **90**, No. 2 (2011), 279-303.
184. D.Natroshvili, N.Chinchaladze, R.P.Gilbert, G.Jaiani, S.Kharibegashvili, *Fluid-solid interaction dynamical problems*,
In preparation
185. D.Natroshvili, A.Gachechiladze, R.Gachechiladze, *The Unilateral Contact of Two Elastic Hemitropic Media*, Memoirs on Differential Equations and Mathematical Physics, **48** (2009), 75-96.
186. D.Natroshvili, O.Chkadua, S.Mikhailov, *Analysis of some boundary-domain integral equations for variable-coefficient problems with cracks*, In: H.Power, A.La Rocca, and S.J.Baxter, eds., Advances in Boundary Integral Methods - Proceedings of the 7th UK Conference on Boundary Integral Methods. Nottingham University Publ., ISBN 978-0-95 63221-0-4, UK, 2009, 37-51.
187. D.Natroshvili, O.Chkadua, S.Mikhailov, *Localized boundary-domain integral equations formulation for crack type problems*, Conference on the Mathematics of Finite Elements and Applications, MAFELAP-2009, 9-12 June, 2009, Brunel University, West London, UK, Book of abstracts, Brunel Institute of Computational Mathematics, Department of Mathematical Sciences, 2009, p.66.
188. D.Natroshvili, O.Chkadua, S.Mikhailov, *Analysis of segregated boundary-domain integral equations for variable-coefficient problems with cracks*, Numerical Methods for Partial Differential Equations, **27**, 1 (2011), 121-140.
189. D.Natroshvili, *Application of pseudodifferential equations in stress singularity analysis for thermo-electro-magneto-elasticity problems: a new approach for calculation of stress singularity exponents*. The 7th INTERNATIONAL ISAAC CONGRESS, 13-18 August, 2009, Imperial College London. Volume of Abstracts, Imperial College London, 2009, p. 67.
190. D.Natroshvili, T.Buchukuri, O.Chkadua, R.Duduchava, *Interface crack problems for metallic-piezoelectric composite structures with regard to thermal effects* , Part 1
In preparation

191. D.Natroshvili, T.Buchukuri, O.Chkadua, R.Duduchava, *Interface crack problems for metallic-piezoelectric composite structures with regard to thermal effects* , Part 2
In preparation
192. D.Natroshvili, T.Buchukuri, R.Duduchava, D.Kapanadze, *On the uniqueness of a solution to an anisotropic Maxwell system*, Topics in Operator Theory, Volume 2: Systems and Mathematical Physics, J.A.Ball, V.Bolotnikov, J.W.Helton, L.Rodman, I.M. Spitkovsky (eds.), Birkhäuser Verlag, Basel/Switzerland. Operator Theory: Advances and Applications. **203** (2009), 137-164. (IWOTA 2008 Proceedings: The volume Dedicated to Professor I.Gohberg on the occasion of his 80th birthday).
193. D.Natroshvili, O.Chkadua, S.Mikhailov, *Localized boundary-domain integral equations formulation for mixed type problems*, Georgian Math. J. Vol.17, No3, (2010), 469-494.
194. D.Natroshvili, M.Mrevlishvili, Z.Tediashvili, *Uniqueness theorems for thermo-electro-magneto-elasticity problems*
Submitted to: "Bulletin of the Greek Mathematical Society"
195. D.Natroshvili, A.Gachechiladze, R.Gachechiladze, and J.Gwinner, *A boundary variational inequality approach to unilateral contact problems with friction for hemitropic solids*
Submitted to: "Mathematical Methods in the Applied Sciences"
196. D.Natroshvili, C.E.Athanasiadis, V.Sevroglou, I.G.Stratis, *An application of the reciprocity gap functional to inverse mixed impedance problems in elasticity*, Inverse Problems (2010 Inverse Problems 26 085011 doi: 10.1088/0266-5611/26/8/085011).
197. D.Natroshvili, O.Chkadua, S.Mikhailov, *Localized segregated boundary-domain integral equations formulation for transmission problems*, Eleventh International Conference on Integral Methods in Science and Engineering, University of Brighton, UK, 12-14 July, 2010, Book of Abstracts, School of Computing, Mathematics and Information Sciences, University of Brighton, 2010, p. 26.
198. O.Chkadua, D.Natroshvili, S.Mikhailov, *Localized segregated boundary-domain integral equations for mixed type boundary value problems*, Eleventh International Conference on Integral Methods in Science and Engineering, University of Brighton, UK, 12-14 July, 2010, Book of Abstracts, School of Computing, Mathematics and Information Sciences, University of Brighton, 2010, p. 28.
199. S.Mikhailov, O.Chkadua, D.Natroshvili, *Analysis of segregated boundary-domain integral equations for variable coefficient BVPs in exterior domains*, Eleventh International Conference on Integral Methods in Science and Engineering, University of

Brighton, UK, 12-14 July, 2010, Book of Abstracts, School of Computing, Mathematics and Information Sciences, University of Brighton, 2010, p. 30.

200. D. Natroshvili, *Localized potential method for general scalar elliptic equations with constant coefficients*, First International Conference of Georgian Mathematical Union, Batumi, Georgia, September 12-19, 2010, Book of Abstracts, Georgian Mathematical Union, Tbilisi, 2010, p. 39.
201. O.Chkadua, S.Mikhailov, D.Natroshvili, *Localized boundary-domain integral equation approach for second order partial differential equations with variable coefficients*, First International Conference of Georgian Mathematical Union, Batumi, Georgia, September 12-19, 2010, Book of Abstracts, Georgian Mathematical Union, Tbilisi, 2010, p. 35-36.
202. A.Gachechiladze, R.Gachechiladze, D. Natroshvili, *Boundary contact problems with friction of dynamics for hemitropic elastic solids*, First International Conference of Georgian Mathematical Union, Batumi, Georgia, September 12-19, 2010, Book of Abstracts, Georgian Mathematical Union, Tbilisi, 2010, p. 37-38.
203. O.Chkadua, S.Mikhailov, D.Natroshvili, *On analysis of segregated boundary-domain integral equations for mixed variable-coefficient BVPs in exterior domains*, Proceedings of the Eleventh International Conference on Integral Methods in Science and Engineering, IMSE2010, University of Brighton, UK, 12-14 July, 2010.
204. O.Chkadua, S.Mikhailov, D.Natroshvili, *Analysis of Some Localized Boundary-Domain Integral Equations for Transmission Problems with Variable Coefficients*, Proceedings of the Eleventh International Conference on Integral Methods in Science and Engineering, IMSE2010, University of Brighton, UK, 12-14 July, 2010.
205. O.Chkadua, S.Mikhailov, D.Natroshvili, *Localized Boundary-Domain Integral Equations Approach for Transmission Problems with variable coefficients*, Memoirs on Differential Equations and Applications (Special Volume dedicated to N.I.Muskhelishvili)

II. Text books (in Georgian)

1. D.Natroshvili, L.Giorgashvili, M.Usanetashvili, G.Jashiashvili, *Mathematics for economists*, Global Print, Tbilisi, 1999.
2. D.Natroshvili, G.Sadunishvili, M.Shubladze, T.Aliashvili, *Mathematics (For students of humanitarian faculties)*, Georgian Technical University, Tbilisi, 2000.
3. D.Natroshvili, O.Zumburidze, T.Davitashvili, S.Ebralidze, M.Miminoshvili, G.Mchedlidze, G.Samsonadze *Engineering Mathematics*, Georgian Technical University, Tbilisi , Global Print, Tbilisi, 2001.
4. D.Natroshvili, O.Meladze, T.Zandukeli, *Elementary Mathematics: tests and material for entrance exams*, , Georgian Technical University, Tbilisi, 2001.
5. D.Natroshvili, G.Samsonadze, M.Shubladze, *Linear Algebra with applications*, Part I, Georgian Technical University, Tbilisi, 2002.
6. D.Natroshvili, G.Samsonadze, M.Shubladze, R.Bitsadze, *Linear Algebra with applications*, Part II, Georgian Technical University, Tbilisi, 2003.
7. D.Natroshvili, L.Giorgashvili, G.Jashiashvili, *Mathematics for economists*, Second Edition, "Akhali Ivioni", Tbilisi, 2008.