

# List of publications of Nina Nikolaevna Uraltseva

- [1] N. N. Uraltseva, Regularity of solutions of multidimensional elliptic equations and variational problems (in Russian). *Dokl. Akad. Nauk SSSR* **130** (1960), 1206–1209. English translation. *Sov. Math. Dokl.* **1** (1960), 161–164
- [2] O. A. Ladyzhenskaya and N. N. Uraltseva, A variational problem for quasilinear elliptic equations with many independent variables (in Russian). *Dokl. Akad. Nauk SSSR* **135** (1960), 1330–1333. English translation. *Sov. Math. Dokl.* **1** (1960), 1330–1333
- [3] O. A. Ladyzhenskaya and N. N. Uraltseva, Quasilinear elliptic equations and variational problems in several independent variables (in Russian). *Uspekhi Mat. Nauk* **16** (1961), no. 1(97), 19–90. [English translation](#). *Russian Math. Surveys* **16** (1961), no. 1, 17–91
- [4] O. A. Ladyzhenskaya and N. N. Uraltseva, Differential properties of bounded generalized solutions of multidimensional quasilinear elliptic equations and variational problems (in Russian). *Dokl. Akad. Nauk SSSR* **138** (1961), 29–32. English translation. *Sov. Math. Dokl.* **2** (1961), 516–519
- [5] O. A. Ladyzhenskaya and N. N. Uraltseva, A boundary-value problem for linear and quasi-linear parabolic equations (in Russian). *Dokl. Akad. Nauk SSSR* **139** (1961), 544–547. English translation. *Sov. Math. Dokl.* **2** (1961), 969–972
- [6] O. A. Ladyzhenskaya and N. N. Uraltseva, Regularity of generalized solutions of quasi-linear elliptic equations (in Russian). *Dokl. Akad. Nauk SSSR* **140** (1961), 45–47. English translation. *Sov. Math. Dokl.* **2** (1961), 1149–1151
- [7] O. A. Ladyzhenskaya and N. N. Ural'tzeva, [On the smoothness of weak solutions of quasilinear equations in several variables and of variational problems](#). *Comm. Pure Appl. Math.* **14** (1961), 481–495
- [8] O. A. Ladyzhenskaya and N. N. Uraltseva, A boundary-value problem for linear and quasi-linear parabolic equations. I. (in Russian). *Izv. Akad. Nauk SSSR Ser. Mat.* **26** (1962), no. 1, 5–52
- [9] O. A. Ladyzhenskaya and N. N. Uraltseva, A boundary-value problem for linear and quasi-linear parabolic equations. II. (in Russian). *Izv. Akad. Nauk SSSR Ser. Mat.* **26** (1962), no. 5, 753–780
- [10] N. N. Uraltseva, General quasilinear second-order equations and certain classes of systems of elliptic equations (in Russian). *Dokl. Akad. Nauk SSSR* **146** (1962), 778–781. English translation. *Sov. Math. Dokl.* **3** (1962), 1399–1402
- [11] O. A. Ladyzhenskaya and N. N. Uraltseva, The first boundary-value problem for quasi-linear second-order parabolic equations of general type (in Russian). *Dokl. Akad. Nauk SSSR* **147** (1962), no. 1, 28–30. English translation. *Sov. Math., Dokl.* **3** (1963), 1539–1542

- [12] N. N. Uraltseva, Boundary-value problems for quasi-linear elliptic equations and systems with principal part of divergence type (in Russian). *Dokl. Akad. Nauk SSSR* **147** (1962), no. 2, 313–316. English translation. *Sov. Math. Dokl.* **3** (1963) 1615–1618
- [13] O. A. Ladyzhenskaya and N. N. Uraltseva, A boundary-value problem for linear and quasi-linear parabolic equations. III. (in Russian). *Izv. Akad. Nauk SSSR Ser. Mat.* **27** (1963), no. 1, 161–240. [English translation](#). *Amer. Math. Soc. Transl. Ser. 2* **56** (1966), 103–192
- [14] O. A. Ladyzhenskaya and N. N. Uraltseva, On linear and quasi-linear equations and systems of elliptic and parabolic types. In *Outlines Joint Sympos. Partial Differential Equations (Novosibirsk, 1963)*, pp. 146–150, Academy of Sciences of the USSR, Siberian Branch, Moscow, 1963
- [15] V. I. Plotnikov, A. G. Sigalov, and N. N. Uraltseva, Quasi-linear elliptic equations and variational problems (in Russian). In *Proc. 4th All-Union Math. Congr. (Leningrad, 1961)*, Vol. I, pp. 199–214, Akad. Nauk SSSR, Leningrad, 1963
- [16] O. A. Ladyzhenskaya and N. N. Uraltseva, Admissible extensions of the concept of solution for linear and quasi-linear elliptic equations of second order (in Russian). *Vestnik Leningrad. Univ. Ser. Mat. Meh. Astronom.* **18** (1963), 10–25. [English translation](#). *Amer. Math. Soc. Transl. Ser. 2* **67** (1968), 135–153
- [17] O. A. Ladyzhenskaya and N. N. Uraltseva, *Linear and quasilinear equations of elliptic type* (in Russian). Izdat. “Nauka”, Moscow, 1964. English translation. *Linear and quasi-linear elliptic equations*. Math. Sci. Eng. 46, Academic Press, New York-London, 1968. French translation. *Équations aux dérivées partielles de type elliptique*. Monographies universitaires de mathématiques 31, Dunod, Paris, 1968
- [18] O. A. Ladyzhenskaya and N. N. Uraltseva, On the Hölder continuity of the solutions and the derivatives of linear and quasi-linear equations of elliptic and parabolic types (in Russian). *Trudy Mat. Inst. Steklov.* **73** (1964), 172–220. [English translation](#). *Amer. Math. Soc. Transl., Ser. 2* **61** (1967), 207–269
- [19] O. A. Ladyzhenskaya and N. N. Uraltseva, Hölder continuity of solutions and their derivatives for linear and quasi-linear equations of elliptic and parabolic type (in Russian). *Dokl. Akad. Nauk SSSR* **155** (1964), no. 6, 1258–1261. English translation. *Sov. Math., Dokl.* **5** (1964), 565–569
- [20] O. A. Ladyzhenskaya, V. J. Rivkind, and N. N. Uraltseva, Classical solvability of diffraction problems for equations of elliptic and parabolic types (in Russian). *Dokl. Akad. Nauk SSSR* **158** (1964), no. 3, 513–515. English translation. *Sov. Math. Dokl.* **5** (1965), 1249–1252
- [21] A. V. Ivanov, O. A. Ladyzhenskaya, A. L. Treskunov, and N. N. Uraltseva, Generalized solutions of parabolic equations of second order (in Russian). *Trudy Mat. Inst. Steklov.* **92** (1966), 57–92. English translation. *Proc. Steklov Inst. Math.* **92** (1966), 63–104
- [22] A. V. Ivanov, O. A. Ladyzhenskaya, A. L. Treskunov, and N. N. Uraltseva, Certain properties of generalized solutions of parabolic equations of the second order (in Russian). *Dokl. Akad. Nauk SSSR* **168** (1966), 17–20. English translation. *Sov. Math. Dokl.* **7** (1966), 579–583

- [23] O. A. Ladyzhenskaya, V. J. Rivkind, and N. N. Uraltseva, Solvability of diffraction problems in the classical sense (in Russian). *Trudy Mat. Inst. Steklov.* **92** (1966), 116–146. English translation. *Proc. Steklov Inst. Math.* **92(1966)** (1968), 132–166
- [24] N. N. Uraltseva, The impossibility of  $W_q^2$  estimates for multidimensional elliptic equations with discontinuous coefficients (in Russian). *Zap. Nauchn. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI)* **5** (1967), 250–254. English translation. In *Boundary Value Problems of Mathematical Physics and Related Aspects of Function Theory, Part I.* pp. 95–96, Semin. Math., V. A. Steklov Math. Inst., Leningrad 5, Consultants Bureau, New York 1969
- [25] O. A. Ladyzhenskaya, V. A. Solonnikov, and N. N. Uraltseva, *Linear and quasilinear equations of parabolic type* (in Russian). Izdat. “Nauka”, Moscow, 1967. [English translation](#). Transl. Math. Monogr. 23, American Mathematical Society, Providence, RI, 1968
- [26] O. A. Ladyzhenskaya and N. N. Uraltseva, Certain classes of nonuniformly elliptic equations (in Russian). *Zap. Nauchn. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI)* **5** (1967), 186–191. English translation. In *Boundary Value Problems of Mathematical Physics and Related Aspects of Function Theory, Part I.* pp. 67–69, Semin. Math., V. A. Steklov Math. Inst., Leningrad 5, Consultants Bureau, New York 1969
- [27] O. A. Ladyzhenskaya and N. N. Uraltseva, On smoothness on  $t$  of weak solutions of parabolic type equations (in Russian). *Vestnik Leningrad. Univ. Ser. Mat. Meh. Astronom.* **22** (1967), no. 7, 54–63
- [28] N. N. Uraltseva, Degenerate quasilinear elliptic systems (in Russian). *Zap. Nauchn. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI)* **7** (1968), 184–222. English translation. In *Boundary Value Problems of Mathematical Physics and Related Aspects of Function Theory, Part II.* pp. 83–99, Semin. Math., V. A. Steklov Math. Inst., Leningrad 7, Consultants Bureau, New York 1970
- [29] O. A. Ladyzhenskaya and N. N. Uraltseva, On some classes of nonuniformly elliptic equations (in Russian). *Zap. Nauchn. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI)* **11** (1968), 129–149. [English translation](#). In *Boundary Value Problems of Mathematical Physics and Related Aspects of Function Theory, Part III.* pp. 47–53, Semin. Math., V. A. Steklov Math. Inst., Leningrad 11, Springer, New York, 1970
- [30] O. A. Ladyzhenskaya and N. N. Uraltseva, Total estimates of the first derivatives with respect to  $x$  of the solutions of quasilinear elliptic and parabolic equations (in Russian). *Zap. Nauchn. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI)* **14** (1969), 127–155. English translation. In *Boundary Value Problems of Mathematical Physics and Related Aspects of Function Theory, Part IV.* pp. 63–77, Semin. Math., V. A. Steklov Math. Inst., Leningrad 14, Springer, New York, 1971
- [31] V. J. Rivkind and N. N. Uraltseva, The solvability of diffraction problems for quasilinear parabolic equations (in Russian). *Zap. Nauchn. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI)* **14** (1969), 191–199. English translation. In *Boundary Value Problems of Mathematical Physics and Related Aspects of Function Theory, Part IV.* pp. 97–101, Semin. Math., V. A. Steklov Math. Inst., Leningrad 14, Springer, New York, 1971

- [32] N. N. Uraltseva, The nonselfadjointness in  $L_2(\mathbb{R}^n)$  of an elliptic operator with rapidly increasing coefficients (in Russian). *Zap. Nauchn. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI)* **14** (1969), 288–294. English translation. In *Boundary Value Problems of Mathematical Physics and Related Aspects of Function Theory, Part IV*. pp. 151–155, Semin. Math., V. A. Steklov Math. Inst., Leningrad 14, Springer, New York, 1971
- [33] V. J. Rivkind and N. N. Uraltseva, A priori estimates for quasilinear parabolic equations with discontinuous coefficients and their application in approximation methods (in Russian). *Dokl. Akad. Nauk SSSR* **185** (1969), 271–274. English translation. *Sovi. Math. Dokl.* **10** (1969), 343–347
- [34] O. A. Ladyzhenskaya and N. N. Uraltseva, *Local estimates for gradients of solutions of non-uniformly elliptic and parabolic equations*. *Comm. Pure Appl. Math.* **23** (1970), 677–703
- [35] N. N. Uraltseva, Nonlinear boundary value problems for equations of minimal surface type (in Russian). *Trudy Mat. Inst. Steklov.* **116** (1971), 217–226. English translation. *Proc. Steklov Inst. Math.* **116(1971)** (1973), 227–237
- [36] N. N. Uraltseva, On the non-uniformly quasilinear elliptic equations. In *Actes du Congrès International des Mathématiciens (Nice, 1970), Tome 2*, pp. 885–891, Gauthier-Villars Éditeur, Paris, 1971
- [37] N. N. Uraltseva, The regularity of the solutions of variational inequalities (in Russian). *Zap. Nauchn. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI)* **27** (1972), 211–219. English translation. *J. Sov. Math.* **3** (1975) 565–573
- [38] V. M. Babic, M. S. Birman, V. I. Smirnov, M. Z. Solomjak, and N. N. Uraltseva, Ol'ga Aleksandrovna Ladyzhenskaya (on her fiftieth birthday) (in Russian). *Vestnik Leningrad. Univ. Ser. Mat. Meh. Astronom.* **7** (1972), no. 2, 159–160
- [39] V. J. Rivkind and N. N. Uraltseva, Classical solvability and linear schemes for the approximate solution of diffraction problems for quasilinear equations of parabolic and elliptic type (in Russian). In *Problems of mathematical analysis, No. 3: Integral and differential operators. Differential equations*, pp. 69–111, Izdat. Leningrad. Univ., Leningrad, 1972. English translation. *J. Sov. Math.* **1** (1973), 235–264
- [40] V. J. Rivkind and N. N. Uraltseva, Projection difference schemes for quasilinear elliptic and parabolic equations (in Russian). *Vestnik Leningrad. Univ. Ser. Mat. Meh. Astronom.* **19** (1972), no. 4, 66–69
- [41] O. A. Ladyzhenskaya and N. N. Uraltseva, *Linear and quasilinear equations of elliptic type* (in Russian). 2nd revised ed. Izdat. “Nauka”, Moscow, 1973
- [42] N. N. Uraltseva, The solvability of the capillarity problem (in Russian). *Vestnik Leningrad. Univ. Ser. Mat. Meh. Astronom.* **19** (1973), no. 4, 54–64. English translation. *Vestn. Leningr. Univ., Math.* **6** (1979) 363–375
- [43] N. N. Uraltseva, The solvability of the capillarity problem. II. (in Russian) *Vestnik Leningrad. Univ. Ser. Mat. Meh. Astronom.* **1** (1975), no. 1, 143–149. English translation. *Vestn. Leningr. Univ., Math.* **8** (1980) 151–158
- [44] N. N. Uraltseva, A unilateral boundary value problem for a quasilinear elliptic equation (in Russian). *Probl. Mat. Anal.* **6** (1977), 172–189.

- [45] N. N. Uraltseva, The existence of strong solutions of the quasilinear parabolic equations with unilateral conditions on the boundary of the domain (in Russian). *Vestnik Leningrad. Univ. Ser. Mat. Meh. Astronom.* **13** (1977), no. 3, 89–98. English translation. *Vestn. Leningr. Univ., Math.* **10** (1982) 329–339
- [46] N. N. Uraltseva, Strong solutions of the generalized Signorini problem (in Russian). *Sibirsk. Mat. Zh.* **19** (1978), no. 5, 1204–1212. [English translation](#). *Sib. Math. J.* **19** (1979) 850–856
- [47] O. A. Ladyzhenskaya and N. N. Uraltseva, Estimate of the Hölder norm of solutions of second-order elliptic equations of the general form (in Russian). *Zap. Nauchn. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI)* **96** (1980), 161–168. [English translation](#). *J. Sov. Math.* **21** (1983), no. 5, 762–768.
- [48] V. A. Solonnikov and N. N. Uraltseva, Sobolev spaces (in Russian). In *Selected chapters of analysis and higher algebra. Textbook*, pp. 129–199, “Izd. Leningrad. Univ.”, Leningrad, 1981
- [49] N. N. Uraltseva, Estimates for the maxima of the moduli of the gradients for solutions of capillarity problems (in Russian). *Zap. Nauchn. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI)* **115** (1982), 274–284. [English translation](#). *J. Sov. Math.* **28** (1985), 806–813
- [50] A. D. Aleksandrov, A. P. Oskolkov, N. N. Uraltseva, and L. D. Faddeev, Ol'ga Aleksandrovna Ladyzhenskaya (on her sixtieth birthday) (in Russian). *Uspekhi Mat. Nauk* **38** (1983), no. 5(233), 215–223. [English translation](#). *Russian Math. Surveys* **38** (1983), no. 5, 170–181
- [51] O. A. Ladyzhenskaya and N. N. Uraltseva, Estimates of the Hölder constant for bounded solutions of second-order quasilinear parabolic equations of nondivergent type (in Russian). In *Partial differential equations and problems with a free boundary*, pp. 73–75, “Naukova Dumka”, Kiev, 1983
- [52] N. N. Uraltseva and A. B. Urdaletova, Boundedness of gradients of generalized solutions of degenerate nonuniformly elliptic quasilinear equations (in Russian). *Vestnik Leningrad. Univ. Mat. Mekh. Astronom.* **19** (1983), no. 4, 50–56. English translation. *Vestn. Leningr. Univ., Math.* **16** (1984), 263–270
- [53] O. A. Ladyzhenskaya and N. N. Uraltseva, Estimates of  $\max |u_x|$  for solutions of quasilinear elliptic and parabolic equations of general type, and some existence theorems (in Russian). *Zap. Nauchn. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI)* **138** (1984), 90–107. [English translation](#). *J. Sov. Math.* **32** (1986), 486–499
- [54] O. A. Ladyzhenskaya and N. N. Uraltseva, Estimates of the Hölder constant for functions satisfying a uniformly elliptic or uniformly parabolic quasilinear inequality with unbounded coefficients (in Russian). *Zap. Nauchn. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI)* **147** (1985), 72–94. [English translation](#). *J. Sov. Math.* **37** (1987), 837–851

- [55] A. I. Nazarov and N. N. Uraltseva, Convex-monotone hulls and an estimate of the maximum of the solution of a parabolic equation (in Russian). *Zap. Nauchn. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI)* **147** (1985), 95–109. English translation. *J. Sov. Math.* **37** (1987), 851–859
- [56] N. N. Uraltseva and I. V. Denisova, A problem with one-sided constraints on the interface of two domains (in Russian). *Vestnik Leningrad. Univ. Mat. Mekh. Astronom.* (1985), no. 2, 36–42. English translation. *Vestn. Leningr. Univ., Math.* **18** (1985), no. 2, 43–50
- [57] N. N. Uraltseva, Hölder continuity of gradients of solutions of parabolic equations with boundary conditions of Signorini type (in Russian). *Dokl. Akad. Nauk SSSR* **280** (1985), no. 3, 563–565. English translation. *Soviet Math. Dokl.* **31** (1985), 135–138
- [58] O. A. Ladyzhenskaya and N. N. Uraltseva, Solvability of the first boundary value problem for quasilinear elliptic and parabolic equations in the presence of singularities (in Russian). *Dokl. Akad. Nauk SSSR* **281** (1985), no. 2, 275–279. English translation. *Sov. Math. Dokl.* **31** (1985), 296–300
- [59] O. A. Ladyzhenskaya and N. N. Uraltseva, A survey of results on the solvability of boundary-value problems for second-order uniformly elliptic and parabolic quasilinear equations having unbounded singularities (in Russian). *Uspekhi Mat. Nauk* **41** (1986), no. 5(251), 59–83. English translation. *Russian Math. Surveys* **41** (1986), no. 5, 1–31
- [60] N. N. Uraltseva, Estimation on the boundary of the domain of derivatives of solutions of variational inequalities (in Russian). In *Linear and nonlinear boundary value problems. Spectral theory*, pp. 92–105, Probl. Mat. Anal. 10, Leningrad. Univ., Leningrad, 1986. English translation. *J. Sov. Math.* **45** (1989), no. 3, 1181–1191
- [61] A. A. Arkhipova and N. N. Uraltseva, Regularity of the solution of a problem with a two-sided constraint on the boundary (in Russian). *Vestnik Leningrad. Univ. Mat. Mekh. Astronom.* (1986), no. 1, 3–10. English translation. *Vestn. Leningr. Univ., Math.* **19** (1986), no. 1, 1–8
- [62] T. N. Rozhkovskaya and N. N. Uraltseva, Regularity theorems for variational inequalities and one-sided problems (in Russian). In *Partial differential equations (Proc. International Conf., Novosibirsk, 1983)*, pp. 187–192, “Nauka” Sibirsk. Otdel., Novosibirsk, 1986
- [63] A. A. Arkhipova and N. N. Uraltseva, Regularity of solutions of diagonal elliptic systems under convex constraints on the boundary of the domain (in Russian). *Zap. Nauchn. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI)* **152** (1986), 5–17. English translation. *J. Sov. Math.* **40** (1988), 591–598
- [64] O. A. Ladyzhenskaya and N. N. Uraltseva, Estimates of Hölder constants for bounded solutions of second-order quasilinear parabolic equations of nondivergent form. In *Adv. Math., Suppl. Stud.* **10** (1986), 1–22
- [65] A. A. Arkhipova and N. N. Uraltseva, Limit smoothness of the solutions of variational inequalities under convex constraints on the boundary of the domain (in Russian). *Zap. Nauchn. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI)* **163** (1987), 5–16. English translation. *J. Sov. Math.* **49** (1990), 1121–1128

- [66] A. A. Arkhipova and N. N. Uraltseva, Regularity of the solutions of variational inequalities with convex constraints on the boundary of the domain for nonlinear operators with a diagonal principal part (in Russian). *Vestnik Leningrad. Univ. Mat. Mekh. Astronom.* (1987), no. 3, 13–19. English translation. *Vestn. Leningr. Univ., Math.* **20** (1987), no. 3, 1–8
- [67] O. A. Ladyzhenskaya and N. N. Uraltseva, A Lipschitzian estimate at the boundary points for the solutions of quasilinear equations of divergence form (in Russian). *Sibirsk. Mat. Zh.* **28** (1987), no. 4, 145–153. [English translation](#). *Sib. Math. J.* **28** (1987), no. 4, 632–639
- [68] N. N. Uraltseva, Estimates of derivatives of solutions of elliptic and parabolic inequalities. In *Proceedings of the International Congress of Mathematicians, Vol. 2 (Berkeley, CA, 1986)*, pp. 1143–1149, American Mathematical Society, Providence, RI, 1987
- [69] N. N. Uraltseva, On the regularity of solutions of variational inequalities (in Russian). *Uspekhi Mat. Nauk* **42** (1987), no. 6(258), 151–174, 248. [English translation](#). *Russian Math. Surveys* **42** (1987), no. 6, 191–219
- [70] V. M. Babich, S. G. Mikhlin, and N. N. Uraltseva, Vladimir Ivanovich Smirnov (on his 100th birthday) (in Russian). *Vestnik Leningrad. Univ. Ser. Mat. Meh. Astronom.* **42** (1987), no. 3, 3–12
- [71] K. S. Tulenbaev and N. N. Uraltseva, A nonlinear boundary value problem for elliptic equations of general form (in Russian). In *Partial differential equations*, pp. 95–112, Akad. Nauk SSSR Sibirsk. Otdel., Inst. Mat., Novosibirsk, 1987
- [72] A. A. Arkhipova and N. N. Uraltseva, Regularity of the solution of a problem with a two-sided limit on a boundary for elliptic and parabolic equations (in Russian). *Tr. Mat. Inst. Steklova* **179** (1988), 5–22. English translation. *Proc. Steklov Inst. Math.* **179** (1989), 1–19
- [73] O. A. Ladyzhenskaya and N. N. Uraltseva, Estimates on the boundary of the domain of first derivatives of functions satisfying an elliptic or a parabolic inequality (in Russian). *Tr. Mat. Inst. Steklova* **179** (1988), 102–125. English translation. *Proc. Steklov Inst. Math.* **179** (1989), 109–135
- [74] A. A. Arkhipova and N. N. Uraltseva, Existence of smooth solutions of problems for parabolic systems with convex constraints on the boundary of the domain (in Russian). *Zap. Nauchn. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI)* **171** (1989), 5–11. [English translation](#). *J. Sov. Math.* **56** (1991), 2281–2285
- [75] N. N. Uraltseva, Oblique boundary value problems for nonlinear parabolic equations. In *Differential equations and their applications (Proc. 7th Conf., Equadiff 7, Prague/Czech. 1989)*, pp. 71–73, Teubner-Texte Math. 118. Leipzig, 1990
- [76] N. N. Uraltseva, Nonlinear oblique boundary value problem for parabolic equations (in Russian). *Zap. Nauchn. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI)* **188** (1991), 143–158. [English translation](#). *J. Math. Sci. (N.Y.)* **70** (1994), no. 3, 1817–1827

- [77] A. I. Nazarov and N. N. Uraltseva, Oblique boundary value problem for quasilinear parabolic equation (in Russian). *Zap. Nauchn. Sem. S.-Peterburg. Otdel. Mat. Inst. Steklov. (POMI)* **200** (1992), 118–131. English translation. *J. Math. Sci. (N.Y.)* **77** (1995), no. 3, 3212–3220
- [78] N. N. Uraltseva, Gradient estimates for solutions of nonlinear parabolic oblique boundary problem. In *Geometry and nonlinear partial differential equations (Fayetteville, AR, 1990)*, pp. 119–130, Contemp. Math. 127, American Mathematical Society, Providence, RI, 1992
- [79] V. I. Oliker and N. N. Uraltseva, Evolution of nonparametric surfaces with speed depending on curvature. II. The mean curvature case. *Comm. Pure Appl. Math.* **46** (1993), no. 1, 97–135
- [80] V. I. Oliker and N. N. Uraltseva, Evolution of nonparametric surfaces with speed depending on curvature. III. Some remarks on mean curvature and anisotropic flows. In *Degenerate diffusions (Minneapolis, MN, 1991)*, pp. 141–156, IMA Vol. Math. Appl. 47, Springer, New York, 1993
- [81] O. A. Ladyzhenskaya and N. N. Uraltseva, Local gradient estimates for solutions of a simplest regularization of a class of nonuniformly elliptic equations (in Russian). *Zap. Nauchn. Sem. S.-Peterburg. Otdel. Mat. Inst. Steklov. (POMI)* **213** (1994), 75–92. English translation. *J. Math. Sci. (N.Y.)* **84** (1997), no. 1, 862–872
- [82] N. N. Uraltseva, Boundary regularity for flows of nonparametric surfaces driven by mean curvature. In *Motion by mean curvature and related topics (Trento, 1992)*, pp. 198–209, De Gruyter, Berlin, 1994
- [83] N. N. Uraltseva, Surfaces with inclination-dependent mean curvature (in Russian). *Algebra i Analiz* **6** (1994), 231–241. English translation. *St. Petersburg Math. J.* **6** (1995), no. 3, 665–674
- [84] V. I. Oliker and N. N. Uraltseva, Long time behavior of flows moving by mean curvature. In *Nonlinear evolution equations*, pp. 163–170, Amer. Math. Soc. Transl. Ser. 2 164, American Mathematical Society, Providence, RI, 1995
- [85] D. E. Apushkinskaya and N. N. Uraltseva, On the behavior of free boundaries near the boundary of the domain (in Russian). *Zap. Nauchn. Sem. S.-Peterburg. Otdel. Mat. Inst. Steklov. (POMI)* **221** (1995), 5–19. English translation. *J. Math. Sci. (N.Y.)* **87** (1997), no. 2, 3267–3276
- [86] A. Arkhipova and N. Uraltseva, Sharp estimates for solutions of a parabolic Signorini problem. *Math. Nachr.* **177** (1996), 11–29
- [87] N. N. Uraltseva,  $C^1$  regularity of the boundary of a noncoincident set in a problem with an obstacle (in Russian). *Algebra i Analiz* **8** (1996), 205–221. English translation. *St. Petersburg Math. J.* **8** (1997), no. 2, 341–353
- [88] N. N. Uraltseva, On some properties of the free boundary in the neighborhood of contact with the given boundary (in Russian). *Zap. Nauchn. Sem. S.-Peterburg. Otdel. Mat. Inst. Steklov. (POMI)* **249** (1997), 303–312. English translation. *J. Math. Sci. (N.Y.)* **101** (2000), no. 5, 3570–3576

- [89] V. I. Oliker and N. N. Uraltseva, **Long time behavior of flows moving by mean curvature. II.** *Topol. Methods Nonlinear Anal.* **9** (1997), no. 1, 17–28
- [90] D. E. Apushkinskaya, H. Shahgholian, and N. N. Uraltseva, Boundary estimates for solutions of the parabolic free boundary problem (in Russian). *Zap. Nauchn. Sem. S.-Peterburg. Otdel. Mat. Inst. Steklov. (POMI)* **271** (2000), 39–55. **English translation.** *J. Math. Sci. (N.Y.)* **115** (2003), no. 6, 2720–2730
- [91] N. N. Uraltseva, Contact of a free boundary with a fixed boundary (in Russian). *Mat. Sb.* **191** (2000), no. 2, 165–173. **English translation.** *Sb. Math.* **191** (2000), no. 2, 307–315
- [92] N. N. Uraltseva, Two-phase obstacle problem (in Russian). *Probl. Mat. Anal.* **22** (2001), 240–245. **English translation.** *J. Math. Sci. (N.Y.)* **106** (2001), 3073–3077
- [93] D. E. Apushkinskaya, N. N. Uraltseva, and H. Shahgholian, On the global solutions of the parabolic obstacle problem (in Russian). *Algebra i Analiz* **14** (2002), no. 1, 3–25. English translation. *St. Petersburg Math. J.* **14** (2003), no. 1, 1–17
- [94] N. N. Uraltseva, Olga Aleksandrovna Ladyzhenskaya. In *Nonlinear problems in mathematical physics and related topics, II. In honour of Professor O. A. Ladyzhenskaya.*, pp. vii–xii, Int. Math. Ser. (N.Y.) 2, Kluwer/Plenum, New York, 2002
- [95] A. A. Arkhipova, M. S. Birman, V. S. Buslaev, V. G. Osmolovskii, S. I. Repin, G. A. Seregin, and N. N. Uraltseva, On the jubilee of Ol'ga Aleksandrovna Ladyzhenskaya (in Russian). *Zap. Nauchn. Sem. S.-Peterburg. Otdel. Mat. Inst. Steklov. (POMI)* **288** (2002), 5–13. English translation. *J. Math. Sci. (N.Y.)* **123** (2004), no. 6, 4523–4526
- [96] H. Shahgholian and N. Uraltseva, **Regularity properties of a free boundary near contact points with the fixed boundary.** *Duke Math. J.* **116** (2003), no. 1, 1–34
- [97] G. A. Seregin and N. N. Uraltseva, Ol'ga Aleksandrovna Ladyzhenskaya (on her 80th birthday) (in Russian). *Uspekhi Mat. Nauk* **58** (2003), no. 2, 181–206. **English translation.** *Russian Math. Surveys* **58** (2003), 395–425
- [98] I. V. Denisova, O. A. Ladyzhenskaya, G. A. Seregin, N. N. Uraltseva, and E. V. Frolova,, To the jubilee of Vsevolod Alekseevich Solonnikov (in Russian). *Zap. Nauchn. Sem. S.-Peterburg. Otdel. Mat. Inst. Steklov. (POMI)* **306** (2003), 7–15. **English translation.** *J. Math. Sci. (N.Y.)* **130** (2005), no. 4, 4775–4779
- [99] D. E. Apushkinskaya, N. N. Uraltseva, and H. Shahgholian, Lipschitz property of the free boundary in a parabolic problem with an obstacle (in Russian). *Algebra i Analiz* **15** (2003), no. 3, 78–103. **English translation.** *St. Petersburg Math. J.* **15** (2004), no. 3, 375–391
- [100] V. I. Arnold, M. S. Birman, A. M. Vershik, M. I. Vishik, I. M. Gel'fand, et. al., Ol'ga Aleksandrovna Ladyzhenskaya (obituary) (in Russian). *Uspekhi Mat. Nauk* **59** (2004), no. 3(357), 151–152. **English translation.** *Russian Math. Surveys* **59** (2004), no. 3, 553–555
- [101] S. Friedlander, P. Lax, C. Morawetz, L. Nirenberg, G. Seregin, N. Uraltseva, and M. Vishik, Olga Alexandrovna Ladyzhenskaya (1922–2004). *Notices Amer. Math. Soc.* **51** (2004), no. 11, 1320–1331

- [102] H. Shahgholian, N. Uraltseva, and G. S. Weiss, [Global solutions of an obstacle-problem-like equation with two phases](#). *Monatsh. Math.* **142** (2004), no. 1-2, 27–34
- [103] D. E. Apushkinskaya and N. N. Uraltseva, Boundary estimates for solutions of two-phase obstacle problems (in Russian). *Probl. Mat. Anal.* **34** (2006), 3–11. [English translation](#). *J. Math. Sci. (N.Y.)* **142** (2007), no. 1, 1723–1732
- [104] G. A. Seregin and N. N. Uraltseva, Introduction (in Russian). In *Olga Aleksandrovna Ladyzhenskaya (1922–2004). with list of publications*, pp. 6–41, Materialy k Biobibliografii Uchenykh 20. Matematicheskie Nauki, “Nauka”, Moscow, 2006
- [105] H. Shahgholian, N. Uraltseva, and G. S. Weiss, [The two-phase membrane problem—regularity of the free boundaries in higher dimensions](#). *Int. Math. Res. Not. IMRN* (2007), no. 8, article no. rnm026
- [106] N. N. Uraltseva, Boundary estimates for solutions of elliptic and parabolic equations with discontinuous nonlinearities. In *Nonlinear equations and spectral theory*, pp. 235–246, Amer. Math. Soc. Transl. Ser. 2 220, American Mathematical Society, Providence, RI, 2007
- [107] M. V. Anolik, Y. D. Burago, Y. K. Dem’yanovich, S. V. Kislyakov, V. P. Khavin, et al., Vladimir Gilelevich Maz’ya (On the occasion of his 70th anniversary) (in Russian). *Vestn. Leningr. Univ., Math.* **41** (2008), no. 4, 3–6. [English translation](#). *Vestn. St. Petersburg Univ., Math.* **41** (2008), no. 4, 287–289
- [108] D. E. Apushkinskaya and N. N. Uraltseva, Boundary estimates for solutions to the two-phase parabolic obstacle problem (in Russian). *Probl. Mat. Anal.* **38** (2008), 3–10. [English translation](#). *J. Math. Sci. (N.Y.)* **156** (2009), no. 4 569–576
- [109] I. V. Denisova, K. I. Pileckas, S. I. Repin, G. A. Seregin, N. N. Uraltseva, and E. V. Frollova, To the 75th birthday of Vsevolod Alekseevich Solonnikov (in Russian). *Zap. Nauchn. Sem. S.-Peterburg. Otdel. Mat. Inst. Steklov. (POMI)* **362** (2008), 5–14. [English translation](#). *J. Math. Sci. (N.Y.)* **159** (2009), 385–390
- [110] D. E. Apushkinskaya, N. Matevosyan, and N. N. Uraltseva, [The behavior of the free boundary close to a fixed boundary in a parabolic problem](#). *Indiana Univ. Math. J.* **58** (2009), no. 2, 583–604
- [111] H. Shahgholian, N. Uraltseva, and G. S. Weiss, [A parabolic two-phase obstacle-like equation](#). *Adv. Math.* **221** (2009), no. 3, 861–881
- [112] V. M. Babich, V. S. Buslaev, A. M. Vershik, S. G. Gindikin, S. V. Kislyakov, et al., Mikhail Shlemovich Birman (obituary) (in Russian). *Uspekhi Mat. Nauk.* **65** (2010), no. 3, 185–190. [English translation](#). *Russian Math. Surveys* **65** (2010), no. 3, 569–575
- [113] A. I. Nazarov and N. N. Uraltseva, The Harnack inequality and related properties of solutions of elliptic and parabolic equations with divergence-free lower-order coefficients (in Russian). *Algebra i Analiz* **23** (2011), 131–168. [English translation](#). *St. Petersburg Math. J.* **23** (2012), no. 1, 93–115
- [114] A. Petrosyan, H. Shahgholian, and N. Uraltseva, [Regularity of free boundaries in obstacle-type problems](#). Grad. Stud. Math. 136, American Mathematical Society, Providence, RI, 2012

- [115] D. E. Apushkinskaya and N. N. Uraltseva, Uniform estimates near the initial state for solutions of the two-phase parabolic problem (in Russian). *Algebra i Analiz* **25** (2013), no. 2, 63–74. [English translation](#). *St. Petersburg Math. J.* **25** (2014), no. 2, 195–203
- [116] V. M. Babich, A. R. Its, V. A. Marchenko, L. A. Pastur, B. A. Plamenevskii, et al., Vladimir Savel'evich Buslaev (obituary) (in Russian). *Uspekhi Mat. Nauk* **69** (2014), no. 1(415), 163–168. [English translation](#). *Russian Math. Surveys* **69** (2014), no. 1, 153–158
- [117] D. E. Apushkinskaya and N. N. Uraltseva, [Free boundaries in problems with hysteresis](#). *Philos. Trans. Roy. Soc. A* **373** (2015), no. 2050, article no. 20140271
- [118] D. E. Apushkinskaya and N. N. Uraltseva, [On regularity properties of solutions to the hysteresis-type problem](#). *Interfaces Free Bound.* **17** (2015), no. 1, 93–115
- [119] J. Andersson, H. Shahgholian, N. N. Uraltseva, and G. S. Weiss, [Equilibrium points of a singular cooperative system with free boundary](#). *Adv. Math.* **280** (2015), 743–771
- [120] A. B. Aleksandrov, A. A. Arkhipova, T. E. Guseev, Yu. K. Dem'yanovich, T. P. Dubova, et al., Michail Zaharovich Solomyak (1931–2016) (in Russian). *Vestn. St. Petersburg Univ., Mat. Mekh. Astron.* **4(62)** (2017), no. 1, 169–171
- [121] A. M. Vershik, E. D. Gluskin, V. A. Kozlov, A. A. Laptev, B. M. Makarov, et al., [Mikhail Zakharovich Solomyak \(obituary\)](#) (in Russian). *Uspekhi Mat. Nauk* **72** (2017), no. 5(437), 181–186. [English translation](#). *Russian Math. Surveys* **72** (2017), 955–961
- [122] A. A. Arkhipova, F. L. Bakharev, N. M. Ivochkina, A. I. Karol, G. A. Leonov, et al., On anniversary of V. G. Osmolovskii (in Russian). *Vestn. St. Petersburg Univ., Mat. Mekh. Astron.* **5(63)** (2018), no. 1, 165–166
- [123] M. V. Anolik, D. Apushkinskaya, A. A. Arkhupova, Yu. D. Burago, Yu. K. Dem'yanovich, et al., On anniversary of Vladimir Gilelevich Maz'ya (in Russian). *Vestn. St. Petersburg Univ., Mat. Mekh. Astron.* **5(63)** (2018), no. 3, 524–526
- [124] A. A. Arkhipova, A. K. Belyaev, S. M. Bauer, E. B. Voronkov, S. V. Vostokov, et al., In memoriam of Gennadii Alekseevich Leonov (in Russian). *Vestn. St. Petersburg Univ., Mat. Mekh. Astron.* **5(63)** (2018), no. 4, 701–704
- [125] D. E. Apushkinskaya and N. N. Uraltseva, Monotonicity formula for a problem with hysteresis (in Russian). *Dokl. Akad. Nauk* **478** (2018), no. 4, 379–381. [English translation](#). *Dokl. Math.* **97** (2018), no. 1, 49–51
- [126] E. S. Anitova, A. A. Arkhipova, V. V. Basov, N. A. Begun, Yu. N. Bibikov, et al., In memoriam of Lyudmila Yakovlevna Adrianova (1935–2018) (in Russian). *Vestn. St. Petersburg Univ., Mat. Mekh. Astron.* **6(64)** (2019), no. 2, 347–348
- [127] S. M. Anan'evskii, A. A. Arkhipova, S. M. Bauer, A. V. Bulinskii, S. V. Vostokov, et al., In memoriam of Yakov Yur'evich Nikitin (in Russian). *Vestn. St. Petersburg Univ., Mat. Mekh. Astron.* **7(65)** (2020), no. 3, 552–553
- [128] I. V. Andrianov, V. M. Babich, S. M. Bauer, I. A. Ibragimov, E. V. Kustova, et al., [In memoriam of professor of Saint Petersburg University, Rem Georgievich Barantsev \(1931–2020\)](#) (in Russian). *Mat. Vestn. Vyatka Univ.* (2020), no. 3(18), 12–15

- [129] A. B. Aleksandrov, A. A. Arkhipova, A. D. Baranov, M. Veber M., A. M. Vershik, et al., In memoriam of Boris Michailovich Makarov (in Russian). *Vestn. St. Petersburg Univ., Mat. Mekh. Astron.* **8(66)** (2021), no. 1, 188–190
- [130] V. A. Aleksandrov, D. A. Aleksandrov, D. E. Apushkinskaya, A. A. Arkhipova, V. M. Babich, et al., In memoriam of Viktor Abramovich Zalgaller (1920–2020) (in Russian). *Vestn. St. Petersburg Univ., Mat. Mekh. Astron.* **8(66)** (2021), no. 2, 373–376
- [131] V. N. Aldokhina, D. E. Apushkinskaya, S. M. Bauer, F. L. Bakharev, T. P. Dubova, et al., On the anniversary of Arina Alekseevna Arkhipova (in Russian). *Vestn. St. Petersburg Univ., Mat. Mekh. Astron.* **8(66)** (2021), no. 4, 732–733
- [132] M. I. Belishev, S. Y. Dobrokhotov, I. A. Ibragimov, A. P. Kiselev, S. V. Kislyakov, et al., Vasilii Mikhailovich Babich (on his 90th birthday) (in Russian). *Uspekhi Mat. Nauk* **76** (2021), no. 1(457), 201–202. [English translation](#). *Russian Math. Surveys* **76** (2021), 193–194
- [133] D. Y. Burago, Y. D. Burago, A. L. Verner, A. M. Vershik, M. L. Gromov, et al., Viktor Abramovich Zalgaller (obituary) (in Russian). *Uspekhi Mat. Nauk* **76** (2021), no. 5(461), 195–198. [English translation](#). *Russian Math. Surveys* **76** (2021), 927–931
- [134] M. S. Anan'evskii, A. A. Arkhipova, V. A. Bondarko, O. N. Granichin, Yu. K. Dem'yanovich, et al., In memoriam of Arkady Khaimovich Gelig (in Russian). *Vestn. St. Petersburg Univ., Mat. Mekh. Astron.* **9(67)** (2022), no. 2, 379–381
- [135] A. A. Arkhipova, N. B. Ampilova, V. V. Basov, N. A. Begun, Yu. N. Bibikov, et al., On anniversary of Sergey Yuryevich Pilyugin (in Russian). *Vestn. St. Petersburg Univ., Mat. Mekh. Astron.* **10(68)** (2023), no. 1, 176–177
- [136] A. A. Arkhipova, A. I. Karol, A. S. Mikhailov, V. S. Mikhailov, A. I. Nazarov, E. O. Stepanov, N. N. Uraltseva, E. V. Frolova, A. P. Shcheglova, and A. K. Belyaev, On anniversary of Viktor Georgievich Osmolovskii (in Russian). *Vestn. St. Petersburg Univ., Mat. Mekh. Astron.* **10(68)** (2023), no. 1, 178
- [137] G. I. Bizhanova, I. V. Denisova, A. I. Nazarov, K. I. Pileckas, V. V. Pukhnachev, S. I. Repin, J.-F. Rodrigues, G. A. Seregin, N. N. Uraltseva, and E. V. Frolova, [On the 90th birthday of Vsevolod Alekseevich Solonnikov](#) (in Russian). *Uspekhi Mat. Nauk* **78** (2023), no. 5(473), 187–198. [English translation](#). *Russian Math. Surveys* **78** (2023), no. 5, 971–981
- [138] A. B. Aleksandrov, S. M. Ananyevskiy, D. E. Apushkinskaya, G. G. Amosov, A. A. Arkhipova, et al., On the 60th anniversary of Alexander Il'ich Nazarov (in Russian). *Vestn. St. Petersburg Univ., Mat. Mekh. Astron.* **10(68)** (2023), no. 2, 374–376
- [139] D. E. Apushkinskaya, A. A. Arkhipova, A. I. Nazarov, V. G. Osmolovskii, and N. N. Uraltseva, A survey of results of St. Petersburg State University research school on nonlinear partial differential equations. I. (in Russian). *Vestn. St. Peterbg. Univ. Mat. Mekh. Astron.* **11(69)** (2024), no. 1, 3–37. [English translation](#). *Vestn. St. Petersburg Univ., Math.* **57** (2024), no. 1, 1–22
- [140] A. B. Aleksandrov, G. G. Amosov, A. A. Arkhipova, Yu. A. Andreev, A. D. Baranov, et al., In memoriam of Alexander Alekseevich Florinskiy (1962–2023) (in Russian). *Vestn. St. Petersburg Univ., Mat. Mekh. Astron.* **11(69)** (2024), no. 1, 205–207

- [141] D. E. Apushkinskaya, S. B. Tikhomirov, and N. N. Uraltseva, Properties of the phase boundary in the parabolic problem with hysteresis (in Russian). *Zap. Nauchn. Sem. S.-Peterburg. Otdel. Mat. Inst. Steklov. (POMI)* **536** (2024), 26–53