

Bibliography

- [1] *Ablow C. M., Kaylor D. J.* A committee solution of the pattern recognition problem. *IEEE Transactions*, 1965, IT-11, no. 3, pp. 452–455.
- [2] *Ablow C. M., Kaylor D. J.* Inconsistent homogeneous linear inequalities. *Bulletin of the American Mathematical Society*, 1965, 71, no. 5, pp. 724.
- [3] *Aigner M.* Combinatorial theory. Reprint of the 1979 original. *Classics in Mathematics*. – Berlin: Springer-Verlag, 1997.
- [4] *Aleksandryan R. A., Mirzakhanyan È. A.* General topology. – Moscow: Higher School Publishing House, 1979. [in Russian]
- [5] *Aleskerov F. T., Khabina E. L., Shvarts D. A.* Binary relations, graphs and collective decisions. Second edition. – Moscow: Fizmatlit, 2012.
- [6] *Alexandroff P. S.* Einführung in die Mengenlehre und in die allgemeine Topologie. [Introduction to set theory and to general topology] Translated from the Russian by Manfred Peschel, Wolfgang Richter and Horst Antelmann. *Hochschulbücher für Mathematik [University Books for Mathematics]*, 85. – Berlin: VEB Deutscher Verlag der Wissenschaften, 1984. [in German]
- [7] *Alon N., Spencer J. H.* The probabilistic method. Third edition. With an appendix on the life and work of Paul Erdős. *Wiley–Interscience Series in Discrete Mathematics and Optimization*. – Hoboken, NJ: John Wiley & Sons, Inc., 2008.
- [8] *Altshuller A., Perles M. A.* Quotient polytopes of cyclic polytopes. *Israel Journal of Mathematics*, 1980, 36, no. 2, pp. 97–125.
- [9] *Anderson J.* Discrete mathematics with combinatorics. – Upper Saddle River, NJ: Prentice Hall, Inc., 2001.
- [10] *Andreev A. E.* On the problem of minimization of disjunctive normal forms. *Doklady Akademii Nauk SSSR*, 1984, 274, no. 2, pp. 265–269. [in Russian]
- [11] *Arkhangel'skiĭ, A. V., Ponomarev V. I.* Fundamentals of general topology. Problems and exercises. Translated from the Russian by V. K. Jain. With a foreword by P. Alexandroff [P. S. Aleksandrov]. *Mathematics and its applications*. – Dordrecht: D. Reidel Publishing Co., 1984.
- [12] *Artamonov V. A., Saliĭ V. N., Skornyakov L. A., Shevrin L. N., Shul'geifer E. G.* General algebra. Vol. 2. Edited and with a preface by L. A. Skornyakov. *Mathematical reference library*. – Moscow: Nauka, 1991. [in Russian]
- [13] *Asanov M. O., Baranskii V. A., Rasin V. V.* Discrete mathematics: Graphs, matroids, algorithms. Second edition. – SPb: Lan Publishers, 2010. [in Russian]
- [14] *Ashmanov S. A., Timokhov A. V.* Optimization theory in problems and exercises. Second edition. – SPb: Lan Publishers, 2012. [in Russian]
- [15] *Aurenhammer F.* Using Gale transforms in computational geometry. *Applications of mathematical programming (Tokyo, 1988)*. *Mathematical Programming (Ser. B)*, 1991, 52, no. 1, pp. 179–190.
- [16] *Bachem A., Euler R.* Recent trends in combinatorial optimization. *OR Spectrum*, 1984, 6, no. 1, pp. 1–21.
- [17] *Beklemishev D. V.* Supplementary chapters in linear algebra. Second edition. – SPb: Lan Publishers, 2008. [in Russian]
- [18] *Bioch J. C., Ibaraki T., Makino K.* Minimum self-dual decompositions of positive dual-minor Boolean functions. *Discrete Applied Mathematics*, 1999, 96–97, pp. 307–326.
- [19] *Bit-Shun Tam.* Diagonals of convex sets. *Tamkang Journal of Mathematics*, 1983, 14, no. 1, pp. 91–102.
- [20] *Boltyanski V. G., Soltan P. S.* Combinatorial geometry of various classes of convex sets. – Kishinev: Shtiinca, 1978. [in Russian]

- [21] *Boros E., Hammer pp., Ibaraki T., Kawakami K.* Polynomial time recognition of 2-monotonic positive Boolean functions given by an oracle. *SIAM Journal of Computing*, 1997, 26, pp. 93–109.
- [22] *Bourbaki N.* General topology. Chapters 1–4. Translated from the French. Reprint of the 1989 English translation. *Elements of Mathematics*. – Berlin: Springer-Verlag, 1998.
- [23] *Bröcker Th.* Differentiable germs and catastrophes. Translated from the German, last chapter and bibliography by L. Lander. *London Mathematical Society Lecture Note Series*, 17. – Cambridge–New York–Melbourne: Cambridge University Press, 1975.
- [24] *Brøndsted A.* An introduction to convex polytopes. *Graduate texts in mathematics*, 90. – New York–Berlin: Springer-Verlag, 1983.
- [25] *Buchstaber V. M., Panov T. E.* Torus actions and their applications in topology and combinatorics. *University Lecture Series*, 24. – Providence, RI: American Mathematical Society, 2002.
- [26] *Charin V. S.* Linear transformations and convex sets. – Kiev: Vyshcha shkola, 1978. [in Russian]
- [27] *Chernyshev Yu. O., Nasekin V. Ya.* Solution of the problem of coverage by a gradient algorithm. *Cybernetics*, 1976, 12, no. 4, pp. 584–587.
- [28] *Christofides N.* Graph theory. An algorithmic approach. *Computer science and applied mathematics*. – New York–London: Academic Press [Harcourt Brace Jovanovich, Publishers], 1975.
- [29] *Conn A. R., Scheinberg K., Vicente L. N.* Introduction to derivative-free optimization. *MPS/SIAM series on optimization*, 8. *Society for Industrial and Applied Mathematics (SIAM)*, Philadelphia, PA; *Mathematical Programming Society (MPS)*, 2009.
- [30] *Crama Y., Hammer pp.L.* (eds.) Boolean models and methods in mathematics, computer science, and engineering. *Encyclopedia of mathematics and its applications*, 134. Cambridge: Cambridge University Press, 2010.
- [31] *Davis C.* Theory of positive linear dependence. *American Journal of Mathematics*, 1954, 76, no. 4, pp. 733–746.
- [32] *Diestel R.* Graph theory. Third edition. *Graduate texts in mathematics*, 173. – Berlin: Springer-Verlag, 2005.
- [33] *Ding–Zhu Du, Pardalos P. M.* (eds.) Handbook of combinatorial optimization. Volumes 1–3. – Berlin: Springer-Verlag, 1999.
- [34] *Domingo C., Mishra N., Pitt L.* Efficient read–restricted monotone CNF/DNF dualization by learning with membership queries. *Machine Learning*, 1999, 37, no. 1, pp. 89–110.
- [35] *Eckhoff J.* On a class of convex polytopes. *Israel Journal of Mathematics*, 1976, 23, no. 3–4, pp. 332–336.
- [36] *Edmonds J., Fulkerson D. R.* Bottleneck extrema. *Journal of Combinatorial Theory*, 1970, 8, pp. 299–306.
- [37] *Eiter T., Makino K., Gottlob G.* Computational aspects of monotone dualization: A brief survey. *Discrete Applied Mathematics* 2008, 11, no. 156, pp. 2035–2049.
- [38] *Engelking R.* General topology. Translated from the Polish by the author. Second edition. *Sigma Series in Pure Mathematics*, 6. – Berlin: Heldermann Verlag, 1989.
- [39] *Erëmin I. I.* Improper models of optimal planning. *Library of Mathematical Economics*. – Moscow: Nauka, 1988. [in Russian]
- [40] *Erëmin I. I.* Inconsistent economic models. – Sverdlovsk: Sredne-Ural. Knizhn. Izdat., 1986. [in Russian]
- [41] *Erëmin I. I.* Linear optimization and systems of linear inequalities. *Applied mathematics and informatics*. – Moscow: Academia Publishing Center, 2007. [in Russian]
- [42] *Erëmin I. I.* Theory of linear optimization. *Inverse and Ill-posed problems series*. – Utrecht: VSP, 2002.

- [43] *Erëmin I. I., Mazurov V. D., Astaf'ev N. N.* Improper problems of linear and convex programming. Library of mathematical economics. – Moscow: Nauka, 1983. [in Russian]
- [44] *Fedorchuk V. V., Filippov V. V.* General topology. Fundamental constructions. – Moscow: Fizmatlit, 2006. [in Russian]
- [45] *Fiedler M., Ptak V.* Diagonals of convex sets. Czechoslovak Mathematical Journal, 1978, 28, no. 1, pp. 25–44.
- [46] *Füredi Z.* Matchings and covers in hypergraphs. Graphs and Combinatorics, 1988, 4, no. 1, pp. 115–206.
- [47] *Gainanov D. N.* Algorithms on graphs associated with infeasible systems of constraints, and their application to problems of quality control. PhD Thesis. Institute of Mathematics and Mechanics, Urals Scientific Center of USSR Academy of Sciences, Sverdlovsk, 1981. [in Russian]
- [48] *Gainanov D. N.* Alternative covers and independence systems in pattern recognition. Pattern Recognition and Image Analysis, 1992, 2, no. 2, pp. 147–160.
- [49] *Gainanov D. N.* An algorithm of extracting all maximal feasible subsystems of an infeasible system of linear inequalities. *Tyagunov L. I., Karapetyan E. G., Mirzoev R. G.* (eds.) Quality control of industrial products. – Leningrad: LSU Publishers, 1977. pp. 110–115. [in Russian]
- [50] *Gainanov D. N.* Combinatorial properties of incompatible systems of linear inequalities and polyhedra. Mathematical Notes, 1985, 38, no. 3, pp. 763–768.
- [51] *Gainanov D. N.* On graphs of maximal feasible subsystems of infeasible systems of linear inequalities. VINITI preprint no. 229–281, 1981. [in Russian]
- [52] *Gainanov D. N.* On one criterion of the optimality of an algorithm for evaluating monotonic Boolean functions. USSR Computational Mathematics and Mathematical Physics, 1984, 24, no. 4, pp. 176–181.
- [53] *Gainanov D. N.* On the connectedness of the graphs of some classes of independence systems. Investigations in the Theory of Convex Sets and Graphs, Yu. I. Shashkin and E. G. Pytkeev (eds.) USSR Academy of Sciences, Ural Division, Sverdlovsk, 1987, pp. 16–23. [in Russian]
- [54] *Gainanov D. N., Gusak I. Ya.* Combinatorial properties of positive bases. Mathematical Notes, 1987, 42, no. 3, pp. 756–761.
- [55] *Gainanov D. N., Gusak I. Ya.* Diagonals of convex polytopes. Mathematical Notes, 1991, 49, nos. 3–4, pp. 349–355.
- [56] *Gainanov D. N., Matveev A. O.* Finite lattice diagonals and their relation to pattern recognition. Pattern Recognition and Image Analysis, 1993, 3, no. 2, pp. 84–91.
- [57] *Gainanov D. N., Matveev A. O.* Lattice diagonals and geometric pattern recognition problems. Pattern Recognition and Image Analysis, 1991, 1, no. 3, pp. 277–282.
- [58] *Gainanov D. N., Novokshenov V. Yu., Tyagunov L. I.* Graphs generated by inconsistent systems of linear inequalities. Mathematical Notes, 1983, 33, no. 2, pp. 146–150.
- [59] *Gainanov D. N., Rasskazova V. A.* An inference algorithm for monotone Boolean functions associated with undirected graphs. Bulletin of the South Ural State University. Series *Mathematical Modelling, Programming & Computer Software*, to appear.
- [60] *Gale D.* Neighboring vertices on a convex polyhedron. Linear inequalities and related systems. Annals of mathematics studies, 38. – Princeton, NJ: Princeton University Press, 1956, pp. 255–263.
- [61] *Gordeev È. N.* New estimates in the covering problem. Modeling and optimization of complex control systems. – Moscow: Nauka, 1981, pp. 116–122. [in Russian]
- [62] *Grätzer G.* General lattice theory. With appendices by B. A. Davey, R. Freese, B. Ganter, M. Greferath, P. Jipsen, H. A. Priestley, H. Rose, E. T. Schmidt, S. E. Schmidt, F. Wehrung and R. Wille. Reprint of the 1998 second edition. – Basel: Birkhäuser Verlag, 2003.

- [63] *Grötschel M., Lovász L., Schrijver A.* Geometric algorithms and combinatorial optimization. Second edition. Algorithms and combinatorics, 2. – Berlin: Springer-Verlag, 1993.
- [64] *Grünbaum B.* Convex polytopes. Second edition. Prepared and with a preface by *V. Kaibel, V. Klee* and *G. M. Ziegler*. Graduate texts in mathematics, 221. – New York: Springer-Verlag, 2003.
- [65] *Gusak I. Ya., Ustinov G. M.* Gale transformations and diagrams – the method of combinatorial geometry. Combinatorial properties of convex sets and graphs. Akademii Nauk SSSR, Ural. Nauchn. Tsentr, Sverdlovsk, 1983, pp. 16–33. [in Russian]
- [66] *Hansel G.* Sur le nombre des fonctions booléennes monotones de n variables. Comptes Rendus de l'Académie des Sciences Serie A–B, 1966, 262, A1088–A1090.
- [67] *Harary F.* Graph theory. – Reading, MA: Addison–Wesley, 1969
- [68] *Isaev I. V.* Synthesis of a correct recognition algorithm as a minimal covering construction problem. USSR Computational Mathematics and Mathematical Physics, 1983, 23, no. 2, pp. 137–142.
- [69] *Kalai G.* Polytope skeletons and paths. CRC Handbook of discrete and computational geometry. Second edition, *J. E. Goodman* and *J. O'Rourke* (eds.), Series of Discrete Applied Mathematics, CRC. – Boca Raton, FL: CRC Press, 2004, pp. 455–476.
- [70] *Kalai G.* Some aspects of the combinatorial theory of convex polytopes. Polytopes: abstract, convex and computational (Scarborough, ON, 1993), NATO Adv. Sci. Inst. Ser. C Math. Phys. Sci., 440. – Dordrecht: Kluwer Academic Publisher, 1994, pp. 205–229.
- [71] *Kalai G.* Rigidity and the lower bound theorem. I. Inventiones Mathematicae 1987, 88, no. 1, pp. 125–151.
- [72] *Kaufmann A.* Introduction à la combinatoire en vue des applications. – Paris: Dunaud, 1968. [in French]
- [73] *Kelley J. L.* General topology. Reprint of the 1955 edition [Van Nostrand, Toronto, Ont.]. Graduate Texts in Mathematics, 27. – New York–Berlin: Springer-Verlag, 1975.
- [74] *Khachai M. Yu.* On estimation of the number of members in a minimum committee of a system of linear inequalities. Computational Mathematics and Mathematical Physics, 1997, 37, no. 11, pp. 1356–1361.
- [75] *Khachai M. Yu.* On the existence of majority committee. Discrete Mathematics and Applications, 1997, 7, no. 4, pp. 383–397.
- [76] *Khachai M. Yu., Mazurov V. D., Rybin A. I.* Committee constructions for solving problems of selection, diagnostics, and prediction. Proceedings of the Steklov Institute of Mathematics, 2002, Mathematical Programming. Regularization and Approximation, suppl. 1, S67–S101.
- [77] *Kolmogorov A. N., Fomin S. V.* Elements of the theory of functions and functional analysis. With a supplement, “Banach algebras”, by *V. M. Tikhomirov*. Sixth edition. – Moscow: Nauka, 1989. [in Russian]
- [78] *Korobkov V. K.* On some integer problems of linear programming. Problems in cybernetics, fasc. 14. – Moscow: Nauka, 1965, pp. 297–299. [in Russian]
- [79] *Korshunov A. D.* Monotone Boolean functions. Russian Mathematical Surveys, 2003, 58, no. 5, pp. 929–1001.
- [80] *Korte B., Vygen J.* Combinatorial optimization. Theory and algorithms. Fourth edition. Algorithms and combinatorics, 21. – Berlin: Springer-Verlag, 2008.
- [81] *Lawler E. L.* Combinatorial optimization. Networks and matroids. – New York: Dover Publications, Inc., 2001.
- [82] *Lawler E. L.* Covering problems: duality relations and a new method of solution. SIAM Journal on Applied Mathematics, 1966, 14, pp. 1115–1132.
- [83] *Lehman A.* A solution of the Shannon switching game. Journal of the Society for Industrial and Applied Mathematics, 1964, 12, pp. 687–725.

- [84] *Leichtweiss K.* Konvexe Mengen. Hochschultext. – Berlin–New York: Springer-Verlag, 1980. [in German]
- [85] *Lidl R., Pilz G.* Applied abstract algebra. Second edition. Undergraduate texts in mathematics. – New York: Springer-Verlag, 1998.
- [86] *Logachev O. A., Salnikov A. A., Yashchenko V. V.* Boolean functions in coding theory and cryptography. With a foreword by V. A. Sadovnichii. Translated from the 2004 Russian original by Svetla Nikova. Translations of Mathematical Monographs, 241. – Providence, RI: American Mathematical Society, 2012.
- [87] *Lovász L., Plummer M. D.* Matching theory. Annals of discrete mathematics, 29. – Amsterdam: North Holland, 1986.
- [88] *Makino K., Ibaraki T.* A fast and simple algorithm for identifying 2-monotonic positive Boolean functions. Journal of Algorithms, 1998, 26, no. 2, pp. 291–305.
- [89] *Makino K., Ibaraki T.* The maximum latency and identification of positive Boolean functions. SIAM Journal on Computing, 1997, 26, pp. 1363–1383.
- [90] *Marchenkov S. S.* Boolean functions. – Moscow: Fizmatlit, 2002. [in Russian]
- [91] *Marcus D. A.* Gale diagrams of convex polytopes and positive spanning sets of vectors. Discrete Applied Mathematics, 1984, no. 4, pp. 47–67.
- [92] *Matoušek J.* Lectures on discrete geometry. Graduate texts in mathematics, 212. – New York: Springer-Verlag, 2002.
- [93] *Matveev A. O.* Representative system complexes in research into combinatorial properties of posets and infeasible systems of linear inequalities. PhD Thesis. Institute of Mathematics and Mechanics, Ural Branch of RAS, Ekaterinburg, 1994. [in Russian]
- [94] *Mazurov V. D.* On constructing a committee of a system of convex inequalities. Kibernetika, 1967, no. 2, pp. 56–59. [in Russian]
- [95] *Mazurov V. D.* On the committee of a system of convex inequalities. ICM Proceedings, no. 14, Moscow, MSU, 1966, p. 41.
- [96] *Mazurov V. D.* The committee method in optimization and classification problems. – Moscow: Nauka, 1990. [in Russian]
- [97] *Mazurov V. D., Kazantsev V. S., Beletskii N. G., Krivonogov A. I., Smirnov A. I.* Questions of the justification and application of committee pattern recognition algorithms. Pattern recognition. Classification. Prediction, fasc. 1. – Moscow: Nauka, 1988, pp. 114–148. [in Russian]
- [98] *Mazurov V. D., Khachai M. Yu.* Committee constructions. Izv. Ural. Gos. Univ. Mat. Mekh., 1999, 2, no. 14, pp. 77–108. [in Russian]
- [99] *Mazurov V. D., Khachai M. Yu.* Committees of systems of linear inequalities. Automation and Remote Control, 2004, 65, no. 2, pp. 193–203.
- [100] *McMullen P.* Transforms, diagrams and representations. Contributions to geometry. – Basel: Birkhauser, 1979, pp. 92–130.
- [101] *McMullen P., Shephard G. C.* Convex polytopes and the upper bound conjecture. Prepared in collaboration with J. E. Reeve and A. A. Ball. London Mathematical Society Lecture Note Series, 3. – Cambridge: Cambridge University Press, 1971.
- [102] *Mirsky L.* Transversal theory. – New York: Academic Press, 1971.
- [103] *Mirsky L., Perfect H.* Systems of representatives. Journal of Mathematical Analysis and Applications, 1966, 15, no. 3, pp. 520–568.
- [104] *Melnikov O. I., Tyshkevich R. I., Yemelichev V. A., Sarvanov V. I.* Lectures on graph theory. Translated from the 1990 Russian original by N. Korneenko with the collaboration of the authors. – Mannheim: Bibliographisches Institut, 1994.
- [105] *Mel'nikov O. V., Remeslennikov V. N., Roman'kov V. A., Skorniyakov L. A., Shestakov I. P.* General algebra. Vol. 1. Mathematical Reference Library. – Moscow: Nauka, 1990. [in Russian]

- [106] *Minc H.* Permanents. Encyclopedia of mathematics and its applications, 6. With a foreword by Marvin Marcus. – Reading, MA: Addison–Wesley, 1978.
- [107] *Minoux M.* Mathematical programming: theory and algorithms. With a foreword by Egon Balas. Translated from the French by Steven Vajda. A Wiley–Interscience Publication. – Chichester: John Wiley & Sons Ltd., 1986.
- [108] *Nagel U.* Empty simplices of polytopes and graded Betti numbers. Discrete Computer Geometry, 2008, 39, no. 1–3, pp. 389–410.
- [109] *Nigmatullin R. G.* A method of steepest descent in problems on covering. Problems of accuracy and efficiency of computational algorithms. Proceedings, 5. – Kiev, 1970. [in Russian]
- [110] *Nigmatullin R. G.* Complexity of Boolean functions. With a biography of the author by S. Kuznetsov, N. Nurmeev and V. Khrapchenko. – Moscow: Nauka, 1991. [in Russian]
- [111] *Nosov V. A., Sachkov V. N., Tarakanov V. E.* Combinatorial analysis (matrix problems, the theory of sampling). Probability theory. Mathematical statistics. Theoretical cybernetics, 18. Moscow: Akad. Nauk SSSR, Vsesoyuz. Inst. Nauchn. i Tekhn. Informatsii, 1981, pp. 53–93. [in Russian]
- [112] *Nosov V. A., Sachkov V. N., Tarakanov V. E.* Combinatorial analysis (nonnegative matrices, algorithmic problems). Probability theory. Mathematical statistics. Theoretical cybernetics, 21. Itogi Nauki i Tekhniki. Moscow: Akad. Nauk SSSR, Vsesoyuz. Inst. Nauchn. i Tekhn. Inform., 1983, pp. 120–178. [in Russian]
- [113] *Novoselov V. G.* Minimization of Boolean functions (a survey). Summaries of reasearch in cybernetics, Tomsk, 1968, pp. 40–60. [in Russian]
- [114] *Osis Ya. Ya.* Algorithm of finding a quasi–optimal cover of a set. Automation and Computer Engineering, 1969, no. 2, pp. 94–96. [in Russian]
- [115] *Papadimitriou Ch. H., Steiglitz K.* Combinatorial optimization: algorithms and complexity. – Mineola, New York: Dover Publications, Inc., 1998.
- [116] *Prasolov V. V.* Elements of combinatorial and differential topology. Translated from the 2004 Russian original by Olga Sipacheva. Graduate Studies in Mathematics, 74. – Providence, RI: American Mathematical Society, 2006.
- [117] *Reay J. R.* Generalizations of a theorem of Carathéodory. Memoirs of the American Mathematical Society, 1965, no. 54, pp. 253–261.
- [118] *Reay J. R.* Positive bases as a tool in convexity. Proceedings of the Colloquium on Convexity, no. 3–4. – Copenhagen: 1965, pp. 255–260.
- [119] *Reay J. R.* Unique minimal representations with positive bases.. American Mathematical Monthly, 1966, 73, no. 4, pp. 253–261.
- [120] *Rockafellar R. T.* Convex analysis. Princeton landmarks in mathematics (Reprint of the 1979 Princeton mathematical series 28 edn.). – Princeton, NJ: Princeton University Press, 1997.
- [121] *Rotman J. J.* An introduction to algebraic topology. Graduate Texts in Mathematics, 119. – New York: Springer-Verlag, 1988.
- [122] *Sachkov V. N.* Combinatorial methods in discrete mathematics. Translated from the 1977 Russian original by V. Kolchin and revised by the author. Encyclopedia of Mathematics and its Applications, 55. – Cambridge: Cambridge University Press, 1996.
- [123] *Sachkov V. N., Tarakanov V. E.* Combinatorics of nonnegative matrices. Translated by Valentin F. Kolchin. Translations of Mathematical Monographs, 213. – Providence, RI: American Mathematical Society, 2002.
- [124] *Sapozhenko A. A.* Dedekind’s problem and the method of boundary functionals. – Moscow: Fizmatlit, 2009. [in Russian]
- [125] *Sapozhenko A. A.* Disjunctive normal forms. Metric theory. – Moscow, MSU, 1975. [in Russian]

- [126] Sapozhenko A. A. On the search for the maximal upper zero of monotone functions on ranked sets. *USSR Computational Mathematics and Mathematical Physics*, 1991, 31, no. 12, pp. 79–89.
- [127] Sapozhenko A. A., Chukhrov I. P. Minimization of Boolean functions in the class of disjunctive normal forms. *Journal of Soviet Mathematics*, 1989, 46, no. 4, pp. 2021–2052.
- [128] Schneider R. Convex bodies: the Brunn–Minkowski theory. Second expanded edition. *Encyclopedia of mathematics and its applications*, 151. – Cambridge: Cambridge University Press, 2014.
- [129] Shephard G. C. Diagrams for positive bases. *Journal of the London Mathematical Society*, 1971, 4, no. 1, pp. 165–175.
- [130] Smirnov V. A. Simplicial and operad methods in algebraic topology. *Translations of Mathematical Monographs*, 198. – Providence, RI: American Mathematical Society, 2001.
- [131] Sokolov N. A. On the optimal evaluation of monotonic Boolean functions. *USSR Computational Mathematics and Mathematical Physics*, 1982, 22, no. 2, pp. 207–220.
- [132] Spanier E. H. Algebraic topology. Corrected reprint. – New York–Berlin: Springer-Verlag, 1981.
- [133] Stanley R. P. Combinatorics and commutative algebra. *Progress in mathematics*, 41. – Boston: Birkhauser, 1983.
- [134] Stanley R. P. Enumerative combinatorics. Volume 1. Second edition. *Cambridge Studies in Advanced Mathematics*, 49. – Cambridge: Cambridge University Press, 2012.
- [135] Stechkin B. S., Baranov V. I. Extremal combinatorial problems and their applications. Translated from the Russian and expanded by the authors. *Mathematics and its Applications*, 335. – Dordrecht: Kluwer Academic Publishers Group, 1995.
- [136] Swamy M. N. S., Thulasiraman K. Graphs, networks, and algorithms. A Wiley Interscience Publication. – New York: John Wiley & Sons, Inc., 1981.
- [137] Tarakanov V. E. Combinatorial problems and $(0, 1)$ -matrices. *Problems of science and technological progress*. – Moscow: Nauka, 1985. [in Russian]
- [138] Tarakanov V. E. Depth of $(0, 1)$ -matrices with the same row and same column sums. *Mathematical Notes*, 1983, 34, no. 3, pp. 718–725.
- [139] Tarakanov V. E. Maximum height of arbitrary classes of $(0, 1)$ -matrices and some of its applications. *Math. USSR–Sb.*, 1973, 21, no. 3, pp. 467–484. [in Russian]
- [140] Thomas R. R. Lectures in geometric combinatorics. *Student Mathematical Library*, 33. IAS/Park City Mathematical Subseries. American Mathematical Society, Providence, RI; Institute for Advanced Study (IAS), Princeton, NJ, 2006.
- [141] Torvik V. I. Data mining and knowledge discovery: A guided approach based on monotone Boolean functions. PhD thesis, Louisiana State University, Baton Rouge, LA, USA, 2002.
- [142] Torvik V. I., Triantaphyllou E. Guided inference of nested monotone Boolean functions. *Information Sciences* 151 (Suppl), 2003, pp. 171–200.
- [143] Torvik V. I., Triantaphyllou E. Inference of monotone Boolean functions. *Floudas C. A. and Pardalos P. M. (eds.) Encyclopedia of optimization*. 2nd edn. – New York: Springer, 2009, pp. 1591–1598.
- [144] Triantaphyllou E. Data mining and knowledge discovery via logic-based methods. Theory, algorithms, and applications. *Springer optimization and its applications*, 43. – New York: Springer, 2010.
- [145] Trishin V. N. An adaptive algorithm of solving the multidimensional knapsack problem and recognizing a monotonic Boolean function. *Izv. AN SSSR. Technical Cybernetics*, 1982, no. 4, pp. 11–18. [in Russian]
- [146] Tschernikow S. N. Lineare Ungleichungen. Bearbeitet von H. Hollatz nach einer Übersetzung von H. Weinert aus dem Russischen. – Berlin: VEB Deutscher Verlag der Wissenschaften, 1971. [in German]

- [147] *Tutte W. T.* Graph theory. With a foreword by Crispin St. J. A. Nash–Williams. Reprint of the 1984 original. Encyclopedia of Mathematics and its Applications, 21. – Cambridge: Cambridge University Press, 2001.
- [148] *Tyagunov L. I.* On extracting a sequence of maximal feasible subsystems of an infeasible system of linear inequalities. Mathematical Methods of Planning and Control in Large Systems. Sverdlovsk: UrO AN SSSR, 1973. VINITI preprint no. 7467–7473, 1973. [in Russian]
- [149] *Valiant L.* A theory of the learnable. Communications of the ACM, 1984, 27, no. 11, pp. 1134–1142.
- [150] *Vasil'ev F. P.* Numerical methods for solving extremal problems. Second edition. – Moscow: Nauka, 1988. [in Russian]
- [151] *Vasil'ev Ju. L., Glagolev V. V., Korobkov V. K.* Metric investigations in discrete analysis. A collection consisting mainly of papers presented at the Second All–Union Conference on Problems of Theoretical Cybernetics (Novosibirsk, 1971). Problemy Kibernet. 1973, no. 27, pp. 63–73. [in Russian]
- [152] *Webster R.* Convexity. Oxford science publications. – New York: Oxford University Press, 1994.
- [153] *Wegener I.* The complexity of Boolean functions. Wiley–Teubner series in computer science. – Stuttgart: B. G. Teubner, 1987.
- [154] *Yablonsky S. V.* Functional constructions in a k -valued logic. Collection of articles on mathematical logic and its applications to some questions of cybernetics, Trudy Mat. Inst. Steklov, 51, Acad. Sci. USSR, Moscow, 1958, pp. 5–142. [in Russian]
- [155] *Yablonsky S. V.* Introduction to discrete mathematics. Translated from the Russian by Oleg Efimov. – Moscow: Mir, 1989.
- [156] *Yemelichev V. A., Koval'ev M. M., Kravtsov M. K.* Polytopes, graphs and optimisation. Translated from the Russian by G. H. Lawden. – Cambridge: Cambridge University Press, 1984.
- [157] *Zakrevskij A. D.* On a reduction of enumerating when solving some problems of synthesizing discrete automata. Iz. VUZ, Radiophysics, 1964, 8, no. 1, pp. 166–174. [in Russian]
- [158] *Zakrevskij A. D.* Toward minimization of disjunctive normal forms of Boolean functions. Izvestiya Akademia Nauk SSSR, Tekh. Kibern., 1970, no. 4, pp. 102–104. [in Russian]
- [159] *Zhuravlev Yu. I.* Algebraic approach to the solution of recognition or classification problems. Problems in Cybernetics. – Moscow: Nauka, 1978, fasc. 33, pp. 67–82. [in Russian]
- [160] *Zhuravlev Yu. I.* Algorithms of construction of minimal DNFs for Boolean functions. Discrete mathematics and mathematical topics in cybernetics. – Moscow: Nauka, 1974, pp. 67–82. [in Russian]
- [161] *Zhuravlev Yu. I.* Estimates of complexity of algorithms of constructing minimal disjunctive normal forms for logical functions. Discrete Analysis, 1964, fasc. 3, Novosibirsk, Institute of Mathematics, pp. 41–77. [in Russian]
- [162] *Zhuravlev Yu. I.* On the algorithms for simplification for disjunctive normal forms. Dokl. Akad. Nauk SSSR, 1960, 132, no. 2, pp. 260–263. [in Russian]
- [163] *Ziegler G. M.* Lectures on polytopes. Graduate texts in mathematics, 152. – New York: Springer-Verlag, 1995.
- [164] *Zuev Yu. A.* A set–covering problem: the combinatorial–local approach and the branch and bound method. USSR Computational Mathematics and Mathematical Physics, 1979, 19, no. 6, pp. 217–226.
- [165] *Zykov A. A.* On some properties of linear complexes. Sbornik Mathematics, 1949, 24, no. 2, pp. 163–188. [in Russian]
- [166] *Zykov A. A.* Fundamentals of graph theory. Translated from the Russian and edited by L. Boron, C. Christenson and B. Smith. – Moscow, ID: BCS Associates, 1990.