

List of publications by Alexander E. Guterman

1. Matrix ranks and linear independence over tropical semirings (with M. Akian, S. Gaubert), American Mathematical Society, Contemporary Mathematics, 495, 2009, 1-33, <http://arxiv.org/abs/0812.3496>.
2. Problem book in Algebra (with I.V. Arzhantsev, V.A. Artamonov, Yu.A. Bakhturin, E.B. Vinberg, E.S. Golod, A.I. Zobnin, V.A. Iskovskih, A.I. Kostrikin, V.N. Latyshev, A.V. Mikhalev, A.P. Mishina, Yu.A. Olshanskii, A.A. Pantchishkin, I.V. Proskuryakov, A.N. Rudakov, L.A. Skorniyakov, A.L. Shmelkin), MCCME, 2009, 403pp.
3. The characterization of operators preserving primitivity for matrix k -tuples (with L. B. Beasley), Linear Algebra and its Applications, 430, 2009, 1762-1777, файл: k_prim.pdf.
4. Preserving zeros of a polynomial (with B. Kuzma), Communications in Algebra, 37(11), 2009, 3801-3827, файл: zeropoly.pdf.
5. Matrix invariants over semirings, Handbook of Algebra, Elsevier, 6, 2009, 3-33, файл: handb_sem.pdf.
6. Commutative matrix subalgebras and length function (with O. V. Markova), Linear Algebra and its Applications, 430, 2009, 1790-1805, файл: length.pdf.
7. Maps preserving zeros of matrix polynomials (with B. Kuzma), Doklady of Russian Academy of Sciences, Mathematics, 427(3), 2009, 300-302, файл: zeropoly_sh.pdf.
8. Preserving regular tournaments and term rank-1 (with L.B. Beasley, D. Brown), Linear Algebra and its Applications, 431, 2009, 926-936, файл: tourn.pdf.
9. Operators preserving primitivity for matrix pairs (with L. B. Beasley), Matrix Methods: Theory, Algorithms, Applications, World Scientific Publishing, 2008, 2-20.
10. On linear operators preserving the set of positive polynomials (with B. Shapiro), Journal of Fixed Point Theory and Applications, 3 (2), 2008, 411-429, файл: positive_pres.pdf.
11. Characterization of transformations strongly preserving zeros of matrix polynomials (with B. Kuzma), Uspehi Mat. Nauk, 63(5), 2008, 184-185. [in Russian]
12. Rank and determinant functions for semirings, London Mathematical Society Lecture Notes, 347, 2007, 1-33.
13. Transformations preserving matrix invariants over semirings, Idempotent and tropical mathematics and problems of mathematical physics, Moscow, MCCME, 1, 2007, 84-90.
14. Monotone additive transformations on matrices, Mat. Zametki, 81(5), 2007, 681-692.
15. Monotone matrix mappings defined by the group inverse and simultaneous diagonalizability (with I. I. Bogdanov), Mat. Sbornik, 198(1), 2007, 3-20.
16. Idempotent matrices and majorisation (with L. B. Beasley, K.-T. Kang, S.-Z. Song), Fundamental and Applied Mathematics, 13(1), 2007, 11-29.
17. Frobenius and Dieudonne theorems over semirings (with L. B. Beasley, S.-G. Lee, S.-Z. Song), Linear and Multilinear Algebra, 55(1), 2007, 19-34, файл: SemDetsPrinted.pdf.
18. Linear preservers of extremes of rank inequalities over semirings: the row and column ranks (with L. B. Beasley, Y.-B. Jun, S.-Z. Song), Linear Algebra Appl., 413, 2006, 495-509.
19. Rank-permutable additive mappings (with A. A. Alieva, B. Kuzma), Linear Algebra Appl., 414, 2006, 607-616
20. Linear preservers for Sylvester and Frobenius bounds on matrix rank (with L. B. Beasley, C. L. Neal), Rocky Mountain Journal of Mathematics, 86(1), 2006, 67-80, файл: SylvFrob.pdf.
21. Linear preservers of zeros of matrix polynomials (with L. B. Beasley, S.-G. Lee, S.-Z. Song), Linear Algebra and its Applications, 2005, 401, 325-340, файл: SemZerosPoly.pdf
22. Monotone linear transformations on matrices are invertible (with A. A. Alieva), Communications in Algebra, 33, 2005, 3335-3352, файл: monot_are_invert.pdf
23. Rank inequalities over semirings (with L. B. Beasley), Journal of Korean Math. Soc., 42(2), 2005, 223-241

24. Factor rank for nonnegative matrices (with O. A. Vaysman), *Chebyshevskii Sbornik*, 6(4), 2005, 64-67 [in Russian]
25. Linear preservers of extremes of rank inequalities over semirings: term rank and zero-term rank (with L. B. Beasley and S.-C. Yi), *Fundamental and Applied Mathematics*, 10(2), 2004, 3-21 [in Russian]
26. Linear preservers of rank permutability (with A. A. Alieva), *Linear Algebra and its Applications*, 384, 2004, 97-108
27. Linear Transformations Preserving the Grassmannian over $M_n(\mathbb{Z}^+)$ (with L. B. Beasley, S.-G. Lee, S.-Z. Song), *Linear Algebra and its Applications*, 393, 2004, 39-46
28. LP-problems for rank inequalities over semirings: factorization rank (with L.B. Beasley), *Sovrem. Mat. Prilozh. Algebra*, 13, 2004, 53-70 [in Russian]
29. Rank permutability and additive operators preserving some rank product conditions (with A. A. Alieva), *Fundamental and Applied Mathematics*, 10(4), 2004, 3-14 [in Russian]
30. Linear transformations preserving rank-commutativity (with A. A. Alieva), *Bull. of the Moscow State University. Ser. 1. Mathematics. Mechanics*, 6, 2003, 11-17 [in Russian]
31. Transformations of non-negative integer matrices preserving the determinant, *Uspehi Mat. Nauk*, 58(6), 2003 147-148 [in Russian]
32. Monotone Matrix Maps Preserve Non-Maximal Rank, *Lecture Notes in Pure and Applied Mathematics*, Marcel Dekker, 2003, 311-328
33. General Algebra and Linear Transformations Preserving Matrix Invariants (with A.V. Mikhalev), *Fundamental and Applied Mathematics*, 9(1), 2003, 83-101 [in Russian]
34. Linear transformations that preserve the Dieudonne determinant over an arbitrary division ring, *Uspehi Mat. Nauk*, 57(4), 2002, 171-172 [in Russian]
35. Identities of near-triangular matrices, *Matem. Sbornik*, 192(6), 2001, 3-15
36. Linear preservers for matrix inequalities and partial orderings, *Linear Algebra and its Applications*, 331, 2001, 75-87
37. Frobenius type theorems in the noncommutative case, *Linear and Multilinear Algebra*, 48(4), 2001, 293-312
38. Linear preservers for Drazin star partial order, *Communications in Algebra*, 29(9), 2001, 3905-3917
39. Linear transformations, preserving super-rank, *Mathematical Methods and Applications*, MSSU, 8, 2001, 100-104 [in Russian]
40. Graded local rings, *Fundamental and Applied Mathematics*, 6(3), 2000, 753-756 [in Russian]
41. Some general techniques on Linear Preserver Problems (with C.-K. Li, P. Semrl), *Linear Algebra and Applications*, 315, 2000, 61-81
42. Singularity preservers over local domains, *Journal of Mathematical Sciences*, 102(6), 2000, 4591-4597.
43. On the Growth of Identities (with A.Regev), *Algebra*. Berlin, New York: Walter de Gruyter, 2000, 319-331
44. On determinant preservers over noncommutative Principal Ideal Domains (with A. V. Mikhalev), *Lie Algebras, Rings, and Related Topics*, Hong Kong: Springer-Verlag, 2000, 49-60
45. Ph. Hall type theorems for modules (with E. Kreines), *Universal Algebra and its Applications*, Volgograd, 2000, 60-72
46. A note on linear preservers of a certain matrix partial order, *Formal Power Series and Algebraic Combinatorics*, Berlin: Shpringer-Verlag, 2000, 441-446
47. On the applications of Model Theory for the classifications of linear transformations preserving matrix invariants, *Mathematical Methods and Applications*, MSSU, 7, 2000, 53-57 [in Russian]
48. P. Hall's theorem on transversals for modules (with E. Kreines), *Fundamental and Applied Mathematics*, 5(1), 1999, 119-130 [in Russian]

49. Identities and codimensions of a certain subalgebra of triangular matrix algebra, *Mathematical Methods and Applications*, MSSU, 6, 1999, 79-82 [in Russian]
50. Linear transformations preserving Adjamagbo determinant, *Mathematical Methods and Applications*, MSSU, 6, 1999, 67-72 [in Russian]
51. Frobenius type results for matrices over the skew-fields (with E. M. Kreines, A. V. Mikhalev), *Mathematical Methods and Applications*, MSSU, 5, 1998, 119-132 [in Russian]
52. Frobenius type theorems (with A. V. Mikhalev), *Proceedings of Workshop on General Algebra and Discrete Mathematics*, Germany, Potsdam, 1998, Shaker Verlag Aachen, 1999, 102-112