

List of publications of András RECSKI

October 2, 2007

1. Recski A.: A Fibonacci-számok általánosításáról, *Matematikai Lapok* 22 (1971) 165-170.
2. L. Lovász and A. Recski: On the sum of matroids, *Acta Math. Acad. Sci. Hungary* 24 (1972) 329-333.
3. Recski A.: Matroidok alkalmazása a villamos hálózatok analízisében, *Matematikai Lapok* 24 (1973) 311-328.
4. A. Recski: On partitional matroids with applications, *Coll. Math. Soc. J. Bolyai* 10 (Infinite and Finite Sets, North-Holland, Amsterdam, 1974) III. 1169-1179.
5. A. Recski: Enumerating partitional matroids, *Studia Sci. Math. Hungar.* 9 (1974) 247-249.
6. Á. Csurgay, Z. Kovács and A. Recski: Transient analysis of lumped-distributed non-linear networks, *Proc. 5th Internat. Coll. on Microwave Communication*, Budapest, 1974.
7. A. Recski: On the generalization of the Fibonacci numbers, *The Fibonacci Quarterly* 13 (1975) 315-317.
8. Recski A.: Matroidok alkalmazása a villamos hálózatok analízisében II. *Matematikai Lapok* 26 (1975) 287-303.
9. A. Recski: Matroids and state variables, *Proc. 1976 European Conf. on Circuit Theory and Design*, Genova, 1976, I. 44-51.
10. A. Recski: On the sum of matroids II, *Proc. 5th British Combinatorial Conf. Aberdeen* (Utilias Math., Winnipeg, 1976) 515-520.
11. A. Recski: On random partitions, *Discrete Math.* 16 (1976) 173-177.
12. A. Recski: Application of graph theory to network analysis – a survey, *Beiträge zur Graphentheorie und Anwendungen*, Oberhof (GDR), 1977, 193-200.
13. A. Recski: Matroids and independent state variables, *Annual of the Research Institute for Telecommunication*, Budapest, 1977, II. 239-246.
14. A. Recski: Sufficient conditions for the unique solvability of networks containing linear memoryless 2-ports, *Proc. 1978 European Conf. on Circuit Theory and Design*, Lausanne, 1978, I. 93-97.
15. A. Recski: Contributions to the n -port interconnection problem by means of matroids, *Coll. Math. Soc. J. Bolyai* 18 (Combinatorics, North-Holland, Amsterdam, 1978) II. 877-892.
16. A. Recski: Matroids in network theory, *Proc. 6th Internat. Coll. on Microwave Communication*, Budapest, 1978, I.II-2/12.1-4.
17. A. Recski: Decompositions of a graphic matroid, *Mathématiques discrètes: Codes et hypergraphes* (Bruxelles), Cahiers du CERO, 20 (1978) 437-442.
18. A. Recski: Matroidal structure of n -ports, *Coll. Math. Soc. J. Bolyai* 18 (Combinatorics, North-Holland, Amsterdam, 1978) II. 893-909.
19. A. Recski: Unique solvability and order of complexity of linear networks containing memoryless n -ports, *Circuit Theory and Applications* 7 (1979) 31-42.
20. A. Recski: Terminal solvability and the n -port interconnection problem, *Proc. IEEE Internat. Symp. Circuits and Systems*, Tokyo, 1979, 988-991.
- 21.
22. M. Iri and A. Recski: Reflections on the concepts of dual, inverse and adjoint networks, *Research memorandum RMI* 97-7, University of Tokyo, September, 1979.
23. A. Recski: Some remarks on the arboricity of the tree complements, *Trans. Fac. Sci. Tokai University* 15 (1979) 71-74.
24. A. Recski: Sufficient conditions for the unique solvability of networks containing linear memoryless 2-ports, *Circuit Theory and Applications* 8 (1980) 95-103.
25. M. Iri and A. Recski: What does duality really mean? *Circuit Theory and Applications* 8 (1980) 317-324.
26. A. Recski: Matroids and network synthesis, *Proc. 1980. European Conf. on Circuit Theory and Design*, Warsaw, 1980, II. 192-197.
27. A. Recski and M. Iri: Network theory and transversal matroids, *Discrete Applied Math.* 2 (1980) 311-326.

Proc. IECEJ Coll. Circuits and Systems, CAS-79-133 (1980) 5-10.

29. M. Iri and A. Recski: Reflections on the concepts of dual, inverse and adjoint networks II, Towards a qualitative theory, *Research memorandum RMI 80-1*, University of Tokyo, January 1980.

30. A. Recski: An algorithm to determine whether the sum of some graphic matroids is graphic, *Coll. Math. Soc. J. Bolyai* 25 (Algebraic methods in graph theory, North-Holland, Amsterdam, 1981) II. 647-656.

31. A. Recski and V. Zoller: On the parametrization of linear memoryless 2-ports, *Proc. 1981 European Conf. on Circuit Theory and Design*, The Hague, 1981, 758-763.

32. A. Recski and J. Takács: On the combinatorial sufficient conditions for linear network solvability, *Circuit Theory and Applications* 9 (1981) 351-354.

33. A. Recski: On the sum of matroids III, *Discrete Math.* 36 (1981) 273-287.

34. A. Recski: A practical remark on the minimal synthesis of resistive n -ports, *IEEE Trans. Circuits and Systems* CAS-29 (1982) 267-269.

35. M. Iri and A. Recski: Duality and reciprocity – a qualitative approach, *Proc. IEEE Internat. Symp. Circuits and Systems*, Rome, 1982, II, 415-418.

36. A. Recski: Matroids and terminal solvability, *Proc. 7th Internat. Coll. on Microwave Communication*, Budapest, 1982, I, 242-245.

37. A. Recski and V. Zoller: On the parametrization of linear memoryless 2-ports, *Circuit Theory and Application* 10 (1982) 57-67.

38. A. Recski: Engineering applications of matroids – a survey, A. Barlotti (ed): *Matroid Theory and Its Applications*, Liguori editore, Napoli, 1982, 299-321.

39. L. Lovász and A. Recski: Selected topics of matroid theory and its applications, *Rendiconti del Circolo Matematico di Palermo* II. 2 (1982) 171-185.

40. A. Recski: On the generalization of the matroid parity and the matroid partition problems, with applications, *Annals of Discrete Math.* 17 (1983) 567-574.

41. A. Recski: Unique solvability of linear passive memoryless networks – a survey, *Proc. 1983 European Conf. on Circuit Theory and Design*, Stuttgart, 1983, 53-55.

42. A. Recski: Local and global inconsistencies in the n -port interconnection problem, *Circuit Theory and Applications* 11 (1983) 317-375.

43. A. Recski: Some recent results on planarity and duality, *Proc. of the graph theory conference, dedicated to the memory of K. Kuratowski*, Lagow, Poland, 1981, Springer Lecture Notes 1018 (1983) 199-213.

44. A. Recski: A network theory approach to the rigidity of skeletal structures I. Modelling and interconnection, *Discrete Applied Math.* 7 (1984) 313-324.

45. A. Recski: Statics and electric network theory: A unifying role of matroids, W. R. Pulleyblank (ed): *Progress in Combinatorial Optimization*, Academic Press, London, 1984, 307-314.

46. A. Recski: A network theory approach to the rigidity of skeletal structures II. Laman's theorem and topological formulæ, *Discrete Applied Math.* 8 (1984) 63-68.

47. A. Recski: Applications of combinatorics to statics – a survey, *Rendiconti del Circolo Matematico di Palermo* II. 3 (1984) 237-247.

48. A. Recski: A network theory approach to the rigidity of skeletal structures III. An electric model for planar frameworks, *Structural Topology* 9 (1984) 59-71.

49. A. Recski: Unique solvability of linear memoryless networks – a survey, *IEEE Trans. Circuits and Systems* CAS-31 (1984) 894-897.

50. A. Recski: Some problems of self-dual matroids, *Coll. Math. Soc. J. Bolyai* 37 (Finite and Infinite Sets, North-Holland, Amsterdam, 1984) 635-648.

51. L. Lovász and A. Recski (eds): *Matroid Theory* (Proceedings of the matroid theory colloquium in Szeged, Hungary, 1982) North-Holland, Amsterdam, 1985.

52. A. Recski: Some open problems of matroid theory, suggested by its applications, *Coll. Math. Soc. J. Bolyai* 40 (Matroid theory, North-Holland, Amsterdam, 1985) 311-325.

53. N. Chakravarty, G. Holman, S. McGuinness and A. Recski: One-story buildings as tensegrity frameworks, *Structural Topology* 12 (1986) 11-18.

54. A. Recski: Interconnection properties and matroidal characterization of some basic concepts of network theory, *Proc. 8th Internat. Coll. on Microwave Communication*, Budapest, 1986, 47.

55. A. Recski: Elementary strong maps of graphic matroids, *Graphs and Combinatorics* 3 (1987) 379-382.

56. A. Recski: Engineering applications of matroids – a survey, *Proc. Conference on Control Systems and Computer Science*, Bucharest, 1987, 180-183.

57. A. Recski: Some algorithmic problems of linear network solvability, *Proc. IEEE Internat. Symp. Circuits and Systems*, Helsinki, 1988, 135-138.

58. A. Recski: Bracing cubic grids – a necessary condition, *Discrete Mathematics* 73 (1988/89) 199-206.
59. A. Recski: Some open problems in matroid theory (Combinatorial Mathematics: Proc. 3rd Internat. Conference), *Annals of the New York Academy of Sciences* 555 (1989) 332-334.
60. A. Recski: *Matroid theory and its applications in electric network theory and in statics* (Algorithms and Combinatorics, Vol. 6) Springer Verlag, Berlin (ISBN 3-540-15285-7), New York (ISBN 0-387-15285-7) and Akadémiai Kiadó (ISBN 963-05-5253-1), Budapest, 1989.
61. A. Recski: Symmetric bracing of one-story buildings with cables and asymmetric bracing of one-story buildings with rods, *Symmetry of structures*, Budapest, 1989, Vol. II. 471-472.
62. A. Recski and F. Stryziewski: Vertex-disjoint channel routing on two layers, in Ravi Kannan and W. R. Pulleyblank (eds.): *Integer Programming and Combinatorial Optimization*, University of Waterloo Press, Waterloo, Ont., 1990, 397-405.
63. A. Recski: Változások a BME Villamosmérnöki Karán a Matematikai tárgy oktatásában, *Híradástechnika* 42 (1991. június) 35.
64. A. Recski: One-story buildings as tensegrity frameworks II. *Structural Topology* 17 (1991) 43-52.
65. A. Recski: Applications of Combinatorics in Structural Engineering, *First Workshop on Applications of Combinatorial Optimization in Science and Technology*, Rutgers University, New Brunswick, NJ. 1991, 275-282.
66. B. Andrásfai, P. Ablonczy, A. Recski and K. Vesztergombi: Teaching Discrete Mathematics to Undergraduate Engineering Students, *Proc. of the 6th European Seminar on Mathematics in Engineering Education*, Budapest-Balatonfüred, Hungary, 1991, 6-10.
67. A. Recski: Minimax results and polynomial algorithms in VLSI routing, in M. Fiedler and J. Nešetřil, eds., *Combinatorics, Graphs, Complexity* (Proc. 4th Czechoslovak Symposium on Combinatorics, Prachatice, 1990), *Annals of Discrete Math.* (1992) 261-273.
68. A. Recski: Applications of combinatorics to statics – a second survey, in J. Nešetřil (ed): *Topological, Algebraical and Combinatorial Structures, Discrete Math.* 108 (1992) 183-188.
69. A. Recski: Hogyan tegyük tökkre konferencián tartott előadásainkat az írásvetítő alkalmazásával? *Matematikai Lapok* 2 (1992) 2, 14-16.
70. A. Recski and W. Schwärzler: One-story buildings as tensegrity frameworks III, *Discrete Applied Math.* 39 (1992) 137-146.
71. A. Recski: Some new developments in the undergraduate math curriculum, *Proc. of the 7th European Seminar on Mathematics in Engineering Education*, Eindhoven, The Netherlands, 1993, 39.
72. G. Y. Katona and A. Recski: *Introduction to Finite Mathematics* (University textbook in Hungarian), L. Eötvös University Press, Budapest, 1993.
73. Császár Ákosné, Recski András and Rózsa Pál: A BME Villamosmérnökkari Matematika Tanszéke, *Elektronikai Technológia – Mikrotechnika*, 30 (1993) 209-211.
74. G. Y. Katona and A. Recski: *Combinatorics, Graph Theory and the Theory of Algorithms* (University textbook in Hungarian), Technical University of Budapest, Budapest, 1993.
75. A. Recski: Elementary strong maps of graphic matroids II, *Graphs and Combinatorics* 10 (1994) 205-206.
76. A. Recski: Combinatorics in electrical engineering and statics, in R. Graham, M. Grötschel and L. Lovász (eds.): *Handbook in Combinatorics*, Elsevier, Amsterdam, 1995, pp. 1911-1924.
77. E. Boros, A. Recski and F. Wetzl: Unconstrained multilayer switchbox routing, *Annals of Operations Research* 58 (1995) 481-491.
78. T. Jordán and A. Recski: *Combinatorial Optimization* (University textbook in Hungarian), Technical University of Budapest and L. Eötvös University, Budapest, 1995.
79. A. Recski: *Calculus exercises with and without Mathematica*, Yale University, New Haven, 1995.
80. A. Recski: Some polynomially solvable subcases of the detailed routing problem in VLSI design, *Proc. Oper. Research Conf.*, Springer, Berlin, 1997, pp. 107-110.
81. A. Recski: Channel routing in the dogleg-free multilayer Manhattan model, *Proc. 1997. European Conf. on Circuit Theory and Design*, Budapest, 1997, I. 39-43.
82. Zs. Gáspár, N. Radics and A. Recski: Square grids with long diagonals, *Optimization Methods and Software*, 10 (1998) 217-231.
83. Gy. Nagy and A. Recski: Rúd-csukló szerkezetek, *Matematikai Lapok*, 1998. 72-75.
84. A. Balog, G. O. H. Katona, A. Recski and D. Szász (eds.): *European Congress of Mathematics, Proceedings*. Birkhäuser Verlag, Basel, 1998.
85. Zs. Gáspár, N. Radics and A. Recski: How to make square grids rigid? *10th Inter-Institute Seminar on Nonlinear Computational Mechanics*, (Technical University of Budapest and Cracow University of Technology), Budapest, 1998, 22.
86. L. Lovász, A. Gyárfás, Gy. Katona, A. Recski and L. Székely (eds.): *Graph theory and combinatorial biology*, Bolyai Society Mathematical Studies 7., Budapest, 1999.

87. E. Boros, A. Recski, T. Szkaliczki and F. Wettl: Polynomial time Manhattan routing without doglegs – a generalization of Gallai's algorithm, *Computers and Artificial Intelligence*, 18 (1999) 403-413.
88. Zs. Gáspár, N. Radics and A. Recski: Rigidity of square grids with holes, *Computer Assisted Mechanics and Engineering Sciences*, 6 (1999) 329-335.
89. A. Recski and D. Szeszlér: 3-dimensional single active layer routing, in J. Akiyama, M. Kano and M. Urabe (eds.): *Discrete and Computational Geometry*, Lecture Notes in Computer Science, Springer, Vol. 2098. 2000, 318-329.
90. N. Katoh, T. Ibaraki and A. Recski (eds.): Selected Papers, First Japanese-Hungarian Symposium for Discrete Mathematics and its Applications, *Discrete Applied Math.* 115 (2001) pp. 1-222.
91. Z. Mann, A. Orbán and A. Recski: *Aufgaben zur theoretischen Informatik* (University textbook in German), Budapest University of Technology and Economics, Budapest, 2001.
92. J. Tapolcai, P. Laborczi, Pin-Han Ho, A. Recski, T. Cinkler and H. T. Mouftah: Algorithms for asymmetrically weighted pair of disjoint paths in survivable optical networks, *Proc. 3rd Internat. Workshop on Design of Reliable Communication Networks*, Budapest, 2001. pp. 228-235.
93. A. Recski: Some polynomially solvable subcases of the detailed routing problem in VLSI design, *Discrete Applied Math.* 115 (2001) 199-208.
94. Gy. Y. Katona, A. Recski and Cs. Szabó: *Foundation of Computer Science* (University textbook in Hungarian), Typotex, Budapest (ISBN 963-9326-24-0) 2002.
95. Recski A.: Dualitás a matematikában és sok más helyen, in Hraskó András (ed.): *Új matematikai mozaik*, Typotex, Budapest, 2002, 413-426.
96. A. Recski: Two matroidal families on the edge set of a graph, *Discrete Math.* 251 (2002) 155-162.
97. N. Radics and A. Recski: Applications of combinatorics to statics – rigidity of grids, *Discrete Applied Math.* 123 (2002) 473-485.
98. P. Laborczi and A. Recski: Graph theory and its applications in communication networks, Chapter 1.10 of the on-line book *Telecommunication networks and information services*, www.het.hu/onlinebook.html (2002) pp. 157-167.
99. A. Recski, G. Salamon and D. Szeszlér: Improving size-bounds for subcases of square-shaped switchbox routing, *Periodica Polytechnica*, 48 (2004) 55-60.
100. B. Golda, B. Laczay, Z. Á. Mann, Cs. Megeyeri, A. Recski: Implementation of VLSI Routing Algorithms, W. Elmenreich (ed.) *Intelligent Systems at the Service of Mankind*, Ubooks, 2004, 349-360.
101. T. Jordán, A. Recski and D. Szeszlér: *System Optimization* (University textbook in Hungarian), Typotex (ISBN 963-9548-39-1), Budapest, 2004.
102. K. Ambrus Somogyi and A. Recski: On the complexity of the channel routing problem in the dogleg-free multilayer Manhattan model, *Acta Polytechnica Hungarica*, Vol. 1. Issue 2. (2004) 89-97.
103. A. Recski and O. Shai: One-dimensional synthesis of graphs as tensegrity frameworks, *4th Japanese-Hungarian Symposium on Discrete Mathematics and its Applications*, Budapest, 2005, pp. 284-288.
104. A. Recski: Maps of matroids with applications, *Discrete Math.* 303 (2005) 175-185.
105. B. Drága and A. Recski: A new worst-case lower bound for the width of single row routing in the unconstrained two-layer model, *Proc. 6th Internat. Symp. Computational Intelligence*, Budapest Tech., 2005, pp. 172-176.
106. A. Recski and D. Szeszlér: The evolution of an idea – Gallai's algorithm, *Bolyai Society Mathematical Studies* 15 (2006) 317-328.
107. A. Recski and J. Szabó: On the generalization of the matroid parity problem, in J. A. Bondy, J. Fonlupt, J. L. Fouquet, J.-C. Fournier and J. Ramirez Alfonsin (eds.): *Graph Theory, Trends in Mathematics*, Birkhäuser, 2006, pp. 347-354.
108. K. Friedl, A. Recski and G. Simonyi: *Graph Theory Exercises*, (University textbook in Hungarian), Typotex (ISBN 963-9664-01-4), Budapest, 2006.
109. A. Recski and D. Szeszlér: Routing vertex-disjoint Steiner trees in a cubic grid and connections to VLSI, *Discrete Applied Math.* 155 (2007) 44-52.
110. A. Recski: Some matroidal results inspired by electric engineering applications, *5th Japanese-Hungarian Symposium on Discrete Mathematics and its Applications*, Sendai, 2007, pp. 1-10.
111. A. Recski and D. Szeszlér: 3-dimensional routing, *5th Japanese-Hungarian Symposium on Discrete Mathematics and its Applications*, Sendai, 2007, pp. 138-145.
112. A. Recski and O. Shai: Tensegrity frameworks in the one-dimensional space, to appear.
113. A. Recski: Combinatorial conditions for the rigidity of tensegrity frameworks, to appear.
114. T. Jordán, A. Recski and Z. Szabadka: Rigid tensegrity labellings of graphs, to appear.
115. A. Recski, G. Salamon and D. Szeszlér: Improving size-bounds for subcases of square-shaped switchbox routing, to appear.