

Publications

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1 Books

1. Analysis of algorithms and data structures, (with L.Banachowski and A.Kreczmar) Addison Wesley 1992.
2. Efficient parallel algorithms (with A. Gibbons), Cambridge University Press 1988
3. Text algorithms, (with M.Crochemore), Oxford University Press, New York 1994
4. Algorithms and data structures (with L. Banachowski, K. Diks), WNT 96, in Polish
5. Fast parallel algorithms for matching problems in graphs (with M.Karpinski), Oxford University Press 1998
6. Jewels of stringology (with M. Crochemore), to appear in World Scientific 2002

2 Refereed Publications

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2. The strong stability problem for stochastic automata, Bulletin de L'Academie Polonais de Sciences, 21:3 (1973)
3. The dimension of strong stability of minimal state stochastic automata, Bulletin de L'Academie Polonais de Sciences, 21:3 (1973)
4. On controlled simple programs, Fundamenta Informaticae, (1978)
5. Functional automata, Fundamenta Informaticae 3 (1980)
6. Some properties of trace languages, Fundamenta Informaticae (1983)
7. A correct preprocessing algorithm of Boyer-Moore string searching, SIAM Journal on Computing 9 (1980), 509-512

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9. The dynamic simulation of recursive and stack manipulating programs, IPL 13:2 (1981)
10. A hardest language recognized by two-way nondeterministic pushdown automata, IPL 13:5 (1981)
11. Time complexity of multihead one-way pushdown automata, IPL 1982
12. Time complexity of unambiguous path systems, IPL 15:3 (1982)
13. A note on two-way nondeterministic pushdown automata, IPL 15 (1982)
14. A simulation result for two-way pushdown automata, IPL (1983)
15. Time complexity of loop-free two-way pushdown automata, IPL 19:4 (1984)
16. Remarks on the pyramidal structure, CAAP'83, Lecture Notes in Computer Science 159 (1983), Springer-Verlag
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20. On the complexity of traversing the labyrinth, in Graph Theory, Lecture Notes in Mathematics 1018 (1983) Springer-Verlag
21. The complexity of two-way pushdown automata and recursive programs, In Combinatorial algorithms on words (ed.A.Apostolica, Z.Galil), Springer-Verlag (1985)
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23. Parallel time $O(\log n)$ recognition of unambiguous cfl's, Information and Computation 73:1 (1987) 75-86, preliminary version in FCT'85
24. Optimal parallel algorithms for dynamic expression evaluation and applications to context-free languages (with A.M.Gibbons), Information and Computation (1989), preliminary version in FST&TCS'86
25. On the decidability of some problems about rational subsets of free partially commutative monoids, *Theoretical Computer Science* 48 (1986) 329-337
26. Remarks on string matching and one-way multihead pushdown automata, (with M.Chrobak), IPL 24 (1987) 325-329

27. Parallel $O(\log n)$ time optimal edge-colouring of trees and Halin graphs, (with A.Israeli, A.Gibbons), IPL 27 (1988)
28. Fast parallel algorithms for edge-colouring of some tree-structured graphs, (with A.Gibbons), FCT'87, Lecture Notes in Computer Science, Springer-Verlag (1987)
29. Optimal edge colouring of outerplanar graphs is in NC, *Theoretical Computer Science* (1990)
30. A note on optimal parallel transformations of regular expressions to finite automata, IPL (1988)
31. Remarks on pebble games on graphs, *Zastosowania Matematyki* (1988)
32. Fast parallel computations for some dynamic programming problems, *Theoretical Computer Science* (1988)
33. Optimal parallel parsing of bracket languages, (with R.Giancarlo), *Theoretical Computer Science* (1987)
34. On the parallel complexity of parsing general context-free languages, *Theoretical Computer Science* 47 (1987)
35. On the recognition of context-free languages, *Computation Theory* (ed.A.Skowron), Lecture Notes in Computer Science, 208 (1985), 318-325
36. The unique decipherability problem for partially commutative alphabets (with M.Chrobak), *Fundamenta Informaticae* (1988), preliminary version in MFCS'86
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40. Application of Mehlhorn's algorithm for bracket languages to the recognition of input driven languages, IPL 23 (1986) 81-84
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42. Efficient parallel computation of the travelling salesman problem in Halin graphs, in *Optimal algorithms*, (with K.Diks), Lecture Notes in Computer Science (1989)
43. Parallel algorithms for classes of graphs generated recursively (with T.Szymacha), IPL (1988)

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47. Optimal parallel recognition and colouring outerplanar graphs, in MFCS'89, Lecture Notes in Computer Science, 379 (1989).
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49. Efficient parallel algorithms to test square-freeness and factorize strings, (with M.Crochemore), Information Processing Letters, 38 (1991) 57-60
50. On the complexity of the parallel recognition of 2D-images, (with A.Saoudi), Inf.Proc.Letters 38 (1991) 225-229
51. Efficient sublinear time parallel algorithms for dynamic programming problems and recognition of context-free languages (with L.Larmore), STACS'92, LNCS, Springer-Verlag 1992
52. On the size of test sets for regular languages (with J.Karhumaki), MFCS'91, Lecture Notes in Computer Science, with final version in *Theoretical Computer Science*
53. Exact analysis of three tree contraction algorithms, FCT'91, Lect. Notes in Computer Science, Springer Verlag 1991
54. Speeding up two string matching algorithms, STACS'92, LNCS, Springer-Verlag 1992, final version in *Algorithmica* 12 (1994) 247-267
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56. On optimal parallel computations on sequences of brackets, *Theoretical Computer Science* 87 (1991), 251-262
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58. Observations on log n time parallel recognition of unambiguous cfl's (with P. Rossmanith) IPL 44 (1992) 267-272
59. On optimal parallel algorithm for two dimensional string matching, International Conference on Image processing, Ube, Japan, December 1992

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61. Parallel recognition of dcl's with smaller number of processors (with B.Monien and H. Schapers), *Theoretical Computer Science* 1993
62. On parallel recognition of two classes of 2D-array patterns, International Journal of Pattern Recogn. and Artificial Intelligence 6:2, 1992, 293-299
63. (with M.Karpinski) Optimal parallel searching for 3-dimensional patterns, in Combinatorial Pattern Matching 1994, Lecture Notes in Computer Science. *Theoretical Computer Science* 205(1-2): 243-260 (1998)
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74. (with M. Crochemore) On alphabet-independent linear time algorithms for two-dimensional pattern-matching, LATIN'95, Lecture Notes in Computer Science, Springer-Verlag (1995)
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77. Wojciech Plandowski, Wojciech Rytter, and Tomasz Szymacha. Parallel tree-contraction and Fibonacci numbers. *Information Processing Letters*, 59(5):267-271, 9 September 1996
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