

List of Publications

Zoltán Ésik

Books

1. *Iteration Theories: The Equational Logic of Iterative Processes*, EATCS Monograph Series on Theoretical Computer Science, XVI+630 pages, Springer-Verlag, 1993 (coauthor: S.L. Bloom).
2. *Modern Automata Theory*, available from <http://www.dmg.tuwien.ac.at/kuich/> (coauthor: W. Kuich).

Edited volumes

1. Automata and Formal Languages, spec. issue devoted to the 2011 AFL conference, IJFCS, to appear (coeditor: P. Dömösi).
2. Fixed Points in Computer Science 2012, *EPTCS*, Vol. 77, 2012 (coeditor with D. Miller).
3. Automata and Formal Languages, special issue devoted to AFL 2008, *Int. J. Foundations of Computer Science*, Volume 21, Number 5, October 2010 (co-editor: E. Csuhaj-Varjú).
4. Automata and Formal Languages, *Acta Cybernetica*, Vol. 19, No. 2, 441–565, 2009 (co-editor: E. Csuhaj-Varjú).
5. Automata, Formal Languages, and Related Topics, Dedicated to Ferenc Gécseg on the occasion of his 70th birthday, University of Szeged, 2009 (coeditor: Z. Fülöp).
6. Automata and Formal Languages, proceedings of the 2008 conference, Balatonfüred, *Computer and Automation Institute, Hungarian Academy of Science*, 2008 (coeditor with E. Csuhaj-Varjú).
7. Fundamentals of Computation Theory. Special issue devoted to papers presented at FCT 07, *Theoretical Computer Science*, Volume 411(2010), Issues 4-5. (co-editor with E. Csuhaj-Varjú).

8. SPECIAL ISSUE: Selected Papers of the Conference "Computer Science Logic 2006" Szeged, Hungary, 2006 *Logical Methods in Computer Science*, published in 2009 (coeditor with R. Ramanujam).
9. Fundamentals of Computation Theory 2007, LNCS 4639, Springer, (coeditor with E. Csuhaj-Varjú).
10. The art of rationality. In honour of Professor Christian Choffrut on the occasion of his 60th birthday. *Theoret. Comput. Sci.*, 356(2006), no. 1-2, 262 pages. (co-iditors: A. Bertoni, J. Karhumäki).
11. AFL 05, Special issue of Acta Cybernetica, Volume 17, No.4, 2006, 663–841.
12. Automata and Formal Languages, Special Issue, Theoretical Computer Science, Volume 366, Number 3, 2006, 181–315.
13. Recent Advances in Formal Languages and Applications, Studies in Computational Intelligence 25, Springer-Verlag, 2006, VIII + 373 pages (coeditor with Victor Mitran and Carlos Martín Vide).
14. Computer Science Logic 2006, proceedings, LNCS 4207, Springer-Verlag, 2006, XII + 626 pages.
15. Automata and Formal Languages 2005, Proceedings of the 11th International Conference, Dobogókő, May 17–20, Dept. of Informatics, University of Szeged, 2005 (coeditor with Z. Fülöp).
16. Process Algebra, Special Issue, *Theoretical Computer Science*, Vol. 335:2-3(2005) (coeditor with L. Aceto, W. Fokkink and A. Ingólfssdóttir).
17. Fixed Points in Computer Science 03, Warsaw, Special issue of Theoretical Informatics and Applications, 38:4(2004) (coeditor with I. Walukiewicz).
18. Developments in Language Theory, DLT'03, Special issue of Theoretical Computer Science, 327:3(2004) (coeditor with Z. Fülöp).
19. Fixed Points in Computer Science 02, Copenhagen, Special issue of Theoretical Informatics and Applications, 37(2003), 271–391 (coeditor with A. Ingólfssdóttir).
20. Process Algebra: Open Problems and Future Directions, PA '03, Bologna, Italy, 21–25 July 2003, BRICS Notes Series, NS 03-3, 2003 (coeditor with L. Aceto, W. J. Fokkink, A. Ingólfssdóttir).
21. Developments in Language Theory, 7th International Conference, DLT 2003, LNCS 2710, Springer, 2003 (coeditor with Z. Fülöp).
22. Fixed Points in Computer Science 02, Copenhagen, Preliminary Proceedings, BRICS Notes Series, NS-02-2, 2002 (co-editor with A. Ingólfssdóttir).

23. Fixed Points in Computer Science '99, special issue, *Theoretical Informatics and Applications*, 4/5(1999), 309–493.
24. Special issue dedicated to the 60th birthday of Prof. Ferenc Gécseg. *Acta Cybernetica*, Volume 14, Number 1, 1999 (co-editor with J. Csirik, Z. Fülöp and B. Imreh).
25. Christos Papadimitriou, Számítási bonyolultság, Novadat Kiadó, 1999, [Hungarian translation of “Computational Complexity”, by Ch. Papadimitriou, Addison-Wesley, 1994.], Ed. Z. Ésik.
26. Fundamentals of Computation Theory, Proceedings of the 1993 FCT Conference (Ed.: Z. Ésik), LNCS 710, Springer-Verlag, 1993.
27. D. E. Knuth: Számok valóson innen és túl, Gondolat, Budapest, 1987 [Hungarian translation of the book “Surreal Numbers”, by D. E. Knuth, Reading, MA, 1974] (with J. Virágh).

Refereed journal papers

1. On Müller context-free grammars, *Theoretical Computer Science*, 416(2012), 17–32. (coauthor: S. Iván). (**IF** 0.94)
2. The category of simulations for weighted tree automata, *Int. J. Foundations of Comp. Sci.*, 22(2011), 1845–1859 (coauthor: A. Maletti). (**IF** 0.61)
3. Ordinal automata and Cantor normal form, *Int. J. Foundations of Comp. Sci.*, Volume: 23, Issue: 1(2012), pp. 87–98 (**IF** 0.61)
4. Dagger extension theorem, *Math. Struc. in Comp. Sci.*, 21(2011), 1036–1066 (coauthor: T. Hajgató). (**IF** 0.84)
5. Free iterative and iteration K -semialgebras, *Algebra Universalis*, published on line March 2012, DOI 10.1007/s00012-012-0179-y, Volume 67, Number 2, 141–162. (coauthor: Werner Kuich). (**IF** 0.25)
6. An undecidable property of context-free linear orders, *Information Processing Letters*, 111(2011), pp. 107–109. (**IF** 0.76)
7. Büchi context-free languages, *Theoretical Computer Science*, 412(2011), 805–821 (coauthor: Sz. Iván). (**IF** 0.94)
8. Algebraic linear orderings, *Int. J. Foundations of Computer Science*, 22(2011), 491–515 (co-author: S.L. Bloom). (**IF** 0.61)
9. Algebraic ordinals, *Fundamenta Informaticae*, 99(2010), 383–407 (co-author: S.L. Bloom). (**IF** 0.58)

10. A family of temporal logics on finite trees, *Publ. Math., Debrecen*, 77/3-4 (2010), 277–297. (coauthor: Sz. Iván). (IF 0.65)
11. Formal languages and automata VI: ω -algebraic systems and transducers, *Westnik Rossijskogo Gosudarstvennogo Universiteta im. I. Kanta. Wyp. 10. Ser. Fiziko-matematitscheskije nauki*, 2010, 8–32 (coauthors: S. Aleshnikov, J. Boltnev, S. Ishanov, W. Kuich). (Russian)
12. A Mezei-Wright theorem for categorical algebras, *Theoret. Comput. Sci.*, 411(2010) 341–359 (coauthor: S. L. Bloom). (IF: 0.93)
13. Algebraic characterization of logically defined tree languages, *Int. J. Algebra and Computation*, 20(2010), 195–239. (coauthor: P. Weil). (IF: 0.48)
14. Estimation of state complexity of combined operations, *Theoret. Comput. Sci.*, 410(2009), 3272–3281 (coauthors: Y. Gao, G. Liu, S. Yu). (IF: 0.93)
15. Formal languages and automata V: Conway semiring-semimodule pairs and finite automata, *Westnik Rossijskogo Gosudarstvennogo Universiteta im. I. Kanta. Wyp. 10. Ser. Fiziko-matematitscheskije nauki*, 2009, 6–41. (coauthors: S. Aleshnikov, J. Boltnev, S. Ishanov, W. Kuich). (Russian)
16. Axiomatizing rational power series over natural numbers, *Information and Computation*, 207(2009), 793–811 (coauthor: S. L. Bloom). (IF: 1.50)
17. Formaljnyje jasyki i avtomaty IV: Transduktory i abstraktnyje semejstva (Formal languages and automata IV: Transducers and abstract families). *Westnik Rossijskogo Gosudarstvennogo Universiteta im. I.Kanta. Wyp.10. Ser. Fiziko-matematitscheskije nauki*, 2008, 6–23. (coauthors: S. Aleshnikov, J. Boltnev, S. Ishanov, W. Kuich)
18. Partial Conway and iteration semirings, *Fundamenta Informaticae*, 86(2008), 19–40 (coauthors: S.L. Bloom, W. Kuich). (IF: 0.59)
19. Some varieties of finite tree automata related to restricted temporal logics, *Fundamenta Informaticae*, 82(2008), 79–103 (coauthor: Sz. Iván). (IF: 0.59)
20. Products of tree automata with application to temporal logic, *Fundamenta Informaticae*, 82(2008), 61–78 (coauthor: Sz. Iván). (IF: 0.59)
21. A semiring-semimodule generalization of transducers and abstract omega-families of power series, *J. Automata, Languages, and Combinatorics*, 12(2007), 435–454. (coauthor: W. Kuich)
22. Fuzzy boolean sets, *Int. J. Foundations of Computer Science*, 18(2007), 1197-1207 (coauthor: W. Kuich). (IF: 0.512)
23. On iteration semiring-semimodule pairs, *Semigroup Forum*, 75(2007), 129-159 (coauthor: W. Kuich). (IF: 0.36)

24. Fuzzy tree automata, *Fuzzy Sets and Systems*, Volume 158, Issue 13, 1 July 2007, 1450–1460 (coauthor: Guangwu Liu). (**IF**: 1.18)
25. Axiomatizing the Equational Theory of Regular Tree Languages, *J. Logic and Algebraic Programming*, 79(2010), 189–213. (**IF**: 0.98)
26. Formalnyje jasyki i avtomaty III. Magazinnyje avtomaty i formalnyje stepennyje rjady. (Formal languages and automata III: Pushdown automata and algebraic power series.) *Vestnik Rossiyskogo gosudarstvennogo universiteta im. Immanuila Kanta. Vyp. 10: Ser. Fiziko-matematicheskije nauki*, 2006, 8–27. (coauthors: S. Aleshnikov, J. Boltnev, S. Ishanov, W. Kuich)
27. Characterizing CTL-like Logics on Finite Trees, *Theoretical Computer Science*, 356(2006), 136–152. (**IF**: 0.77)
28. A semiring-semimodule generalization of ω -regular languages, Part 1, *J. Automata, Languages, and Combinatorics*, 10(2005), 203–242 (coauthor: W. Kuich).
29. A semiring-semimodule generalization of ω -regular languages, Part 2, *J. Automata, Languages, and Combinatorics*, 10(2005), 243–264 (coauthor: W. Kuich).
30. Algebraic recognizability of regular tree languages, *Theoretical Computer Science*, 340(2005), 291–321 (coauthor: P. Weil). (**IF**: 0.74)
31. The equational theory of regular words, *Information and Computation*, 197(2005), 55–89 (coauthor: S. L. Bloom). (**IF**: 1.05)
32. Algebraic and graph-theoretic properties of infinite n -posets, *Theoretical Informatics and Applications*, 39(2005), 305–322. (**IF**: 0.47) (coauthor: Z. L. Németh).
33. Formal languages and automata, Part II: Continuous semirings and algebraic systems (in Russian), *Vestnik, Kaliningradckogo gosudarstvennogo universiteta, Seria Informatika i telekommunikacia*, 19–45. (coauthors: S. Aleshnikov, J. Boltnev, S. Ishanov, W. Kuich, N. Malachovskij).
34. Formal languages and automata I: Conway semirings and finite automata (in Russian), *Vestnik, Kaliningradckogo gosudarstvennogo universiteta, Seria Informatika i telekommunikacia*, 3(2003), 7–38. (coauthors: S.I. Aleshnikov, Ju. F. Boltnev, S.A. Ishanov, W. Kuich).
35. Algebraically complete semirings and Greibach normal form, *Annals of Pure and Applied Logic*, 103(2005), 173–203. (coauthor: Hans Leiss). (**IF**: 0.48)
36. Axiomatizing omega and omega-op power on words, *Theoretical Informatics and Applications*, 38(2004), 3–18 (coauthor: S. L. Bloom). (**IF**: 0.25)
37. Regular languages defined by Lindström quantifiers, *Theoretical Informatics and Applications*, 37(2003), 179–242 (coauthor: K. G. Larsen). (**IF**: 0.34)

38. Higher dimensional automata, *J. of Automata, Languages and Combinatorics*, 9(2004), 3–29 (coauthor: Z. L. Németh).
39. Deciding whether the frontier of a regular tree is scattered, *Fundamenta Informaticae*, 55(2003), 1–21 (coauthor: S. L. Bloom). (**IF**: 0.69)
40. An extension theorem with an application to formal tree series, *J. of Automata, Languages and Combinatorics*, 8(2003), 145–185 (coauthor: S.L. Bloom).
41. Formal tree series, *J. of Automata, Languages and Combinatorics*, 8(2003), 219–285 (coauthor: W. Kuich).
42. Temporal logic with cyclic counting and the degree of aperiodicity of finite automata, *Acta Cybernetica*, 16(2003), 1–28 (coauthor: M. Ito).
43. Equational theories of tropical semirings, *Theoretical Computer Science*, 298(2003), 417–469 (coauthors: L. Aceto and A. Ingólfssdóttir). (**IF**: 0.76)
44. Hazard algebras, *Formal Methods in System Design*, 23(2003), 223–256 (coauthor: J. Brzozowski). (**IF**: 1.45)
45. A fully equational proof of Parikh’s theorem, *Theoretical Informatics and Applications*, 36(2002), 129–154 (coauthors: L. Aceto, A. Ingólfssdóttir). (**IF**: 0.27)
46. Locally closed semirings, *Monatshefte Mathematik*, 137(2002), 21–29 (coauthor: W. Kuich). (**IF**: 0.54)
47. Homomorphic Simulation and Letichevsky’s Criterion, *J. of Automata, Languages and Combinatorics*, 6(2001), 427–436 (coauthor: P. Dömösi).
48. Rationally additive semirings, *J. Universal Computer Science*, 2(8) 2002, 173–183 (coauthor: W. Kuich). (**IF**: 0.66)
49. Inductive *-semirings, *Theoret. Comput. Sci.*, 324(2004), 3–33 (coauthor: W. Kuich). (**IF**: 0.25)
50. Free De Morgan bisemigroups and bisemilattices. *Algebra Colloquium*, 10(2003), 23–32. (**IF**:0.27)
51. Continuous additive algebras and injective simulations of synchronization trees, *J. Logic. Comput.*, 12(2002), 271–300. (**IF**: 0.27)
52. A note on completeness of the ν_3 -product, *Publ. Math.*, 60(2002), 539–550 (coauthor: P. Dömösi). (**IF**: 0.15)
53. Axiomatizing the subsumption and subword preorders on finite and infinite partial words, *Theoretical Computer Science*, 273(2002), 225–248. (**IF**: 0.48)
54. A Kleene theorem for Lindenmayerian algebraic power series, *J. of Automata, Languages and Combinatorics*, 5(2000), 109–122 (coauthor: Werner Kuich).

55. The max-sum algebra of natural numbers has no finite equational basis, *Theoretical Computer Science*, 293(2003), 169–188. (coauthors: L. Aceto and A. Ingólfssdóttir). (**IF**: 0.76)
56. A note on equations for commutative regular languages, *Inf. Proc. Letters*, 70(1999), 265–267 (coauthors: S. Crvenković and I. Dolinka). (**IF**: 0.19)
57. On equations for union-free regular languages, *Information and Computation*, 164(2001), 152–172 (coauthors: S. Crvenković and I. Dolinka). (**IF**: 0.57)
58. Axiomatizing iteration categories, *Acta Cybernetica*, 14(1999), 65–82.
59. Shuffle binoids, *Theoretical Informatics and Applications*, 32(1998), 175–198 (coauthor: S.L. Bloom). (**IF**: 0.17)
60. The variety of Kleene algebras with conversion is not finitely based, *Theoretical Computer Science*, 230(2000), 235–245 (coauthors: S. Crvenković and I. Dolinka). (**IF**: 0.18)
61. A variety theorem for trees and theories, *Publ. Math.*, 54(1999), 711–762. (**IF**: 0.14)
62. The power of the group identities for iteration, *Int. J. Algebra and Computation*, 10(2000), 349–373. (**IF**: 0.57)
63. Iteration 2-theories, *Applied Categorical Structures*, 9(2001), 173–216 (coauthors: S. L. Bloom, A. Labella and E. Manes). (**IF**: 0.20)
64. A Cayley theorem for ternary algebras, *Int. J. Algebra and Computation*, 8(1998), 311–316. (**IF**: 0.50)
65. The equational logic of fixed points, *Theoretical Computer Science*, 179(1997), 1–60 (coauthor: S.L. Bloom). (**IF**: 0.36)
66. A new proof of the Krohn–Rhodes decomposition theorem, *Theoretical Computer Science*, 234(2000), 287–300. (**IF**: 0.41)
67. Equational properties of iteration in algebraically complete categories, *Theoretical Computer Science*, 195(1998), 61–89. (coauthor: A. Labella). (**IF**: 0.35)
68. Group axioms for iteration, *Information and Computation*, 148(1999), 131–180. (**IF**: 0.74)
69. Semantics of flowchart programs and the free Conway theories, *Theoretical Informatics and Applications*, RAIRO, 32(1998), 35–78 (coauthor: L. Bernátsky). (**IF**: 0.17)
70. Poset operations on languages, *Mathematical Structures in Computer Science*, 7(1997), 701–713 (coauthor: S.L. Bloom).
71. Modeling literal morphisms by shuffle, *Semigroup Forum*, 56(1998), 225–227 (coauthor: I. Simon). (**IF**: 0.28)

72. Completeness of Park induction, *Theoretical Computer Science*, 177(1997), 217–283. (IF: 0.36)
73. Definite tree automata and their cascade compositions, *Publ. Math.*, 48(1996), 243–262. (IF: 0.10)
74. Fixed-point operations on CCC's, Part 1, Fundamental Study, *Theoretical Computer Science*, 155(1996), 1–38 (coauthor: S.L. Bloom). (IF: 0.41)
75. Some equational properties of initiality in 2ccc's, *Int. J. on Foundations of Computer Science*, 6(1995), 95–118 (coauthor: S.L. Bloom).
76. Axiomatizing concatenation and shuffle in languages, *Information and Computation*, 139(1997), 62–91 (coauthor: S.L. Bloom). (IF: 0.67)
77. Nonfinite axiomatizability of the equational theory of shuffle, *Acta Informatica*, 35(1998), 505–539. (coauthor: M. Bertol) (IF: 0.47)
78. Free shuffle algebras for language varieties, Fundamental Study, *Theoretical Computer Science*, 163(1996), 55–98. (IF: 0.41)
79. Notes on equational theories of relations, *Algebra Universalis*, 33(1995), 98–126 (coauthors: S.L. Bloom and Gh. Stefanescu). (IF: 0.24)
80. Equational properties of Kleene algebras of relations with conversion, *Theoretical Computer Science*, 137(1995), 237–251 (coauthor L. Bernátsky). (IF: 0.33)
81. Equational axioms for regular sets, *Mathematical Structures in Computer Science*, 3(1993), 1-24 (coauthor: S. L. Bloom) (IF: 0.84)
82. Matrix and matricial iteration theories, Part I, *J. Comput. Sys. Sci.*, 46(1993), 381-408 (coauthor: S.L. Bloom). (IF: 0.41)
83. Matrix and matricial iteration theories, Part II, *J. Comput. Sys. Sci.*, 46(1993), 409-439 (coauthor: S.L. Bloom). (IF: 0.41)
84. Iteration theories of synchronization trees, *Information and Computation*, 102(1993), 1-55 (coauthors: S.L. Bloom and D. Taubner). (IF: 0.46)
85. Varieties of automata and transformation semigroups, *Acta Math. Hung.*, 59(1992), 59-74. (IF: 0.14)
86. Iteration algebras, *International Journal on Foundations of Computer Science*, 3(1992), 245-302, (coauthor: S.L. Bloom).
87. Floyd-Hoare logic in iteration theories, *J. of Assoc. Comput. Machinery*, 38(1991), 887-934, (coauthor: S.L. Bloom). (IF: 1.20)
88. A note on isomorphic simulation of automata by networks of two-state automata, *Discr. Appl. Math.*, 30(1991), 77-82. (IF: 0.31)

89. Results on homomorphic realization of automata by α_0 -products, *Theoret. Comput. Sci.*, 87(1991), 229-249. (**IF**: 0.59)
90. A Cayley theorem for Boolean algebras, *Amer. Math. Monthly*, 97(1990), 831-833 (coauthors: S.L. Bloom and E.G. Manes). (**IF**: 0.18)
91. Product hierarchies of automata and homomorphic realization, *Acta Cybernetica*, 9(1990), 371-374 (coauthor: P. Dömösi).
92. A note on the axiomatization of iteration theories, *Acta Cybernetica*, 9(1990), 375-384.
93. Equational logic of circular data type specification, *Theoret. Comput. Sci.*, 63(1989), 303-331 (coauthor: S.L. Bloom). (**IF**: 0.59)
94. A decidability result for homomorphic representation of automata by α_0 -product, *Acta Math. Hung.*, 53(1989), 205-212 (coauthor: F. Gécseg). (**IF**: 0.05)
95. On α_1^λ -products of automata, *Acta Sci. Math.*, 53(1989), 245-253.
96. Critical classes for the α_0 -product, *Theoret. Comput. Sci.* 61(1988), 17-24 (coauthor: P. Dömösi).
97. On homomorphic simulation of automata by α_0 -products, *Acta Cybernetica* 8(1988), 315-323 (coauthor: P. Dömösi).
98. On the hierarchy of ν_i -products, *Acta Cybernetica*, 8(1988), 253-257 (coauthor: P. Dömösi). (**IF**: 0.59)
99. The independence of the equational axioms of iteration theories, *J. Comput. Sys. Sci.*, 36(1988), 66-76. (**IF**: 1.04)
100. Varieties of iteration theories, *SIAM J. of Computing*, 17(1988), 939-966 (coauthor: S.L. Bloom). (**IF**: 0.99)
101. On cycles of directed graphs, *Periodica Mathematica*, 19(1988), 19-23.
102. On isomorphic realization of automata with α_0 -products, *Acta Cybernetica*, 8(1987), 117-127.
103. On a representation of tree automata, *Theoret. Comput. Sci.*, 53(1987), 243-255 (coauthor: F. Gécseg). (**IF**: 0.59)
104. On homomorphic simulation of automata by ν_1 -products, *Papers on Automata Theory*, IX(1987), 91-112 (coauthor: P. Dömösi).
105. A note on α_0 -products of aperiodic automata, *Acta Cybernetica*, 8(1987), 41-43, (coauthor: J. Virágh).
106. Loop products and loop-free products, *Acta Cybernetica*, 8(1987), 45-48.

107. On α_0 -products and α_2 -products, *Theoretical Computer Science*, 48(1986), 1-8 (coauthor: F. Gécseg). (**IF**: 0.59)
108. Complete classes of automata for the α_1 -product, *Found. Control Engrg.*, 11(1986), 95-107.
109. On homomorphic realization of automata with α_0 -products, *Papers on Automata Theory*, 8(1986), 63-97 (coauthor: P. Dömösi).
110. On products of automata with identity, *Acta Cybernetica*, 7(1986), 299-311 (coauthor: J. Virágh).
111. Type independent varieties and metric equivalence of tree automata, *Fundamenta Informaticae*, IX(1986), 205-216 (coauthor: F. Gécseg).
112. Varieties and general products of top-down algebras, *Acta Cybernetica*, 7(1986), 33-36.
113. Complete classes of automata for the α_0 -product, *Theoret. Comput. Sci.*, 47(1986), 1-14 (coauthor P. Dömösi). (**IF**: 0.59)
114. Homomorphically complete classes of automata with respect to the α_2 -product, *Acta Sci. Math.*, 48(1985), 135-141.
115. On the weak equivalence of Elgot's flowchart schemes, *Acta Cybernetica*, 7(1985), 147-154.
116. Axiomatizing schemes and their behaviors, *J. Comput. Sys. Sci.*, 31(1985), 375-393 (coauthor: S.L. Bloom). (**IF**: 1.04)
117. Pseudo varieties and α_0 -products, *Papers on Automata Theory*, VI(1984), 47-76 (coauthor: Gy. Horváth).
118. A note on kernel languages of programs, *Alk. Mat. Lapok*, 10(1984), 61-63 (in Hungarian).
119. On identities preserved by general products of algebras, *Acta Cybernetica*, 6(1983), 285-289.
120. The α_2 -product is homomorphically general, *Papers on Automata Theory*, V(1983), 49-62 (coauthor: Gy. Horváth).
121. On homomorphic realization of monotone automata, *Papers on Automata Theory*, V(1983), 63-76.
122. Algebras of iteration theories, *J. Comput. Sys. Sci.*, 27(1983), 291-303. (**IF**: 1.04)
123. Decidability results concerning tree transducers II, *Acta Cybernetica*, 6(1983), 303-314.
124. General products and equational classes of automata, *Acta Cybernetica*, 6(1983), 281-284 (coauthor: F. Gécseg).

125. On generalized iterative algebraic theories, *Computational Linguistics and Computer Languages*, XV(1982), 95-110.
126. Subdirectly irreducible commutative automata, *Acta Cybernetica*, 5(1981), 251-260 (coauthor: B. Imreh).
127. Remarks on commutative automata, *Acta Cybernetica*, 5(1981), 143-146 (coauthor: B. Imreh).
128. Decidability results concerning tree transducers I, *Acta Cybernetica*, 5(1980), 1-20.
129. Identities in iterative and rational algebraic theories, *Computational Linguistics and Computer Languages*, XIV(1980), 183-207.
130. On two problems of A. Salomaa, *Acta Cybernetica*, 2(1975), 299-306.

Book chapter

1. Equational theories for automata, in: *Handbook of Automata*, to appear in 2011.
2. Fixed point theory, in: *Handbook of Weighted Automata*, Springer, 2009, 29–65.
3. Finite automata, in: *Handbook of Weighted Automata*, Springer, 2009, 69–104. (coauthor: W. Kuich)
4. Automata theory, in: *Encyclopedia of Computer Science and Technology*, Vol. 26, 1992, Marcel Dekker, New York, 9-36.

Refereed conference papers

1. On context-free languages of scattered words, *DLT 2012*, Taipei, LNCS, Springer, to appear (coauthor: S. Okawa).
2. Algebraic synchronization trees and processes, *ICALP 2012*, Warwick, 2012, LNCS, Springer, to appear (coauthors: L. Aceto, A. Caraol, A. Ingólfssdóttir).
3. Hausdorff Rank of Scattered Context-free Linear Orders, *Latin American Symposium on Theoretical Informatics, LATIN 2012*, LNCS 7256, pp. 291–302, 2012 (coauthor: S. Iván).
4. Residuated Park theories, *Topology, Algebra, and Categories in Logic, TACL 2011*, Marseille, 2011, 37–40.
5. Axiomatizing rational series, in: *8th Panhellenic Logic Symposium*, Ioannina, 2011, 30–34. (coauthor: W. Kuich).
6. Scattered context-free linear orderings, in: *Proc. Developments in Language Theory, Milan, 2011*, LNCS 6795, Springer-Verlag, 2011, 216–227.

7. Multi-linear iterative K -semialgebras, in: Proc. *27th Int. Conference on Mathematical Foundations of Programming Semantics*, Carnegie Mellon University, May 2011, ENTCS, Vol. 276, 2011, 159–170.
8. Representing small ordinals by finite automata, in Proc. *12th Workshop Descriptive Complexity of Formal Systems*, Saskatoon, Canada, 2010, EPTCS, vol. 31, 78–87, 2010.
9. Simulations of tree automata, in Proc. *15th Int. Conf. Implementation and Application of Automata*, Winnipeg, Canada, 2010, LNCS 6482, Springer, 2011, 321–330 (co-author: A. Maletti).
10. On Müller context-free grammars, in Proc. *Developments in Language Theory*, London, ON, 2010, LNCS, Volume 6224, Springer, 173–184, 2010. (coauthor: Sz. Iván).
11. Simulation vs. equivalence, In: H. R. Arabnia, G. A. Gravvanis, A. M. G. Solo, Eds., Proc. 6th Int. Conf. Foundations of Computer Science, FCS 2010, July 12–15, Las Vegas, Nevada, CSREA Press, 119–122. (coauthor: A. Maletti).
12. Extended temporal logics on finite trees, *Automata, Formal Languages, and Algebraic Systems*, World Scientific, 2010, 47–62 (coauthor: Sz. Iván).
13. Linear languages of finite and infinite words, *Automata, Formal Languages, and Algebraic Systems*, World Scientific, 2010, 33–46 (coauthors: W. Kuich and M. Ito).
14. Scattered algebraic linear orderings, 6th Workshop on Fixed Points in Computer Science, Coimbra, 2009, Edited by Ralph Matthes and Tarmo Uustalu, Institute of Cybernetics at Tallin University of Technology, 2009, 25–29.
15. Cycle-free finite automata in partial iterative semirings, CAI 2009, Thessaloniki, LNCS 5725, Springer, 2009, 1–12, (coauthors: S.L. Bloom, W. Kuich).
16. Iteration grove theories with applications, CAI 2009, Thessaloniki, LNCS 5725, Springer, 2009, 227–249. (coauthor: T. Hajgató).
17. Context-free languages of countable words, ICTAC 09, Kuala Lumpur, LNCS 5684, Springer, 2009, 185–199. (coauthor: Sz. Iván)
18. Iteration semirings, in: proc. DLT 2008. LNCS, Vol. 5257, Springer, 2008, 1–21.
19. Estimation of state complexity of combined operations, in Proc. Descriptive Complexity of Formal Systems, DFCS 2008, University of Prince Edward Island, 168–181. (Coauthors: Y. Gao, G. Liu, S. Yu).
20. Games for temporal logics on trees, in Proceedings of Implementation and Application of Automata, CIAA 2008, LNCS 5148, 2008, 191–200. (coauthor: Sz. Iván).

21. An algebraic characterization of Wolper’s logic, Foundations of Computer Science, in Proceedings of Foundations of Computer Science, WORLDCOMP 2007 (World Congress in Computer Science, Computer Engineering, and Applied Computing), Las Vegas, CSRE Press, 2007, 139–143.
22. Aperiodicity in tree automata, proc. CAI 2007, Thessaloniki, LNCS 4728, Springer, 2007, 189–207 (coauthor: Sz. Iván).
23. Fixed points in semiring theory. *Proceedings of the 1st International Workshop on Theory and Application of Language Equations* (M. Kunc, A. Okhotin, eds.), Turku Center for Computer Science, 2007, pp. 5–13 (coauthor: W. Kuich).
24. Regular and Algebraic Words and Ordinals, proc. CALCO 2007, Bergen, LNCS 4624, Springer, 2007, 1–15. (coauthor: S. L. Bloom).
25. Cascade Products and Temporal Logics on Finite Trees, Electronic Notes in Theoretical Computer Science, Volume 162, 29 September 2006, Pages 163–166.
26. Completing categorical algebras, Proc. *Fourth IFIP Conf. Theoretical Computer Science TCS-2006*, Springer, 231–250 (coauthor: S. L. Bloom).
27. An algebraic characterization of the expressive power of temporal logics on finite trees, Part 1, Proc. *1st International Conference on Algebraic Informatics*, Aristotle University of Thessaloniki, 2005, 53–78.
28. An algebraic characterization of the expressive power of temporal logics on finite trees, Part 2, Proc. *1st International Conference on Algebraic Informatics*, Aristotle University of Thessaloniki, 2005, 79–100.
29. An algebraic characterization of the expressive power of temporal logics on finite trees, Part 3, Proc. *1st International Conference on Algebraic Informatics*, Aristotle University of Thessaloniki, 2005, 101–110.
30. A note on Wolper’s logic, in: Proc. *ICALP Workshop on Semigroups and Automata*, Lisboa, 2005, 61–68 (coauthor: G. Martin).
31. An algebraic generalization of omega-regular languages, in: *Proc. MFCS 04, Prague*, LNCS 3153, Springer, 2004, 648–659 (coauthor: W. Kuich). (**IF**: 0.51)
32. On logically defined recognizable tree languages, in: *Proc. FST&TCS 03, Mumbai*, LNCS 2914, Springer, 2003, 195–206 (coauthor: P. Weil). (**IF**: 0.51)
33. Axioms for regular words, in: *Proc. FST&TCS 03, Mumbai*, LNCS 2914, Springer, 2003, 50–61. (coauthor: S. L. Bloom). (**IF**: 0.51)
34. Extended temporal logic on finite words and wreath products of monoids with distinguished generators, in: *Proc. DLT 02, Kyoto*, LNCS 2450, 43–58, Springer, 2003. (**IF**: 0.51)

35. Greibach normal form in algebraically complete semirings, in: Proceedings of *Computer Science Logic, CSL 2002*, Edinburgh, LNCS 2471, Springer, 2002, 135–150 (coauthor: H. Leiss). (IF: 0.51)
36. Unique guarded fixed-points in an additive setting, in: Proceedings of *Category Theory and Computer Science, CTCS 2002*, Ottawa, ENTCS, vol. 69, Elsevier, 2002 16 pages (coauthor: S. L. Bloom).
37. Conway-Halbringe als Grundlage für eine mathematische Automatentheorie. In: Doklady meschdunarodnogo matematitscheskogo seminara k 140-letiju so dnja roschdenija Davida Gilberta iz Kenigsberga i 25-letiju matematitscheskogo fakulteta (Vorträge des internationalen mathematischen Seminars zum 140. Geburtstag David Hilberts aus Königsberg und zum 25 - jährigen Jubiläum der mathematischen Fakultät), (S.I. Aleschnikov, S.Ju. Piljugin, Ju.I. Schevtschenko, Herausgeber), Universität in Königsberg, 2002, 240-246. (coauthor: Werner Kuich).
38. Equational axioms for probabilistic bisimilarity, in: Proceedings of *Algebraic Methodology and Software Technology, AMAST 2002*, Reunion, LNCS 2422, Springer, 2002, 239–253 (coauthors: L. Aceto, A. Ingólfssdóttir). (IF: 0.51)
39. The equational theory of fixed points with applications to generalized language theory, *Developments in Language Theory*, 5th Int. Conf., LNCS 2295, Springer-Verlag, 2002, p. 21–36. (IF: 0.51)
40. Automata on series-parallel biposets, *Developments in Language Theory*, 5th Int. Conf., LNCS 2295, Springer, 2002, p. 217–227 (coauthor: Z. L. Németh). (IF: 0.51)
41. Nonfinitely Based Tropical Semirings. Proceedings of the WORKSHOP ON MAX-PLUS ALGEBRAS and Their Applications to Discrete-event Systems, Theoretical Computer Science, and Optimization, 27-29 August, 2001, Prague, (S. Gaubert and J. J. Loiseau editors), IFAC (International Federation of Automatic Control) Publications, Elsevier Science, 2001, 29–34 (coauthors: L. Aceto and A. Ingólfssdóttir).
42. Algebras for hazard detection, in: *31st IEEE International Symposium on Multiple-Valued Logic*, 22-24 May 2001, Warsaw, Poland, IEEE Computer Society, Los Alamitos, California, 2001, 3–12. (coauthors: J. Brzozowski and Y. Iland).
43. Axiomatizing tropical semirings, in: *Foundations of Software Science and Computation Structures, Genova, 2001*, F. Honsell and M. Miculan editors), Lecture Notes in Computer Science 2030, Springer-Verlag, April 2001, 42–56. (coauthors: L. Aceto and A. Ingólfssdóttir).
44. Hazard algebras, in: *Half Century of Automata Theory*, London, ON, 2000, World Scientific, Singapore, 2001, 1–19 (coauthor: J. A. Brzozowski).
45. Free algebras for generalized automata and language theory, in: proc. *Algebraic Systems, Formal Languages and Computation, RIMS Kokyuroku 1166*, Kyoto University, 2000, 52–58.

46. Iteration theories of boolean functions, in: proc. *Math. Found. of Computer Science, Bratislava, 2000*, LNCS 1893, Springer-Verlag, 2000, 343–352. (**IF**: 0.39)
47. Axiomatizing the least fixed point operation and binary supremum, in: proc. *Computer Science Logic, Fischbachau, 2000*, LNCS 1862, Springer-Verlag, 302–316. (**IF**: 0.39)
48. On the two-variable segment of the equational theory of the max-sum algebra of natural numbers, in: proc. *STACS 2000, Lille*, LNCS 1770, Springer-Verlag, 2000, 267–278 (coauthors: L. Aceto and A. Ingólfssdóttir). (**IF**: 0.39)
49. There is no finite axiomatization of iteration theories, in: proc. *LATIN 2000, Punta del Este, Uruguay*, LNCS 1776, Springer-Verlag, 2000, 367–376 (coauthor: S.L. Bloom). (**IF**: 0.39)
50. Serial and parallel operations on pomsets, In: proc. *Foundations of Software Technology and Theoretical Computer Science, Chennai, India, 1999*, LNCS 1738, Springer-Verlag, 1999, 316–328 (coauthor: S. Okawa). (**IF**: 0.87)
51. Axiomatizing the equational theory of regular tree languages, in: proc. *STACS '98, Paris*, LNCS 1373, Springer-Verlag, 1998, 455–465.
52. Research project, Axiomatizing shuffle, in: *Trabajos seleccionados WAIT '97, Buenos Aires*, Sociedad Argentina de Informatica e Investigacion Operativa, 47–54 (coauthor: S.L. Bloom).
53. The equational theory of reversal, in: *Algebraic Engineering, proc. of the International Workshop on Formal Languages and Computer Systems, Kyoto, March 18 – 21 1997 and the First International Conference on Semigroups and Algebraic Engineering, Aizu, 24 – 28 March 1997*, Word Scientific, 1999, 502–521 (coauthors: M. Ito and M. Katsura).
54. Iteration 2-theories, in: proc. *Algebraic Methodology and Software Technology AMAST '97, Sydney*, LNCS 1349, Springer-Verlag, 1997, 30–44 (coauthors: S.L. Bloom, A. Labella and E.G. Manes). (**IF**: 0.87)
55. Equational properties of iteration, in: proc. *Mathematical Foundations of Computer Science MFCS '96, Krakow*, LNCS 1113, Springer-Verlag, 1996, 336–347 (coauthor: A. Labella). (**IF**: 0.30)
56. Nonfinite axiomatizability of the equational theory of shuffle, in: proc. *Int. Conf. Automata, Languages and Programming, ICALP'95*, LNCS 944, Springer-Verlag, 1995, 27–38 (coauthor: M. Bertol). (**IF**: 0.30)
57. Nonfinite axiomatizability of shuffle inequalities, in: proc. *TAPSOFT '95, Aarhus*, LNCS 915, Springer-Verlag, 1995, 318–333 (coauthor: S.L. Bloom). (**IF**: 0.30)

58. Free shuffle algebras for language varieties, in: proc. *LATIN '95*, Valparaiso, LNCS 911, Springer Verlag, 1995, 99-111 (coauthor: S.L. Bloom). (**IF**: 0.30)
59. Scott induction and equational proofs, in: proc. *Mathematical Foundations of Programming Semantics '95*, New Orleans, ENTCS 1(1995), 32 pages, available at: <http://www.elsevier.nl> (coauthor: L. Bernátsky).
60. Solving polynomial fixed point equations, text of invited lecture, in: proc. conf. *Mathematical Foundations of Computer Science '94*, LNCS 841, Springer-Verlag, 1994, 52–67 (coauthor: S.L. Bloom). (**IF**: 0.30)
61. Equational theories of relations and regular sets, in: M. Ito and H. Jürgensen, Eds., proc. conf. *Words, Languages and Combinatorics II*, Kyoto, 1992, World Scientific, 1994, 40–48 (coauthors: L. Bernátsky, S.L. Bloom and Gh. Stefanescu).
62. Some quasi-varieties of iteration theories, in: *Mathematical Foundations of Programming Semantics '93*, LNCS 802, Springer-Verlag, 1994, 378–409 (coauthor: S.L. Bloom). (**IF**: 0.12)
63. Iteration theories of synchronization trees, in: *Semantics for Concurrency'90*, Leicester, Springer-Verlag, 1990, 96-115 (coauthors: S.L. Bloom and D. Taubner).
64. Program correctness and matricial iteration theories, in: proc. conf. *Mathematical Foundations of Programming Semantics'91*, LNCS 598, Springer-Verlag, 1992, 457-475 (coauthor: S.L. Bloom). (**IF**: 0.30)
65. Iteration algebras, in: proc. *TAPSOFT'91, Colloq. on Trees in Algebra and Programming*, Brighton, S. Abramsky and T.S.E. Maibaum Eds., LNCS 493, Springer-Verlag, 1991, 264-274 (coauthor: S.L. Bloom). (**IF**: 0.30)
66. On product hierarchies of automata, in: Proc. conf. *Fundamentals of Computation Theory '89*, LNCS 380, 1989, 137-144 (coauthors: P. Dömösi and B. Imreh). (**IF**: 0.30)
67. An extension of the Krohn-Rhodes decomposition of automata, text of invited lecture, in: *Machines, Languages, and Complexity*, LNCS 381, 1989, Springer-Verlag, 66-71. (**IF**: 0.30)
68. On homomorphic realization and homomorphic simulation of automata by α_0 -products, in: proc. conf. *Automata, Languages and Programming Systems*, Salgótarján 1988, 89-98 (coauthor: P. Dömösi).
69. Homomorphic realization of automata with compositions, in: *Mathematical Foundations of Computer Science*, Bratislava 1986, LNCS 233, Springer-Verlag, 299-307 (coauthors: P. Dömösi, F. Gécseg and J. Virágh). (**IF**: 0.30)
70. Completeness results in automata theory, in: Conf. on *Automata, Languages and Programming Systems*, Salgótarján, 1986, Karl Marx Univ. of Economics, DM 86-4, 110-122.

71. On λ -products of automata, in: *4th Hungarian Computer Sci. Conf.*, Győr, Akadémiai Kiadó, 1986, 79-89 (coauthor: J. Virágh).
72. On Elgot's flowchart schemes, in: *System Theoretical Aspects in Computer Science*, Salgótarján, 1982, 99-102.
73. An axiomatization of regular forests in the language of algebraic theories with iteration, in: *Fundamentals of Computation Theory*, Szeged, 1981, LNCS 117, Springer-Verlag, 130-136. (IF: 0.30)
74. On functional tree transducers, in: *Fundamentals of Computation Theory*, Berlin, 1979, Akademie Verlag, 121-127.
75. On decidability of injectivity of tree transformations, in: *Les arbres en algebre et en programmation*, Lille, 1978, 107-133.

Refereed papers in other edited volumes

1. Partial Conway and iteration semiring-semimodule pairs, in: *Algebraic Foundations in Computer Science*, Essays dedicated to Symeon Bozapalidis on the occasion of his retirement, LNCS 7020, Springer, 56–71.
2. Kleene theorem in partial Conway theories with applications, in: *Algebraic Foundations in Computer Science*, Essays dedicated to Symeon Bozapalidis on the occasion of his retirement, LNCS 7020, Springer, 72–93 (co-author: T. Hajgató).
3. A unifying Kleene theorem for weighted finite automata, in: C. S. Calude, G. Rozenberg, A. Salomaa (Eds.): Maurer Festschrift, LNCS 6570, pp. 76–89. Springer, Heidelberg (2011), (co-author: W. Kuich).
4. A semiring-semimodule generalization of ω -context-free languages, Springer, *Theory is Forever*, LNCS 3113, Springer, 2004, 68–80 (coauthor: W. Kuich).
5. Equational Axioms for a Theory of Automata, in: *Formal Languages and Applications*, Studies in Fuzziness and Soft Computing 148, Carlos Martin-Vide, Victor Mitrana, Gheorghe Paun (Eds.), Springer, 2004, 183-196 (coauthor: W. Kuich).
6. A generalization of Kozen's axiomatization of the equational theory of the regular sets, in: *Words, Semigroups, and Transductions*, M. Ito, Gh. Paun, Sheng Yu, eds., World Scientific, 2001, 99–114 (coauthor: W. Kuich).

Other scientific papers

1. Stephen. L. Bloom, 1940–2010, *Fundamenta Informaticae*, 109(2011), 369–381 (co-author: Klaus Sutner).

2. Two axiomatizations of a star semiring quasi-variety, *EATCS Bulletin*, 59, June 1996, 150–152 (coauthor: S.L. Bloom).
3. Cayley iff Stone, *EATCS Bulletin*, 43, February 1991, 159-161 (coauthor: S.L. Bloom).
4. Some varieties of iteration theories, *Bulletin of EATCS*, 24(1984), 53-65 (coauthor: S.L. Bloom).