Bibliography

[1] ABDELWAHED, S. *Interacting Discrete Event Systems: Modelling, Verification and Supervisory Control*. PhD thesis, University of Toronto, 2002.

[2] ABDELWAHED, S., AND WONHAM, W. Interacting DES: Modelling and analysis. In *41st IEEE Conference on Decision and Control* (2002), pp. 1175–1180.

[3] ALLOUCHE, J.-P., AND SHALLIT, J. *Automatic Sequences: Theory, Applications, Generalizations*. Cambridge University Press, 2003.

[4] AMAR, V., AND PUTZOLU, G. On a family of linear grammars. *Inf. and Cont. 7* (1964), 283–291.

[5] AMAR, V., AND PUTZOLU, G. Generalizations of regular events. *Inf. and Cont. 8* (1965), 56–63.

[6] ARAKI, T., KAGIMASA, T., AND TOKURA, N. Relations of flow languages to Petri net languages. *Theor. Comp. Sci. 15* (1981), 51–75.

[7] ARAKI, T., AND TOKURA, N. Decision problems for regular expressions with shuffle and shuffle closure operators. *Systems, Computers, Controls 12*, 6 (1981), 46–50.

[8] ARAKI, T., TOKURA, N., AND KOSAI, S. Shuffle grammars. *Systems, Computers, Controls 14*, 4 (1983), 37–45.

[9] ARDEN, D. *Delayed logic and finite state machines*. University of Michigan Press, 1960, pp. 1–35.

[10] AUTEBERT, J.-M., BERSTEL, J., AND BOASSON, L. Context-free languages and pushdown automata. pp. 111–174. In [171].

[11] BAADER, F., AND KÜSTERS, R. Solving linear equations over regular languages. In *UNIF 2001: 15th International Workshop on Unification* (2001), F. Baader, V. Diekert, C. Tinelli, and R. Treinen, Eds., pp. 27–31.

[12] BEL-ENGUIX, G., MARTÍN-VIDE, C., AND MATEESCU, A. Dialog and splicing on routes. *Romanian Journal of Information Science and Technology 6*, 1-2 (2003), 45–59.

[13] BAADER, F., AND NARENDRAN, P. Unification of concept terms in descriptional logics. *J. Symb. Comput. 31* (2001), 277–305.

[14] BALCÁZAR, J., DIAZ, J., AND GABARRÓ, J. *Structural Complexity II*. Springer, 1990.

[15] BARIL, J.-L., AND VAJNOVSZKI, V. Gray code for derangements. *Disc. Appl. Math. 140* (2004), 207–221.

[16] BERARD, B. Literal shuffle. *Theor. Comp. Sci. 51* (1987), 281–299.

[17] BERSTEL, J., BOASSON, L., CARTON, O., PETAZZONI, B., AND PIN, J.-E. Operations preserving recognizable languages. In *Fundamentals of Computation Theory (FCT 2003)* (2003), A. Lingas and B. Nilsson, Eds., vol. 2751 of *Lecture Notes in Computer Science*, Springer-Verlag, pp. 343–354.

[18] BERSTEL, J., AND PERRIN, D. *Theory of Codes*. Available at http://www-igm.univ-mlv.fr/%7Eberstel/LivreCodes/Codes.html, 1996.

[19] BRUYÈRE, V., AND PERRIN, D. Maximal bifix codes. *Theor. Comp. Sci. 218* (1999), 107–121.

[20] BRZOZOWSKI, J. Roots of star events. *J. ACM 14*, 3 (1967), 466–477.

[21] CÂMPEANU, C., SALOMAA, K., AND VÁGVÖLGYI, S. Shuffle decompositions of regular languages. *Int. J. Found. Comp. Sci. 13*, 6 (2002), 799–816.

[22] CÂMPEANU, C., SALOMAA, K., AND YU, S. Tight lower bound for the state complexity of shuffle of regular languages. *J. Automata, Languages and Combinatorics 7*, 3 (2002), 303–310.

[23] CHEN, K., FOX, R., AND LYNDON, R. Free differential calculus IV: The quotient groups of lower central series. *Ann. Math., 2nd Ser. 68*, 1 (1958), 81–95.

[24] CHOFFRUT, C., AND KARHUMÄKI, J. Combinatorics on words. pp. 329–438. In [171].

[25] CHOFFRUT, C., AND KARHUMÄKI, J. On Fatou properties of rational languages. In *Where Mathematics, Computer Science, Linguistics and Biology Meet* (2000), C. Martin-Vide and V. Mitrana, Eds., Kluwer, pp. 227–235.

[26] CLERBOUT, M., ROOS, Y., AND RYL, I. Synchronization languages. *Theor. Comp. Sci. 215* (1999), 99–121.

[27] CLERBOUT, M., ROOS, Y., AND RYL, I. Synchronization languages and rewriting systems. *Inf. and Comp. 167*, 1 (2001), 46–69.

[28] CONWAY, J. *Regular Algebra and Finite Machines*. Chapman and Hall, 1971.

[29] DALEY, M. *Computational Modeling of Genetic Processes in Stichotrichous Ciliates*. PhD thesis, University of Western Ontario, 2003.

[30] DALEY, M., IBARRA, O., AND KARI, L. Closure properties and decision questions of some language classes under ciliate bio-operations. *Theor. Comp. Sci. 306*, 1 (2003), 19–38.

[31] DALEY, M., KARI, L., AND MCQUILLAN, I. Families of languages defined by ciliate bio-operations. *Theor. Comp. Sci. 320*, 1 (2004), 51–69.

[32] DASSOW, J., MITRANA, V., AND SALOMAA, A. Operations and language generating devices suggested by the genome evolution. *Theor. Comp. Sci. 270* (2002), 701–738.

[33] DE LUCA, A., AND VARRICCHIO, S. Regularity and finiteness conditions. pp. 747–810. In [171].

[34] DE SIMONE, R. Langages infinitaires et produits de mixage. *Theor. Comp. Sci. 31* (1984), 83–100.

[35] DOMARATZKI, M. State complexity of proportional removals. *J. Automata, Languages and Combinatorics 7*, 4 (2002), 455–468.

[36] DOMARATZKI, M. On iterated scattered deletion. *Bull. Eur. Assoc. Theor. Comp. Sci. 80* (2003), 159–161.

[37] DOMARATZKI, M. Deletion along trajectories. *Theor. Comp. Sci. 320*, 2–3 (2004), 293–313.

[38] DOMARATZKI, M. On the decidability of 2-infix-outfix codes. Tech. Rep. 2004-479, School of Computing, Queen's University, 2004.

[39] DOMARATZKI, M. Trajectory-based codes. *Acta Inf. 40*, 6–7 (2004), 491–527.

[40] DOMARATZKI, M. Trajectory-based embedding relations. *Fund. Inf. 59*, 4 (2004), 349–363.

[41] DOMARATZKI, M., MATEESCU, A., SALOMAA, K., AND YU, S. Deletion along trajectories and commutative closure. In *Proceedings of WORDS'03: 4th International Conference on Combinatorics on Words* (2003), T. Harju and J. Karhumäki, Eds., pp. 309–319.

[42] DOMARATZKI, M., AND OKHOTIN, A. Representing recursively enumerable languages by iterated deletion. *Theor. Comp. Sci. 314*, 3 (2004), 451–457.

[43] DOMARATZKI, M., AND SALOMAA, K. State complexity of shuffle on trajectories. In *Descriptional Complexity of Formal Systems (DCFS)* (2002), J. Dassow, M. Hoeberechts, H. Jürgensen, and D. Wotschke, Eds., pp. 95–109.

[44] DOMARATZKI, M., AND SALOMAA, K. Decidability of trajectory-based equations. To appear in *Mathematical Foundations of Computer Science 2004* (2004).

[45] DOMARATZKI, M., AND SALOMAA, K. Restricted sets of trajectories and decidability of shuffle decompositions. In *Descriptional Complexity of Formal Systems (DCFS 2004)* (2004), L. Ilie and D. Wotschke, Eds., pp. 37–51.

[46] DOMARATZKI, M., AND SALOMAA, K. State complexity of shuffle on trajectories. *Accepted, J. Automata, Languages and Combinatorics 9*, 2 (2004).

[47] EHRENFEUCHT, A., HAUSSLER, D., AND ROZENBERG, G. On regularity of context-free languages. *Theor. Comp. Sci. 23* (1983), 311–332.

[48] ELLUL, K. Descriptional complexity measures of regular languages. M.Math thesis, University of Waterloo, 2002.

[49] FLAJOLET, P., AND STEYAERT, J.-M. On sets having only hard subsets. In *Automata Languages and Programming* (1974), J. Loeckx, Ed., vol. 14 of *Lecture Notes in Computer Science*, Springer-Verlag, pp. 446–457.

[50] GINSBURG, S. *The Mathematical Theory of Context-Free Languages*. McGraw-Hill, 1966.

[51] GINSBURG, S. *Algebraic and Automata-Theoretic Properties of Formal Languages*. North-Holland, 1975.

[52] GINSBURG, S., AND SPANIER, E. Quotients of context-free languages. *J. ACM 10*, 4 (1963), 487–492.

[53] GINSBURG, S., AND SPANIER, E. Mappings of languages by two-tape devices. *J. ACM 12*, 3 (1965), 424–434.

[54] GINSBURG, S., AND SPANIER, E. H. Bounded regular sets. *Proc. Amer. Math. Soc. 17* (1966), 1043–1049.

[55] GISCHER, J. Shuffle language, Petri nets and context-sensitive grammars. *Comm. ACM 24*, 9 (1981), 597–605.

[56] GUO, L., SALOMAA, K., AND YU, S. Synchronization expressions and languages. In *Proc. 6th IEEE Symposium on Parallel and Distributed Processing* (1994), IEEE Computer Society Press, pp. 257–264.

[57] GUO, Y., SHYR, H., AND THIERRIN, G. E-Convex infix codes. *Order 3* (1986), 55–59.

[58] HAINES, L. On free monoids partially ordered by embedding. *J. Comb. Th. 6* (1969), 94–98.

[59] HARJU, T., AND ILIE, L. On quasi orders of words and the confluence property. *Theor. Comp. Sci. 200* (1998), 205–224.

[60] HARJU, T., AND KARHUMÄKI, J. Morphisms. In *Handbook of Formal Languages, Vol. I* (1997), pp. 439–510.

[61] HARJU, T., MATEESCU, A., AND SALOMAA, A. Shuffle on trajectories: The Schützenberger product and related operations. In *Mathematical Foundations of Computer Science 1998* (1998), L. Brim, J. Gruska, and J. Zlatuska, Eds., no. 1450 in Lecture Notes in Computer Science, Springer-Verlag, pp. 503–511.

[62] HARRISON, M. *Introduction to Formal Language Theory*. Addison-Wesley, 1978.

[63] HAUSLER, D., AND ZEIGER, H. Very special languages and representations of recursively enumerable languages via computation histories. *Inf. and Cont. 47* (1980), 201–212.

[64] HIGMAN, G. Ordering by divisibility in abstract algebras. *Proc. London Math. Soc. 2*, 3 (1952), 326–336.

[65] HOLZER, M., AND KUTRIB, M. State complexity of basic operations on nondeterministic finite automata. In *Implementation and Application of Automata: 7th International Conference, CIAA 2002* (2003), J.-M. Champarnaud and D. Maurel, Eds., vol. 2608 of *Lecture Notes in Computer Science*, Springer-Verlag, pp. 148–157.

[66] HOLZER, M., AND KUTRIB, M. Unary language operations and their nondeterministic state complexity. In *Developments in Language Theory: Sixth International Conference, DLT 2002* (2003), M. Ito and M. Toyama, Eds., vol. 2450 of *Lecture Notes in Computer Science*, Springer-Verlag, pp. 162–172.

[67] HOLZER, M., AND LANGE, K.-J. On the complexity of iterated insertions. In *New Trends in Formal Languages* (1997), G. Paun and A. Salomaa, Eds., vol. 1218 of *Lecture Notes in Computer Science*, Springer-Verlag, pp. 440–453.

[68] HOPCROFT, J. E., AND ULLMAN, J. D. *Introduction to Automata Theory, Languages, and Computation*. Addison-Wesley, 1979.

[69] HSIAO, H., HUANG, C., AND YU, S.-S. Word operation closure and primitivity of languages. *J. Universal Comp. Sci. 8*, 2 (2002), 243–256.

[70] HUNT, H., AND ROSENKRANTZ, D. Computational parallels between the regular and context-free languages. *SIAM J. Comput. 7* (1978), 99–114.

[71] IGARASHI, A., AND KOBAYASHI, N. Resource usage analysis. *ACM SIGPLAN Notices 37*, 1 (2002), 331–342.

[72] ILIE, L. Remarks on well quasi orders of words. In *Proceedings of the 3rd DLT* (1997), S. Bozapalidis, Ed., pp. 399–411.

[73] ILIE, L. *Decision Problems on Orders of Words*. PhD thesis, University of Turku, 1998.

[74] IMREH, B., ITO, M., AND KATSURA, M. On shuffle closures of commutative regular languages. In *Combinatorics, Complexity, & Logic (Auckland, 1996)* (1997), D. Bridges, C. Calude, I. Gibbons, S. Reeves, and I. Witten, Eds., Springer, pp. 276–288.

[75] ITO, M. Shuffle decomposition of regular languages. *J. Universal Comp. Sci. 8*, 2 (2002), 257–259.

[76] ITO, M., JÜRGENSEN, H., SHYR, H., AND THIERRIN, G. n-prefix-suffix languages. *Intl. J. Comp. Math. 30* (1989), 37–56.

[77] ITO, M., JÜRGENSEN, H., SHYR, H., AND THIERRIN, G. Outfix and infix codes and related classes of languages. *J. Comp. Sys. Sci. 43* (1991), 484–508.

[78] ITO, M., KARI, L., AND THIERRIN, G. Insertion and deletion closure of languages. *Theor. Comp. Sci. 183* (1997), 3–19.

[79] ITO, M., KARI, L., AND THIERRIN, G. Shuffle and scattered deletion closure of languages. *Theor. Comp. Sci. 245* (2000), 115–133.

[80] ITO, M., AND SILVA, P. Remark on deletions, scattered deletions and related operations on languages. In *Semigroups and Applications* (1998), J. Howie and N. Ruskuc, Eds., World Scientific, pp. 97–105.

[81] ITO, M., AND TANAKA, G. Dense property of initial literal shuffles. *Intl. J. Comp. Math. 34* (1990), 161–170.

[82] ITO, M., THIERRIN, G., AND YU, S.-S. Shuffle-closed languages. *Publ. Math. Debrecen 48*, 3–4 (1996), 317–338.

[83] ITO, T., AND NISHITANI, Y. On universality of concurrent expressions with synchronization primitives. *Theor. Comp. Sci. 19* (1982), 105–115.

[84] IWAMA, K. Unique decomposability of shuffled strings. In *Proceedings of the Fifteenth Annual ACM Symposium on Theory of Computing* (1983), D. Johnson *et al.*, Ed., pp. 374–381.

[85] JANTZEN, M. The power of synchronizing operations on strings. *Theor. Comp. Sci. 14* (1981), 127–154.

[86] JANTZEN, M. Extending regular expressions with iterated shuffle. *Theor. Comp. Sci. 38* (1985), 223–247.

[87] JĘDRZEJOWICZ, J. On the enlargement of the class of regular languages by the shuffle closure. *Inf. Proc. Letters 16* (1983), 51–54.

[88] JĘDRZEJOWICZ, J. Nesting of shuffle closure is important. *Inf. Proc. Letters 25* (1987), 363–367.

[89] JĘDRZEJOWICZ, J. Infinite hierarchy of expressions containing shuffle closure operator. *Inf. Proc. Letters 28*, 1 (1988), 33–37.

[90] JĘDRZEJOWICZ, J. Infinite hierarchy of shuffle expressions over a finite alphabet. *Inf. Proc. Letters 36*, 1 (1990), 13–17.

[91] JĘDRZEJOWICZ, J. Undecidability results for shuffle languages. *J. Automata, Languages and Combinatorics 1*, 2 (1997), 147–159.

[92] JĘDRZEJOWICZ, J. Structural properties of shuffle automata. *Grammars 2* (1999), 35–51.

[93] JĘDRZEJOWICZ, J., AND SZEPIETOWSKI, A. Shuffle languages are in P. *Theor. Comp. Sci. 250* (2001), 31–53.

[94] JIRÁSEK, J., JIRÁSKOVÁ, G., AND SZABARI, A. State Complexity of Concatenation and Complementation of Regular Languages. In *Pre-proceedings of CIAA 2004: Ninth International Conference on Implementations and Applications of Automata* (2004), M. Domaratzki, A. Okhotin, K. Salomaa and S. Yu, Eds., pp. 132–142.

[95] JIRÁSKOVÁ, G. State complexity of some operations on regular languages. In *Descriptional Complexity of Formal Systems: Fifth International Workshop* (2003), E. Csuhaj-Varjú, C. Kintala, D. Wotschke, and G. Vaszil, Eds., pp. 114–125.

[96] JULLIEN, P. Sur un théorème d'extension dans la théorie des mots. *CR Acad. Sc. Paris (Série A) 266* (1968), 851–854.

[97] JÜRGENSEN, H., AND KONSTANTINIDIS, S. Codes. pp. 511–600. In [171].

[98] JÜRGENSEN, H., SALOMAA, K., AND YU, S. Transducers and the decidability of independence in free monoids. *Theor. Comp. Sci. 134* (1994), 107–117.

[99] JÜRGENSEN, H., SHYR, H., AND THIERRIN, G. Codes and compatible partial orders on free monoids. In *Algebra and Order: Proceedings of the First International Symposium on Ordered Algebraic Structures, Luminy–Marseilles 1984* (1986), S. Wolfenstein, Ed., Heldermann Verlag, pp. 323–334.

[100] JÜRGENSEN, H., AND YU, S. Relations on free monoids, their independent sets, and codes. *Int. J. Comput. Math. 40* (1991), 17–46.

[101] KADRIE, A., DARE, V., THOMAS, D., AND SUBRAMANIAN, K. Algebraic properties of the shuffle over ω-trajectories. *Inf. Proc. Letters 80*, 3 (2001), 139–144.

[102] KARI, L. Insertion and deletion of words: Determinism and reversibility. In *Mathematical Foundations of Computer Science 1992* (1992), I. Havel and V. Koubek, Eds., vol. 629 of *Lecture Notes in Computer Science*, Springer-Verlag, pp. 315–326.

[103] KARI, L. Generalized derivatives. *Fund. Inf. 18* (1993), 27–39.

[104] KARI, L. Insertion operations: Closure properties. *Bull. Eur. Assoc. Theor. Comp. Sci. 51* (1993), 181–191.

[105] KARI, L. Deletion operations: Closure properties. *Intl. J. Comp. Math. 52* (1994), 23–42.

[106] KARI, L. On language equations with invertible operations. *Theor. Comp. Sci. 132* (1994), 129–150.

[107] KARI, L. Power of controlled insertion and deletion. In *Results and Trends in Theoretical Computer Science* (1994), J. Karhumäki, H. Maurer, and G. Rozenberg, Eds., vol. 812 of *Lecture Notes in Computer Science*, Springer-Verlag, pp. 197–212.

[108] KARI, L., KONSTANTINIDIS, S., AND SOSÍK, P. On properties of bond-free DNA languages. Tech. Rep. 609, Computer Science Department, University of Western Ontario, 2003. Submitted for publication.

[109] KARI, L., KONSTANTINIDIS, S., AND SOSÍK, P. Bond-free languages: Formalisms, maximality and construction methods. Tech. Rep. 2004–001, Saint Mary's University Department of Mathematics and Computer Science, 2004. To appear, DNA 10.

[110] KARI, L., KONSTANTINIDIS, S., AND SOSÍK, P. Substitutions, trajectories and noisy channels. In *Pre-proceedings of CIAA 2004: Ninth International Conference on Implementations and Applications of Automata* (2004), M. Domaratzki, A. Okhotin, K. Salomaa and S. Yu, Eds., pp. 154–162.

[111] KARI, L., MATEESCU, A., SALOMAA, A., AND PĂUN, G. Deletion sets. *Fund. Inf. 19* (1993), 355–370.

[112] KARI, L., AND SOSÍK, P. Language deletions on trajectories. Tech. Rep. 606, Computer Science Department, University of Western Ontario, 2003. Submitted for publication.

[113] KARI, L., AND SOSÍK, P. On language equations with deletion. *Bull. Eur. Assoc. Theor. Comp. Sci. 83* (2004), 173–180.

[114] KARI, L., AND THIERRIN, G. k-catenation and applications: k-prefix codes. *J. Inf. Opt. Sci. 16*, 2 (1995), 263–276.

[115] KARI, L., AND THIERRIN, G. k-insertion and k-deletion closure of languages. *Soochow J. Math 21*, 4 (1995), 479–495.

[116] KARI, L., AND THIERRIN, G. Contextual insertions/deletions and computability. *Inf. and Comp. 131* (1996), 47–61.

[117] KARI, L., AND THIERRIN, G. Maximal and minimal solutions to language equations. *J. Comp. Sys. Sci. 53* (1996), 487–496.

[118] KARI, L., AND THIERRIN, G. Word insertions and primitivity. *Util. Math. 53* (1998), 49–61.

[119] KLEENE, S. Representation of events in nerve nets and finite automata. In *Automata Studies* (1956), C. Shannon and J. McCarthy, Eds., vol. 34 of *Annals of Mathematics Studies*, Princeton University Press, pp. 3–41.

[120] KOSARAJU, S. Correction to "Regularity Preserving Functions". *ACM SIGACT News 6*, 3 (1974), 22.

[121] KOSARAJU, S. Regularity preserving functions. *ACM SIGACT News 6*, 2 (1974), 16–17.

[122] KOSARAJU, S. Context-free preserving functions. *Math. Sys. Theor. 9*, 3 (1975).

[123] KOZEN, D. On regularity-preserving functions. Tech. Rep. TR95-1559, Department of Computer Science, Cornell University, 1995.

[124] KRISHNAN, P. Automatic synthesis of a subclass of schedulers in timed systems. *Theor. Comp. Sci. 298*, 3 (2003), 347–363.

[125] KRUSKAL, J. The theory of well-quasi-ordering: A frequently discovered concept. *J. Comb. Th. (A) 13* (1972), 297–305.

[126] KUDLEK, M., AND MATEESCU, A. On distributed catenation. *Theor. Comp. Sci. 180* (1997), 341–352.

[127] KUDLEK, M., AND MATEESCU, A. On mix operation. In *New Trends in Formal Languages* (1997), G. Paun and A. Salomaa, Eds., vol. 1218 of *Lecture Notes in Computer Science*, Springer-Verlag, pp. 430–439.

[128] LAM, N. Finite maximal infix codes. *Semigroup Forum 61* (2000), 346–356.

[129] LATTA, M., AND WALL, R. Intersective context-free languages. In *Lenguajes Naturales y Lenguajes Formalex IX* (1993), C. Martin-Vide, Ed., pp. 15–43.

[130] LATTEUX, M., LEGUY, B., AND RATOANDROMANANA, B. The family of one-counter languages is closed under quotient. *Acta. Inf. 22* (1985), 579–588.

[131] LEISS, E. *Language Equations*. Monographs in Computer Science. Springer, 1999.

[132] LEVI, F. On semigroups. *Bull. Calcutta Math. Soc. 36* (1944), 141–146.

[133] LIU, L., AND WEINER, P. An infinite hierarchy of intersections of context-free languages. *Math. Sys. Th. 7*, 2 (1973), 185–192.

[134] LONG, D. On nilpotency of the syntactic monoid of a language. In *Words, Languages and Combinatorics II* (1992), M. Ito and H. Jürgensen, Eds., World Scientific, pp. 279–293.

[135] LONG, D. On two infinite hierarchies of prefix codes. In *Proceedings of the Conference on Ordered Structures and Algebra of Computer Languages* (1993), K. Shum and P. Yuen, Eds., World Scientific, pp. 81–90.

[136] LONG, D. k-bifix codes. *Rivista di Matematica Pura ed Applicata 15* (1994), 33–55.

[137] LONG, D. *Study of Coding Theory and its Application to Cryptography*. PhD thesis, City University of Hong Kong, 2002.

[138] LONG, D., JIA, W., MA, J., AND ZHOU, D. k-p-infix codes and semaphore codes. *Disc. Appl. Math. 109* (2001), 237–252.

[139] LONG, D., MA, J., AND ZHOU, D. Structure of 3-infix-outfix maximal codes. *Theor. Comp. Sci. 188* (1997), 231–240.

[140] LOTHAIRE, M. *Combinatorics on Words*. Addison-Wesley, 1983.

[141] MARTIN, J. *Introduction to Languages and the Theory of Computation (3rd ed.)*. McGraw-Hill, 2003.

[142] MARTIN-VIDE, C., MATEESCU, A., ROZENBERG, G., AND SALOMAA, A. Contexts on trajectories. *Intl. J. Comp. Math. 73*, 1 (1999), 15–36.

[143] MATEESCU, A. CD grammar systems and trajectories. *Acta. Cyb. 13*, 2 (1997), 141–157.

[144] MATEESCU, A. Splicing on routes: a framework of DNA computation. In *Unconventional Models of Computation* (1998), C. Calude, J. Casti, and M. Dinneen, Eds., Springer, pp. 273–285.

[145] MATEESCU, A., AND MATEESCU, G. Associative and fair shuffle of ω-words. Tech. Rep. TUCS-TR-162, University of Turku, 1998.

[146] MATEESCU, A., ROZENBERG, G., AND SALOMAA, A. Syntactic and semantic aspects of parallelism. In *Foundations of Computer Science: Potential–Theory–Cognition* (1997), C. Freksa, M. Jantzen, and R. Valk, Eds., Lecture Notes in Computer Science, Springer-Verlag, pp. 79–106.

[147] MATEESCU, A., ROZENBERG, G., AND SALOMAA, A. Shuffle on trajectories: Syntactic constraints. *Theor. Comp. Sci. 197* (1998), 1–56.

[148] MATEESCU, A., AND SALOMAA, A. Aspects of classical language theory. pp. 175–246. In [171].

[149] MATEESCU, A., AND SALOMAA, A. Parallel composition of words with re-entrant symbols. *An. Univ. Bucureşti Mat. Inform. 45*, 1 (1996), 71–80.

[150] MATEESCU, A., SALOMAA, A., SALOMAA, K., AND YU, S. On an extension of the Parikh mapping. Tech. Rep. 364, TUCS, 2000.

[151] MATEESCU, A., SALOMAA, A., AND YU, S. Factorizations of languages and commutativity conditions. *Acta Cyb. 15*, 3 (2002), 339–351.

[152] MATEESCU, A., SALOMAA, K., AND YU, S. On fairness of many-dimensional trajectories. *J. Automata, Languages and Combinatorics 5* (2000), 145–157.

[153] MEDUNA, A. Middle quotients of linear languages. *Intl. J. Comp. Math. 71* (1999), 319–335.

[154] MORIYA, T., AND YAMASAKI, H. Literal shuffle on ω-languages. *Inf. Proc. Letters 59* (1996), 165–168.

[155] NICAUD, C. Average state complexity of operations on unary automata. In *Proceedings of the 24th International Symposium on Mathematical Foundations of Computer Science (MFCS 1999)* (1999), M. Kutylowski, L. Pacholski, and T. Wierzbicki, Eds., vol. 1672 of *Lecture Notes in Computer Science*, Springer-Verlag, pp. 230–240.

[156] OGDEN, W., RIDDLE, W., AND ROUNDS, W. Complexity of expressions allowing concurrency. In *Conference Record of the Fifth Annual ACM Symposium on Principles of Programming Languages* (1978), A. Aho and S. Zilles, Eds., pp. 185–194.

[157] OKHOTIN, A. Conjunctive grammars. *J. Automata, Languages and Combinatorics 6*, 4 (2001), 519–535.

[158] OKHOTIN, A. Personal communication, September 2003.

[159] OKHOTIN, A. Boolean grammars. *To appear, Inf. and Comp.* (2004).

[160] OKHOTIN, A. On the equivalence of linear conjunctive grammars to trellis automata. *RAIRO Theor. Inf. and Appl. 38*, 1 (2004), 69–88.

[161] PARKES, D. *Formal Languages and the Word Problem in Groups*. PhD thesis, University of Leicester, 2000.

[162] PARKES, D., AND THOMAS, R. Syntactic monoids and word problems. *Arabian Journal for Science and Engineering (C) 25*, 2 (2000), 81–94.

[163] PIGHIZZINI, G., AND SHALLIT, J. Unary language operations, state complexity and Jacobsthal's function. *International Journal of Foundations of Computer Science 13* (2002), 145–159.

[164] PIN, J.-E. *Varieties of Formal Languages*. Plenum, 1986.

[165] PIN, J.-E., AND SAKAROVITCH, J. Une application de la representation matricielle des transductions. *Theor. Comp. Sci. 35* (1981), 271–293.

[166] PIN, J.-E., AND SAKAROVITCH, J. Some operations and transductions that preserve rationality. In *6th GI Conference* (1983), A. Cremers and H.-P. Kriegel, Eds., vol. 145 of *Lecture Notes in Computer Science*, Springer-Verlag, pp. 277–288.

[167] POLÁK, L. Syntactic semirings and language equations. In *Implementation and Application of Automata: 7th International Conference* (2003), J.-M. Champarnaud and D. Maurel, Eds., vol. 2608 of *Lecture Notes in Computer Science*, Springer-Verlag, pp. 182–193.

[168] PĂUN, G., AND SALOMAA, A. Thin and slender languages. *Disc. Appl. Math. 61* (1995), 257–270.

[169] RAMESH KUMAR, P., AND RAJAN, A. Expletive languages. *Southeast Asian Bulletin of Mathematics 23* (1998), 187–197.

[170] RIDDLE, W. An approach to software system behaviour description. *Comp. Lang. 4* (1979), 29–47.

[171] ROZENBERG, G., AND SALOMAA, A., Eds. *Handbook of Formal Languages, Vol. 1*. Springer-Verlag, 1997.

[172] RYL, I., ROOS, Y., AND CLERBOUT, M. Generalized synchronization languages. In *Fundamentals of Computation Theory, 12th International Symposium, (FCT'99)* (1999), G. Ciobanu and G. Paun, Eds., pp. 451–462.

[173] SALOMAA, A. *Theory of Automata*. Pergamon Press, 1969.

[174] SALOMAA, A. *Formal Languages*. Academic Press, 1973.

[175] SALOMAA, A. *Jewels of Formal Language Theory*. Computer Science Press, 1981.

[176] SALOMAA, A., AND YU, S. On the decomposition of finite languages. In *Developments in Language Theory* (1999), G. Rozenberg and W. Thomas, Eds., pp. 22–31.

[177] SALOMAA, K., AND YU, S. Synchronization expressions with extended join operation. *Theor. Comp. Sci. 207* (1998), 73–88.

[178] SALOMAA, K., AND YU, S. Synchronization expressions and languages. *J. Universal Comp. Sci. 5* (1999), 610–621.

[179] SÂNTEAN, L. Six arithmetic-like operation on languages. *Cahiers de linguistique theoretique et applique 25* (1988), 65–73.

[180] SEIFERAS, J., AND MCNAUGHTON, R. Regularity-preserving relations. *Theor. Comp. Sci. 2* (1976), 147–154.

[181] SHALLIT, J. Numeration systems, linear recurrences, and regular sets. *Inf. and Comp. 113*, 2 (1994), 331–347.

[182] SHAW, A. Software descriptions with flow expressions. *IEEE Trans. Soft. Eng. SE-4*, 3 (1978), 242–254.

[183] SHOUDAI, T. A P-complete language describable with iterated shuffle. *Inf. Proc. Letters 41*, 5 (1992), 233–238.

[184] SHYR, H. *Free Monoids and Languages*. Hon Min Book Company, Taichung, Taiwan, 2001.

[185] SHYR, H., AND THIERRIN, G. Hypercodes. *Inf. and Cont. 24*, 1 (1974), 45–54.

[186] SHYR, H., AND THIERRIN, G. Codes and binary relations. In *Séminaire d'Algébre Paul Dubreil, Paris 1975–1976* (1977), A. Dold and B. Eckmann, Eds., vol. 586 of *Lecture Notes in Mathematics*, Springer-Verlag, pp. 180–188.

[187] SHYR, H., AND YU, S.-S. Bi-catenation and shuffle product of languages. *Acta Inf. 35* (1998), 689–707.

[188] SLOANE, N. *The On-Line Encyclopedia of Integer Sequences*. Published electronically at http://www.research.att.com/∼njas/sequences, 2004.

[189] STEARNS, R., AND HARTMANIS, J. Regularity preserving modifications of regular expressions. *Inf. and Cont. 6*, 1 (1963), 55–69.

[190] SZILARD, A., YU, S., ZHANG, K., AND SHALLIT, J. Characterizing regular languages with polynomial densities. In *Mathematical Foundations of Computer Science 1992* (1992), I. Havel and V. Koubek, Eds., vol. 629 of *Lecture Notes in Computer Science*, Springer-Verlag, pp. 494–503.

[191] TANAKA, G. Alternating products of prefix codes. In *Second Conference on Automata, Languages and Programming Systems: Proceedings of the conference held in Salgótarján, May 23–26, 1988* (1988), F. Géseg and I. Peák, Eds., pp. 209–213.

[192] THIERRIN, G. Convex languages. In *Automata, Languages and Programming, Colloquium, Paris, France* (1972), M. Nivat, Ed., pp. 481–492.

[193] THIERRIN, G., AND YU, S.-S. Shuffle relations and codes. *J. Inf. Opt. Sci. 12*, 3 (1991), 441–449.

[194] TULLY, E. Expletives in languages and middle units in semigroups. *Semigroup Forum 38* (1989), 77–84.

[195] VAJNOVSZKI, V. Gray visiting Motzkins. *Acta Inf. 38*, 11–12 (2002), 793–811.

[196] VAJNOVSZKI, V. A loopless algorithm for generating the permutations of a multiset. *Theor. Comp. Sci. 307*, 2 (2003), 415–431.

[197] VAN LEEUWEN, J. Effective constructions in well-partially ordered free monoids. *Disc. Math. 21* (1978), 237–252.

[198] WARMUTH, M., AND HAUSSLER, D. On the complexity of iterated shuffle. *J. Comp. Sys. Sci. 28* (1984), 345–358.

[199] WOOD, D. A factor theorem for subsets of a free monoid. *Inf. and Cont. 21* (1972), 21–26.

[200] WOTSCHKE, D. The boolean closures of deterministic and nondeterministic context-free languages. In *GI Jahrestagung* (1973), W. Brauer, Ed., vol. 1 of *Lecture Notes in Computer Science*, Springer-Verlag, pp. 113–121.

[201] YU, S. Regular languages. pp. 41–110. In [171].

[202] YU, S. State complexity of the regular languages. *J. Automata, Languages and Combinatorics 6* (2001), 221–234.

[203] YU, S. State complexity of finite and infinite regular languages. *Bull. Eur. Assoc. Theor. Comp. Sci. 76* (2002), 142–152.

[204] YU, S., ZHUANG, Q., AND SALOMAA, K. The state complexities of some basic operations on regular languages. *Theor. Comp. Sci. 125* (1994), 315–328.

[205] ZHANG, G.-Q. Automata, boolean matrices, and ultimate periodicity. *Inf. and Comp. 152* (1999), 138–154.

[206] ZHANG, L., AND SHEN, Z. Completion of recognizable bifix codes. *Theor. Comp. Sci. 145* (1995), 345–355.