

CURRICULUM VITAE

I. Personal data

Family Name: MITRANA

First name: VICTOR

Date of birth: 1958, June 26

DNI: X2731828A

Phone: 645464958

II. Current professional situation

Position: Full Professor

Institution: Faculty of Mathematics and Computer Science, University of Bucharest

III. Career history

- 2002 – present *Full Professor*, University of Bucharest, Faculty of Mathematics and Computer Science, Romania
- 10/2008 – 09/2009 *Visiting Professor*, Polytechnic University of Valencia, Spain.
- 2003 -- 2008 *Ramon y Cajal Researcher*, Rovira i Virgili University, Tarragona, Spain.
- 2002 – 2003 *Full Professor*, University of Bucharest, Faculty of Mathematics and Computer Science, Romania
- 1999 -- 2002 *Associate Professor*, University of Bucharest, Faculty of Mathematics and Computer Sciences, Romania.
- 1994 - -1999 *Senior Lecturer*, University of Bucharest, Faculty of Mathematics and Computer Sciences, Romania.
- 1991 -- 1994 *Assistant Professor*, University of Bucharest, Faculty of Mathematics and Computer Sciences, Romania.
- 1990 – 1991 *Teacher of Computer Science*, Tudor Vianu National College of Computer Science, Bucharest, Romania.
- 1986 – 1990 *Teacher of Mathematics*, School Nr. 165, Bucharest, Romania.

IV. Academic degrees

- 1986 -- Diploma in Mathematics and Computer Science, University of Bucharest, Romania. Thesis' title: Strict Deterministic Grammars.
- 1993 - PhD in Mathematics, University of Bucharest, Romania. Thesis' title: Distributed Grammar Systems.

V. Scientific activity

- Author of two mathematical books in Romanian.
- Author of one monograph in English.
- Co-editor of four books at Kluwer Academic, Taylor and Francis, and Springer-Verlag (2).
- Author or co-author of more than 200 research papers published in refereed international journals, proceedings of scientific conferences, edited books.
 - 156 papers in **ISI Web of Science**
 - 133 papers indexed in **MathSciNet**
 - 148 papers indexed in **Zentralblatt Math**
 - 157 papers indexed in **DBLP**
 - unique author for 31 papers

- 67 co-authors

VI. Research projects

- *NATO PST.CLG. 976912 Project* (Funded by the EU Comission), 2001—2003. **Member.**
- *Computación en red con procesadores evolutivos TIC2003-09319-C03-01* (Funded by the Spanish Ministry of Science and Innovation), 2003--2006. **Team leader.**
- *Spanish NET on DNA Based Molecular Computing and Cellular Computing with Membranes TIC2002-1068-E* (Funded by the Spanish Ministry of Science and Innovation), 2002--2011. **Member.**
- *European Molecular Computing Consortium EMCC* (Funded by the EU Comission), 2001--2008. **Member.**
- *GlobalComp 11052/2007 - Models, semantics, logics and technologies for global computing* (Funded by the Romanian Ministry of Education and Research), 2007-2009. **Member.**
- *CellSim 11052/2007 – Cell Simulation With Membrane Systems* (Funded by the Romanian Ministry of Education and Research), 2007-2009. **Member.**
- *SELF 136/2008 - Integrated system for editing the educational contents* (Funded by the Romanian Ministry of Education and Research), 2008-2011. **Team leader.**
- *SEFIN 12127/2008 - Interdisciplinary study on the role of intelligent automatic systems in the learning efficiency* (Funded by the Romanian Ministry of Education and Research), 2008-2011. **Coordinator.**
- *Networks of bio-inspired processors: hardware implementations TIN2011-28260-C03-03* (Funded by the Spanish Ministry of Education and Science), 2012-2013. **Team leader.**

VII. International recognition

- Total citations / without self-citations (**Web of Science**): 729/533
- Citing articles / citing articles without self-citations (**Web of Science**): 342/271
- Average citations per article (**Web of Science**): 4.67
- H index (**Web of Science**): 15
- Total citations (**Google Scholar**): 2085
- H index (**Google Scholar**): 26
- Total citations (**Scopus**): 845
- Citing articles (**Scopus**): 355
- H index (**Scopus**): 17
- Repeated lectures at universities from Germany (Magdeburg, Frankfurt, Hamburg), Finland (Turku), Japan (Kyoto, Tokyo), Italy (Rome, Pisa, Milano), Spain (Tarragona, Madrid, Valencia, Seville), Hungary (Budapest, Szeged), Belgium (Gent, Brussels), Czech Republic (Prague, Opava), Holland (Leiden), Austria (Vienna), Turkey (Istanbul).
- Professor of the International PhD School in Formal Languages and Automata, Tarragona, Spain, 2003-2008.
- Courses in the PhD programs of foreign universities:
 - Formal Language-Based Approaches in Biology (15 hours) in the PhD program of the Polytechnic University of Madrid, 2003.
 - Bio-operations in Molecular Computing (15 hours) in the PhD program of the University of Seville, 2005.
 - On the Computational Power of Some Operations Inspired from the Genome Evolution (15 hours) in the PhD program of the Polytechnic University of Madrid, 2007.
 - Bio-operations and combinatorial algorithms (15 hours) in the PhD program of the Polytechnic University of Madrid, 2007.

VIII. Awards, acknowledgements

- "Gheorghe Lazar" Prize of the Romanian Academy of Sciences, 1997, for my results on grammatical models inspired by the genome evolution.
- **I3 accreditation** (open competition) granted by the Spanish Agency of Evaluation of Scientific Activity based on an international evaluation
- Accredited as "**Catedratico de universidad**" by the ANECA, Madrid, Spain.

IX. Scientific positions and research stays in internationally recognized research centres (at least two months)

- Alexander von Humboldt Fellow (open worldwide competition), Magdeburg (June 1995-December 1996), Hamburg (September-October 1999), Magdeburg (April-June 2008, March-May 2011), Potsdam (March-May 2014).
- Visiting Researcher at the University of Turku, Finland (October-December 1996).
- Visiting Researcher at the Academy of Finland (June-July 1998).
- Fellow of the Spanish Ministry of Education and Science (open worldwide competition) (January 1999-December 2000).
- Visiting Professor at the University of Pisa 2001-2002 (open worldwide competition) (declined).
- University "La Sapienza", Rome, Italy, (2001, 2008, 2011, 2014).
- PIV Fellow of the Catalan Government (open worldwide competition), Spain (January-December 2001, March-October 2010).
- Ramon y Cajal Researcher (open worldwide competition), Spanish Government (February 2003-January 2008), Rovira i Virgili University, Tarragona, Spain.
- Visiting Researcher at the European Center of Excellence at the Hungarian Academy of Sciences, Computer and Automation Research Institute (September-October 2003).
- Visiting Professor at the Polytechnic University of Valencia (October 2008-September 2009).
- Visiting Researcher of the Japan Society for Promotion of Science Fellow, Kyoto Sangyo University, Japan (August-September 2008).
- Visiting Researcher of the Abo Akademi, Turku, Finland (September-November 2009).

X. Foreign visits (most important)

- University of Turku, Finland (1993, 1996, 1998).
- Åbo Akademi, Turku, Finland (2009, 2011).
- Rovira i Virgili University, Spain, (1997, 2010).
- Technical University of Wien, Wien, Austria (1998).
- University of Opava, Czech Republic, (1998).
- Leiden University, Leiden, The Netherlands (1999).
- University of Kyoto, Japan (2000).
- University of Metz, Metz, France (2004).
- Polytechnic University of Madrid, Spain (2004, 2007, 2010, 2011).
- University "La Sapienza", Rome, Italy, (2001, 2008, 2010, 2011).
- University of Szeged, Hungary (2004).
- Hungarian Academy of Sciences, Computer and Automation Research Institute (2000, 2002, 2004).
- Charles University of Prague, Prague, Czech Republic (2009).
- Waseda University, Tokyo, Japan (2010).
- University of Kiel, Germany, 2014.
- University of Potsdam, Germany, 2014.

XI. Scientific expert positions

- Associate editor of the *Journal of Computational and Applied Mathematics* (Springer).

- Member of the editorial board of the *Journal of Universal Computer Science* (Springer).
- Member of the editorial board of the *Annals of the University of Bucharest* (Publishing House of the Bucharest University).
- Member in the program committee of more than 20 international academic conferences in Europe, USA and Japan (ICWLC, ECAL, SOFSEM, DLT, DCFS, CIAA, IWINAC, LATA, CiE, AFL, etc.) . PC chair for three of these conferences.
- Referee and/or member in the international committee of several doctoral and habilitation dissertations in India (2) and Europe: Spain (7), Germany (3), France(2).

XII. Scientific positions of trust and administration

- Chairman of the Computer Science Commission of CNATDCU (2010-2011).
- Member of the Computer Science Commission of CNATDCU (2012-2015).
- Scientific expert of the Executive Unit for Financing Higher Education and Scientific Research, Ministry of Education and Research from Romania (2006-2011).
- Director of the research center MOCALC (Models of Computation, Algorithms and Cryptography), University of Bucharest (2007-2010).
- Director of the Doctoral School of Computer Science, University of Bucharest (2011-present)

XIII. Supervised doctoral thesis

- Peter Leupold: *Languages Generated by Iterated*, Rovira i Virgili University, Tarragona, Spain, 2006.
- Florin Manea: *Networks of Bio-Processors*, University of Bucharest, Romania, 2007.
- Remco Loos: *Finite Models of Splicing and their Complexity*, Rovira i Virgili University, Tarragona, Spain, 2008.
- Armand-Mihai Ionescu: *Membrane Computing: Traces, Neural Inspired Models, Controls*, Rovira i Virgili University, Tarragona, Spain, 2008.
- Cristina Bibire-Târnuță: *Language Learning with Correction Queries*, Rovira i Virgili University, Tarragona, Spain, 2009
- Maria Adela Grando: *Contributions of Formal Language Theory and Grammar Systems Theory to the Formal Study of Dialogues*, Rovira i Virgili University, Tarragona, Spain, 2009.
- Traian Virgil Serbanuta: *On Parikh Matrices and Ambiguity*, University of Bucharest, 2010.
- Daniel Claudiu Voinescu: *Combinatorial Aspects in Formal Language Theory*, University of Bucharest, 2010.
- Marius Dumitran: *Algorithmical Aspects of Some Bio-Inspired Operations*, University of Bucharest, Romania 2015.
- Adrian Horia Dediu: *Learning Automata With Help*, Rovira i Virgili University, Tarragona, Spain 2015.

XIV. Supervised master and diploma thesis

More than 100 master and diploma thesis supervised at the University of Bucharest.

XV. Main research fields (and topics)

- theory of computation (formal language theory, computability, classic and unconventional models of computation, computational and descriptonal complexity, parallel and distributed computing)
- Bio-inspired computing (DNA recombination, theoretical models and experiments, splicing systems, solving problems with DNA-based algorithms, computational models based on bio-operations, language-theoretical models of the genome evolution, structural linguistics of nucleic acids, membrane computing, computing with tissues, networks of bio-inspired processors)

- combinatorics on words (finite and infinite sequences, data structures and algorithms on words, DNA sequence analysis, subword complexity)
- natural language processing (parsing, mathematical developments and applications, pattern interpretation, tree-controlled grammars)

Scientific Publications

December 2014

N.B.: In the European communities of Mathematics and Computer Science no distinction is usually made between the first author and the other authors. Authors are listed alphabetically and it should be assumed that all authors have made an essential contribution.

A Peer-reviewed scientific articles

A1 Journal articles

1. P. Pablo Alarcón, F. Arroyo, H. Bordihn, **V. Mitrana**, M Müller: Ambiguity of the Multiple Interpretations on Regular Languages. *Fundamenta Informaticae* 138(1-2): 85-95 (2015) ([IOS Press Netherlands](#))
2. F. Manea, C. Martín-Vide, **V. Mitrana**: Hairpin lengthening: language theoretic and algorithmic results. *Journal of Logic and Computation* 25(4): 987-1009 (2015) ([Oxford University Press](#))
3. M. Dumitran, J. Gil, F. Manea, **V. Mitrana**: Bounded Prefix-Suffix Duplication: Language Theoretic and Algorithmic Results. *International Journal of Foundations of Computer Science* 26(7): 933-952 (2015) ([World Scientific Publishing](#))
4. P. Bottoni, A. Labella, **V. Mitrana**: Accepting Networks of Evolutionary Picture Processors. *Fundamenta Informaticae* 131(2014): 337-349 ([IOS Press Netherlands](#)).
5. P. Pablo Alarcón, F. Arroyo, **V. Mitrana**: Networks of polarized evolutionary processors. *Information Sciences* 265 (2014): 189-197 ([Elsevier Inc. USA](#))
6. S. Gómez Canaval, **V. Mitrana**, S. Alonso Villaverde: Transducers Based on Networks of Evolutionary Processors. *Journal of Automata, Languages and Combinatorics* 19(2014): 93-105 ([Otto-von-Guericke University, Germany](#))
7. J. García-López, F. Manea, **V. Mitrana**: Prefix-suffix duplication. *Journal of Computer and System Sciences* 80(2014): 1254-1265 ([Elsevier Inc. USA](#))
8. F. Arroyo, J. Castellanos, J. Dassow, **V. Mitrana**, J-R. Sánchez-Couso: Accepting splicing systems with permitting and forbidding words. *Acta Informatica* 50(2013): 1-14 ([Springer-Verlag, Germany](#))
9. V. Diekert, S. Kopecki, **V. Mitrana**: Deciding regularity of hairpin completions of regular languages in polynomial time. *Information and Computation* 217(2012): 12-30 ([Elsevier Inc. USA](#))
10. M. Ito, P. Leupold, F. Manea, **V. Mitrana**: Bounded hairpin completion. *Information and Computation*, 209(2011) 368-382. ([Elsevier Inc. USA](#))
11. **V. Mitrana**, C. Târnuță: New bounds for the query complexity of an algorithm that learns DFAs with correction and equivalence queries. *Acta Informatica*, 48(2011) 43-50. ([Springer-Verlag, Germany](#))
12. J. Dassow, **V. Mitrana**, B. Truthe: The role of evolutionary operations in accepting networks of evolutionary processors. *Information and Computation*, 209(2011) 471-485. ([Elsevier Inc. USA](#))
13. F. Arroyo, J. Castellanos, **V. Mitrana**, E. Santos, J. M. Sempere: Filter position in networks of substitution processors does not matter. *International Journal of Foundation of Computer Science* 22(2011) 155-165. ([World Scientific Publishing, Singapore](#))
14. P. Bottoni, A. Labella, F. Manea, **V. Mitrana**, I. Petre: Complexity-preserving simulations among three variants of accepting networks of evolutionary processors, *Natural Computing* 10(2011) 429-445. ([Springer-Verlag, Germany](#))

15. F. Manea, M. Margenstern, **V. Mitrana**, M. J. Pérez-Jiménez: A new characterization of NP, P, and PSPACE with accepting networks of evolutionary processors, *Theory of Computing Systems*, 46(2010) 174-192. ([Springer-Verlag, Germany](#))
16. R. Loos, F. Manea, **V. Mitrana**: Small universal accepting hybrid networks of evolutionary processors, *Acta Informatica*, 47(2010) 133-146. ([Springer-Verlag, Germany](#))
17. **V. Mitrana**, I. Petre, V. Rogojin: Accepting splicing systems. *Theoretical Computer Science*, 411(2010) 2414-2422. ([Elsevier B.V., Netherlands](#))
18. F. Manea, **V. Mitrana**: Some remarks on the hairpin completion. *International Journal of Foundation of Computer Science*, 21(2010) 859-872. ([World Scientific Publishing, Singapore](#))
19. F. Manea, C. Martin-Vide, **V. Mitrana**: On some algorithmic problems regarding the hairpin completion, *Discrete Applied Mathematics* 157, 9(2009) 2143-2152. ([Elsevier B.V., Netherlands](#))
20. F. Manea, **V. Mitrana**, T. Yokomori: Two complementary operations inspired by the DNA hairpin formation: Completion and reduction, *Theoretical Computer Science* 410(2009) 417-425. ([Elsevier B.V., Netherlands](#))
21. R. Loos, F. Manea, **V. Mitrana**: On small, reduced, and fast universal accepting networks of splicing processors, *Theoretical Computer Science* 410(2009) 406-416. ([Elsevier B.V., Netherlands](#))
22. J. Dassow, **V. Mitrana**: Accepting networks of non-inserting evolutionary processors, *Transactions on Computational Systems Biology*, 11(2009) 187-199. ([Springer-Verlag, Germany](#))
23. A. Choudhary, K. Krithivasan, **V. Mitrana**: Returning and non-returning PCFA are equivalent, *RAIRO/Theoretical Informatics and Applications*, 17, 2(2007) 137-145. ([EDP Sciences, France](#))
24. F. Manea, C. Martin-Vide, **V. Mitrana**: On the size complexity of universal accepting hybrid networks of evolutionary processors, *Mathematical Structures in Computer Science*, 17, 4(2007) 753-771. ([Cambridge University Press, UK](#))
25. R. Loos, **V. Mitrana**: Non-preserving splicing with delay, *International Journal of Computer Mathematics*, 84(2007), 427-436. ([Taylor & Francis, UK](#))
26. C. Martin-Vide, **V. Mitrana**: Remarks on multiple pattern interpretations, *Information Processing Letters*, 101, 5 (2007), 209-214. ([Elsevier B.V., Netherlands](#))
27. P. Leupold, **V. Mitrana**: Uniformly bounded duplication codes, *RAIRO Theoretical Informatics and Applications*, 41, 4(2007) 411-424. ([EDP Sciences, France](#))
28. F. Manea, **V. Mitrana**: All NP-problems can be solved in polynomial time by accepting hybrid networks of evolutionary processors of constant size, *Information Processing Letters*, 103(2007), 112-118. ([Elsevier B.V., Netherlands](#))
29. C. Martin-Vide, **V. Mitrana**: Decision problems on path-controlled grammars, *International Journal of Foundations of Computer Science*, 18, 6(2007) 1323-1332. ([World Scientific Publishing, Singapore](#))
30. C. Drăgoi, F. Manea, **V. Mitrana**: Accepting hybrid networks with filtered connections, *Journal of Universal Computer Science* 13, 11(2007) 1598-1614. ([Springer-Verlag, Germany](#))
31. M. A. Grando, **V. Mitrana**: A possible connection between two theories: grammar systems and concurrent programming, *Fundamenta Informatica*, 76, 3 (2007), 325-336. ([IOS Press, Netherlands](#))
32. F. Manea, C. Martin-Vide, **V. Mitrana**: Accepting networks of splicing processors: complexity results, *Theoretical Computer Science*, 371(2007), 72-82. ([Elsevier B.V., Netherlands](#))
33. P. Bottoni, A. Labella, V. Manca, **V. Mitrana**: Superposition Based on Watson-Crick like complementarity, *Theory of Computing Systems*, 39, 4 (2006), 503-524. ([Springer-Verlag, Germany](#))
34. F. Manea, **V. Mitrana**, D.C. Voinescu: Synchronized shuffle on backbones, *Fundamenta Informaticae*, 73, 1-2 (2006), 191-202. ([IOS Press, Netherlands](#))

35. J. Castellanos, P. Leupold, **V. Mitrana**: On the size complexity of hybrid networks of evolutionary processors, *Theoretical Computer Science*, 330, 2 (2005) 205-220. ([Elsevier B.V., Netherlands](#))
36. P. Leupold, C. Martin-Vide, **V. Mitrana**: Uniformly bounded duplication languages, *Discrete Applied Mathematics*, 146, 3 (2005), 301-310. ([Elsevier B.V., Netherlands](#))
37. **V. Mitrana**: Marcus external contextual grammars: from one to many dimensions, *Fundamenta Informaticae*, 54, 1-4 (2005), 307-316. ([IOS Press, Netherlands](#))
38. E. Csuhaj-Varju, C. Martin-Vide, **V. Mitrana**: Hybrid NEPs are computationally complete, *Acta Informatica*, 41, 4-5 (2005), 257-272. ([Springer-Verlag, Germany](#))
39. M. ter Beek, C. Martin-Vide, **V. Mitrana**: Synchronized shuffles, *Theoretical Computer Science*, 341 (2005), 263-275. ([Elsevier B.V., Netherlands](#))
40. I. Ardelean, M. Gheorghe, C. Martin-Vide, **V. Mitrana**: A computational model for cell differentiation, *BioSystems*, 76(2004), 1-3, 169-176. ([Elsevier B.V., Netherlands](#))
41. M. Gheorghe, **V. Mitrana**: A formal language based approach in biology, *Comparative and Functional Genomics* 5 (2004), 91-94. ([John Wiley & Sons, Inc. USA](#))
42. J. Dassow, **V. Mitrana**, G. Paun, R. Stiebe: On functions and related languages of context-free grammars, *RAIRO/Theoretical Informatics and Applications*, 38 (2004), 257-267. ([EDP Sciences, France](#))
43. M. ter Beek, E. Csuhaj-Varju, **V. Mitrana**: Teams of pushdown automata, *International Journal of Computer Mathematics*, 81, 2 (2004), 141-156. ([Taylor & Francis, UK](#))
44. J. Castellanos, C. Martin-Vide, **V. Mitrana**, J. Sempere: Networks of evolutionary processors, *Acta Informatica*, 39 (2003), 517-529. ([Springer-Verlag, Germany](#))
45. A. Atanasiu, C. Martin-Vide, **V. Mitrana**: On the sentence valuation in a semiring. *Information Sciences*, 151 (2003), 107-124. ([Elsevier Inc. USA](#))
46. M. Kudlek, C. Martin-Vide, A. Mateescu, **V. Mitrana**: Contexts and the concept of mild context-sensitivity, *Linguistics and Philosophy*, 26, 6 (2003), 703-725. ([Springer-Verlag, Germany](#))
47. **V. Mitrana**, K.G. Subramanian, M. Tataram: Pictural Networks of Evolutionary Processors, *Romanian Journal of Information Science and Technology*, 6 (2003), no.1-2, 189-199. ([Publishing House of the Romanian Academy, Romania](#))
48. J. Dassow, **V. Mitrana**, A. Salomaa: Operations and language generating devices suggested by the genome evolution, *Theoretical Computer Science*, 270, 1-2 (2002), 701-738. ([Elsevier B.V., Netherlands](#))
49. R. Freund, C. Martin-Vide, **V. Mitrana**: On some operations suggested by gene assembly in ciliates. *New Generation Computing*, 20, 3 (2002), 279-293. ([Ohmsha Ltd., Japan](#))
50. C. Martin-Vide, A. Mateescu, **V. Mitrana**: Parallel finite automata systems communicating by states, *International Journal of Foundation of Computer Science*, 13, 5 (2002), 733-749. ([World Scientific Publishing, Singapore](#))
51. C. Martin-Vide, **V. Mitrana**: Grammars with bounded-life resources, *Journal of Automata, Languages, and Combinatorics*, 7, 4 (2002), 561-570. ([Otto-von-Guericke University, Germany](#))
52. C. Martin-Vide, **V. Mitrana**: Networks of evolutionary processors: a survey, *Theoria*, 18 (2003), no.46, 59-70. ([University of the Basque Country, Spain](#))
53. M. Kudlek, C. Martin-Vide, **V. Mitrana**: Multiple pattern interpretations, *GRAMMARS*, 5 (2002), 223-238. ([Kluwer Academic Publishers, Netherlands](#))
54. C. Martin-Vide, **V. Mitrana**, R. Stiebe: Weighted grammars and automata with threshold interpretation, *Journal of Automata, Languages, and Combinatorics*, 8, 2 (2003), 303-318. ([Otto-von-Guericke University, Germany](#))
55. **V. Mitrana**, R. Stiebe: Extended finite automata over groups. *Discrete Applied Mathematics*, 108, 3 (2001), 247-260. ([Elsevier B.V., Netherlands](#))

56. S. Kobayashi, **V. Mitrana**, Gh. Paun, G. Rozenberg: Formal properties of PA-Matching, *Theoretical Computer Science*, 262, 1-2 (2001), 117-131. (Elsevier B.V., Netherlands)
57. C. Martin-Vide, **V. Mitrana**: Some undecidable problems for parallel communicating finite automata systems, *Information Processing Letters*, 77, 5-6 (2001), 239-245. (Elsevier B.V., Netherlands)
58. A. Kelemenova, J. Kelemen, **V. Mitrana**: Towards Biolinguistics. New developments in formal language theory inspired from biology, *GRAMMARS*, 4, 3 (2001), 187-203. (Kluwer Academic Publishers, Netherlands)
59. M. Ito, C. Martin-Vide, **V. Mitrana**: Group weighted finite transducers, *Acta Informatica*, 38 (2001), 117-129. (Springer-Verlag, Germany)
60. C. Martin-Vide, **V. Mitrana**, Gh. Paun: On the power of valuations in P systems, *Computacion y Sistemas*, 5,2 (2001), 120-128. (Instituto Politecnico Nacional, Mexico)
61. M. Kudlek, **V. Mitrana**: Closure properties of multiset languages, *Fundamenta Informaticae*, 49, 1-3 (2001), 191-203. (IOS Press, Netherlands)
62. E. Csuhaj-Varju, **V. Mitrana**: Evolutionary systems: A language generating device inspired by evolving communities of cells, *Acta Informatica*, 36, 11 (2000), 913-926. (Springer-Verlag, Germany)
63. **V. Mitrana**: On the degree of communication in parallel communicating finite automata, *Journal of Automata, Languages and Combinatorics*, 5, 3 (2000), 301-314. (Otto-von-Guericke University, Germany)
64. J. Dassow, **V. Mitrana**: Finite automata over the free generated groups, *International Journal of Algebra and Computation*, 10, 6 (2000), 725-738. (World Scientific Publishing, Singapore)
65. E. Csuhaj-Varju, C. Martin-Vide, **V. Mitrana**, G. Vaszil: Parallel communicating pushdown automata systems, *International Journal of Foundations of Computer Science*, 11, 4 (2000), 633-650. (World Scientific Publishing, Singapore)
66. C. Martin-Vide, **V. Mitrana**: Parallel communicating automata systems. A survey. Invited article in *Journal of Computational and Applied Mathematics* 7 (2), 2000, 237-257. (Springer-Verlag, Germany)
67. J. Kelemen, A. Kelemenova, C. Martin-Vide, **V. Mitrana**: Colonies with limited activation of components, *Theoretical Computer Science*, 244, 1-2 (2000), 289-298. (Elsevier B.V., Netherlands)
68. E. Csuhaj-Varju, **V. Mitrana**: Dynamical teams in eco-grammar systems. *Fundamenta Informaticae*, 44, 1-2 (2000), 83-94. (IOS Press, Netherlands)
69. C. Martin-Vide, **V. Mitrana**: Uniquely parsable CD grammar systems, *Journal of Universal Computer Science*, 6, 9 (2000), 850-861. (Springer-Verlag, Germany)
70. J. Dassow, **V. Mitrana**: Stack cooperation in multi-stack pushdown automata, *Journal of Computer and System Sciences*, 58 (1999), 611-621. (Elsevier B.V., Netherlands)
71. **V. Mitrana**, G. Rozenberg: Some properties of duplication grammars. *Acta Cybernetica*, 14, 1 (1999), 165-177. (University of Szeged, Hungary)
72. J. Dassow, **V. Mitrana**: DOL-pattern systems, *Publicationes Mathematicae*, 54 (1999), 653-666. (University of Debrecen, Hungary)
73. **V. Mitrana**: Patterns and languages: An overview, *GRAMMARS*, 2, 2 (1999), 149-173. (Kluwer Academic Publishers, Netherlands)
74. J. Dassow, **V. Mitrana**: On the leftmost derivations in cooperating grammar systems. *Revue Roumaine de Mathematiques Pures et Appliquees*, 43, 3-4 (1998), 361-374. (Publishing House of the Romanian Academy, Romania)
75. **V. Mitrana**: Parallelism in contextual grammars. *Fundamenta Informaticae*, 33 (1998), 281-294. (IOS Press, Netherlands)
76. **V. Mitrana**: Chomsky-Schutzemberger type characterizations based on contextual languages, *GRAMMARS*, 1 (1988), 167-176. (Kluwer Academic Publishers, Netherlands)

77. A. Atanasiu, **V. Mitrana**: On the error-tolerant closure of languages, *Annals of the University of Bucharest, Mathematics-Informatics Series*, 47 (1998) 5-14. (University of Bucharest, Romania)
78. C. Martin-Vide, **V. Mitrana**: Cooperation in contextual grammars, *Romanian Journal of Information Science and Technology*, 3 (1998) 231-241. (Publishing House of the Romanian Academy, Romania)
79. **V. Mitrana**: On the interdependence between shuffle and crossing-over operations. *Acta Informatica*, 34 (1997), 257-267. (Springer-Verlag, Germany)
80. J. Dassow, **V. Mitrana**: Cooperation in context-free grammar, *Theoretical Computer Science*, 180 (1997) 353-361. (Elsevier B.V., Netherlands)
81. **V. Mitrana**: Crossover systems. A generalization of splicing systems. *Journal of Automata, Languages and Combinatorics*, 2 (1997), 3, 151-160. (Otto-von-Guericke University, Germany)
82. **V. Mitrana**: Primitive morphisms. *Information Processing Letters*, 64 (1997) 277-281. (Elsevier B.V., Netherlands)
83. J. Dassow, **V. Mitrana**, A. Salomaa: Context-free evolutionary grammars and the structural language of nucleic acids. *BioSystems*, 4 (1997) 169-177. (Elsevier B.V., Netherlands)
84. **V. Mitrana**, Gh. Paun, G. Rozenberg, A. Salomaa: Pattern systems. *Theoretical Computer Science*, 154, 2 (1996), 183-201. (Elsevier B.V., Netherlands)
85. J. Dassow, **V. Mitrana**: Splicing grammar systems, *Computers and Artificial Intelligence*, 15 (1996), 2-3, 109-122. (Institute of Informatics, Slovak Academy of Sciences, Slovakia)
86. J. Dassow, **V. Mitrana**, Gh. Paun, S. Vicolov: On determinism in cooperating distributed grammar systems. *Publicationes Mathematicae*, 48 (1996), 3-4, 217-231. (University of Debrecen, Hungary)
87. J. Dassow, **V. Mitrana**: "Call by name" and "call by value" strategies in grammar systems. *Annals of the University of Bucharest*, 1 (1996), 29-40. (University of Bucharest, Romania)
88. L. Ilie, **V. Mitrana**: Binary self-adding languages and sequences. *International Journal of Computer Mathematics*, 62 (1996), 171-181. (Taylor & Francis, UK)
89. **V. Mitrana**: Iterated pattern languages. *Journal of Automata, Languages and Combinatorics*, 1 (1996), 4, 305-311. (Otto-von-Guericke University, Germany)
90. J. Dassow, **V. Mitrana**: Fairness in grammar systems. *Acta Cybernetica* 12 (1996), 331-345. (University of Szeged, Hungary)
91. **V. Mitrana**: Similarity in grammar systems. *Fundamenta Informaticae*, 24 (1995), 3, 251-257. (IOS Press, Netherlands)
92. A. Mateescu, **V. Mitrana**, A. Salomaa: Dynamical teams in cooperating distributed grammar systems. *Annals of the University of Bucharest*, (1993-1994), 3-14. (University of Bucharest, Romania)
93. **V. Mitrana**, Gh. Paun, G. Rozenberg: Structuring grammar systems by priority and hierarchies. *Acta Cybernetica*, 11, 3 (1994), 189-204. (University of Szeged, Hungary)
94. **V. Mitrana**: On languages satisfying the "interchange lemma". *R.A.I.R.O./ Theoretical Informatics and Applications*, 27, 1 (1993), 71-79. (EDP Sciences, France)
95. **V. Mitrana**: Cooperating/distributed grammar systems with total activation. *Studii Cercetari Matematice*, 45, 1 (1993), 31-37. (Publishing House of the Romanian Academy, Romania)
96. **V. Mitrana**: Hybrid cooperating/distributed grammar systems. *Computers and Artificial Intelligence*, 12, 1 (1993), 83-88. (Institute of Informatics, Slovak Academy of Sciences, Slovakia)
97. J. Dassow, **V. Mitrana**, Gh. Paun: Szilard languages associated to a cooperating distributed grammar system. *Studii Cercetari Matematice*, 45, 5 (1993), 403-413. (Publishing House of the Romanian Academy, Romania)

98. E. Csuhaj-Varju, J. Dassow, **V. Mitrana**, Gh. Paun: Cooperation in grammar systems: universality, similarity, timing. *Cybernetics and Systems*, 36, 4 (1993), 271-286. ([Taylor & Francis, UK](#))
99. A. Atanasiu, **V. Mitrana**: Parallel substitution on words and languages. *Annals of the University Al.I.Cuza, Iasi, Inf.*, 2 (1993), 37-43. ([University of Iassy, Romania](#))
100. **V. Mitrana**: Grammar-gsm pairs. *Annals of the University of Bucharest, Series Mathematics-Informatics*, 3 (1990-1991), 64-71. ([University of Bucharest, Romania](#))
101. A. Atanasiu, **V. Mitrana**: The modular grammars. *International Journal of Computer Mathematics*, 30 (1989), 17-35. ([Taylor & Francis, UK](#)).

A2 Book sections, chapters in research books

1. F. Manea, R. Mercas, **V. Mitrana**: Hairpin Lengthening and Shortening of Regular Languages. *Languages Alive*, LNCS 7300, 2012: 145-159.
2. R. Gramatovici, F. Manea, **V. Mitrana**: Context insertions. *Models of Computation, Cooperation and Life*, LNCS 6610, Springer-Verlag, Berlin, 2011, 24-34. ISBN: 978-3-642-20000-7
3. F. Manea, C. Martin-Vide, **V. Mitrana**: Networks of evolutionary word and picture processors: A survey, *Scientific Applications of Language Methods*, Imperial College Press, London, UK, 2010, 523-560. ISBN: 978-1-84816-544-1
4. J. Dassow, C. Martin-Vide, **V. Mitrana**: Free generating hybrid networks of evolutionary processors, *Formal Models, Languages and Applications Series in Machine Perception and Artificial Intelligence* vol. 66, 2006, World Scientific, Singapore, 65-78. ISBN: 978-981-256-889-2
5. C. Martin-Vide, **V. Mitrana**: Networks of Evolutionary Processors: Results and Perspectives. In *Molecular Computational Models: Unconventional Approaches*, Idea Group Publishing, Hershey, 2005, 78-114. ISBN: 1-59140-333-2
6. P. Damosi, C. Martin-Vide, **V. Mitrana**: Remarks on sublanguages consisting of primitive words of slender regular and context-free languages, *Theory Is Forever* LNCS 3113, Springer Verlag, Berlin, 2004, 60-68. ISBN: 3-540-22393-2
7. L. Ilie, **V. Mitrana**: Crossing-over on languages. A formal representation of chromosomes recombination. In *Grammars and Automata for String Processing. From Mathematics and Computer Science to Biology and Back*, Gordon and Breach, London, 2003, 289-302. ISBN: 978-0415298858
8. P. Leupold, **V. Mitrana**, J. Sempere: Formal languages arising from gene repeated duplication. *Aspects of Molecular Computing*, LNCS 2950, Springer Verlag, Berlin, 2003, 297-308. ISBN: 3-540-20781-3
9. J. Castellanos, **V. Mitrana**: Some remarks on hairpin and loop languages, *Words, Semigroups, and Tranlations*, World Scientific, Singapore, 2001 47-59. ISBN: 981-02-4739-7
10. C. Martin-Vide, **V. Mitrana**: On context-free duplications, *Recent topics in mathematical and computational linguistics*, The Publishing House of the Romanian Academy, 2000, 196-206. ISBN: 973-27-0770-4
11. J. Kelemen, A. Kelemenova, **V. Mitrana**: Neo-modularity and colonies, *Where Linguistics, Computer Science and Biology Do Meet*, Kluwer Academic Publisher, Dordrecht, 2000, 63-74. ISBN: 0-7923-6693-X
12. A. Atanasiu, **V. Mitrana**: About symbolic encryption. Separable encryption systems. *Grammatical Models of Multi-Agent Systems*, Gordon and Breach, London, 1999, 218-225. ISBN: 90-5699-177-9
13. **V. Mitrana**: On the degree of cooperation in CD grammar systems. *Grammatical Models of Multi-Agent Systems*, Gordon and Breach, London, 1999, 33-40. ISBN: 90-5699-177-9
14. J. Dassow, **V. Mitrana**: Self-crossing-over systems. *Computing with Bio-Molecules*, Springer-Verlag Singapore, 1998, 283-294. ISBN: 978-981-4021-05-0

15. **V. Mitrana**, R. Stiebe: The accepting power of finite automata over groups. *New Trends in Formal Languages. Control, Cooperation, Combinatorics*. LNCS 1218, Springer, Verlag, Berlin, 1997, 39-48. ISBN: 978-3-540-62844-6
16. V. Mihalache, **V. Mitrana**: Deterministic cooperating distributed grammar systems. *New Trends in Formal Languages. Control, Cooperation, Combinatorics*. LNCS 1218, Springer Verlag, Berlin, 1997, 137-149. ISBN: 978-3-540-62844-6
17. **V. Mitrana**: Eco-pattern systems. *Artificial Life. Grammatical Models.*, The Black Sea Univ. Press, 1995, 202-209. ISBN: 973-0-00131-6
18. **V. Mitrana**: Contextual insertion and deletion. *Mathematical Linguistics and Related Topics*, The Publishing House of the Romanian Academy, 1994, 271-278. ISBN: 973-27-0486-1
19. **V. Mitrana**: Contextual grammars: the strategy of minimal competence. *Mathematical Aspects of Natural and Formal Languages*, World Scientific Publishing, Singapore, 1994, 319-331. ISBN: 978-981-02-1914-7

A3 Conference proceedings

1. F. Arroyo, S. Gómez Canaval, **V. Mitrana**, S. Popescu: Networks of Polarized Evolutionary Processors Are Computationally Complete. *International Conference on Language and Automata Theory and Applications LATA 2014*, LNCS 8370, Springer Verlag, 2014, 101-112.
2. M. Dumitran, J. Gil, F. Manea, **V. Mitrana**: Bounded Prefix-Suffix Duplication. *Implementation and Application of Automata - 19th International Conference, CIAA 2014*, LNCS 8587, Springer Verlag, 2014, 176-187.
3. H. Bordihn, P. Bottoni, A. Labella, **V. Mitrana**: Solving 2D-Pattern Matching with Networks of Picture Processors. *Theory and Practice of Natural Computing, TPNC 2014*, LNCS 8890, Springer Verlag, 2014, 157-168.
4. F. Arroyo, J. Castellanos, **V. Mitrana**: Uniform Distributed Pushdown Automata Systems. *Descriptive Complexity of Formal Systems - 14th International Workshop, DCFS 2012*, LNCS 7386, Springer Verlag, 2012, 64-75.
5. P. Pablo Alarcón, F. Arroyo, **V. Mitrana**: Networks of Polarized Evolutionary Processors as Problem Solvers, *Advances in Knowledge-Based and Intelligent Information and Engineering Systems - 16th Annual KES Conference*, Frontiers in Artificial Intelligence and Applications, IOS Press, 2012, 807-815.
6. J. Castellanos, **V. Mitrana**, E. Santos: Splicing systems: Accepting versus Generating, *Models of Computation in Context, 7th Computability in Europe, CiE 2011*, LNCS 6735 Springer Verlag 2011, 41-51.
7. J. Castellanos, **V. Mitrana**, E. Santos, J. Sempere: Simulating ANEPs with filtered connections by accepting evolutionary P systems, *Proceedings of the International Work-Conference on Artificial and Natural Neural Networks IWINAC 2011*, LNCS 6686, Springer Verlag 2011, 295-302.
8. F. Arroyo, J. Castellanos, **V. Mitrana**: On the degree of team cooperation in grammar systems, *Proceedings of 12th International Workshop on Descriptive Complexity of Formal Systems DCFS 2011*, LNCS 6808, Springer Verlag 2011, 68-79.
9. F. Manea, C. Martín-Vide, **V. Mitrana**: Hairpin Lengthening, *Programs, Proofs, Processes, 6th Conference on Computability in Europe, CiE 2010*, LNCS 6158 Springer Verlag 2010, 296-306.
10. M. Ito, P. Leupold, **V. Mitrana**: Bounded hairpin completion, *Proc. 3rd International Conference on Language and Automata Theory and Applications LATA 2009*, LNCS 5457, Springer Verlag 2009, 434-445.
11. **V. Mitrana**, B. Truthe: On accepting networks of evolutionary processors with at most two types of nodes, *Proc. 3rd International Conference on Language and Automata Theory and Applications LATA 2009*, LNCS 5457, Springer Verlag 2009, 588-600.

12. F. Manea, **V. Mitrana**, J. Sempere: Some remarks on superposition based on Watson-Crick-like complementarity, *13th International Conference on Developments in Language Theory DLT 2009*, LNCS 5583, Springer Verlag 2009, 372-383.
13. P. Bottoni, A. Labella, F. Manea, **V. Mitrana**, J. Sempere: Filter position in networks of evolutionary processors does not matter, *The 15th International Meeting on DNA Computing and Molecular Programming DNA 15*, LNCS 5877, Springer Verlag 2009, 1-11.
14. F. Manea, **V. Mitrana**: Accepting networks of evolutionary processors: complexity aspects - recent results and new challenges. *Proceedings of the International Conference on Agents and Artificial Intelligence ICAART 2009*, INSTICC Press, 2009, 597-604.
15. V. Diekert, S. Kopecki, **V. Mitrana**: On the hairpin completion of regular languages. *Theoretical Aspects of Computing ICTAC 2009*, LNCS 5684, Springer Verlag 2009, 170-184.
16. P. Bottoni, A. Labella, F. Manea, **V. Mitrana**, J. M. Sempere: Networks of evolutionary picture processors with filtered connections. *8th International Conference on Unconventional Computation, UC 2009*, LNCS 5715, Springer Verlag 2009, 70-84.
17. R. Loos, F. Manea, **V. Mitrana**: Small universal accepting networks of evolutionary processors with filtered connections. *Proceedings 11th International Workshop on Descriptive Complexity of Formal Systems DCFS 2009*, Electronic Proceedings in Theoretical Computer Science EPTCS 3, 173-183.
18. F. Manea, **V. Mitrana**, T. Yokomori: Some remarks on the hairpin completion, In E. Csuhaj-Varju, Z. Esik (eds.) *Proc. 12th International Conference on Automata and Formal Languages, AFL 2008*, Computer and Automation Research Institute, Hungarian Academy of Science, 302-313.
19. F. Manea, **V. Mitrana**: Hairpin completion versus hairpin reduction, *Computation in Europe CiE 2007*, LNCS 4497, Springer Verlag 2007, 532-541.
20. J. Castellanos, F. Manea, L. F. de Mingo Lopez, **V. Mitrana**: Accepting networks of splicing processors with filtered connections, *Machines, Computability, Universality, MCU 2007*, LNCS 4664, Springer Verlag 2007, 218-229.
21. F. Manea, C. Martin-Vide, **V. Mitrana**: All NP-Problems can be solved in polynomial time by ANSP of constant size, *DNA Based Computers DNA 12*, LNCS 4287, Springer Verlag 2006, 47-57.
22. R. Loos, C. Martin-Vide, **V. Mitrana**: Solving SAT and HPP with accepting splicing systems, *Parallel Problem Solving from Nature PPSN IX*, LNCS 4193, Springer Verlag 2006, 771-777.
23. J. Castellanos, L.F. de Mingo Lopez, **V. Mitrana**: Solving SAT by accepting networks of splicing processors with filtered connections, *15th International Conference on Computing CIC 2006*, IEEE Computer Society, 2006, 260-265.
24. F. Manea, C. Martin-Vide, **V. Mitrana**: On some algorithmic problems regarding the hairpin completion, *Optimal Discrete Structures and Algorithms ODSA 2006*, Electronic Notes in Discrete Mathematics ENDM 172.
25. D. Cheptea, C. Martin-Vide, **V. Mitrana**: A new operation on words suggested by DNA biochemistry: hairpin completion, *Transgressive Computing*, University of Granada, Spain, 2006, 216-228.
26. F. Manea, C. Martin-Vide, **V. Mitrana**: A universal accepting hybrid network of evolutionary processors, *First International Workshop on Developments in Computational Models, DCM '05*, Electronic Notes in Theoretical Computer Science ENTCS 93 (2006), 15-24.
27. F. Manea, C. Martin-Vide, **V. Mitrana**: Accepting networks of splicing processors, *Computation in Europe CiE 2005*, LNCS 3526 Springer Verlag 2005, 300-309.
28. C. Martin-Vide, **V. Mitrana**: Contextual information systems, *CONTEXT '05*, LNAI 3554, Springer Verlag 2005, 304-315.
29. C. Martin-Vide, **V. Mitrana**: Remarks on multiple pattern interpretations, *Automata and Formal Languages AFL05*, University of Szeged, Hungary, 2005, 200-212.

30. C. Martin-Vide, **V. Mitrana**: Further properties of path-controlled grammars, *Formal Grammars/Mathematics of Languages, FG-MOL10*, CSLI Publications 2005, 139-150.
31. C. Martin-Vide, **V. Mitrana**: Descriptive and computational aspects of generating and accepting hybrid networks of evolutionary processors, *Proc. Conference on Algebraic Informatics CAI'05*, Aristotle University of Thessaloniki, Greece, 2005, 207-220.
32. C. Martin-Vide, **V. Mitrana**: A new uniform translocation distance, *Structural, Syntactic, and Statistical Pattern Recognition SSPR 2004*, LNCS 3138, Springer Verlag 2004, 278-286.
33. M. Margenstern, **V. Mitrana**, M. Perez-Jimenez: Accepting hybrid networks of evolutionary systems, *Proc. DNA Based Computers DNA 10*, LNCS 3384 Springer Verlag 2005, 235-246.
34. M. A. Grando, **V. Mitrana**: Can PC grammar systems benefit from concurrent programming?, *Grammar System Week*, Budapest, Hungarian Academy of Sciences, 2004, 200-211.
35. F. Manea, C. Martin-Vide, **V. Mitrana**: Solving 3CNF-SAT in linear time with WWW, *Machines, Computability, Universality, MCU 2004*, LNCS 3354, Springer Verlag 2005, 269-280.
36. A. Atanasiu, C. Martin-Vide, **V. Mitrana**: On the sentence valuations in a semiring, (Invited lecture) *Proc. International Conference Words, Languages and Combinatorics III*, World Scientific, Singapore, 2003, 22-39.
37. E. Csuha-Varju, **V. Mitrana**, G. Vaszil: Distributed automata systems: computational power, *Developments in Language Theory (DLT 2003)*, LNCS 2710, Springer Verlag, Berlin, 2003, 218-229.
38. C. Martin-Vide, **V. Mitrana**, M.J. Perez-Jimenez, F. Sancho-Caparrini: Hybrid networks of evolutionary processors, *Genetic and Evolutionary Computation Conference (GECCO 2003)*, LNCS 2723, Springer Verlag, Berlin, 2003, 401-412.
39. M. Gheorghe, C. Martin-Vide, **V. Mitrana**, M.J. Perez-Jimenez: An agent based approach of collective foraging, *International Work-Conference on Artificial and Natural Neural Networks (IWANN 2003)*, LNCS 2686, Springer Verlag, Berlin, 2003, 638-645.
40. M. ter Beek, E. Csuha-Varju, **V. Mitrana**: Teams of pushdown automata, *International Conference on Perspectives of System Informatics (PSI 2003)*, LNCS 2890, Springer-Verlag, Berlin, 2003, 329-337.
41. I. Ardelean, M. Gheorghe, C. Martin-Vide, **V. Mitrana**: A computational model for cell differentiation, *Workshop Pre-Proceedings, IPCAT2003*, Lausanne, Switzerland, 2003, 275-287.
42. C. Martin-Vide, **V. Mitrana**: Some remarks on multiple pattern interpretations, *Proceeding of Mathematics of Languages (MOL 8)*, 2003, 105-117.
43. **V. Mitrana**: Some complexity aspects of hybrid networks of evolutionary processors, *Proc. Descriptive Complexity of Formal Systems (DCFS 2003)* (Invited plenary lecture), 2003, 5-20.
44. E. Csuha-Varju, C. Martin-Vide, **V. Mitrana**: Parallel communicating finite transducer systems, *Computational Linguistics in the Netherlands (CLIN 2002)*, Language and Computers: Studies in Practical Linguistics, Rodopi, Amsterdam-NY, 2003, 9-24.
45. C. Martin-Vide, **V. Mitrana**, R. Stiebe: Weighted grammars and automata with maximum interpretation, *Weighted Automata: Theory and Applications 2002*, TUD-FI 20-02, 32-35.
46. M. Kudlek, **V. Mitrana**: Considerations on a multiset model for membrane computing, *Proc. Workshop in Membrane Computing (WMC 2002)*, LNCS 2597, Springer Verlag, Berlin, 2003, 352-358.
47. J. Castellanos, C. Martin-Vide, **V. Mitrana**, J. Sempere: Solving NP-complete problems with networks of evolutionary processors, *Proc. of the 6th International Work-Conference on Artificial and Natural Neural Networks, IWANN 2001*, LNCS 2048, Springer Verlag, Berlin, 2001, 621-628.
48. E. Csuha-Varju, C. Martin-Vide, **V. Mitrana**: Multiset automata, *Multiset Processing*, LNCS 2235, Springer Verlag 2001, 69-84.

49. M. Ito, C. Martin-Vide, **V. Mitrana**: Chomsky-Schutzemberger type characterizations of poly-slender and Parikh slender context-free languages, *Proceedings of Formal Grammars/Mathematics of Languages FGMOL '01*, 2001, 104-112.
50. M. Kudlek, **V. Mitrana**: Normal forms for multiset grammars, *Multiset Processing*, LNCS Springer Verlag, 2235, 2001, 135-146.
51. C. Martin-Vide, **V. Mitrana**: Grammars with bounded-life resources, *Proc. Descriptive Complexity of Automata, Grammars and Related Structures*, DCAGRS '01, 2001, 214-222.
52. S. Marcus, C. Martin-Vide, **V. Mitrana**, Gh. Paun: A new-old class of linguistically motivated regulated grammars, *7th International Conference on Computational Linguistics in Netherlands, CLIN 2001*, Rodopi, Amsterdam, 2001, 111-125.
53. M. Kudlek, **V. Mitrana**: Closure properties of multiset languages, *Workshop on Membrane Computing, WMC2001*, Curtea de Arges, August 20-25, 2001, 157-168.
54. C. Martin-Vide, **V. Mitrana**: P Systems with valuations, *Proceedings of the Second International Conference on Unconventional Models of Computation UMC '2K*, Springer Verlag, London, 2000, 154-166.
55. **V. Mitrana**: Parallel communicating finite automata systems, *Proc. of Algebraic Systems, Formal Languages and Computations, RIMS Kokyuroku*, 2000, 178-191.
56. C. Martin-Vide, **V. Mitrana**: Uniquely parsable CD grammar systems, *Sixth Intern. Workshop on Parsing Technologies IWPT 2000*, 2000, 313-315.
57. **V. Mitrana**: Parsability approaches in CD grammar systems, *Proceedings of the Workshop in Grammar Systems*, Bad Ischl, 2000, 165-185.
58. **V. Mitrana**, R. Stiebe: Extended finite automata over groups. *Proc. of the 1st Conference on Semigroups and Algebraic Engineering*, Aizu, World Scientific, 1999, 317-329.
59. **V. Mitrana**: On the degree of communication in parallel communicating finite automata, *Workshop on Descriptive Complexity of Automata, Grammars and Related Structures*, Otto-von-Guericke Universitat, 155-165, 1999.
60. J. Dassow, **V. Mitrana**: The degree of parallelism in contextual grammars with the strategy of minimal competence. In *Mathematical and Computational Analysis of Natural Language*, Studies in Functional and Structural Linguistics 45, John Benjamins, Amsterdam, 1998, 3-16.
61. C. Martin-Vide, **V. Mitrana**: Cooperation in contextual grammars. In *MFCS '98 Workshop on Grammar Systems. Proceedings*, Silesian University, Institute of Computer Science, 1998, 289-302.
62. A. Atanasiu, **V. Mitrana**: Distributed encryption systems. In *Proc. of ROSYCS '98*, 1998, 47-56.
63. C. Martin-Vide, **V. Mitrana**: An algebraic model of synonymy. In *MFCS '98 Workshop on Mathematical Linguistics. Proceedings*, University of Hamburg, Fachbereich Informatik, Bericht 213/1998, 107-115.
64. J. Dassow, **V. Mitrana**: Evolutionary grammars: a grammatical model for genome evolution. *Bioinformatics. Proceedings of GCB '96*, LNCS 1278, Springer-Verlag, 1997, 199-209.
65. J. Dassow, **V. Mitrana**: On some operations suggested by the genome evolution. *Pacific Symposium on Biocomputing '97*, Hawaii, 1997, 97-108.
66. J. Dassow, **V. Mitrana**, G. Paun: Point mutations in context-free languages. *Proc. of DLT '97*, 1997, 429-446.
67. **V. Mitrana**: Binary self-adding sequences. *Developments in Language Theory. At the Crossroads of Mathematics, Computer Science and Biology*, World Scientific Publishing, 1996, 62-68.
68. L. Ilie, **V. Mitrana**: Crossing-over on languages. A formal representation of the recombination of genes in a chromosome. *German Conference on Bioinformatics GCB '96*, Leipzig, Germany, 1996, 87-93.
69. **V. Mitrana**: On some classes of grammar systems. *Developments in Theoretical Computer Science, Proc. of the 7th IMYCS '92*, Gordon and Breach Science Publishers, 1994, 153-162.

70. A. Atanasiu, **V. Mitrana**: Substitution on words and languages. *Developments in language theory. At the Crossroads of Mathematics, Computer Science and Biology* (A.Salomaa, G.Rozenberg, eds.), World Scientific Publishing, 1994, 51-60.
71. A. Atanasiu, **V. Mitrana**: Formal cryptation systems. *Proc. of COMP-Sec '94*, Technical Military Academy of Romania, 1995, 29-36.
72. A. Atanasiu, **V. Mitrana**: Parallel substitution on words and languages. *Proc. of the 9th ROSYCS '93*, Iasi, 1993, 24-30.
73. **V. Mitrana**: On grammatical interpretation. *Proc. of the Third Colloquium on Logics, Languages, Math. Linguistics*, Brasov, Romania, 1991, 86-93.
74. **V. Mitrana**: Leftmost derivation in modular grammars, *Proc. of the 7th National Symp. "Info-lasi"*, Iasi, Romania, 1989, 83-88.
75. A. Atanasiu, **V. Mitrana**: Queue automata. Decisions problems. *Proc. of the Second Colloquium on Logics, Languages, Math. Linguistics*, Brasov, Romania, 1988, 1-6.
76. A. Atanasiu, **V. Mitrana**: Modular grammars. Generative power and properties of closure. *Proc. of the Second Colloquium on Logics, Languages, Math. Linguistics*, Brasov, Romania, 1988, 161-168.
77. A. Atanasiu, **V. Mitrana**: A convergent structure on the power series space, *Proc. of the 6th National Symp. "Info-lasi"*, Iasi, Romania, 1987, 41-49.

B Non-refereed scientific articles

B1 Non-refereed journal articles

1. M. ter Beek, C. Martin-Vide, **V. Mitrana**: *Synchronized shuffles*, Technical Report 2003-TR-40, Istituto di Scienza e Tecnologie dell'Informazione, Consiglio Nazionale delle Ricerche, 2003.
2. J. Dassow, **V. Mitrana**, Gh. Paun: On the regularity of duplication closure, *Bulletin of the EATCS*, 69 (1999), 133-137. ([European Association for Theoretical Computer Science](#))
3. A. Atanasiu, C. Martin-Vide, **V. Mitrana**: *On the sentence valuations in a semiring. An approach to the study of synonymy*, TUCS Technical Report No 224, 1998.
4. **V. Mitrana**, G. Rozenberg, A. Salomaa: *On the crossover distance*, TUCS Technical Report No 223, 1998.
5. **V. Mitrana**: Some remarks on morphisms and primitivity. *Bulletin of the EATCS*, 62 (1997), 213-216. ([European Association for Theoretical Computer Science](#))
6. **V. Mitrana**, R. Stiebe: *The accepting power of finite automata over groups*. Turku Centre for Computer Science, TR 70, 1996.
7. V. Mihalache, **V. Mitrana**: *Deterministic cooperating distributed grammar systems*. Turku Centre for Computer Science, TR 63, 1996.
8. **V. Mitrana**: Distributed catenation versus shuffle. *Bulletin of the EATCS*, 58 (1996), 163-167. ([European Association for Theoretical Computer Science](#))
9. J. Dassow, **V. Mitrana**, A. Salomaa: *Context-free evolutionary grammars and the structural language of nucleic acids*. Turku Centre for Computer Science, TR 68, 1996.
10. **V. Mitrana**: *On morphisms preserving primitive words*. Turku Centre for Computer Science, TR 69, 1996.
11. L. Ilie, **V. Mitrana**: *Crossing-over on languages. A formal representation of the recombination of genes in a chromosome*. Turku Centre for Computer Science, TR 32, 1995.
12. **V. Mitrana**, Gh. Paun, G. Rozenberg, A. Salomaa: *Pattern systems*. Technical Report 94-20 (1994), University of Leiden, The Netherlands.
13. **V. Mitrana**: Some remarks on Paun-Salomaa sequences. *Bulletin of the EATCS*, 49 (1993), 175-178. ([European Association for Theoretical Computer Science](#))
14. E. Csehaj-Varju, J. Dassow, **V. Mitrana**, Gh. Paun: *Cooperation in grammar systems: universality, similarity, timing*. Technische Universität "Otto von Guericke" Magdeburg, INF-

4-93, 1993.

15. **V. Mitrana**: Valence grammars on a free generated group. *Bulletin of the EATCS*, 47 (1992), 174-179. (European Association for Theoretical Computer Science)

C Scientific books (monographs)

C1 Books

1. **V. Mitrana**: *New Developments in Formal Language Theory Inspired from Biology*, The Publishing House of the University of Bucharest, 2001. ISBN: 973-575-535-1
2. **V. Mitrana**: *Bioinformatics*. L&S Infomat Publishing House, Bucharest, 1998, (in Romanian). ISBN: 973-96382-9-5
3. **V. Mitrana**: *The Challenge of Algorithms*. Agni Publishing House, Bucharest, 1995, (in Romanian). ISBN: 973-96357-2-9

C2 Edited books, conference proceedings or special issue of a journal

1. Z. Esik, C. Martin-Vide, **V. Mitrana**: *Recent Advances in Formal Languages and Applications*, Springer-Verlag, Berlin, 2006. ISBN: 978-3540209072
2. **V. Mitrana**, *Special Issue on the 1st International PhD School on Formal Languages and Applications*, GRAMMARS vol.7 (2004). ISSN: 1386-7393
3. C. Martin-Vide, **V. Mitrana**, G. Paun: *Formal Languages and Applications*, Springer Verlag, Berlin, 2003. ISBN: 978-3540334606
4. C. Martin-Vide, **V. Mitrana**: *Grammars and Automata for String Processing. From Mathematics and Computer Science to Biology and Back*, Taylor and Francis, London, 2003. ISBN: 978-0415298858
5. C. Martin-Vide, **V. Mitrana**: *Where Do Mathematics, Computer Science, Linguistics and Biology Meet*, Kluwer Academic, Dordrecht, 2000. ISBN: 0-7923-6693-X

D Theses

D1 Licentiate thesis

1. **V. Mitrana**: *Strict Deterministic Grammars*, University of Bucharest, Romania, 1986. (Supervisor: Prof. A. Atanasiu)

D2 Doctoral dissertation (monograph)

1. **V. Mitrana**: *Distributed Grammar Systems*, University of Bucharest, Romania, 1993. (Supervisor: Acad. Gh. Păun).