1. **Institutul de Matematică "Simion Stoilow" al Academiei Române**

2. **Lista cărţilor publicate în 2003 în edituri străine**

    1. Gh. Păun, M. Cavaliere, C. Martin-Vide, eds., *Proceedings of the Brainstorming Week on Membrane Computing*, Tarragona, February 2003, Technical Report 26/03, Rovira i Virgili University, Tarragona, 2003, (254 pagini);

    2. Gh. Păun, A. Alhazov, C. Martin-Vide, eds., *Pre-proceedings of Workshop on Membrane Computing*, WMC 2003, Tarragona, Spain, July 2003, Technical Report 28/03, Rovira i Virgili University, Tarragona, 2003 (472 pagini);

    3. Gh. Păun, C. Martin-Vide, V. Mitrana, eds., *Formal Language Theory and Applications*, Springer-Verlag, 2004 (in press);

    4. Gh. Păun, C. Martin-Vide, G. Rozenberg, A. Salomaa, eds., *Membrane Computing, International Workshop*, WMC 2003, Tarragona, July 2003, LNCS 2933, Springer-Verlag, Berlin, 2004 (382 + x pagini);

    5. Gh. Păun, G. Rozenberg, A. Salomaa, eds. *Current Trends in Theoretical Computer Science. The Challenge of the 21st Century*, Vol. I *Algorithms and Complexity* (670 + xii pagini), Vol. II *Logics and Semantics* (656 + xii pagini), World Scientific, Singapore, 2004;

    6. Gh. Păun, N. Jonoska, G. Rozenberg, eds., *Aspects of Molecular Computing. Essays in Honor of the 70th Birthday of Tom Head*, LNCS 2950, Springer-Verlag, Berlin, 2004 (390 + x pagini);

    7. Gh. Păun, Co-editor de volume speciale la *Romanian Journal of Information Science and Technology* (Ed. Academiei), *Natural Computing* (Kluwer), *New Generation Computing* (Springer-Verlag);

3. **Lista cărţilor publicate în 2003 în edituri din România**

    1. M. Cipu, *Clase de inele şi module*, Ed. Univ. Bucureşti, 2003;

    2. R. Iordănescu, *Jordan Structures in Geometry and Physics with an Appendix on Jordan Structures in Analysis*, Editura Academiei Române, martie 2003, 201 pag., am primit numeroase mesaje de apreciere, ale căror copii vi le-am predat direct (Anexa 1), precum şi mai multe lucrări recente. N.B. Se poate constata cu uşurinţă (utilizând bibliografia cărţii) că mesajele au venit de la cei mai valoroşi specialişti în domeniu;

4. **Lista capitolelor din monografii apărute în 2003 în străinătate**

    1. T. Albu, *Cogalois Theory*, A Series of Monographs and Textbooks, Vol. 252, Marcel Dekker, Inc., New York and Basel, 2003, 368 pp.;

    2. G. Bucur, Aspects of NumberTheory in terms of Potential Theory, Advances in Math. Researche, vol. 2, pg. 105-150 in Nova Science Publications, New-York;

    3. V. Drăgan, T. Morozan, A. Stoica, *The disturbance attenuation problem for a general class of linear stochastic systems*, Advances in Automatic Control, Mihail Voicu (Ed.) Kluwer Academic Publishers, Boston, Dordrecht, London, 2003, pp.39-54;

    4. H. Ene, *Application of the Homogenization Method to Flow through Porous Media* in vol. "Current Issues on Heat and Mass Transfer in Porous Media", Proceedings of the NATO Advanced Study Institute on Porous Media, 9-20 June 2003 Neptun, ed. D.B. Ingham, Ovidius University Press;

    5. C. Ionescu, *Torsion in tensor powers and flatness* în vol. "Commutative algebra, singularities and computer", J.Herzog, V. Vuletescu(eds.), Algebra-Kluwer, 2003;

    6. G. Paşa, *The control of Saffman - Taylor instability*, Proc. Conf. "Analysis and Optimiz. Diff. Systems", Constanţa, 2002, Kluwer Academic Press, 2003, D. Tiba, C. Vârsan, Eds., 291-297;

    7. D. Popescu, *Rank one maximal Cohen-Macaulay modules over singularities of type $y_1^3 + \ldots y_4^3$* (cu V. Ene). A apărut în "Commutative Algebra, Singularities and Computer Algebra", Eds: J. Herzog, V. Vuletescu, NATO Science Series, Vol 115, Kluwer Acad. Publ., Dordrecht-Boston-London, 2003, pp. 141-157;

5. Lista capitolelor din monografii apărute în 2003 în România

1. L. Badea - *On a multiplicative Schwarz domain decomposition method for variational inequalities*, în L. Badea, C. Făciu, L. Graţie, M. Mihăilescu-Suliciu, D. Polişevski and N. Simion, "Current Topics in Continuum Mechanics", vol. II, Lazăr Dragoş, Ed., Editura Academiei, 2003;

2. C. Făciu, M. Mihăilescu-Suliciu, *On modelling exothermic/endothermic phase transformations in shape memory alloys*, pp. 41-86 in "Current Topics in Continuum Mechanics", vol. II, Ed. Lazăr Dragoş, Editura Academiei;

3. D. Polişevschi, *The regularized diffusion in partially fractured porous media*, în "Current Topics in Continuum Mechanics", vol. 2, L. Dragoş (edt.), Ed. Acad. Rom., 36-48, 2003;

6. Lista articolelor ştiinţifice apărute în reviste de specialitate din străinătate în 2003

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2. C. Ambrozie, F. Vasilescu, *Operator Theoretic Positivsatze*, Zeitschrift fur Analysis un Anwend., vol. 22:2 (2003), p. 299-314;

3. D. Belţiţă, *Complex homogeneous spaces of pseudo-restricted groups*, Mathematical Research Letters 10 (2003), no. 4, 459–467;

4. F. Boca, R. Gologan, A. Zaharescu, *The average length of a trajectory in a certain billiard in a flat two-torus*, New York Journal of Mathematics 9 (2003), pp. 303-330.;

5. F. Boca, R. Gologan, A. Zaharescu, *The statistics of the trajectory of a certain billiard in a flat two-torus*, Commun. Math. Phys. 240 (2003), pp 53-73.

6. A. Gheondea, G. Popescu, *Joint similarity and dilations for noncontractive sequences of operators*, Journal of Functional Analysis 197 (1): 68-109, 2003;

7. A. Gheondea, G. Popescu, *Bounded characteristic functions and models for noncontractive sequences of operators*, Integral Equations and Operator Theory, 45 (1): 15-38, 2003;

8. N. Popa, Sorina Bârză, Lars-Erik Persson, *A matriceal analogue of Fejer's theory*, Math. Nachr. 260, pp. 14-20, 2003;

9. B. Prunaru, *Strongly reductive algebras are selfadjoint*, Journal of Operator Theory, vol. 48, no. 3 (2002) p. 615-619 (Această lucrare a ieşit de sub tipar după raportul de activitate pe 2002 şi nu am inclus-o în acel raport ca lucrare publicată);

10. Dykema, Ken; Rădulescu, Florin *Rescalings of free products of* II_1-*factors.* Proc. Amer. Math. Soc. 131 (2003), no. 6, 1813–1816;

11. Getán, J.; Martnez-Legaz, J.-E.; Singer, I. $(*, s)$-*dualities. Optimization and related topics, 1.* J. Math. Sci. (New York) 115 (2003), no. 4, 2506–2541;

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13. M. Stoiciu: *An estimate for the number of bound states for the Schrödinger operatror in two dimensions*, Proc. Am. Math. Soc. August 2003 (versiune electronică);

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19. L. Stoica, *A probabilistic interpretation of the divergence and BSDE's*, Stoch. Proc. Appl., vol. 103, 31-55 (2003);

20. C. Vârsan, *Smooth mappings and Non Fz-Adapted Aolutions Associated with Hamilton-Jacobi Stochastic Ecuations* (cu D. Ijacu), Proceedings Analysis and Optimization of Differential Systems, Kluwer Academic Publishers, 2003;

21. C. Vârsan, *A partitive solution for nonlinear parabolic equations with stochastic perturbations* (cu B. Iftimie), CEJM, Nr. 3, 2003;

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22. M. Aprodu: *On the Vanishing of Higher Syzygies of Curves.II.*, Math. Zeitschrift 243, 775-778 (2003);

23. M. Aprodu, M. Toma, *Une Note sur les Fibrs Holomorphes Non-Filtrables*, C. R. Acad. Sci. Paris 336, 581-584 (2003);

24. M. Aprodu, C. Voisin: *Green-Lazarsfeld's Conjecture for Generic Curves of Large Gonality*. C. R. Acad. Sci. Paris 336, 335-339 (2003);

25. V. Brînzănescu, M. Aprodu, *On the holomorphic rank-2 vector bundles with trivial discriminant over non-Kaehler elliptic bundles*, J. Math. Kyoto Univ. 42 (2002), no. 4, 617-623 (apărut în mai 2003);

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28. M. Colţoiu, *Weakly pseudoconvex domains in 1-convex spaces and the hyperintersection problem*, Math. Z. 2003;

29. M. Colţoiu, *On q-Runge pairs*, Ann. Sc. Norm. Sup. Pisa 2003;

30. M. Colţoiu, M. Tibar, *Steiness of the universal covering of the complement of a 2 dimensional complex singularity*, Math. Ann. 326 (2003), 95-104;

31. A. Constantinescu, *Local structure of subalgebras around 1-height maximal ideals and desingularizations. II*, in Proceedings of the International Conference on "Geometry and its Applications, Cairo, June 19 - 26, 2003", in Algebras, Groups and Geometry, vol. 10, no. 3, september 2003, Hadronic Press;

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33. C. Joiţa, *Traces of convex domains*, în "Proceedings of the American Mathematical Society", vol. 131 (2003), nr. 9, paginile 2721–2725;

34. C. Joiţa, *The third Cauchy-Fantappie formula of Leray*, împreună cu Finnur Larusson, în "Michigan Mathematical Journal", vol. 51 (2003), nr. 2, paginile 339–350;

35. C. Joiţa, *On the n-concavity of covering spaces with parameters*, în "Mathematische Zeitschrift", vol. 245 (2003) nr. 2, paginile 221-231;

36. C. Joiţa, *Inequalities related to rearrangements of powers and symmetric polynomials*, împreună cu P. Stănică, în "Journal of Inequalities in Pure and Applied Mathematics", vol. 4 (2003), no. 2, art.37;

37. M. Mustaţă, *Log discrepancies, jet schemes and Inversion of Adjunction*, împreună cu L. Ein şi T. Yasuda), Invent. Math. 153, 119–135, 2003;

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39. M. Mustaţă, *Divisors on $\mathcal{M}_{g,g+1}$ and the Minimal Resolution Conjecture for points on canonical curves*, împreună cu G. Farkas şi M. Popa, Ann. Sci. École Norm. Sup. 36, 553–581, 2003;

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43. V. Vâjâitu, *Cohomology with compact supports for cohomologically q-convex spaces*, Archiv der Math. 80 (2003), 496–500;

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44. S. Moroianu, *K-theory of suspended pseudo-differential operators*, K-Theory 28 (2003), no. 2, 167–181;

45. Br, Christian; Moroianu, Sergiu *Heat kernel asymptotics for roots of generalized Laplacians*, Internat. J. Math. 14 (2003), no. 4, 397–412;

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48. M. Popa, *Stable maps and Quot schemes* (cu Mike Roth), Invent. Math. 152, no. 3 (2003), 625-663;

49. M. Popa, *Regularity on abelian varieties I* (cu Giuseppe Pareschi), J. Amer. Math. Soc. 16 (2003), 285-302;

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50. T. Albu, *Corrigendum and Addendum to my paper on Kummer extensions with few roots of unity*, J. Number Theory (USA), 99 (2003), 222-224;

51. T. Albu, *Infinite Cogalois Theory, Clifford extensions, and Hopf algebras*, J. Algebra Appl. (USA), 2 (2003), 119-136;

52. M. Cipu, *A bound for the solutions of the Diophantine equation $D_1 x^2 + D_2^m = 4y^n$*, Proc. Japan Acad., 78, Ser. A (2002), 179-180;

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55. C. Cobeli, A. Iordache, A. Zaharescu, *The relative size of consecutive odd denominators in Farey series*, Integers 3 (2003), A7, 14 pp. (electronic);

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