

Curriculum Vitae
Prof.dr. Dorin Popescu

Data si locul nasterii: 21 martie 1947, in comuna Patarlagele, jud.Buzau.

Nationalitate: Romana

Cetatenie: Romana

Adresa oficiala:

- Universitatea din Bucuresti, Facultatea de Matematica, Str. Academiei 14, Bucuresti, 70109, Romania;

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STUDII:

1964-1969 - Absolvent al Facultatii de Matematica, Universitatea din Bucuresti.

1974 - titlul de doctor obtinut cu lucrarea "Proprietatea de aproximare forte pentru inele de valoare discreta"; conducator stiintific Prof.Dr. I.Bucur.

ACTIVITATEA PROFESIONALA

* 1969-1979 - Asistent univ. la Facultatea de Matematica, Universitatea din Bucuresti, Romania;

* 1979-1990 - CP III, Institutul National pentru Stiinta si Creatie Tehnica, Bucuresti, Romania;

* 1990-1993 - CP II, Institutul de Matematica al Academiei Romane, Bucuresti, Romania;

* 1991-1993 - Conf. univ. la Facultatea de Matematica, Universitatea din Bucuresti, Romania;

* 1993 - prezent - CP I, Institutul de Matematica al Academiei Romane, Bucuresti, Romania;

* 1993 - prezent - Prof. univ. la Facultatea de Matematica, Universitatea din Bucuresti, Romania.

DOMENII DE CERCETARE

Algebra comutativa, combinatorica in algebra comutativa, computer algebra, geometrie algebrica.

PREMII OBTINUTE

Premiul I pentru cercetare, Atena (1973), acordat de Uniunea Balcanica de Matematica

Premiul Academiei Romane, 1979.

CONFERINTE SUSTINUTE

Am sustinut conferinte la urmatoarele universitati din strainatate: MIT, Berkeley, Los Angeles, Salt Lake City, Urbana-Champaign (USA), Montreal (Canada), Edinburgh, Glasgow, Sheffield (Marea Britanie), Kyoto, Nagoya (Japonia), Genova, Ferrara, Catania, Cortona (Italia), Barcelona (Spania), Bordeaux, Luminy, Grenoble (Franta), Utrecht (Olanda), Innsbruck, Viena (Austria), Max-Planck Institut Bonn, Bochum, Essen, Stuttgart, Koln, Berlin, Cottbus, Eisenach, Gottingen,

Bielefeld, Kaiserslautern, Oldenburg, Oberwolfach, Osnabruck, Vechta (Germania), Salonic (Grecia), Oslo (Norvegia), Islamabad, Lahore (Pakistan), Varsovia (Polonia), Budapesta (Ungaria), Chisinau (Moldova).

STAGII de CERCETARE in STRAINATATE

- * 1980-1981: bursa NSF la Institute for Advanced Study, Princeton, USA;
- * 1990-1991: bursa Alexander von Humboldt la Universitatea din Essen, Germania;
- * 1992: bursa Alexander von Humboldt (6 luni) la Universitatea din Osnabruck, Abteilung Vechta, Germania;
- * 1993-1997: in fiecare an am fost cate 6 luni profesor invitat la Sonderforschungsbereich 170 Gottingen, Universitatea din Kaiserslautern, respectiv Universitatea din Essen, Germania, cu bursa DFG, respectiv bursa Alexander von Humboldt;
- * 1998: profesor invitat cate o luna la Universitatea din Edinburgh, Scotia; Universitatea din Kaiserslautern, Germania; Sonderforschungsbereich Bielefeld, Universitatea din Bielefeld, Germania;
- * mai-iunie 1999: profesor invitat la Universitatea din Edinburgh, Scotia, cu un grant EPSRC;
- * aprilie 1999: profesor invitat la Universitatea din Kaiserslautern;
- * iulie-septembrie 1999: profesor invitat la Universitatea din Essen, Germania, cu bursa Alexander von Humboldt;
- * ianuarie-martie 2000: profesor invitat la Universitatea din Kaiserslautern, respectiv Universitatea din Essen, Germania, cu un grant DFG, respectiv o bursa DAAD;
- * mai-iunie 2000: profesor invitat la University din Edinburgh, Scotia, cu un grant EPSRC;
- * ianuarie-martie 2001: profesor invitat la Universitatea din Kaiserslautern, respective Universitatea Humboldt Berlin, Germania, cu un grant DFG;
- * iunie 2001: profesor invitat la Universitatea din Bordeaux, Franta;
- * ianuarie-martie 2002: profesor invitat la Universitatea din Essen, Germania, cu bursa Alexander von Humboldt;
- * aprilie 2002: profesor invitat la Universitatea din Barcelona, Spania;
- * mai-august 2002: profesor invitat la Universitatea Humboldt Berlin, Germania;
- * februarie-martie 2003: profesor invitat la MSRI Berkeley, USA;
- * iunie-iulie 2003: profesor invitat la Universitatea din Kaiserslautern, Germania, cu un grant DFG;
- * august 2004 - iulie 2005: profesor invitat la Universitatea din Essen, Germania, cu o bursa Marie Curie Intra-European Fellowship MEIF-CT-2003-501046.

GRANTURI in ultima perioada

- a) personal oferit de Higher Education Comission of Pakistan (2006-2007).
- b) Director Contract 2916/31GR/2006 (director) al Ministerului Educatiei si Cercetarii. tema 20A.
- c) Director Contract CEX nr 249, 2006
- d) Responsabil pe colectivul universitate din contractul CEx06-11-20/25.07.06 (director Brinzanescu),

- e) Responsabil pe IMAR in cadrul contractului SISEB (Biometric Signature Secured e-Banking System) la ANCS (cu Softwin)
- f) participare la -Contract CEx05-D11-11/2005 al Ministerului Educatiei si Cercetarii (Director N. Manolache).
- g) participare la Grant ID-PCE, no 51/28.09.2007 (Director I. Coanda).
- h) Director la Grant PN II Program, CNCISIS, 542/2008.
- i) Director la Grant UEFISCDI grant 247/2011

DIVERSE

Organizator la

- 1) Workshop Cohen-Macaulay Rings and Related Structures, organizat in Universitatea Ovidius, Constanta (Romania) cu suport DFG, April 5-10, 2005 (vezi www.univ-ovidius.ro/math/workshop).
- 2) Mini-Workshop on Commutative Algebra, Essen, Martie 15-17, 2005,
- 3) CIMPA School "Aspects combinatoires et calculatoires de l'algebre commutativ" - CIMPA-UNESCO-Pakistan , Lahore, 21-28 Februarie 2009,
- 4) Conferinta Internationala Busteni iulie, 2007
- 5) Diferite scoli anuale de Algebra din Constanta,
- 6) O scoala de criptografie si una de coduri la Vatra Dornei 2006,2008.

ALTE INFORMATII

* Editor pentru 3 jurnale: Central European Math J, preluat de Springer sub numele de Versita J. (revista internationala indexata ISI); Bull. Math. Soc. Sc. Math. Roumanie (indexata ISI), Analele Universitatii Ovidius Constanta (indexata ISI);

* Presedintele Societatii de Stiinte Matematice din Romania in perioada 2004-2008;

* Vice-presedinte MASSEE (Asociatia Societatilor de Stiinte Matematice din Balcani), 2004-2007;

* Am fost seful Catedrei de Geometrie Complexa, Topologie si Algebra Computationala in perioada 2008-2009.

* Am fost conducatorul de doctorat pentru: Prof. Dr. Viviana Ene, Lector Dr. Marius Vladoiu, Cercetator Dr. Mircea Cimpoias, Lector Dr. Alin Stefan, Asistent Dr. Dumitru Stamate, Dr. Costel Chites (Romania), Dr. Imran Anwar, Dr. Sarfraz Ahmad, Muhammad Imran Qureshi, Muhammad Ishaq (Pakistan).

DESCRIEREA REZULTATELOR SEMNIFICATIVE

Am obtinut diverse rezultate originale privind: aproximare Artin si inele Henseliene, desingularizare Neron, module proiective ale inelelor de polinoame peste un inel regulat, module maximale Cohen-Macaulay, module Quasi-Buchsbaum si module generalizate Cohen-Macaulay, algebre Rees si combinatorica in algebra.

Solutiile mele la cateva conjecturi ale lui M.Artin, Bass-Quillen au fost prezentate la Seminarul Bourbaki de B.Teissier (1993-1994) si de R.Swan in "Neron

Popescu Desingularization” in Algebra and Geometry, Ed.Ming-Chang Kang, International Press, Boston, 1998. Impreuna cu J.Herzog si L.O’Carroll, am generalizat o teorema a lui Knorrer, pe care am folosit-o in descrierea modulelor maximale Cohen-Macaulay peste anumite hipersuprafețe. Mai tarziu, impreuna cu Herzog am demonstrat Conjectura lui Pardue privind regularitatea Mumford-Castelnuovo a idealelor p-Borel si am obtinut rezultate parțiale unei conjecturi a lui Eisenbud-Green-Harris in Cayley-Bacharach Theory and Higher Castelnuovo Theory. Folosind clasificarea Atiyah a fibratilor peste $V(f)$, am reusit impreuna cu R.Laza si G.Pfister sa descriem modulele maximale Cohen-Macaulay peste conul curbei proiective $V(f)$, unde $f = X^3 + Y^3 + Z^3$. De asemenea impreuna cu C.Baciu, V.Ene si G.Pfister am descris modulele maximale Cohen-Macaulay peste suprafața $f = X^3 + Y^3 + Z^3 + U^3$ de rang ≤ 2 .

Recent, impreuna cu J.Herzog am extins conceptul de complex simplicial shelabil si am studiat proprietatile echivalentului algebric, i.e. asa numitul modul ”pretty clean”. Impreuna cu I.Anwar am demonstrat conjectura lui Stanley pentru idealele monomiale in patru variabile si ulterior am demonstrat aceeasi conjectura pentru 5 variabile. Am extins cu Herzog si Vladoiu o teorema importanta a lui Lyubeznik in cadrul invariantului Stanley depth si am obtinut multe cazuri cand Conjectura Stanley are loc ca de exemplu cazul intersectiilor a cel mult 4 ideale monomiale prime.

ARTICOLE STIINTIFICE.

1. Quelques applications de la decomposition triangulaire, Publ. Dept. Math. Lyon 3-4 (1967), p.63-68.
2. On the algebraic categories, Rev. Roum. Math. Pures et Appl. 13 (1968), p.337-342 (cu G.Georgescu).
3. Les faisceaux d’une theorie, C.R. Acad. Sci. Paris 269 (1969), p.380-382.
4. Sur les categories des (t,T)-faisceaux, C.R. Acad. Sci. Paris 269 (1969), p.413-415.
5. Deux extensions des ensembles preordonnes, Rev. Roum. Math. Pures et Appl. 15 (1970), p.569-572 (cu N.Manolache).
6. Some remarks on complete cogenerated categories, Rev. Roum. Math. Pures et Appl. 15 (1970), p.1027-1033.
7. Monoconuri proiective si epiconuri inductive, Stud. Cerc. Mat. 22 (1970), p.641-647.
8. Categories de faisceaux, J. of Algebra 18 (1971), p.343-365.
9. Les faisceaux d’une classe des morphismes, C.R.Acad. Sci. Paris 272 (1971), p.101-103.
10. Cofaisceaux d’une categorie, C.R. Acad. Sci. Paris 272 (1971), p.299-302.
11. A strong approximation theorem over discrete valuation rings, Rev. Roum. Math. Pures et Appl. 20 (1975), p.659-692.
12. Die strenge Approximationseigenschaft lokaler Ringe, Inventiones Math. 30 (1975), p.145-174 (cu G.Pfister).
13. Some algorithmic methods in the theory of local complete rings, Bull. Math. de la Soc. Math. de la Roumaine 22 (70), nr.1 (1978), p.61-69.
14. Algebraically pure morphisms, Rev. Roum. Math. Pures et Appl. 24 (1979), p.947-977.

15. Die approximation von Primidealen, *Bull. de l'Acad. Polonaise Sci.* 27 (1979), p.771-778 (cu G.Pfister).
16. A remark on two-dimensional local rings with the property of approximation, *Math. Z.* 173 (1980), p.235-240.
17. Approximation properties and existential completeness for ring morphisms, *Manuscripta Math.* 33 (1981), p.227-282 (cu S.Basarab si V.Nica).
18. On three dimensional local rings with the property of approximation, *Rev. Roum. Math. Pures et Appl.* 26 (1981), p.301-307 (cu G.Pfister).
19. Some extensions of Neron's p-desingularization and approximation, *Rev. Roum. Math. Pures et Appl.* 26 (1981), p.1299-1304 (cu M.Cipu).
20. Global form of Neron's p-desingularization and approximation, *Proceedings "Week of Algebraic Geometry"*, Bucharest, June 30 - July 6 (1980), Teubner Texte Band 40, Leipzig 1981.
21. On Zariski's Uniformization Theorem, in *Algebraic Geometry, Bucharest 1982, Proceedings, Springer Lect. Notes in Math.*, p.1056, Berlin 1984.
22. Ultraproducts and big Cohen-Macaulay modules, *Stud. si Cerc. Mat.* 36 (1984), p.424-428 (cu C.Mateescu).
23. A desingularization theorem of Neron type, *Ann. Univ. Ferrara*, 30 (1984), p.63-76 (cu M.Cipu).
24. General Neron desingularization, *Nagoya Math. J.*, 100 (1985), p.97-126.
25. A structure theorem on formally smooth morphisms in positive characteristic, *J. of Algebra*, 100 (1986), p.436-455 (cu V.Nica).
26. Some structure theorems for valuation rings, *Rev. Roum. Math. Pures Apl.*, 31 (1986), p.577-582.
27. General Neron desingularization and Approximation, *Nagoya Math. J.*, 104 (1986), p.85-115.
28. Artin approximation theory and applications, *Analele St. ale Univ. Iasi* 31 (1985 supliment), p.11-14.
29. A certain desingularization Theorem, *Analele St. ale Univ. Iasi*, 31 (1985 supliment), p.20-22 (cu M.Cipu).
30. Ultraproducts and Hochster's modifications, *Analele St. ale Univ. Iasi*, 31 (1985 supliment), p.26-27 (cu C.Mateescu).
31. On the structure of formally smooth morphisms, *Analele St. ale Univ. Iasi*, 31 (1985 supliment), p.33-34 (cu V.Nica).
32. Algebraic extensions of valued fields, *J. of Algebra*, 108 (1987), p.513-533.
33. Algebrization of deformation of exceptional couples, *Rev. Roum. Math. Pures et Appl.*, 33 (1988), p.251-260 (cu M.Roczen).
34. Polynomial rings and their projective modules, *Nagoya Math. J.*, 113 (1989), p.121-128.
35. Flatness in non-Noetherian ring theory, *Rev. Roum. Math. Pures et Appl.*, 34 (1989), p.839-854.
36. Immediate extensions of filtered rings, *Annali di Ferrara*, 35 (1989), p.35-37 (cu W.Morariu).
37. Indecomposable Cohen-Macaulay modules and the Brauer-Thrall Conjectures, *Proceedings of the Algebra Conference 9-10 June 1988, Brasov.*
38. Indecomposable Cohen-Macaulay modules and irreducible maps, *Compositio Math.*, 76 (1990), p.277-294 (cu M.Roczen).

39. Letter to the Editor, General Neron desingularization and approximation, Nagoya Math. J., nr.118 (1990), p.45-53.
40. Indecomposable Cohen-Macaulay modules and their multiplicities, Trans, AMS 323 (1989), p.369-387.
41. The second Brauer-Thrall conjecture, Manuscripta Math., 71 (1991), p.375-383 (cu M.Roczen).
42. Liftings of finite injective dimension modules, Analele Univ. Bucuresti XL (1991), p.65-75.
43. Indecomposable generalized Cohen-Macaulay modules, Trans. Amer. Math. Soc. 342 (1994), p.107-136 (cu M.Cipu si J.Herzog).
44. Relative liftings, J. Pure Appl. Algebra, 108 n.3 (1996).
45. Maximal Cohen-Macaulay modules over isolated singularities, J. of Algebra 178 (1995), p.710-732.
46. Deformations of maximal Cohen-Macaulay modules, Math. Z., 223 (1996), p.309-332 (cu G.Pfister).
47. Maximal Cohen-Macaulay modules and their deformations, Analele St. Univ. Constanta, v.II (1994), p.112-119.
48. Thom-Sebastiani problems for maximal Cohen-Macaulay modules, Math. Ann., 309 (1997), 677-700 (cu J.Herzog).
49. Infinitesimal module deformations in the Thom-Sebastiani problem, Archiv der Math. 69 (1997), p.196-208 (cu F.Enescu si G.Pfister).
50. Hilbert functions and generic forms, Compositio Math. 113 (1998), p.1-22 (cu J.Herzog).
51. Maximal Cohen-Macaulay modules over singularities of type $X^t + Y^3$, Revue Roum. Math. Pures et Appl., 42, no.7-8 (1997), p.591-619 (cu B.Martin and G.Pfister).
52. Special Cohen-Macaulay modules over singularities of type $X^{3r} + Y^3$, Analele Stiintifice Constanta, 5, no.2 (1997), p.112-119.
53. A family of Cohen-Macaulay modules over singularities of type $X^t + Y^3$, Commun. in Alg., 27(6)(1999), p.2555-2572 (with G.Pfister).
54. Variations on Green Theorem concerning the Hilbert functions, in: "Commutative Algebra and Algebraic Geometry" editor F.Van Oystaeyen, Dekker Lect. Notes in Pure and Appl. Math. 206(1999), p.237-244.
55. Steps in the classification of Cohen-Macaulay modules over singularities of type $X^t + Y^3$, Algebras and Representation Theory, vol.2, no.2 (1999), p.137-175 (cu V.Ene).
56. Free resolutions for deformations of maximal Cohen-Macaulay modules, Commun. In Alg., 28 (11) (2000), p.5329-5352 (cu L.O'Carroll).
57. On a Theorem of Knrre concerning Cohen-Macaulay modules, J. of Pure and Appl. Alg. (2000) (cu L.O'Carroll).
58. Betti numbers for p-stable ideals, Communications in Algebra, 28 (3), (2000), p.1515-1531 (cu V.Ene si G.Pfister).
59. Combinatorics in Algebra and Geometry, Italian Journal of Pure and Appl. Math., no.7 (2000), p.27-32.
60. Variations on Nron desingularization, in: Sitzungsberichte der Berliner Mathematischen Gessellschaft, Berlin, 2001, p.143-151.
61. Splitting syzygies, J. of Alg. 228 (2000), p.682-709 (cu L.O'Carroll).

62. On the regularity of p-Borel ideals, Proceedings of AMS 129 (2001), p.2563-2570 (cu J.Herzog).
63. Betti numbers and the regularity of p-Borel ideals, Bul. St. Univ. Pitesti, Ser. Mat.Inf., 5 (2001), 1-7.
64. Regularity of Rees algebras, J. London Math. Soc., (2) 65, (2002), p.320-338 (cu J.Herzog si N.V.Trung).
65. Explicit linear minimal free resolutions over a natural class of Rees algebras, Archiv Math., 81 (2003), p.636-645 (cu J.Herzog si L.O'Carroll).
66. Maximal Cohen-Macaulay modules over $Y_{13+} + Y_{n3}$ with few generators, Math. Reports 3 (53), 2 (2001), p.177-185 (cu R.Laza si L.O'Carroll).
67. Cohen-Macaulay representation, in Algebra-Representation Theory, Eds. K.W.Roggenkamp si M. Stefanescu, Kluwer, 2001, p.249-256.
68. Maximal Cohen-Macaulay modules over the cone of an elliptic curve, J. Alg., 253, (2002), p.209-236 (cu R.Laza, G.Pfister).
69. Grbner basis and depth of Rees algebras, Anal. Univ. Ovidius, Constanta, IX (2001), p.81-88.
70. On the Ext-modules of ideals of Borel type, in Commutative Algebra, Interactions with Algebraic Geometry, Eds: L. Avramov et al, Contemporary Math. Nr 331, AMS, Providence, 2003, 171-186 (cu J. Herzog, M. Vladoiu).
71. Rank one maximal Cohen-Macaulay modules over singularities of type $Y_1^3 + Y_2^3 + Y_3^3 + Y_4^3$, in Commutative Algebra, Singularities and Computer Algebra, Eds: J. Herzog, V. Vuletescu, NATO Science Series, Vol 115, Kluwer Acad. Publ., Dordrecht-Boston-London, 2003, 141-157 (cu V.Ene).
72. Rank two maximal Cohen-Macaulay modules over singularities of type $Y_1^3 + Y_2^3 + Y_3^3 + Y_4^3$, J. Alg., 292, (2005), p.447-491 (cu C.Baciu, V.Ene, G.Pfister).
73. On a question of Quillen, Bull. Math. Soc. Sci. Roum., Vol.45 (93), no.3-4 (2002), p.209-212.
74. Finite filtrations of modules and shellable multicomplexes, Manuscripta Math., 121, no.3, (2006), p.385-410 (cu J. Herzog).
75. Extremal Betti numbers and regularity of Borel type ideals, Bull Math. Soc. Sc. Roum. Vol.48 (96), no.1 (2005), p.65-72.
76. Lifting an ideal from a tight Bourbaki sequence and maximal Cohen-Macaulay modules, in NATO Science Series, Vol.196, Kluwer Acad. Publ., Dordrecht-Boston-London, Eds: G.Pfister, S.Cojocaru, V.Ufnarovski, 2005, 90-103.
77. Criteria for shellable multicomplexes, Annalele St. Univ. Ovidius, Constanta, 14(2), (2006), 73-84.
78. A monomial cycle basis of Koszul homology modules, J. of Pure and Appl. Algebra, 212(2008), 132-139.
79. The strong Lefschetz property and simple extensions, (with J.Herzog), arXiv:math.AC/0506537.
80. The strong Lefschetz property and certain complete intersection extensions, Bull. Math. Soc. Sc. Math. Roumanie, 48(96), no.4, (2005), 421-431.
81. Strong Lefschetz property on algebras of embedding dimension three, (with M. Vladoiu), Bull. Math. Soc. Sc. Math. Roumanie, 49(97), no.1, (2006), 75-86.
82. On the structure of MCM-modules over the ring $K[[x, y]]/(x^n)$, (cu V. Ene), Algebras and Representation Theory, (11) no.2, (2008), 191-205.
83. Binomial cycle basis on Koszul homology modules, Communications in Algebra, (36), (2008), 1789-1800.

84. Sequentially Cohen-Macaulay monomial ideals of embedding dimension four, (with S.Ahmad), Bull. Math. Soc. Sc. Math. Roumanie, 50(98), no.2, (2007), 99-110.
85. Stanley conjecture in small embedding dimension, (with I.Anwar), J. Algebra (318), (2007), 1027-1031.
86. Stanley depth of monomial ideals, in Proceedings of the Sixth Congress of Romanian Mathematicians, vol. I, 2007, 71-74.
87. Stanley depth of multigraded modules, Journal of Algebra **321** (2009), 2782-2797.
88. An inequality between depth and Stanley depth, Bull. Math. Soc. Sc. Math. Roumanie **52**(100) (2009), 377-382.
89. Computing the Stanley depth (with Muhammad Qureshi), Journal of Algebra, **323** (2010), 2943-2959.
90. Stanley conjecture on intersection of four monomial prime ideals, arXiv:1009.5646v1, 2010.
91. Bounds of Stanley depth, An. St. Univ. Ovidius. Constanta, 19(2),(2011), 187-194.
92. Stanley depth and size of a monomial ideal, (with J. Herzog and M. Vladioiu), Proceedings of AMS, 140 (2012), 493-504, arXiv:AC/1011.6462v1
93. Graph and depth of a square free monomial ideal, arXiv:1104.5596v1, 2011, to appear in Proceedings of AMS.
94. Depth and minimal number of generators of square free monomial ideals, to appear in An. St. Univ. Ovidius. Constanta, arXiv:1107.2621, 2011.
95. Depth of factors of square free monomial ideals, arXiv:1110.1963, 2011.

CARTI SI MANUALE.

1. Die Approximationseigenschaft lokaler Ringe, Springer Lect. Notes in Math. 634, 1978, Berlin (cu H.Kurke, T.Mostowski, G.Pfister si M.Roczen).
2. Inele henseliene si proprietatea de aproximarare, Ed. Univ. Bucuresti, 1979 (cu V.Nica).
3. Elemente de teoria grupurilor finite si aplicatii, Ed. Stiintifica Enciclopedica, 1986 (cu C.Vraciu).
4. Artin approximation, in Handbook of Algebra, vol.2, Ed. M.Hazewinkel, 2000 Elsevier Science, 321-356.
5. Artin Approximation, in Encyclopaedia of Mathematics, Supplement II, Ed. M.Hazewinkel, Kluwer Academic Publishers, 2000, 30-32.
6. Inele Cohen-Macaulay, in "Seminar de Algebra, Inele si Module Cohen-Macaulay", Ed.M.Stefanescu, Tip. Univ. Iasi, 1986, Cap.IV.
7. Module Cohen-Macaulay si conjecturi omologice, in "Probleme actuale ale cercetarii matematice", vol.II, Tip. Univ. Bucuresti, 1992, 101-113.
8. Bounds for Betti numbers, in "Combinatorics in algebra and geometry", Sem. Ser. Math. Algebra: 2, Tip. Univ. Ovidiu University, Constanta, 1998, 65-70.
9. F-rational and strong F-rational rings, in "Tight Closure", Sem. Ser. Math., Tip. Univ. Ovidiu University, Constanta, 2001, 31-42.
10. Criptografie, coduri, algoritmi, (cu C.Gherghe), Ed. Univ. din Bucuresti, 2005.

11. Modern Algebra (in Romanian), in *Enciclopedie Matematica*, Editors: Marius Iosifescu, Octavian Stanasila, Dan Stefanoiu, AGIR (2010), 805-823.