

FORMAT
EUROPEAN
CURRICULUM VITAE



INFORMATII PERSONALE

Nume Pastravanu Octavian Cezar
Adresa
Telefon
Fax
E-mail

Nationalitate Romana

Data nasterii

EXPERIENTA PROFESIONALA

- Perioada 1994-prezent
• Numele si adresa angajatorului Universitatea Tehnica "Gh. Asachi" Iasi, Facultatea de Automatica si Calculatoare, B-dul Dimitrie Mangeron nr. 53A, Iasi
• Tipul activitatii sau Sector de activitate Invatamant si cercetare
 - Functia sau postul ocupat Cadru didactic universitar (conferentiar 1994-1998, profesor 1998-prezent)
 - Principalele activitati si responsabilitati Predare cursuri si conducere sedinte de aplicatii la disciplinele: Teoria sistemelor, Aplicatii ale retelelor neurale în automata, Sisteme cu evenimente discrete, Modelarea proceselor
Cercetare in domeniile: Inteligenta artificiala, Retele Petri, Tehnici de analiza calitativa a dinamicii sistemelor
- Perioada 1993-1994
• Numele si adresa angajatorului Automation and Robotics Research Institute, The University of Texas at Arlington, 7300 Jack Newell Blvd. S., Fort Worth, TX 76118, USA
• Tipul activitatii sau Sector de activitate Cercetare
 - Functia sau postul ocupat Cercetator asociat (bursa postdoctorala acordata de Sistemul Universitar al Statului Texas)
 - Principalele activitati si responsabilitati Cercetare in domeniul: Sisteme de fabricatie cu evenimente discrete
- Perioada 1992-1993
• Numele si adresa angajatorului Department of Electrical Energy, Systems & Automation, The University of Ghent, Technologiepark 913, 9052 Ghent, Belgium
• Tipul activitatii sau Sector de activitate Cercetare
 - Functia sau postul ocupat Cercetator asociat (bursa postdoctorala acordata de Guvernul Belgiei)
 - Principalele activitati si responsabilitati Cercetare in domeniul: Tehnici de inteligenta artificiala in identificarea si conducerea sistemelor
- Perioada 1986 → 1992
• Numele si adresa angajatorului Universitatea Tehnica "Gh. Asachi" Iasi (Institutul Politehnic "Gh. Asachi"), Facultatea de Automatica si Calculatoare, B-dul Dimitrie Mangeron nr. 53A, Iasi
• Tipul activitatii sau Sector de activitate Invatamant si cercetare
 - Functia sau postul ocupat Cadru didactic universitar (asistent 1986-1990, sef de lucrari 1990-1992)

<ul style="list-style-type: none"> • Principalele activitati si responsabilitati 	<p>Predare cursuri si conducere sedinte de aplicatii la disciplinele: Teoria sistemelor, Metode numerice, Regulate automate</p> <p>Cercetare in domeniile: Tehnici de modelare și simulare, Aplicatii de timp real pentru conducerea proceselor, Inteligenta artificiala – calcul simbolic</p>
<ul style="list-style-type: none"> • Perioada 	1982-1986
• Numele si adresa angajatorului	Institutul pentru Automatizari si Telecomunicatii IPATCT Bucuresti - Filiala Iasi, Str. Horia nr 5-8, Iasi
• Tipul activitatii sau Sector de activitate	Cercetare si inginerie tehnologica
• Functia sau postul ocupat	Inginer cercetare
• Principalele activitati si responsabilitati	Proiectare, implementare și testare produse software
EDUCATIE SI FORMARE	
• Perioada	1993 -1994
• Numele si tipul institutiei de invatamant si al organizatiei profesionale prin care s-a realizat formarea profesionala	Automation and Robotics Research Institute, The University of Texas at Arlington, 7300 Jack Newell Blvd. S., Fort Worth, TX 76118, USA (bursa postdoctorala acordata de Sistemul Universitar al Statului Texas)
• Domeniul studiat/aptitudini ocupationale	Sisteme automate: Sisteme de fabricatie cu evenimente discrete
• Tipul calificarii/Diploma obtinuta	Specializare in cercetare
• Nivelul de clasificare a formei de instruire/invatamant	Postdoctoral
• Perioada	1992 -1993
• Numele si tipul institutiei de invatamant si al organizatiei profesionale prin care s-a realizat formarea profesionala	Department of Electrical Energy, Systems & Automation, The University of Ghent, Technologiepark 913, 9052 Ghent, Belgium (bursa postdoctorala acordata de Guvernul Belgiei)
• Domeniul studiat/aptitudini ocupationale	Sisteme automate: Tehnici de inteligenta artificiala in identificarea si conducerea sistemelor
• Tipul calificarii/Diploma obtinuta	Specializare in cercetare
• Nivelul de clasificare a formei de instruire/invatamant	Postdoctoral
• Perioada	1989 -1992
• Numele si tipul institutiei de invatamant si al organizatiei profesionale prin care s-a realizat formarea profesionala	Universitatea Tehnica "Gh. Asachi" Iasi (Institutul Politehnic "Gh. Asachi"), Facultatea de Automatica si Calculatoare (Facultatea de Electrotehnica), B-dul Dimitrie Mangeron nr. 53A, Iasi
• Domeniul studiat/aptitudini ocupationale	Sisteme automate : Tehnici de analiza si conducere pentru sisteme cu parametri necunoscuti
• Tipul calificarii/Diploma obtinuta	Doctor inginer / Diploma de doctor inginer
• Nivelul de clasificare a formei de instruire/invatamant	Doctorat
• Perioada	1977 -1982
• Numele si tipul institutiei de invatamant si al organizatiei profesionale prin care s-a realizat formarea profesionala	Universitatea Tehnica "Gh. Asachi" Iasi (Institutul Politehnic "Gh. Asachi"), Facultatea de Electrotehnica, B-dul Dimitrie Mangeron nr. 53A, Iasi
• Domeniul studiat/aptitudini ocupationale	Automatica si calculatoare
• Tipul calificarii/Diploma obtinuta	Inginer / Diploma de inginer – Automatica si calculatoare
• Nivelul de clasificare a formei de instruire/invatamant	Studii universitare

APTITUDINI SI COMPETENTE PROFESIONALE Dobandite in cursul vietii si carierei dar care nu sunt recunoscute neaparat printr-un certificate sau o diploma.	
LIMBA MATERNA	Romana
LIMBI STRAINE CUNOSCUTE	
Engleza <ul style="list-style-type: none"> • abilitatea de a citi • abilitatea de a scrie • abilitatea de a vorbi 	Utilizator experimentat Utilizator experimentat Utilizator experimentat
Franceza <ul style="list-style-type: none"> • abilitatea de a citi • abilitatea de a scrie • abilitatea de a vorbi 	Utilizator experimentat Utilizator independent Utilizator independent
APTITUDINI SI COMPETENTE SOCIALE	Abilitati de comunicare si negociere. Colaborari eficiente ca membru in echipe.
APTITUDINI SI COMPETENTE ORGANIZATORICE	Experienta in managementul activitatilor specifice mediului academic (proiecte / colaborari pe teme didactice sau stiintifice la nivel international, national si local).
APTITUDINI SI COMPETENTE TEHNICE	Formatie tehnico – stiintifica Utilizator avansat al tehnicii de calcul – in conformitate cu atributiile profesionale
ALTE APTITUDINI SI COMPETENTE	Literatura si exegeza literara
PERMIS DE CONDUCERE	Categoría B

Prof. dr. ing. Octavian Cezar Pastravanu
Universitatea Tehnica Gh. Asachi Iasi
Facultatea de Automatica si Calculatoare
Bd. Mangeron 53A, Iasi 700050
Tel: 0232-278680-1320, 0232-230751
Fax: 0232-230751
E-mail: opastrav@ac.tuiasi.ro

LISTA DE LUCRARI

- I. Articole publicate in reviste si volume indexate ISI
 - I.1. Articole publicate in reviste cotate ISI cu factor de impact
 - I.2. Articole publicate in reviste din Romania, recent indexate ISI, fara factor de impact
 - I.3. Articole publicate in volume indexate ISI Proceedings
- II. Articole publicate in reviste si volume indexate in baze de date internationale (SCOPUS, INSPEC, Zentralblatt fur Mathematik)
 - II.1. Articole publicate in reviste indexate in baze de date internationale
 - II.2. Articole publicate in volume indexate in baze de date internationale
- III. Articole publicate in reviste si volume cu referenti, neindexate in baze de date internationale
 - III.1. Articole publicate in reviste din Romania
 - III.2. Articole publicate in volume de conferinte organizate de organisme internationale de profil (IFAC, IEEE, IMACS, IFIP, IFORS, EUCA etc)
 - III.3. Articole publicate in volume de conferinte internationale organizate de universitati din Romania
- IV. Carti si capitole de carti
 - IV.1. Carti publicate in Romania
 - IV.2. Capitole de carti publicate in strainatate
- V. Inventii
- VI. Proiecte, granturi, contracte de cercetare-dezvoltare

I. Articole publicate in reviste si volume indexate ISI

I.1. Articole publicate in reviste cotate ISI cu factor de impact (IF)

1. Vrabie D., Pastravanu O., Abu-Khalaf M, Lewis F.L., 2008, Adaptive optimal control for continuous-time linear systems based on policy iteration, Automatica, in press - doi:10.1016/j.automatica.2008.08.017. (IF=2.083)
2. Pastravanu O., Voicu M., 2006, Generalized matrix diagonal stability and linear dynamical systems, Linear Algebra and its Applications, Vol. 419, issues 2-3, 299-310, ISSN 0024-3795. (IF=0.702)
3. Pastravanu, O., Matcovschi, M., 2005, Absolute componentwise stability of interval Hopfield neural networks, IEEE Trans. Syst Man Cy. B, Vol. 35, 1, 136-41, ISSN 1083-4419. (IF=1.353)
4. Pastravanu, O., Voicu, M., 2005, On the componentwise stability of linear systems, Int J Robust Nonlin Contr, 15, 1, 15-23, ISSN 1049-8923. (IF=1.637)
5. Lazar, M., Heemels, W.P.M.H., Weiland, S., Bemporad, A., Pastravanu, O., 2005, Infinity norms as Lyapunov functions for model predictive control of constrained PWA systems, Hybrid Systems: Computation and Control, Lecture Notes in Computer Science,

Vol. 3414, 417-432, ISSN 0302-9743 (IF=0.402 in 2005; ISI Proceedings dupa 2006)

6. Pastravanu, O., Voicu, M., 2004, Necessary and sufficient conditions for componentwise stability of interval matrix systems, IEEE Trans. Aut Contr, Vol. 49, 6, 1016-21, ISSN 0018-9286. (IF=2.824)
7. Matcovschi, M., Pastravanu, O., 2004, Flow-invariance and stability analysis for a class of nonlinear systems with slope conditions, Eur J Contr, Vol. 10, 4, 352-64, ISSN 0947-3580. (IF=1.153)
8. Lazar, M., Pastravanu, O., 2002, A neural predictive controller for non-linear systems, Math Comput Simulat, Vol. 60, 3-5, 315-24, ISSN 0378-4754. (IF=0.738)
9. Voicu, M., Pastravanu, O., 2002, Time-domain and parametric L2-properties corresponding to Popov inequality, Kybernetika, Vol. 38, 5, 617-29, ISSN 0023-5954. (IF=0.552)
10. Teodosiu, C., Pastravanu, O., Macoveanu, M., 2000, Neural network models for ultrafiltration and backwashing, Water Research, Vol. 34, 18, 4371-80, ISSN 0043-1354. (IF=3.427)
11. Lewis, F.L., Gurel, A., Bogdan, S., Doganalp, A., Pastravanu, O. 1998, Analysis of deadlock and circular waits using a matrix model for flexible manufacturing systems, Automatica, Vol. 34, No. 9, 1083-1100, ISSN 0005-1098. (IF=2.083)
12. Jagannathan, S., Lewis, F.L., Pastravanu, O., 1996, Discrete-time model reference adaptive control of nonlinear dynamical systems using neural networks, Int. Journal of Control, Vol. 64, 2, 217-239, ISSN 0020-7179. (IF=0.861)
13. Huang, H.H., Lewis, F.L., Pastravanu, O., Gurel, A., 1995, Flow-shop scheduling design in an FMS matrix framework, Control Engineering Practice, Vol.3, 4, 561-568, ISSN 0967-0661. (IF=1.263)

I.2. Articole publicate in reviste din Romania, recent indexate ISI, fara factor de impact

1. Matcovschi M.H., Pastravanu O., M. Voicu, 2007, Novel results in the qualitative analysis of continuous-time bidirectional associative memories, Mathematical Reports, Vol 9 (59), 1, 61-75, ISSN 1582-3067 (revista indexata din 2008).
2. Pastravanu O., Matcovschi M.H., Voicu M., 2006, New results in the state-space analysis of positive linear systems, Romanian Journal of Information Science and Technology ROMJIST, Vol. 9, 3, 217-225, ISSN 1453-8245 (revista indexata din 2007).
3. Matcovschi, M.H., Pastravanu, O., Voicu, M., 2003, Componentwise absolute stability of Hopfield neural networks without delay, Rev. Roum. Sci. Techn.– Electrotechn. et Energ., Tome 48, No.4, 495-504, ISSN: 0035-4066 (revista indexata din 2007).
4. Pastravanu, O., Voicu, M., 2001, Robustness of componentwise asymptotic stability for a class of nonlinear systems, Proc Rom Acad, Series A, Vol. 2, 1-2, 61-7, ISSN 1454-8267 (revista indexata din 2007).
5. Pastravanu, O., Voicu, M., 2000, Quasi-behavioral approach to eigenvalue assignment, Rev Roum Sci Techn – Electrotech Energ, Vol. 45, 3, 373-89, ISSN 0035-4066 (revista indexata din 2007).

6. Pastravanu, O., Voicu, M., 2000, Preserving componentwise asymptotic stability under disturbances, Rev. Roum Sci Techn – Electrotech Energ, Vol. 45, 3, 413-25, ISSN 0035-4066 (revista indexata din 2007).

I.3. Articole publicate in volume indexate ISI Proceedings

1. Pastravanu O., Matcovschi M.H., State Feedback Design with CWEAS Constraints, 2008 IEEE-TTTC International Conference on Automation, Quality and Testing, Robotics AQTR 2008 (THETA 16), May 22-25, 2008, Cluj-Napoca, vol. 2, pp. 59 - 64.
2. Matcovschi M.H. and Pastravanu O., Perron-Frobenius Theorem and Invariant Sets in Linear Systems Dynamics, The 15th Mediterranean Conference on Control and Automation MED'07, Athens, Greece, June 27-29, 2007, Conference Program and Book of Abstracts, pp. 57, ISBN 978-96-0254-664-2, CD 6 pp.
3. Vrabie D., Pastravanu O., Lewis F., Policy Iteration for Continuous-Time Systems with Unknown Internal Dynamics, The 15th Mediterranean Conference on Control and Automation MED'07, Athens, Greece, June 27-29, 2007, Conference Program and Book of Abstracts, pp. 62, ISBN 978-96-0254-664-2, CD 6 pp.
4. Pastravanu O., Matcovschi, M.H., 2007, On the construction of diagonal Lyapunov functions for linear systems, The 8-th IEEE International Symposium on Signals, Circuits and Systems ISSCS 2007, July 12-13, 2007, Iasi, Romania, Proceedings, vol. 2, pp. 505-508, IEEE Catalog Number 07EX1678, ISBN 1-4244-0968-3, Library of Congress 2007920356.
5. Pastravanu O., Matcovschi M.H., Voicu M., 2006, Time-Dependent Invariant Sets in System Dynamics, IEEE Conference on Control Applications (CCA 2006), Munchen, Proceedings on CD-ROM, 6 pg, IEEE Catalog Number: 06CH37824C.
6. Matcovschi M.H., Mahulea C., Lefter C., Pastravanu O., 2006, Petri Net Toolbox in Control Engineering Education", IEEE Conference on Control Applications (CCA 2006), Munchen, Proceedings on CD-ROM, 6 pg, IEEE Catalog Number: 06CH37824C.
7. Pastravanu O., Matcovschi M.H., 2006, Invariance Properties in the Dynamics of Positive Linear Systems, Proc. 2006 IEEE-TTTC International Conference on Automation, Quality&Testing, Robotics AQTR, Tome I, 27-31, ISBN 1-4244-0360-X, IEEE Catalog Number: 06EX1370, Library of Congress: 2006924077.
8. Matcovschi, M.H.; Pastravanu, O., 2005,: Flow-Invariant Sets with Respect to the Markings of Timed Continuous Petri Nets, Proc. 44th IEEE Conf.On Decision and Control and European Control Conf. Ecc '05, Seville, Spain, Cd-Rom, 7726 – 7731, IEEE Catalog Number: 05CH37740C, Library of Congress: 79-640961, ISBN 0-7803-9568-9, ISSN 0191-2216.
9. Pastravanu, O. Matcovschi, M.H., 2005, Matrix Framework for Analysis of Invariant Sets, Proc. IEEE Int. Symp. Signals, Circuits and Systems ISSCS 2005, 179-182, ISBN: 0-7803-9029-6, IEEE Catalog Number: 05EX1038, Library of Congress: 2005922345.
10. Marinovici, L., Pastravanu, O., 2003, Flow invariance properties for a class of uncertain discrete-time systems, In Barbu, V., Lasieka, I., Tiba, D., Varsan, C. (Eds.), Anal. Optimiz. Differ. Syst., 269-80, IFIP 121, Kluwer, ISBN 1-4020-7439-5.
11. Voicu, M., Pastravanu, O., 2003, Componentwise asymptotic stability induced by symmetrical polyhedral time-dependent constraints, In Barbu, V., Lasieka, I., Tiba, D., Varsan, C. (Eds.), Anal. Optimiz. Differ. Syst., 433-42, IFIP 121, Kluwer, ISBN 1-4020-

7439-5.

12. Pastravanu, O., Voicu M., 2001, Componentwise asymptotic stability of a class of nonlinear systems, In P. Horacek (Ed.), 1st IFAC/IEEE Symposium System Structure And Control 2001, Prague, 27-31 August 2001, pag 407-412, Elsevier, ISBN: 0080434142.
13. Mahulea, C., Barsan, L., Pastravanu, O., 2002, MATLAB tools for Petri-net-based approaches to flexible manufacturing systems, in F.G. Filip, I. Dumitrache S. Iliescu (Eds.) Large Scale Systems: Theory and Applications 2001 (IFAC Proceedings Volumes, Proceedings volume from the 9th IFAC/IFORS/IMACS/IFIP Symposium, Bucharest, Romania, 18-20 July 2001) pp. 199-204, Elsevier, ISBN 0080436919.
14. Lefter, C, Pastravanu, O, 2001, Matlab stateflow in teaching discrete-event control, In L. Vlacic, M. Brisk (Eds.) 5th IFAC/IEEE Symposium on Advances in Control Education 2000, Dec. 17-19, 2000, Queensland, Australia, pag: 193-198, Elsevier, 2001, ISBN 0-08-043245-X
15. Voicu, M., Panescu, D., Pastravanu, O., Dumbrava, St., Ifrim, S., Resmerita, St., 1998, CIM systems: a new trend in control engineering education, In Pudlowski, Z.J. (Ed.) Global Congress on Engineering Education, Cracaw, pp. 337-341, UNESCO International Centre for Engineering Education, ISBN 0 7326 1903 3.
16. Gurel, A., Lewis, F.L., Bogdan, S., Pastravanu, O., 1998, Circular blocking in flexible manufacturing systems: a matrix-based analysis, Proc. of the IEEE Conference on Control Applications, Trieste, pp. 786-791, IEEE Cat.-No.98CH36104, ISBN 0-7803-4104-X.,
17. Lewis, F.L. Bogdan, S., Gurel, A., Pastravanu, O., 1997, Analysis of deadlocks and circular waits using a matrix model for discrete event systems, Proc. of the 36th IEEE Conference on Decision and Control, San Diego, 1997, pp. 4080-4085, ISSN 0191-2216.,
18. Pastravanu, O., 1998, Switched bond graphs in computer-aided analysis of hybrid dynamical systems, Proc. of the IEEE Conference on Control Applications, Trieste, pp. 118-122, IEEE Cat.-No.98CH36104, ISBN 0-7803-4104-X.
19. Pastravanu, O., Voicu, M., 1998, East-West academic cooperation within the framework of TEMPUS-PHARE Program, In Dumitrache, I., Kile, F., Kopacek, P. (Ed.) Proc. of the IFAC Conf. Supplemental Ways for Improving International Stability SWIIS'98, Sinaia, pp.97-103, Elsevier, ISBN: 008043231X.
20. Pastravanu, O., 1997, Bond-graph-based computational approach to hybrid system dynamics, In Ionescu, V., Popescu, D. (Eds.), Prep. of the 4th IFAC Conference on System Structure and Control, Bucharest, 1997, pp. 167-172, Elsevier, ISBN 0-08-0430236.
21. Pastravanu, O., Gurel, A., Lewis, F.L., 1998, Teaching discrete event control of manufacturing systems, In C. Verde (Ed.) 4th IFAC Symposium on Advances in Control Education 1997, Dec. 14-16, 1997, Istanbul, pag 261-266, Elsevier, ISBN 0-08-042591-7.
22. Pastravanu, O., Gurel, A., Lewis, F.L., Huang, H.H., 1994, Rule-based controller design algorithm for discrete event manufacturing systems, Proc. of 1994 American Control Conference ACC'94 (IEEE), Baltimore-Maryland, pp. 299-305, IEEE Cat. No. 94CH3390-2, ISBN 0-7803-1783-1.
23. Jagannathan, S., Lewis, F.L., Pastravanu, O., 1994, Model reference adaptive control of nonlinear dynamical systems using multilayer neural networks, Proc. IEEE Conf. on

- Neural Networks, Orlando-Florida, pp. 4766-4771, IEEE Cat. No. 94CH3429-8, ISBN 0-7803-1901-X.
24. Lewis, F.L., Huang, H.H., Pastravanu, O., Gurel, A., 1994, A matrix formulation for design and analysis of discrete event manufacturing, Proc. of the IEEE Int. Conference on Systems, Man, and Cybernetics, San Antonio-Texas, pp.1700-1705, IEEE Cat. No. 94CH3571-5, ISBN 0-7803-2129-4.
 25. Lewis, F.L., Pastravanu, O., Huang, H.H., 1993, Controller design and conflict resolution for discrete event manufacturing systems, Proc. of the 32nd Conference on Decision and Control CDC'93 (IEEE), San Antonio-Texas, pp. 3288-3293, IEEE Cat. No. 93CH3307-6, ISSN 0191-2216.
 26. Voicu, M., Pastravanu, O., Pavaluc, L., Lazar, C., 1992, Design and numerical implementation of a state estimator for biosynthesis processes, In Karim,N.,M., Stephanopoulos,G. (Eds.). Proc of 2nd IFAC Symposium on Modelling and Control of Biotechnical Processes, Colorado, Pergamon Press, pp.359-362, ISBN 0-08-041710-8.
 27. Pastravanu, O., Voicu, M., Isopescu, L., Calinescu, R., 1993, Symbolic manipulation CAD for parameterized families of systems, In Stowell,F.A., West,D., Howell,J.G.(Eds,) Systems Science: Addressing Global Issues, pp.507-512, Plenum, 1993, ISBN 0-306-44522-0.
 28. Pastravanu, O., Voicu, M., 1992, Effects of sampled and quantized control on the geometry of the reachability sets of linear continuous systems, In Sydow,A. (Ed.), Computational Systems Analysis, pp. 221-226, Elsevier, ISBN 0-444-89780-1.
 29. Pastravanu, O., Voicu, M., 1992, A trajectory-related geometric insight into state feedback derived from Ackermann's formula, In Trappl,R. (Ed.) Cybernetics and Systems Research '92, vol. 1, pp. 237-244, World Scientific Publishing, ISBN 981-02-1991-1.
 30. Pastravanu, O., Voicu, M., Marcu, T., Lazar, C., 1991, From numerical to symbolic computation - Modern perspectives for computer-aided education in control engineering, In Zajc,B., Solina,F.(Eds.), Proc. of the IEEE Region 8 Int. Conf. MELECON'91, Ljubljana, Vol. II, pp. 1548-1551, IEEE Cat. No:91CH2964-5, ISBN 0-87942-655-1.

II. Articole publicate in reviste si volume indexate in baze de date internationale (SCOPUS, INSPEC, Zentralblatt fur Mathematik)

II.1. Articole publicate in reviste indexate in baze de date internationale

1. Pastravanu, O., Voicu, M., 2003, Dynamics of a class of uncertain nonlinear systems under flow-invariance constraints, Int J Math & Math Sci, USA, 2003, 5, 263-94, ISSN 0161-1712. (indexata SCOPUS).
2. Pastravanu, O., Voicu, M., 2002, Interval matrix systems - Flow invariance and componentwise asymptotic stability, Diff & Int Equations, USA, 15, 11, 1377-94, ISSN 0893-4983. (indexata Zentralblatt fur Mathematik)
3. Lazar, C., Schonberger, Fr., Ifrim, S., Pastravanu, O., 1996, Teaching computer control for thermal treatment processes, Buletinul Institutului Politehnic din Iasi, XLII (XLVI), Sectia IV, 11-20, ISSN 1220-2169. (indexata Zentralblatt fur Mathematik)
4. Lazar, C., Pastravanu, O., Schonberger, Fr., Poli, E., 1996, Teaching digital control with laboratory equipment aquired in the framework of the TEMPUS JEP IMPACT, Buletinul

- Institutului Politehnic din Iasi, XLII (XLVI), Sectia IV, 89-94, ISSN 1220-2169. (indexata Zentralblatt fur Mathematik)
5. Voicu, M., Pastravanu, O., Lazar, C., 1996, A didactic approach to the hyperstability of automatic control systems, Buletinul Institutului Politehnic din Iasi, XLII (XLVI), Sectia IV, 95-102, ISSN 1220-2169. (indexata Zentralblatt fur Mathematik)
 6. Pastravanu, O., Ifrim, S., Lazar, C., Voicu, M., 1996, Petri-net based approach to resource allocation in fuzzy distributed control, Buletinul Institutului Politehnic din Iasi, XLII (XLVI), Sectia IV, 109-114, ISSN 1220-2169. (indexata Zentralblatt fur Mathematik)
 7. Voicu, M., Lazar, C., Pastravanu, O., 1996, Fuzzy-type PID control using Shegalkin polynomials, Buletinul Institutului Politehnic din Iasi, XLII (XLVI), Sectia IV, 47-53, ISSN 1220-2169. (indexata Zentralblatt fur Mathematik)
 8. Pastravanu, O., Voicu, M., 1995, Geometric approach to eigenvalue assignment with decoupled finite effect sequence constraints, Systems Analysis - Modelling - Simulation, Germany, Vol. 18-19, 119-122, ISSN 0232-9298. (indexata INSPEC)
 9. Voicu, M., Lazar, C., Balaban, E., Ganciu, T., Pastravanu, O., 1994, Designing a new curriculum for automatic control, Buletinul Institutului Politehnic din Iasi, XL (XLIV), Sectia IV, 23-40, ISSN 1220-2169. (indexata Zentralblatt fur Mathematik)
 10. Voicu, M., Pastravanu, O., 1994, Transferring knowledge from mathematics to systems and control theory - A metatheoretic and didactic viewpoint, Buletinul Institutului Politehnic din Iasi, XL (XLIV), Sectia IV, 41-52, ISSN 1220-2169. (indexata Zentralblatt fur Mathematik)
 11. De Keyser, R., Pastravanu, O., 1993, Neural network based control algorithms implemented in MATLAB, Buletinul Institutului Politehnic din Iasi, XXXIX (XLIII), Sectia IV, 25-34, ISSN 1220-2169. (indexata Zentralblatt fur Mathematik)
 12. Voicu, M., Pastravanu, O., 1992, An approach to linear-quadratic control problem using non-recursive models, Buletinul Institutului Politehnic din Iasi, XXXVIII (XLII), Sectia IV, 61-72, ISSN 1220-2169. (indexata Zentralblatt fur Mathematik)
 13. Marcu, T., Pastravanu, O., 1990, Control system diagnosis via linear classification of model estimations, Buletinul Institutului Politehnic din Iasi, XXXVI (XL), sectia III, Fasc. 3-4, 21-26, ISSN 0304-5188. (indexata Zentralblatt fur Mathematik)
 14. Voicu, M., Pastravanu, O., 1988, On the dimension of linear dynamical systems, Buletinul Institutului Politehnic din Iasi, XXXIV (XXXVIII), sectia III, 21-26, ISSN 0304-5188. (indexata Zentralblatt fur Mathematik)
 15. Pastravanu, O., Voicu, M., 1989, A microcomputer-based teaching environment for control engineering, Systems Analysis - Modelling - Simulation, Germany, vol 6, nr. 11-12, 933-937, ISSN 0232-9298. (indexata INSPEC)
 16. Pastravanu, O., Tesu, I., Stiurca, D., Ganciu, T., 1987, Extraction optimale des parametres SPICE de courant continu pour les modeles des transistors bipolaires, Modelling, Simulation and Control, France, vol.12, nr. 4, 39-48, ISSN 0761-2508. (indexata SCOPUS).
 17. Voicu, M., Pastravanu, O., Practical testing of state and output controllability, 1987, Systems Science, Poland, vol. 13, nr.3-4, 93-105, ISSN 0137-1223. (indexata INSPEC)

18. Lazar, C., Voicu, M., Pastravanu, O., 1987, Performance improvement using I-intelligent controller in case of Kessler's optimization criteria, Buletinul Institutului Politehnic din Iasi, XXXIII (XXXVII), sectia III, 74-78, ISSN 0304-5188. (indexata INSPEC)

II.2. Articole publicate in volume indexate in baze de date internationale

1. Pastravanu, O., Voicu, M., 2003, Norm-based approach to componentwise asymptotic stability, 11th IEEE Mediterranean Conference on Control and Automation MED'03, Rhodes, Greece, Abstracts pp. 101 (ISBN 960-87706-0-20), CD-ROM (6 pg). (indexata INSPEC)
2. Matcovschi, M., Pastravanu, O., 2003, Refined qualitative analysis for a class of neural networks, European Control Conference 2003 ECC2003 (EUCA), University of Cambridge, UK, CD-ROM, 2049-54. (indexata INSPEC)
3. Pastravanu, O., Voicu, M., 2003, Componentwise stabilizability and detectability of linear systems, European Control Conference 2003 ECC2003 (EUCA), University of Cambridge, UK, CD-ROM, 648-53. (indexata INSPEC)
4. Matcovschi, M., Mahulea, C., Pastravanu, O., 2003, Petri Net Toolbox for MATLAB, 11th IEEE Mediterranean Conference on Control and Automation MED'03, Rhodes, Greece, Abstracts pp. 71 (ISBN 960-87706-0-20) CD-ROM (6 pg). (indexata INSPEC)
5. Lewis, F.L., Huang, H.H., Tacconi, D., Gurel, A., Pastravanu, O., 1995, Manufacturing dispatching controller design and deadlock avoidance using a matrix equation formula, In Lumia, R. (Ed.) SPIE Proceedings series, vol. 2596, pp. 63-77, 1995, ISBN 0-8194-1960-5. (indexata SCOPUS)
6. Gürel, A., Pastravanu, O., Lewis, F.L., 1995, A real-time control policy for deadlock avoidance in a class of flexible manufacturing systems, In Borangiu, T., Dumitrache, I., (Eds.) Proc. of the 3rd IFAC/IFIP/IFORS Workshop Intelligent Manufacturing Systems IMS'95, Bucharest, 281-286, Pergamon Press, ISBN 0-08-042595-X. (indexata INSPEC)
7. Voicu, M., Pastravanu, O., 1995, Optimal control design based on non-recursive linear models, Proc. of the 3rd European Control Conference ECC'95 (EUCA), Rome, Vol.1, pp. 501-506. (indexata INSPEC)
8. Pastravanu, O., Gurel, A., Lewis, F.L., 1994, Petri net based deadlock analysis in flowshops with kanban-type controllers, In Zaremba, M.B. (Ed.) Proc. of the 10th ISPE/IFAC Conference on CAD/CAM, Robotics and Factories of the Future, Ottawa, 1994, pp.75-80. (indexata INSPEC)
9. Pastravanu, O., Voicu, M., 1994, Mathematical background of self-learning pole placement via non-recursive linear models, In Houstis, E.N., Rice, J.R. (Eds.), Artificial Intelligence, Expert Systems and Symbolic Computing, pp. 331-342, 1992, Elsevier (458p), ISBN 0-444-89703-8. (indexata INSPEC)
10. Pastravanu, O., Lazar, C., 1992, A professionally-disillusioned generation. Can there be found any remedies?, In Forslin, J., Kopacek, P. (Eds.) Cultural Aspects of Automation, pp 77-80, Springer, ISBN 3-211-82362-X. (indexata INSPEC)
11. Voicu, M., Pastravanu, O., 1990, Optimal control of systems with unknown parameters using non-recursive linear models, In Kaynak, O. (Ed.), Proc. of the IEEE Int. Workshop on Intelligent Motion Control, Istanbul, pp. 757-761, IEEE Cat. No:90TH0272-5. (indexata INSPEC)
12. Voicu, M., Pastravanu, O., Pavaluc, L., 1988, Numerical aspects of D.C. electric motor parameter and state estimation via adaptive observer simulation, Proc. of the 2nd International Conf. on Electrical Drives, Poiana Brasov, vol. IV, pp. D2-2-1 -D2-2-8. (indexata INSPEC)

III. Articole publicate in reviste si volume cu referenti, neindexate in baze de date internationale

III.1. Articole publicate in reviste din Romania

1. Matcovschi M.H., Pastravanu O., 2008, Stability and Set-Invariance Testing for Interval Systems, Control Engineering and Applied Informatics, vol.10, no.3, pp.18-26, ISSN 1454-8658.
2. Pastravanu O., Voicu M., 2007, Flow-invariant exponential stability of linear systems. Memoriile Sectiilor Stiintifice ale Academiei Romane (ISSN 1224-1407), Tom XXVIII, 173-184.
3. Matcovschi, M., Pastravanu,O., 2007, Marking Properties Induced by Token Fluidification for Timed Continuous Extended State Machines, Memoriile Sectiilor Stiintifice ale Academiei Romane, Seria IV, Tom XXVIII, pp. 185 – 197, ISSN 11224-1407.
4. Pastravanu O., Matcovschi M.H., 2007, Invariance properties of time-varying linear systems, The Annals of “Dunarea de Jos” University of Galati, Fascicle III, Electrotechnics, electronics, automatic control, informatics, pp 65-70, ISSN 1221-454X.
5. Pastravanu O., Matcovschi M.H., 2007, On the Asymptotic Stability of Positive Linear Systems, Scientific Bulletin of „Politehnica” University of Timisoara, Transactions on Automatic Control and Computer Science, vol. 51 (65), no. 2, pp. 29-34, ISSN: 1224-600X.
6. M.H. Matcovschi, O. Pastravanu, and M. Voicu, 2007, Invariant sets with arbitrary time-dependence in the dynamics of linear systems with interval-type uncertainties, Control Engineering and Applied Informatics, vol. 9, no. 3-4, pp. 36-42, ISSN 1454-8658.
7. M.H. Matcovschi, O. Pastravanu, 2007, Stability Criteria for Positive Linear Systems, Buletinul Stiintific al Universitatii Politehnica din Timisoara, Romania, Seria Automatica si Calculatoare, vol. 52 (66), no. 1, p. 31-36, ISSN 1224-600X.
8. Pastravanu,O., Matcovschi,M., 2006, Object Identification in Color Images by Neural Network Classifiers, Buletinul stiintific al Universitatii “Politehnica” din Timisoara, Seria Automatica si Calculatoare, vol. 51 (65), no. 2, pp.29-34, ISSN: 1224-600X.
9. O. Pastravanu, M.H. Matcovschi, 2005, Interval matrix systems – Invariant sets and stability properties, Annals of the University of Craiova, Series: Automation, Computers, Electronics and Mechatronics, vol. 2 (29), no. 1, 71-76. ISSN 1841-0626.
10. Matcovschi, M., Popescu,C., Pastravanu,O., 2005, A New Approach to Hybrid System Simulation: Development of a Simulink Library for Petri Net Models, Control Engineering and Applied Informatics, vol 7, nr. 4, 55-62, ISSN 1454-8658.
11. Matcovschi, M.H., Pastravanu, O., 2004, Discrete-time interval bidirectional associative memories – Novel stability results, Control Engineering and Applied Informatics, Vol. 6, no. 3, 3-10, ISSN 1454-8658.
12. Lefter, C., Mahulea, C., Matcovschi, M., Pastravanu,O., 2004, Instruments for topology-based analysis in Petri Net Toolbox, Buletinul Stiintific al Universitatii Politehnica din Timisoara, Periodica Politehnica, Transactions on Automatic Control and Computer Science, Vol. 49 (63), No. 2, 153-158, ISSN 1224-600X.
13. Matcovschi, M., Pastravanu, O., 2004, New results on the stability of continuous-time cellular neural networks, Buletinul Stiintific al Universitatii Politehnica din Timisoara, Periodica Politehnica, Transactions on Automatic Control and Computer Science, Vol. 49 (63), No.1, 105-110, ISSN 1224-600X.

14. Kloetzer, M., Pastravanu, O., 2004, Simulink blockset for neural predictive control, Buletinul Stiintific al Universitatii Politehnica din Timisoara, Periodica Politehnica, Transactions on Automatic Control and Computer Science, Vol. 49 (63), No. 2, 19-22, ISSN 1224-600X.
15. Kloetzer, M., Pastravanu, O., 2003, On neural network classifiers with supervised training, Analele Universitatii din Craiova, Seria: Inginerie Electrica, Anul 27, nr.27. Vol. I, 290-295, ISSN: 1223-530X.
16. Mahulea, C., Matcovschi, M., Pastravanu, O., 2003, Role of animation in teachware for control engineering – A case study, Analele Universitatii din Craiova, Seria: Inginerie Electrica, Anul 27, nr.27. Vol. I, 296-301, ISSN: 1223-530X.
17. Matcovschi, M., Mahulea, C., Pastravanu, O., 2002, Computer tools for linear systems analysis over max-plus algebra, Buletinul Stiintific al Universitatii Politehnica din Timisoara, Romania, Seria Automatica si Calculatoare, Vol. 47 (61), No. 1, 97-102, ISSN 1224-600X.
18. Kloetzer, M., Ardelean, D., Pastravanu, O., 2002, Crearea unei biblioteci Simulink pentru exploatarea retelelor neuronale in identificare, Revista Romana de Informatica si Automatica, vol. 12 , nr. 2, 53-64, ISSN 1220-1758.
19. Matcovschi, M., Pastravanu, O., 2002, Developing practicals for a course on queueing systems delivered to control engineering students, Buletinul Stiintific al Universitatii Politehnica din Timisoara, Romania, Seria Automatica si Calculatoare, Vol. 47 (61), No. 1, 151-156, ISSN 1224-600X.
20. Pastravanu, O., Voicu, M., 2002, Flow-invariance and componentwise asymptotic stability of a class of nonlinear systems – the non-symmetrical case, Memoriile Sectiilor Stiintifice ale Academiei Romane Tom XXV, pp. 7 – 22, ISSN 11224-1407.
21. Voicu, M., Pastravanu, O., 2002, Exploring the Componentwise Absolute Stability of Endemic Epidemic Systems via SIR Models, Control Engineering and Applied Informatics, Vol. 4, no. 4, 23-28, ISSN 1454-8658.
22. Ibanescu, R., Pastravanu, O., 2002, Numerical problems in block-diagram simulation of bond-graph models with derivative causality - A MATLAB-Simulink-based case study, Buletinul Institutului Politehnic din Iasi, tom XLVIII (LII), Sectia Matematica. Mecanica teoretica. Fizica, fasc. 1-2, 75-86, ISSN 0304-5188.
23. Matcovschi, M., Pastravanu, O., 2002, New results on the dynamics of a class of nonlinear systems, Bul Inst Politeh Iasi, XLVIII (LII), Sectia Mat Mec Teor Fiz, 3-4, 29-46, ISSN 0304-5188.
24. Matcovschi, M., Mahulea, C., Pastravanu, O., 2001, Exploring structural properties of Petri nets in MATLAB, Buletinul Institutului Politehnic din Iasi, tom XLVII (LI), Sectia IV, Automatica si Calculatoare, fasc. 1-4, 15-26, ISSN 1220-2169.
25. Pastravanu, O., Voicu, M., 2001, State feedback and observer design ensuring componentwise asymptotic stability, Buletinul Institutului Politehnic din Iasi, tom XLVII (LI), Sectia IV, Automatica si Calculatoare, fasc. 1-4, 85-98, ISSN 1220-2169.
26. Ardelean, D., Kloetzer, M., Pastravanu, O., 2000, Simulink tools for neural-net-based identification, Bul. St. al Univ. Politehnica din Timisoara, Seria Automatica si Calculatoare, Vol. 45 (59), No. 1, 135-140, ISSN 1224-600X.
27. Voicu, M., Pastravanu, O., 1994, Development of low-cost automation in Romania, Buletinul Institutului Politehnic din Iasi, XL (XLIV), Sectia IV, 21-22, ISSN 1220-2169.

28. Lazar, C., Pastravanu, O., Voicu, M., 1994, Laboratory equipment and process set-ups for control systems, Buletinul Institutului Politehnic din Iasi, XL (XLIV), Sectia IV, 61-68, ISSN 1220-2169.
29. Poli, E., Pastravanu, O., Voicu, M., 1994, Design of real-time applications, Buletinul Institutului Politehnic din Iasi, XL (XLIV), Sectia IV, 69-78, ISSN 1220-2169.
30. Pastravanu, O., Lazar, C., Ifrim, S., Schonberger, Fr., Use of a rule-based autotuner, 1994, Buletinul Institutului Politehnic din Iasi, XL (XLIV), Sectia IV, 103-106, ISSN 1220-2169.
31. Pastravanu, O., Voicu, M., Isopescu, L., 1992, Design and real-time implementation of a structurally stable compensator for a BIBO unstable multi-model system, Studies in Informatics and Control, vol. 1, No 3, 215-225, ISSN 1220-1776.
32. Pastravanu, O., Onea, Al., Schonberger, Fr., 1991, Real-time control of multivariable plants with unknown mathematical model, Buletinul Institutului Politehnic din Iasi, XXXVII (XLI), sectia IV, 23-32, ISSN 1220-2169.
33. Tesu, I., Pastravanu, O., Stiurca, D., Ganciu, T., 1990, Gummel-Poon parameters optimal extraction for computer-aided design with SPICE, Buletinul Institutului Politehnic din Iasi, XXXVI (XL), sectia III, Fasc 1-2, 43-54, ISSN 0304-5188.

III.2. Articole publicate in volume de conferinte organizate de organisme internationale de profil (IFAC, IEEE, IMACS, IFIP, IFORS, EUCA etc)

1. Pastravanu O., Matcovschi M.H., 2008, Componentwise stabilization of interval systems, Proc. of the 17-th World Congress of the Int. Fed. of Aut. Ctrl., Seoul, South Korea, July 6-11, DVD-ROM, 6pp.
2. Pastravanu O., Matcovschi M.H., and Voicu M., Majorant Matrices in the Qualitative Analysis of Interval Dynamical Systems, European Control Conference ECC'07, Kos, Greece, 2-5 July 2007, CD, 6pp.
3. Voicu M., Matcovschi M.H. and Pastravanu O., Invariant and Contractive Sets in Motion Stability Analysis of a Mobile Robot, The 4th IFAC Conference on Management and Control of Production and Logistics (IFAC MCPL 2007), Invited Session on Advances in Control Methods for Robotics and Manufacturing Systems, Sibiu, Romania, September 27-30, 2007, Preprints (O. Bologa, I. Dumitrache, F.G. Filip Eds), vol. I, pp. 133-138, ISBN 978-973-481-1.
4. Pastravanu, O., Matcovschi, M.H., Voicu, M., 2005, Diagonally-Invariant Exponential Stability, Proc. 16-th IFAC World Congress, Prague, DVD-ROM, 6 p. Format tiparit Pavel Piztek (Ed.), ISBN 0-08-045108-X (in curs de aparitie la Editura Elsevier).
5. Matcovschi, M., Claudiu Lefter, C., Mahulea, C., Pastravanu, O., 2005, Petri Net Toolbox for Matlab in Web-Based Analysis and Design of Discrete-Event Systems, Proc. 16-th IFAC World Congress, Prague, DVD-ROM, 6 p. Format tiparit Pavel Piztek (Ed.), ISBN 0-08-045108-X (in curs de aparitie la Editura Elsevier).
6. Lefter, C., Mahulea, C., Matcovschi, M., Pastravanu, O., 2004, Petri Net Web Simulator for Internet-Based Training in Discrete Event Systems, IFAC Multitrack Conference on Advanced Control Strategies for Social and Economic Systems, September 2 - 4, 2004, Vienna University of Technology, Vienna Austria, CD-ROM, 6 pg. Format tiparit P. Kopacek (Ed.) ISBN-13: 978-0-08-044242-6, ISBN-10: 0-08-044242-0 (Editura Elsevier, 2005).

7. Pastravanu, O., Voicu, M., 2001, Dynamics of a class of nonlinear systems under flow-invariance constraints, 9th IEEE Mediterranean Conference on Control and Automation, MED 01, Dubrovnik, Croatia, Book of Abstracts, pp. 94, ISBN 953-6037-34-3, Proceedings on CD-ROM, 6 p, ISBN 953-6037-35-1,
8. Kloetzer, M., Ardelean, D., Pastravanu, O., 2001, Developing Simulink tools for teaching neural-network-based identification, 9th IEEE Mediterranean Conference on Control and Automation, MED 01, June 27-29, 2001, Dubrovnik, Croatia, Book of Abstracts, pp.63, ISBN 953-6037-34-3, Proceedings on CD-ROM, 6 p, ISBN 953-6037-35-1.
9. Pastravanu, O., Voicu M., 2001, Flow-invariance in exploring stability for a class of non-linear uncertain systems, European Control Conference, ECC 2001 (EUCA),, Porto, Book of Abstracts, pp. 47, ISBN 972-752-047-2, Proceedings on CD-ROM, 6 pg.
10. Pastravanu, O., Voicu, M., 2000, Robustness analysis of componentwise asymptotic stability, Proceedings of the 16th World Congress of IMACS, IMACS 2000, Lausanne, Proc. CD-ROM, 6p, ISBN 3 95222075 1 9.
11. Pastravanu, O., Voicu, M., 1999, Flow-invariant rectangular sets and componentwise asymptotic stability of interval matrix systems, Proc of the 5-th European Control Conference ECC'99 (EUCA), Karlsruhe, 1999; Volume of abstracts, pp. 13; Full paper on CD-ROM, rubicon GmbH (1999).
12. Pastravanu, O., Voicu, M., 1997, State feedback control in a quasi-behavioral setting based on non-recursive models, Proc of the 4-th European Control Conference ECC'97 (EUCA), Bruxelles, Volume of abstracts, pp. WE-E J4; Full paper on CD-ROM, BELWARE Information Technology, Belgium, pp. WE-E J4.
13. Pastravanu, O., Poli, E., Lazar, C., Ifrim, S., 1997, Numerical algorithms and procedural knowledge sources in hybrid control systems with automatic tuning, In Sydow,A. (Ed.) Proc of the 15-th World Congress of IMACS, Berlin, Volume of abstracts, pp. 562, Full paper on CD-ROM, Wissenschaft und Technik Verlag, Germany, Vol. 5, pp. 119-124.
14. Lewis, F.L., Pastravanu, O., Gurel, A., Huang, H.H., 1994, Digital control of discrete event manufacturing systems, In Kopacek,P. (Ed) Proc. of the 2nd IFAC/IFIP/IFORS Workshop Intelligent Manufacturing Systems IMS'94, Vienna, 1994, pp. 279-284, Pergamon Press, ISBN 0-08-042235-7.
15. Gurel, A., Pastravanu, O., Lewis, F.L., 1994, A robust approach in deadlock-free live FMS design, Proc. of the 2nd IEEE Mediterranean Symposium on New Directions in Control & Automation, Crete, pp.40-47.
16. De Keyser, R., Pastravanu, O., Onu, D., 1994, An approach to neural network-based nonlinear identification and control using MATLAB, In Ichikawa,A., Furuta,K. (Eds.), Prep. of the 3rd IFAC Symposium on Advances in Control Education ACE'94, Tokyo, pp.115-118.
17. Voicu, M., Pastravanu, O., Pavaluc, L., Lazar, C., 1992, State estimation techniques in increasing the efficiency of computer-controlled biosynthesis processes, In Kuzucu,A., Eksin,I, Dinibutun,A.T. (Eds.) Prep. of IFAC Workshop on Automatic Control for Quality and Productivity, Istanbul, 1992, Vol.2, pp.487-494.,
18. Pastravanu, O., Voicu, M., 1991, Self-learning control using non-recursive linear models, In Vishnevetsky,R., Miller,J.J.H. (Eds.), Proc. of the 13th IMACS World Congress, Dublin, vol. III, pp. 1041-1042.

19. Lazar, C., Voicu, M., Pastravanu, O., 1989, A microcomputer-based vision system, In Voss,K., Chetverikov,D., Sommer,G. (Eds.) Proc. of the 3rd International Conference on Automatic Image Processing CAIP'89, Leipzig, Akademie-Verlag, Poster book, pp. 21-23.
20. Pastravanu, O., Tesu, I., Ganciu, T., Stiurca, D., 1987, Accurate bipolar models in electronic devices simulation, In Hamata,V. (Ed.) Proc. of the European Congress on Simulation, Prague, Publishing House of the Czechoslovak Academy of Sciences, vol. B, pp. 90 - 94.

III.3. Articole publicate in volume de conferinte internationale organizate de universitati din Romania

1. Matcovschi M.H., Pastravanu O., 2008, Contractive invariant sets in the dynamics of switched linear systems, Proc. of the 8-th Int. Conf. on Technical Informatics CONTI 2008, Timisoara, CD-ROM, 6 pp.
2. Matcovschi M.H., Pastravanu O., and Voicu M., 2007, Invariant sets with arbitrary time-dependence in the dynamics of linear systems with interval-type uncertainties, CSCS 16 The 16th International Conference on Control Systems and Computer Science, 22-25 May 2007, Bucharest. Proceedings (I. Dumitrache, S.S. Iliescu - Eds), vol. I, pp. 663-668, ISBN 978-973-718-741-3, 978-973-718-742-0.
3. Pastravanu O. and Matcovschi M.H., 2007, Invariance properties of time-varying linear systems, The 13th International Symposium on Modeling, Simulation and System's Identification SIMSIS 2007, Galati, Romania, September 21-22, 2007, CD, 6 pp.
4. Matcovschi M.H., Pastravanu O., Box-constrained stabilization for parametric uncertain systems, The International Symposium on Systems Theory SINTES 13, October18-20, 2007, Craiova, Romania, Proceedings (E. Petre, M. Nitulescu, D. Popescu Eds.), vol. I (Automation, Mechatronics), pp. 140-145, ISBN 978-973-742-839-4, 978-973-742-840-0.
5. Pastravanu O., Matcovschi M.H., 2007, Robust Design of Componentwise Stabilizers and Observers, SACCS 2007 - The 9th International Symposium on Automatic Control and Computer Science, Iasi, Romania, November 16-18, 2007, CD, 6 pp.
6. Matcovschi M.H., Pastravanu O., 2006, On the Asymptotic Stability of Positive Linear Systems, Proc. of the 7th International Conference on Technical Informatics – CONTI 2006, Timisoara, vol. 1, 95-98, ISBN: (10) 973-625-320-1 (vol. 1), (13) 978-973-625-320-1.
7. Matcovschi, M.H., Popescu, C., Pastravanu, O., 2005, A new approach to hybrid system simulation: Development of a Simulink library for Petri Net models, Proc. Int. Symp. on Systems Theory SINTES 12, Craiova, Ed. “Universitaria”, Craiova, vol. I, pg. 125-130, ISBN: 973-742-148-5.
8. Olaru, C., Dragnea, G., Pastravanu, O., 2005, Simulink blockset for neuro-fuzzy predictive control, Proc. Int. Symp. on Systems Theory SINTES 12, Craiova, Romania, Ed. “Universitaria”, Craiova, vol. I, pg. 158-163, ISBN: 973-742-148-5.
9. Pastravanu, O. Matcovschi, M.H., 2005, Diagonal invariance and comparison methods, Proc. 15th Int. Conf. Control Systems and Computer Science CSCS 15, Bucuresti, Vol. I, 116-121, ISBN 973-8449-89-8.
10. Matcovschi, M., Pastravanu,O., 2005, Timed continuous extended state machines – Study of markings evolutions, Proc. 15th Int. Conf. Control Systems and Computer Science CSCS 15, Bucuresti, Vol. I, 162-167, ISBN 973-8449-89-8.

11. Matcovschi, M., Pastravanu, O., 2005, Componentwise stability of BAM neural networks with uncertainties, Proc. 2nd Romanian-Hungarian Joint Symp. on Applied Computational Intelligence SACI 2005, Timisoara, pp. 359-372, 2005, ISBN: 963-7154-39-6.
12. Matcovschi, M., Lefter, C., Pastravanu, O., 2005, Petri nets in hybrid system simulation under Simulink, Proc. 15th Int. Conf. Control Systems and Computer Science CSCS 15, Bucuresti, Vol. I, 168-173, ISBN 973-8449-89-8.
13. Matcovschi, M.H., Pastravanu, O., 2004, Robust stability of BAMs with respect to the activation functions, In H.N. Teodorescu (Ed.) Intelligent Systems – Selected Papers from ECIT2004 Iasi, Ed. Performantica, Iasi, pp. 21-31, ISBN: 973-799485-X
14. Mahulea, C., Lefter, C., Matcovschi, M., Pastravanu, O., 2004, Distance learning in control based on client-server applications - A case study, Proc. IEEE-TTTC - International Conference on Automation, Quality and Testing, Robotics, Tome 1, A&QT-R 2004 (THETA 14), Cluj-Napoca, pp. 335-341, ISBN: 973-713-046-4.
15. Lefter, C., Matcovschi, M., Pastravanu, O., 2004, Computer-aided analysis and design of discrete-event systems with Petri Net Toolbox for MATLAB, In G. Yagawa, M. Kikuchi, G. Atanasiu and C. Bratianu (Eds.) Performance Based Engineering for 21st Century, Ed. Cermi, pp. 222-227, ISBN: 973-667-063-5.
16. Matcovschi, M., Pastravanu, O. 2004, Componentwise stability of discrete-time interval bidirectional associative memories, Proc. 12th International Symposium on Modelling, Simulation and Systems Identification, SIMSIS 12, Dunarea de Jos University of Galati, pp. 108-113, ISBN: 973-627-156-0.
17. Pastravanu, O., Voicu, M., 2004, New results on the flow invariance of linear systems, Proc. 8th International Symposium on Automatic Control and Computer Science SACCs 2004, Faculty of Automatic Control and Computer Engineering of Iasi, Book of Abstracts, pp. 27, ISBN 973-621-083-9, Proceedings on CD-ROM (6 pag.)
18. Dragnea, G., Olaru, C., Kloetzer, M., Pastravanu, O., 2004, Simulink tools for neuro-fuzzy identification, 2004, Proc. 8th International Symposium on Automatic Control and Computer Science SACCs 2004, Faculty of Automatic Control and Computer Engineering of Iasi, Book of Abstracts, pp. 14, ISBN 973-621-083-9, Proceedings on CD-ROM (6 pag.)
19. Matcovschi, M., Pastravanu, O., 2004, Componentwise stability of a class of recurrent neural networks with uncertainties, Proc. 8th International Symposium on Automatic Control and Computer Science SACCs 2004, Faculty of Automatic Control and Computer Engineering of Iasi, Book of Abstracts, pp. 9, ISBN 973-621-083-9, Proceedings on CD-ROM (6 pag.)
20. Pastravanu, O., Matcovschi, M., Voicu, M., 2004, Generalized Diagonal Stability -A System Theoretic Point of View, Proc. 8th International Symposium on Automatic Control and Computer Science SACCs 2004, Faculty of Automatic Control and Computer Engineering of Iasi, Book of Abstracts, pp. 85, ISBN 973-621-083-9, Proceedings on CD-ROM (6 pag.)
21. Matcovschi, M., Mahulea, C., Pastravanu, O., 2003, Modeling, simulation and analysis of Petri nets in MATLAB, The 14th International Conference On Control Systems And Computer Science - CSCS14, Bucharest, Romania, Vol. 1, pp. 106-111, ISBN: 973-8449-17-0.

22. Pletea, D., Bucos, A., Pastravanu, O., 2003, Refined stability analysis of load balancing for a class of queueing networks, The 14th International Conference On Control Systems And Computer Science - CSCS14, Bucharest, Romania, Vol. 2, pp. 98-103, ISBN: 973-8449-17-0,
23. Ardelean, D., Kloetzer, M., Pastravanu, O., 2001, RBF Neural Networks in nonlinear system identification, 7th International Symposium on Automatic Control and Computer Science SACCS 2001, Faculty of Automatic Control and Computer Engineering of Iasi, Book of Abstracts, pp. 82, ISBN 973-8292-10-7, Proceedings on CD-ROM (6 pag.).
24. Ferariu, L., Iftime, B., Pastravanu, O., 2001, Software for developing WEB-based educational facilities, 7th International Symposium on Automatic Control and Computer Science SACCS 2001, Faculty of Automatic Control and Computer Engineering of Iasi, Book of Abstracts, pp. 80, ISBN 973-8292-10-7, Proceedings on CD-ROM (6 pag.).
25. Pastravanu, O., Voicu, M., 2001, Componentwise characterization of the free response for a class of nonlinear systems, 13th International Conf. on Control Systems and Computer Science, University Politehnica of Bucharest; Proceedings of CSCS13, pp. 50-55. ISBN 973-85237-1-0.
26. Pastravanu, O., Voicu, M., 2001, State feedback design for componentwise exponential asymptotic stability, 7th International Symposium on Automatic Control and Computer Science SACCS 2001, Faculty of Automatic Control and Computer Engineering of Iasi, Book of Abstracts, pp. 118, ISBN 973-8292-10-7, Proceedings on CD-ROM (6 pag.).
27. Lefter, C., Pastravanu, O. 2000, Supervisory control techniques implemented in Simulink, International Symposium on System Theory, SINTES 10, University of Craiova, pp. A92-A95, ISBN 973-98836-6-4.,
28. Barsan, L., Pastravanu, O., 2000, Developing Web facilities for teaching Control Engineering at the Technical University Gh. Asachi of Iasi, International Symposium on System Theory, SINTES 10, University of Craiova, pp. A58-A61, ISBN 973-98836-6-4.
29. Barsan, C., Pastravanu, O., 1998, Bond-graph method – A systematic approach to physical modeling of complex structure plants, Proc. of the 6th Symposium on Automatic Control and Computer Science SACCS'98, Iasi, vol.1, pp. 83-88.
30. Pastravanu, O., Poli, E., 1998, Linear inequalities in exploring structural liveness of Petri nets, Proc. of the 6th Symposium on Automatic Control and Computer Science SACCS'98, Iasi, vol.1, pp.155-160.
31. Pastravanu, O., Gurel, A., Lewis, F.L., 1997, Standard industrial engineering tools from a feedback control perspective, Proc. of the 11th Int. Conf. on Control Systems and Computer Science, Bucharest, vol I, pp 255 – 260.
32. Pastravanu, O., Poli, E., Lazar, C., Ifrim, S., 1995, PID autotuner for fluid level control, Proc. of the 5th Symposium on Automatic Control and Computer Science, Iasi, vol.1, pp.339-345.
33. Voicu, M., Pastravanu, O., Calinescu, R., 1991, A Comparison between Numerical and Symbolic Simulation of Nonlinear Dynamical Systems, Proc. of the 8th Intern. Conf. on Control Systems and Computer Science, Bucharest, vol. I, pp. 190-194.
34. Pastravanu, O., Pastravanu, A., Lazar, C, Voicu, M., 1991, Pattern recognition using nonlinear fast transforms implemented on 8-bit microcomputers, Proc. of the 8th Int. Conf. on Control Systems and Computer Science, Bucharest, vol III, pp. 27–30.

35. Voicu, M., Pastravanu, O., 1987, Stepwise optimal control of linear continuous systems with unknown parameters, Proc. of the 7th Intern. Conf. on Control Systems and Computer Science, Bucharest, vol. I, pp. 210-215.
36. Pastravanu, O., Tesu, I., Ganciu, T., 1987, On the application of parameter estimation techniques in integrated circuit design, Proc. of the 7th Internat. Conf. on Control Systems and Computer Science, Bucharest, vol. III, pp. 144-149.
37. Bejan, I., Voicu, M., Lazar, C., Leca, M., Pal, C., Asandei, D., Pastravanu, O., 1987, On visual information acquisition for pattern recognition, Proc. of the 7th Intern. Conf. on Control Systems and Computer Science, Bucharest, vol. III, pp. 214- 218.

IV. Carti si capitole de carti

IV.1. Carti publicate in Romania

1. Matcovschi, M., Pastravanu, O., 2008, Petri Net Toolbox for MATLAB – Petri-net-based approaches to discrete event and hybrid systems in MATLAB-Simulink, Editura Politehniun, Iasi, ISBN: 978-973-621-149-2.
2. Matcovschi, M., Pastravanu, O., 2008, Aplicatii ale retelelor neurale in automatica, Editura Politehniun, Iasi, 2008, ISBN: 978-973-621-221-5.
3. Matcovschi, M., Pastravanu, O., 2008, Teme de analiza si sinteza a sistemelor cu evenimente discrete si hibride, Editura Politehniun, Iasi, ISBN: 978-973-621-025-1.
4. Pastravanu, O., Lefter, C., 2003, Principiile conducerii numerice a sistemelor, Editura Gh. Asachi, Iasi, 293p, ISBN 973-8292-87-5.
5. Pastravanu, O., Matcovschi, M., Mahulea, C., 2002, Aplicatii ale retelelor Petri in studiul sistemelor cu evenimente discrete, Editura Gh. Asachi, Iasi, 250p, ISBN 973-8292-86-7.
6. Pastravanu, O., Barabula, A., 2002, Sisteme automate: Elemente de curs, Probleme rezolvate analitic si asistat de calculator, Editura Gh. Asachi, Iasi, 198p, ISBN 973-8292-13-1.
7. Pastravanu, O., Ibanescu, R., 2001, Limbajul bond-graph in modelarea si simularea sistemelor fizico-tehnice, Editura Gh. Asachi, Iasi, 469p, ISBN 973-8292-12-3.
8. Voicu, M., Ferariu, L., Pastravanu, O., Schonberger, Fr., 1999, Introducere in Automatica - Culegere de probleme, Editura Matrix Rom, 217p, ISBN 973-685-135-4.
9. Pastravanu, O., 1997, Sisteme cu evenimente discrete – Tehnice calitative bazate pe formalismul retelelor Petri, Editura Matrix Rom, Bucuresti, 243p., ISBN 973-9254-61-6.
10. Voicu, M., Pastravanu, O., 1997, Non-Recursive Models in Control System Analysis and Design, Editura Dosoftei, Iasi, 1997, 145p., ISBN 973-9135-31-5.,
11. Lazar, C., Pastravanu, O., Poli, E., Schonberger, Fr., 1996, Conducerea asistata de calculator a proceselor tehnice – Proiectarea si implementarea algoritmilor de reglare numerica, Editura Matrix Rom, Bucuresti, 226p., ISBN 973-97494-6-1.

IV.2. Capitole de carti publicate in strainatate

1. Pastravanu, O., Matcovschi, M., Mahulea, C., 2004, Petri Net Toolbox – teaching discrete event systems under Matlab, In Voicu, M. (Ed.), Advances in Automatic Control, 247-256, Kluwer International Series in Engineering & Computer Science, 754, (444p), ISBN 1-4020-7607-X.

2. Pastravanu, O., Voicu, M., 2004, Componentwise asymptotic stability – from flow-invariance to Lyapunov functions, In Voicu, M. (Ed.), *Advances in Automatic Control*, 257-270, Kluwer International Series in Engineering & Computer Science, 754, (444p), ISBN 1-4020-7607-X.
3. Voicu, M., Pastravanu, O., 2004, Setting up the reference input in sliding motion control and its closed-loop tracking performance, In Voicu, M. (Ed.), *Advances in Automatic Control*, 383-392, Kluwer International Series in Engineering & Computer Science, 754, (444p), ISBN 1-4020-7607-X.
4. Voicu, M., Pastravanu, O., 2004, Flow-invariance method in control – a survey of some results, In Voicu, M. (Ed.), *Advances in Automatic Control*, 393-433, Kluwer International Series in Engineering & Computer Science, 754, (444p), ISBN 1-4020-7607-X.
5. Gurel, A., Pastravanu, O., Lewis, F.L., 1998, A system-theoretic approach for discrete-event control of manufacturing systems, In Gunawardena, J. (Ed.) *Idempotency*, pp. 242-261, Cambridge University Press (455p), ISBN 0 521 55344 X.,
6. Lewis, F.L., Tacconi, D., Gurel, A., Huang, H.H., Pastravanu, O., 1997, Manufacturing controller design and deadlock avoidance using matrix model for discrete event systems, In Tzafestas, S.G. (Ed), *Methods and Applications of Intelligent Control*, pp. 485-508, Kluwer Academic Publishers (563p), ISBN 0-7923-4624-6.,
7. Voicu, M., Lazar, C., Schonberger, Fr., Pastravanu, O., Ifrim, S., 1996, Predictive control vs. PID control of thermal treatment processes, In Albertos, P., Strietzel, R., Mort, N. (Eds.), *Control Engineering Solutions - A Practical Approach*, pp. 163-174, IEE Press, (300p), ISBN 0-85296-829-9.,
8. Lewis, F.L., Huang, H.H., Pastravanu, O., Gurel, A., 1995, Control system design for flexible manufacturing systems, In Raouf, A., Ben Daya, M. (Eds), *Flexible Manufacturing Systems: Recent Developments*, pp. 253-290, Elsevier (324p), ISBN 0-444-89798-4.,
9. Pastravanu, O., Lazar, C., 1992, A professionally-disillusioned generation. Can there be found any remedies?, In Forslin, J., Kopacek, P. (Eds.) *Cultural Aspects of Automation*, pp 77-80, Springer, ISBN 3-211-82362-X.,
10. Pastravanu, O., Voicu, M., 1991, Eigenvalues assignment method based on non-recursive linear models, In Barbu, V. (Ed.), *Differential Equations and Control Theory*, Longman Scientific and Technical, Pitman Research Notes in Mathematics Series 250, Longman House, pp. 264-272, ISBN 0-582-06691-3.,

V. Inventii

1. PATENT USA: Lewis, F.L., Tacconi, A., Pastravanu, O., Gurel, A., 2001, Method and apparatus for testing and controlling a flexible manufacturing system, Patent No.: US 6,185,469 B1, Date of Patent: Feb.6, 2001, <http://www.freepatentsonline.com/6185469.html>.
2. PRODUS SOFTWARE OMOLOGAT USA – COMPANIA THE MATHWORKS INC.: Mahulea, C., Matcovschi, M., Pastravanu, O., 2004, Petri Net Toolbox for MATLAB, The MathWorks Connections Program, http://www.mathworks.com/products/connections/product_main.html?prod_id=556&prod_name=Petri%20Net%20Toolbox

VI. Proiecte, granturi, contracte de cercetare-dezvoltare

1. Lazar, C. (director grant), Pastravanu, O., Matcovschi, M., Mirea, L., Tehnologii informatice de timp real pentru sistemele incorporate care asigura controlul lantului de transmisie a puterii la autovehicule (SICONA), CNMP – Programme prioritare, Contract finantare 12100 / 2008.
2. Matcovschi, M.H. (director grant), Pastravanu, O., Voicu, M. , 2005-2007, Dinamica sistemelor si multimi invariante la flux: Noi abordari conceptuale, instrumente teoretice si software, Grant CNCSIS tip A, contract nr. 63 GR / 19.05.2006, Tema nr. 20, cod CNCSIS – 255.
3. Lazar, C. (director grant), Pastravanu, O., Panescu, D., Matcovschi, M., Mirea, L., Tehnici avansate bazate pe vedere artificiala pentru conducerea robotilor, Grant CNCSIS tip A, cod CNCSIS – 232 / 2007
4. Pastravanu, O. (director grant), Ganciu, T., Matcovschi, M., Ferariu L., Lefter, C., 2004-2005, Integrarea Petri Net Toolbox cu mediul Simulink si crearea de noi instrumente software, cu larga aplicabilitate in studierea dinamicilor hibride, Universitatea Tehnica Iasi - Grant CNCSIS tip A, contract nr. 33371/2004, Tema nr. 33, cod CNCSIS – 541.
5. Pastravanu, O. (coordonator), Lazar, M. (student - director grant), 2001-2002, Conducerea predictiva a proceselor neliniare utilizand modele de tip retea neuronală, Universitatea Tehnica Iasi - Grant CNCSIS tip S, contract nr. 6177/2000, Tema A52/2001.
6. Pastravanu, O. (director grant), Ferariu, L., Lazar, C., Lefter, C., Matcovschi, M., Varvara, G., 1998-2002, Laborator de instruire in domeniul conducerii asistate de calculator a proceselor – LICAP, Universitatea Tehnica Iasi - Grant CNFIS (finantat de Banca Mondiala si Guvernul Romaniei) 2MU-103, contract 12819/28.09.1998.
7. Lazar, C. (director grant), Pastravanu, O., Ganciu T., Barabula A., Carari S., Acordarea neuro-predictiva a algoritmilor de conducere, Universitatea Tehnica Iasi - Grant CNCSIS tip A, contract nr. 40222/2003, Tema nr. 10, cod CNCSIS – 763, Finantare: CNCSIS.
8. Voicu, M. (director grant), Lazar, C., Pastravanu, O., Panescu, D., Dumbrava, St., Ferariu, L., Braescu, C., Lefter, C., Ninu A., Utilizarea sistemelor de vedere artificiala in conducerea robotilor industriali – Metode de conducere a robotilor industriali utilizand informatii senzoriale extrase din imagini, Universitatea Tehnica Iasi - Contract nr. 34280/1999, Tema nr. 32, cod CNCSIS 264, Finantare: CNCSIS.
9. Voicu M. (director grant), Ganciu, T., Lazar, C., Pastravanu, O., Panescu, D., Dumbrava, St., Ifrim, S., Pricop, A., Postolache, M., Ferariu, L., Resmerita, St., Utilizarea sistemelor de vedere artificiala in conducerea robotilor industriali – Metode de analiza a imaginilor 3D continand obiecte poliedrice, Universitatea Tehnica Iasi - Contract nr. 37/1998, Tema nr. 47, cod CNCSU 545, Finantare: CNCSU.
10. Voicu M. (director grant), Pal, C., Pastravanu, O., Panescu, D., Dumbrava St., Ifrim, S., Pricop, A., Postolache, M., Resmerita, St., Ninu, A., Sistem integrat de laboratoare pentru studiul domeniului fabricatiei asistate de calculator, Universitatea Tehnica Iasi - cod CNFIS 1 PU 2 0006 din 1997 (1997-2002), Finantare: Banca Mondiala si Guvernul Romaniei.
11. Lazar, C. (director grant), Pastravanu, O., Poli, E., Schonberger, Fr., Mustata, B., Algoritmi predictivi pentru conducerea proceselor termice, Universitatea Tehnica Iasi – nr. 7002/97 – grant 141, tema3, Finantare: M.I.S.

12. Voicu, M. (coordonator), Pastravanu, O. (autor al proiectului, delegat oficial al coordonatorului), EU Compatible Training in Industrial Automation – COMPANION, TEMPUS MJEP 11467/1996 (1996-1999), Finantare: TEMPUS-PHARE, UE.
13. Voicu, M. (director grant), Lazar, C., Pastravanu, O., Poli, E., Marcu, T., Schonberger, Fr., Ifrim, S., Modele de estimare si analiza a complexitatii in recunoasterea formelor bidimensionale, Universitatea Tehnica Iasi - nr. 2074/96 - poz. B2., Finantare: M.C.T.
14. Voicu, M. (director grant), Lazar, C., Pastravanu, O., Poli, E., Marcu, T., Schonberger, Fr., Ifrim, S., Modele si metode de recunoastere 3D utilizand imagini bidimensionale cu nivele de gri, Universitatea Tehnica Iasi - nr. 4002/95 -grant 533 poz. B4, nr. 5002/96 grant 553 -poz. 2, nr. 6002/97 grant 143 - poz. 5., Finantare: M.I.S.
15. Voicu, M. (director grant), Lazar, C., Pastravanu, O., Poli, E., Schonberger, Fr., Ifrim, S., Onea, Al., Aplicatii ale inteligentei artificiale in conducerea sistemelor tehnice, Universitatea Tehnica Iasi - nr. 3002/94 - poz. C1, nr. 4002/95 grant 480 -poz. A14, nr.5002/96 grant 136-poz. 1., Finantare: M.I.S.,
16. Pastravanu, O. (grant individual), Research in Automated Control Theory and Manufacturing, Proiect de cercetare in cadrul Institutului de Cercetari in Automatica si Robotica, Fort Worth, US (1993-1994), UTA, TX 76019, US Information Agency, Exchange Visitor Facilitative Staff GC/V: D308377 / April 18, 1993, Finantare: Bursa postdoctorala acordata, prin competitie, de Universitatea Texas Arlington.
17. Pastravanu, O. (grant individual), Research in Nonlinear System Identification and Control, Proiect de cercetare in cadrul Laboratorului de Automatica al Universitatii Ghent, Belgia (1992-1993), Ambassade de Belgique, P.07-91.20.10, No 1277 / August 11th, 1992, Finantare: Bursa postdoctorala acordata, prin competitie, de Guvernul Belgiei.
18. Voicu, M. (persoana de contact), Pastravanu, O. (delegat oficial al persoanei de contact), Improvement in Automatic Control Technologies – IMPACT, TEMPUS JEP 2011/1991 (1991-1994), Finantare: TEMPUS-PHARE, UE.
19. Voicu, M. (responsabil tema), Lazar, C., Pastravanu, O., Marcu, T., Poli, E., Ifrim, S., Onea, Al., Schonberger, Fr., Utilizarea bazelor de date in sistemele expert destinate conducerii inteligente a proceselor industriale, Inst. Polit. Iasi - nr. 10354/28.11.91, Finantare: M.I.S.
20. Voicu, M. (persoana de contact), Pastravanu, O. (delegat oficial al persoanei de contact) Higher Education in Control Engineering – HECE, TEMPUS JEP 0886/1990 (1990-1993), Finantare: TEMPUS-PHARE, UE.
21. Bejan, I. (responsabil tema), Voicu, M., Lazar, C., Marcu, T., Pastravanu, O., Pachet de programe pentru identificarea surselor de informatie necunoscute, Inst. Polit. Iasi - Fac.Electrotehnica; nr. 823/1989, Finantare: I.C.S.I.T. - T.C.I. Bucuresti - filiala Iasi.
22. Voicu, M. (responsabil tema), Lazar, C., Pastravanu, O., Elaborarea si validarea prin simulare a unui estimator de stare pentru procese lente perturbate aleator. Inst. Polit. Iasi - Fac.Electrotehnica; nr. 4313/1988, Finantare: C.T.C.E. Iasi.
23. Bejan, I. (responsabil tema), Voicu, M., Lazar, C., Pastravanu, O., Pal, Cr., Asandei, D., Leca, M., Studiu privind utilizarea tehnicii de calcul in optimizarea distributiei energiei electrice la I.R.E. Bacau, Inst. Polit. Iasi - Fac.Electrotehnica; nr. 4338/1988, Finantare: I.R.E. Bacau.

24. Stiurca, D. (responsabil tema), Tesu, I., Maxim, Gh., Pastravanu, O., Bogdan, I., Vrabie, I., Nistor., S., Studiu privind determinarea parametrilor tranzistoarelor bipolare din modelul Gummel-Poon, Inst.Polit. Iasi - Fac.Electrotehnica; nr. 12994/1986, Finantare: I.E.A. Aerofina Bucuresti.
25. Bejan, I. (responsabil tema), Voicu, M., Lazar, C., Pastravanu, O., Pal, Cr., Asandei, D., Leca, M., Cercetari privind prelucrarea imaginilor TV in scopul recunoasterii formelor in robotica, Inst. Polit. Iasi - Fac.Electrotehnica; nr. 2631/1985, Finantare: C.T.C.E. Suceava.
26. Stiurca, D. (responsabil tema), Tesu, I., Maxim, Gh., Pastravanu, O., Bogdan, I., Vrabie, I., Nistor., S., Studii si cercetari privind implementarea pe minicalculatorul I 102-F a unui program de analiza si simulare a circuitelor electronice, precum si modelarea dispozitivelor semiconductoare in vederea utilizarii programului, Inst. Polit. Iasi - Fac.Electrotehnica; nr. 16798/1984, Finantare: I.T.R.D. Pascani.
27. Pastravanu, O. (responsabil tema - angajat al I.C.S.I.T. Automatizari - Filiala Iasi), Metoda de prelucrare a caracteristicilor de transfer statice si dinamice pentru identificarea parametrica a modelului diodei semiconductoare si a modelului tip Gummel-Poon pentru tranzistorul bipolar, I.C.S.I.T. Automatizari - Filiala Iasi; nr. 1418/1985, Finantare: Inst. Politehnic. Iasi.
28. Pirvulescu E. (responsabil tema), Orhei, V., Orhei, M., Pastravanu, O. (angajat al I.C.S.I.T. Automatizari - Filiala Iasi), Bulau, Fl., Sistem de proiectare asistat grafic interactiv implementat pe minicalculatoarele romanesti, utilizat pentru pregatirea fabricatiei reperelor de profil complex in plan si spatiu, I.C.S.I.T. Automatizari - Filiala Iasi; nr. 6870/1985, Finantare: I.M. Nicolina Iasi.
29. Petrus, O. (responsabil tema), Ignat, C., Jucan, T., Ocneanu, Tr, Clocotici, V., Constantin, B., Pastravanu, O. (angajat al Universitatii Al. I. Cuza Iasi), Stancu, Al., Pachet de programe versiunea FELIX C-256 pentru analiza functionarii circuitelor electronice, Universitatea Al. I. Cuza Iasi - Facultatea de Fizica; nr. 2539/1984, Finantare: U.M. 02512 Bucuresti.
30. Pastravanu, O. (responsabil tema - angajat al C.F.S. Iasi), Realizarea unei versiuni FELIX C-256 pentru rutinele din biblioteca ELIPTIC privind rezolvarea ecuatiilor Poisson si Helmutz tridimensionale in coordonate carteziane, C.F.S. Iasi - Of. de calcul; nr. 1398/1983, Finantare: Universitatea Al.I. Cuza Iasi - Facultatea de Fizica.

28 noiembrie, 2008