Articole publicate 1990-2024

1. **Filipescu, A.,-**Stamatescu, S., Robust variable structure controller design with special switching functions, 8th*IFAC Symposium Computer Aided Control Systems Design - CACSD 2000, 11th-13th*, Sep. Manchester, University of Salford, U.K(BDI: www.elsevier.com).

2. **Filipescu, A., -**Some Modifications for Improving Robustness and Alleviating Chattering in Variable Structure Adaptive Control of Non-linear Plant,*6th St. Petersburg Symposium on Adaptive Systems Theory. Dedicated to the memory of Ya.Z.Tsypkin,* Saint-Petersburg, *Russia September 7th –9th, 1999, pp.60-64 ISBN 5-8220-0016-9.*

3. **Filipescu, A.,** -Robustness and alleviation of chattering by new modified update laws and sigmoid function in variable structure adaptive control, *IFAC Workshop on adaptive control and signal processing,* August, University of Strathclyde, Glasgow, Scotland, UK,1998. (Published in Proceedings Elsevier Science ISBN:0-08-043238-7,Edited byM.J.Grimble and M.A. Johnson, BDI: www.elesevier.com).

4. **Filipescu, A.,-**New modified update laws in robust variable structure and compound adaptive control for plant model with higher relative degree, *IFAC Conference System Structure and Control*, volume 1, pp. 215-220, 8th-10th July, Nantes, France, 1998 (Published in Proceedings Elsevier Science ISBN:0-08-043035-X,Edited by J.-F. Lafay, BDI: www.elsevier.com).

5. **Filipescu, A.,**-Two new nonlinear modified adjustment laws for variable structure and compound robust adaptive control. Higher relative degree case.*IFAC Symposium Nonlinear Control System Design (NOLCOS98), volume 1, pp. 251-256, 1st-3rd* July, Enschede, The Netherlands, 1998. (Published in Proceedings Elsevier Science ISBN:0-08-043049-X,Edited by H.J.C. Huiberts, H. Nijmeijer and A.J.van der Schaft, BDI: www.elsevier.com).

6. **Filipescu, A.,**Synthesis algorithm of a compound law for adaptive and variable structure control with sigmoid function and without strictly positive real condition. *5-th IFAC Symposium on Adaptive Systems in Control and Signal Processing,* Preprints, **Budapest**, June 1995, Volume 1, pp. 142-147,1995.(Proceedings edited by Cs.Banyasz, ISBN:0-08-042375-2, BDI: www.elsevier.com)

7. **Filipescu A.,** Dugard L., Dion J-M., Adaptive gain sliding observer based sliding controller for uncertain parameters nonlinear systems. Application to flexible joint robots, Proceedings of the 42ndIEEE Conference on Decision and Control, CDC03, Maui, Hawaii, USA, Dec, 2003, ISBN: 0-7803-7924-1/03/, pp.3537-3522, Editors: J. Jim Zhu and Thomas Parisini(Proceedings ISI quoted,www.ieeexplore.ieee.org).

8. **Filipescu, A.** Dugard, L., Stamatescu S.,-Robots control based on parameter identification and adaptive gain smooth sliding observer-controller robots control based on parameter identification and adaptive gain smooth sliding observer-controller, 16thIFAC World Congress, Prague, July 2005, Elsevier IFAC Publication, pp.511-516 (Published in proceedings, ISBN:0-08-045108, proceedings ISI quoted, http://www.ifac-papersonline.net/Detailed/28636.html, BDI: www.elsevier.com);

9. **Filipescu, A.,** Nunes U., Stamatescu S., Discrete-time sliding mode WMR control based on parameter identification, 16th IFAC World Congress, Prague, July 2005, Elsevier IFAC Publication, pp.89-94, (Published in proceedings, ISBN:0-08-045108, Proceedings ISI quoted, http://www.ifac-papersonline.net/Detailed/28240.html, BDI:www.elsevier.com).

10. **Filipescu A.**, Dugard L., Dion J-M., Robots control by adaptive gain smooth sliding observer-controller and parameter identification, Control Engineering and Applied Informatics CEAI, volume 6, number 3, September 2004, pp26-36, ISSN 1454-8658 (Cod CNCSIS 302).

11. **Filipescu A.,**Dugard L., Dion J-M., Smooth variable structure observer-controller with adaptive gains. Application to robot manipulators control, *European Control Conference, ECC2003, Cambrige, U.K., Sep.2003* (Published in Proceedings, BDI:www.elsevier.com).

12. **Filipescu A.**, Stancu Al.**,** Stamatescu G., On-line Parameter Estimation and Adaptive Gain Smooth Sliding Observer-Controller for Robotic Manipulator Control, 6th IEEE International Conference an Control and Automation, ICCA 2007, pp.1948-1955, Guangzhou, China, 30/May-1/June/2007, Catalog number: 07EX1625C, ISBN:1-4244-0818-0, Library of Congress: 2006937560, (http://apps.isiknowledge.com/full_record.do?product=WOS&search_mode=GeneralSearch&qid=2&SID=Q1JdLllGmcM9ceb5Gop&page=2&doc=13, http://www.ieeexplore.ieee.org/search/freesrchabstract.jsp?tp=&arnumber=4376701&queryText%3DFilipescu+A.%26openedRefinements%3D*%26searchField%3DSearch+All Proceedings ISI quoted, www.ieeexplore.ieee.org, www.scopus.com).

13. **Filipescu A.,** Stancu A., Filipescu S., Stamatescu G.,**-** On-line Parameter Estimation in Sliding-mode Control of Pioneer 3-DX Wheeled Mobile Robot, Proceedings of the 7th WSEAS International Conference on Systems Theory and Scientific Computation ISTASC'07, pp72-77 in Vouliagmeni Beach, Athens, Greece, August 24-26, 2007 . ISSN: 1790-5117, ISBN 978-960-8457-98-0, Proceedings + Book published by WSEAS Press that participate in ISI and all the other important international citation indices: www.worldses.org/indexes, (http://apps.isiknowledge.com/full_record.do?product=WOS&search_mode=GeneralSearch&qid=1&SID=S26PaJFdEb@8Ho@jhL4&page=2&doc=12 Proceedings ISI quoted, www.ieeexplore.ieee.org)

14. **Filipescu A.,** Stancu A., Filipescu S., Sliding-mode adaptive control of Pioneer 3-DX wheeled mobile robot *The Annals of "Dunarea de Jos" University of Galati, ISSN 1221-454X, Fascicule III, Electrotehnics, Electronics, Automatic, Informatics,* 2007, pg.71-76 (Cod CNCSIS 482, BDI : www.csa.com/ids70/serials_source_list.php, http://www.ann.ugal.ro/eeai/index.html).

15. **Filipescu A.,** Stancu A., Filipescu S.,-Three-machines Power System Control by Smooth Sliding-Mode Observer-Controller, 16th International Symposium on Control Systems and Computer Science, CSCS16, 22-25 May, 2007, Bucharest, Romania. ISBN: 978-973-718-741-3, 978-973-718-742-0, pp.261-266.

16. **Filipescu A.,** Stancu A., Filipescu S.,-Sliding-Mode Adaptive Control of Pioneer 3-Dx Wheeled Mobile Robot, *13th International Symposium on Modelling, Simulation, and Systems Identification*, Editura Fundatiei Universitare "Dunarea de Jos" Galati, 2007, ISBN 978-973-88413-0-7, ISSN 1843 - 5130, pp 130-135, 21-22 Sep, 2007, Galati, Romania.

17. **Filipescu A.,** Stancu A., Filipescu S.,- Real-time Sliding-mode Adaptive Control of Pioneer 3-DX Wheeled Mobile Robot, 9th International Symposium on Automatic Control and Computer Science, Proceedings, SACCS 2007, 15-18 noiembrie 2007, Iasi, Romania, ISSN 1843-665-X.

18. Susnea I, **Filipescu A**, Vasiliu G., Filipescu S., Path Following, Real-time, Embedded Fuzzy Control of a Mobile Platform Wheeled Mobile Robot, IEEE International Conference on Automation and Logistics, ICAL 2008, 1-3 Sep., Qingdao, China, IEEE ICAL 2008 CD Proceedings, pp.91-96, IEEE Catalog Number: CFP08CAL, ISBN: 978-1-4244-2503-7, Library of Congress: 2008903794 (Proceedings ISI quoted, http://apps.isiknowledge.com/full_record.do?product=WOS&search_mode=GeneralSearch&qid=1&SID=S26PaJFdEb@8Ho@jhL4&page=

1&doc=7, http://www.ieeexplore.ieee.org/search/freesrchabstract.jsp?tp=&arnumber=4636158&queryText%3DFilipescu+A.%26openedRefinements%3D*%26searchField%3DSearch+All, www.ieeexplore.ieee.org).

19. **Filipescu A.,** Stancu A., Filipescu S., Stamatescu G**.,** Real-time Sliding-mode Adaptive Control of a Mobile Platform Wheeled Mobile Robot, Proceedings of the 17th World Congress, The International Federation of Automatic Control, Seoul, Korea, July 6-11, 2008, pp 4393-4399, ISBN: 978-3-902661-00-5, ID: 978-1-1234-7890-2/08/$20.00 © 2008 IFAC, 10.3182/20080706-5-KR-1001.0881, Elsevier IFAC Publication (http://www.ifac-papersonline.net/Detailed/36455.html, www.elsevier.com)

20. Susnea I, Vasiliu G, **Filipescu A,** Real-Time, Embedded Fuzzy Control of the Pioneer3-DX Robot for Path Following, Proceedings of 12th WSEAS International Conference on SYSTEMS, Heraklion, Greece, July 22-24, 2008, pp.334-338, ISBN: 978-960-6766-83-1, ISSN: 1790-2769, Published by WSEAS Press (http://apps.isiknowledge.com/full_record.do?product=WOS&search_mode=GeneralSearch&qid=1&SID=S26PaJFdEb@8Ho@jhL4&page=2&doc=11, www.wseas.org, www.worldses.org/indexes).

21. Vasiliu G, **Filipescu A,** Stancu Al, Filipescu S, An experiment on using the pioneer 3-dx robot in a multichannel measurement system, 8th WSEAS International Conference on Systems Theory and Scientific Computation (ISTASC'08), Rhodes (Rodos) Island, Greece, August 20-22, 2008, pp.49-55, ISBN: 978-960-8764-83-1, ISSN: 1790-3865, Published by WSEAS Press (http://apps.isiknowledge.com/full_record.do?product=WOS&search_mode=GeneralSearch&qid=1&SID=S26PaJFdEb@8Ho@jhL4&page=1&doc=9, www.wseas.org, www.worldses.org/indexes)

22. **Filipescu A,** Susnea I, Stancu Al, Stamatescu G, Path following, real-time, embedded fuzzy control of a mobile platform pioneer 3-DX, 8th WSEAS International Conference on Systems Theory and Scientific Computation (ISTASC'08), Rhodes (Rodos) Island, Greece, August 20-22, 2008, pp. 136-141, ISBN: 978-960-8764-83-1, ISSN: 1790-3865, Published by WSEAS Press (http://apps.isiknowledge.com/full_record.do?product=WOS&search_mode=GeneralSearch&qid=1&SID=S26PaJFdEb@8Ho@jhL4&page=1&doc=9, www.wseas.org, www.worldses.org/indexes)

23. Susnea I **.** Vasiliu G, **Filipescu A,** RFID Digital Pheromones for Generating Stigmergic Behaviour to Autonomous Mobile Robots, 4th WSEAS Int. Conf. on Dynamica Systems and Control (Control '08)**,** CORFU ISLAND, GREECE, October 26-28, 2008, pp.20-24, ISBN 978-960-474-014-7, ISSN: 1790-2769 Proceedings + Book published by WSEAS Press that participate in ISI and all the other important international citation indices: www.worldses.org/indexes, (Proceedings ISI quoted, www.ieeexplore.ieee.org) Published by WSEAS Press.

24. Susnea I**.** Vasiliu G, **Filipescu A,** Coman G., On the Implementation of a Robotic Assistant for the Elderly. A Novel Approach, 7th WSEAS Int. Conf. on Computational, lintelligence Man-machine Systems and Cybernatics (CIMMACS '08)**,** Cairo, Egipt, December 29-31, 2008, pp.215-220, ISBN 978-960-474-049-9, ISSN: 1790-5117 Proceedings + Book published by WSEAS Press that participate in ISI and all the other important international citation indices: www.worldses.org/indexes, (Proceedings ISI quoted, http://apps.isiknowledge.com/full_record.do?product=WOS&search_mode=GeneralSearch&qid=1&SID=S26PaJFdEb@8Ho@jhL4&page=1&doc=6, www.ieeexplore.ieee.org) Published by WSEAS Press

25. Susnea I**. Filipescu A,** Minzu V, Vasiliu G, Virtual Pheromones and Neural Networks based Wheeled Mobile Robot Control, Recent Advances on Systems, Proceedings of thr 13 International Conference on Systems WSEAS CSCC Multiconference, ISBN 978-960-474-097-0, ISSN: 1790-2769 Rodos, Greece , JULY 22-24, 2009, pp 511-516 Mathematics and Computers in Science Engineering, A series of Reference Books and Textbook Published by WSEAS Press, http://apps.isiknowledge.com/full_record.do?product=WOS&search_mode=GeneralSearch&qid=1&SID=S26PaJFdEb@8Ho@jhL4&page=1&doc=4

26. Susnea I, **Filipescu Adrian,** Filipescu Adriana, Coman G., Wheeled Mobile Robot Control Using Virtual Pheromones, Petroleum-Gas University of Ploiesti Bulletin, Tehnical Series, Vol LXI, no.3/2009, ISSN 1224-8495, pp. 117-126, cod CNCSIS 38.

27. Susnea I**.** Vasiliu G, **Filipescu A,** Coman G., Radaschin A., Real-Time Control of Autonomous Mobile Robots Using Virtual Pheromones, Proceedings of the 7th Asian Control Conference, Hong Kong, China, August 27-29, 2009, IEEE Catalog Number CFP09832, ISBN:978-89-956056-9-1, pp.1450-1455, http://apps.isiknowledge.com/full_record.do?product=WOS&search_mode=GeneralSearch&qid=1&SID=S26PaJFdEb@8Ho@jhL4&page=1&doc=1, http://www.ieeexplore.ieee.org/search/freesrchabstract.jsp?tp=&arnumber=5276352&queryText%3DFilipescu+A.%26openedRefinements%3D*%26searchField%3DSearch+All

28. **Filipescu Adrian,** Susnea I, Filipescu Adriana, Stamatescu G.,Control of Mobile platforms as Robotic Assistants for Elderly, Proceedings of the 7th Asian Control Conference, Hong Kong, China, August 27-29, 2009, IEEE Catalog Number CFP09832, ISBN:978-89-956056-9-1, pp.1456-1461, http://apps.isiknowledge.com/full_record.do?product=WOS&search_mode=GeneralSearch&qid=1&SID=S26PaJFdEb@8Ho@jhL4&page=1&doc=2, http://www.ieeexplore.ieee.org/search/freesrchabstract.jsp?tp=&arnumber=5276245&queryText%3DFilipescu+A.%26openedRefinements%3D*%26searchField%3DSearch+All

29. Solea R., **Filipescu A.,** Nunes U., Sliding-Mode Control for Trajectory-Tracking of a Wheeled Mobile Robot in Presence of Uncertainties, Proceedings of the 7th Asian Control Conference, Hong Kong, China, August 27-29, 2009, IEEE Catalog Number CFP09832, ISBN:978-89-956056-9-1, pp.1701-1706, http://apps.isiknowledge.com/full_record.do?product=WOS&search_mode=GeneralSearch&qid=1&SID=S26PaJFdEb@8Ho@jhL4&page=1&doc=3, http://www.ieeexplore.ieee.org/search/freesrchabstract.jsp?tp=&arnumber=5276210&queryText%3DFilipescu+A.%26openedRefinements%3D*%26searchField%3DSearch+All

30. **Filipescu Adrian,** Susnea I, Filipescu Silviu, Stamatescu G., Wheeled Mobile Robot Control Using Virtual Pheromones and Neural Networks, Proceedings of 2009 IEEE International Conference on Control and Automation Christchurch, New Zealand, December 9-11, 2009, IEEE Catalog Number CFP09537, ISBN: 978-1-4244-4707-7, pp: 157-162, Library of Congress:2009904841, http://www.ieeexplore.ieee.org/search/freesrchabstract.jsp?tp=&arnumber=5410442&queryText%3DFilipescu+A.%26openedRefinements

%3D*%26searchField%3DSearch+All,
http://apps.isiknowledge.com/full_record.do?product=UA&search_mode=GeneralSearch&qid=1&SID=S2ene73DABhCcNMLkfA&page=1&doc=3&colname=WOS

31. **Filipescu Adrian,** Susnea I, Filipescu Adriana, Stamatescu G., Distributed System of Mobile Platform Obstacle Avoidance and Control as Robotic Assistant for Disabled and Elderly, Proceedings of 2009, IEEE International Conference on Control and Automation Christchurch, New Zeeland, December 9-11, 2009, IEEE Catalog Number CFP09537, ISBN: 978-1-4244-4707-7, pp: 1886-1891, Library of Congress:2009904841,
http://www.ieeexplore.ieee.org/search/freesrchabstract.jsp?tp=&arnumber=5410165&queryText%3DFilipescu+A.%26openedRefinements%3D*%26searchField%3DSearch+All,
http://apps.isiknowledge.com/full_record.do?product=UA&search_mode=GeneralSearch&qid=1&SID=S2ene73DABhCcNMLkfA&page=1&doc=4&colname=WOS

32. Solea R., **Filipescu A.,** Stamatescu G. Sliding-mode real-time mobile platform controlin the presence of uncertainties, Proceedings of the 48th IEEE Conference on Decision and Control & 28th Chinese Control Conference, Shanghai, China, December 16-18, 2009, IEEE Catalog Number CFP09CDC-CDR, ISBN:978-1-4244-3872-3, pp.7747-7752, Library of Congress: 79-640961, ISSN:0191-2216,

33. Susnea I., **Filipescu A**., Serbencu A, Radaschin A, *Virtual Pheromones to Control Mobile Robots* . A Neural Network Approach, Proceedings of the IEEE International Conference on Automation and Logistics, Shenyang, China, ISBN: 978-1-4244-4795-4/09, 2009 IEEE, CD-ROM Proceedings IEEE, Catalog #: CFP09CAL, August 5 - 7, 2009, Shenyang, China, pp1962-1967.
http://www.ieeexplore.ieee.org/search/freesrchabstract.jsp?tp=&arnumber=5262627&queryText%3DFilipescu+A.%26openedRefinements%3D*%26searchField%3DSearch+All

34. Susnea I., Vasiliu G**., Filipescu A.,** Radaschin A., Virtual Pheromones for Real-Time Control of Autonomous Mobile Robots, STUDIES IN INFORMATICS AND CONTROL, Volume: **18** Issue: **3** Pages: **233-240** Published: **SEP 2009,** IDS Number: **499SC,** ISSN: **1220-1766,**
http://apps.isiknowledge.com/full_record.do?product=WOS&search_mode=GeneralSearch&qid=1&SID=S26PaJFdEb@8Ho@jhL4&page=1&doc=5

35. Solea R., **Filipescu A.,** Stamatescu G., Trajectory-tracking sliding-mode control for wheeled mobile robots in the presence of uncertainties, Proceedings of 1st Workshop on Energy, Transport, and Environment Control Applications, ETECA'09, Targoviste, ISBN: 978-973-618-218-1, ISBN:978-973-159-080-6, pp. 121-134, The Expert Publishing House, Bucharest, Romania.

36. Solea R., Nunes U., **Filipescu A**., Cernega D., *Sliding Mode Control for Trajectory Tracking of an Intelligent Wheelchair* The Annals of "Dunarea de jos" University of Galati, Fascicle III, 2009, vol.32, no.2, ISSN 1221-454x, Electrotechnics, Electronics, Automatic Control, Informatics, pp.42-50, http://www.ann.ugal.ro/eeai/index.html

37. Solea R., **Filipescu A**, Minzu V., and Filipescu S., Sliding-mode Trajectory-tracking Control for a Four-Wheel-Steering Vehicle, 2010 8th IEEE International Conference on Control and Automation Xiamen, China, June 9-11, 2010, pp.382-387, ISBN: 978-1-4244-5196-8, ISSN: 1948-3457/10/$26.00 ©2010 IEEE, IEEE Catalog Number: CFP10537CDR,
http://ieeexplore.ieee.org/search/freesearchresult.jsp?newsearch=true&queryText=Filipescu+A.

38. Susnea I., **Filipescu A.,** Vasiliu G., Coman G., Radaschin A., The Bubble Rebound Obstacle Avoidance Algorithm for Mobile Robots, 2010 8th IEEE International Conference on Control and Automation Xiamen, China, June 9-11, 2010, pp.540-545, ISBN: 978-1-4244-5196-8, ISSN: 1948-3457/10/$26.00 ©2010 IEEE, IEEE Catalog Number: CFP10537-CDR; ,
http://ieeexplore.ieee.org/search/freesearchresult.jsp?newsearch=true&queryText=Filipescu+A.

39. **Filipescu A.,** Susnea I., Minzu V., Vasiliu G. and Filipescu S., Obstacle Avoidance and Path Following Control of a WMR used as Personal Robotic Assistant 18th Mediterranean Conference on Control & Automation Congress Palace Hotel, Marrakech, Morocco June 23-25, 2010, pp:1555-1560, ISBN: 978-1-4244-8092-0/10/$26.00 ©2010 IEEE, IEEE Catalog Number CFP10 MED-CDR; ,
http://ieeexplore.ieee.org/search/freesearchresult.jsp?newsearch=true&queryText=Filipescu+A.

40. Solea R., **Filipescu A.,** Filipescu S*.,* Dumitrascu B.,- Sliding-mode Controller for Four-Wheel-Steering Vehicle:Trajectory-Tracking Problem, the 8th World Congress on Intelligent Control and Automation July 6-9 2010, Jinan, China, pp: 1185-1190, ISBN: 978-1-4244-6712-9/10/$26.00 ©2010 IEEE; , http://ieeexplore.ieee.org/search/freesearchresult.jsp?newsearch=true&queryText=Filipescu+A.

41. Filipescu A, Susneal., Minzu V., Filipescu S.,- Fuzzy Control and Bubble Rebound Obstacle Avoidance of a Mobile Platform Used as Robotic Assistant, Proceedings of the 29th Chinese Control Conference July 29-31, 2010, Beijing, China, pp:3654-3659, ISBN:978-7-89463-104-6, http://ieeexplore.ieee.org/search/freesearchresult.jsp?newsearch=true&queryText=Filipescu+A.

42. Solea R., **Filipescu A.,** Cernega D.,- Lateral Motion Control of Four-Wheels Steering Vehicle Using a Sliding-Mode Controller, Proceedings of the 29th Chinese Control Conference July 29-31, 2010, Beijing, China, pp:3699-3703, ISBN:978-7-89463-104-6, , http://ieeexplore.ieee.org/search/freesearchresult.jsp?newsearch=true&queryText=Filipescu+A

43. Dumitrascu B., **Filipescu A.-**Sliding Mode Control of Four Driving-Steering Wheels Autonomous Vehicle, Proceeding of 14th IEEE International Conference in System Theory and Control, pp:202-206, 17-19 Oct., Sinaia, Romania, 2010, ISSN: 2068-0465;

44. Solea R., Cernega D., Filipescu A. and Serbencu A. (2010). Formation control of multi-robots via sliding-mode technique. In Proceedings of the 7th International Conference on Informatics in Control, Automation and Robotics, ICINCO, pages 161-166, ISBN:978-989-8425-01-0, indexata dblp http://dblp.unitrier.de/rec/bibtex/conf/icinco/SoleaCFS10

45. Vasiliu G., Mihalcea I., Radjabov S., Filipescu A Jr.: Intelligent Trajectory Tracking in Sliding Mode Based Wheeled Mobile Robot Control, Proceeding of 14th IEEE International Conference in System Theory and Control, pp556-561, 17-19 Oct., Sinaia, Romania, 2010, ISSN: 2068-0465;

46. Dumitrascu B., **Filipescu A.**, Radaschin A., Filipescu A. Jr., Minca E.,-Discrete-Time Sliding Mode Control of Wheeled Mobile Robots, Proceedings of the 8th Asian Control Conference, pp. 771 – 776, Kaohsiung, Taiwan, China, May 16-18, 2011, **ISBN:** 978-1-61284-487-9,
http://ieeexplore.ieee.org/search/freesrchabstract.jsp?tp=&arnumber=5899169&queryText%3DFilipescu+A.%26openedRefinements%3D*%26filter%3DAND%28NOT%284283010803%29%29%26searchField%3DSearch+All ;

47. **Filipescu, A.**; Minzu, V.; Dumitrascu, B.; Filipescu, A.; Minca, E. Trajectory-tracking and discrete-time sliding-mode control of wheeled mobile robots, 2011 IEEE International Conference on Information and Automation, pp. 27-32, E-ISBN : 978-1-4577-0269-3, Print ISBN: 978-1-4577-0268-6, Digital Object Identifier : 10.1109/ICINFA.2011.5948958, 6-8 June 2011, Shenzhen, China, http://ieeexplore.ieee.org/search/freesrchabstract.jsp?tp=&arnumber=5948958&queryText%3DFilipescu+A.%26openedRefinements%3D*%26filter%3DAND%28NOT%284283010803%29%29%26searchField%3DSearch+All

48. Dumitrascu, B.; **Filipescu, A.;** Vasilache, C.; Minca, E.; Filipescu, A. Jr.; Discrete-time sliding-mode control of four driving/steering wheels mobile platform, The Proceedings of 19th IEEE Mediterranean Conference on Control & Automation, pp. 1076 – 1081, ISBN: 978-1-4577-0124-5, Digital Object Identifier : 10.1109/MED.2011.5983167, 20-23 June 2011, Corfu, Greece. http://ieeexplore.ieee.org/search/freesrchabstract.jsp?tp=&arnumber=5983167&queryText%3DFilipescu+A.%26openedRefinements%3D*%26filter%3DAND%28NOT%284283010803%29%29%26searchField%3DSearch+All

49. Dumitrascu, Bogdan; **Filipescu, Adrian**; Minzu, Viorel; Voda, Alina; Minca, Eugenia., Discrete-time sliding-mode control of four driving-steering wheels autonomous vehicle, Proceedings of the 30th Chinese Control Conference (CCC 2011), pp. 3620 – 3625, ISSN: 1934-1768, ISBN: 978-1-4577-0677-6, 22-24 July 2011, Yanthai, China, http://ieeexplore.ieee.org/search/freesrchabstract.jsp?tp=&arnumber=6001526&queryText%3DFilipescu+A.%26openedRefinements%3D*%26filter%3DAND%28NOT%284283010803%29%29%26searchField%3DSearch+All

50. Bogdan Dumitrascu, **Adrian Filipescu,** Viorel Minzu and A. Filipescu Jr.; -Backstepping Control of Wheeled Mobile Robots, Proceeding of 15th IEEE International Conference in System Theory, Control and Computing, pp:206-211, 14-16 Oct., Sinaia, Romania, 2011, ISBN: 978-973-621-323-6;

51. Adrian Radaschin**, Adrian Filipescu,** Viorel Minzu, Eugenia Minca and AdrianaFilipescu Jr.-Adaptive disassembly sequence control by using mobile robots and system information, Proceeding of 15th IEEE International Conference in System Theory, Control and Computing, pp: 499-505, 14-16 Oct., Sinaia, Romania, 2011, ISBN: 978-973-621-323-6

52. **Filipescu A.,** Minzu V. Filipescu A. Jr. Minca E. Discrete-Time Sliding-Mode Control of a MobilePlatform with Four Driving/Steering Wheels, **Lecture Notes in Electrical Engineering,** 122, ISSN 1876-1100, Gary Lee Editor, Advances in Automation and Robotics, Vol. 1, LNEE 122, pp. 401–409. springerlink.com © Springer-Verlag Berlin Heidelberg 2011, ISBN 978-3-642-25552-6, e-ISBN 978-3-642-25553-3,DOI 10.1007/978-3-642-25553-3

53. A. Besançon-Voda, **A. Filipescu**, I. Susnea, E. Minca, "Control and Obstacle Avoidance of a Mobile Platform Used as Robotic Assistant for Elderly and Disabled", The 6th National Conference on "Control Architectures of Robots", May 24-25, 2011, Grenoble, FRANCE;

54. **A.** Radaschin, A. Voda, E. Minca, **A. Filipescu**, Task Planning Algorithm in Hybrid Assembly/Disassembly Process, 14th IFAC Conference on Information Control Problems in Manufacturing, (INCOM 2012), May 23-25, 2012, Bucharest, ISSN: 1474-6670; ISBN: 978-3-902661-98-2, pp. 571-576.

55. **Adrian Filipescu,** Silviu Filipescu, Eugenia Minca,Hybrid System Control of an Assembly/Disassembly Mechatronic Line Using Robotic Manipulator Mounted on Mobile Platform, The 7th IEEE Conference on Industrial Electronics and Applications (ICIEA2012), 18-20 July,2012, Singapore, pp. 433-438, IEEE Catalog Number CFP 1220A-CDR, ISBN: 978-1-4577-2117-5.

56. A. Voda, A. Radaschin, E. Minca, **A. Filipescu**, Control of Automatic Robot with Guided Manipulator Integrated into Flexible Manufacturing System Using Hybrid Petri Nets, IEEE International Conference on System Theorie, Control and Computing, , Joint Conference SINTES 16, SACCS 12, SIMSIS 16, Proceedings of the 16th IEEE Intrenational Conference on System Theory, Control and Computing, ICSTCC2012, Sinaia, 12-14, Oct, 2012 ISBN 978-606-834-848-3, IEEE Catalog Number CFP1236P-CDR

57. E. Minca, V. Stefan, A. **Filipescu, A.,**. Serbencu, A. Filipescu Jr, Two Approaches in Modeling of Assembly/Disassembly Line with Integrated Manipulator Mounted on Mobile Platform, International Conference on System Theory, Control and Computing, Joint Conference SINTES 16, SACCS 12, SIMSIS 16, Proceedings of the 16th IEEE, Intrenational Conference on System Theorie, Control and Computing, ICSTCC2012 12-14, Oct. Sinaia, 2012, ISBN 978-606-834-848-3, IEEE Catalog Number CFP1236P-CDR.

58. Eugenia Minca, **Adrian Filipescu** and Alina Voda, New Approach in Control of Assembly/Disassembly Line Served by RoboticManipulator Mounted on Mobile Platform, 2012 IEEE International Conference on Robotics and Biomimetics (ROBIO 2012), ISBN;978-1-4673-2126-6, 11-14 Dec, 2012, Guangzhou, China.

59. Eugenia MINCA, Alina Voda **Adrian Filipescu** and Adriana Filipescu Hybrid Model Based Control of a Mechatronics Line Served by Mobile Robot with Manipulator, accepted paper to the 8th IEEE International Conference on Industrial and Electronic Application (ICIEA2013), 19-21, June, 2013, Melbourne, Australia.

60. Eugenia MINCA, Adrian FILIPESCU, Alina VODA, A Theoretical Approach of the Generalized Hybrid Model Based on the Control of Repetitive Processes, In Proceedings of the 9th Asia Control Conference (ASCC2013), ISBN:978-1-4673-5769-2, 23-26 June, 2013, Istanbul, Turkey;

61. B. Dumitrascu, A. **Filipescu,** A. Voda, E. Minca, S. Filipescu G. Petrea, Laser-based Obstacle Avoidance Algorithm for Four Driving/Steering Wheels Autonomous VehicleInternational Conference on System Theory, Control and Computing, Joint Conference SINTES 16, SACCS 12, SIMSIS 16, Proceedings of the 17th IEEE, Intrenational Conference on System Theory, Control and Computing, ICSTCC2013 11-13, Oct. Sinaia, 2013, pp.187-192, ISBN: 978-1-4799-2228-4/13/$31.00 ©2013IEEE.

62. G. Petrea, A. **Filipescu,** E. Minca, A. Voda A. Filipescu Jr., A. Serbencu, Hybrid modeling based control of an processing/reprocessing mechatronics line served by an autonomous robotic system,International Conference on System Theory, Control and Computing, Joint Conference SINTES 16, SACCS 12, SIMSIS 16, Proceedings of the 17th IEEE, Intrenational Conference on System Theory, Control and Computing, ICSTCC2013 11-13, Oct. Sinaia, 2013, pp. 410-415, ISBN: 978-1-4799-2228-4/13/$31.00 ©2013IEEE.

63. A. Filipescu Jr., G. Petrea, A. Filipescu, E. Minca, S. Filipescu-Discrete modelling based control of a processing/reprocessing mechatronics line served by an autonomous robotic system, The 4th International Symposium on Electrical, and Electronics Engineering, ISEEE 2013, 11-13, Oct, Galati, 2013, ISBN: 978-1-4799-2442-4/13/$31.00 ©2013 IEEE.

64. **G.Petrea, A. Filipescu, E.Minca, A. Voda, A. Filipescu Jr., A. Serbencu,** *Hybrid Modelling Based Control of an Processing/Reprocessing Mechatronics Line Served by an Autonomous Robotic System* **(pp. 13-18) THE ANNALS OF "DUNĂREA DE**

JOS" UNIVERSITY OF GALATI FASCICLE III, YEAR 2013, VOLUME 36, NUMBER 1, ELECTROTECHNICS, ELECTRONICS, AUTOMATIC CONTROL, INFORMATICS.

65. Filipescu Adriana, Petrea George, **Filipescu Adrian**, Filipescu Silviu-Modeling and Control of a Mechatronics System Served by a MobilePlatform Equipped with Manipulator, Proceedings of the 33rd Chinese Control Conference, July 28-30, 2014, Nanjing, China, pp. 6577-6582, ISBN:978-988-15638-4-2, IEEE Catalog number CFP:1441A-CDR.

66. **Filipescu Adrian**, Filipescu Adriana, Simulated Hybrid Model of an Autonomous Robotic SystemIntegrated into Assembly/Disassembly Mechatronics LinePreprints of the 19th World CongressThe International Federation of Automatic Control, Cape Town, South Africa. August 24-29, 2014, pp.9223-9228, Copyright © 2014 IFAC, DOI:10.3182/20140824-6-ZA-1003.00556.

67. Eugenia Minca, **Adrian Filipescu**, Alina Voda, Modelling and control of an assembly/disassembly mechatronics line, served by mobile robot with manipulator, Control Engineering Practice vol. 31 (2014) pp. 50–62, ISSN: 0967-0661, DOI: 10.1016/j.conengprac.2014.06.005, 0967-0661/& 2014 Elsevier Ltd., WOS:000342273000005 IF 2018=3.232, Clasificare WoS Clarivate Analytics: Q2, Automation&Control Systems. (articol premiat UEFISCDI)

68. **Filipescu**, A. Filipescu, Speed Estimators Based Control of Permanent Magnet Syncronous MotorProceedings of the 18th IEEE, International Conference on System Theory, Control and Computing, ICSTCC2014 17-19, Oct. Sinaia, 2014, pp.897-902, ISBN 978-1-4799-4602-0 ©2014 IEEE.

69. Razvan Solea, **Adrian Filipescu**, Adriana Filipescu Jr. Eugenia Minca, Silviu Filipescu, Wheelchair Control and Navigation Based on Kinematic Model and Iris Movement, Proceedings of the 2015 7th IEEE International Conference on Robotics,Automation and Mechatronics (CIS&RAM), 15 – 17 July 2015, Angkor Wat, Cambodia, IEEE Catalog Number: CFP15835-CDR, ISBN: 978-1-4673-7336-4, pp.78-83.

70. **Minca E., Filipescu**, A., Dragomir O., Coanda, H., G., Dragomir F., Cycle Time Optimization of a Reversible A/DML Served by a Mobile Robotic System, Proceedings of the 19th IEEE, International Conference on System Theory, Control and Computing, ICSTCC 2015 14-16, Oct. Cheile Gradistei, Romania, 2015, pp.99-104, ISBN: 978-1-4799-8481-7©2015 IEEE.

71. **Filipescu**, A., Minca E., Voda A., Dumitrascu B., Filipescu A., Jr., Ciubucciu G., Sliding-Mode Control and Sonnar Based Bubble Rebound Obstacle Avoidance for a WMR, Proceedings of the 19th IEEE, International Conference on System Theory, Control and Computing, ICSTCC 2015 14-16, Oct. Cheile Gradistei, Romania, 2015, pp.105-110, ISBN: 978-1-4799-8481-7©2015 IEEE.

72. George Ciubucciu, Adrian Filipescu, Adriana Filipescu, Silviu Filipescu, Bogdan Dumitrascu, Control and Obstacle Avoidance of a WMR Based on Sliding-Mode, Ultrasounds and Laser; Proceedings or the 12th IEEE International Conference on Control and Automation, Kathmandu, Nepal, June 1-3, 2016, pp.779-784, ISBN: 978-1-5090-1737-9/16/$31.00 ©2016 IEEE.

73. Filipescu A., **Filipescu A., Jr.,** Minca, E., Voda, A., Hybrid Modeling,Balancing and Control of a Mechatronics Line Served by Two Mobile Robots, Proceedings of the 20th IEEE, International Conference on System Theory, Control and Computing, ICSTCC 2016, ISBN: 978-1-5090-2720-0/16/$31.00 ©2016 IEEE, pp:234-239, 14-16, Oct., Sinaia, Romania (indexed WoS).

74. George Ciubucciu, Razvan Solea, Adrian Filipescu, Adriana Filipescu, "Visual Servoing and Obstacle Avoidance Method based Control Autonomous Robotic Systems Servicing a Mechatronics Manufacturing Line", Proceedings of the 2017 IEEE 9th International Conference on Intelligent Data Acquisition and Advanced Computing Systems: Technology and Applications (IDAACS) 21-23, Sep, 2017 Bucharest Vol. 2, pp. 874- 879, 20EEE Catalog number: CFP17803-USB, ISBN 978-1-5386-0697-1/17/$31.00 ©2017 IEEE (WoS indexed).

75. **Filipescu Adrian**, Minca Eugenia, Cernega Daniela, Filipescu Adriana, Solea Razvan, SHPN Models Based Simulation and Control of Mobile Robotic Systems Integrated into A/DML Proceedings of the 21th IEEE, International Conference on System Theory, Control and Computing, ICSTCC2017 19-21, Oct. Sinaia, 2017, pp. 320-325, ISBN: 978-1-5386-3841-5.

76. Filipescu Adrian, Solea Razvan, Petrea George, Cernega Daniela, Filipescu Adriana, Ciubucciu George, SHPN Modelling, Visual Servoing and Control of WMR with RM Integrated into P/RML, Proceedings of the 21th IEEE, International Conference on System Theory, Control and Computing, ICSTCC2017 19-21, Oct. Sinaia, 2017, pp. 230-235 ISBN: 978-1-5386-3841-5 (WoS indexed).

77. A. Filipescu, R. Solea, A. Filipescu Jr., G. Stamatescu, G. Ciubucciu Trajectory-Tracking Sliding-Mode Control of the Autonomous Wheelchair Modeled as a Nonholonomic WMR, Proceedings of the 2018 IEEE 14th International Conference on Control and Automation (ICCA) June 12-15, 2018. Anchorage, Alaska, USA pp.1168-1173, ISBN: 978-1-5386-6088-1/18/$31.00 ©2018 IEEE (WoS indexed).

78. George Petrea, Adrian Filipescu, Eugenia Minca, Adriana Filipescu, Hybrid Modelling and Simulation of a P/RML with Integrated Complex Autonomous Systems, Proceedings of the 22th IEEE, International Conference on System Theory, Control and Computing, ICSTCC2018 10-12, Oct., Sinaia, 2018, pp. 439-444, ISBN: 978-1-5386-4444-7/18/$31.00 ©2018 (WoS indexed).

79. George Petrea, Adrian Filipescu, Razvan Solea, Adriana Filipescu, Visual servoing systems based control of complex autonomous systems serving a P/RML, Proceedings of the 22th IEEE, International Conference on System Theory, Control and Computing, ICSTCC2018 10-12, Oct., Sinaia, 2018, pp. 323-328, ISBN: 978-1-5386-4444-7/18/$31.00 ©2018 (WoS indexed).

80. Razvan Solea, George Ciubucciu, Daniela Cernega, Adrian Filipescu, Ion Voncila, Trajectory Tracking Nonlinear Control and Narrow Spaces Navigation of a WMR, Proceedings of the 22th IEEE, International Conference on System Theory, Control and Computing, ICSTCC2018 10-12, Oct., Sinaia, 2018, pp. 329-334, ISBN: 978-1-5386-4444-7/18/$31.00 ©2018 (WoS indexed).

81. Eugenia Minca, Adrian Filipescu, Heneri-George Coanda, Florin Dragomir, Otilia Elena Dragomir, Adriana Filipescu, Extended Approach for Modelling and simulation of Mechatronics Lines Served by Collaborative Mobile Robots, Proceedings of the 22th IEEE, International Conference on System Theory, Control and Computing, ICSTCC2018 10-12, Oct., Sinaia, 2018, pp. 335-341, ISBN: 978-1-5386-4444-7/18/$31.00 ©2018 (WoS indexed).

82. Florin Dragomir, Eugenia Minca, Otilia Elena Dragomir, **Adrian Filipescu**, Modelling and control of mechatronics lines served by complex autonomous systems, Sensors, Open Access, Volume 19, Issue 15, 1, Aug., 2019, ISSN: 1424-8220, DOI: 10.3390/s19153266, Document Type: Article, Article no.3266, IF 2018=3,081, 5years IF 3.302, Clasificare WoS: Q1, Instrument&Instrumentation. (articol premiat UEFISCDI)

83. O. Duca, V. Gurgu, E. Minca, A. Filipescu, F. Dragomir, O. E. Dragomir, Adriana Filipescu, Optimal control of the complete assembly/disassembly cycle for a mechatronics line prototype, Proceedings of the 23th IEEE, International Conference on System Theory,

Control and Computing, ICSTCC2019 19-11, Oct., Sinaia, 2019, pp. 620-625, ISBN 978-1-7281-0699-1/19/$31.00 ©2019 IEEE (WoS indexed).

84. A. Filipescu, A. Filipescu Jr., S. Filipescu, E. Minca, - Technology on a Mechatronics Line Assisted by Autonomous Robots and Visual Servoing Systems, The 6th International Symposium on Electrical, and Electronics Engineering, ISEEE 2019, 18-19, Oct, Galati, 2019, ISBN: 978-1-7281-2906-8/19/$31.00 ©2019 IEEE (WoS indexed).

85. **Adrian Filipescu**, Eugenia Minca, Adriana Filipescu**,** Henri-George Coanda, Manufacturing Technology on a Mechatronics Line Assisted by Autonomous Robotic Systems, Robotic Manipulators and Visual Servoing Systems, MDPI, Actuators 2020, 9, 127; doi:10.3390/act9040127, Document Type: Article, 2021 IF: 2,6 Clasificare WoS: Q2, Instruments&Instrumentation(**25,17p**)

86. O. Duca, V. Gurgu, E. Minca, A. Filipescu, F. Dragomir, O. E. Dragomir, Optimal control of the complete assembly/disassembly cycle for a mechatronics line prototype, Proceedings of the 23th IEEE, International Conference on System Theory, Control and Computing, ICSTCC2019 19-11, Oct., Sinaia, 2019, pp. 620-625, ISBN 978-1-7281-0699-1/19/$31.00 ©2019 IEEE (WOS, IEEE xplore and SCOPUS indexed).(**5,41p**)

87. A. Filipescu, E. Minca, A. Filipescu jr, „Mechatronics Manufacturing Line with Integrated Autonomous Robots and Visual Servoing Systems", 9th IEEE International Conference on Cybernetics and Intelligent Systems, and Robotics, Automation and Mechatronics (CIS-RAM 2019), November 18-20, 2019, Bangkok, Thailand, pp. 620-625, ISBN:978-1-7281-3457-4, part number: CFP19835-DVD ©978-1-7281-3458-1/19/$31.00_c 2019 IEEE.(**10,83**p)

88. Filipescu, A.; Ionescu, D.; Filipescu, A.; Mincă, E.; Simion, G. Multifunctional Technology of Flexible Manufacturing on a Mechatronics Line with IRM and CAS, Ready for Industry 4.0. MDPI, *Processes* **2021**, Volume*9*, 864. https://doi.org/10.3390/pr9050864, 2021 Impact factor: 3.5, ranked Q2 (Engineering&Chemical). (**25,112p**)

89. A. Filipescu, R. Solea, A. Filipescu Jr., G. Stamatescu, G. Ciubucciu Trajectory-Tracking Sliding-Mode Control of the Autonomous Wheelchair Modeled as a Nonholonomic WMR, Proceedings of the 2018 IEEE 14th International Conference on Control and Automation (ICCA) June 12-15, 2018. Anchorage, Alaska, USA pp.1168-1173, ISBN: 978-1-5386-6088-1/18/$31.00 ©2018 IEEE (indexata IEEE Xplore si SCOPUS) (**4p**).

90. S. **Filipescu**, A. Filipescu, Speed Estimators Based Control of Permanent Magnet Syncronous MotorProceedings of the 18th IEEE, International Conference on System Theory, Control and Computing, ICSTCC2014 17-19, Oct. Sinaia, 2014, pp.897-902, ISBN 978-1-4799-4602-0 ©2014 IEEE.(indexata IEEE Xplore si SCOPUS) (**10p**)

91. O. Duca, E. Minca, A. Filipescu, C. Bidica, M. Paun, Optimal Control of Automated Resupply on a Flexible Manufacturing Mechatronics Line, Proceedings of the 2020 24th IEEE, International Conference on System Theory, Control and Computing, ICSTCC2020 8-10, Oct., Sinaia, 2020, pp. 921-926, ISBN 978-1-7281-9809-5/20/$31.00 ©2020 IEEE.(**4p**)

92. M. Paun, E. Minca, A. Filipescu, A. Filipescu, Jr., , O. Duca, Improved Image Processing Algorithm for Quality Test on a Flexible Manufacturing Mechatronic Line, Proceedings of the 2020 24th IEEE, International Conference on System Theory, Control and Computing, ICSTCC2020 8-10, Oct., Sinaia, 2020, pp. 819-824, ISBN 978-1-7281-9809-5/20/$31.00 ©2020 IEEE (**4p**)

93. Ionescu, D., Cernega, D., Solea, R., Filipescu, A., Simion, G., Filipescu, A., Jr., CAS and IRM Integrated into a Multifunctional Flexible Manufacturing Technology on an A/D/RML, Proceedings of the 25th International Conference on System Theory, Control and Computing, Iasi, Romania, October 20-23, 2021, 978-1-6654-1496-8/21/$31.00 ©2021 IEEE, pp:541-546.(**9,58**)

94. Adrian Filipescu, Răzvan Şolea, Daniela Cristina Cernega, Dan Ionescu, Georgian Simion, Adriana Filipescu, Complex Autonomous System Assisting a Manufacturing Technology on a Mechatronics Line. A Digital Twin Approach, Proceedings of the 26th International Conference on System Theory, Control and Computing (ICSTCC), 19-21 Oct. 2022, Sinaia, Romania, pp.157-162, https://doi.org/10.1109/ICSTCC55426.2022.9931812.**(5,41p)**

95. Adrian Filipescu, Daniela Cristina Cernega, Eugenia Mincă, Razvan Solea, Dan Ionescu, Georgian Simion, Adriana Filipescu, Digital Twin for a Mechatronics Line with Integrated Mobile Robotic Systems, Proceedings of the 26th International Conference on System Theory, Control and Computing (ICSTCC), 19-21 Oct. 2022, Sinaia, Romania, pp.163-169, https://doi.org/10.1109/ICSTCC55426.2022.9931782. **(4,64p)**

96. Octavian Duca, Eugenia Minca, Adrian Filipescu, Răzvan Şolea, Daniela Cernega, Marius Paun, Event-based PID control in a flexible manufacturing process, Proceedings of the 26th International Conference on System Theory, Control and Computing (ICSTCC), 19-21 Oct. 2022, Sinaia, Romania, pp.182-187, **https://doi.org/10.1109/ICSTCC55426.2022.9931787**. **(5,41p)**

97. Eugenia Mincă, Adrian Filipescu, Daniela Cernega, Răzvan Şolea, Adriana Filipescu, Dan Ionescu, Georgian Simion, Digital Twin for a Multifunctional Technology of Flexible Assembly on a Mechatronics Line with Integrated Robotic Systems and Mobile Visual Sensor—Challenges towards Industry 5.0, Sensors, Volume 22 (21), https://doi.org/10.3390/s22218153, 2022 Impact factor: 3,9, ranked Q2, Intrument&Instrumentation, WOS:000881435200001,(20,05p).

98. Dan Ionescu, Adrian Filipescu, Georgian Simion, Eugenia Mincă, Daniela Cernega, Răzvan Şolea, Adriana Filipescu, Communication and Control of an Assembly, Disassembly and Repair Flexible Manufacturing Technology on a Mechatronics Line Assisted by an Autonomous Robotic System, *Inventions* 2022, *7*(2), **43; https://doi.org/10.3390/inventions7020043**, **WOS:000818151300001, IF=3,4, (6,78p).**

99. Georgian Simion, Adrian Filipescu, Dan Ionescu, Răzvan Şolea, Daniela Cernega, Eugenia Mincă, Adriana Filipescu, Mobile Visual Servoing Based Control of a Complex Autonomous System Assisting a Manufacturing Technology on a Mechatronics Line, *Inventions* 2022, *7*(3),47; https://doi.org/10.3390/inventions7030047, WOS:00085823250000, IF=3,4, **(6,78p).**

100. Octavian Duca, Eugenia Minca, Adrian Filipescu, Daniela Cernega, Ra.zvan Solea, Claudiu Bidica, Event-Based PID Control of a Flexible Manufacturing Process, *Inventions* 2022, https://doi.org/10.3390/inventions7040086, WOS:000902580500001, IF 3,4, **(7,91p).**

101. Adrian Filipescu, Daniela Cernega, Razvan Solea, Adriana Filipescu, Eugenia Minca, Dan Ionescu, Georgian Simion, Modeling and Control an A/DT Served by an ACPS based on SCADA, Industry 4.0 and 5.0, 28th IEEE International Conference on Emerging Technologies and Factory Automation, ETFA 2023, Sinaia, 12 September 2023 through 15 September 2023, https://doi.org/10.1109/ETFA54631.2023.10275730, ISSN: 1946-0759.

102. Octavian Duca, Eugenia Minca, Adrian Filipescu, Razvan Solea, Daniela Cernega, Adriana Filipescu, Flexible Manufacturing with Integrated Robotic Systems in the Context of Industry 5.0, 28th IEEE International Conference on Emerging Technologies and Factory Automation, ETFA 2023, Sinaia, 12 September 2023 through 15 September 2023, https://doi.org/10.1109/ETFA54631.2023.10275349, ISSN: 1946-0759

103. Adrian Filipescu, Eugenia Minca, Daniela Cernega, Razvan Solea, Adriana Filipescu, Simion Georgian, Dan Ionescu, Digital Twin Based a Processing Technology Assisted by a MCPRS, Ready for Industry 5.0, 97 - 3022023 27th International Conference on System Theory, Control and Computing, ICSTCC 2023Timisoara11 October 2023through 13 October 2023, https://doi.org/10.1109/ICSTCC59206.2023.10308478, ISSN: 2473-5698.

104.	Adrian Filipescu, Georgian Simion, Dan Ionescu, Adriana Filipescu, Remote Control of a Flexible Robotic Cell as a Cyber Physical System for Assembly and Disassembly based on SCADA and Industry 4.0, accepted paper to The 32nd Mediterranean Conference on Control and Automation, JUNE 11 - 14, 2024 KAM Center of Mediterranean Architecture CHANIA, CRETE, GREECE.

105.	Adrian Filipescu, Iulia Stamatescu, Georgian Simion, Dan Ionescu, Adriana Filipescu, IoT-Cloud based Control of a Flexible Assembly/Disassembly Mechatronic System in the Framework of Industries 4.0 and 5.0, accepted paper to 2024 IEEE 18th International Conference on Control & Automation (ICCA),June 18-21, 2024, Reykjavík, Iceland.

106.	Eugenia Mincă, Adrian **Filipescu**, Daniela Cernega, Răzvan Șolea, Adriana Filipescu, Dan Ionescu, Georgian Simion, Digital Twin for a Multifunctional Technology of Flexible Assembly on a Mechatronics Line with Integrated Robotic Systems and Mobile Visual Sensor—Challenges towards Industry 5.0, Sensors, Volume 22 (21), https://doi.org/10.3390/s22218153, 2022 Impact factor: 3,9, ranked Q2, Intrument&Instrumentation, WOS:000881435200001.

107.	Dan Ionescu, Adrian Filipescu, Georgian Simion, Eugenia Mincă, Daniela Cernega, Răzvan Șolea, Adriana Filipescu, Communication and Control of an Assembly, Disassembly and Repair Flexible Manufacturing Technology on a Mechatronics Line Assisted by an Autonomous Robotic System, *Inventions* 2022, *7*(2), **43; https://doi.org/10.3390/inventions7020043, WOS:000818151300001, IF=3,4.**

108.	Georgian Simion, Adrian Filipescu, Dan Ionescu, Răzvan Șolea, Daniela Cernega, Eugenia Mincă, Adriana Filipescu, Mobile Visual Servoing Based Control of a Complex Autonomous System Assisting a Manufacturing Technology on a Mechatronics Line, *Inventions* 2022, *7*(3),47; https://doi.org/10.3390/inventions7030047, WOS:00085823250000, IF=3,4

109.	Octavian Duca, Eugenia Minca, Adrian Filipescu, Daniela Cernega, Razvan Solea, Claudiu Bidica, Event-Based PID Control of a Flexible Manufacturing Process, *Inventions* 2022, https://doi.org/10.3390/inventions7040086, WOS:000902580500001, IF 3,4.

Articole publicate in reviste cu factor de impact

1.	Florin Dragomir, Eugenia Minca, Otilia Elena Dragomir, **Adrian Filipescu,** Modelling and control of mechatronics lines served by complex autonomous systems, Sensors, Open Access, Volume 19, Issue 15, 1, Aug., 2019, ISSN: 1424-8220, DOI: 10.3390/s19153266, Document Type: Article, Article no.3266, IF 2018=3,081, 5years IF 3,9, Clasificare WoS: Q1, Instrument&Instrumentation. (articol premiat UEFISCDI)

2.	Eugenia Minca, **Adrian Filipescu**, Alina Voda, Modelling and control of an assembly/disassembly mechatronics line, served by mobile robot with manipulator, Control Engineering Practice vol. 31 (2014) pp. 50–62, ISSN: 0967-0661, DOI: 10.1016/j.conengprac.2014.06.005, 0967-0661/& 2014 Elsevier Ltd., WOS:000342273000005 IF 2023=4,9, Clasificare WoS Clarivate Analytics: Q2, Automation&Control Systems.(articol premiat UEFISCDI)

3.	A.Chirosca, G. Ifrim, **A. Filipescu,** S. Caraman:Multivariable H∞ Control of Wastewater Biological Treatment Processes, CONTROL ENGINEERING AND APPLIED INFORMATICS, CEAI, Vol.15, No.1 pp. 11-21, 2013, ISSN 1454-8658, (impact factor=.565, Q4);

4.	**Filipescu A.**, Dugard L., Dion J-M., Robots control by adaptive gain smooth sliding observer-controller and parameter identification, Control Engineering and Applied Informatics CEAI, volume 6, number 3, September 2004, pp26-36, ISSN 1454-8658, (impact factor=0,9, Q4);

5.	Susnea I., Vasiliu G., Filipescu A.,Radaschin A., Virtual Pheromones for Real-Time Control of Autonomous Mobile Robots, STUDIES IN INFORMATICS AND CONTROL, **Volume:** 18, **Issue:** 3, **Pages:** 233-240, **Published:** SEP 2009, **IDS Number:** 499SC, **ISSN:** 1220-1766, (impact factor=2,1, Q2);

6.	**Adrian Filipescu**, Eugenia Minca, Adriana Filipescu**,** Henri-George Coanda, Manufacturing Technology on a Mechatronics Line Assisted by Autonomous Robotic Systems, Robotic Manipulators and Visual Servoing Systems, MDPI, Actuators 2020, 9, 127; doi:10.3390/act9040127, Document Type: Article, 2021 IF: 2,6 Clasificare WoS: Q2, Instruments&Instrumentation.

7.	Filipescu, A.; Ionescu, D.; Filipescu, A.; Mincă, E.; Simion, G. Multifunctional Technology of Flexible Manufacturing on a Mechatronics Line with IRM and CAS, Ready for Industry 4.0. MDPI, *Processes* **2021**, Volume*9*, 864. https://doi.org/10.3390/pr9050864, 2021 Impact factor: 3,5, ranked Q2 (Engineering&Chemical).

8.	Eugenia Mincă, Adrian **Filipescu**, Daniela Cernega, Răzvan Șolea, Adriana Filipescu, Dan Ionescu, Georgian Simion, Digital Twin for a Multifunctional Technology of Flexible Assembly on a Mechatronics Line with Integrated Robotic Systems and Mobile Visual Sensor—Challenges towards

Industry 5.0, Sensors, Volume 22 (21), https://doi.org/10.3390/s22218153, 2022 Impact factor: 3,9, ranked Q2, Intrument&Instrumenstion, WOS:000881435200001.

9. Dan Ionescu, Adrian Filipescu, Georgian Simion, Eugenia Mincă, Daniela Cernega, Răzvan Șolea, Adriana Filipescu, Communication and Control of an Assembly, Disassembly and Repair Flexible Manufacturing Technology on a Mechatronics Line Assisted by an Autonomous Robotic System, *Inventions* 2022, *7*(2), 43; https://doi.org/10.3390/inventions7020043, WOS:000818151300001, IF=3,4.

10. Georgian Simion, Adrian Filipescu, Dan Ionescu, Răzvan Șolea, Daniela Cernega, Eugenia Mincă, Adriana Filipescu, Mobile Visual Servoing Based Control of a Complex Autonomous System Assisting a Manufacturing Technology on a Mechatronics Line, *Inventions* 2022, *7*(3),47; https://doi.org/10.3390/inventions7030047, WOS:00085823250000, IF=3,4

11. Octavian Duca, Eugenia Minca, Adrian Filipescu, Daniela Cernega, Razvan Solea, Claudiu Bidica, Event-Based PID Control of a Flexible Manufacturing Process, *Inventions* 2022, https://doi.org/10.3390/inventions7040086, WOS:000902580500001, IF 3,4.

Lista proiectelor şi granturilor de cercetare nationale ca director:

1. **PN-III-P1-1.2-PCCDI-2017-0290, contract 78PCCDI/01.03.2018**, Conducerea inteligentă şi distribuită a 3 sisteme autonome complexe integrate în tehnologii emergente pentru asistare personală medico-socială şi deservire de linii de fabricaţie flexibilă de precizie (CIDSACTEH), www.cidsacteh.ugal.ro

2. **PN-II-PT-PCCA-2013-4-0686,** Prototypes of autonomous robotic systems for medical/social assistance and servicing of manufacturing processes in metallurgy, ceramics, glass and automotive, 2014-2017, ProRobSis, www.prorobsis.ugal.ro

3. **PN-II-ID-PCE-2011-3-0641,** Advanced control of reversible manufacturing systems of assembling and disassembling using wheeled mobile robots equipped with robotic manipulators, 2011-2016**;**

4. **PN II-ID-PCE-2007-1-641-**Sliding-mode adaptive control applied to robotic manipulators, wheeled mobile robots, wheelchairs and electric autonomous vehicles, 2007-2010.

5. **CEEX-M2-C2-PD22,** -Study and implementation of adaptive and variable structure control applied to robotic manipulators, wheeled mobile robots and autonomous vehicles, 2006-2008.

6. **A-525 proiect CNCSIS,** Real-time, adaptive, sliding-mode control of robotic manipulator and mobile robots, 2006-2008**.**

7. **Grant CNCSU, 4007, 1996**, Sinteza unor comenzi compuse pentru conducerea adaptive si custructura variabila cu aplicatii in domeniul naval,

8. **Grant CNCSU, A.14, 1995,** Sisteme adaptive şi cu structura variabilă vizând conducerea avansată a navelor şi echipamentelor de bord

9. **POSDRU ID 64051** Invata automatica

Director/responsabil internationale :

1. **FCT-ICCTI-NATO (ICCTI-03276)** research project grant at Institute of Systems and Robotics, University of Coimbra, Portugal, Sliding-Mode Adaptive Control of Mobile Robots and Autonomous Vehicles, 15/Sep/2003-15/Mar/2004.

2. **CNAM-NATO** research project grant at Laboratoire d'Automatique Grenoble, INPG, France, Adaptive and Variable Structure Control of Mechanical Systems, 01/Oct/2002-30/June/2003.

3. CNR-NATO (No. 52 NATO research project grant Outreach Fellowships Programme, No2. Fellowship for Engineering) research fellowship grant at Department of Mechanics, Torino Polytechnics, Italy, Kinematical and Dynamical Modelling of Robotic Systems, 15/Nov/2000-15/May/2001,

4. Project TEMPUS12018/97, Perspectives d'Utilisation Rationnelle de l'Energie, 1997-2000.

Membru in echipe nationale :

1. **PN-III-P1-1.2-PCCDI-2017-0734 contract 72PCCDI/01.03.20182018,** Roboţii şi Societatea: Sisteme Cognitive pentru Roboţi Personali şi Vehicule Autonome **(ROBIN)**

2. **PN II-ID-PCE-2008-2-506 -**Studiu pentru implementarea in timp real a unui sistem hibrid pentru conducerea avansata a manipulatoarelor robotice si robotilor mobili colaborativi**;**

3. **POSDRU SIMBAD** (ID 6853)
4. **POSDRU EFICIENT (ID 61445)**
5. **POSDRU TOPACADEMIC (ID: 76822)**
6. **Contract nr. 23/1991, cu Ministerul Învăţământului, Faza a III-a**, Elaborarea de algoritmi şi proceduri pentru reglarea adaptivă multivariabilă, cu aplicaţii în domeniul termoenergetic şi naval, dec.1993*;*
7. **Contract nr. 23/1991, cu Ministerul Învatamântului, Faza a II-a-** Elaborarea de algoritmi de comutare a structurii şi de adaptare a parametrilor în regulatoarele numerice, cu aplicaţii în domeniul naval, termoenergetică şi robotică, noiembrie 1992**;**
8. **Contract nr.23/1991, cu Ministerul Învatamântului,** - Sisteme instruibile de inteligenţă artificială pentru diagnoză şi conducerea automată a proceselor, **Faza I-a,** Sinteza regulatoarelor adaptive pentru stabilizarea cursului navelor, noiembrie 1991;
9. **Contract nr. 60/1988, cu ICPTT Bucuresti-Faza a II-a**, Real-time, on-line identification of ship dynamics in horizontal plane, Februarie 1990**;**
10. **Contract nr. 60/1988, cu ICPTT Bucuresti-** Elaborarea, testarea, validarea algoritmilor şi programelor de conducere adaptivă pentru pilot automat computerizat destinat navelor maritme, **Faza I-a,** Identificarea off-line a dinamicii navei, elaborarea softului şi a hardului pentru conducerea navei în marş şi manevră, oct., 1989**;**
11. **Contract nr. 51/1987, cu ICA Bucureşti -** Simularea proceselor de biosinteza din industria alimentara în vederea optimizarii parametrilor biotehnologici şi conducerea acestora pe calculator, dec., 1988
12. **Contract nr. 8/1986, cu ICA Bucureşti -** Elaborarea modelului matematic al procesului de biosinteza a alfamilazei si proteazei bacteriene, **Faza I-a,** oct., 1987
13. **Contract nr. 31/1984, cu FEPER Bucuresti**- Elaborarea unui pachet de programe de roiectare asistata de calculator a formelor navei prin utilizarea sistemului Diagram 2030, **Faza a II-a**, Programe de cuplare a imprimantei grafice ICT800 la microcalculatorul TPD si pachet de programe interactiv pentru desenarea structurilor navale, oct.1986**.**

30-04-2024   **Prof.dr.ing. Adrian FILIPESCU**