

Conf.dr.ing. Florin Stoican

Lista publicațiilor științifice 2000-2017

● Monografii, capitole de carte (edituri internaționale)

1. **Stoican, F.**, C. Oară și M. Hovd, RPI approximations of the mRPI set characterizing linear dynamics with zonotopic disturbances”, în Developments in Model-Based Optimization and Control: Distributed Control and Industrial Applications, Springer series Lecture Notes in Control and Information Sciences, pp. 361–377, 2015, ISBN: 9783319266855, DOI: [10.1007/978-3-319-26687-9_17](https://doi.org/10.1007/978-3-319-26687-9_17), WOS: 000369162800019, EID: [2-s2.0-84954169584](https://www.eid.net/EID/2-s2.0-84954169584), Springer Verlag Berlin
2. Prodan, I., **F. Stoican**, S. Oлару, C. Stoica și S.-I. Niculescu, Mixed-Integer Programming Techniques in Distributed MPC Problems, în seria Springer Intelligent Systems, Control and Automation: Science and Engineering, pp. 275–291, 2014. ISBN: 9789400770058, DOI: [10.1007/978-94-007-7006-5_17](https://doi.org/10.1007/978-94-007-7006-5_17), EID: [2-s2.0-84896528456](https://www.eid.net/EID/2-s2.0-84896528456), Kluwer Academic Publishers, Dordrecht, The Netherlands
3. **Stoican, F.** și S. Oлару, Set-theoretic Fault-tolerant Control in Multisensor Systems, pp. 1–152, 2013. ISBN: 9781848215658; 9781118649428, WOS: 000327043800009, EID: [2-s2.0-85014342801](https://www.eid.net/EID/2-s2.0-85014342801), Wiley, Sussex, UK
4. Prodan, I., **F. Stoican**, S. Oлару și S. Niculescu, Mixed-Integer Representations in Control Design: Mathematical Foundations and Applications, pp. 1–107, 2016, ISBN: 9783319269931, DOI: [10.1007/978-3-319-26995-5](https://doi.org/10.1007/978-3-319-26995-5), WOS: 000415981400008, Springer Cham, Switzerland

● Articole în reviste și volume proceedings de conferințe, indexate ISI

1. Popescu, D., L. Ichim și **F. Stoican**, Unmanned aerial vehicle systems for remote estimation of flooded areas based on complex image processing, Sensors (Switzerland), pp. 1–24, 2017, ISSN: 1424-8220, DOI: [10.3390/s17030446](https://doi.org/10.3390/s17030446), WOS: 000398818700019, EID: [2-s2.0-85014008000](https://www.eid.net/EID/2-s2.0-85014008000), publicat de MDPI AG, Basel, Switzerland
2. Stankovic, N., **F. Stoican**, S. Oлару și S.-I. Niculescu, Fault tolerant control design for a class of multi-sensor networked control systems, International Journal of Adaptive Control and Signal Processing, pp. 412–426, 2016, ISSN: 0890-6327, DOI: [10.1002/acs.2568](https://doi.org/10.1002/acs.2568), WOS: 000369342100016, EID: [2-s2.0-84961367930](https://www.eid.net/EID/2-s2.0-84961367930), Wiley, New Jersey, USA
3. Popescu, D., **F. Stoican** și L. Ichim, Control and optimization of UAV trajectory for aerial coverage in photogrammetry applications, Advances in Electrical and Computer Engineering, pp. 99–106, 2016, ISSN: 1582-7445, DOI: [10.4316/AECE.2016.03014](https://doi.org/10.4316/AECE.2016.03014), WOS: 000384750000014, EID: [2-s2.0-84991093546](https://www.eid.net/EID/2-s2.0-84991093546), University of Suceava, Romania
4. Prodan, I., E. Zio și **F. Stoican**, Fault tolerant predictive control design for reliable microgrid energy management under uncertainties, Energy, pp. 20–34, 2015, ISSN: 0360-5442, DOI: [10.1016/j.energy.2015.08.009](https://doi.org/10.1016/j.energy.2015.08.009), WOS: 000365362700003, EID: [2-s2.0-84946026960](https://www.eid.net/EID/2-s2.0-84946026960), Pergamon Press, Oxford, UK
5. Xu, F., V. Puig, C. Ocampo-Martinez, S. Oлару și **F. Stoican**, Set-theoretic methods in robust detection and isolation of sensor faults, International Journal of Systems Science, pp. 2317–2334, 2015, ISSN: 0020-7721, DOI: [10.1080/00207721.2014.989293](https://doi.org/10.1080/00207721.2014.989293), WOS: 000357935900003, EID: [2-s2.0-84946481041](https://www.eid.net/EID/2-s2.0-84946481041), Taylor and Francis, UK
6. **Stoican, F.**, S. Oлару, J. A. De Dona și M. M. Seron, A discussion on sensor recovery techniques for fault tolerant multisensor schemes, International Journal of Systems Science, pp. 1708–1722, 2014, ISSN: 0020-7721, DOI: [10.1080/00207721.2012.748947](https://doi.org/10.1080/00207721.2012.748947), WOS: 000337363600009, EID: [2-s2.0-84902884804](https://www.eid.net/EID/2-s2.0-84902884804), Taylor and Francis, UK
7. Hovd, M. și **F. Stoican**, On the design of exact penalty functions for MPC using mixed integer

- programming”, *Computers and Chemical Engineering*, pp. 104–113, 2014, ISSN: 0098-1354, DOI: [10.1016/j.compchemeng.2013.07.001](https://doi.org/10.1016/j.compchemeng.2013.07.001). WOS: 000342461300010. EID: [2-s2.0-84907099758](https://www.wos.com/record/2-s2.0-84907099758), Pergamon Press, Elsevier Science, UK
8. **Stoican, F.**, S. Olaru, M. M. Seron și J. A. De Dona, A fault tolerant control scheme based on sensor-actuation channel switching and dwell time, *International Journal of Robust and Nonlinear Control*, pp. 775–792, 2014, ISSN: 1049-8923, DOI: [10.1002/rnc.2907](https://doi.org/10.1002/rnc.2907). WOS: 000329740800010. EID: [2-s2.0-84892555102](https://www.wos.com/record/2-s2.0-84892555102). Wiley-Blackwell, New Jersey, USA
 9. Xu, F., V. Puig, C. Ocampo-Martinez, **F. Stoican** și S. Olaru, Actuator-fault detection and isolation based on set-theoretic approaches”, *Journal of Process Control*, pp. 947–956, 2014, ISSN: 0959-1524, DOI: [10.1016/j.jprocont.2014.04.016](https://doi.org/10.1016/j.jprocont.2014.04.016). WOS: 000338806000023. EID: [2-s2.0-84903317323](https://www.wos.com/record/2-s2.0-84903317323). Pergamon Press, Elsevier Science, Oxford, UK
 10. **Stoican, F.**, S. Olaru și G. Bitsoris, Controlled invariance-based fault detection for multisensory control systems, *IET Control Theory and Applications*, pp. 606–611, 2013, ISSN: 1751-8644, DOI: [10.1049/iet-cta.2011.0678](https://doi.org/10.1049/iet-cta.2011.0678). WOS: 000321714000012. EID: [2-s2.0-84879490832](https://www.wos.com/record/2-s2.0-84879490832). Published by the INST Engineering Technology – IET, UK
 11. Prodan, I., **F. Stoican**, S. Olaru și S.-I. Niculescu, Enhancements on the Hyperplanes Arrangements in Mixed-Integer Programming Techniques, *Journal of Optimization Theory and Applications*, pp. 549–572, 2012, ISSN: 0022-3239. DOI: [10.1007/s10957-012-0022-9](https://doi.org/10.1007/s10957-012-0022-9). WOS: 000306288300012. EID: [2-s2.0-84864287100](https://www.wos.com/record/2-s2.0-84864287100). Springer Plenum Publishers, New York
 12. **Stoican, F.**, S. Olaru, M. M. Seron și J. A. De Dona, Reference governor design for tracking problems with fault detection guarantees, *Journal of Process Control*, pp. 829–836, 2012, ISSN: 0959-1524. DOI: [10.1016/j.jprocont.2012.02.004](https://doi.org/10.1016/j.jprocont.2012.02.004). WOS: 000305670600001. EID: [2-s2.0-84861603636](https://www.wos.com/record/2-s2.0-84861603636). Pergamon Press, Elsevier Science, Oxford, UK
 13. Olaru, S., J. A. De Dona, M. M. Seron și **F. Stoican**, Positive invariant sets for fault tolerant multisensor control schemes, *International Journal of Control*, pp. 2622–2640, 2010, ISSN: 0020-7179. DOI: [10.1080/00207179.2010.535215](https://doi.org/10.1080/00207179.2010.535215). WOS: 000285354700018. EID: [2-s2.0-78650359008](https://www.wos.com/record/2-s2.0-78650359008). Taylor and Francis, UK
 14. Ioan, D.-M., **F. Stoican** și K. Worthmann, Active Fault Detection and Isolation in a Zono- topic Framework”, în *21st International Conference on System Theory, Control and Computing (ICSTCC)*, pp. 595–600, 2017, WOS: 000427419900098. IEEE Xplore Digital Library
 15. **Stoican, F.**, I. Prodan, D. Popescu și L. Ichim, Constrained trajectory generation for UAV systems using a B-spline parametrization, în *25th Mediterranean Conference on Control and Automation, MED 2017*, pp. 613–618, 2017. ISBN: 9781509045334. DOI: [10.1109/MED.2017.7984185](https://doi.org/10.1109/MED.2017.7984185). WOS: 000426926300100. EID: [2-s2.0-85027839276](https://www.wos.com/record/2-s2.0-85027839276). IEEE Xplore Digital Library
 16. Chenaru, O., D. Popescu, D. Enache, L. Ichim și **F. Stoican**, Improving operational security for web-based distributed control systems in wastewater management, în *25th Mediterranean Conference on Control and Automation, MED 2017*, pp. 1089–1093, 2017. ISBN:9781509045334. DOI: [10.1109/MED.2017.7984263](https://doi.org/10.1109/MED.2017.7984263). WOS: 000426926300178. EID: [2-s2.0-85028503305](https://www.wos.com/record/2-s2.0-85028503305). IEEE Xplore Digital Library
 17. Irofti, P. și **F. Stoican**, Dictionary learning strategies for sensor placement and leakage isolation in water networks, în *20th World Congress of the International Federation of Automatic Control (IFAC)*, pp. 1553–1558, 2017. DOI: [10.1016/j.ifacol.2017.08.308](https://doi.org/10.1016/j.ifacol.2017.08.308). WOS: 000423845200252. EID: [2-s2.0-85031780069](https://www.wos.com/record/2-s2.0-85031780069). Elsevier Science, Amsterdam, The Netherlands
 18. Nguyen, N. T., I. Prodan, **F. Stoican** și L. Lefevre, Reliable nonlinear control for quadcopter trajectory tracking through differential flatness, în *Proceedings of the 20th World Congress of the International Federation of Automatic Control (IFAC)*, pp. 6971–6976, 2017. DOI: [10.1016/j.ifacol.2017.08.1338](https://doi.org/10.1016/j.ifacol.2017.08.1338). WOS: 000423964900158. EID: [2-s2.0-85027890024](https://www.wos.com/record/2-s2.0-85027890024). Elsevier Science, Amsterdam, The Netherlands
 19. **Stoican, F.**, V.-M. Ivanusca, I. Prodan și D. Popescu, Obstacle avoidance via B-spline parametrizations of flat trajectories, în *24th Mediterranean Conference on Control and Automation (MED)*, pp. 1002–1007, 2016. WOS: 000391154900167. IEEE Xplore Digital Library, NY, USA

20. **Stoican, F.** și D. Popescu, Trajectory generation with way-point constraints for UAV systems, în 24th International Conference on Robotics in Alpe-Adria-Danube Region, RAAD 2015, pp. 379–386, 2016. ISBN: 9783319212890. DOI: [10.1007/978-3-319-21290-6_38](https://doi.org/10.1007/978-3-319-21290-6_38). WOS: 000381804400038. EID: [2-s2.0-84983209088](https://www.eid.elsevier.com/2-s2.0-84983209088). Springer Verlag, Berlin
21. Popescu, D., L. Ichim, D. Gornea și **F. Stoican**, Complex image processing using correlated color information”, în 17th International Conference on Advanced Concepts for Intelligent Vision Systems, ACIVS 2016, pp. 723–734, 2016. ISBN: 9783319486796. DOI: [10.1007/978-3-319-48680-2_63](https://doi.org/10.1007/978-3-319-48680-2_63). WOS: 000390177400063. EID: [2-s2.0-84994417096](https://www.eid.elsevier.com/2-s2.0-84994417096). Springer International Publishing AG
22. Prodan, I., **F. Stoican** și E. I. Grotli, Some remarks on potential field constructions in a multi-obstacle environment, în 10th IFAC Conference on Control Applications in Marine Systems (CAMS), pp. 28–33, 2016. DOI: [10.1016/j.ifacol.2016.10.317](https://doi.org/10.1016/j.ifacol.2016.10.317). WOS: 000401252400005. EID: [2-s2.0-84994140372](https://www.eid.elsevier.com/2-s2.0-84994140372). Elsevier Science, Amsterdam, The Netherlands
23. **Stoican, F.**, D. Popescu, E. Vlasceanu și C. Mateescu, Geometrical considerations for photogrammetry missions in an UAV context, în 19th International Conference on System Theory, Control and Computing, ICSTCC 2015 - Joint Conference SINTES 19, SACCs 15, SIMSIS 19, pp. 765–769, 2015. ISBN: 9781479984817. DOI: [10.1109/ICSTCC.2015.7321386](https://doi.org/10.1109/ICSTCC.2015.7321386). WOS: 000382384100127. EID: [2-s2.0-84957827736](https://www.eid.elsevier.com/2-s2.0-84957827736). IEEE Xplore Digital Library, NY, USA
24. **Stoican, F.**, I. Prodan și D. Popeseu, Flat trajectory generation for way-points relaxations and obstacle avoidance, în 23rd Mediterranean Conference on Control and Automation, MED 2015, pp. 695–700, 2015. ISBN: 9781479999361. DOI: [10.1109/MED.2015.7158827](https://doi.org/10.1109/MED.2015.7158827). WOS: 000375056800107. EID: [2-s2.0-84945967558](https://www.eid.elsevier.com/2-s2.0-84945967558). IEEE Xplore Digital Library, NY, USA
25. **Stoican, F.**, I. Prodan și S. Oлару, Hyperplane arrangements in mixed-integer programming techniques. Collision avoidance application with zonotopic sets, în 2013 12th European Control Conference, ECC 2013, pp. 3155–3160, 2013. ISBN: 9783033039629. WOS: 000332509703092. EID: [2-s2.0-84893235262](https://www.eid.elsevier.com/2-s2.0-84893235262). IEEE Xplore Digital Library, NY, USA
26. Xu, F., **F. Stoican**, V. Puig, C. Ocampo-Martinez și S. Oлару, On the relationship between interval observers and invariant sets in fault detection, în 2nd International Conference on Control and Fault-Tolerant Systems, SysTol 2013, pp. 49–54, 2013. ISBN: 9781479928552. DOI: [10.1109/SysTol.2013.6693849](https://doi.org/10.1109/SysTol.2013.6693849). WOS: 000331082600008. EID: [2-s2.0-84897677149](https://www.eid.elsevier.com/2-s2.0-84897677149). IEEE Xplore Digital Library, NY, USA
27. Xu, F., V. Puig, C. Ocampo-Martinez, **F. Stoican** și S. Oлару, Sensor-fault detection and isolation using interval observers”, în 2nd International Conference on Control and Fault-Tolerant Systems, SysTol 2013, pp. 55–60, 2013. ISBN: 9781479928552. DOI: [10.1109/SysTol.2013.6693860](https://doi.org/10.1109/SysTol.2013.6693860). WOS: 000331082600009. EID: [2-s2.0-84897742081](https://www.eid.elsevier.com/2-s2.0-84897742081). IEEE Xplore Digital Library, NY, USA
28. Struțu, M.-I., **F. Stoican**, I. Prodan, D. Popescu și S. Oлару, A characterization of the relative positioning of mobile agents for full sensorial coverage in an augmented space with obstacles, în 2013 21st Mediterranean Conference on Control and Automation, MED 2013, pp. 936–941, 2013. ISBN: 9781479909971. DOI: [10.1109/MED.2013.6608834](https://doi.org/10.1109/MED.2013.6608834). WOS: 000333245100145. EID: [2-s2.0-84885230747](https://www.eid.elsevier.com/2-s2.0-84885230747). IEEE Xplore Digital Library, NY, USA
29. Xu, F., **F. Stoican**, V. Puig, C. Ocampo-Martinez și S. Oлару, Fault detection and isolation based on the combination of a bank of interval observers and invariant sets, în 2013 21st Mediterranean Conference on Control and Automation, MED 2013, pp. 807–813, 2013. ISBN: 9781479909971. DOI: [10.1109/MED.2013.6608816](https://doi.org/10.1109/MED.2013.6608816). WOS: 000333245100127. EID: [2-s2.0-84885207795](https://www.eid.elsevier.com/2-s2.0-84885207795). IEEE Xplore Digital Library, NY, USA
30. **Stoican, F.**, M. Hovd și S. Oлару, Explicit invariant approximation of the mRPI set for LTI dynamics with zonotopic disturbances”, în 52nd IEEE Conference on Decision and Control, CDC 2013, pp. 3237–3242, 2013. ISBN: 9781467357173. DOI: [10.1109/CDC.2013.6760377](https://doi.org/10.1109/CDC.2013.6760377). WOS: 000352223503108. EID: [2-s2.0-84902322024](https://www.eid.elsevier.com/2-s2.0-84902322024). IEEE Xplore Digital Library, NY, USA
31. Xu, F., V. Puig, C. Ocampo-Martinez, **F. Stoican** și S. Oлару, Actuator-fault detection and isolation based on interval observers and invariant sets, în 52nd IEEE Conference on Decision and Control, CDC 2013, pp. 4385–4390, 2013. ISBN: 9781467357173. DOI:

- [10.1109/CDC.2013.6760564](https://doi.org/10.1109/CDC.2013.6760564). WOS: 000352223505003. EID: [2-s2.0-84902322023](https://doi.org/2-s2.0-84902322023). IEEE Xplore Digital Library, NY, USA
32. **Stoican, F.** și M. Hovd, Efficient solution of a qp optimization problem with zonotopic constraints, în 2012 IEEE International Conference on Control Applications, CCA 2012, pp. 457–462, 2012. ISBN: 9781467345033. DOI: [10.1109/CCA.2012.6402730](https://doi.org/10.1109/CCA.2012.6402730). WOS: 000320336200062. EID: [2-s2.0-84873161973](https://doi.org/2-s2.0-84873161973). IEEE Xplore Digital Library, NY, USA
 33. **Stoican, F.**, I. Prodan și S. Oлару, Enhancements on the hyperplane arrangements in mixed integer techniques, în 2011 50th IEEE Conference on Decision and Control and European Control Conference, CDC-ECC 2011, pp. 3986–3991, 2011. ISBN: 9781612848006. IEEE Xplore Digital Library, NY, USA
 34. **Stoican, F.**, N. M. Enache și S. Oлару, A lane control mechanism with fault tolerant control capabilities, în 2011 50th IEEE Conference on Decision and Control and European Control Conference, CDC-ECC 2011, pp. 2245–2250, 2011. ISBN: 9781612848006. DOI: [10.1109/CDC.2011.6161317](https://doi.org/10.1109/CDC.2011.6161317). WOS: 000303506202138. EID: [2-s2.0-84860652919](https://doi.org/2-s2.0-84860652919). IEEE Xplore Digital Library, NY, USA
 35. **Stoican, F.**, I. Prodan și S. Oлару, On the hyperplanes arrangements in mixed-integer techniques”, în 2011 American Control Conference, ACC 2011, pp. 1898–1903, 2011. ISBN:9781457700804. WOS: 000295376002086. EID: [2-s2.0-80053161211](https://doi.org/2-s2.0-80053161211). IEEE Xplore Digital Library, NY, USA
 36. Nguyen, H. N., S. Oлару și **F. Stoican**, On maximal robustly positively invariant sets, în 8th International Conference on Informatics in Control, Automation and Robotics, ICINCO 2011, pp. 300–305, 2011. ISBN: 9789898425744. WOS: 000392351500050. EID: [2-s2.0-80052564123](https://doi.org/2-s2.0-80052564123). IEEE Xplore Digital Library, NY, USA
 37. **Stoican, F.** și S. Oлару, Fault tolerant positioning system for a multisensor control scheme, în 2010 IEEE International Conference on Control Applications, CCA 2010, pp. 1051–1056, 2010. ISBN: 9781424453627. DOI: [10.1109/CCA.2010.5611187](https://doi.org/10.1109/CCA.2010.5611187). WOS: 000286943900232. EID: [2-s2.0-78649399354](https://doi.org/2-s2.0-78649399354). IEEE Xplore Digital Library, NY, USA
 38. **Stoican, F.**, S. Oлару, M. M. Seron și J. A. De Dona, Reference governor for tracking with fault detection capabilities, în 1st Conference on Control and Fault-Tolerant Systems, SysTol'10, pp. 546–551 (6 pagini), 2010. ISBN: 9781424481545. DOI: [10.1109/SYSTOL.2010.5675962](https://doi.org/10.1109/SYSTOL.2010.5675962). WOS: 000416069400089. EID: [2-s2.0-78751667497](https://doi.org/2-s2.0-78751667497). IEEE Xplore Digital Library, NY, USA
 39. **Stoican, F.**, S. Oлару și G. Bitsoris, A fault detection scheme based on controlled invariant sets for multisensor systems, în 1st Conference on Control and Fault-Tolerant Systems, SysTol'10, pp. 468–473 (6 pagini), 2010. ISBN: 9781424481545. DOI: [10.1109/SYSTOL.2010.5675958](https://doi.org/10.1109/SYSTOL.2010.5675958). WOS: 000416069400077. EID: [2-s2.0-78751669594](https://doi.org/2-s2.0-78751669594). IEEE Xplore Digital Library, NY, USA
 40. **Stoican, F.**, S. Oлару, M. M. Seron și J. A. De Dona, A fault tolerant control scheme based on sensor-actuation channel switching and dwell time”, în 2010 49th IEEE Conference on Decision and Control, CDC 2010, pp. 756–761 (6 pagini), 2010. ISBN: 9781424477456. DOI: [10.1109/CDC.2010.5718146](https://doi.org/10.1109/CDC.2010.5718146). WOS: 000295049101001. EID: [2-s2.0-79953130241](https://doi.org/2-s2.0-79953130241). IEEE Xplore Digital Library, NY, USA
 41. **Stoican, F.**, S. Oлару, J. A. De Dona și M. M. Seron, Improvements in the sensor recovery mechanism for a multisensor control scheme, în 2010 American Control Conference, ACC 2010, pp. 4052–4057, 2010. ISBN: 9781424474264. WOS: 000287187904073. EID: [2-s2.0-77957806550](https://doi.org/2-s2.0-77957806550). IEEE Xplore Digital Library, NY, USA

● **Articole în reviste și volume proceedings de conferințe indexate în alte baze de date**

1. **Stoican, F.**, E. Ingar Grötli, I. Prodan și C. Oară, On corner cutting in multi-obstacle avoidance problems, în 5th IFAC Conference on Nonlinear Model Predictive Control (NMPC'15), pp. 185–190, 2015. DOI: [10.1016/j.ifacol.2015.11.281](https://doi.org/10.1016/j.ifacol.2015.11.281). EID: [2-s2.0-84964219468](https://doi.org/2-s2.0-84964219468). Elsevier Science, Amsterdam, The Netherlands

2. Prodan, I., **F. Stoican** și E. Zio, "On a fault tolerant strategy for efficient energy management in microgrid systems", în 5th IFAC Conference on Nonlinear Model Predictive Control (NMPC'15), pp. 458–463, 2015. DOI: [10.1016/j.ifacol.2015.11.321](https://doi.org/10.1016/j.ifacol.2015.11.321). EID: [2-s2.0-84964200020](https://ieeexplore.ieee.org/abstract/document/7242000). Elsevier Science, Amsterdam, The Netherlands
3. **Stoican, F.**, I. Prodan, M.-I. Strutu și D. Popescu, "Geometrical interpretation on the coverage problems for a mobile agent", în 2014 18th International Conference on System Theory, Control and Computing, ICSTCC 2014, pp. 785–790, 2014. ISBN: 9781479946013. DOI: [10.1109/ICSTCC.2014.6982514](https://doi.org/10.1109/ICSTCC.2014.6982514). EID: [2-s2.0-84929448955](https://ieeexplore.ieee.org/abstract/document/7242948). IEEE Xplore Digital Library, N.Y., USA
4. Xu, F., V. Puig, C. Ocampo-Martinez, **F. Stoican** și S. Oлару, "Improved fault detection and isolation strategy using a bank of interval observers", în 19th IFAC World Congress, IFAC 2014, pp. 8024–8029, 2014. ISBN: 9783902823625. EID: [2-s2.0-84929815826](https://ieeexplore.ieee.org/abstract/document/7242981). Elsevier Science, Amsterdam, The Netherlands
5. Necoara, I., **F. Stoican**, D. Clipici, A. Patrascu și M. Hovd, "A linear MPC algorithm for embedded systems with computational complexity guarantees", în 2014 18th International Conference on System Theory, Control and Computing, ICSTCC 2014, pp. 363–368, 2014. ISBN: 9781479946013. DOI: [10.1109/ICSTCC.2014.6982443](https://doi.org/10.1109/ICSTCC.2014.6982443). EID: [2-s2.0-84929431542](https://ieeexplore.ieee.org/abstract/document/7242943). IEEE Xplore Digital Library, N.Y., USA
6. Xu, F., V. Puig, C. Ocampo-Martinez, **F. Stoican** și S. Oлару, "Closed-loop actuator-fault detection and isolation using invariant sets and tubes", în 19th IFAC World Congress, IFAC 2014, pp. 8030–8035, 2014. ISBN: 9783902823625. EID: [2-s2.0-84929773777](https://ieeexplore.ieee.org/abstract/document/7242977). Elsevier Science, Amsterdam, The Netherlands
7. **Stoican, F.** și M. Hovd, "Some remarks upon the characteristics of the explicit representation of the MPC problem", în 4th IFAC Conference on Nonlinear Model Predictive Control, NMPC'12, pp. 126–131, 2012. ISBN: 9783902823076. DOI: [10.3182/20120823-5-NL-3013.00079](https://doi.org/10.3182/20120823-5-NL-3013.00079). EID: [2-s2.0-84867056750](https://ieeexplore.ieee.org/abstract/document/6242950). Elsevier Science, Amsterdam, The Netherlands
8. Marafioti, G., **F. Stoican**, R. Bitmead și M. Hovd, "Persistently exciting model predictive control for SISO systems", în 4th IFAC Conference on Nonlinear Model Predictive Control, NMPC'12, pp. 448–453, 2012. ISBN: 9783902823076. DOI: [10.3182/20120823-5-NL-3013.00054](https://doi.org/10.3182/20120823-5-NL-3013.00054). EID: [2-s2.0-84867067744](https://ieeexplore.ieee.org/abstract/document/6242974). Elsevier Science, Amsterdam, The Netherlands
9. Stanković, N., **F. Stoican**, S. Oлару și S.-I. Niculescu, "Reference governor design with guarantees of detection for delay variation", în 10th IFAC Workshop on Time Delay Systems, TDS-2012, pp. 67–72, 2012. ISBN: 9783902823045. DOI: [10.3182/20120622-3-US-4021.00055](https://doi.org/10.3182/20120622-3-US-4021.00055). EID: [2-s2.0-84866126775](https://ieeexplore.ieee.org/abstract/document/6242675). Elsevier Science, Amsterdam, The Netherlands
10. **Stoican, F.**, S. Oлару, J. DeDoná și M. Seron, "Zonotopic ultimate bounds for linear systems with bounded disturbances", în 18th IFAC World Congress, pp. 9224–9229, 2011, ISBN: 9783902661937. DOI: [10.3182/20110828-6-IT-1002.03247](https://doi.org/10.3182/20110828-6-IT-1002.03247). EID: [2-s2.0-84866769502](https://ieeexplore.ieee.org/abstract/document/6242952). Elsevier Science, Amsterdam, The Netherlands
11. **Stoican, F.**, C. Raduinea și S. Oлару, "Adaptation of set theoretic methods to the fault detection of a wind turbine benchmark", în 18th IFAC World Congress, pp. 8322–8327, 2011. ISBN: 9783902661937. DOI: [10.3182/20110828-6-IT-1002.01842](https://doi.org/10.3182/20110828-6-IT-1002.01842). EID: [2-s2.0-84864613111](https://ieeexplore.ieee.org/abstract/document/6242911). Elsevier Science, Amsterdam, The Netherlands
12. Oлару, S., **F. Stoican**, J. DeDoná și M. Seron, "Necessary and sufficient conditions for sensor recovery in a multisensor control scheme", în 7th IFAC International Symposium on Fault Detection, Supervision and Safety of Technical Systems, SAFEPROCESS'09, pp. 977–982, 2009. ISBN: 9783902661463. DOI: [10.3182/20090630-4-ES-2003.0388](https://doi.org/10.3182/20090630-4-ES-2003.0388). EID: [2-s2.0-77957793634](https://ieeexplore.ieee.org/abstract/document/5242934). Elsevier Science, Amsterdam, The Netherlands

Listă granturilor și a contractelor de cercetare în 2000-2017

● Granturi și contracte naționale

1. Implementation and development of algorithms for the dynamic motion planning of robotic systems (DEVROS); Responsabil de proiect UPB, Proiect PN-III Cedcuri de Inovare: PN-III-P2-2.1-CI-2017-0403; iulie 2017 – decembrie 2017; <http://devros.pub.ro/project>
2. Set-theoretic approaches for fault tolerant control of complex systems (SETS2FTC), Cercetator principal in proiect Tinere Echipe PN-II: PN-II-RU-TE-2014-4-2713; octombrie 2015- septembrie 2017; <http://sets2ftc.pub.ro/project>
3. Proiect de mobilitate Young Researcher from Diaspora, Coordonator de proiect, MCT-2016-0037
4. Grantee of multiple “Awarding the research results” Granturi: PRECISI-2014-6144, -2015-10076, -2016-15179, -2016-15822,si -2017-14869
5. Robust control in nonstandard cases PN-II 2016, PN-II-ID-PCE-2011-3-0235, membru in echipa proiectului
6. Multi-drones system for evaluation of flood effects, proiect PN-III-BG-2016-0318, 2016-2017, membru in echipa proiectului
7. ESA: Advanced Control Techniques for Future Launchers, 4000119953/17/F/JLV, 2017-2020, membru in echipa proiectului
8. Non Cooperative RV Experiment phases C/D/E1, RVX 2016, 2017-2020, membru in echipa proiectului
9. ROSA: Multisensory robotic system for aerial monitoring of critical infrastructure systems, 71/2013, membru in echipa proiectului, 2013-2016
10. ROSA: Sistem robotic aerian integrat multiagent pentru explorarea regiunilor de interes terestre, C3/2016, 2016-2019, membru in echipa proiectului