

TEZA DE DOCTORAT

Arhitecturi cu cost redus pentru sisteme domotice

Data sustinerii: 29.09.2015. Indrumator: prof. dr. ing. Petru Dobra

CĂRȚI

1. R. Moga, **N. Stroia**, G. Cosovici. *Semnale și sisteme : aplicații în MATLAB și Mathematica*, Mediamira, 2016, ISBN 978-973-713-335-9 004.

LUCRĂRI

Articole publicate în reviste de specialitate de circulație internațională recunoscute (cotate ISI)

1. C. Lungoci, D. Moga, V. Muresan, D. Petreus, **N. Stroia**, R. Moga, M. Munteanu, I. Raus, V. Muntean, A. I. Mironiuc. Hyperthermic Intraperitoneal Chemotherapy Approach Based on Cyber-Physical System Paradigm, *Journal of Control Engineering and Applied Informatics*, vol 17, no 3, pp. 50-59, 2015.
2. T. Harko, G. Mocanu, **N. Stroia**. "Self organized criticality in an one dimensional magnetized grid. Application to GRB X-ray afterglows", *Astrophysics and Space Science* 357 (1), 1-9, 2015
3. F. Hrebenciuc, **N. Stroia**, D. Moga, and Z. Barabas, A low cost approach to large smart shelf setups, *Advances in Electrical and Computer Engineering*, vol. 11, no. 4, pp. 117 – 122, 2011. DOI: 10.4316/AECE.2011.04019.

Articole publicate la conferințe indexate în baze de date internaționale de referință

4. C.-B. Rusu, C. Lungoci, D. Moga, G. Cosovici, **N. Stroia**. Modelling a Temperature Calibration System for Medical Probes, 21st International Conference on Control Systems and Computer Science (CSCS), 2017
5. D. Iudean, A. Cretu, R. Muntean jr., R. Moga, **N. Stroia**, D. Moga, L. Vladareanu. Reliability approach of a compression system using reliability block diagram. The -7th International Conference on Communication, Management and Information Technology (ICCMIT2017), Warsaw, Poland, 03-05 April, 2017
6. D. Moga, D. Petreus, **N. Stroia**. "Web based solution for remote monitoring of an islanded microgrid", The 42nd Annual Conference of the IEEE Industrial Electronics Society (IECON2016). October 24-27, 2016, Florence, Italy
7. D. Moga, D. Petreus, V. Muresan, **N. Stroia**, G. Cosovici Optimal generation scheduling in islanded microgrids, IFAC and CIGRE/CIGRE Workshop on Control of Transmission and Distribution Smart Grids (CTDSG'16), October 11-13, Prague, Czech Republic, 2016
8. **N. Stroia**, D. Moga, E. Vitan, G. Cosovici, C. Lungoci, I. Kovacs, M. Mircea. "Internet based SCADA platform for monitoring strategic hydrotechnical structures", 20th IEEE International Conference on Automation, Quality and Testing, Robotics, AQTR 2016, May 19-21, Cluj-Napoca, Romania, 2016. DOI: 10.1109/AQTR.2016.7501397
9. V. Muresan, I. Clitan, D. Moga, R. Moga, G. Cosovici, **N. Stroia**, C. Lungoci, I.A. Mironiuc, F. Neaga. "Modeling and control of the temperature for cytostatic solutions used in surgical procedures". 2016 International Conference on Control Decision and Information Technologies (CoDIT'16), April 6-8, 2016, Malta, DOI: 10.1109/CoDIT.2016.7593649
10. D. Moga, **N. Stroia**, D. Petreus, R. Moga, and R. A. Munteanu, "Embedded platform for web-based monitoring and control of a smart home," in 2015 IEEE 15th International Conference on Environment and Electrical Engineering Conference, (Rome), pp. 1256–1261, June 10-13 2015. ISBN: 978-1-4799-7992-9.

11. D. Moga, I. V. Sita, **N. Stroia**, P. Dobra, R. Moga, and D. Petreus, "Sensing and control strategies in tracking solar systems," in 20th International Conference on Control Systems and Computer Science (CSCS20-2015), (Bucharest, Romania), May 27 – 29 , 2015.
12. I. Clitan, D. Moga, C. Lungoci, I. A. Mironiuc, V. Muresan, and **N. Stroia**, "Digital temperature control for an hyperthermic intraperitoneal chemotherapy equipment," in 20th International Conference on Control Systems and Computer Science (CSCS20-2015), (Bucharest, Romania), May 27 - 29 2015.
13. I. Clitan, D. Moga, C. Lungoci, V. Muresan, and **N. Stroia**, "Experimental identification of heating process from hyperthermic intraperitoneal chemotherapy (HIPEC) equipment," *Applied Mechanics and Materials*, vol. 772, pp. 626–630, Jul. 2015.
14. I. Clitan, D. Moga, V. Muresan, **N. Stroia**, V.Sita, C. Lungoci, I. A. Mironiuc. "Design of a Temperature Controller for an Hyperthermic Intraperitoneal Chemotherapy Equipment," in 2015 IEEE 10th Jubilee International Symposium on Applied Computational Intelligence and Informatics (SACI), pp. 49 – 54, May 21-23 2015 Timisoara. DOI:10.1109/SACI.2015.7208168.
15. C. Lungoci, I. Raus, T. Oniu, D. Moga, **N. Stroia**, V. Muntean, D. Petreus, and I. A. Mironiuc, "Assessment of temperature distribution in intraperitoneal chemohyperthermia," in International Conference on Advancements of Medicine and Health Care through Technology (IFMBE Proceedings), vol. 44, pp. 193–196, 2014.
16. F. Neaga, I. Raus, R. Moga, D. Moga, S. Vlad, **N. Stroia**, and M. Munteanu, "Structured light based imaging architecture for guided fracture reduction," in International Conference on Advancements of Medicine and Health Care through Technology; 5th 7th 13 June 2014, Cluj-Napoca, Romania (S. Vlad and R. V. Ciupa, eds.), vol. 44 of IFMBE Proceedings, pp. 265–270, Springer International Publishing, 2014.
17. **N. Stroia**, D. Moga, and Z. Barabas, "Web based monitoring of solar power systems," in 2nd IFAC Workshop Convergence of Information Technologies and Control Methods with Power Systems (ICPS'13), vol. 2, (Cluj-Napoca), pp. 131–136, 22-24 May 2013. DOI: 10.3182/20130522-3-RO-4035.00046.
18. **N. Stroia**, D. Moga, K. Istvan, G. Mocanu, and M. Dobra, "Hydropower structures monitoring system with hierarchically distributed smart sensor network," in 2nd IFAC Workshop Convergence of Information Technologies and Control Methods with Power Systems (ICPS'13) (D. Moga and P. Dobra, eds.), (Cluj-Napoca), pp. 37–41, 22-24 May 2013.
19. D. Moga, D. Petreus, and **N. Stroia**, "A low cost architecture for remote control and monitoring of greenhouse fields," in 2012 7th IEEE Conference on Industrial Electronics and Applications (ICIEA), (Singapore), pp. 1940–1944, 18-20 July 2012.
20. R. Moga, F. Hrebenciuc, **N. Stroia**, and D.Moga, "Optimal approximations for liniarization of sensor transfer curves," *Automation, Computers, Applied Mathematics (ACAM)*, 2012.
21. R. Munteanu, D. Moga, D. Petreus, **N. Stroia**, Z. Barabas, and F. Hrebenciuc, "Diagnosis of industrial systems driven by electrical machines with a low cost platform," in IEEE International Symposium on Diagnostics for Electric Machines, Power Electronics and Drives (SDEMPED), pp. 535–541, 2011. DOI: 10.1109/DEMPED.2011.6063675.
22. F. Neaga, D. Moga, D. Petreus, M. Munteanu, and **N. Stroia**, "A wireless system for monitoring the progressive loading of lower limb in post-traumatic rehabilitation," in IFMBE Proceedings of International Conference on Advancements of Medicine and Health Care through Technology, vol. 36, pp. 54–59, 2011.
23. D. Moga, M. Dumitrean, **N. Stroia**, and D. Petreus, "Remote Monitoring of Industrial Systems Health," in Proceedings of the Second IFAC Symposium on Telematics Applications, (Timisoara, Romania), 2010.

24. **N. Stroia**, D. Moga, M. Dumitrean, D. Petreus, and M. Dobra, "Low cost environment for teaching and experimenting current based testing," in IEEE International Conference on Automation, Quality and Testing, Robotics (AQTR'08), vol. 1, (Cluj-Napoca, Romania), pp. 208 – 211, May 22 – 25 2008.
25. L. Nagy-Kulcsar, P. Dobra, D. Moga, M. Dumitrean, **N. Stroia**. "Developing Simulation Models of Open Distributed Control System - Design Concepts Based on Foundation Fieldbus", IEEE International Conference on Automation, Quality and Testing, Robotics, 2006, Volume 1, 25-28 May 2006 Page(s):132 – 137
26. L. Nagy-Kulcsar, P. Dobra, D. Moga, M. Dumitrean, **N. Stroia**. „Opportunities of Emerging Technologies for Smart Houses-City-wide Energy, Gas and Water Measurements Networks”, 3rd Romanian-Hungarian Joint Symposium on Applied Computational Intelligence, pp. 87-97, 25-26 May, 2006, Timișoara, Romania
27. R. M. Dumitrean, D. Moga, D. Petreus, **N. Stroia**, R.A. Munteanu. „Indirect Measurement System For Angular Velocity”, Proceedings of 6th Electromotion Conference, 27-29 sept. 2005, Lausanne, Switzerland

Lucrări publicate în reviste și volume de conferințe neindexate

28. **N. Stroia**, D. Moga, C. Lungoci, R. Moga, and D. Petreus, "Development of a hyperthermic intra-peritoneal chemotherapy equipment architecture based on the cyberphysical system paradigm," in Third International Workshop on Cyber Physical Systems (IWOCPS-3) (I. Dumitrache, F. Filip, and A. Dumitrascu, eds.), (Bucharest, Romania), Romanian Academy, 2014.
http://iwocps.hpc.pub.ro/Lucrari/iwocps2014_L13.pdf
29. R. Munteanu, D. Moga, M. Dobra, and **N. Stroia**, "Sistem de masurare indirecta a masei cu aplicatii in industria alimentara," *Revista romana a inovarii*, no. 4, 2009.

Lucrări de laborator

1. Reprezentarea semnalelor in Matlab
2. Convolutia bidimensionala si filtrarea imaginilor
3. Filtrarea imaginilor in domeniul frecventei
4. Descriptori de forma. Descriptori Fourier

Data: 10.01.2018

Stroia