

## LISTA LUCRĂRILOR PUBLICATE

### Articole în reviste cotate ISI:

1. I. Zagan, V. G. Găitan, "Implementation of nMPRA CPU Architecture based on Preemptive Hardware Scheduler Engine and Different Scheduling Algorithms", IET Computers & Digital Techniques, vol. 11, nr. 6, November 2017, pp. 221-230, doi:10.1049/iet-cdt.2017.0163. Factor Impact: 0.515
2. I. Zagan, V. G. Găitan, "Improving the Performances of the nMPRA Processor using a Custom Interrupt Management Scheduling Policy", Advances in Electrical and Computer Engineering (AECE), vol. 16, nr. 4, 30/11/2016, pp. 45-50, doi: 10.4316/AECE.2016.04007, Factor Impact 2016: 0.595
3. I. Zagan, V. G. Găitan, A. Petrariu, A. Brezilianu, "Healthcare IoT m-GreenCARDIO Remote Cardiac Monitoring System – Concept, Theory of Operation and Implementation", Advances in Electrical and Computer Engineering (AECE), vol. 17, nr. 2, Mai 2017, doi: 10.4316/AECE.2017.02004, Factor Impact 2016: 0.595.

### Articole în reviste indexate ISI:

4. N. C. Găitan, I. Zagan, V. G. Găitan, "Predictable CPU Architecture Designed for Small Real-Time Application - Concept and Theory of Operation", International Journal of Advanced Computer Science and Applications (IJACSA), vol. 6, nr. 4, doi: 10.14569/IJACSA. 2015. 060406, U.S ISSN: 2156-5570(Online), pp. 47-52, 2015.
5. I. Zagan, V. G. Găitan, "Improving the performance of CPU architectures by reducing the Operating System overhead (Extended Version)", The Scientific Journal of Riga Technical University - Electrical, Control and Communication Engineering, ISSN: 2255-9140 (print), Iulie 2016, vol. 10, pp. 13-22, doi: 10.1515/ecce-2016-0002.
6. I. Zagan, N. C. Găitan, V. G. Găitan, "An Approach of nMPRA Architecture using Hardware Implemented Support for Event Prioritization and Treating", International Journal of Advanced Computer Science and Applications (IJACSA), vol. 8, nr. 2, doi: 10.14569/IJACSA.2017.080206, 2017.

### Articole în conferințe indexate ISI:

7. N. C. Găitan, V. G. Găitan, I. Ungurean, I. Zagan, "Methods to improve the performances of the real-time operating systems for small microcontrollers", 20th International Conference on Control Systems and Computer Science (CSCS), București, România, 27-29 Mai 2015, ISBN: 978-1-4799-1779-2, doi: 10.1109/CSCS.2015.10, pp. 261-266.
8. I. Zagan, "Improving the performance of CPU architectures by reducing the Operating System overhead", The 3rd IEEE Workshop on Advances in Information, Electronic and Electrical Engineering AIEEE'2015, pp. 1-6, 13 - 14 Noiembrie 2015, Riga, Letonia, doi: 10.1109/AIEEE.2015.7367279.
9. I. Zagan, V. G. Găitan, "Schedulability Analysis of nMPRA Processor based on Multithreaded Execution", 13th International Conference on Development and Application Systems (DAS), Suceava, România, 19-21 Mai, 2016, doi: 10.1109/DAAS.2016.7492561.

### Articole în conferințe internaționale indexate BDI:

10. I. Zagan, V. G. Găitan, "Predictable CPU Architecture Designed for Small Real-Time Applications – Implementation Results", 3rd International Conference on Advances in Computing, Electronics and Communication (ACEC), 10 - 11 Octombrie 2015, Zurich, Elveția, pp. 143-150, ISBN: 978-1-63248-064-4, doi: 10.15224/ 978-1-63248-064-4-29.

Publicat în jurnalul IRED: International Journal of Advances in Computer Science and Its Applications (IJCSIA), 2016, vol. 6, nr. 1, 18/04/2016, pp. 141-148, ISSN: 2250-3765.



11. I. Zagan, "Real-time evaluation of nMPRA CPU Architecture based on Multithreaded Execution", 8th International Conference on Computer Science and Information Technology (ICCSIT2015), 10 - 11 Decembrie 2015, Amsterdam, Olanda.  
Publicat în jurnalul: International Journal of Computer and Electrical Engineering (IJCEE), vol. 7, nr. 6, pp. 424-429, 2015, ISSN: 1793-8163, doi: 10.17706/IJCEE.2015.7.6.424-429.
12. I. Zagan, V. G. Găitan, "Improving the Performances of the nMPRA Architecture by Implementing Specific Functions in Hardware", 19th International Conference on Digital Circuits and Microarchitecture Technologies (ICDCMT 2017), Berlin, Germania, 21-22 Mai, World Academy of Science, Engineering and Technology, International Journal of Electrical, Computer, Energetic, Electronic and Communication Engineering, vol. 11, nr. 5, pp. 417-424, 2017.
13. I. Zagan, V. G. Găitan, "CPU Architecture Based on Static Hardware Scheduler Engine and Multiple Pipeline Registers", 19th International Conference on Advanced Computing Systems and Microarchitecture (ICACSM), Zurich, Elveția, 15 - 16 Septembrie, 2017.
14. I. Zagan, V. G. Găitan, A. Brezilianu, "Portable Cardiac Monitoring System based on Real-Time Microcontroller and Multiple Communication Interfaces", abstract prezentat la: 19th International Conference on Advanced Computing Systems and Microarchitecture, Zurich, Elveția, Septembrie 2017.

Articole în buletine științifice și seminarii:

15. N. C. Găitan, I. Zagan, V. G. Găitan, "IMPROVING THE PREDICTABILITY OF NMPRA AND NHSE ARCHITECTURE", Bulletin of the Polytechnic Institute of Iași, Automatic Control and Computer Science Section, România, fasc. 1/2015, pp. 27-38, ISSN 1220-2169.
16. I. Zagan, V. G. Găitan, "CPU architecture description based on fine-grained multithreading and hardware scheduler engine", Sisteme Distribuite, vol. XII, Suceava, România, 2014, ISSN/ISBN: 1842-6808.
17. I. Zagan, N. C. Găitan, V. G. Găitan, "Scheduling real-time tasks with nMPRA architecture for embedded applications", Sisteme Distribuite, vol. XIII, 16 Decembrie 2015, Suceava, România, ISSN/ISBN: 1842-6808.

Teza de doctorat:

**„Contribuții la dezvoltarea sistemelor de operare în timp real cu funcții implementate în hardware”**, susținută public în data de 22/06/2017.

Data: 21/01/2018

Dr. ing. Zagan Ionel

