



**ADMITERE DOCTORAT**

**Sesiunea Septembrie 2022**

**Domeniul de doctorat:** Inginerie electronică, telecomunicații și tehnologii informaționale

**Conducător de doctorat:** Prof.Dr. Doru URSUTIU (Membru corespondent AOSR)

**TEME (TEMATICĂ) PENTRU CONCURS**

**TEMA 1:** *Tehnologii noi in monitorizarea starii de sanatate*

Conținut / Principalele aspecte abordate

1. Sisteme IoT (industriale si medicale)
2. Ceasuri inteligente si alte solutii de monitorizare
3. Sisteme de comunicare (tendinte, dezvoltare, aplicatii)
4. Sisteme de alimentare autonome (energy harvesting)

Se pot aborda si alte teme de comun acord (personalizate) discutate cu candidatii inscrisi la concurs.

**Bibliografie recomandată:**

1. Chamunorwa, T; Ursutiu, D; (...); Modran, HA., **Electronic Educational Laboratory Platform for Students, 18th Annual International Conference of the International-Association-of-Online-Engineering (IAOE) and the Global-Online-Laboratory-Consortium (GOLC) on Remote Engineering and Virtual Instrumentation (REV) - Online Engineering and Society 4.0, 2022 | ONLINE ENGINEERING AND SOCIETY 4.0 298 , pp.311-322**
2. Ravariu C., E. Manea, Babarada F., Ursutiu D., Mihaiescu D., Smith AM, "Organic Compounds on Integrated Nanostructured Materials for Biomedical Applications" **Proceedings of the 15th International Conference on Remote Engineering and Virtual Instrumentation ISSN: 23.67337 million isbn: 978-3-319-95678-7, Publishing Year: 2018**
3. Neagu, A., Ursutiu, D., Samoila C., Jingles, V - "INTERNET of Things AND ONLINE ENGINEERING ", Editors: Auer, Michael E., Zutin, Danilo G. (eds.) **Lecture Notes in Networks and Systems, vol 22. Springer, modularity Applied to SMART HOME ChamNumber of Pages pp. 1062 (pp.56 -67) ISBN 978-3-319-64352-6 Online [https://doi.org/10.1007/978-3-319-64352-6\\_6](https://doi.org/10.1007/978-3-319-64352-6_6) DOI Print ISBN 978- 3-319-64351-9 © Springer International Publishing AG Published: 2017**
4. D. Ursutiu and other **New trends on monitoring and diagnosis for health sciences, Chapter: "Preliminary results related to the effects melotherapy BioRadio and analysis Using the LabVIEW analyzes" p.95-113 Ed. LAP LAMBERT Academic Publishing, 2015, ISBN: 978 -3-659-77699-1**

**Note /Preconđii / Obs.:** se va adapta /completa/elimina, după caz

**TEMA 2: Siteme hard reconfigurabile soft (case inteligente)**

**Conținut / Principalele aspecte abordate**

**1. Sisteme complexe hard - reconfigurabile soft**

- **Senzori inteligenți**
- **Sisteme de instrumentație reconfigurabile**
- **Sisteme noi de măsurare și control în "cloud"**

**2. Sisteme IoT**

- **Platforme universale de comunicare**
- **Componente hard și soft**
- **Interoperabilitate și securitate**

Se pot aborda si alte teme de comun acord (personalizate) discutate cu candidatii inscrisi la concurs.

**Bibliografie recomandată:**

1. Chamunorwa, T; Modran, HA; (...); Ursutiu.D, Hedesiu, H., Reconfigurable Wireless Sensor Node Remote Laboratory Platform with Cloud Connectivity, , Oct 2021, SENSORS 21 (19)
2. Palade, C; Lepadatu, AM; Ursutiu. D (...); Samoila, C., Nanocrystallized Ge-Rich SiGe-HfO2 Highly Photosensitive in Short-Wave Infrared, Nov 2021 MATERIALS 14 (22)
3. Ursutiu, D., Samoila C., Jinga, V., Alto, F - "The Future of Reconfigurable hardware-software" in ICL-2016 Conference 21-23 Sept.2016 - Belfast North Ireland Published in "Advances in Intelligent Systems and Computing" - Springer ISSN: 2194-5357, Editors: Michael E. Auer, David Guralnick, James Uhomoihi Book Title "Interactive Collaborative Learning" eBook ISBN 978-3-319-50337-0, Softcover ISBN 978-3-319-50336- 3 Series Volume 544
4. Ursutiu D.Neagu A. Samoila C., LabSocket-E "and myRIO in LabVIEW Real-Time / Embedded Systems Student Teaching and Training", Proceedings of the 15th International Conference on Remote Engineering and Virtual Instrumentation ISSN: 23.67337 million isbn: 978-3 -319-95677-0 An appearance: 2018
5. Neagu, A., Ursutiu, D., Samoila C., Jingles, V - "INTERNET of Things AND ONLINE ENGINEERING " Editors: Auer, Michael E., Zutin, Danilo G. (eds.) Lecture Notes in Networks and Systems, vol 22. Springer, modularity Applied to SMART HOME ChamNumber of Pages pp. 1062 (pp.56 -67) ISBN 978-3-319-64352-6 Online [https://doi.org/10.1007/978-3-319-64352-6\\_6](https://doi.org/10.1007/978-3-319-64352-6_6) DOI Print ISBN 978- 3-319-64351-9 © Springer International Publishing AG Published: 2017

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