

LISTA DE LUCRĂRI

RUSU-CASANDRA Alexandru - Doctor din 2013

1^o Teza de doctorat

''Prelucrarea digitală a semnalelor în sisteme globale de navigație prin satelit'', UPB, 2012

2^o Cărți publicate (C)

Ca1 VOCHIN Marius - Constantin, **RUSU CASANDRA Alexandru**, NICULESCU Graziela Sevastita, *Routing in Telecommunication Networks*, Editura Politehnica Press, 2019, Cod 19, 221 pagini, ISBN 978-606-515-867-2

Ca2 **RUSU CASANDRA Alexandru**, VOCHIN Marius - Constantin, IOAN Lucian, *Switching Systems in Telecommunication Networks*, Editura Politehnica Press, 2019, Cod 19, 287 pagini, ISBN 978-606-515-868-9

Ca3 **RUSU CASANDRA Alexandru**, *Sisteme de navigație globală prin satelit*, Editura Politehnica Press, 2025, Cod 19, 202 pagini, ISBN 978-630-339-021-5

3^o Alte materiale publicate (I,D)

I1 DATCU Octaviana, PIRNOG Ionut, **RUSU-CASANDRA Alexandru**, STANCIU Mihai, *Măsurări electronice. Teorie si aplicatii*, Editura Politehnica Press, 2021, Cod 19, 170 pagini, ISBN 978-606-515-969-3

I2 **RUSU CASANDRA Alexandru**, *Laboratory Applications for Digital Radio Access Technologies*, Editura Politehnica Press, 2021, Cod 19, 116 pagini, ISBN 978-606-515-986-0

4^o Articole/studii in extenso publicate (R,V)

Ris1 Ionescu L., **Rusu-Casandra A.**, Bira C., Tatomirescu A., Tramandan I., Scagnoli R., Istrateanu D., Popa A.E., *Development of the Romanian Radar Sensor for Space Surveillance and Tracking Activities*. Sensors 2022,22(9), 3546, May 2022; 19 pagini, <https://doi.org/10.3390/s22093546>, ISSN: 1424-8220, WOS ... In curs de indexare, , Factor de impact 3.576

Ris2 Torres-Sospedra, J., Lohan, E.S., Molinaro, A., Moreira, A., **Rusu-Casandra, A.**, Smekal, Z., *Applications and Innovations on Sensor-Enabled Wearable Devices*. Sensors 2022, 22(7), 2599, April 2022; 4 pagini, <https://doi.org/10.3390/s22072599>, ISSN: 1424-8220, WOS:000781495200001, Factor de impact 3.576

Ris3 Svertoka E, Saafi S, **Rusu-Casandra A.**, Burget R, Marghescu I, Hosek J, Ometov A., *Wearables for Industrial Work Safety: A Survey*. Sensors. May 2021; Volume 21(Issue 11):3844. 25 pagini, <https://doi.org/10.3390/s21113844> ISSN 1424-8220 WOS:000660663600001, Factor de impact 3.576

Ris4. Lohan, E. S.; **Rusu-Casandra, A.**; Cramariuc, O.; Marghescu, I.; Cramariuc, B.; *End-User Attitudes towards Location-Based Services and Future Mobile Wireless Devices: The Students' Perspective*, Information 2011, volume 2, no. 3, Sep 2011, pag. 426-454, ISSN 2078-2489, DOI: 10.3390/info2030426, WOS:000214787200004, Citescore 3.0 Scopus

Ris5. Al Hasnawi, R*; Marghescu, CI; Rusu-Casandra, A*, *Enhancing Vehicular VLC Systems with Multi-Relay Techniques: A Performance Evaluation*, Electronics, 2025, Volume14, Issue 6, WOS:001453878700001 ISSN 2079-9292 <https://doi.org/10.3390/electronics14061170>

Ris6. Rusu-Casandra, A.*; Lohan, E.S. *Experimental Assessment of OSNMA-Enabled GNSS Positioning in Interference-Affected RF Environments*. Sensors 2025, 25, Issue 3, Art. No. 729. ISSN 1424-8220 <https://doi.org/10.3390/s25030729> WOS:001419463200001

Ris7. Bîră C., Ionescu L., Rusu-Casandra A. *, *The Radar Signal Processor of the First Romanian Space Surveillance Radar*. Remote Sensing. 2023; 15(14):3630, ISSN: 2072-4292, <https://doi.org/10.3390/rs15143630> WOS 001069861300001

Ris8. Ekaterina Svertoka , Alexandru Rusu-Casandra , Radim Burget , Ion Marghescu, Jiri Hosek , and Aleksandr Ometov, *LoRaWAN: Lost for Localization?* , IEEE Sensors 2022, Volume22, Issue23, Page 23307-23319, ISSN:1530-437X <https://doi.org/10.1109/JSEN.2022.3212319> WOS:000893571900102

Vis1 Svertoka E., **Rusu-Casandra A.**, Marghescu I., *State-of-the-Art of Industrial Wearables: A Systematic Review*, COMM 2020 International Conference, June 2020, Bucuresti, Romania, pages: 411-415 ISBN: 978-1-7281-5611-8 WOS: 000612723900073

Vis2 PĂUN A.F., **RUSU-CASANDRA A.**, *On the Reduced Complexity FFT Acquisition for Galileo E1 Signal*, International Symposium on Electronics and Telecommunications 2018, 08-09 noiembrie 2018, Timisoara Romania, Pages: 255-258 ISSN 2475-787X ISBN:978-1-5386-5925-0 WOS:000463031500057

Vis3 **CASANDRA Alexandru RUSU**, PĂUN A.F., *Performance Evaluation of a Tracking Algorithm for Galileo E1 Signals*, COMM 2018 International Conference, 09-11 June 2018, Bucuresti, Romania, pages: 385-390 ISBN:978-1-5386-2350-3 WOS:000449526000073



- Vis4** Paun A.F., **Rusu Casandra A.**, “*Analysis of the Performance of an Acquisition Algorithm for Galileo E1 Signals*”, in Proc. of International Conference on Communications COMMS 2016, June 9-11, Bucharest, Romania, pp. 469-472. doi: 10.1109/ICComm.2016.7528262 ISBN:978-1-4673-8197-0 WOS:000383221900095
- Vis5** **A. Rusu-Casandra**, E. S. Lohan, “*Comparison of Detection Techniques for Multipath Propagation of Pseudolite Signals Used in Dense Industrial Environments*”, in Proc. of International Symposium on Intelligent Manufacturing and Automation, doi:10.1016/j.proeng.2015.01.496, Vienna, Austria, 26-29 Nov. 2014, Volume: 100, Pages: 1294-1300 ISSN: 1877-7058, WOS:000380551900161
- Vis6** **A. Rusu**, C. Voicu, C. Stanciu, “*Contributions on the Filtering of Continuous Wave Interferences in CDMA Communications Systems*”, in Proc. of ISETC 2014, November 14-15, Timișoara, Romania, pp.179-182, ISBN: 978-1-4799-7265-4 WOS:000366633300042
- Vis7** **A. Rusu**, E. S. Lohan, G. Seco- Granados, “*Contributions to the Filtering of Narrowband Interferences in GNSS*”, in the ISI Conference Proceedings of the 13th SGEM GeoConference on Informatics, Geoinformatics And Remote Sensing, SGEM2013, Albena, Bulgaria, Vol. 1, 371 - 378 pp, 16-22 June 2013, ISBN 978-954-91818-9-0 / ISSN 1314-2704 WOS:000349067200048
- Vis8** **A. Rusu-Casandra**, E.S. Lohan, “*Contributions to the Characterization of the Indoor GPS Propagation Channel*”, in the ISI Conference Proceedings of the 13th SGEM GeoConference on Informatics, Geoinformatics And Remote Sensing, SGEM2013, Albena, Bulgaria, Vol. 1, 363 - 370 pp, 16-22 June 2013 ISBN 978-954-91818-9-0 / ISSN 1314-2704 WOS:000349067200047
- Vis9** Elena Simona Lohan, **Alexandru Rusu-Casandra**, Ion Marghescu, “*Hybrid Acquisition of CBOC Galileo Signals under Multiple Correct-window Hypothesis*”, Conference Proceedings of the Third International Conference on Advances in Satellite and Space Communications SPACOMM 2011, ISBN: 978-1-61208-005-5, Budapest, Hungary, pp. 91-96, 102 pag., Apr. 2011.
- Vis10** **Alexandru Rusu-Casandra**, Elena Simona Lohan, Ion Marghescu, “*Estimators of the Indoor Channel for GPS-Based Pseudolite Signal*”, Conference Proceedings of the 2010 9th International Symposium on Electronics and Telecommunications, ISBN: 978-1-4244-8458-4, Timișoara, România, pp. 233-236, 441 pag., Nov. 2010, Scopus.
- Vis11** **Alexandru Rusu-Casandra**, “*Possible applications of eLORAN system for positioning and timing synchronization in underground mining*”, 17 International Multidisciplinary Scientific GeoConference 2017, 27 June - 6 July, 2017, Albena, Bulgaria Volume 17, Issue 22, 2017, Pages 451-460 ISSN: 13142704 DOI: 10.5593/sgem2017/22/S09.057 Scopus.
- Vis12** **Alexandru Rusu-Casandra**, Adrian Paun, “*Vector Tracking Loops for GNSS Signal Processing under Interference and Multipath Conditions*”, 17 International Multidisciplinary Scientific GeoConference 2017, 27 June - 6 July, 2017, Albena, Bulgaria Volume 17, Issue 22, 2017, Pages 757-764 ISSN: 13142704 DOI: 10.5593/sgem2017/22/S09.096 Scopus.
- Vis13** **A. Rusu**, E. S. Lohan, “*Analysis of Real Mobility Records in Urban and Suburban Environments*”, in Proc. of International Symposium on Intelligent Manufacturing and Automation, Zadar, Croatia, Oct. 2015, ISSN 17269679 ISBN 978-390273407-5 <http://dx.doi.org/10.2507/26th.daaam.proceedings.094> Scopus.
- Vis14** **Alexandru Rusu-Casandra**, Elena-Simona Lohan, Ion Marghescu, “*Impact of Narrowband Interference on Unambiguous Acquisition Approaches in Galileo*”, Conference Proceedings of the 1st International Conference on Localization and GNSS 2011 ICL-GNSS, ISBN: 978-1-4577-0187-0, Tampere, Finland, Iunie 2011 Scopus.
- Vis15** Elena-Simona Lohan, Oana Cramariuc, **Alexandru Rusu-Casandra**, Ion Marghescu, Bogdan Cramariuc, “*User Requirements in the Context of Future Location Based Services as Seen From a Survey Among Romanian Students*”, Conference Proceedings of the 1st International Conference on Localization and GNSS 2011 ICL-GNSS, ISBN: 978-1-4577-0187-0, Tampere, Finland, Iunie 2011 Scopus.
- Vis16** **A. Rusu-Casandra**, E. S. Lohan, I. Marghescu, “*Investigation of Multipath Detection Algorithms Based on Scatter Plots in Galileo CBOC Signals*”, in EURASIP Conference Proceedings of the Signal Processing and Applied Mathematics for Electronics and Communications Workshop SPAMEC 2011, Cluj-Napoca, Romania, pp. 17-20, August 2011, Eurasip.
- Vis17** Bira, C.; **Rusu-Casandra, A.** *Dataset of Spatial Objects Acquired Using Romania's First Ground-Based Space Tracking Radar*. accepted in the Proceedings of the 14th International Conference on Communications COMM 2022, Bucharest, Romania, 16–18 June 2022, to be indexed.
- Vi1** **A. Rusu-Casandra**, E. S. Lohan, G. Seco-Granados, I. Marghescu, “*Investigation of Narrowband Interference Filtering Algorithms for Galileo CBOC Signals*”, in the Conference Proceedings of the 3rd European Conference of Communications, Paris, France, pp. 274-279, Dec. 2012.

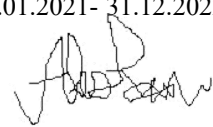
5⁰ Brevete de invenție

6⁰ Contracte și rapoarte științifice

Pi1 Proiect european European Space Agency ESA Contract No. 4000114741/15/NL/MM Developing a Galileo Vector Processing Receiver for Difficult Signal Conditions- GaVPro, Perioada desfasurarii 27/04/2015 - 19/03/2019, Buget 57280 euro, **Director de proiect s.l. dr. ing. RUSU-CASANDRA Alexandru**

Pi2 Proiect european H2020 Marie Skłodowska-Curie Innovative Training Network (ITN)/European Joint Doctorate (EJD) "A network for dynamic wearable applications with privacy constraints" A-WEAR <http://a-wear.eu>, duration 01.01.2018 - 31.12.2022, funded from the European Union's Horizon H2020-MSCA-ITN-2018 call, under the Grant Agreement no 813278, Responsabil pentru UPB : prof. Niculescu Dragos. Membru in echipa **RUSU-CASANDRA Alexandru**

Pn1 PN-III-P3-3.6-H2020-2020-0124 H2020 AWEAR Suport, nr. 43/2021, durata 01.01.2021- 31.12.2022, Director de proiect prof. Niculescu Dragos Membru in echipa **RUSU-CASANDRA Alexandru**



Pn2 Sistem inteligent de navigatie in mediul exterior destinat persoanelor cu dizabilitati vizuale PN II RU-TE-2014-4-02-02, durata 01.10.2015 -20.09.2017, Director de proiect prof Tapu Ruxandra Membru in echipa **RUSU-CASANDRA Alexandru**
Pn3 EPOCH 15TE 2020 Enhancing Performance of Satellite-based Location systems by reduction of atmospheric propagation effects , durata 07.09.2020-06.09.2022, Director de proiect prof Badescu Alina Membru in echipa **RUSU-CASANDRA Alexandru**

⁷⁰ Comunicări științifice nepublicate

Candidat,

A handwritten signature in black ink, appearing to be 'Alexandra', written in a cursive style.