



Europass Curriculum Vitae

Professional experience related to the topic of this tender: “Supporting Activities in Cybersecurity of Electronic Communications, Internet Infrastructure and Services”

Intended function in the delivery of the service

All my academic activity have been developed in the area of Mobile and Wireless Communications, including communications networks and the corresponding infrastructure implementation. In the last 15 years my research activity has been focused on IoT application development and on security aspects, focusing on the synergy between these domains and the synergy between them and the wireless / mobile communications one. In this respect I participated to different research European and Romanian funded projects in the area of IoT and its applications (including detectors networks, eHealth and eCare), communication security and Cybersecurity.

As a “Senior Expert”, I will be able to carry out any kind of technical assignments related to cybersecurity of electronic communications, Internet infrastructure and services. More specific, I will be able to solve technical issues related to:
• Electronic communications networks and services architecture (e.g. mobile network technologies, 4G, 5G, PSTN, VoIP, Internet infrastructure, DNS, etc.) at the access network (base stations), as well as the core network, interconnections, signaling, etc. – published 16 books, >90 papers in recognized scientific journals and presented >200 papers in scientific conferences (with publication in recognized digital databases);

- The electronic communications sector regulatory landscape – member of IEEE Standardisation Society and member of Romanian Association of Standardisation (President of Technical Committee no. 6, Radiocommunications)
- Security guidelines, security measures, good practices for electronic communications providers – part of the course related to Mobile Terminal Security (since 2013), part of the curricula of the Mobile Communications Master of UPB.
- Risk assessment methodologies
- Understanding of threats (unintentional and intentional) to electronic communications networks, specifically in mobile networks
- Internet infrastructure security risks and measures, in particular for Top Level Domain (TLD) name registries, Internet Exchange Points (IXPs) and Domain Name System (DNS) providers.

Personal information

First name(s) / Surname(s)

Octavian FRATU

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Nationality

Romanian

Date of birth

[Redacted]

Gender

Male

Work experience

Period

October 2003 – till present / 2000-2003 / 1995 -2000 / 1991-1995

Occupation or position held

Professor / Associated Professor / Lecturer / Assistant professor

Main activities and responsibilities	courses, applications and laboratories taught: Mobile Communications; Mobile Terminals Security (Master Cmob & Master BIOSINF); Mobile Communications Systems (Master CMob); Mobile Communications & Wireless Sensor Networks (FILS); Advanced Techniques in Data Transmissions (Master CMob); Data Communications; Measurements Electronic Instruments; Measurements in Electronics and Telecommunications;
Name and address of employer	University Politehnica of Bucharest, Electronics, Telecommunications and Information Technology Faculty Telecommunications Department, Bd. Iuliu Maniu 1-3, Bucharest, 6, 061071
Type of business or sector	higher education
Period	Sept 2008- present
Occupation or position held	Professor (part time)
Main activities and responsibilities	Mobile Communications; Diata Communications
Name and address of employer	Constanta Maritime University Bd. Mircea cel Batran nr. 104, 900663
Type of business or sector	higher education
Period	September 1998 - August 1999
Occupation or position held	PostDoc stage
Main activities and responsibilities	Researches in the area of digital implementation of RAKE receivers for UMTS systems.
Name and address of employer	Universite Marne la Vallee, France & Ecole National Supérieure de Cachan, France
Type of business or sector	higher education
Period	1990 – 1991
Occupation or position held	part time Assistant Professor
Main activities and responsibilities	applications at “Analog and Digital Transmissions” discipline
Type of business or sector	higher education
Name and address of employer	University Politehnica of Bucharest, Electronics, Telecommunications and Information Technology Faculty Telecommunications Department, Bd. Iuliu Maniu 1-3, Bucharest, 6, 061071
Period	October 1989 – October 1991
Occupation or position held	Scientific Researcher
Main activities and responsibilities	Development of measurement equipments for nonelectric parameters (automatique straingagemeters)
Type of business or sector	National Research Institute for Electronics, București
Name and address of employer	Cercetare-Dezvoltare în domeniul aparaturii electronice
Period	October 1986 – October 1989
Occupation or position held	Design engineer
Main activities and responsibilities	Matriceal printers design
Type of business or sector	Peripheral Equipment Factory (FEPER) București
Name and address of employer	Design in the area of electronic equipment
Education and training	
Period	February – March 2008
Title of qualification awarded	Professional Competencies Certificate Project Management courses
Principal subjects/occupational skills covered	Project Management

Name and type of organisation providing education and training	Romanian National Council for Attesting Occupational Standards (COSA) for Public Local Administration
Level in national or international classification	National – based on Occupational Standard R38
Period	1996-1997
Title of qualification awarded	Graduation diploma Postgraduate courses in Management and Marketing
Principal subjects/occupational skills covered	Management (module I) and Marketing (Module II)
Name and type of organisation providing education and training	Romanian Trade and Industry Chamber and Politehnica University of Bucharest, in collaboration with Technical Hochschule Darmstadt, Germany
Level in national or international classification	International
Period	1992 – 1997
Title of qualification awarded	Ph.D. diploma in Radio-communications domain
Principal subjects/occupational skills covered	- domain: Communication System Design, - dissertation title: “Timing Synchronization in Radio Data Transmissions”
Name and type of organisation providing education and training	University “Politehnica” of Bucharest
Level in national or international classification	international
Period	1981 - 1986:
Title of qualification awarded	Master of Sciences in Electronics and Telecommunications
Principal subjects/occupational skills covered	Electronics and Telecommunications / Radiocommunications
Name and type of organisation providing education and training	University “Politehnica” of Bucharest
Level in national or international classification	international

Personal skills and competences

Mother tongue(s) **Specify mother tongue Romanian**

Other language(s)

Self-assessment
European level ()*

English

French

Understanding				Speaking				Writing	
Listening		Reading		Spoken interaction		Spoken production			
C1	Experienced user	C1	Experienced user	C1	Experienced user	C1	Experienced user	C1	Experienced user
B2	Independent user	B2	Independent user	B2	Independent user	B2	Independent user	B2	Elementary user

(*) *Common European Framework of Reference for Languages*

Social skills and competences	<p>Communication skills, team-work capabilities; Project management competencies, Capability to work in a multicultural environment</p>
Scientific activity and skills	<ul style="list-style-type: none"> - Author or co-author of 12 scientific books published by Romanian or International recognized Publishing Houses - Author or co-author of 4 printed courses for students - Author or co-author of more than 90 scientific papers published in scientific journals and magazines (more than 50 of these papers are published in journals indexed in ISI Web of Knowledge with Impact Factor) - Author or co-author of more than 200 scientific papers presented in scientific conferences and published in the conference proceedings (more than 140 of these papers are included in International recognized databases like IEEE Xplore, Scopus, SprigerLink or ScienceDirect) - h-index: 19 (according Scopus), 18 (according ISI Web of Knowledge via Thomson-Reuters), 34 (according Google Scholar) - i10-index: 28 (according Scopus), 24 (according ISI Web of Knowledge via Thomson-Reuters), 74 (according Google Scholar) - citations: 738 (according Scopus, 652 without my self-citations and 276 without self-citation of all authors), 139 (according ISI Web of Knowledge via Thomson-Reuters), 6545 (according Google Scholar)
Organisational skills and competences	<p>Project Management competencies:</p> <ul style="list-style-type: none"> • Scientific Coordinator of 9 national projects and 4 international projects, including: <ul style="list-style-type: none"> • O. Fratu (UPB coord.), S. Halunga, ș.a., „Research Collaboration and Mobility for Beyond 5G Future Wireless Networks (RECOMBINE)”, H2020-MSCA-RISE project no. 872857, (participants from Denmark, România, Bulgaria, Greece, Italy,UK, Cyprus,US and Brazil) (2020-2015). • „Multiagent smart systems platform for water quality monitoring on Romanian Danube sector and Danube Delta (Platforma de sisteme inteligente multiagent pentru monitorizarea calitatii apei pe sectorul romanesc al Dunarii si Deltei Dunarii) (MultiMonD2)”, Romanian grant no. 33PCCDI/2018, Communication subproiect director & UPB coordinator: Prof. O. FRATU, (2018-2020). • „Integrated Informatic System for Activities Management (Sistem informatic integrat pentru managementul activităților) (SIIMA)”, Romanian grant no. 8Sol/2018, UPB Project Responsible: Prof. O. FRATU, (2018-2021). • „Integrated Software Platform for Malware Analysis of Mobile Terminals (Platforma Software integrata pentru analiza malware a terminalelor mobile) (ToR-SIM)”, Romanian grant no. 5Sol/2017, Project Director & UPB coordinator: Prof. O. FRATU, (2017-2020). • O. Fratu (coord. UPB), S. Halunga & others, “eWALL for Active Long Living/ewall (eWALL-Ro)”, IP - FP7 European project no. 610658, accepted in FP7-ICT-2013-10 call, (coord. Aalborg University, 13 partners from Denmark, Germany, Italy, România, Croația, Greece, Holande, Austria, Macedonia, Muntenegru and Bulgaria) , (2013-2016). • „Optimisation and Rational use of Wireless Communications Bands (ORCA)”, Science for Peace NATO project no. SfP-984409 (participants from Macedonia, Denmark, România and Greece), Co-Director and UPB coord: Prof. O. Fratu, (2013 –2015). • O. Fratu (PPD, UPB coord.), S. Halunga, I. Marghescu ș.a., „Reconfigurable Interoperability of Wireless Communications Systems (RIWCoS)”, Science for Peace NATO project no. SfP-982469 (international coordinators: O. Fratu – PPD, A.C. Boucouvalas – NPD, participants from România, Greece, Macedonia and Denmark) (2007-2011). • Participant, as member of the research team, in more than 40 projects (6 in tle last 5 years) from which 9 international projects (2 in the last 5 years). <ul style="list-style-type: none"> ○

Technical skills and competences	<ul style="list-style-type: none"> • Communications security and Cybersecurity; • development of IoT networks and applications; • the ability to develop and test mobile communications systems (physical level in wireless hybrid access networks); • modulation and encoding techniques for mobile communications systems; • wireless access and sensor systems design and performance evaluation ;
Computer skills and competences	<p>INDUSTRIAL EXPERIENCE AND CONSULTING</p> <ul style="list-style-type: none"> • 2019 - consultant engineer on IoT and Communications Security aspects at <i>Sefetech Innovation SRL</i> company. • 1999 - 2018 - consultant engineer on radio communications problems at "<i>Beia</i>" <i>Consult International</i> company. • 2000 – 2009: design engineer- <i>LDIC California</i>, Bucharest branch., later <i>Atmel Romania</i>.
Other skills and competences	Photography, mountain trekking
Driving licence	B category since 1996
Additional information	<ul style="list-style-type: none"> • General Chairman of IEEE BlackSeaCom 2021 ComSoc Conference (Bucharest, 24-28 May 2021) • General Chairman of EAI FABULOUS 2017 Conference (Bucharest, 12-14 October 2017) • Operational Chairman of BlackSeaCom 2015 IEEE & ComSoc Conference (Constanta, Romania, 18-21 May 2015) & Publication Chairman of BlackSeaCom 2016 IEEE & ComSoc Conference (Varna, Bulgaria, 6-9 June 2016) • ARACIS evaluator – since 2010 • FP7 evaluator – FP7 Strep Projects – Call 4 (ICT 2009.1.1 The Network of the Future) 25-29 May 2009, Bruxelles and FP7 STREM evaluator for monitoring process (ICT 2009.1.1 The Network of the Future). • member (from 1995 till present) and President (from 2012 till present) of the Technical Committee no. 6 for radio receiving and transmissions –Romanian Standardization Association, • from May 2004 – expert evaluator for the National Romanian Council on Scientific Research in the area of analog and digital communication systems, data transmissions, mobile/wireless communications, mobile networks and signal processing for communications. • Dec. 2005 – Dec 2006– associated editor at IEEE Global Communication Newsletter (GCN); • organizer of the special session "<i>Synergy versus Convergence in the Wireless and Hybrid Mobile Broadband Communications beyond 3G</i>" in IEEE- EUROCON 2005 Conference, Belgrade, Serbia and Macedonia; • scientific reviewer at TTC 2005; • Member of the organization committee (publications and publicity) for ICT-2001 Conference, Bucharest, Romania, 2001; • Member of the organization committee for Mobile Communication Systems Symposium, Bucharest, Romania 23 May 1995 • Member of Master and Bachelor Thesis Commissions, since 1995. • responsible with students research activities within the "Signal Processing for Communications" group, part of the "Communications and Signal Processing Research Center" (3CPS); • IEEE member (No.40111887)
Annexes	List of publications (selected)

Date: 14.01.2022

Signature:



Annex 1. Selected List of Publication

- Ca1. T. Petrescu, S. Halunga, **O. FRATU**, I. Marcu, C. Voicu, R. Craciunescu, „*Analiza și sinteza circuitelor – teorie și aplicații*” – (*Circuit Analysis and Synthesis – Theory and Applications*) Politehnica Press, București 2015, 306 pag., ISBN 978-606-515-641-8.
- Ca2. **O. FRATU** „*Securitatea calculatorului personal*” (*Personal Computer Security*), Editura Politehnica Press, București, ISBN 978-606-515-484-1, 114 pag., 2013.
- Ca3. S. Halunga, **O. FRATU** „*Data transmissions and multiple access techniques*”, Editura Electronica 2000, București, ISBN 978-973-7860-17-0, 290 pag., 2009.
- Ris1. F.L. Chiper, Al. Martian, C Vladeanu, I Marghescu, R Craciunescu, **O. FRATU**, “Drone Detection and Defense Systems: Survey and a Software-Defined Radio-Based Solution”- *Sensors*, 2022, 22(4), 1453; <https://doi.org/10.3390/s22041453>.
- Ris2. SA Arghirescu, M Drăgan, **O. FRATU**, “Footprint Reduction of Sensor Control Modules for Remote Portable Laboratories” *Sensors*, 2022, 22(4), 1483; <https://doi.org/10.3390/s22041483>.
- Ris3. RG Bărtușică, M Mihai, S Halunga, **O. FRATU** “Radio Frequency over Fibre Optics Repeater for Mission-Critical Communications: Design, Execution and Test” *Sensors*, 2022, 22(2), 612; <https://doi.org/10.3390/s22020612>.
- Ris4. A Boitan, S Halunga, V Bîndar, **O. FRATU**, “Compromising Electromagnetic Emanations of USB Mass Storage Devices”, *Wireless Personal Communications* (2020), <https://doi.org/10.1007/s11277-020-07329-8>.
- Ris5. AR Petre, R Craciunescu, **O. FRATU**, “Design, Implementation and Simulation of a Fringing Field Capacitive Humidity Sensor” *Sensors*, 2020, 20(19), 5644; <https://doi.org/10.3390/s20195644>.
- Ris6. A.A.A. Alajmi, Al. Vulpe, **O. FRATU**, “UAVs for Wi-Fi Receiver Mapping and Packet Sniffing with Antenna Radiation Pattern Diversity,” *Wireless Personal Communications*, January 2017, Volume 92, Issue 1, pp 297–313, ISSN: 0929-6212, DOI: 10.1007/s11277-016-3851-2 (ISI, Springerlink), IF 2015: 0,701.
- Ris7. S. Kyriazakos, M. Mihaylov, B. Anggorojati, A. Mihovska, R. Craciunescu, **O. FRATU**, R. Prasad, „*eWALL: An Intelligent Caring Home Environment Offering Personalized Context-Aware Applications Based on Advanced Sensing*”, *Wireless Personal Communications*, April 2016, Volume 87, Issue 3, pp 1093–1111, ISSN: 0929-6212, doi:10.1007/s11277-015-2779-2, IF2015 - 0.701 (Springerlink, ISI Web of Knowledge).
- Ris8. Al. Martian, R. Craciunescu, Al. Vulpe, G. Suci, **O. FRATU**, „*Access to RF White Spaces in Romania: Present and Future*”, *Wireless Personal Communications*, April 2016, Volume 87, Issue 3, pp 693–712, ISSN: 0929-6212, doi:10.1007/s11277-015-2638-1, IF2015 - 0.701 (Springerlink, ISI Web of Knowledge).
- Ris9. **O. FRATU**, M. Pejanovic-Djurisic, V. Poulkov. L. Gavrilovska, „*Introduction to Special Issue “Current Trends in Information and Communications Technology”*”, *Wireless Personal Communications*, April 2016, Volume 87, Issue 3, pp 615–617, ISSN: 0929-6212, DOI 10.1007/s11277-016-3228-6, IF2015 - 0.701 (Springerlink, ISI Web of Knowledge).
- Ris10. G. Suci, V. Suci, Al. Martian, R. Crăciunescu, Al. Vulpe, I. Marcu, S. Halunga, **O. FRATU**, “*Big Data, Internet of Things and Cloud Convergence An Architecture for Secure eHealth Applications*”, *Journal of Medical System*, Springer, Vol. 39, Issue 11, art. Nr. 141, November 2015, DOI 10.1007/s10916-015-0327-y, ISSN 1573-689X, IF2014 – 2,213 (ISI Web of Knowledge).
- Ris11. A Aab, P. Abreu, M. Aglietta, M. Ahlers, ..., **O. FRATU** ș.a (Pierre Auger Collaboration), “*Measurement of the cosmic ray spectrum above 4×10^{18} eV using inclined events detected with the Pierre Auger Observatory*”, *Journal of Cosmology and Astroparticle Physics*, Volume 2015, Issue 8, Aug 2015 Art. Nr. 049, ISSN 1475-7516, doi:10.1088/1475-7516/2015/08/049, IF2015 - 5,634 (ISI Web of Knowledge)
- Ris12. A. Vulpe, A. Mihovska, **O. FRATU**, Octavian; S. Halunga, R. Prasad, „*Admission Control and Scheduling Algorithm for Multi-carrier Systems*” *Wireless Personal Communications*, p. 1-17,2014, ISSN: 0929-6212, DOI: 10.1007/s11277-014-2218-9 Springer US, IF2013 - 0.979 (ISI Web of Knowledge).
- Ris13. **O FRATU**, A Vulpe, R Craciunescu, S Halunga, “*Small Cells in Cellular Networks: Challenges of Future HetNets*”, *Wireless Personal Communications*, Volume: 78 Number: 3 (Special Issue: SI), pp. 1613-1627, October 2014, ISSN 0929-6212, DOI: 10.1007/s11277-014-1906-9, IF2014 - 0.653 (ISI Web of Knowledge).
- Ris14. E Popovici, **O FRATU**, A Vulpe, S Halunga, “*New Developments in Vertical Handover Based on Media Independent Handover Standard*”, *Wireless Personal Communications*, Volume: 78 Number: 3 (Special Issue: SI), pp. 1739-1753, October 2014, ISSN 0929-6212, DOI: 10.1007/s11277-014-1912-y, IF2014 - 0.653 (ISI Web of Knowledge).
- Vis1. D. Draghicescu; Al. Caranica; Al. Vulpe; **O. FRATU**, „*Crypto-Mining Application Fingerprinting Method*”, 2018 International Conference on Communications (COMM), 14-16 June 2018, Bucharest, Romania, IEEEExplore, doi: 10.1109/ICComm.2018.8484745 .
- Vis2. George Suci , Cristiana-Ioana Istrate , Ruxandra Ioana Răducanu , Maria-Cristina Dițu , Octavian Fratu , Alexandru Vulpe, „*Mobile devices forensic platform for malware detection*”, 6th International Symposium for ICS & SCADA Cyber Security Research 2019 (ICS-CSR), 10th-12th September 2019, <http://dx.doi.org/10.14236/ewic/icscsr19.8>
- Vis3. Sorin Soviany, Andrei Scheianu, George Suci, Alexandru Vulpe, Octavian Fratu, Cristiana Istrate „*Android Malware Detection and Crypto-mining Recognition Methodology with Machine Learning*,” 16th IEEE International Conference on Embedded and Ubiquitous Computing (EUC 2018), Bucharest, Romania, 29-31 Oct 2018 (IEEEExplore)

- Vis4. Alexandru Vulpe, Stefan-Ciprian Arseni, Octavian Fratu, Simona Halunga, "Evaluation of a Hybrid Architecture for Security in Internet-of-Things," 21st International Conference on Wireless Personal Multimedia Communications 2018 (WPMC'18), Chiang Rai, Thailand, 25-28 nov 2018 (IEEEExplore)
- Vis5. Al. Vulpe, S. Arseni, I. Marcu, C. Voicu, **O. FRATU**, "Building a Unified Middleware Architecture for Security in IoT," 5th World Conference on Information Systems and Technologies (WorldCIST) 2017, Porto Santo, Portugal, April 11-13, 2017 (IEEEExplore)
- Vis6. Al. Vulpe, S. Arseni, I. Marcu, C. Voicu, **O. FRATU**, "Building a Unified Middleware Architecture for Security in IoT," 5th World Conference on Information Systems and Technologies (WorldCIST) 2017, Porto Santo, Portugal, April 11-13, 2017, (IEEEExplore)
- Vis7. G. Suci, M. Vochin, Al. Vulpe, **O. FRATU**, "Vehicular Mobile Data Collection Platform to Support the Development of Intelligent Transportation Systems," 24th Telecommunications Forum (TELFOR 2016), Belgrade, Serbia, November 22-23, 2016, (IEEEExplore)
- Vis8. G. Suci, **O. FRATU**, L. Necula, L. Ghenciu, V. Suci, C. Voicu, "Sustainable Business Models for the Adoption of Energy Management Cloud Platforms within Enterprises", in Global Wireless Summit 2016 (GWS'16), Aarhus, Denmark, Nov. 2016. (IEEEExplore, ISI).
- Vis9. St.-C. Arseni, Al. Stancu, Al. Vulpe, M. Oproiu, S. Halunga, and **O. FRATU**, "Primary evaluation of a software-defined security architecture for an IoT environment," in Global Wireless Summit 2016 (GWS'16), (Aarhus, Denmark), Nov. 2016 (IEEEExplore, ISI).
- Vis10. G. Suci, **O. FRATU**, L. Necula, A. Pasat, and V. Suci, "Machine-to-Machine Communications for Cloud-Based Energy Management Systems within SMEs", IEEE 22nd International Symposium for Design and Technology in Electronic Packaging (SIITME), Oradea, Romania, Oct. 20th-23rd, 2016, 10.1109/SIITME.2016.7777257 (IEEEExplore, ISI).
- Vis11. A. V. Nicolae, E. C. Popovici, M. G. Berceanu, **O. FRATU**, "Multiplexed Communication for Online Game Plugin Messaging", 12th IEEE International Symposium on Electronics and Telecommunications (ISETC), 27-28 Oct. 2016, DOI: 10.1109/ISETC.2016.7781068 (IEEEExplore).
- Vis12. A.-M. Cl. Drăgulescu, I. Marcu, S. Halunga, **O. FRATU**, "Persons Counting and Monitoring System based on Passive Infrared Sensors and Ultrasonic Sensors (PIRUS)", Fabulous 2016 Conference, 24-26 October 2016, Belgrade, Serbia (Springerlink, ISI Web of Knowledge)
- Vis13. Al. Stancu, S.-C. Arseni, Al. Vulpe, **O. FRATU**, S. Halunga, "Intrusion Prevention System Evaluation for SDN-enabled IoT systems", Fabulous 2016 Conference, 24-26 October 2016, Belgrade, Serbia (Springerlink, ISI Web of Knowledge)
- Vis14. G. Suci, **O. FRATU**, V. Suci, I. Grigore, "Monitoring the Black Sea Region using Satellite Earth Observation and Ground Telemetry", Fabulous 2016 Conference, 24-26 October 2016, Belgrade, Serbia (Springerlink, ISI Web of Knowledge)
- Vis15. G. Suci, C. Butca, V. Suci, Al. Cretu, **O. FRATU**, "Cyber Physical Systems based on Cloud Computing and Internet of Things for energy efficiency", ATOM-N Conference, Constanta, 25-27 Sept. 2016, doi:10.1117/12.2243318. (SPIE, ISI Web of Knowledge).
- Vis16. M. Popescu, V. Bindar, R. Craciunescu, **O. FRATU**, "Estimate of minimum attenuation level for a TEMPEST shielded enclosure," 2016 International Conference on Communications (COMM), Bucharest, Romania, June 9-11, 2016, ISBN: 978-1-4673-8196-3, pp. 277-280. (IEEEExplore, ISI Web of Knowledge).
- Vis17. C. A. Conțu, E. C. Popovici, **O. FRATU** and M. G. Berceanu, "Security issues in most popular content management systems," 2016 International Conference on Communications (COMM), Bucharest, Romania, June 9-11, 2016, ISBN: 978-1-4673-8196-3, pp. 277-280. (IEEEExplore, ISI Web of Knowledge).
- Vis18. G. Suci, **O. FRATU**, Al. Vulpe, Cr. Butcă, V. Suci, "IoT Agro-Meteorology for Viticulture Disease Warning", BlackSeaCom 2016, 06-09 iunie 2016, Varna, Bulgaria, ISBN 978-1-5090-1924-3 (IEEEExplore).
- Vis19. St. Arseni, S. Halunga, **O. FRATU**, Al. Vulpe, G. Suci, "Analysis of the security solutions implemented in current Internet of Things Platforms," Tier 2 Federation Grid, Cloud & High Performance Computing Science (RO-LCG), 2015 8th Romania, Cluj-Napoca, Romania, October 28-30, 2015 (SCOPUS, IEEEExplore)
- Vis20. **O. FRATU**, C. Pena, R. Craciunescu, S. Halunga, "Fog Computing System for Monitoring Mild Dementia and COPD Patients", 12th International Conference on Telecommunication in Modern Satellite, Cable and Broadcasting Services (TELSIKS), Nis, Serbia, 14-17 Oct. 2015, pp. 123-128 doi: 10.1109/TELSIKS.2015.7357752, (IEEEExplore)
- Vis21. **O. FRATU**, S. Halunga, R. Craciunescu, Al. Vulpe, "Instrumental IoT - from Environmental Monitoring to Cosmic Ray Detection", Proceedings of 22nd Telecommunications Forum (TELFOR), 2014, invited paper, pp. 1-6, Belgrade, Serbia, 25-27 Nov. 2014 (IEEEExplore).
- Vis22. **O. FRATU**, Al. Vulpe, S. Halunga, R. Crăciunescu, "Interference Analysis for Inter-Band Carrier Aggregation in LTE-Advanced", Invited Paper, Proceedings of 11th International Conference on Telecommunications in Modern Satellite, Cable and Broadcasting Services (TELSIKS 2013), vol. 1, pag. 199-208, 16-19 Oct.2013, ISBN 978-1-4799-0900-1, DOI: 10.1109/TELSIKS.2013.6704919, (IEEEExplore, ISI Web of Knowledge), INSPEC Accession No. 14025048.
- Vis23. Al. Vulpe, **O. FRATU**, A. Mihovska, R. Prasad, "A Multi-Carrier Scheduling Algorithm for LTE-Advanced", Proceedings of 15th International Symposium on Wireless Personal Multimedia Communications (WPMC), 2013, pp. 1-5, 24-28 Jun. 2013, Atlantic City, NJ, S.U.A., ISBN 978-87-92982-52-0 (IEEEExplore, ISI Web of Knowledge), ISSN: 1347-6890, INSPEC Accession Number: 13825420 (Best Student Paper Award).