

Βιογραφικό Σημείωμα - Ιωάννη Σ. Βαρδάκα

ΠΡΟΣΩΠΙΚΑ ΣΤΟΙΧΕΙΑ

Όνοματεπώνυμο: Ιωάννης Βαρδάκας
Όνομα Πατρός Σπυρίδων
Στρατιωτικές υποχρεώσεις: Πλήρως Εκπληρωμένες (Θητεία 2010-2011, Π. Ν.)
Επάγγελμα: Ηλεκτρολόγος Μηχανικός και Μηχανικός Υπολογιστών

ΣΠΟΥΔΕΣ

Μεταπτυχιακές Διδακτορικό, Θέμα διδακτορικής διατριβής: "[Αποτίμηση της Απόδοσης Τηλεπικοινωνιακών Δικτύων Πολυδιάστατης Κίνησης με Έμφαση στα Οπτικά Δίκτυα](#)".
Φεβρουάριος 2006
Ιούνιος 2012:

Εργαστήριο Ενσύρματης Τηλεπικοινωνίας, Τομέας Τηλεπικοινωνιών και Τεχνολογίας Πληροφορίας, [Τμήμα Ηλεκτρολόγων Μηχανικών και Τεχνολογίας Υπολογιστών](#), Πολυτεχνική Σχολή, [Πανεπιστήμιο Πατρών](#).

Επιβλέπων: Λογοθέτης Μιχαήλ, Καθηγητής.

Προπτυχιακές Δίπλωμα Ηλεκτρολόγου Μηχανικού και Μηχανικού Υπολογιστών
Οκτώβριος 1998
Σεπτέμβριος 2004: [-Τμήμα Ηλεκτρολόγων Μηχανικών και Μηχανικών Υπολογιστών](#), Πολυτεχνική Σχολή, [Δημοκρίτειο Πανεπιστήμιο Θράκης](#).

Διπλωματική εργασία: "Ανάλυση της Απόδοσης Αμιγώς Οπτικού Καταχωρητή Ολίσθησης με Ανάδραση, Υλοποιημένου με το μη Γραμμικό Συμβολόμετρο Sagnac, Βασισμένο σε Οπτικό Ενισχυτή Ημιαγωγού". Επιβλέπων: Κ. Ζωηρός, Επίκουρος Καθηγητής.

ΔΙΔΑΚΤΙΚΗ ΕΜΠΕΙΡΙΑ

Σεπτέμβριος 2022 – Αναπληρωτής Καθηγητής, τμήμα Πληροφορικής, Σχολή Θετικών σήμερα Επιστημών, Πανεπιστήμιο Δυτικής Μακεδονίας.

Σεπτέμβριος 2016- Διδασκαλία του μαθήματος «*Διαχείριση και Βελτιστοποίηση Δικτύων*» (χειμερινό εξάμηνο ακ. έτη 2016-17, 2017-18, 2018-19) και «*Θεωρία και Διαχείριση Τηλεπικοινωνιακής Κίνησης*» (εαρινό εξάμηνο ακ. έτη 2016-17, 2017-18, 2018-19, 2019-20, 2020-2021, 2021-2022), «*Συστήματα Επικοινωνιών Ι*» (χειμερινό εξάμηνο, ακ. έτη 2018-19, 2019-20, 2020-2021) Κινητή Υπολογιστική (χειμερινό εξάμηνο ακ. έτη

2020-2021, 2021-2022) Τμήμα Μηχανικών Πληροφορικής & Τηλεπικοινωνιών, Πολυτεχνική Σχολή, Πανεπιστήμιο Δυτικής Μακεδονίας

Ακαδημαϊκά έτη 2006- Επικουρικό έργο στο Τμήμα Ηλεκτρολόγων Μηχανικών και 07 (1,2,5,6), 2007-08 Τεχνολογίας Υπολογιστών, Πανεπιστήμιο Πατρών.

(1,2,3,5,6), 2008-09 (1,2,4,5,6) και 2009-2010 (1,2,4,5,6):

- 1) Εργαστήριο μαθήματος «*Τηλεπικοινωνιακά Συστήματα Ι*», 4^ο έτος.
- 2) Εργαστήριο μαθήματος «*Τηλεπικοινωνιακά Συστήματα ΙΙ*» 4^ο έτος.
- 3) Εργαστήριο μαθήματος «*Συστήματα Αυτομάτου Ελέγχου Ι*» 3^ο έτος.
- 4) Εργαστήριο μαθήματος «*Δίκτυα Επικοινωνίας Υπολογιστών*» 2^ο έτος
- 5) Θεωρία Τηλεπικοινωνιακής Κίνησης, φροντιστηριακές ασκήσεις, 4^ο έτος
- 6) Τηλεπικοινωνιακά Δίκτυα Ευρείας Ζώνης, 5^ο έτος

Σεπτέμβριος
Ιούνιος 2014

2012- Διδασκαλία των μαθημάτων “Χρήση Η/Υ” “Συστήματα Αυτομάτου Ελέγχου”, “Στοιχεία Ηλεκτροτεχνίας” “Πρακτική Άσκηση Τεχνικού Δικτύων”, “Αλγοριθμικές Δομές Δεδομένων”, “Επικοινωνίες δεδομένων και Τεχνολογίες Internet”, “Πρακτική Άσκηση Τεχνικού Πληροφορικής” στα Δημόσια ΙΕΚ Νεάπολης, Ευόσμου και Τριανδρίας Θεσσαλονίκης.

Σεπτέμβριος 2008
Ιούλιος 2012:

– Διδασκαλία των μαθημάτων “Σχεδίαση και Ανάπτυξη Ιστοσελίδων”, “Αντικειμενοστρεφής Προγραμματισμός”, “Αντικειμενοστρεφής Προγραμματισμός με C++”, “Εισαγωγή στα Πολυμέσα”, “Συστήματα Αυτομάτου Ελέγχου”, “Εισαγωγή στην Πληροφορική” “Βιομηχανική Πληροφορική Ι και ΙΙ”, “Επεξεργασία Κειμένου” στο Ιδιωτικό Ινστιτούτο Επαγγελματικής Κατάρτισης ΑΚΜΗ Πάτρας.

TUTORIALS

[T-5] **John S. Vardakas** and Christos Verikoukis, “[Evolution of Converged Optical-Wireless Networks Towards 5G Fronthaul Network Architectures](#)”, *IEEE WCNC 2019*, Marrakesh, Morocco, 15-19 April 2019.

[T-4] **John S. Vardakas** and Christos Verikoukis, “[Converged Optical-Wireless Networks: an Effective Solution for 5G Network Architectures](#)”, *MOCAS 2018*, Thessaloniki, Greece, 7-9 May 2018.

[T-3] **John S. Vardakas** and Christos Verikoukis, “[Smart Cities Energy Management: A Cooperative Perspective](#)”, *IMCL 2017*, Thessaloniki, Greece, 30-Nov. 01 Dec. 2017.

[T-2] **John S. Vardakas** and Christos Verikoukis, “[Demand Response in Smart Grids: A Cooperative Perspective](#)”, *IEEE ISCC 2017*, Heraklion, Greece, 3-6 Jul. 2017.

[T-1] **John S. Vardakas** and Michael. Logothetis, “[Passive Optical Network Configurations - Performance Analysis](#)”, *AICT 2012*, May 27-June 1 2012, Stuttgart Germany.

INVITED TALKS

[IT-14] **John Vardakas**, “[MAchine learning-based, networking and computing infrastructure ReSource mAnagement of 5G and Beyond inteLLigent networks: the MARSAL Vision](#)”, Infocom World 2021, 26 November 2021.

[IT-13] **John Vardakas**, “[Beyond 5G – where are we heading in open-RAN networks](#)”, *Keynote Speech, 5G Made Together conference*, 14th October 2021.

[IT-12] **John Vardakas**, “[Evolution of Converged Optical-Wireless Networks Towards 5G Fronthaul Network Architectures](#)”, *Winter School on “Emerging Technologies for 5G and IoT*, MSCA-ITN TeamUp5G training school, online, 14-15 December 2020.

[IT-11] **John Vardakas**, Kostas Ramantas, and Christos Verikoukis, “[Building cooperation in smart-city environments towards optimal utilization of distributed energy resources](#)”, 4th *Technology FITCE Forum*, online, 11 December 2020.

[IT-10] **John Vardakas** and Christos Verikoukis, “A cooperative perspective for energy management in smart cities: a study based on Barcelona’s Superblock concept” *Keynote Speech at the 2nd International Conference on Energy and Sustainable Futures*, 10-11 Sept. 2020.

[IT-9] **John Vardakas**, “Converged Optical-Wireless Networks: an Effective Solution for 5G Network Architectures”, 4rd *5G STEP-FWD School on “Fiber-wireless (FiWi) access networks: Challenges and opportunities*”, Goteborg, Sweden, 15 Feb. 2020.

[IT-8] **John Vardakas**, “[Applications of 5G technology in smart-city environments](#)”, *IEEE SB UoWM lecture series*, Kozani, Greece, 17 Jan. 2020.

[IT-7] **John Vardakas** and Christos Verikoukis, “[Evolution of converged optical-wireless networks towards 5G network architectures](#)”, *IEEE 5G and IoT Thessaloniki Summit 2018*, Thessaloniki, Greece, 25th Oct. 2018.

[IT-6] **John Vardakas** and Christos Verikoukis, “[Cooperative Energy Management in Smart Cities](#)”, *Training School 2018 on Emerging Technologies for 5G and Internet of Things*, Thessaloniki, Greece, 22nd Oct. 2018.

[IT-5] **John Vardakas**, “[An IoT enabled 5G platform for vertical applications](#)” 5th *Technology Forum*, Thessaloniki Greece, 16 May 2018.

[IT-4] **John Vardakas** “Evolution of Optical-Wireless Networks Towards 5G Fronthaul Network Architectures”, 1st *SPOTLIGHT seminar on 5G networks and beyond*, Athens, Greece, 6-9 Mar. 2018.

[IT-3] **John Vardakas**, Christos Verikoukis, “[Evolution of Fiber Wireless networks towards 5G network architectures](#)”, 11th FITCE Technology Forum, *Advanced technologies, optical, 5G, satellite and their role in future developments*, Thessaloniki, Greece, 15 Dec. 2017.

[IT-2] **John S. Vardakas** and Christos Verikoukis, “[Energy Management in Smart Cities: The Cooperative Approach of Barcelona's "Superblock" Smart-City Case](#)”, *Winter School 2017, on Internet of Things: Security, Communication & Application Challenges*, Thessaloniki Greece, 15-16 Dec. 2017.

[IT-1] **John Vardakas**, “[5G Network Infrastructures based on Fiber-Wireless Convergence Architectures \(FiWi\), research challenges and application development](#)”, *IEEE SB UoWM lecture series*, Kozani, Greece, 13 Dec. 2017.

ΕΡΕΥΝΗΤΙΚΕΣ ΔΡΑΣΤΗΡΙΟΤΗΤΕΣ

1. Ανάπτυξη αλγορίθμων και αναλυτικών μοντέλων για την αποτίμηση της απόδοσης δικτύων υπολογιστών
2. Μελέτη της απόδοσης δικτύων υποστηριζόμενα από τις τεχνολογίες SDN και NFV για την βέλτιστη λειτουργία δικτυοκεντρικών υπολογιστικών συστημάτων
3. Σχεδιασμός και ανάπτυξη πρωτοκόλλων για Radio-over-Fiber / Fiber-Wireless networks για ευρυζωνικά ασύρματα δίκτυα σε συχνότητες 60GHz
4. Σχεδιασμός και μελέτη αλγορίθμων για το επίπεδο MAC ασύρματων τοπικών δικτύων (WLANs) και δικτύων αισθητήρων (WSNs)
5. Ανάπτυξη αλγορίθμων για Demand Response σε Smart Grids

ΔΗΜΟΣΙΕΥΣΕΙΣ

- 42 Άρθρα σε Επιστημονικά Περιοδικά μετά από peer review
- 1 Βιβλίο (editor)
- 4 Κεφάλαια σε Βιβλία
- 71 Άρθρα σε Επιστημονικά Συνέδρια μετά από peer review

ΕΤΕΡΟΑΝΑΦΟΡΕΣ

2591, h-index: 23, source Google Scholar (29/09/2022)

ΕΠΙΣΤΗΜΟΝΙΚΕΣ ΔΙΑΚΡΙΣΕΙΣ

1. Standards liaison της IEEE CSIM Technical Committee.
2. Leader του Special Interest Group on “[Converged Optical Wireless Technologies for 5G Networks: Modeling, Performance Evaluation and Optimization](#)” της IEEE CSIM Technical Committee.
3. Μέλος της επιτροπής του Membership Development Support Grant της IEEE Communication Society.
4. Το άρθρο "An Analytical Study of an All-Optical Packet Switch with QoS Support" έλαβε το βραβείο “**Best Paper Award**”, στο συνέδριο AICT 2010, Barcelona, Spain.

5. Το άρθρο "*Bandwidth Reservation in the Erlang Multirate Loss Model for Elastic and Adaptive Traffic*" έλαβε το βραβείο "**Best Paper Award**", στο συνέδριο AICT 2013, Rome, Italy.
6. Special Session organizer "Energy to Smart Grids - Advances in Optimization of Smart Grid Networks", IEEE/IET CSNDSP 2014.
7. Special Session organizer "Radio-over-fiber access networks: Technologies and Architectures", IEEE CAMAD 2014.
8. Special Session organizer "Innovative Architectures, Wireless Technologies and Tools for High Capacity and Sustainable 5G Ultra-Dense Cellular Networks", IEEE CAMAD 2016.
9. Special Session organizer "Communications and information processing for the smart grid", IEICE ICTF 2016.
10. Special Session organizer "Communications and information processing for the smart grid", IEEE CAMAD 2017.
11. Special Session organizer "Innovative Smart Components, Modules and Appliances for a Truly Connected, Efficient and Secure Smart Grid", IEEE CAMAD 2018.
12. Special Session organizer, "Towards Machine-Learning Based Secure and Efficient 5G and Beyond Disaggregated Networks", IEEE MEDITCOM 2021.
13. Tutorial Chair in IEEE CAMAD 2016.
14. Publication Chair in IEEE CAMAD 2018.
15. Publicity Chair in SPECTS 2020.
16. Publication Chair in IEEE MEDITCOM 2021.
17. CQRM TPC co-Chair, IEEE GLOBECOM 2022.
18. TPC-co-Chair, IEEE CAMAD 2022.
19. Κριτής διεθνών επιστημονικών περιοδικών:

IEEE Transactions on Communications, IEEE Communication Letters, IEEE Transactions on Wireless Communications, IEEE Communications Magazine, IEEE Transactions on Smart Grid, IEEE Transactions on Industrial Informatics, IEEE Transactions on Industrial Electronics, IEEE Transactions on Power Electronics, IEEE Transactions on Multi-Scale Computing, IEEE Transactions on Vehicular Technology, IEEE Transactions on Aerospace and Electronic Systems, IEEE Transactions on Cybernetics, IEEE Transactions on Sustainable Energy, IEEE Systems Journal, IEEE Access, IEEE Internet of Things Journal, IEEE/OSA Journal of Optical Communications and Networking, Computer Communications-Elsevier, Computer Networks-Elsevier, Journals of System and Software-Elsevier, Applied Energy – Elsevier, Energy Policy – Elsevier, Energy – Elsevier, Sustainable Cities and

Society-Elsevier, International Journal of Electrical Power and Energy Systems – Elsevier, International Journal of Electronics and Communications – Elsevier, Optics Express, Optik, IEICE Transactions on Communications, IET Circuits Devices and Systems, IET Networks, IET Communications, Wireless Personal Communications-Springer, Telecommunication Systems Journal – Springer, Sustainable Energy, Grids and Networks, EURASIP Journal on Wireless Communications and Networking, Mediterranean Journal of Computers and Networks (MEDJCN), COMCOM SPECIAL HET-NETs JOURNAL ISSUE, Communications - Scientific Letters of the University of Zilina, American Journal of Engineering and Applied Sciences, International Journal of Ad Hoc and Ubiquitous Computing, International Journal of Antennas and Propagation, International Transactions on Electrical Energy Systems, International Transactions on Electrical Energy Systems, Electric Power Components and Systems, Energy Technology, Annals of Operations Research, Journal of Ambient Intelligence and Humanized Computing, International Journal of Production Research, Advances in Telecommunications, Frequenz.

20. Κριτής διεθνών επιστημονικών συνεδρίων:

CSNDSP 2006, CSNDSP 2008, IMETI 2009, IWCMC 2009, ITA 2009, IEEE ICC 2010, CSNDSP 2010, AICT 2010, IMETI 2010,, AICT 2011., IEEE ISCC 2011, AICT 2012, IEEE/IET CSNDSP 2012, IEEE CAMAD 2012, IEEE ICC 2013, ICCIT 2013, ISWTA 2013, IEEE Healthcom 2013, IEEE RFMC 2013, IEEE ICC 2013, RFM 2013, ICWiSe 2013, ICCVE 2013, IEEE ICC 2014, IEEE MELECON 2014, IEEE/IET CSNDSP 2014, IEEE CAMAD 2014, IEEE ICTON 2014, IEEE TEMU 2014, IEEE ISCAIE 2014, ADVICIT 2014, APACE 2014, APPEIC 2014, ETDS 2014, ICCVE 2014, ICDT 2014, IEEE CAMAD 2015, IEEE GLOBECOM 2015, IEEE ICIT 2015, IEEE VTC 2015, EUCNC 2015, AICT 2015, ICACCI 2015, ICCME 2015, ICDT 2015, ICOCOE 2015, ICTF 2015, TAFGEN 2015, REEGETECH 2015, ICT 2016, IEEE/IET CSNDSP 2016, ICTF 2016, APCC 2016, TEMU 2016, IEEE ICC 2016, IEEE GLOBECOM 2016, IEEE CAMAD 2016, APCC 2016, ICACCI 2016, ICCVE 2016, IEACon 2016, IEEE ICC 2017, IEEE GLOBECOM 2017, IEEE GCC 2017, ICSigSys2017, ICT 2017, IEEE CAMAD 2017, IEEE ISCC 2017, IEEE COMNETSAT 2017, IEEE PIMRC 2017, IEEE LATINCOM 2017, ICCEREC 2017, GREEN 2017, CENICS 2017 ICTF 2017, MSWIM 2018, IEEE GLOBECOM 2018, IEEE VTC 2018, IEEE CNCC 2018, NICS 2018, IoTaIS 2018, ICON EEI 2018, IMCET 2018, GIIS 2018, AGERS 2018, IEEE CAMAD 2018, MSWiM 2018, IoTaIS 2019, APCC 2019, APWiMob 2019, WPMC 2019, AGERS 2019, ATC 2019, IEEE GLOBECOM 2019, IEEE COMNETSAT 2019, AEIT 2019, WF-5G 2019, MSWiM 2019, IEEE PIMRC 2019, ICSigSys2019, IAICT 2019, IEEE EuCNC 2019, IEEE ISCC 2019, IEEE ICC 2019, IEEE WCNC 2019, ICT 2019, GIIS 2019, IEEE ICC 2020, CSNDSP 2020, IEEE GLOBECOM 2020, 5G-WF 2020, CSNDSP 2020, IAICT 2020, 5G-WF 2021, ATC 2021, CITS 2021, IAICT 2021, IEEE GLOBECOM 2021, IEEE ICC 2021, IEEE MEDITCOM 2021, IEEE PIMRC 2021, IEEE URUCON 2021,

SOFTT 2021.

21. Μέλος του editorial board των περιοδικών Photonics, Frontiers in Communications and Networks Journal και International Journal On Advances in Telecommunications.
22. Μέλος του Technical Program Committee των Διεθνών επιστημονικών συνεδρίων, AICT 2010, AICT 2011, AICT 2012, AICT 2013, IEEE ICC 2013, ICDT 2013, ICCIT 2013, CSP 2013, ICCVE 2013, ICCIT 2013, MIC-Telecom 2013, ICCVE 2014, AICT 2014, ICDT 2014, TEMU 2014, IEEE ICC 2014, IEEE MELECON 2014, IEEE ISCAIE 2014, ISSPIT 2015, ICCME 2015, IEEE ICC 2015, IEEE GLOBECOM GSICT & CQRM 2015, ICSPDM 2015, IEEE CAMAD 2015, GSCIT' 2015, AICT 2015, ICCVE 2015, ICDT 2015, IEEE ICC 2016, ICT 2016, IEICE ICTF 2016, ICACCI 2016, TEMU 2016, GSCIT' 2016, IEEE/IET CSNDSP 2016, IEACon 2016, APCC 2016, ICCVE 2016, AICT 2016, IEEE COMNETSAT 2016, IEEE CAMAD 2016, IEEE GLOBECOM 2016, ICDT 2016, ISWTA 2017, ICACCI 2017, ICCISN 2017, ICCEREC 2017, ICSigSys2017, IEACon 2017, IEEE COMNETSAT 2017, IEEE ISCC 2017, IEEE ICC 2017, IEEE CAMAD 2017, IEEE GLOBECOM 2017, AICT 2017, VEHICULAR 2017, WPMC 2017, NICS 2017, MSWiM 2017, ICT 2018, ICSigSys 2018, WP-5G 2018, AIECon 2018, KSE 2018, IEEE/IET CSNDSP 2018, ICon EEI 2018, NICS 2018, IEEE CAMAD 2018, WF-5G 2018, IEEE GLOBECOM 2018, IEEE COMNETSAT 2018, IMCET 2018, IEEE ISCC 2018, ATC 2018, ICACCI 2018, ICCEREC 2018, MSWiM 2018, IJCDS 2018, IoTaIS 2018, WSCAR 2018, SigTelCom 2019 GIIS 2019, COMNETSAT 2019, AIECon 2019, KSE 2019, WPMC 2019, APCC 2019, NICS 2019, WF-5G 2019, APWiMob 2019, IEEE GLOBECOM 2019, IoTaIS 2019, ATC 2019, ICT 2019, AGERS 2019, IEEE COMNESTAT 2019, IEE ICC 2019, IAICT 2019, ICSigSys2019, CITS 2019, MSWiM 2019, IEEE ICC 2020, ICT 2020, CSNDSP 2020, COMNETSAT 2020, SigTelCom 2020, NICS 2020, 5G-WF 2020, IEEE GLOBECOM 2020, IAICT 2020, ATC 2020, CITS 2020, APEiMob 2021, IEEE ICC 2021, ICOIN 2021, IEEE ICC 2021, IEEE GLOBECOM 2021, IoTaIS 2021, APWiMob'2021, IEEE MEDITCOM 2021, IAICT 2021, ICT 2021, COMNETSAT 2021, GC 2021, ICOMITEE 2021, AGERS 2021, 5G-WF'21, IC-ICTRuDev 2021, CITS 2021, IMCET'21, SOFTT 2021, IEEE GLOBECOM 2022.

ΔΗΜΟΣΙΕΥΣΕΙΣ ΣΕ ΔΙΕΘΝΗ ΕΠΙΣΤΗΜΟΝΙΚΑ ΠΕΡΙΟΔΙΚΑ

[Π-42] A. Dalgkitis, L. Garrido, F. Rezazadeh, H. Chergui, K. Ramantas, J. Vardakas, Ch. Verikoukis, "[SCHE2MA: Scalable, Energy-Aware, Multi-Domain Orchestration for Beyond-5G URLLC services](#)", to appear in the Transactions on Intelligent Transportation Systems, 2002.

[Π-41] I. Zengin, **J. Vardakas**, and C. Verikoukis, "[Smart Home's Energy Management through a Clustering-based Reinforcement Learning Approach](#)", *IEEE Internet of Things journal*, vol.9, issue 17, pp. 16363-16371, September 2022.

- [Π-40] M. Maule, **J. Vardakas**, and C. Verikoukis, "[A novel 5G-NR resources partitioning framework through real-time user-provider traffic demand analysis](#)," *IEEE Systems Journal*, accepted for publication, 2021.
- [Π-39] Mohammadreza Mosahebfard, **John S. Vardakas**, and Christos Verikoukis, "[Modelling the Admission Ratio in NFV-based Converged Optical-Wireless 5G Networks](#)", *IEEE Transactions on Vehicular Technology*, vol. 70, no. 11, pp. 12024-12038, Nov. 2021.
- [Π-38] M. Maule, **J. Vardakas**, and C. Verikoukis, "5G RAN Slicing: [Dynamic Single Tenant Radio Resource Orchestration for eMBB Traffic within a Multi-Slice Scenario](#)," *IEEE Communications Magazine*, vol. 59, no. 3, pp. 110-116, March 2021.
- [Π-37] E. Datsika, **J. Vardakas**, K. Ramantas, P. V. Mekikis, I. T. Monroy, L. A. Neto, and C. Verikoukis, "[SDN-enabled resource management for converged Fi-Wi 5G Fronthaul](#)" *IEEE Journal on Selected Areas in Communications*, vol. 39, no. 9, pp. 2772-2788, Sept. 2021.
- [Π-36] T. M. Shami, D. Grace, A., Burr, and **J. S. Vardakas**, "[Load balancing and control with interference mitigation in 5G heterogeneous networks](#)", *EURASIP Journal on Wireless Communications and Networking*, vol. 177, July 2019.
- [Π-35] G. Kalfas, C. Vagionas, A. Antonopoulos, E. Kartsakli, A. Mesodiakaki, S. Papaioannou, P. Maniotis, **J. S. Vardakas**, C. Verikoukis, N. Pleros, "[Next Generation Fiber-Wireless Fronthaul for 5G mmWave Networks](#)," *IEEE Communications Magazine*, vol. 57, no. 3, pp. 138-144, March 2019.
- [Π-34] I. Zenginisis, **J. Vardakas**, J. Abadal, C. Echave, M. Morato and C. Verikoukis, "[Optimal power equipment sizing and management for cooperative buildings in microgrids](#)," *IEEE Transactions on Industrial Informatics*, vol. 15, no. 1, pp. 158-172, Jan. 2019.
- [Π-33] **J. S. Vardakas**, I. Zenginisis, N. Zorba, C. Echave, M. Morató, and C. V. Verikoukis, "[Electricity energy savings through efficient cooperation of urban buildings: the smart community case of ‘Superblocks’ in Barcelona](#)", *IEEE Communications Magazine*, vol. 56, no. 11, pp. 102-109, Nov. 2018.
- [Π-32] Ioannis Zenginisis, **John S. Vardakas**, Nizar Zorba, and Christos V. Verikoukis, "[Performance Evaluation of a Multi-standard Fast Charging Station for Electric Vehicles](#)", *IEEE Transactions on Smart Grid*, vol. 9, no. 5, pp. 4480-4489, Sept. 2018.
- [Π-31] I. Zenginisis, **J. S. Vardakas**, C. Echave, M. Morató, J. Abadal, and C. V. Verikoukis, "[Cooperation in microgrids through power exchange: An optimal sizing and operation approach](#)", *Applied Energy*, vol. 203, pp. 972-981, 2017.
- [Π-30] M. Vincenzi, A. Antonopoulos, E. Kartsakli, **J. Vardakas**, L. Alonso and Ch. Verikoukis "[Multitenant Slicing for Spectrum Management on the Road to 5G](#)", *IEEE Wireless Communications*, vol. 24, no. 5, pp. 118-125, October 2017.

[Π-29] G. Kalfas, **J. Vardakas**, L. Alonso, C. Verikoukis and N. Pleros “[Non-saturation delay analysis of Medium Transparent MAC protocol for 5G 60GHz Fiber-Wireless towards 5G mmWave networks](#)”, *IEEE/OSA Journal of Lightwave Technology*, vol. 35, no. 18, pp. 3945-3955, Sept.15, 15 2017.

[Π-28] Ioannis Zenginīs, **John Vardakas**, Nizar Zorba and Christos Verikoukis, “[Analysis and Quality of Service Evaluation of a Fast Charging Station for Electric Vehicles](#)”, *Energy*, vol. 112, pp. 669-678, Oct. 2016.

[Π-27] **John S. Vardakas**, Nizar Zorba and Christos V. Verikoukis, "[Power Demand Control Scenarios for Smart Grid Applications with Finite Number of Appliances](#)", *Applied Energy*, vol. 162, pp. 83–98, 15 Jan. 2016.

[Π-26] Ioannis D. Moscholios, Michael D. Logothetis, **John S. Vardakas**, Anthony C. Boucouvalas, [Congestion probabilities of elastic and adaptive calls in Erlang-Engset multirate loss models under the threshold and bandwidth reservation policies](#), *Computer Networks*, vol. 92, Part 1, pp. 1–23, 9 Dec. 2015.

[Π-25] **John S. Vardakas**, Nizar Zorba and Christos V. Verikoukis, "[Performance Evaluation of Power Demand Scheduling Scenarios in a Smart Grid Environment](#)", *Applied Energy*, Vol. 142, pp. 164–178, Mar. 2015.

[Π-24] K. Niotaki, A. Georgiadis, A. Collado, **J. S. Vardakas**, "[Dual-Band Resistance Compression Networks for Improved Rectifier Performance](#)," *IEEE Transactions on Microwave Theory and Techniques*, vol.62, no.12, pp.3512-3521, Dec. 2014.

[Π-23] Ioannis D. Moscholios, Michael D. Logothetis, **John S. Vardakas**, Anthony C. Boucouvalas, "[Performance metrics of a multirate resource sharing teletraffic model with finite sources under the threshold and bandwidth reservation policies](#)", *IET Networks*, vol. 4, no. 3, pp.195-208, May 2015.

[Π-22] **John S. Vardakas**, Nizar Zorba and Christos V. Verikoukis, “[A Survey on Demand Response Programs in Smart Grids: Pricing Methods and Optimization Algorithms](#)”, *IEEE Communication Surveys and Tutorials*, vol.17, no.1, pp.152-178, First quarter 2015.

[Π-21] K. Niotaki, A. Collado, A. Georgiadis, **J. Vardakas**, “[5 Watt GaN HEMT Power Amplifier for LTE](#)”, *Radioengineering*, vol. 23, no. 1, April 2014.

[Π-20] **John S. Vardakas**, Nizar Zorba and Christos V. Verikoukis, “[Scheduling Policies for Two-State Smart-Home Appliances in Dynamic Electricity Pricing Environments](#)”, *Energy, Elsevier*, vol. 69, pp. 455-469, May 2014.

[Π-19] **J. S. Vardakas**, I. D. Moscholios, M. D. Logothetis and V. G. Stylianakis, “[Performance Analysis of OCDMA PON Configuration Supporting Multi-Rate Bursty Traffic](#)

[with Retrials and QoS Differentiation](#)” *Optical Switching and Networking*, vol. 13, pp. 112–123, Jul. 2014.

[Π-18] **J. S. Vardakas**, I. D. Moscholios, N. Zorba, M. D. Logothetis and C. V. Verikoukis, “[Delay Analysis of Converged Optical-Wireless Networks with QoS Support](#)”, *IET Circuits, Devices & Systems* vol. 8, no. 5, pp. 339-348, Sept. 2014.

[Π-17] I. Moscholios, V. Vassilakis, M. Logothetis, M., & J. Vardakas, "[Erlang-Engset Multirate Retry Loss Models for Elastic and Adaptive Traffic under the Bandwidth Reservation Policy](#)", *International Journal On Advances in Networks and Services*, vol. 7, no. (1 and 2), pp. 12-24, 2014.

[Π-16] I. D. Moscholios, **J. S. Vardakas**, M. D. Logothetis and M. & Koukias, “[A Quasi-Random Multirate Loss Model Supporting Elastic and Adaptive Traffic under the Bandwidth Reservation Policy](#)”, *International Journal On Advances in Networks and Services*, vol. 6, no. 3 and 4, pp. 163-174, Dec. 2013.

[Π-15] I. D. Moscholios, **J. S. Vardakas**, M. D. Logothetis and A. C. Boucouvalas, “[Derivatives of Blocking Probabilities in Multirate Access Tree Networks](#)”, *Advances in Electronics and Telecommunications*, vol. 3, no. 5, Dec. 2013.

[Π-14] **J. S. Vardakas**, I. D. Moscholios, M. D. Logothetis and V. G. Stylianakis, "[Performance Analysis of OCDMA PONs Supporting Multi-Rate Bursty Traffic](#)", *IEEE Transactions on Communications*, vol. 61, no. 8, pp. 3374-3384, Aug. 2013.

[Π-13] **J.S. Vardakas**, I.D. Moscholios, M. D. Logothetis and V.G. Stylianakis, "[Blocking Performance of Multi-rate OCDMA PONs with QoS Guarantee](#)", *IARIA International Journal On Advances in Telecommunications*, Vol. 5, No. 3 and 4, pp. 120-130, Dec. 2012.

[Π-12] I. D. Moscholios, **J. S. Vardakas**, M. D. Logothetis and A. C. Boucouvalas, “[Congestion Probabilities in a Batched Poisson Multirate Loss Model supporting Elastic and Adaptive Traffic](#)”, *Annals of Telecommunications, Springer*, Volume 68, Issue 5-6, pp 327-344, , Jun. 2013.

[Π-11] I. D. Moscholios, V. G. Vassilakis, **J. S. Vardakas** and M. D. Logothetis, “[Retry loss models supporting elastic traffic](#)”, *Advances in Electronics and Telecommunications*, Vol.2, No.3, Sept. 2011, pp. 8-13.

[Π-10] I. Moscholios, **J. Vardakas**, M. Logothetis, and A. Boucouvalas, "[New algorithms for Performance Measures Derivatives in the Erlang Multirate Loss Model including the Bandwidth Reservation Policy](#)", *Mediterranean Journal of Computers and Networks*, Vol. 7, No. 4, 2011, pp.222-234.

[Π-9] **John S. Vardakas**, Ioannis D. Moscholios, Michael D. Logothetis, and Vassilios G. Stylianakis, "[An Analytical Approach for Dynamic Wavelength Allocation in WDM-TDMA](#)

[PONs Servicing ON-OFF Traffic](#)", *IEEE/OSA Journal of Optical Communications and Networking*, Vol. 3, No. 4, Apr. 2011, pp.347-358.

[Π-8] **John S. Vardakas**, Ioannis D. Moscholios, Michael D. Logothetis, and Vassilios G. Stylianakis, "[A Mathematical Framework for the Performance Evaluation of an All-Optical Packet Switch with QoS Differentiation](#)", *International Journal On Advances in Telecommunications*, 2010, vol. 3, no. 3&4, pp.126-138.

[Π-7] Kyriakos E. Zoiros, **John S. Vardakas**, and Marios Tsigkas, "[Study on the instantaneous frequency deviation of pulses switched from semiconductor optical amplifier "assisted Sagnac interferometer"](#)", *Optical Engineering*, Vol. 49, Iss. 7, pp.075003, 2010, ISSN: 00913286.

[Π-6] **John S. Vardakas**, Vassilios G. Vassilakis and Michael D. Logothetis, "[Call-level analysis of hybrid WDM-OCDMA Passive Optical Networks with finite traffic sources](#)", *Journal on Information Technologies and Communications (JITC)*, Special issue on Modeling and Analysis Aspects of NGN networks, Jul. 2009.

[Π-5] **J. S. Vardakas**, V.G. Vassilakis and M.D. Logothetis, "[Performance Modelling and Analysis of Passive Optical Networks for Poisson Traffic](#)", *Journal of Communications*, 4/2008, pp. 38 – 44, University of Zilina, Slovakia, 2008.

[Π-4] **J. S. Vardakas**, M. K. Sidiropoulos and M. D. Logothetis, "[Performance Behavior of IEEE 802.11 Distributed Coordination Function](#)", *IET Circuits, Devices & Systems*, Vol. 2, No. 1, pp. 50-59, Feb. 2008.

[Π-3] **J. S. Vardakas**, K. E. Zoiros, "[Performance Investigation of All-Optical Clock Recovery Circuit Based on Fabry-Pérot Filter and SOA-Assisted Sagnac Switch](#)", *Optical Engineering*, Vol. 46(8), 085005, Aug. 2007.

[Π-2] K.E. Zoiros, **J. Vardakas**, C.S. Koukourlis, T. Houbavlis, "[Analysis and design of ultrahigh-speed all optical semiconductor-optical-amplifier assisted Sagnac recirculating shift register with an inverter](#)", *Optical Engineering*, Vol. 44(6), 065001, Jun. 2005.

[Π-1] K.E. Zoiros, **J. Vardakas**, T. Houbavlis, and M. Moyssidis, "[Investigation of SOA-assisted Sagnac recirculating shift register switching characteristics](#)", *Optic-International Journal for Light and Electron*, Elsevier, Vol. 116, Issue 11, pp. 527-541, Oct. 2005.

BIBLIA

[BK-1] J. Rodriguez, C. Verikoukis, **J. Vardakas**, and N. Passas, (Eds.), "[Enabling 6G Mobile Networks](#)", Springer, 2021.

ΚΕΦΑΛΑΙΑ ΣΕ ΒΙΒΛΙΑ

- [B-4] M. Dalgitsis, M. Mosahebfard, E. Datsika, and **J. S. Vardakas**, “[SDN-Based Resource Management for Optical-Wireless Fronthaul](#)”, *Enabling 6G mobile networks*, 2022.
- [B-3] John Vardakas, Ioannis Zenginīs, and Christos Verikoukis, “[Machine Learning Methodologies for Electric-Vehicle Energy Management Strategies: a Comprehensive Survey](#)”, *Connected and Autonomous Vehicles in Smart Cities*, Taylor and Francis, 2020.
- [B-2] Ioannis Zenginīs, **John Vardakas**, Prodromos-Vasileios Mekikis, and Christos Verikoukis, “[Cooperative Energy Management in Microgrids](#)”, *Transportation and Power Grid in Smart Cities: Communication Networks and Services*, John Wiley, UK, 2018.
- [B-1] **John S. Vardakas**, Vassilios G. Vassilakis and Michael D. Logothetis, “[Blocking Analysis in Hybrid TDM-WDM Passive Optical Networks](#)”, in the book, *Heterogeneous Networks, Vol. II - Performance Analysis & Applications* (D.SEA.6.1.6: Part of Final Deliverables of NoE Euro-NGI to EC), River Publishers, 2008.

ΔΗΜΟΣΙΕΥΣΕΙΣ ΣΕ ΠΡΑΚΤΙΚΑ ΔΙΕΘΝΩΝ ΕΠΙΣΤΗΜΟΝΙΚΩΝ ΣΥΝΕΔΡΙΩΝ

- [C-73] M. Maule, **J. Vardakas** and Ch. Verikoukis "Multi-service Single Tenant 5G Fronthaul Resource Orchestration Framework based on Network Slicing", in *Proc. IEEE GLOBECOM*, Rio, Brazil, 4-8 December, 2022.
- [C-72] I. Keramidi, **J. Vardakas**, K. Ramantas, I. Moscholios and Ch. Verikoukis "Traffic Management in Cell-Free-Based 6G Networks", in *Proc. IEEE CSNDSP*, Porto, Portugal, 20-22 July 2022.
- [C-71] Michail Dalgitsis, **John S. Vardakas**, and Christos Verikoukis, “[5G RAN resource slicing with flexible functional splits over multi-tenant environment](#)”, in *Proc. IEEE CAMAD*, Porto, Portugal, 25-27 Oct. 2021.
- [C-70] E. Bantola, **J. S. Vardakas**, and M. Louta, “[Performance evaluation of Cloud Radio Access Networks by jointly considering communicational and computational network resources](#)”, in *proc. SEEDA 2021*, Preveza, Greece, 24-26 Sept. 2021.
- [C-69] I. Zenginīs, **J. Vardakas**, and C. Verikoukis, “A reinforcement learning approach for the real-time energy management of a smart home”, ESCC 2021, Volos, Greece, Aug. 30, Sept. 3 2021.
- [C-68] **John S. Vardakas**, Kostas Ramantas, Eftychia Datsika, Miquel Payaro, Sofie Pollin, Evgenii Vinogradov, Manos Varvarigos, Panagiotis Kokkinos, Roberto Gonzalez-Sanchez, Juan Jose Vegas Olmos, Ioannis Chochliouros, Philippe Chanclou, Pierangela Samarati, Adam Flizikowski, Md Arifur Rahman, and Christos Verikoukis, “[Towards Machine-Learning-Based 5G and Beyond Intelligent Networks: The MARSAL Project Vision](#)”, in *Proc. IEEE MEDITCOM*, Athens, Greece, 7-10 Sept. 2021.

- [C-67] Ioannis Zenginīs, **John Vardakas**, Kostas Ramantas, and Christos Verikoukis, “[Real-time energy management of a smart home based on deep deterministic policy gradient](#)”, in *Proc. IEEE ICCT 2021*, Bari, Italy, 7-10 Sept. 2021.
- [C-66] I. Chochliouros, A. Kostopoulos, M. Payaró, C. Verikoukis, S. Vimercati, E. Vinogradov, V. Ranjbar, **J. Vardakas**, A. Rahman, P. Soumplis, E. Varvarigos, I. Maglogiannis, J. Macintyre, L. Iliadis, “[Machine Learning-Based, Networking and Computing Infrastructure Resource Management](#)”, in *Proc., AIAI 2021 IFIP WG 12.5 International Workshops Artificial Intelligence Applications and Innovations*, 2021.
- [C-65] Massimiliano Maule, Prodromos-Vasileios Mekikis, Kostas Ramantas, **John S. Vardakas**, and Christos Verikoukis, “[Dynamic partitioning of radio resources based on 5G RAN Slicing](#)”, in *Proc. IEEE GLOBECOM 2020*, Taipei, Taiwan, 7-11 Dec. 2020.
- [C-64] Z. Vujicic, J. Rodriguez, N. Passas, R. Iqbal, T. Maniak, E. Datsika, **J. S. Vardakas**, C. Karyotis, S. A. Busari, and C. Verikoukis, “[EXPLOR – A Novel Holistic Numerical Platform for Converged Optical-Wireless B5G Networks](#)”, in *Proc. IEEE CAMAD*, 14-16 Sept. 2020.
- [C-63] E. Datsika, **J. Vardakas**, G. Kalfas, C. Vagionas, A. Mesodiakaki, and C. Verikoukis, “[End-to-end delay performance of analog fiber wireless architecture for 5G NR fronthaul](#)”, in *Proc. ICTON 2020*, Bari, Italy, 19-23 Jul. 2020.
- [C-62] G. Kalfas, M. Agnus, A. Pagano, L.A. Neto, A. Mesodiakaki, C. Vagionas, **J. Vardakas**, Ch. Verikoukis, and N. Pleros “[Converged Analog Fiber Wireless Point-to-Multipoint architecture for eCPRI 5G fronthaul networks](#)”, in *Proc. IEEE Globecom 2019*, Waikoloa, HI, USA , 9-13 Dec. 2019.
- [C-61] M. Maule, P-V. Mekikis, K. Ramantas, **J. Vardakas**, Ch. Verikoukis, “[Real-time Dynamic Network Slicing for the 5G Radio Access Network](#)”, in *Proc. IEEE Globecom 2019*, Waikoloa, HI, USA , 9-13 Dec. 2019.
- [C-60] M. Mosahebfard, **J. Vardakas**, K. Ramantas, and C. Verikoukis “[SDN/NFV-based network resource management for converged optical-wireless network architectures](#)”, in *Proc. IEEE ICTON 2019*, Angers, France, 9-13 Jul. 2019.
- [C-59] A. Mesodiakaki, P. Maniotis, C. Vagionas, **J. Vardakas**, E. Kartsakli, A. Antonopoulos, C. Verikoukis, N. Pleros, and G. Kalfas, “[Delay Analysis of a Gated Service MAC Protocol for Fiber-Wireless 5G MmWave C-RANs](#),” in *Proc. IEEE ICC 2019*, Shanghai, China, 20 – 24 May 2019.
- [C-58] A. Mesodiakaki, P. Maniotis, G. Kalfas, C. Vagionas, **J. Vardakas**, E. Kartsakli, A. Antonopoulos, E. Datsika, C. Verikoukis, and N. Pleros, “[A Gated Service MAC Protocol for 5G Fiber-Wireless Cloud-Radio Access Networks](#)”, in *Proc. ONDM 2019*, Athens, Greece, 13-16 May 2019.

- [C-57] E. Datsika, E. Kartsakli, **J. Vardakas**, A. Antonopoulos, G. Kalfas, P. Maniotis, C. Vagionas, N. Pleros, and C. Verikoukis, "[QoS-aware resource management for converged Fiber Wireless 5G Fronthaul networks](#)", in *Proc. IEEE GLOBECOM 2018*, Abu Dhabi, 9-13 Dec. 2018.
- [C-56] A. Mesodiakaki, P. Maniotis, Ch. Vagionas, M. Gatzianas, E. Datsika, E. Kartsakli, **J. Vardakas**, G. Kalfas, "[Medium-transparent Dynamic Bandwidth Allocation for 5G Fiber Wireless Dense Fronthaul Networks](#)", in *Proc. IEEE CAMAD 2018*, Barcelona, Spain, 17-19 Sept. 2018.
- [C-55] G. Kalfas, P. Maniotis, A. Mesodiakaki, S. Papaioannou, Ch. Vagionas, M. Gatzianas, E. Kartsakli, and **J. Vardakas**, "[Medium-transparent packet-based fronthauling for 5G Hot-spot networks](#) (Invited)", in *Proc. ICTON 2018*, Bucharest, Romania, 1-5 Jul. 2018.
- [C-54] K. Ramantas, A. Antonopoulos, E. Kartsakli, P.-V. Mekikis, **J. Vardakas**, and C. Verikoukis, "[A C-RAN based 5G platform with a fully virtualized, SDN controlled optical/wireless fronthaul](#) (Invited)", in *Proc. ICTON 2018*, Bucharest, Romania, 1-5 Jul. 2018.
- [C-53] Stamatia Rizou, Klemen Kenda, Dimitris Kofinas, Nikos Mellios, Petra Pergar, P Ritsos, **John Vardakas**, Kostas Kalaboukas, Chrysi Laspidou, Matej Senožetnik, Alexandra Spyropoulou, "[Water4Cities: An ICT Platform Enabling Holistic Surface Water and Groundwater Management for Sustainable Cities](#)" in *Proc. 3rd EWaS International Conference*, Lefkada, Greece, 27-30 Jun. 2018.
- [C-52] S. Papaioannou, G. Kalfas, C. Vagionas, P. Maniotis, A. Miliou, N. Pleros, L. Anet Neto, P. Chancelor, M. Raj-Ali, P. Bakopoulos, C. Caillaud, H. Debregeas, M. B. Sirbu, Y. Eichhammer, E. Theodoropoulou, G. Lyberopoulos, E. Kartsakli, **J. Vardakas**, G. Torfs, X. Yin, K. Tsagkaris, P. Demestichas, G. Giannoulis, H. Avramopoulos, G. Lentaris, E. Varvarigos, I. Tafur Monroy, E. Dayan, Y. Leiba, I. Dimogiannis, "[5G mm Wave Networks Leveraging Enhanced Fiber-Wireless Convergence for High-Density Environments: The 5G-PHOS Approach](#)," in *Proc. IEEE BMSB*, Valencia, Spain, 3-6 June 2018.
- [C-51] **J. S. Vardakas**, E. Kartsakli, S. Papaioannou, G. Kalfas, N. Pleros, A. Antonopoulos, and C. Verikoukis, "[Quality of Service Provisioning in High-Capacity 5G Fronthaul/Backhaul Networks](#)", in *Proc. IMCL 2017*, pp. 797-804, Thessaloniki, Greece, 30-Nov. 01 Dec. 2017.
- [C-50] V. G. Vassilakis, I. D. Moscholios, **J. S. Vardakas**, M.D. Logothetis, "[On the Digital Certificate Management in Advanced Metering Infrastructure Networks](#)", in *proc. IEICE ICTF*, Poznan, Poland, July 2017.
- [C-49] **J. S. Vardakas**, I. T. Monroy, L. Wosinska, G. Agapiou, R. Brenot, N. Pleros, and C. Verikoukis, "[Towards high capacity and low latency backhauling in 5G: The 5G STEP-FWD vision](#) (Invited)", in *Proc. ICTON 2017*, Girona, Spain, 3-6 Jul. 2017.

- [C-48] G. Kalfas, **J. Vardakas**, L. Alonso, C. Verikoukis, and N. Pleros, "[Medium transparent MAC access schemes for seamless packetized fronthaul in mm-wave 5G picocellular networks](#) (Invited)", in *Proc. ICTON 2017*, Girona, Spain, 3-6 Jul. 2017.
- [C-47] G. Kalfas, P. Maniotis, M. Oikonomakou, E. Kartsakli, **J. Vardakas**, N. Pleros, C. Verikoukis, "[On converged Medium-Transparent MAC protocols for mm-wave Fiber-Wireless Networks](#)", in *Proc. IEEE CAMAD 2017*, Lund, Sweden, 19-21 Jun. 2017.
- [C-46] Maria Oikonomakou, Polynikis Kaloudis, Angelos Antonopoulos, Pavlos Maniotis, Elli Kartsakli, **John S. Vardakas**, "[Internet services market across Europe during crisis: A study focused on low-income groups](#)", in *Proc. IEEE CAMAD 2017*, Lund, Sweden, 19-21 Jun. 2017.
- [C-45] Matteo Vincenzi, Angelos Antonopoulos, Elli Kartsakli, **John Vardakas**, Luis Alonso and Christos Verikoukis, "[Cooperation Incentives for Multi-Operator C-RAN Energy Efficient Sharing](#)", in *Proc. IEEE ICC 2017*, Paris, France, 21-25 May 2017.
- [C-44] G. Kalfas, **J. S. Vardakas**, N. Pleros, L. Alonso and C. V. Verikoukis, "[Delay analysis of converged Medium Transparent fixed service Optical-Wireless networks](#)", in *Proc. IEEE Globecom 2016*, Washington D.C., USA, 4-8 Dec. 2016.
- [C-43] N. Giatsoglou, A. Antonopoulos, E. Kartsakli, **J. S. Vardakas**, and C. V. Verikoukis, "[Transmission Policies for Interference Management in Full-Duplex D2D Communication](#)", in *Proc. IEEE Globecom 2016*, Washington D.C., USA, 4-8 Dec. 2016.
- [C-42] **J. S. Vardakas**, Ioannis Zenginisis, and Maria Oikonomakou, "[Peak Demand Reduction Through Demand Control: A Mathematical Analysis](#)", in *Proc. ICTF 2016*, 6-8 July, Patras, Greece.
- [C-41] **John S. Vardakas**, Nizar Zorba, Charalabos Skianis, and Christos V. Verikoukis, "[Performance Analysis of M2M Communication Networks for QoS-differentiated Smart Grid Applications](#)", in *Proc. IEEE GLOBECOM workshops*, San Diego, USA, 5-10 Dec. 2015.
- [C-40] Ali Parichehreh, Kostas Ramantas, Umberto Spagnolini, **John S. Vardakas**, "[Scheduling of the Super-Dense Wireless Cloud Networks](#)", in *Proc. IEEE ICC 2015-Workshop on Advanced PHY and MAC Techniques for Super Dense Wireless Networks*, London, UK, 8-12 Jun. 2015.
- [C-39] Alister Burr, Cheng Chen and Mehdi Molu, Kostas Ramantas, **John S. Vardakas**, "[System-level Simulation of Multihop Wireless Networks using Physical-layer Network Coding](#)", in *Proc. EuCNC 2015*, Paris, France, Jun. 29-Jul. 2, 2015.
- [C-38] I. D. Moscholios, V. G. Vassilakis, **J. S. Vardakas** and M. D. Logothetis, "[Multirate Retry Loss Models Supporting Elastic Traffic of Quasi-Random Input](#)", in *Proc. IEICE ICTF 2014*, Poznan, Poland, 28-30 May 2014.
- [C-37] M. D. Logothetis, I. D. Moscholios, A. C. Boucouvalas and **J. S. Vardakas**, "[Delay Performance of WDM-EPON for Multi-dimensional Traffic Under the IPACT Fixed Service](#)

[and the MultiPoint Control Protocol](#)" in *Proc. of ETS 2013*, Karlskrona, Sweden, 30 Sept. 2-Oct. 2013.

[C-36] **J. S. Vardakas**, "[Electric vehicles charging management in communication controlled fast charging stations](#)" in *Proc. IEEE CAMAD 2014*, Athens, Greece, 1-3 Dec. 2014.

[C-35] Georgios Kollias, Ferran Adelantado, **John Vardakas**, Kostas Ramantas, "[Handover Performance in LTE-A HetNets Through Inter-Site Distance Differentiation](#)", in *Proc. IEEE CAMAD 2014*, Athens, Greece, 1-3 Dec. 2014.

[C-34] Vassilios G. Vassilakis, Ioannis D. Moscholios, **John S. Vardakas**, Michael D. Logothetis, "[Handoff Modeling in Cellular CDMA with Finite Sources and State-Dependent Bandwidth Requirements](#)", in *Proc. IEEE CAMAD 2014*, Athens, Greece, 1-3 Dec. 2014.

[C-33] **John S. Vardakas**, Ioannis Zenginisis, "[A Survey on Short-Term Electricity Price Prediction Models for Smart Grid Applications](#)", in *Proc. WICON 2014*, Lisbon, Portugal, 12-14 Nov. 2014.

[C-32] M. D. Logothetis, **J. S. Vardakas** and I. D. Moscholios, "[Performance Evaluation of PON Technologies](#)", in *proc. ICTON 2014*, Graz, Austria, 6-10 July 2014 (**invited paper**).

[C-31] M. D. Logothetis, **J. S. Vardakas** and I. D. Moscholios, "[Performance Evaluation of a Dynamic Wavelength Allocation Protocol in WDM-TDM PONs Servicing Pareto ON-OFF Traffic](#)", in *proc. ICTON 2014*, Graz, Austria, 6-10 July 2014 (**invited paper**)

[C-30] Kyriaki Niotaki, Ana Collado, Apostolos Georgiadis, and **John Vardakas**, "[A Dual-Band Power Amplifier Based on Composite Right/Left-Handed Matching Networks](#)", in *Proc. IEEE ECTC 2014*, Florida, USA, 27-30 May, 2014.

[C-29] K. Niotaki, F. Giuppi, A. Collado, A. Georgiadis and **J. Vardakas**, "A Broadband Power Amplifier Based on Composite Right/Left-Handed Half-Mode Substrate Integrated Waveguide," in *Proc. DCIS 2013*, San Sebastian, Nov. 27-29, 2013.

[C-28] Ioannis D. Moscholios, Michael D. Logothetis, Vassilios G. Stylianakis and **John S. Vardakas**, "[The Priority Wavelength Release Protocol for Dynamic Wavelength Allocation in WDM-TDMA PONs Supporting Random and Quasi-Random Bursty Traffic](#)" *Proc. of 18th NOC 2013*, GRAZ, Austria, 10-12 Jul. 2013.

[C-27] Ioannis D. Moscholios, Vassilios G. Vasilakis, Michael D. Logothetis and **John S. Vardakas**, "[Bandwidth Reservation in the Erlang Multirate Loss Model for Elastic and Adaptive Traffic](#)" *Proc. of 9th AICT 2013*, Rome, Italy, 23 – 28 Jun., 2013.

[C-26] I. D. Moscholios, **J. S. Vardakas**, M. D. Logothetis, and M. N. Koukias, "[A Quasi-random Multirate Loss Model supporting Elastic and Adaptive Traffic](#)", in *Proc. of the 4th EMERGING 2012*, Barcelona, Spain, , 23-28 Sept. 2012.

- [C-25] **J. S. Vardakas**, I.D. Moscholios, M.D. Logothetis, and V.G. Stylianakis, "[On Code Reservation in Multi-Rate OCDMA Passive Optical Networks](#)", in *Proc. of the 8th IEEE, IET CSNDSP 2012*, Poznan, Poland, 18-20 Jul. 2012.
- [C-24] I. D. Moscholios, **J. S. Vardakas**, M. D. Logothetis, and A. C. Boucouvalas, "[Derivatives of Blocking Probabilities in Multirate Access Tree Networks](#)", in *Proc. of the 8th IEEE, IET CSNDSP 2012*, Poznan, Poland, 18-20 Jul. 2012.
- [C-23] I. D. Moscholios, **J. S. Vardakas**, M. D. Logothetis, and A. C. Boucouvalas, "[Call Blocking Probabilities of Elastic and Adaptive Traffic with Retrials](#)", *8th AICT 2012*, Stuttgart, Germany, 27 May- 1 Jun. 2012.
- [C-22] I. D. Moscholios, **J. S. Vardakas**, M. D. Logothetis, and A. C. Boucouvalas, "[QoS Guarantee in a Batched Poisson Multirate Loss Model Supporting Elastic and Adaptive Traffic](#)", *IEEE ICC 2012*, Ottawa, Canada, 10-15 Jun. 2012.
- [C-21] **J.S. Vardakas**, I.D. Moscholios, M. D. Logothetis, and V. G. Stylianakis, "[Blocking performance of Multi-rate OCDMA PONs](#)", in *Proc. of EMERGING 2011*, Lisbon, Portugal, 20-25 Nov. 2011.
- [C-20] **John S. Vardakas**, Ioannis L. Anagnostopoulos, Ioannis D. Moscholios, Michael D. Logothetis, and Vassilios G. Stylianakis, "[A Multi-Rate Loss Model for OCDMA PONs](#)", in *Proc. of ICTON 2011*, Stockholm, Sweden, 26-30 Jun. 2011.
- [C-19] **J. S. Vardakas**, I. D. Moscholios, M. D. Logothetis, V. G. Stylianakis, and F. Röck, "[Evaluation of dynamic wavelength allocation scenarios in WDM-TDMA PONs servicing ON-OFF traffic from finite sources](#)", in *Proc. of the 11th ICT*, Graz, Austria, 15-17 Jun. 2011.
- [C-18] I. D. Moscholios, **J. S. Vardakas**, M. D. Logothetis, and A. C. Boucouvalas, "[A Batched Poisson Multirate Loss Model Supporting Elastic Traffic Under The Bandwidth Reservation Policy](#)", *IEEE ICC 2011*, Kyoto, Japan, 5-9 Jun. 2011.
- [C-17] Ioannis Moscholios, Vassilios Vassilakis, **John Vardakas** and Michael Logothetis, "[Retry Loss Models Supporting Elastic Traffic](#)", *1st European Teletraffic Seminar*, Poznan, Poland, 14-16 Feb. 2011.
- [C-16] F. Röck, **J. S. Vardakas**, I. D. Moscholios, M. D. Logothetis, and E. Leitgeb, "[A Simple Analytical Model for the Calculation of Packet Blocking Probability in an Optical Packet Switching Network](#)", *14th PCI*, 10-12 Sept. 2010, Tripoli, Greece,
- [C-15] I. D. Moscholios, **J. S. Vardakas**, M. D. Logothetis, and A. C. Boucouvalas, "[QoS Guarantee in the Erlang Multirate Loss Model based on Derivatives of Blocking Probabilities](#)", in *Proc. of the 7th IEEE/IET CSNDSP*, Newcastle, UK, 21-23 Jul. 2010.
- [C-14] **John S. Vardakas**, Ioannis D. Moscholios, Michael D. Logothetis, and Vassilios

Stylianakis, "[ON-OFF Traffic Models for a Hybrid TDM-WDM PON with Dynamic Wavelength Allocation](#)", in *Proc. of the 7th IEEE/IET CSNDSP*, Newcastle, UK, 21-23 Jul. 2010.

[C-13] **John S. Vardakas**, Ioannis D. Moscholios, and Michael D. Logothetis, "[An analytical Study of an All-Optical Packet Switch with QoS Support](#)", in *Proc. of the 6th AICT 2010*, Barcelona, Spain, May 9-14, 2010.(**Best Paper Award**).

[C-12] **John S. Vardakas** and Michael D. Logothetis, "[Packet delay analysis for Priority-based Passive Optical Networks](#)" in *Proc. of 5th ECUMN*, Sliema, Malta, 11-16 Oct., 2009.

[C-11] **John S. Vardakas**, Vassilios G. Vassilakis and Michael D. Logothetis, "[Blocking Analysis for Priority Classes in hybrid WDM-OCDMA Passive Optical Networks](#)", in *proc. of the 5th AICT 2009*, Venice, Italy, May 24-28, 2009,

[C-10] **John S. Vardakas**, Vassilios G. Vassilakis and Michael D. Logothetis, "[End-to-End Delay Analysis of the IEEE 802.11e with MMPP Input-Traffic](#)", in *Proc. 9th ISADS 2009, 3rd International Workshop AHSP 2009*", Athens, Greece, Mar. 23-25, 2009,

[C-9] **John. S. Vardakas**, Vasillios G. Vassilakis and Michael D. Logothetis, "[Loss Models in Traffic-Groomed WDM All-Optical Networks](#)", in *proc. of CSNDSP 2008*, Graz, Austria, 23-28 Jul. 2008.

[C-8] **John. S. Vardakas**, Vasillios G. Vassilakis and Michael D. Logothetis, "[Call-Level Analysis of Hybrid OCDMA-WDM Passive Optical Networks](#)", in *proc. of the 10th ICTON 2009*, Athens, Greece, 22-26 Jun. 2008.

[C-7] **John S. Vardakas**, Vassilios G. Vassilakis and Michael D. Logothetis, "[Blocking Analysis in Hybrid TDM-WDM Passive Optical Networks supporting elastic traffic](#)", in *proc. of the 4th AICT 2008*, Athens, Greece, 8-13 June 2008.

[C-6] **John S. Vardakas**, Vassilios G. Vassilakis and Michael D. Logothetis, "[Blocking Analysis in Hybrid TDM-WDM Passive Optical Networks](#)", in *proc. of the 5th HET-NETs 2008*, Karlskrona, Sweden, 18-20 Feb. 2008.

[C-5] I. Papapanagiotou, **J. S. Vardakas**, M.D. Logothetis and S.A. Kotsopoulos, "[Performance Evaluation of IEEE 802.11e based on ON-OFF Traffic Model](#)", in *proc. of the 3rd Mobimedia 2007*, Nafpaktos, Greece, 27-29 August 2007,

[C-4] **J. S. Vardakas**, I. Papapanagiotou, M.D. Logothetis and S.A. Kotsopoulos, "[On the End-to-End Delay Analysis of the IEEE 802.11 Distributed Coordination Function](#)", in *proc. of the 2nd ICIMP 2007*, Silicon Valley, USA, 1-6 July, 2007,

[C-3] **John S. Vardakas**, Vasillios G. Vassilakis and Michael D. Logothetis, "[Calculating Blocking Probabilities in Single-Hop WDM Traffic Groomed Optical Networks](#)", in *proc. of*

the 9th ICTON 2007, Rome, Italy, 1-5 July 2007,

[C-2] Vassilios G. Vassilakis, Ioannis D. Moscholios and Michael D. Logothetis and **John S. Vardakas**, "[Call-level Multi-rate Loss Models for Elastic Traffic](#)", in *proc. of the 45th European Telecommunications Congress of FITCE*, Athens, Greece, 30 Aug.- 2 Sept. 2006, pp. 287-291.

[C-1] M. K. Sidiropoulos, **J. S. Vardakas** and M. D. Logothetis, "[On the Performance Behavior of the IEEE 802.11 Distributed Coordination Function](#)", in *proc. of the 5th CSNDSP*, Patras, Greece, 24-26 July 2006.

ΔΗΜΟΣΙΕΥΣΕΙΣ ΣΕ ΠΡΑΚΤΙΚΑ ΕΛΛΗΝΙΚΩΝ ΕΠΙΣΤΗΜΟΝΙΚΩΝ ΣΥΝΕΔΡΙΩΝ

[E-1] Δημήτριος Ε. Γκούνης, **Ιωάννης Σ. Βαρδάκας**, Μιχαήλ Δ. Λογοθέτης, "Ανάλυση της Απόδοσης Αλγορίθμου Δυναμικής Ανάθεσης Εύρους Ζώνης σε Παθητικά Οπτικά Δίκτυα Ethernet", 4ο συνέδριο φοιτητών ηλεκτρολόγων μηχανικών και μηχανικών υπολογιστών, Πάτρα, 19-20 Νοεμβρίου 2010.

[E-2] Αντωνία Κοκίου, **Ιωάννης Σ. Βαρδάκας**, Μιχαήλ Δ. Λογοθέτης, "Μελέτη της Απόδοσης Παθητικών Οπτικών Δικτύων Πρόσβασης, Τεχνολογίας Ethernet για Πολλαπλές Υπηρεσίες", 6ο συνέδριο φοιτητών ηλεκτρολόγων μηχανικών και μηχανικών υπολογιστών, Αθήνα, 19-20 Νοεμβρίου 2012.