Georgia E. Athanasiadou

CV 2025

1 Personal Information

Name:	Georgia E. Athanasiadou
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Email:	gathanas@uop.gr, g.e.athanasiadou@gmail.com
Webpage:	http://wmclab.uop.gr/georgia-athanasiadou
Academic position:	Professor, Department of Informatics & Telecommunications, (https://dit.uop.gr/) Member of Wireless & Mobile Communications Lab (WMCLab, http://wmclab.uop.gr/)

Research Interests: Wireless and mobile communications; radio-wave propagation and radio-coverage models; EM radiation and wireless systems measurements; radio network planning; wireless sensor networks – IoT.

2 Education

PhD - University of Bristol

Department of Electrical Engineering, Centre for Communications Research, UK, 1997.
Thesis: "Development, Investigation and Evaluation of Novel Indoor and Outdoor Ray Tracing Propagation Models", Supervisor: Dr. A. Nix.

- **Scholarship**: Bakala Foundation (Greece).
- **Sponsorship**: Nortel Networks UK.

MEng - National Technical University of Athens (NTUA)

School of Electrical & Computer Engineering, Electronics track.
Diploma Thesis: "Theory and Applications of Spread Spectrum Modulation – Implementation of a Direct Sequence Spread Spectrum Modem and basic measurements",
Supervisor: Prof. Ph. Constantinou.

3 Professional Experience

University of Peloponnese

2013–present: Department of Informatics & Telecommunications.

2002–2013: Department of Telecommunication Science & Technology.
Discipline: "Modern Wireless Communications – Propagation and Radio Coverage."

Cambridge University, UK, Department of Engineering, Lab for Communications Engineering

2001 - 02: Industrial Research Fellow, PI for a BFWA project at 3.5 GHz (funded by Cambridge Broadband Ltd, UK).

Adaptive Broadband Ltd (AXXCELERA Broadband Wireless), Cambridge, UK

1999 - 01: Senior Research Engineer. Study/design/development/testing of BFWA broadband wireless networks; standardization (IEEE 802.16).

University of Bristol, Centre for Communications Research

1993 – 99: Research Assistant/ Associate/ Fellow, Department of Electrical Engineering, UK.

National Technical University of Athens – Mobile Radio Communications Lab

1992 – 93: Postgraduate Research Assistant.

4 Research

Research Projects

✓ **University of Peloponnese (UoP):**

- **National project "Partnerships for Research Excellence": INTERPLAY**

INTERPLAY: Integration of Mobile Communication Systems and Sensor Networks to Enhance Public Safety and Smart City Infrastructure, duration 05/2025–06/2026, total project budget €900k. Role: Deputy Scientific Coordinator and member of the UoP research team.

The project focuses on leveraging the Internet of Things (IoT) with a cloud-based architecture and studies the management of multiple 4G/5G IoT devices using different communication protocols, ensuring scalability, interoperability, and efficient data exchange. Key focus areas include adaptive protocol selection to optimize network performance, the use of artificial intelligence methods for data processing and analysis, and real-time decision making for time-sensitive applications.

- **EU – HORIZON Innovation Action: SYNERGIES**

  SYNERGIES – Shaping consumer-inclusive data pathways towards the energy transition, through a reference energy data space implementation, 22 partners from 10 European countries, duration 09/2022–02/2026, total budget €7.97M, https://energydataspaces.eu/. Role: Deputy Scientific Coordinator and member of the UoP research team.

  The project introduces a reference model for Energy Data Space Implementation to unlock innovation based on usage data and data sharing across the entire energy value chain. The lab team leads the open-standards IoT connectivity base of the SYNERGIES Data Space and supports the definition of IoT equipment and WSN topologies at the project's pilot sites.

- **Region of Peloponnese: PANDORA**

  PANDORA – EMF monitoring observatory in the Region of Peloponnese for mobile networks up to 5G, prioritizing citizen protection, OPS 6001405, Region of Peloponnese, ESIF / Operational Programme "Peloponnese 2021–2027", duration 05/2021–11/2024, total budget €400k, http://wmclab.uop.gr/pandora/. Role: Deputy Scientific Coordinator and member of the UoP research team.

  The project focus on the effective recording and analysis of received EMF from wireless telecommunication networks with emphasis on 5G. The objectives are to develop robust methodologies for accurate and reliable EMF measurements and to propose practical deployment guidelines that ensure both network efficiency and compliance with safety standards. Through the program, the lab acquired state-of-the-art equipment for frequency-selective and wideband measurements, both on the ground and at various heights using custom-built drones, enabling measurements across different areas of the Peloponnese. The initiative continues at research level through BSc/MSc theses.

- **UoP – DRÁSEIS**

  Research activities at the Wireless and Mobile Communications Lab (DRÁSEIS) (Project code 80683), 12/2022–12/2033.

Scope: Promotion of research activities through publications, participation in international conferences and fora, and other related tasks.

- **H2020 (RIA) – BIMERR**

  BIMERR – BIM-based holistic tools for Energy-driven Renovation of existing Residences, 16 partners from 8 European countries, total budget €6.93M, duration 01/2019–09/2022, https://bimerr.eu/. Role: Deputy Scientific Coordinator and member of the research team.

  The project designed and developed a toolkit covering the entire renovation process of existing buildings, from project conception to delivery. The lab team led work on stakeholder requirements, definition of the evaluation methodology for the BIMERR system, planning of activities in real renovation sites, and evaluation of BIMERR based on renovation activities in two European countries, with emphasis on wireless sensor/IoT systems.

- **H2020 (IA) – MERLON**

  MERLON – Integrated Modular Energy Systems and Local Flexibility Trading for Neural Energy Islands, 18 partners from 8 European countries, total project budget €5.74M **(**€230.9k share), duration 01/2019–03/2022, https://www.merlon-project.eu/. Role: Deputy Scientific Coordinator and member of the UoP research team.

  The main goal was to deliver and demonstrate an integrated modular framework for local energy management to holistically optimize local energy systems. The lab team contributed throughout, focusing on the potential of EV charging points as local energy resources. In this context, WSN topologies were designed for optimal data collection and processing, and the EV Flexibility Manager (EVFM) algorithm was developed to provide forecasts and specific flexibility requests (supply/consumption) during EV charging.

- **Research Collaboration with Huawei European Research Center, Munich, Germany**

  Nomadic Node Relays for Wireless Communications, 2015–18 — use of vehicle-mounted repeaters/relays to improve radio coverage. Radio-channel studies were carried out using ray-tracing models.

- **THALIS – EKTEINO (NTUA)**

  Innovative Transmission Techniques and Design of Wireless Broadband Networks, EU and national co-funding. Participation of 4 universities (NTUA, UoP, AUEB, AUTH). Total budget €512k. Role: Member of the UoP research team, 2012–15.

- **PEGA – Educational Program**

Development & Management of Wireless Broadband and Optical Networks, Information Management & Automation Control Systems in Agricultural Production, and e-Business in the Peloponnese Region — educational program co-funded by the EU and national resources (MIS 505700), delivered in-person and via distance learning.

- **PENED Program, NTUA**

  PENED 2003 – Study of Smart Antenna Systems at the Base Station and User Equipment (MIMO) for advanced Wireless Communication Systems, NTUA, School of ECE, Microwaves & Optical Fibers Lab, 11/2005–06/2009. Role: Technical support on propagation/coverage issues.

- **Office of Communications (OfCom), UK**

  Research project by the UK telecoms regulator OfCom (program ref. SES AY4463) on effective radio-spectrum use, with COTARES, Cambridge Broadband Ltd, and the University of Cambridge**,** 2003.

✓ **University of Cambridge, UK — Lab for Communications Engineering:**

Propagation/Coverage for BFWA systems at 3.5 GHz

- Principal investigator for a research project on Broadband Fixed Wireless Access (BFWA) at 3.5 GHz — funded by Cambridge Broadband Ltd (CBL), UK**,** 2001–02.
- Responsible for supervising BFWA research programs with the University of Cambridge**,** UK (4 programs) and the University of Kansas, USA (1 program).

✓ **Centre for Communications Research (CCR), University of Bristol (1993–99):**

Research projects as Principal Investigator

- Development and evaluation of a deterministic 3D propagation model for the automated design of third-generation macro- and micro-cell networks (Funding: ORANGE PCS and Nortel Networks — Duration: 2 years).
- CITRUS (*Channel Impulse Three-dimensional Rural-Urban Simulator*) (Funding: Defense Evaluation Research Agency —1.5 years).
- Virtual University Research Initiative (VURI)**,** British Telecom (BT): investigation of the accuracy and sensitivity of a microcell propagation model (6 months).
- Development of a microcell propagation tool using two-dimensional vector building databases (Funding: Defense Evaluation Research Agency —6 months).
- Investigation of the indoor broadband wireless channel at 60 GHz (Funding: Hewlett Packard (HP) Labs —1 year).

Research projects as Team Member

- Optimization of adaptive antennas for UMTS environments (Funding: Engineering & Physical Sciences Research Council and ORANGE PCS —1.5 years).
- Design study of a User Location system exploiting angle-of-arrival information (Funding: KSI Inc., USA —6 months).
- European research program ESPRIT WINHOME (6 months).
- European research program ACTS SUNBEAM (6 months).
- European research program ACTS TSUNAMI II (1 year).

✓ **NTUA — Mobile Radio Communications Laboratory:**

Participation in research projects 1992–93:

- RACE II PLATON — Measurements and characterization of cellular environments.
- INMARSAT 21 R&D — European safety standards for non-ionizing radiation.
- RACE BARBARA — Functional requirements for tele-library and tele-education.

Certification / Acceptance of Research Projects

- Member of the Physical Object Certification Team for (EPAnEK) projects under the unified action RESEARCH–CREATE–INNOVATE (ESPA 2014–2020), Ministry of Development & Investments**,** Special Managing and Implementation Service for actions in Research, Technological Development and Innovation (EYDE-ETAK)**.**
- Member of the Project Acceptance Committee, Action "RESEARCH–CREATE–INNOVATE", (EPAnEK) project "ESTHISIS — Smart sensor system for leak detection in petroleum pipelines in noisy environments," 2018–2022**.**
- Member of the Committee for Proper Execution of the THALIS research program, project "PROTOMI: Adaptive technology in optical transmission," 2012–2015.

Research Proposal Writing and Technical Reports

- Preparation of research proposals for calls such as HFRI/ELIDEK (twice proposals advanced to Phase 2), THALIS (participation in 3 proposals), Region of Peloponnese and Municipality of Tripoli, Heraclitus II, Latsis Foundation scholarships, etc.
- Authorship of technical reports (projects: SYNERGIES, PANDORA, BIMERR H2020, MERLON H2020, Huawei, THALIS NTUA–EKTEINO, OfCom – Ref: AY4463, ACTS SUNBEAM**,** ESPRIT WINHOME, ACTS TSUNAMI, British Telecom VURI, RACE – PLATON, INMARSAT).

Publications

✓ Overview

- 37 publications in peer-reviewed international journals
- 3 chapters in international books
- 70 publications in peer-reviewed international conferences
- 1 publication in a COST Action
- 1 contribution to a white paper
- 9 publications in Greek journals
- 2 contributions to international standards
- 40+ technical reports in research/development projects

✓ Citations

- 2,058 citations (as of 09/2025) according to Google Scholar *(h-index = 24, i10-index = 43)* (https://scholar.google.gr/citations?user=pV_jL3sAAAAJ&hl=en).

✓ Distinctions

- Ranked among the top 1.13% of scientists worldwide in wireless communications (Scholar GPS) — https://scholargps.com/scholars/56846706438809/georgia-athanasiadou
- "Machine Learning-Based In-Car KPI Predictions for Cellular Networks," MOCAST 2025, Finalist Best Paper Award in Communication Systems.
- "Field Trials of Modern Cellular Networks in Diverse Operational Environments," MOCAST 2024, Finalist Best Paper Award in Communication Systems.
- "An Arduino-Based Subsystem for Controlling UAVs Through GSM," MOCAST 2017, Finalist Best Student Paper Award.
- "The effects of antenna array size and back lobe level on self-interference and transmitted powers of 4G beamforming multicell systems with in-band full duplex relays," EUCAP 2015**,** Finalist, Best Paper Award.
- "Mobile telemedicine for moving vehicle scenarios: Wireless technology options and challenges," Journal of Network and Computer Applications 35(3):1140–1150, 2012, Top 25 hottest articles of the journal in 2012.
- "OFDMA techniques in multicellular networks with total frequency reuse," Computer Communications 32(3):522–530, Feb. 2009, Top 25 hottest articles (Jan–Mar 2009).

Technical Program Committee (TPC) of International Conferences

- IEEE International Symposium on Personal, Indoor and Mobile Radio Communications (PIMRC 2025), (PIMRC 2024), (PIMRC 2023), (PIMRC 2020), (PIMRC 2019), (PIMRC 2018), (PIMRC 2017), (PIMRC 2016) , (PIMRC 2015), (PIMRC 2014), (PIMRC 2013), (PIMRC 2008).
- European Conference on Networks and Communications (EuCNC 2022), (EuCNC 2021), (EuCNC 2020).
- European Conference on Antennas and Propagation (EUCAP 2018), (EUCAP 2017), (EUCAP 2015).
- World Symposium on Communication Engineering (WSCE 2020).
- Asia Simulation Conference (AsiaSim2017).
- International Workshop on Antenna Technology (IWAT 2017).
- Loughborough Antenna & Propagation Conference, UK (LAPC 2016), (LAPC 2015), (LAPC 2014),
- IEEE International Conference on Communications - Wireless Communications Symposium (ICC - WCS 2009), (ICC - WCS 2008).
- IEEE Global Communications Conference (GLOBECOM 2008).
- IEEE Vehicular Technology Conference (VTC-F2008).
- IEEE Wireless Communications and Networking Conference (WCNC 2007).
- Panhellenic Conference on Electronics & Telecommunications (PACET 2024),

Reviewer for International Journals and Conferences

IEEE Transactions on Antennas and Propagation, IEEE Transactions on Vehicular Technology, IEEE Transactions on Wireless Communications, IEE Proceedings on Communications, IEEE Communications Magazine, IEEE Antennas and Propagation Magazine, IEEE Vehicular Technology Magazine, IEEE Antennas and Wireless Propagation Letters, Kluwer Academic Publishers, EURASIP Journal on Wireless Communications and Networking, Research Letters in Communications, Wireless Networks, Mediterranean Journal of Computers and Networks.

Other Activities

- Session Chair at the 9th European Conference on Antennas and Propagation (EuCAP 2015), Lisbon, Portugal (April 2015), and at the 9th WSEAS International Conference on Communications, Athens, Greece (July 2005).
- Invited talks at mobile-telecom companies and research labs, including Hewlett-Packard Labs, Nortel Networks (UK), Nortel Wireless Research Centre (Ottawa, Canada), and the Nortel Global Research Conference (1997, Richardson, Texas).

5 Teaching

Undergraduate courses

- Department of Informatics & Telecommunications: Core: Electromagnetic Fields, Principles of Telecommunication Systems (lab); Elective: Wireless Links.

  Previously:
- Dept. of Informatics & Telecommunications: Core: Principles of Telecommunication Systems (theory);
- Dept. of Telecommunication Science & Technology: Core: Communications I (theory & lab); Fields & Waves in Telecommunications, Physics I, Elective: Wireless Links – (theory & Lab).
- Dept. of Computer Science & Technology: Core: Physics.
- University of Bristol: C Programming Lab (Teaching Assistant).
- NTUA ECE: Telecommunications Lab (Teaching Assistant).

Postgraduate Courses

- MSc Modern Wireless Communications: Wireless Communications (2018–present).
- MSc Advanced Telecommunication Systems & Networks: Propagation – Radio Coverage in Wireless Communications and Advanced Topics in Antennas & Propagation.

PhD, MSc, Undergraduate Theses

- PhD Supervision:

  ✓ Department of Informatics & Telecommunications, University of Peloponnese

  - Study of Beyond-5G mobile communication systems, S. Moukidou — Supervisor, ongoing.
  - Unmanned Aerial Vehicles (UAVs) with Machine Learning (ML) techniques to mitigate Internet of Everything (IoE) constraints, S. Tsakalidis, — Member of the supervising committee, ongoing.
  - Design and evaluation of resource-management mechanisms using AI/ML in modern cellular communication systems, M. Christopoulou — Member of the supervising committee, ongoing.
  - Next-generation wireless communications, P. Fytampanis, — Supervisor.
  - Design and performance evaluation of protocols for V2X communications, A. Kanavos — Member of the supervising committee, 2025.
  - Study of optical fibers using equivalent circuits, C. Thraskias — Member of the supervising committee, 2015.

- ✓ University of Cambridge — Co-supervisor: Measurements and characterization of the channel for Broadband Fixed Wireless Access (BFWA) systems, 2004, funded by Cambridge Broadband Ltd.
- ✓ University of Bristol — Co-supervisor: 1/ Propagation models for high-bit-rate multimedia applications using ray-launching techniques, 2002, 2/ Optimization of radio coverage for third-generation (UMTS) systems via algorithms for automated base-station placement, antenna pattern selection, and frequency planning, 2001, funded by ORANGE PCS and Nortel Networks.

- Member of examining committees of PhD theses
  - 1/ National Technical University of Athens (NTUA), School of ECE, Division of Information Transmission Systems & Materials Technology,
  - 2/ National and Kapodistrian University of Athens (NKUA), Department of Physics, Division of Electronics and Systems.
- Supervisor of 9 MSc theses (MSc in Modern Wireless Communications).
- Supervisor of 6 MSc theses (MSc in Advanced Telecommunication Systems & Networks).
- Supervision Committee member for 15+ MSc theses (UoP).
- Co-supervision of MSc theses at the University of Bristol.
- Supervisor/ Supervision committee member in 50+ undergraduate theses.

6 Administrative Services

Recent Activities

- Member, Departmental General Assembly, Dept. of Informatics & Telecommunications, 2013–present.
- Member, Steering Committee of the MSc Modern Wireless Communications — http://wireless-msc.uop.gr/ — 2019–present.
- Member, Undergraduate Studies Program Committee (four-year term by Senate decision), 2021–present.
- Member, Departmental Internal Evaluation Group (OMEA), 2025–present.
- Lead for course timetabling and examination schedules, 2014–present.

Earlier Activities

- Service on numerous departmental/university committees: evaluation of candidates for “Acquiring academic teaching experience for new PhD holders” positions; member of the General Assembly and the Special Composition General Assembly (Department of Telecommunication Science & Technology); Program of Studies Committee (responsible for

drafting the Study Guide and transition regulations); Departmental Acceptance Committee; evaluation of adjunct-teaching candidates under PD 407/80; election committees for department chair; Procurement/Services Acceptance Committees of the School (aggregate value > €1M); student-welcoming team; school outreach; selection committees for MSc, Internship, Erasmus, placement tests, student transfers, admissions for students with disabilities, etc.

- By decision of the Department's General Assembly, responsible for the creation (specifications for infrastructure), maintenance, and operation of the Digital Communications Laboratory (2002–2008).
- By decision of the Department's General Assembly, Head of the Wireless & Mobile Communications Laboratory (2002–2010): authored specifications and oversaw initial infrastructure and the lab website.

Selection Board for Faculty Positions

- Member of 10+ election committees for faculty appointments in the Departments of Telecommunication Science & Technology and Informatics & Telecommunications.
- Member (regular or substitute) of election committees in other academic departments: NTUA – ECE, AUTH – ECE, University of Thessaly – Informatics with Biomedical Applications, Hellenic Air Force Academy – Aviation Sciences, Hellenic Naval Academy – Naval Sciences, University of Thessaly – Physics, University of the Aegean – Information & Communication Systems Engineering, University of Peloponnese – Digital Systems, National and Kapodistrian University of Athens (NKUA) – Digital Industry Technologies.

7 Additional Information

- Member, Technical Chamber of Greece (TEE), IEEE ComSoc Radio Communications Committee (RCC), EurAAP Propagation Working Group.
- Founding member and member of the first Board of the University of Peloponnese Faculty Association.
- Languages: English, French.

8 Publications

International Journals

[J1] G. Tsoulos, G. Athanasiadou, D. Zarbouti, G. Nikitopoulos, V. Tsoulos, N. Christopoulos, 'Empirical Analysis of 5G Deployments: A Comparative Assessment of Network Performance with 4G', AEU - International Journal of Electronics and Communications, Volume 186, 2024, 155479, ISSN 1434-8411, DOI: 10.1016/j.aeue.2024.155479.

[J2] G. Tsoulos, G. Athanasiadou, G. Nikitopoulos, V. Tsoulos, D. Zarbouti, "Empirical Insights into 5G Deployments in Highway Operational Environments and Comparative Performance with 4G", MDPI, Electronics, 2024, vol. 13 (8), DOI: 10.3390/electronics13081533.

[J3] S. Tsakalidis, G. Tsoulos, D. Kontaxis, G. Athanasiadou, "Design and Implementation of a Versatile OpenHAB IoT Testbed with a Variety of Wireless Interfaces and Sensors", MDPI, Telecom, 2023 , Vol. 4 (26), DOI: 10.3390/telecom4030026.

[J4] S. P. Sotiroudis, G. Athanasiadou, G. Tsoulos, P. Sarigiannidis, C. G. Christodoulou, S. K. Goudos, "Evolutionary Ensemble Learning Pathloss Prediction for 4G and 5G Flying Base Stations With UAVs," IEEE Transactions on Antennas and Propagation, vol. 71, no. 7, pp. 5994-6005, July 2023, DOI: 10.1109/TAP.2023.3266784.

[J5] D. Kontaxis, G. Tsoulos, G. Athanasiadou, G. Giannakis, "Wireless Sensor Networks for Building Information Modeling", MDPI, Telecom, 2022, Vol. 3 (7), DOI: 10.3390/telecom3010007.

[J6] D. Zarbouti**,** E. Koutsi**,** G. Athanasiadou, G. Tsoulos, "Minimizing the Cost of PHEV Usage with Price Sensitive Charging Strategies", MDPI, Electricity, 2021, Vol. 2 (4), pp. 459-470; DOI: 10.3390/electricity2040027.

[J7] E. Koutsi, S. Deligiannis, G. E. Athanasiadou, D. A. Zarbouti, G. V. Tsoulos, "Analysis of Electric Vehicle (EV) cost-based charging load profiles", MDPI, Proceedings 2020, Vol. 65(1), 2; DOI:10.3390/proceedings2020065002.

[J8] G.E. Athanasiadou, P. Fytabanis, D.A. Zarbouti, G.V. Tsoulos, P.K. Gkonis, D.I. Kaklamani, "Radio Network Planning towards 5G mmWave Standalone Small-Cell Architectures", MDPI, Electronics, 2020, vol. 9 (2), No 339. DOI: 10.3390/electronics9020339.

[J9] S.K. Goudos, G. Athanasiadou, "Application of an Ensemble Method to UAV Power Modeling for Cellular Communications", IEEE Antennas and Wireless Propagation Letters, 2019, DOI: 10.1109/LAWP.2019.2926784.

[J10] S.K. Goudos, G.V. Tsoulos, G. Athanasiadou, M.C. Batistatos, D. Zarbouti and K.E. Psannis, "Artificial Neural Network Optimal Modeling and Optimization of UAV Measurements for Mobile Communications Using the L-SHADE Algorithm", in IEEE Transactions on Antennas and Propagation, vol. 67, no. 6, pp. 4022-4031, June 2019, DOI: 10.1109/TAP.2019.2905665.

[J11] G.E. Athanasiadou, G.V. Tsoulos, D.A. Zarbouti, I.K. Valavanis, “Optimizing Radio Network Planning Evolution Towards Microcellular Systems”, Springer Wireless Pers Commun 106, 521–534, 2019, DOI: 10.1007/s11277-019-06177-5

[J12] G.E. Athanasiadou, M.C. Batistatos, D.A. Zarbouti, G.V. Tsoulos, “LTE Ground to Air Field Measurements in the context of Flying Relays”, IEEE Wireless Communications Magazine, Integrating UAVs into 5G and beyond, February 2019, DOI: 10.1109/mwc.2018.1800225

[J13] D.A. Zarbouti, G.V. Tsoulos, G.E. Athanasiadou, “The Effective Radiation Pattern Concept for Wireless Systems Analysis”, Electronics Letters, 53 (16), pp. 1160-1162, 2017, DOI: 10.1049/el.2017.1368.

[J14] G. Tsoulos, Ö. Bulakci, D. Zarbouti, G. Athanasiadou, A. Kaloxylos, “Dynamic Wireless Network Shaping via Moving Cells: The Nomadic Nodes Case”, Wiley Transactions on Emerging Telecommunications Technologies, 23 November 2016, DOI: 10.1002/ett.3145.

[J15] D.E. Kontaxis, G.V. Tsoulos, G.E. Athanasiadou, S. Karaboyas, “Optimality of Transmit Beamforming in Spatially Correlated MIMO Rician Fading Channels”, Wireless Personal Communications, vol. 88, no 2, pp. 371-384, 2016, DOI: 10.1007/s11277-015-3125-4.

[J16] D. Zarbouti, G. Tsoulos, G. Athanasiadou, “Effects of antenna array characteristics on in-band full-duplex relays for broadband cellular communications”, ICT Express, Available online 2 December 2015, ISSN 2405-9595, DOI: 10.1016/j.icte.2015.11.002.

[J17] G.V. Tsoulos, G.E. Athanasiadou, “Analysis of CDMA MIMO Beamforming Multicell Deployment Scenarios using Effective Radiation Patterns”, Wireless Personal Communications (Springer) , April 2014, Volume 75, Issue 4, pp 2269-2280. DOI: 10.1007/s11277-013-1466-4.

[J18] D. Zarbouti, G. Tsoulos, G. Athanasiadou, C. Valagiannopoulos, “The Effective Radiation Pattern Concept for Realistic Performance Estimation of LTE Wireless Systems”, International Journal of Antennas and Propagation, vol. 2013, Article ID 746831, 2013, DOI:10.1155/2013/746831.

[J19] D.A. Zarbouti, D.C. Tsilimantos, G.V. Tsoulos, G.E. Athanasiadou, D.I. Kaklamani, “Performance of OFDMA multicell systems with Opportunistic Beamforming”, Wireless Personal Communications, vol. 65, no. 4, pp. 843-861, 2012, DOI: 10.1007/s11277-011-0315-6.

[J20] M.C. Batistatos, G.V. Tsoulos, G.E. Athanasiadou, “Mobile telemedicine for moving vehicle scenarios: Wireless technology options and challenges”, Journal of Network and Computer Applications, Volume 35, Issue 3, Pages 1140-1150, May 2012, ISSN 1084-8045, DOI: 10.1016/j.jnca.2012.01.003.

[J21] I.N. Stiakogiannakis, G.E. Athanasiadou, G.V. Tsoulos, D.I. Kaklamani, “Performance Analysis of Fractional Frequency Reuse for Multi-Cell WiMAX Networks Based on Site-Specific Propagation Modeling”, Wireless Corner, Antennas and Propagation Magazine, IEEE , vol.54, no.1, pp.214,226, Feb. 2012, DOI: 10.1109/MAP.2012.6202554.

[J22] D.C. Tsilimantos, D.A. Zarbouti, G.V. Tsoulos, G.E. Athanasiadou, D.I. Kaklamani, “Fairness and throughput trade-off analysis for UMTS WCDMA network planning”, Springer Wireless Personal Communicatios Journal, vol. 56, no.4, pp. 693-714, Oct.2011, DOI: 10.1007/s11277-009-9840-y

[J23] P.K. Gkonis, T.E. Athanaileas, G.V. Tsoulos, G.E. Athanasiadou, D.I. Kaklamani, “Adaptive Beam-Centric Admission Control for WCDMA Multicell/Multiservice Scenarios with Non-Uniform Traffic”, Springer Wireless Personal Communications Journal, vol. 58, no. 2, pp. 369-389, 2011.

[J24] T.E. Athanaileas, G.E. Athanasiadou, G.V. Tsoulos, D.I. Kaklamani, “Parallel Radio-Wave Propagation Modelling with Image-Based Ray Tracing Techniques”, Parallel Computing Journal, Elsevier, vol. 36, issue 12, pp. 679-695, 2010, DOI: 10.1016/j.parco.2010.08.002.

[J25] D. Zarbouti, I. Stiakogiannakis, G.V. Tsoulos, G. Athanasiadou, D. Kaklamani, “OFDMA techniques in multicellular networks with total frequency reuse”, Elsevier Computer Communications, Volume 32, Issue 3, 25 February 2009, Pages 522-530.

[J26] P. Gkonis, G.V. Tsoulos, G. Athanasiadou, D. Kaklamani, “An Adaptive Beam-Shaping Strategy for WCDMA Multicellular Networks with Non-Uniform Traffic Requirements”, Academy Publisher, Journal of Communications, vol. 3, no. 4, pp. 16-25, September 2008.

[J27] T. Athanaileas, P. Gkonis, G. Athanasiadou, G.V. Tsoulos, D. Kaklamani, “Implementation and evaluation of a web-based grid-enabled environment for WCDMA multibeam system simulations”, IEEE Antennas and Propagation Magazine, Vol. 50, No. 3, June 2008, pp. 195-204.

[J28] G.E. Athanasiadou, I.J. Wassell, “Comparisons of Ray Tracing Predictions and Field Trial Results for Broadband Fixed Wireless Access Scenarios”, WSEAS Transactions on Communications, ISSN 1109-2742, Issue 8, Vol. 4, August 2005, pp.717-721.

[J29] M.P. Sellars, G.E. Athanasiadou, B. Ziolko, S.D. Greaves, “Opposite-sector uplink interference in broadband FWA networks in high-rise cities”, Electronics Letters, 40 (17), pp. 1070–1071, 2004, DOI: 10.1049/el:20045100.

[J30] G.V. Tsoulos, G.E. Athanasiadou, “On the application of adaptive antennas to microcellular environments: Radio channel characteristics and system performance”, IEEE Transactions on Vehicular Technology, January 2002, vol. 51, no 1, pp. 1-16.

[J31] G.V. Tsoulos, G.E. Athanasiadou, R.J. Piechocki, “Low complexity smart antenna methods for third generation WCDMA systems”, IEEE Transactions on Vehicular Technology, November 2000, vol. 49, no 6, pp. 2382-2396.

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