

PUBLICATIONS LIST

Stelios MITILINEOS

1 PhD Dissertation

S.A. Mitilneos, “Multipath Fading Mitigation Using Smart Antennas”, Athens, October 2006.

2 Book Chapters

B1. Mitilneos, S.A., Capsalis, C.N., and Thomopoulos, S.C.A., “Simulation of small-scale fading in mobile channel models for next-generation wireless communications”, appears in *Handbook of Research on Heterogeneous Next-Generation Networking: Innovations and Platform*, by Kotsopoulos S.A. and Ioannou K.G. (Editors), Chapter 15, IGI Global Publishing, ISR Press, 2009.

B2. Varlamos, P.K., Mitilneos, S.A., Panagiotou, S.C., Sotiriou, A.I., and Capsalis, C.N., “Direction-of-Arrival estimation approach using switched parasitic arrays”, appears in *Advances in Direction-of-Arrival Estimation*, by Sathish Chandran (Editor), pp. 145-160, Chapter 8, Artech House, January 2006, Norwood MA.

B3. Stathopoulos, N.A., Savaidis, S.P., and Mitilneos, S.A., “RF measurements and characterization of conductive materials”, appears in *Electronics and Computing in Textiles*, by Savvas K. Vassiliadis, editor; Ventus Publishing ApS, 2012.

3 International Peer-Reviewed Scientific Journals

J26. Mitilneos, S.A., Symeonidis, S.K., Mpatsis, I.B., Iliopoulos, D.K., Kliros, G.S., Savvaids, S.P., and Stathopoulos, N.A., “Conformal patch antenna arrays design for onboard ship deployment using genetic algorithms”, *Advances in Power Electronics*, Vol. 2013, pp. 1-5.

J25. Mitilneos, S.A., Segou, O.K., and Thomopoulos, S.C.A., “Fast simulation of average small-scale fading for indoor localization applications”, *Wireless Personal Communications*, Vol. 71, No. 1, pp. 745-767, 2013.

J24. Skiani, E.D., Mitilneos, S.A., and Thomopoulos, S.C.A., “A study of the performance of wireless sensor networks operating with smart antennas”, *IEEE Antennas and Propagation Magazine*, Vol. 54, No. 3, pp. 50-67, June 2012.

J23. Dimousios, T.D., Mitilneos, S.A., Panagiotou, S.C., and Capsalis, C.N., “Design of a corner-reflector reactively controlled antenna for maximum directivity and multiple beam forming at 2.4GHz”, *IEEE Transactions on Antennas and Propagation*, Vol. 59, No. 4, pp. 1132-1139, April 2011.

J22. Mitilneos, S.A., and Thomopoulos, S.C.A., “MIND: a non-parametric decision fusion method for accurate indoor localization using sensors with monotonically increasing error functions”, *IEEE Transactions on Aerospace and Electronic Systems*, Vol. 47, No. 2, pp. 1498-1506, April 2011.

J21. Mitilneos, S.A., Kyriazanos, D.M., Segou, O.E., Goufas, J.N., and Thomopoulos, S.C.A., “Indoor localization with wireless sensor networks”, *Progress In Electromagnetic Research*, Vol. 109, pp. 441-474, 2010.

J20. Mitilneos, S.A., “Blind position location via geometric loci construction”, *Wireless Personal Communications*, Vol. 60, pp. 665-677, 2011.

J19. Dimousios, T.D., Nikolopoulos, C.D., Mitilneos, S.A., and Capsalis, C.N., “A new, low-profile and low-cost SPA-PIFA, suitable for mobile 2.4GHz ISM applications”, *Journal of Electromagnetic Waves and Applications*, Vol. 24, No. 7, pp. 881-891, 2010.

J18. Mitilneos, S.A., and Thomopoulos, S.C.A., “Positioning accuracy enhancement using error modeling via a polynomial approximation approach”, *Progress In Electromagnetic Research*, No. 102, pp. 49-64, 2010.

J17. Mitilneos, S.A., Mougiakos, K.S., Lampropoulos, I.G., Kordoni, M.D., and Capsalis, C.N., “A programmable beamforming network for adaptive arrays applications”, *Journal of Active and Passive Electronic Devices*, Vol. 6, No. 1-2, pp. 141-156, 2011.

J16. Mitilneos, S.A., Mougiakos, K.S., and Thomopoulos, S.C.A., “Design and optimization of ESPAR antennas via impedance measurements and a genetic algorithm”, *IEEE Antennas and Propagation Magazine*, Vol. 51, No. 2, pp. 118-123, April 2009.

- J15.** Panagiotou, S.C., Dimousios, T.D., Mitilineos, S.A., and Capsalis, C.N., "Broadband switched parasitic arrays for portable DVB-T receiver applications at the V UHF band", *IEEE Antennas and Propagation Magazine*, Vol. 50, No. 5, pp. 110-117, October 2008.
- J14.** Panagiotou, S.C., Mitilineos, S.A., Dimousios, T.D., and Capsalis, C.N., "A broadband, circular switched parasitic array for portable and vehicular mobile DVB-T applications at the V UHF band", *Microwave and Optical Technology Letters*, Vol. 50, No. 7, pp. 1727-1732, July 2008.
- J13.** Mitilineos, S.A., and Capsalis, C.N., "A new, low-cost, switched beam and fully adaptive antenna array for 2.4GHz ISM applications", *IEEE Transactions on Antennas and Propagation*, Vol. 55, No. 9, pp. 2502-2508, September 2007.
- J12.** Panagiotou, S.C., Mitilineos, S.A., Dimousios, T.D., and Capsalis, C.N., "A broadband, vertically polarized, circular switched parasitic array for indoor portable DVB-T applications at the IV UHF band", *IEEE Transactions on Broadcasting*, Vol. 53, No. 2, pp. 547-552, June 2007.
- J11.** Mitilineos, S.A., Thomopoulos, S.C.A., and Capsalis, C.N., "Genetic design of dual-band, switched-beam dipole arrays, with elements failure correction, retaining constant excitation coefficients", *Journal of Electromagnetic Waves and Applications*, Vol. 20, No. 14, pp. 1925-1942, 2006.
- J10.** Mitilineos, S.A., Papakanellos, P.I., and Capsalis, C.N., "Compensation for elements discrepancies in array development using genetic algorithms", *Proceedings of the European Microwave Association*, Vol. 2, September 2006, pp. 269-273.
- J9.** Varlamos, P.K., Mitilineos, S.A., and Capsalis, C.N., "A hybrid MoM and UTD simulation model for the performance estimation of switched parasitic arrays in indoor environments", *Proceedings of the European Microwave Association*, Vol. 2, June 2006, pp. 236-240.
- J8.** Mitilineos, S.A., and Capsalis, C.N., "On the design of a dual-band, switched-beam antenna array with constant excitation coefficients", *Wireless Personal Communications*, Vol. 41, No. 1, pp. 127-133, April 2007.

- J7.** Mitilneos, S.A., Andreoudi, A.E., and Capsalis, C.N., "A novel switched parasitic array and diversity scheme using horizontally polarized antennas", *Wireless Personal Communications*, Vol. 38, No. 4, pp. 421-433, September 2006.
- J6.** Mitilneos, S.A., Thomopoulos, S.C.A., and Capsalis, C.N., "On array failure mitigation with respect to probability of failure, using constant excitation coefficients and a genetic algorithm", *IEEE Antennas and Wireless Propagation Letters*, Vol. 5, pp. 187-190, 2006.
- J5.** Mitilneos, S. A., and Capsalis, C. N., "On array failure mitigation using genetic algorithms and a priori joint optimization", *IEEE Antennas and Propagation Magazine*, Vol. 47, No. 5, pp. 227-232, October 2005.
- J4.** Mitilneos, S. A., Panagiotou, S. C., Varlamos, P. K., and Capsalis, C. N., "Indoor environments propagation simulation using a hybrid MoM and UTD electromagnetic method", *Annals of Telecommunications*, Vol. 60, No. 9-10, pp.1231-1243, September-October 2005.
- J3.** Mitilneos, S.A., Mitropoulos, G.K., and Capsalis, C.N., "A new active RF phase shifter using variable gain, drain voltage controlled PHEMTs: A 2.4-GHz ISM implementation", *IEEE Microwave and Wireless Components Letters*, Vol. 15, No. 7, pp. 454-456, July 2005.
- J2.** Mitilneos, S.A., Varlamos, P K., and Capsalis, C.N., "A simulation method for bit error rate performance estimation for arbitrary angle of arrival channel models", *IEEE Antennas and Propagation Magazine*, Vol. 46, No. 2, pp. 158-163, April 2004.
- J1.** Mitilneos, S.A., Papagianni, C.A., Verikaki, G.I., and Capsalis, C.N., "Design of switched beam planar arrays using the method of genetic algorithms", *Progress In Electromagnetic Research*, Issue 46, pp. 105-126, 2004.

4 Proceedings of International Scientific Conferences

- C18.** Savvaidis, S. P., Ioannidis, Z. C., Stathopoulos, N. A., Mitilneos, S. A., Tsitouri, C., "Transmission line modeling of microwave pulse compression systems", *Proceedings of the 2013 IEEE International Conference on Microwaves, Communications, Antennas and Electronic Systems*, pp. 1-5, October 21-23, 2013, Tel Aviv, Israel.

C17. Symeonidis, S., Vassiliadis, S., Mitilneos, S. A., Potirakis, S., and Vossou, C., “On the feasibility and applications of wearable antennas”, *International Istanbul Textiles Congress: Innovative and Functional Textiles*, pp. 1-5, May 30 – June 1, 2013, Istanbul, Turkey.

C16. Potirakis, S.M., Analytis, A., Tatlas, N.A., and Mitilneos, S.A., “Identification of Anomalies in the Earth’s electromagnetic field by spectral decomposition techniques”, *eRA-7*, September, 2012, Piraeus, Greece.

C15. Vassiliadis, S., Marmarali, A., Mitilneos, S.A., and Blaga, M., “Electromagnetic shielding with knitted fabrics”, *Proceedings of the 46th International Congress of the International Federation of Knitting Technologists*, pp. 1-7, September 6-8, 2012, Sinaia, Romania.

C14. Mitilneos, S.A., et al., “Conformal patch antenna array design for on-board ship deployment using genetic algorithms”, *1st MARINELIVE Conference*, pp. 1-7, June 3-5, Athens, Greece (also appears as in J26).

C13. Mitilneos, S.A., Kyriakis-Bitaros, B.D., Savvaidis, S., Stathopoulos, N., Broutas, P., and Chatzandroulis, S., “A RF powered smart wireless sensor system”, *eRA-6*, September, 2011, Piraeus, Greece.

C12. Vastianos, G.E., Kyriazanos, D.K., Vastianos, G.E., Segou, O.E., Mitilneos, S.A., and Thomopoulos, S.C.A., “Indoor localization using passive RFID”, *Proceedings of the XXth SPIE Conference on Signal Processing, Sensor Fusion and Target Recognition – SPIE Defense Security and Sensing 2011 Symposium*, pp. 1-5, April 25-29, 2011, Orlando, FL, USA.

C11. Segou, O.E., Mitilneos, S.A., and Thomopoulos, S.C.A., “DALE: A range-free, adaptive indoor localization method enhanced by limited fingerprinting”, *Proceedings of the 2010 International Conference on Indoor Positioning and Indoor Navigation*, pp. 234-241, September 15-17, 2010, Zurich, Switzerland.

C10. Mitilneos, S.A., Goufas, J.N., Segou, O.E., and Thomopoulos, S.C.A., “WAX-ROOM: an indoor WSN-based localization platform”, *Proceedings of the XIXth SPIE Conference on Signal Processing, Sensor Fusion and Target Recognition – SPIE Defense Security and Sensing 2010 Symposium*, pp. 1-5, April 5-9, 2010, Orlando FL, USA.

C9. Mitilneos, S.A., and Thomopoulos, S.C.A., “Development of a compact SPA for 2.4GHz applications using commercially available elements: design and experimental validation”,

Proceedings of the 2009 Loughborough Antennas and Propagation Conference, pp. 717-720, November 16-17, 2009, Loughborough, UK.

C8. Mitilneos, S.A., Roumeliotis, G.K., Mougiakos, K.S., Capsalis, C.N., and Thomopoulos, S.C.A., "Positioning accuracy enhancement using localization error modeling", *Proceedings of the 10th IEEE Symposium on a World of Wireless Mobile and Multimedia Communications*, pp. 1-5, June 15-19, 2009, Kos, Greece.

C7. Mitilneos, S.A., Argyreas, N.D., and Thomopoulos, S.C.A., "A near-optimal low complexity sensor fusion technique for accurate localization based on ultrasound time of arrival measurements from low-quality sensors", *SPIE Defense Security and Sensing – Proceedings of the XVIII Conference on Signal Processing, Sensor Fusion, and Target Recognition*, pp. 1-5, April 13-17, 2009, Orlando FL, USA.

C6. Mitilneos, S.A., Argyreas, N.D., Makri, E.T., Kyriazanos, D.M., and Thomopoulos, S.C., "An indoor localization platform for ambient assisted living using UWB", *Proceedings of the 6th International Conference on Advances in Mobile Computing and Multimedia (WAS-ACM MoMM 2008)*, pp. 178-182, November 24-26, 2008, Linz, Austria.

C5. Mitilneos, S.A., Panagiotou, S.C., Thomopoulos, S.C.A., and Capsalis, C.N., "Design of a dual-band, switched-beam dipole array, with elements failure correction", *Proceedings of the 18th Annual IEEE International Symposium on Personal, Indoor and Mobile Radio Communications (PIMRC'07)*, pp. 1-5, September 3-7, 2007, Athens, Greece.

C4. Panagiotou, S., Kouveliotis, N., Dimousios, T., Varlamos, P., Mitilneos, S.A., and Capsalis, C.N., "A PIFA-parasitic optimization utilizing the genetic algorithms technique", *Proceedings of the 1st European Conference on Antennas and Propagation*, pp. 1-5, November 6-10, 2006, Nice, FR.

C3. Mitilneos, S.A., Thomopoulos, S.C.A., and Capsalis, C.N., "Design of a dual-band, switched-beam dipole array", *Proceedings of the 1st European Conference on Antennas and Propagation*, pp. 1-5, November 6-10, 2006, Nice, FR.

C2. Mitilneos, S.A., Heretakis, I.I., Chatziathanassiou, N., Thomopoulos, S.C.A., and Capsalis, C.N., "Multiobjective antenna array design using the method of genetic algorithms", *WSEAS 9th International Conference on Communications*, pp. 1-5, July 14-17, 2005, Athens,

Greece. (Also included in the *WSEAS Transactions on Communications*, Vol. 4, No. 8, pp. 739-743, August 2005.)

C1. Mitilineos, S. A., Thomopoulos, S. C. A., Bougoulas, D. K., and Capsalis, C. N., “Position location using a minimum square error method: an indoor environment implementation”, *Proceedings of the WSEAS 4th International Conference on Telecommunications and Informatics*, pp. 1-5, March 13-15, 2005, Prague, Czech Republic.

5 Patents

(i) Patent No. 1004954, Greek Industrial Property Organization, “**POSITION LOCATION VIA GEOMETRIC LOCI CONSTRUCTION**”. WIPO Reference in <http://www.wipo.int/pctdb/en/wo.jsp?wo=2006070211>, European patent pending.