

Kubilay Sertel

Electrical and Computer Engineering
The Ohio State University
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EDUCATION

- 2003 Ph.D. in Electrical Engineering, University of Michigan, Ann Arbor
1997 M.S. in Electrical Engineering, Bilkent University, Ankara, Turkey
1995 B.Sc. in Electrical and Electronics Eng., Middle East Technical University, Ankara, Turkey

PERSONAL

Citizenship: US

PROFESSIONAL

- 2017-present Associate Professor, The Ohio State University, Electrical and Computer Engin. Department
2012-2017 Assistant Professor, The Ohio State University, Electrical and Computer Engin. Department
2007-2012 Research Scientist, The Ohio State University, ElectroScience Laboratory, Columbus, OH.
2005-2012 Adjunct Assistant Professor, The Ohio State University, Electrical and Computer Engin. Dept.
2003-2007 Senior Research Associate, The Ohio State University, ElectroScience Lab., Columbus, OH.
1997-2003 Graduate Research Assistant, University of Michigan, Department of Electrical Engineering and Computer Science, Ann Arbor, MI.
1995-1997 Graduate Research Assistant, Bilkent University, Ankara, Turkey.

RESEARCH INTERESTS

Electromagnetic (EM) theory, analysis and design of THz and mmW sensors, antennas arrays and spectroscopy systems for biomedical and non-destructive imaging, ultra-wideband low-profile antennas and phased arrays for cognitive sensing and opportunistic wireless networks, reconfigurable antennas, arrays and miniaturization techniques, novel RF materials, frequency selective surfaces/volumes and magneto-dielectric metamaterials, measurement and characterization of anisotropic composites. In computational electromagnetics, Prof. Sertel's research pioneered curvilinear fast multipole modeling of hybrid EM integral equation/finite element systems and efficient solution of large-scale, real-life problems on massively parallel supercomputing platforms.

AWARDS, RECOGNITIONS, AND STUDENT AWARDS

- 2019 **2nd Place in student paper competition:** S. Sahin, N. K. Nahar, K. Sertel, "Non-contact Characterization of Antenna Impedance, Gain and Pattern through Open-Fixture Network Calibration", *2019 Antenna Measurement Techniques Association Symposium*, San Diego, CA
2019 **Honorable mention in student paper competition:** W.-J. Foo and K. Sertel, "Wideband Printed Antenna Arrays for 5G Mobile Applications", *2019 IEEE Antennas and Propagation Society/URSI Symposium*, Atlanta, GA
2018 **OSU Presidential Fellowship**, S. Sahin, Advisor: K. Sertel, The Ohio State Univ. Graduate School
2018 **IEEE Antennas and Propagation Society Doctoral Research Grant**, S. Sahin, Advisor: K. Sertel
2017 **OSU Presidential Fellowship**, S.A.N. Saqueeb, Advisor: K. Sertel, The Ohio State Univ. Graduate School

- 2017 **3rd Place in student paper competition:** N. Srinivasan, C. Caglayan, N. K. Nahar, K. Sertel, “High-resolution Polarimetric THz Imaging for Biomedical Applications”, *2017 IEEE Antennas and Propagation Society/URSI Symposium*, San Diego, CA
- 2016 **3rd Place in student paper competition:** S. Sahin, N.K. Nahar, and K. Sertel, “On-chip UWB Phased Arrays for mmW Connectivity”, *2016 IEEE Antennas and Propagation Society/URSI Symposium*, Fajardo, Puerto Rico
- 2016 **Finalist in student paper competition:** C. Caglayan and K. Sertel, “On-Chip “Baluntennas” for Differential-Mode Non-Contact Characterization of mmW/THz Devices and ICs”, *2016 IEEE Antennas and Propagation Society/URSI Symposium*, Fajardo, Puerto Rico
- 2016 **Finalist in student paper competition:** S. A.N. Saqueb and K. Sertel, “Phase-sensitive THz Imaging using Single-Pixel Intensity-only Measurements”, *2016 IEEE Antennas and Propagation Society/URSI Symposium*, Fajardo, Puerto Rico
- 2016 **Honorable mention in student paper competition:** A. Abumunsar, N.K. Nahar, D. Hyman, and K. Sertel, “K-to-Ka Band Low-profile Phased Array with Integrated MEMS Phase Shifters”, *2016 IEEE Antennas and Propagation Society/URSI Symposium*, Fajardo, Puerto Rico
- 2016 **OSU College of Engineering, Lumley Research Award, K. Sertel**
- 2015 **OSU Presidential Fellowship**, C. Caglayan, Advisor: K. Sertel, The Ohio State Univ. Graduate School
- 2015 **IEEE Antennas and Propagation Society Doctoral Research Grant**, C. Caglayan, Advisor: K. Sertel
- 2014 **The ARFTG Roger Pollard Memorial Student Fellowship in Microwave Measurement**, C. Caglayan, Advisor: K. Sertel
- 2014 **OSU ElectroScience Lab, Best Paper of the Year**, C. Caglayan, G.C. Trichopoulos, and K. Sertel
- 2014 **Early Career Innovator of the Year: K. Sertel**, The Ohio State University
- 2014 **Fellow: K. Sertel**, Applied Computational Electromagnetic Society (ACES)
- 2014 **Inspiration Award: K. Sertel** and G.C. Trichopoulos, ElectronicProducts.com
- 2014 **Finalist in student paper competition:** C. Caglayan, G.C. Trichopoulos and K. Sertel, “Non-contact device and integrated circuit characterization in the G-Band (140–220 GHz)”, *2014 IEEE Antennas and Propagation Society/URSI Symposium*, Memphis, TN
- 2013 **OSU ElectroScience Lab, Best PhD Dissertation of the Year**, N. Apaydin, Advisors: K. Sertel and J.L. Volakis, “Novel Implementations of Coupled Microstrip Lines on Magnetic Substrates”
- 2013 **First place in student paper competition:** G.C. Trichopoulos and K. Sertel: “A Large-Format Focal Plane Array for Rapid THz Computed Tomography”, *2013 IEEE Antennas and Propagation Society/URSI Symposium*, Orlando, FL
- 2013 **Honorable mention in student paper competition:** N. Apaydin, Lanlin Lee, K. Sertel, and J.L. Volakis, “Nonreciprocal and Magnetically Scanned Leaky-wave Antenna Using Coupled CRLH Lines”, *2013 IEEE Antennas and Propagation Society/URSI Symposium*, Orlando, FL
- 2013 **Innovators Award: K. Sertel**, OSU College of Engineering, The Ohio State University
- 2013 **Second place in student paper competition:** J. Chalas, K. Sertel, and J.L. Volakis “Computation of the Q Limits for Arbitrary-Shaped Antennas using Characteristic Modes”, 2013 National Radio Science Meeting - URSI, Boulder, CO
- 2012 **Third place in student poster competition:** G. Trichopoulos and K. Sertel, “Real-Time Imaging at Terahertz Frequencies Using a New 80×64 Pixel THz Camera”, Fourth Annual John D. and Alice Nelson Kraus Memorial Student Poster Competition, The Ohio State University, Columbus, OH
- 2012 **Second place in student paper competition:** J. Doane, K. Sertel, J.L. Volakis, “A Wideband Scanning Conformal Array with a Compact Compensating Balun”, *2012 Antenna Applications Symposium*, Allerton, IL
- 2012 **First place in student paper competition:** J. Doane, K. Sertel, J.L. Volakis, “A 6.3:1 Bandwidth Scanning Tightly Coupled Dipole Array with Co-Designed Compact Balun”, *2012 IEEE Antennas and Propagation Society/URSI Symposium*, Chicago, IL

- 2011 **International Union of Radio Science (URSI) Young Scientist Award:** K. Topalli, Advisor: K. Sertel, presented at the 2011 URSI General Assembly, Istanbul, Turkey
- 2011 **Honorable mention in student paper competition:** E. Irci, K. Sertel, J.L. Volakis, “Bandwidth enhancement of low-profile microstrip antennas using tightly coupled patch arrays”, *2011 IEEE Antennas and Propagation Society/URSI Symposium*, Spokane, WA
- 2010 **First place in student paper competition:** I. Tzanidis, K. Sertel, and J.L. Volakis, “An Interweaved Spiral Array (ISPA) Providing a 10:1 Bandwidth Over a Ground Plane”, *2010 IEEE APS/URSI Conference, July 2010, Toronto, ON, Canada*
- 2008 **Lumley Research Excellence Award:** K. Sertel, The Ohio State University, College of Engineering Award
- 2008 **Second place in student paper competition:** G. Mumcu, K. Sertel, and J.L. Volakis, “Miniature antenna using printed coupled lines emulating degenerate band edge crystals”, *2008 URSI National Radio Science Meeting, Jan, 2008, Boulder, CO*
- 2007 **Elected Member, URSI Commission B**
- 2007 **IEEE Senior Member**
- 2006 **Third place in student paper competition:** B.C. Usner, K. Sertel, and J.L. Volakis, “A Hybrid VSIE Method for Periodic Media and Metamaterials”, *2006 ACES Conference, Monterey, CA*
- 1997 **Roketsan Inc. Travel Grant:** K. Sertel and L. Gurel, “A comparison of surface-modeling techniques,” *1997 IEEE AP-S International Symposium and URSI Radio Science Meeting, Montreal, Canada, vol. 3, pp. 1834-1837, July 1997.*
- 2020 **ISI Citation h-index:** 23 (23 publications with 23 or more citations)
- 2020 **Google Scholar h-index:** 33 (33 publications with 33 or more citations)
- 2020 **Google Scholar i10-index:** 76 (76 publications with 10 or more citations)

TEACHING

- ECE 8019: Advanced Topics: THz Sensing, Spectroscopy and Imaging
- ECE 7813: Advanced Antenna Theory and Design
- ECE 5510: Introduction to Computational Electromagnetics
- ECE 5132: Photonics
- ECE 5017: Microwave Engineering
- ECE 5011: Antennas
- ECE 3010: Introduction to RF and Optical Engineering

CURRENT GRADUATE STUDENTS

Wei Jian Foo (PhD - Expected 2020)
 Lucas Newton (PhD - Expected 2022)
 Maruf S. Hussain (PhD - Expected 2022)
 Banaful Paul (PhD - Expected 2023)
 Yagmur Ozturk (PhD - Expected 2024)

CURRENT VISITING SCHOLARS AND POST DOCTORAL ASSOCIATES

Vinicius Pepino, Visiting Scholar

FORMER GRADUATE STUDENTS and POST DOCTORAL ASSOCIATES

Brian C. Usner, PhD (PhD-2006), Ansoft Corp.
Gokhan Mumcu, PhD (PhD-2008), Associate Professor at University of Southern Florida
Salih Yarga, PhD (PhD-2009), at Apple Inc., Cupertino, CA
Jae-Young Chung, PhD (PhD-2010), Assistant Professor at Seoul National Univ. of Sci. and Techn. (SeoulTech)
Erdinc Irci (PhD-2011), at Apple Inc., Cupertino, CA
Ioannis Tzanidis (PhD-2011), at Echodyne Corp. Bellevue, WA
William Moulder (PhD-2012), at MIT Lincoln Labs, Boston, MA
Jonathan P. Doane (PhD-2013), at MIT Lincoln Labs, Boston, MA
Georgios C. Trichopoulos (PhD-2013), Assistant Professor at Arizona State University
Nil Apaydin (PhD-2013), at SpaceX, Seattle, WA
Woon Gi Yeo (PhD-2014), at Hyundai, S. Korea
Yasir Karisan (PhD-2014), at Peregrine Semiconductor, Chicago, IL
Jeffrey Chalas (PhD-2015) at MITRE, Boston, MA
Cosan Caglayan (PhD-2016) at Ossia, Inc., Seattle, WA
Anas Abumunshar (PhD-2017) at Intel, Portland, OR
Syed An Nazmus Saqueeb (PhD-2018) at Aptiv, Kokomo, IN
Nandhini Srinivasan (MS-2019) at Qualcomm, San Diego, CA
Raed Almhadi (PhD-2019) at University of Jeddah, Saudi Arabia
Seckin Sahin (PhD-2019) at Google, Inc.

Burak Ozbey, Fulbright Scholar (2017-2018) - Technical University of Munich Foundation Fellow
Cumhur Basaran, (Visiting Scholar 2011-2012) Associate Professor, Antalya, Turkey
Kagan Topalli (Post-Doc: 2010-2012), Astranis Space Technologies Corporation, San Francisco, CA

SYNERGISTIC ACTIVITIES

- **Editor in Chief (Electronic Publications 2017-2020)** IEEE Antennas and Propagation Society
- **Fellow (2014)** Applied Computational Electromagnetics Society
- **General Co-chair (2012)** Applied Computational Electromagnetics Society Conf., Columbus, OH
- **Senior Member** of Institute of Electrical and Electronics Engineers (IEEE)
- **Member**, IEEE Antennas and Propagation and IEEE Microwave Theory and Techniques Societies.
- **President (2009), Vice President (2008), Secretary (2007)**, IEEE Columbus AP/MTT Chapter
- **Elected Member**, URSI Commission B
- **Technical reviewer** for IEEE Trans. Antennas and Propagat, IEEE Antennas and Propagat. Magazine, IEEE Trans. Microwave Theory and Techn., IEEE Trans. THz Science and Techn., AGU Radio Science, IEEE Microwave Theory and Techn. Society Mag., Microwave and Guided Wave Letters, IEEE Trans. on Geoscience and Remote Sensing, IET Microwaves, Antennas and Propagat., Applied Computational Electromagnetics Society (ACES) Journal, IEEE Trans. Magnetics, AIAA: Aeronautics and Astronautics Research, Neurocomputing, ASME J. Engineering Materials and Techniques

PUBLICATIONS

BOOKS

- J.L. Volakis, and K. Sertel, “*Integral Equation Methods for Electromagnetics*”, SciTech Publishing, 2012.
- J.L. Volakis, K. Sertel, and B. Usner, “*Frequency Domain Hybrid Finite Element Methods in Electromagnetics*,” (Synthesis Lectures on Computational Electromagnetics) *edited by C.A. Balanis*, Morgan & Claypool Publishers, 2006

BOOK CHAPTERS

1. K. Sertel and G.C. Trichopoulos, “Non-contact Metrology for mm-Wave and THz Electronics”, in High Speed GaN Devices, Springer, 2019

2. G. C. Trichopoulos and K. Sertel, "Terahertz Antennas and Arrays", in *Antenna Engineering Handbook*, Edited by J.L. Volakis, 5th Ed: McGraw-Hill Education, 2019
3. K. Sertel and C.J. Reddy, "Numerical Methods for Modeling Reflector Antennas and Feeds", in *Reflector Antennas*", 1st Edition, Vol. 2, Shafai, Sharma, Rao, Editors. Boston/London: Artech House, 2013
4. G. Mumcu, K. Sertel, and J.L. Volakis, "Metamaterial Antennas", 2011, in *Frontiers in Antennas*, ed. F.B. Gross, 2011 McGraw-Hill
5. J.F. Lee, R. Lee, V. Rawat, K. Sertel and F. Teixeira, "Numerical Methods for Antenna Engineering", in *Frontiers in Antennas*, ed. F.B. Gross, 2011 McGraw-Hill
6. G. Mumcu, K. Sertel, and J.L. Volakis, "Chapter 7: Antenna Miniaturization Using Magnetic Photonic and Degenerate Band Edge Crystals", in *Small Antennas: Miniaturization Techniques and Applications*, McGraw-Hill, 2010
7. J. Chalas, K. Fujimoto, J.L. Volakis, and K. Sertel, "Chapter 1: Survey of Small Antenna", in *Small Antennas: Miniaturization Techniques and Applications*, McGraw-Hill, 2010
8. T. Eibert, K. Sertel, D. Filipovic and J.L. Volakis, "Finite Element-Fast Integral Methods for Antenna Analysis," *Chapter in book edited by N. Uzunoglu et. al. Applied Computational Electromagnetics: State of the Art and Future Trends (NATO ASI Series. Series F, Computer and Systems Sciences)*, vol. 171, pp. 183-197, Springer-Verlag, N.Y. 2000.

PATENTS AND DISCLOSURES

1. Kubilay Sertel, "Antenna-Coupled Radio Frequency (RF) Probe with a Replaceable Tip", filed 2016, (patent pending), Application No. 62/422,220
2. Kubilay Sertel, Niru K. Nahar, and Syed An Nazmus Saqueb, "Methods for Antenna Pattern Characterization based on Compressive Sensing", filed August 2019, (patent pending), Application No. 16/529,180
3. Kubilay Sertel, Georgios C. Trichopoulos, and Cosan Caglayan, "On-Chip, Wideband, Differentially-Fed Antennas with Integrated Bias Structures" Issued 2019, Patent No. 10473587
4. Kubilay Sertel, Georgios C. Trichopoulos, and Cosan Caglayan, "Non-Contact Probe Measurement Test-Bed for mmW and THz Devices." Issued 2016, Patent No. 9,488,572-B2
5. Kubilay Sertel and Gokhan Mumcu, "Asymmetrically Fed Miniature Antennas for High Resolution Focal Plane THz Imaging Arrays" Issued 2016, Patent No. 9,490,280-B2
6. Kubilay Sertel and John L. Volakis, "Emulation of Anisotropic Media in Transmission Line" Issued 2013, Patent No. 8,384,493-B2

JOURNAL PAPERS

1. S. Sahin, N. K. Nahar and K. Sertel, "A Simplified Nicolson-Ross-Weir Method for Material Characterization using Single-port Measurements," *IEEE Transactions on Terahertz Science and Technology*, Online, March 2020
2. B Ozbey, and K Sertel, "Distinct Gaussian Properties of Multiple Reflections in Extended Hemispherical Lenses", *Journal of Infrared, Millimeter, and Terahertz Waves*, 2019
3. S. A. N. Saqueb and K. Sertel, "Multisensor Compressive Sensing for High Frame-Rate Imaging System in the THz Band", *IEEE Transactions on Terahertz Science and Technology*, vol. 9, no. 5, pp. 520-523 01 Sept. 2019
4. S. Sahin, N. K. Nahar and K. Sertel, "Thin-Film SUEX as an Antireflection Coating for mmW and THz Applications," *IEEE Transactions on Terahertz Science and Technology*, vol. 9, no. 4, pp. 417-421, July 2019
5. Seckin Sahin, NK Nahar and K Sertel, "Dielectric Properties of Low-Loss Polymers for mmW and THz Applications", *Journal of Infrared, Millimeter, and Terahertz Waves* (2019): 1-17.

6. Woon-Gi Yeo, Ogan Gurel, Charles L. Hitchcock, Sungchan Park, Kubilay Sertel and Niru K. Nahar, "Evaluation of Cancer Tissue Morphology via THz Spectroscopic Imaging: Human Lung and Small Intestine Malignancies", *Infrared Physics and Technology*, vol. 97, pp. 411-416, March 2019
7. S. A. N. Saqueb and K. Sertel, "Compressive Terahertz Imaging Using a Single-bit Sensor", *IEEE Transactions on Terahertz Science and Technology*, vol. 8, no. 6, pp. 757-764, November 2018
8. S. Sahin, N. K. Nahar and K. Sertel, "Permittivity and Loss Characterization of SUEX Epoxy Films for mmW and THz Applications," in *IEEE Transactions on Terahertz Science and Technology*, vol. 8, no. 4, pp. 397-402, July 2018
9. Yasir Karisan, Cosan Caglayan, and Kubilay Sertel, "Sub-millimeter-Wave Equivalent Circuit Model for External Parasitics in Double-Finger HEMT Topologies", *Journal of Infrared, Millimeter, and Terahertz Waves* 39(2):142-160 01 Feb. 2018
10. Woon-Gi Yeo, Ogan Gurel, Nandhini Srinivasan, Paul D King, Niru K Nahar, Sungchan Park, Norman L Lehman, and Kubilay Sertel, "Terahertz Imaging and Electromagnetic Model of Axon Demyelination in Alzheimer's Disease", *IEEE Transactions on Terahertz Science and Technology*, Volume: 7, Issue: 6, pp. 711 – 721, August 2017
11. Anas J. Abumunshar and Kubilay Sertel, "5: 1 Bandwidth Dielectric Rod Antenna Using a Novel Feed Structure", *IEEE Transactions on Antennas and Propagation*, Volume: 65, Issue: 5, May 2017
12. Cosan Caglayan and Kubilay Sertel, "Experimental Analysis of Repeatability and Calibration Residuals in On-Wafer Non-Contact Probing", *IEEE Transactions on Microwave Theory and Techniques*, Volume: 65, Issue: 6, June 2017
13. Saqueb, Syed An Nazmus, and Sertel, Kubilay, "Phase-Sensitive Single-Pixel Imaging Using Intensity-Only Measurements", *IEEE Transactions on Terahertz Science and Technology*, vol. 6, no. 6: 810-816. 2016
14. Caglayan, Cosan; Sertel, Kubilay, "Noncontact On-Wafer Characterization of Differential-Mode Millimeter- and Submillimeter-Wave Devices and Integrated Circuits". *IEEE Transactions on Microwave Theory and Techniques*. Vol. PP, 1-7. 2016
15. Chalas, Jeffrey; Sertel, Kubilay; Volakis, John L, "Computation of the Q Limits for Arbitrary-Shaped Antennas Using Characteristic Modes". *IEEE Transactions on Antennas and Propagation*. Vol. 64, no. 7: 2637 - 2647. 2016
16. Caglayan, Cosan; Trichopoulos, Georgios, C; Sertel, Kubilay, "Hybrid Electromagnetic Modeling of Lens-Integrated Antennas for Non-Contact On-Wafer Characterization of THz Devices and Integrated Circuits". *Applied Computational Electromagnetics Society Express Journal*. Vol. 1, no. 2: 72-75. 2016
17. Karisan, Yasir; Caglayan, Cosan; Trichopoulos, Georgios, C; Sertel, Kubilay, "Lumped-Element Equivalent Circuit Modeling of Millimeter-Wave HEMT Parasitics Through Full-Wave Electromagnetic Analysis". *IEEE Transactions on Microwave Theory and Techniques*. Vol. 64, no. 5: 1419-1430. 2016
18. Basaran, Siddik, C; Sertel, Kubilay, "Compact and Planar Monopole Antenna for WLAN and WiMAX Applications". *Applied Computational Electromagnetics Society Journal*. Vol. 30, no. 5: 546-550. 2015

19. Trichopoulos, Georgios, C; Sertel, Kubilay, "Broadband Terahertz Computed Tomography Using a 5k-pixel Real-time THz Camera". *Journal of Infrared, Millimeter, and Terahertz Waves*. Vol. Online, 12. 2015
20. Basaran, Siddik, C; Sertel, Kubilay, "Dual-Band Frequency-Reconfigurable Monopole Antenna for WLAN Applications". *Microwave and Optical Technology Letters*. Vol. 57, no. 1: 55-58. 2015
21. Ghalichechian, Nima; Sertel, Kubilay, "Permittivity and Loss Characterization of SU-8 Films for mmW and Terahertz Applications". *IEEE Antennas and Wireless Propagation Letters*. Vol. 14, 723-726. 2015
22. Caglayan, Cosan; Trichopoulos, Georgios, C; Sertel, Kubilay, "Non-Contact Probes for On-Wafer Characterization of Sub-Millimeter-Wave Devices and Integrated Circuits". *IEEE Transactions on Microwave Theory and Techniques*. Vol. 62, no. 11: 2791-2801. 2014
23. Zuboraj, Muhammed; Apaydin, Nil; Sertel, Kubilay; Volakis, John, L, "Half-Ring Helical Structure for Traveling Wave Tube Amplifiers". *IEEE Transactions on Plasma Science*. Vol. 42, no. 11: 3465-3470. 2014
24. Apaydin, Nil; Sertel, Kubilay; Volakis, John, L, "Nonreciprocal and Magnetically Scanned Miniaturized Leaky-wave Antennas Using Coupled Transmission Lines". *EPJ Applied Metamaterials*. Vol. 1, 3. 2014
25. Doane, Jonathan,P; Sertel, Kubilay; Volakis, John, L, "Bandwidth Limits for Lossless, Reciprocal PEC-backed Arrays of Arbitrary Polarization". *IEEE Transactions on Antennas and Propagation*. Vol. 62, no. 5: 2531-2542. 2014
26. Peng, Tao; Sertel, Kubilay; Volakis, John, L, "Fully Overlapping Decomposition Method for Finite-Element Modeling of Small Features". *Electromagnetics*. Vol. 34, no. 3-4: 253-269. 2014
27. Alwan, Elias, A; Balasubramanian, Sidharth; Atallah, Jad, G; LaRue, Matthew; Sertel, Kubilay; Khalil, Waleed; Volakis, John, L, "Coding-based Ultra-wideband Digital Beamformer with Significant Hardware Reduction". *Analog Integrated Circuits and Signal Processing*. Vol. 78, no. 3: 691-703. 2014
28. Moulder, William, F; Sertel, Kubilay; Volakis, John, L, "Ultrawideband Superstrate-Enhanced Substrate-Loaded Array With Integrated Feed". *IEEE Transactions on Antennas and Propagation*. Vol. 61, no. 11: Online. 2013
29. Basaran, Siddik, Cumhur; Sertel, Kubilay, "Dual Wideband CPW-Fed Monopole Antenna with Split-Ring Resonators". *Microwave and Optical Technology Letters*. Vol. 55, no. 9: 2088-2092. 2013
30. Doane, Jonathan,P; Sertel, Kubilay; Volakis, John, L, "A Wideband, Wide Scanning Tightly Coupled Dipole Array With Integrated Balun (TCDA-IB)". *IEEE Transactions on Antennas and Propagation*. Vol. 61, no. 9: 4538-4548. 2013
31. Apaydin, Nil; Sertel, Kubilay; Volakis, John, L, "Nonreciprocal Leaky-Wave Antenna Based on Coupled Microstrip Lines on a Non-Uniformly Biased Ferrite Substrate". *IEEE Transactions on Antennas and Propagation*. Vol. 61, no. 7: 3458-3465. 2013
32. Tzanidis, Ioannis; Sertel, Kubilay; Volakis, John, L, "UWB Low-Profile Tightly Coupled Dipole Array With Integrated Balun and Edge Terminations". *IEEE Transactions on Antennas and Propagation*. Vol. 61, no. 6: 3017-3025. 2013

33. Basaran, Siddik, Cumhur; Olgun, Ugur; Sertel, Kubilay, "Multiband Monopole Antenna with Complementary Split-ring Resonators for WLAN and WiMAX Applications". *Electronics Letters*. Vol. 49, no. 10: 636-638. 2013
34. Doane, Jonathan, P; Sertel, Kubilay; Volakis, John, L, "Matching Bandwidth Limits for Arrays Backed by a Conducting Ground Plane". *IEEE Transactions on Antennas and Propagation*. Vol. 61, no. 5: 2511-2518. 2013
35. Trichopoulos, Georgios, C; Mosbacker, Lee, H; Burdette, Don; Sertel, Kubilay, "A Broadband Focal Plane Array Camera for Real-time THz Imaging Applications". *IEEE Trans. on Antennas and Propagation*. Vol. 61, no. 4: 1733-1740. 2013
36. Yeo, Woon-Gi; Nahar, Niru, K; Sertel, K, "Far-IR Multiband Dual-polarization Perfect Absorber for Wide Incident Angles". *Microwave and Optical Technology Letters*. Vol. 55, no. 3: 632-636. 2013
37. Moulder, William, F; Sertel, Kubilay; Volakis, John, L, "Superstrate-Enhanced Ultrawideband Tightly Coupled Array with Resistive FSS". *IEEE Transactions on Antennas and Propagation*. Vol. 60, no. 9: 4166-4172. 2012
38. Apaydin, Nil; Zhang, Lanlin; Sertel, Kubilay; Volakis, John, L, "Experimental Validation of Frozen Modes Guided on Printed Coupled Transmission Lines". *IEEE Transactions on Microwave Theory and Techniques*. Vol. 60, no. 6: 1513-1519. 2012
39. Doane, Jonathan, P; Sertel, Kubilay; Volakis, John, L, "Bandwidth Limits for Lossless Planar Arrays Over Ground Plane". *Electronics Letters*. Vol. 48, no. 10: 540-541. 2012
40. Tzanidis, Ioannis; Sertel, Kubilay; Volakis, John, L, "Characteristic Excitation Taper for Ultrawideband Tightly Coupled Antenna Arrays". *IEEE Transactions on Antennas and Propagation*. Vol. 60, no. 4: 1777-1784. 2012
41. Chung, Jae-Young; Nahar, Niru, K; Zhang, Lanlin; Bayram, Yakup; Sertel, Kubilay; Volakis, John, L, "Broadband Radio Frequency Conductivity Measurement Technique for Engineered Composites". *IET Microwaves, Antennas and Propagation*. Vol. 6, no. 4: 371-376. 2012
42. Alwan, Elias, A; Sertel, Kubilay; Volakis, John, L, "A Simple Equivalent Circuit Model for Ultrawideband Coupled Arrays". *IEEE Antennas and Wireless Propagation Letters*. Vol. 11, 117-120. 2012
43. Irci, Erdinc; Sertel, Kubilay; Volakis, John, L, "An Extremely Low Profile, Compact, and Broadband Tightly Coupled Patch Array". *Radio Science*. Vol. 47, RS0M06. 2012
44. Topalli, Kagan; Trichopoulos, Georgios, C; Sertel, Kubilay, "An Indirect Impedance Characterization Method for Monolithic THz Antennas Using Coplanar Probe Measurements". *IEEE Antennas and Wireless Propagation Letters*. Vol. 11, 3-5. 2012
45. Volakis, John, L; Sertel, Kubilay, "Narrowband and Wideband Metamaterial Antennas Based on Degenerate Band Edge and Magnetic Photonic Crystals". *Proceedings of the IEEE*. Vol. 99, no. 10: 1732-1745. 2011
46. Nahar, Niru, K; Chung, Jae-Young; Tzanidis, Ioannis; Sertel, Kubilay; Volakis, John, L, "Optically Transparent RF-EO Aperture with 20:1 Bandwidth". *Microwave and Optical Technology Letters*. Vol. 53, no. 8: 1863-1866. 2011
47. Zhang, Lanlin; Puri, Archana; Sertel, Kubilay; Volakis, John, L; Verweij, Henk, "Low Loss Z-Type Ba₃Co₂Fe₂₄O₄₁ Hexaferrites for Antennas and RF Devices". *IEEE Transactions on Magnetics*. Vol. 47, no. 8: 2149-2152. 2011

48. Irci, Erdinc; Sertel, Kubilay; Volakis, John, L, "Miniature Printed Magnetic Photonic Crystal Antennas Embedded into Vehicular Platforms". *Applied Computational Electromagnetics Society Journal*. Vol. 26, no. 2: 109-114. 2011
49. Burdette, Don,J; Alverbro, Joergen; Zhang, Ze; Fay, Partick; Ni, Yang; Potet, Pierre; Sertel, Kubilay; Trichopoulos, Georgios; Topalli, Kagan; Volakis, John; Mosbacker, H, Lee, "Development of an 80 x 64 pixel, Broadband, Real-time THz Imager". *Terahertz Physics, Devices, and Systems V: Advanced Applications in Industry and Defense*. Vol. 8023, 80230F. 2011
50. Mumcu, Gokhan; Gupta, Saurabh; Sertel, Kubilay; Volakis, John, L, "Small Wideband Double-Loop Antennas Using Lumped Inductors and Coupling Capacitors". *IEEE Antennas and Wireless Propagation Letters*. Vol. 10, 107-110. 2011
51. Tzanidis, Ioannis; Sertel, Kubilay; Volakis, John, L, "Interwoven Spiral Array (ISPA) With a 10:1 Bandwidth on a Ground Plane". *IEEE Antennas and Wireless Propagation Letters*. Vol. 10, 115-118. 2011
52. Chung, Jae-Young; Sertel, Kubilay; Volakis, John, L, "Broadband Characterization of Bulk and Thin Magnetic Composites Using Stripline Structures". *IEEE Transactions on Microwave Theory and Techniques*. Vol. 58, no. 11: 2960-2967. 2010
53. Apaydin, Nil; Irci, Erdinc; Mumcu, Gokhan; Sertel, Kubilay; Volakis, John, L, "Miniature Antennas Based on Printed Coupled Lines Emulating Anisotropy". *IET Microwaves, Antennas and Propagation*. Vol. 4, no. 8: 1039-1047. 2010
54. Irci, Erdinc; Sertel, Kubilay; Volakis, John, L, "Antenna Miniaturization for Vehicular Platforms Using Printed Coupled Lines Emulating Magnetic Photonic Crystals". *Metamaterials*. Vol. 4, no. 2-3: 127-138. 2010
55. Trichopoulos, Georgios, C; Mumcu, Gokhan; Sertel, Kubilay; Mosbacker, H, Lee; Smith, Phil, "A Novel Approach for Improving Off-Axis Pixel Performance of Terahertz Focal Plane Arrays". *IEEE Transactions on Microwave Theory and Techniques*. Vol. 58, no. 7: 2014-2021. 2010
56. Zhang, Lanlin; Shqau, Krenar; Verweij, Henk; Mumcu, Gokhan; Sertel, Kubilay; Volakis, John, L, "A Viable Route for Dense TiO₂ with a Low Microwave Dielectric Loss". *Journal of the American Ceramic Society*. Vol. 93, no. 4: 969-972. 2010
57. Mumcu, Gokhan; Sertel, Kubilay; Volakis, John, L, "Lumped Circuit Models for Degenerate Band Edge and Magnetic Photonic Crystals". *IEEE Microwave and Wireless Components Letters*. Vol. 20, no. 1: 4-6. 2010
58. Chung, Jae-Young; Sertel, Kubilay; Volakis, John, L, "A Non-Invasive Metamaterial Characterization System Using Synthetic Gaussian Aperture". *IEEE Transactions on Antennas and Propagation*. Vol. 57, no. 7: 2006-2013. 2009
59. Mumcu, Gokhan; Sertel, Kubilay; Volakis, John, L, "Miniature Antenna Using Printed Coupled Lines Emulating Degenerate Band Edge Crystals". *IEEE Transactions on Antennas and Propagation*. Vol. 57, no. 6: 1618-1624. 2009
60. Yarga, Salih; Sertel, Kubilay; Volakis, John, L, "A Directive Resonator Antenna Using Degenerate Band Edge Crystals". *IEEE Transactions on Antennas and Propagation*. Vol. 57, no. 3: 799-803. 2009

61. Yarga, Salih; Sertel, Kubilay; Volakis, John, L, "Multilayer Dielectric Resonator Antenna Operating at Degenerate Band Edge Modes". IEEE Antennas and Wireless Propagation Letters. Vol. 8, 287-290. 2009
62. Mumcu, Gokhan; Sertel, Kubilay; Volakis, John, L, "Surface Integral Equation Solutions for Modeling 3-D Uniaxial Media Using Closed-form Dyadic Green's Functions". IEEE Transactions on Antennas and Propagation. Vol. 56, no. 8: 2381-2388. 2008
63. Stephanson, Matthew, B; Sertel, Kubilay; Volakis, John, L, "Frozen Modes in Coupled Microstrip Lines Printed on Ferromagnetic Substrates". IEEE Microwave and Wireless Components Letters. Vol. 18, no. 5: 305-307. 2008
64. Zhang, Lanlin; Mumcu, Gokhan; Yarga, Salih; Sertel, Kubilay; Volakis, John, L; Verweij, Henk, "Fabrication and Characterization of Anisotropic Dielectrics for Low-loss Microwave Applications". Journal of Materials Science. Vol. 43, no. 5: 1505-1509. 2008
65. Mumcu, Gokhan; Sertel, Kubilay; Volakis, John, L, "A Measurement Process to Characterize Natural and Engineered Low-loss Uniaxial Dielectric Materials at Microwave Frequencies". IEEE Transactions on Microwave Theory and Techniques. Vol. 56, no. 1: 217-223. 2008
66. Yarga, Salih; Sertel, Kubilay; Volakis, John, L, "Degenerate Band Edge Crystals for Directive Antennas". IEEE Transactions on Antennas and Propagation. Vol. 56, no. 1: 119-126. 2008
67. Volakis, John, L; Mumcu, Gokhan; Sertel, Kubilay, "Anisotropic Periodic Assemblies and Metamaterials for Applications to Antennas and Microwave Devices". IEICE Transactions on Communications. Vol. E90B, no. 9: 2203-2207. 2007
68. Waltz, Caleb; Sertel, Kubilay; Carr, Michael, A; Usner, Brian, C; Volakis, John, L, "Massively Parallel Fast Multipole Method Solutions of Large Electromagnetic Scattering Problems". IEEE Transactions on Antennas and Propagation. Vol. 55, no. 6: 1810-1816. 2007
69. Volakis, John, L; Sertel, Kubilay; Chen, Chi-Chih, "Miniature Antennas and Arrays Embedded within Magnetic Photonic Crystals and Other Novel Materials". Applied Computational Electromagnetics Society Journal. Vol. 22, no. 1: 22-30. 2007
70. Usner, Brian, C; Sertel, Kubilay; Volakis, John, L, "Doubly Periodic Volume-Surface Integral Equation Formulation for Modelling Metamaterials". IET Microwaves, Antennas and Propagation. Vol. 1, no. 1: 150-157. 2007
71. Loecker, Claudius; Sertel, Kubilay; Volakis, John, L, "Emulation of Propagation in Layered Anisotropic Media with Equivalent Coupled Microstrip Lines". IEEE Microwave and Wireless Components Letters. Vol. 16, no. 12: 642-644. 2006
72. Burkholder, Robert, J; Pathak, Prabhakar, H; Sertel, Kubilay; Marhefka, Ronald, J; Volakis, John, L; Kindt, Rickie, W, "A Hybrid Framework for Antenna/Platform Analysis". Applied Computational Electromagnetics Society Journal. Vol. 21, no. 3: 177-195. 2006
73. Volakis, John, L; Mumcu, Gokhan; Sertel, Kubilay; Chen, Chi-Chih; Lee, Ming; Kramer, Bradley; Psychoudakis, Dimitris; Kiziltas, Gullu, "Antenna Miniaturization Using Magnetic-Photonic and Degenerate Band-Edge Crystals". IEEE Antennas and Propagation Magazine. Vol. 48, no. 5: 12-28. 2006
74. Lim, Chan-Ping; Volakis, John,L; Sertel, Kubilay; Kindt, Rickie, W; Anastasopoulos, Achilleas, "Indoor Propagation Models Based on Rigorous Methods for Site-Specific Multipath Environments". IEEE Transactions on Antennas and Propagation. Vol. 54, no. 6: 1718-1725. 2006

75. Sancer, Maurice, I; Sertel, Kubilay; Volakis, John, L; Van Alstine, Peter, "On Volume Integral Equations". IEEE Transactions on Antennas and Propagation. Vol. 54, no. 5: 1488-1495. 2006
76. Mumcu, Gokhan; Sertel, Kubilay; Volakis, John, L, "Miniature Antennas and Arrays Embedded within Magnetic Photonic Crystals". IEEE Antennas and Wireless Propagation Letters. Vol. 5, 168-171. 2006
77. Usner, Brian, C; Sertel, Kubilay; Carr, Michael, A; Volakis, John, L, "Generalized Volume-Surface Integral Equation for Modeling Inhomogeneities within High Contrast Composite Structures". IEEE Transactions on Antennas and Propagation. Vol. 54, no. 1: 68-75. 2006
78. Mumcu, Gokhan; Sertel, Kubilay; Volakis, John, L; Vitebskiy, Ilya; Figotin, Alex, "RF Propagation in Finite Thickness Unidirectional Magnetic Photonic Crystals". IEEE Transactions on Antennas and Propagation. Vol. 53, no. 12: 4026-4034. 2005
79. Sertel, Kubilay; Volakis, John, L, "Multilevel Fast Multipole Method Solution of Volume Integral Equations Using Parametric Geometry Modeling". IEEE Transactions on Antennas and Propagation. Vol. 52, no. 7: 1686-1692. 2004
80. Usner, Brian, C; Sertel, Kubilay; Volakis, John, L, "Conformal Galerkin Testing for VIE Using Parametric Geometry". Electronics Letters. Vol. 40, no. 15: 926-928. 2004
81. Volakis, John, L; Sertel, Kubilay; Jorgensen, Eric; Kindt, Rickie, W, "Hybrid Finite Element and Volume Integral Methods for Scattering Using Parametric Geometry". CMES-Computer Modeling in Engineering and Sciences. Vol. 5, no. 5: 463-476. 2004
82. Kindt, Rickie, W; Sertel, Kubilay; Topsakal, Erdem; Volakis, John, L, "An Extension of the Array Decomposition Method for Large Finite-Array Analysis". Microwave and Optical Technology Letters. Vol. 38, no. 4: 323-328. 2003
83. Kindt, Rickie, W; Sertel, Kubilay; Topsakal, Erdem; Volakis, John, L, "Array Decomposition Method for the Accurate Analysis of Finite Arrays". IEEE Transactions on Antennas and Propagation. Vol. 51, no. 6: 1364-1372. 2003
84. Siah, Eng, Swee; Sertel, Kubilay; Volakis, John, L; Liepa, Valdis, V; Wiese, R, "Coupling Studies and Shielding Techniques for Electromagnetic Penetration Through Apertures on Complex Cavities and Vehicular Platforms". IEEE Transactions on Electromagnetic Compatibility. Vol. 45, no. 2: 245-257. 2003
85. Erdemli, Yunus, E; Sertel, Kubilay; Gilbert, Roland, A; Wright, Daniel, E; Volakis, John, L, "Frequency-Selective Surfaces to Enhance Performance of Broad-band Reconfigurable Arrays". IEEE Transactions on Antennas and Propagation. Vol. 50, no. 12: 1716-1724. 2002
86. Sertel, Kubilay; Volakis, John, L, "Method of Moments Solution of Volume Integral Equations Using Parametric Geometry Modeling". Radio Science. Vol. 37, no. 1: 1010. 2002
87. Topsakal, Erdem; Kindt, Rickie, W; Sertel, Kubilay; Volakis, John, L, "Evaluation of the BICGSTAB(l) Algorithm for the Finite-Element/Boundary-Integral Method". IEEE Antennas and Propagation Magazine. Vol. 43, no. 6: 124-131. 2001
88. Sertel, Kubilay; Volakis, John, L, "Incomplete LU Preconditioner for FMM Implementation". Microwave and Optical Technology Letters. Vol. 26, no. 4: 265-267. 2000
89. Eibert, Thomas, F; Sertel, Kubilay; Volakis, John, L, "Hybrid Finite Element Modeling of Conformal Antenna and Array Structures Utilizing Fast Integral Methods". International Journal of Numerical Modeling: Electronic Network, Devices and Fields. Vol. 13, 2-3. 2000

90. Volakis, John, L.; Eibert, Thomas, F.; Sertel, Kubilay, "Fast Integral Methods for Conformal Antenna and Array Modeling in Conjunction with Hybrid Finite Element Formulation". *Radio Science*. Vol. 35, no. 2: 537-546. 2000
91. Gurel, Levent; Sertel, Kubilay; Sendur, Kursat, I, "On the Choice of Basis Functions to Model Surface Electric Current Densities in Computational Electromagnetics". *Radio Science*. Vol. 34, no. 6: 1373-1387. 1999

CONFERENCE PROCEEDINGS

1. S. Sahin, N.K. Nahar and K. Sertel, "Non-contact Characterization of Antenna Impedance, Gain and Pattern through Open-Fixture Network Calibration.", *41st Annual Meeting and Symposium of the Antenna Measurement Techniques Association*, San Diego, CA, 2019.
2. W.-J. Foo and K. Sertel, "Wideband Printed Antenna Arrays for 5G Mobile Applications", *2019 IEEE International Symposium on Antennas and Propagation & USNC/URSI National Radio Science Meeting*, Atlanta, GA, 2019
3. M. Md S. Hossain, S. An N. Saqueeb, A. H. Arage, J. Cabigao, C. Velasquez, K. Sertel, and N. K. Nahar, "Wideband, Wide Angle Radome Design for mm-Wave Automotive Radar Systems", *2019 IEEE International Symposium on Antennas and Propagation & USNC/URSI National Radio Science Meeting*, Atlanta, GA, 2019
4. S. Sahin, N. K. Nahar and K. Sertel, "Non-Contact Characterization of Antenna Parameters via One-Port Open-Fixture Network Calibration," *2019 93rd ARFTG Microwave Measurement Conference (ARFTG)*, Boston, MA, USA, 2019
5. K. Sertel, Invited: "Automated Performance of On-Wafer Calibration and Characterization Using Non-Contact Probes," *2019 92nd ARFTG Microwave Measurement Conference (ARFTG)*, Orlando, FL, USA, 2019
6. R. Almhadi and K. Sertel, "Frozen-Light Modes in 3-way Coupled Silicon Ridge Waveguides," *2019 United States National Committee of URSI National Radio Science Meeting (USNC-URSI NRSM)*, Boulder, CO, USA, 2019
7. S. Sahin, C. Caglayan, N. K. Nahar and K. Sertel, "Performance Characterization of Monolithically Integrated mmW Phased Arrays," *2018 IEEE International Symposium on Antennas and Propagation & USNC/URSI National Radio Science Meeting*, Boston, MA, 2018
8. Srinivasan, N.; Caglayan, C.; Nahar, N.K.; Sertel, K. "THz Polarimetric Imaging for Biomedical Applications", *2018 IEEE International Symposium on Antennas and Propagation & USNC/URSI National Radio Science Meeting*, Boston, MA, 2018
9. Saqueeb, S.A.N.; Garry, J.L.; Smith, G.E.; Nahar, N.K.; Sertel, K., "THz Imaging Using Rail-based Synthetic Aperture Radar for the Detection of Concealed Objects", *2018 IEEE International Symposium on Antennas and Propagation & USNC/URSI National Radio Science Meeting*, Boston, MA, 2018
10. Saqueeb, S.A.N.; Arage, A.H.; Cabigao, J.; Velasquez, C.; Sertel, K.; Nahar, N.K., "Pyramidal Corrugations as Wideband, Wide-angle Radomes for Millimeter-wave Automotive Radars" *2018 IEEE International Symposium on Antennas and Propagation & USNC/URSI National Radio Science Meeting*, Boston, MA, 2018
11. Sahin, S.; Nahar, N.K.; Sertel, K. "SUEX as an Anti-Reflection Coating for Silicon Lenses for mmW and THz Applications", *2018 IEEE International Symposium on Antennas and Propagation & USNC/URSI National Radio Science Meeting*, Boston, MA, 2018

12. B. Ozbey and K. Sertel, "Effects of internal reflections on the performance of lens-integrated mmW and THz antennas," *2018 International Applied Computational Electromagnetics Society Symposium (ACES)*, Denver, CO, 2018
13. S. A. N. Saqueb and K. Sertel, "Single-bit compressive imaging system for the mmW and THz bands," *2017 IEEE International Symposium on Antennas and Propagation & USNC/URSI National Radio Science Meeting*, San Diego, CA, 2017, pp. 843-844
14. N. Srinivasan, C. Caglayan, N. Nahar and K. Sertel, "High-resolution polarimetric THz imaging for biomedical applications," *2017 IEEE International Symposium on Antennas and Propagation & USNC/URSI National Radio Science Meeting*, San Diego, CA, 2017, pp. 793-794
15. Anas J. Abumunshar, Niru K. Nahar, Daniel J. Hyman, Kubilay Sertel. "K-to-Ka Band Low-profile Phased Array with Integrated MEMS Phase Shifters" In: *Antennas and Propagation Society International Symposium (APSURSI)*, 2016
16. Cosan Caglayan, Kubilay Sertel. "On-Chip "Baluntennas" for Differential-Mode Non-Contact Characterization of mmW/THz Devices and ICs" *Antennas and Propagation Society International Symposium (APSURSI)*, 2016
17. Muhammed Zuboraj, Kubilay Sertel, John Volakis. "Non-identical Coupled Transmission Lines and Higher-order Dispersion Engineering" *Antennas and Propagation Society International Symposium (APSURSI)*, 2016
18. Seckin Sahin, Niru K. Nahar, Kubilay Sertel. "On-chip UWB Phased Arrays for mmW Connectivity" *Antennas and Propagation Society International Symposium (APSURSI)*, 2016
19. Syed An Nazmus Saqueb, Kubilay Sertel. "Phase-sensitive THz Imaging using Single-Pixel Intensity-only Measurements" *Antennas and Propagation Society International Symposium (APSURSI)*, 2016
20. Georgios C. Trichopoulos and Kubilay Sertel. "Polarimetric terahertz probe for endoscopic assessment of malignancies" *Antennas and Propagation Society International Symposium (APSURSI)*, 2015
21. Yasir Karisan, Cosan Caglayan, Georgios C. Trichopoulos, and Kubilay Sertel. "Lumped-element modeling of millimeter-wave HEMT parasitics via full-wave electromagnetic analysis" *Computational Electromagnetics Workshop (CEM'15)*. Izmir, Turkey, 2015
22. Yasir Karisan, Cosan Caglayan, Georgios C. Trichopoulos, and Kubilay Sertel. "Lumped-element modeling of millimeter-wave HEMT parasitics via full-wave electromagnetic analysis" In: *Compound Semiconductor IC Symposium (CSICS)*. New Orleans, Louisiana, IEEE 2015
23. Cosan Caglayan, Georgios C. Trichopoulos, Kubilay Sertel. "Repeatability performance of non-contact probes in the 500–750 GHz band" In: *ARFTG Microwave Measurement Conference (ARFTG)*, 2014 84th. NY, IEEE. (2015)
24. Yasir Karisan, Cosan Caglayan, Georgios C Trichopoulos, Kubilay Sertel. "Distributed modeling of submillimeter-wave HEMT parasitics based on full-wave electromagnetic analysis" In: *Microwave Symposium (IMS)*, 2015 IEEE MTT-S International. NY, IEEE. (2015)
25. Yasir Karisan, Cosan Caglayan, Georgios C. Trichopoulos, and Kubilay Sertel. "Full-wave electromagnetic modeling of sub-millimeter wave HEMT parasitics" In: *ARFTG Microwave Measurement Conference (ARFTG)*, 2015 85th. NY, IEEE. (2015)

26. Cosan Caglayan, Georgios C Trichopoulos, Kubilay Sertel. "Accuracy and repeatability of automated non-contact probes for on-wafer characterization" In: ARFTG Microwave Measurement Conference (ARFTG), 2014 84th. NY, IEEE. (2014)
27. Jeremy JM Law, Chris A Roedig, Don J Burdette, Kubilay Sertel, Georgios C Trichopoulos, Yi Xie, Patrick Fay, H Lee Mosbacker. "Design considerations and performance metrics of a high-sensitivity multi-band terahertz linear camera" In: Infrared, Millimeter, and Terahertz waves (IRMMW-THz), 2014 39th International Conference on. NY, IEEE. (2014)
28. Woon-Gi Yeo, Ogan Gurel, Niru K Nahar, Charles L Hitchcock, Norman L Lehman, Sungchan Park, Kubilay Sertel. "THz imaging of Alzheimer's disease: Spectroscopic differentiation between normal and diseased tissues" In: Infrared, Millimeter, and Terahertz waves (IRMMW-THz), 2014 39th International Conference on. NY, IEEE. (2014)
29. Cosan Caglayan, Georgios C Trichopoulos, Kubilay Sertel. "Non-contact device and integrated circuit characterization in the G-Band (140–220 GHz)" In: Antennas and Propagation Society International Symposium (APSURSI), 2014 IEEE. NY, IEEE. (2014)
30. Jeffrey Chalas, Kubilay Sertel, John L Volakis. "NVIS synthesis for electrically small aircraft using characteristic modes" In: Antennas and Propagation Society International Symposium (APSURSI), 2014 IEEE. NY, IEEE. (2014)
31. Yasir Karisan, Kubilay Sertel. "Full-wave modeling device parasitics of sub-millimeter wave HEMTs" In: Antennas and Propagation Society International Symposium (APSURSI), 2014 IEEE. NY, IEEE. (2014)
32. Cosan Caglayan, Georgios C Trichopoulos, Kubilay Sertel. "Non-contact probes for device and integrated circuit characterization in the THz and mmW bands" In: Microwave Symposium (IMS), 2014 IEEE MTT-S International. NY, IEEE. (2014)
33. Cosan Caglayan, Georgios C Trichopoulos, Kubilay Sertel. "THz on-wafer calibration using offset-shorts and known through as standards" In: Aerospace and Electronics Conference, NAECON 2014-IEEE National. NY, IEEE. (2014)
34. Yasir Karisan, Kubilay Sertel. "Extraction of parasitics in GaN HEMTs via Full-Wave Electromagnetic Modeling" In: Aerospace and Electronics Conference, NAECON 2014-IEEE National. NY, IEEE. (2014)
35. Christoph A Roedig, Don J Burdette, Jeremy J Law, Georgios C Trichopoulos, Kubilay Sertel, Howard L Mosbacker. "Initial results of a real-time, quad-frequency, polarization-sensitive THz line camera" In: SPIE Sensing Technology+ Applications. NY, IEEE. (2014)
36. Cosan Caglayan, Georgios C Trichopoulos, Kubilay Sertel. "Non-contact probe calibration for THz-frequency device characterization" In: Microwave Measurement Conference, 2013 82nd ARFTG. NY, IEEE. (2013)
37. S Cumhur Basaran, Kubilay Sertel. "A compact frequency-tunable microstrip antenna for dual-band WLAN applications" In: Antennas and Propagation in Wireless Communications (APWC), 2013 IEEE-APS Topical Conference on. NY, IEEE. (2013)
38. Cosan Caglayan, Georgios C Trichopoulos, Kubilay Sertel. "Device Characterization with Non-Contact Probes in the THz Band" In: US-National-Committee-of-URSI National Radio Science Meeting. NEW YORK, NY, United States: IEEE. (2013)
39. Cosan Caglayan, Georgios C Trichopoulos, Kubilay Sertel. "On-Wafer Device Characterization with Non-Contact Probes in the THz Band" In: International Symposium of the IEEE-Antennas-and-Propagation-Society. NEW YORK, NY, United States: IEEE. (2013)

40. E.A. Alwan, S. Balasubramanian, J.G. Atallah, M. LaRue, K. Sertel, W. Khalil, J.L. Volakis. "Ultra-wideband digital beamformer with significant SWAP-C reduction" In: Wireless Innovation Forum, Proceedings of SDR-WInnComm. (2013)
41. Georgios C Trichopoulos, Cosan Caglayan, Kubilay Sertel. "Hybrid Electromagnetic Modeling of Non-Contact Probes for Terahertz Device Characterization" In: Computational Electromagnetics Workshop (CEM). NEW YORK, NY, United States: IEEE. (2013)
42. Georgios C Trichopoulos, Kubilay Sertel. "A Large-Format Focal Plane Array for Rapid THz Computed Tomography" In: International Symposium of the IEEE-Antennas-and-Propagation-Society. NEW YORK, NY, United States: IEEE. (2013)
43. Georgios C Trichopoulos, Kubilay Sertel. "Terahertz Computed Tomography Using a Large-format, Real-time Focal Plane Array Sensor" In: US-National-Committee-of-URSI National Radio Science Meeting. NEW YORK, NY, United States: IEEE. (2013)
44. Jeffrey Chalas, Kubilay Sertel, John L Volakis. "Design of in-Situ Antennas Using Platform Characteristic Modes" In: International Symposium of the IEEE-Antennas-and-Propagation-Society. NEW YORK, NY, United States: IEEE. (2013)
45. John L Volakis, Kubilay Sertel. "Optimal Ultra Wideband Conformal Arrays" In: International Symposium of the IEEE-Antennas-and-Propagation-Society. NEW YORK, NY, United States: IEEE. (2013)
46. Jonathan Doane, Kubilay Sertel, John L Volakis. "Matching Bandwidth Limits for Linearly Polarized Scanning Arrays above a Ground Plane" In: IEEE AP-S/URSI-USNC Symposium. NEW YORK, NY, United States: IEEE. (2013)
47. Jonathan P Doane, William F Moulder, Kubilay Sertel, John L Volakis. "Wideband, Wide Scanning Conformal Arrays with Practical Integrated Feeds" In: URSI International Symposium on Electromagnetic Theory (EMTS). NEW YORK, NY, United States: IEEE. (2013)
48. Nil Apaydin, Lanlin Z Lee, Kubilay Sertel, John L Volakis. "Nonreciprocal and Magnetically Scanned Leaky-wave Antenna Using Coupled CRLH Lines" In: International Symposium of the IEEE-Antennas-and-Propagation-Society. NEW YORK, NY, United States: IEEE. (2013)
49. Nil Apaydin, Panagiotis Douris, Kubilay Sertel, John L Volakis. "Metamaterial-based Slow Wave Structure for Travelling Wave Tubes" In: US-National-Committee-of-URSI National Radio Science Meeting. NEW YORK, NY, United States: IEEE. (2013)
50. Nima Ghalichechian, Jonathan P Doane, Wonbin Hong, Kubilay Sertel, John L Volakis. "Characterization of SU-8 Using Terahertz Time-Domain Spectroscopy" In: IEEE AP-S/URSI-USNC Symposium. NEW YORK, NY, United States: IEEE. (2013)
51. William F Moulder, Kubilay Sertel, John L Volakis. "Feeding of a Wideband Superstrate-Enhanced Substrate Loaded Array" In: International Symposium of the IEEE-Antennas-and-Propagation-Society. NEW YORK, NY, United States: IEEE. (2013)
52. Woon-Gi Yeo, Niru K Nahar, Charles L Hitchcock, Sungchan Park, Ogan Gurel, Kubilay Sertel. "Real-time THz Imaging of Human Tissue Characteristics and Cancer Margins" In: 38th International Conference on Infrared, Millimeter, and Terahertz Waves (IRMMW-THz). NEW YORK, NY, United States: IEEE. (2013)
53. Woon-Gi Yeo, Niru K Nahar, Kubilay Sertel. "Ka-Band Phased Array Antenna with Integrated MEMS Phase Shifters" In: US-National-Committee-of-URSI National Radio Science Meeting. NEW YORK, NY, United States: IEEE. (2013)

54. Woon-Gi Yeo, Niru K Nahar, Kubilay Sertel. "Phased Array Antenna with Integrated MEMS Phase Shifters for Ka-Band SATCOM" In: International Symposium of the IEEE-Antennas-and-Propagation-Society. NEW YORK, NY, United States: IEEE. (2013)
55. Yasir Karisan, Kubilay Sertel. "Full-wave Modeling of Sub-millimeter Wave Diode Parasitics" In: International Symposium of the IEEE-Antennas-and-Propagation-Society. NEW YORK, NY, United States: IEEE. (2013)
56. Yasir Karisan, Kubilay Sertel. "Wideband Impedance-matched Integrated Transceivers for Future THz-band Wireless Networks" In: US-National-Committee-of-URSI National Radio Science Meeting. Boulder, CO, URSI. (2013)
57. Elias Alwan, Kubilay Sertel, and John L Volakis. "Circuit Model Based Optimization of Ultra-wideband Phased Arrays" In: 2012 IEEE Antennas and Propagation Society/URSI Symposium. New York, IEEE. (2012)
58. Elias Alwan, Kubilay Sertel, Waleed Khalil, and John L Volakis. "Cost and Power Efficient Ultra-wideband Digital Beam-forming for Cognitive Sensing" In: 2012 IEEE Antennas and Propagation Society/URSI Symposium. New Jersey, IEEE. (2012)
59. Georgios C Trichopoulos, Kagan Topalli and Kubilay Sertel. "Non-contact THz probes for On-chip Device and IC Characterization" In: 2012 National Aerospace and Electronics Conference. New York, IEEE. (2012)
60. Yasir Karisan and Kubilay Sertel. "Wideband Active Matching of THz Envelope Detectors" In: 2012 National Aerospace and Electronics Conference. New York, IEEE. (2012)
61. Georgios C Trichopoulos and Kubilay Sertel. "Hybrid Electromagnetic Modeling of Terahertz Focal Plane Array Imaging Sensors" In: 2012 ACES Conference. Columbus OH, (2012)
62. Jeffrey Chalas, Kubilay Sertel, and John L Volakis. "Evaluation of In-Situ Antenna Performance Using Characteristic Modes" In: 2012 ACES Conference. Columbus OH, ACES. (2012)
63. Jeffrey Chalas, Kubilay Sertel, and John L Volakis. "Q limits for arbitrary shaped antennas using characteristic modes" In: EuCAP. Prag, Czech Republic, EUCAP. (2012)
64. Tao Peng, Kubilay Sertel and John L Volakis. "Improving Convergence and Accuracy of Fully Overlapping Domain Decomposition Method" In: 2012 ACES Conference. Columbus OH, ACES. (2012)
65. Willian F Moulder, Kubilay Sertel and John L Volakis. "Finite Size Effects on the Performance of Ultrawideband Tightly Coupled Arrays" In: 2012 ACES Conference. Columbus OH, ACES. (2012)
66. Elias A Alwan, Sidharth Balasubramanian, Jad G. Atallah, Matthew R. Larue, Waleed Khalil, Kubilay Sertel, John L Volakis. "Coding-Based Transceiver for Phased Array with Significant Hardware Reduction" In: IEEE International Conference on Wireless Information Technology and Systems (ICWITS). NEW YORK, NY, United States: IEEE. (2012)
67. Georgios C Trichopoulos, Kubilay Sertel. "Quasi-optical Imaging Performance of THz Focal Plane Array Antennas" In: IEEE International Symposium on Antennas and Propagation. NEW YORK, NY, United States: IEEE. (2012)

68. Georgios C Trichopoulos, Kubilay Sertel. "THz Imaging Performance of a Broadband 80x64 Focal Plane Array" In: IEEE National Aerospace and Electronics Conference (NAECON). NEW YORK, NY, United States: IEEE. (2012)
69. Ioannis Tzanidis, Jonathan P Doane, Kubilay Sertel, and John L Volakis. "Wheeler's Current Sheet Concept and Munk's Wideband Arrays" In: IEEE International Symposium on Antennas and Propagation. NEW YORK, NY, United States: IEEE. (2012)
70. Jeffrey Chalas, Kubilay Sertel. "Efficient Computation of In-Situ Antenna Performance using Platform Characteristic Modes" In: IEEE International Symposium on Antennas and Propagation. NEW YORK, NY, United States: IEEE. (2012)
71. Jonathan P Doane, Kubilay Sertel, John L Volakis. "A 6.3:1 Bandwidth Scanning Tightly Coupled Dipole Array with Co-Designed Compact Balun" In: IEEE International Symposium on Antennas and Propagation. NEW YORK, NY, United States: IEEE. (2012)
72. Kagan Topalli, Georgios C Trichopoulos, Kubilay Sertel. "Non-contact Probes for THz Circuits and Integrated Devices" In: IEEE International Symposium on Antennas and Propagation. NEW YORK, NY, United States: IEEE. (2012)
73. Nil Apaydin, Lanlin Zhang, Kubilay Sertel, John L. Volakis. "Nonreciprocal and Magnetically Scanned Leaky-wave Antenna Using Coupled Microstrip Lines" In: IEEE International Symposium on Antennas and Propagation. NEW YORK, NY, United States: IEEE. (2012)
74. S Cumhur Basaran and Kubilay Sertel. "A frequency reconfigurable monopole antenna based on complementary split ring resonators" In: 2012 IEEE Antennas and Propagation Society/URSI Symposium. New York, IEEE. (2012)
75. Tao Peng, Kubilay Sertel, John L Volakis. "Spurious Field Suppression in Overlapping Domain Decomposition Methods" In: International Conference on Electromagnetics in Advanced Applications (ICEAA) / IEEE-APS Topical Conference on Antennas and Propagation in Wireless Communications (IEEE APWC) / URSI Electromagnetic Environment and Interference Symposium (EEIS). New York, IEEE. (2012)
76. Tao Peng, Kubilay Sertel, John L Volakis. "Spurious Fields Suppression in Domain Decomposition Algorithms using Lagrange Multipliers" In: IEEE International Symposium on Antennas and Propagation. NEW YORK, NY, United States: IEEE. (2012)
77. William F Moulder, Kubilay Sertel, John L Volakis. "Compact Ultrawideband Beam-Steering Horn Antenna" In: IEEE International Symposium on Antennas and Propagation. NEW YORK, NY, United States: IEEE. (2012)
78. Woon-Gi Yeo, Niru K Nahar, Kubilay Sertel. "Dual-Band, Wide-Incident-Angle Absorber for Far-IR and THz Frequencies" In: IEEE National Aerospace and Electronics Conference (NAECON). NEW YORK, NY, United States: IEEE. (2012)
79. Yasir Karisan, Kubilay Sertel. "Active Matching Networks for Wideband Terahertz Receivers" In: IEEE International Symposium on Antennas and Propagation. NEW YORK, NY, United States: IEEE. (2012)
80. Don J Burdette, Patrick Fay, Y. Ni, P. Potent, Kubilay Sertel, Georgios C Trichopoulos, Kagan Topalli, Z. Zhang and H. Lee Mosbacker. "Initial test results for a real-time, 80 x 64 pixel, 600 GHz – 1.2 THz imager" In: International Conference on Infrared, Millimeter, and Terahertz Waves (IRMMW-THz). Houston, TX, IRMMW-THz. (2011)

81. Georgios C Trichopoulos, Kagan Topalli, and Kubilay Sertel. "Ultra Wide Band Focal Plane Array for THz imaging" In: 2011 National Aerospace & Electronics Conference. New York, IEEE. (2011)
82. Ioannis Tzanidis, Kubilay Sertel, and John L Volakis. "A technique for feeding tightly coupled antenna arrays" In: 2011 IEEE Antennas and Propagation Society/URSI Symposium. New York, IEEE. (2011)
83. K. Topalli, G. C. Trichopoulos, and K. Sertel. "A Broadband Focal Plane Array for real-time THz imaging" In: 2011 National Aerospace & Electronics Conference. New York, IEEE. (2011)
84. K. Topalli, G. C. Trichopoulos, and K. Sertel. "An Indirect Impedance Characterization Method for Monolithic Double-slot Antennas for THz Sensors" In: 2011 URSI-General Assembly. Istanbul, Turkey, URSI. (2011)
85. Kubilay Sertel, Nil Apaydin, Lanlin Zhang and John L Volakis. "Experimental demonstration of spectral non-reciprocity and unidirectionality in bulk and printed magnetic photonic crystals" In: 2011 URSI-General Assembly. Istanbul, Turkey, URSI. (2011)
86. Tao Peng, Kubilay Sertel, and John L Volakis. "Higher order fully overlapping domain decomposition method for EMI/EMC modeling" In: 2011 URSI-General Assembly. Istanbul, Turkey, URSI. (2011)
87. Nil Apaydin, Lanlin Zhang, Kubilay Sertel, and John L Volakis. "Experimental verification of frozen mode phenomenon in printed magnetic photonic crystals" In: Proceedings of the 5th European Conference on Antennas and Propagation (EUCAP). Online, IEEE. (2011)
88. Jeffrey Chalas, Kubilay Sertel, and John L Volakis. "Q Limits for Arbitrary-Shaped Multi-Mode Antennas Using Characteristic Modes" In: 2011 Applied Computational Electromagnetics Society (ACES) Conference. Williamsburg, VA, ACES. (2011)
89. Don J Burdette, Joergen Alverbro, Ze Zhang, Partick Fay, Yang Ni, Pierre Potet, Kubilay Sertel, Georgios C Trichopoulos, Kagan Topalli, John L Volakis, H Lee Mosbacker,. "Development of an 80 x 64 pixel, broadband, real-time THz imager" In: Conference on Terahertz Physics, Devices, and Systems V - Advance Applications in Industry and Defense. Vol. 8023. BELLINGHAM, SPIE-INT SOC OPTICAL ENGINEERING. (2011)
90. Erdinc Irci, Kubilay Sertel, John L Volakis. "Bandwidth Enhancement of Low-Profile Microstrip Antennas Using Tightly Coupled Patch Arrays" In: IEEE International Symposium on Antennas and Propagation (APSURSI)/USNC/URSI National Radio Science Meeting. ??, IEEE. (2011):
91. Georgios C Trichopoulos, Kagan Topalli, Kubilay Sertel. "Imaging Performance of a THz Focal Plane Array" In: IEEE International Symposium on Antennas and Propagation (APSURSI)/USNC/URSI National Radio Science Meeting. NEW YORK, IEEE. (2011)
92. Jeffrey Chalas, Kubilay Sertel, John L Volakis. "Computation of the Q Limits for Arbitrary-Shaped Antennas Using Characteristic Modes" In: IEEE International Symposium on Antennas and Propagation (APSURSI)/USNC/URSI National Radio Science Meeting. NEW YORK, IEEE. (2011)
93. Kagan Topalli, Georgios C Trichopoulos, Kubilay Sertel. "An Indirect Impedance Characterization Method for Monolithic THz Antennas" In: IEEE International Symposium on Antennas and Propagation (APSURSI)/USNC/URSI National Radio Science Meeting. NEW YORK, IEEE. (2011)

94. Lanlin Zhang, Kubilay Sertel, John L Volakis. "Self-biased Magnetic Photonic Crystals for Unidirectional Antennas" In: IEEE International Symposium on Antennas and Propagation (APSURSI)/USNC/URSI National Radio Science Meeting. NEW YORK, IEEE. (2011)
95. Tao Peng, Kubilay Sertel, John L Volakis. "Fully Overlapping Domain Decomposition Method with h-refinement for Finite Element Modeling of Small Features in Large Domains" In: IEEE International Symposium on Antennas and Propagation (APSURSI)/USNC/URSI National Radio Science Meeting. NEW YORK, IEEE. (2011)
96. Yasir Karisan and Kubilay Sertel. "A Spectrum Shaping Technique for Wideband Wireless Channels with Rician Multipath Fading Conditions" In: 2011 IEEE Antennas and Propagation Society/URSI Symposium. New York, IEEE. (2011)
97. John L Volakis, Kubilay Sertel, and Ioannis Tzanidis. "Small wideband antennas based on photonic crystals" In: EuCAP. Barcelona, Spain, EUCAP. (2010)
98. Erdinc Irci, Kubilay Sertel, and John L Volakis. "Miniature printed magnetic photonic crystal antennas embedded into vehicular platforms" In: 2010 ACES Conference. Tempura, Finland, ACES. (2010)
99. Erdinc Irci, Kubilay Sertel, John L Volakis. "Ultrathin Miniature Antenna to Mitigate Platform Loading Effects" In: 2010 IEEE International Symposium Antennas and Propagation/CNC-USNC/URSI Radio Science Meeting. NEW YORK, IEEE. (2010)
100. Georgios C Trichopoulos, Kubilay Sertel, John L Volakis. "Slot Spiral Detector Array for Broadband THz Imaging" In: 2010 IEEE International Symposium Antennas and Propagation/CNC-USNC/URSI Radio Science Meeting. NEW YORK, IEEE. (2010)
101. Ioannis Tzanidis, Kubilay Sertel, John L Volakis. "An Interweaved Spiral Array (ISPA) Providing a 10:1 Bandwidth Over a Ground Plane" In: 2010 IEEE International Symposium Antennas and Propagation/CNC-USNC/URSI Radio Science Meeting. NEW YORK, IEEE. (2010)
102. Jae-Young Chung, Kubilay Sertel, John L Volakis. "Broadband Permeability Characterization of Thin and Small Magnetic Composites with Patterned Anisotropy" In: 2010 IEEE International Symposium Antennas and Propagation/CNC-USNC/URSI Radio Science Meeting. NEW YORK, IEEE. (2010)
103. John L Volakis, Kubilay Sertel, Ioannis Tzanidis. "Small Wideband Antennas Based on Photonic Crystals" In: 4th European Conference on Antennas and Propagation (EuCAP). NEW YORK, IEEE. (2010)
104. Nil Apaydin, Kubilay Sertel, John L Volakis. "Demonstration of Unidirectional Printed Structures Emulating Magnetic Photonic Crystals" In: 2010 IEEE International Symposium Antennas and Propagation/CNC-USNC/URSI Radio Science Meeting. NEW YORK, IEEE. (2010)
105. Niru K Nahar, Ioannis Tzanidis, Kubilay Sertel, John L Volakis. "Ultra Wideband Transparent RF Aperture for Electro-Optical Integration" In: 2010 IEEE International Symposium Antennas and Propagation/CNC-USNC/URSI Radio Science Meeting. NEW YORK, IEEE. (2010)
106. John L Volakis, Kubilay Sertel, and Yakup Bayram. "Integral and Hybrid Finite Element Methods for Electromagnetics" In: 2009 Applied Computational Electromagnetics Society Conference. ACES. (2009)
107. Erdinc Irci, Kubilay Sertel, John L. Volakis. "Antenna Miniaturization Using Coupled Microstrip Lines Emulating Magnetic Photonic Crystals" In: IEEE Antennas and Propagation

- International Symposium /USNC/URSI National Radio Science Meeting. NEW YORK, IEEE. (2009)
108. Gokhan Mumcu, Kubilay Sertel. "Dual Slot THz Antenna Array for Real Time Excised Tissue Imaging" In: IEEE Antennas and Propagation International Symposium /USNC/URSI National Radio Science Meeting. NEW YORK, IEEE. (2009)
 109. Gokhan Mumcu, Kubilay Sertel, John L Volakis. "Partially Coupled Microstrip Lines for Printed Antenna Miniaturization" In: IEEE International Workshop on Antenna Technology. NEW YORK, IEEE. (2009)
 110. Lanlin Zhang, K Shqau, Hendric Verweij, Gokhan Mumcu, Kubilay Sertel, John L Volakis. "Preparation of Low-Loss Titanium Dioxide for Microwave Frequency Applications " In: Materials Science and Technology Conference and Exhibition (MS&T 08). Vol. 204. Westerville, Amer. Ceramic Soc. (2009)
 111. Nil Apaydin, Kubilay Sertel, John L Volakis. "3-D Artificial Media Exhibiting Degenerate Band Edge and Frozen Modes" In: IEEE Antennas and Propagation International Symposium /USNC/URSI National Radio Science Meeting. New York, IEEE. (2009)
 112. Salih Yarga, Kubilay Sertel, John L Volakis. "Non-reciprocal Radiation using Magnetic Photonic Crystals" In: IEEE Antennas and Propagation International Symposium /USNC/URSI National Radio Science Meeting. NEW YORK, IEEE. (2009)
 113. Tao Peng, Kubilay Sertel, John L Volakis. "Fully Overlapping Domain Decomposition Method for Modeling Fine Structures Embedded in Host Media" In: International Conference on Electromagnetics in Advanced Applications (ICEAA 2009). NEW YORK, IEEE. (2009)
 114. Jae-Young Chung, Kubilay Sertel, and John L Volakis. "Material characterization system using synthetic aperture Gaussian beam for RF materials metamaterials" In: 2008 URSI General Assembly. Chicago, IL, URSI. (2008)
 115. John L Volakis and Kubilay Sertel. "Antennas and RF components using dispersion engineered coupled microstrip transmission lines" In: 2008 URSI General Assembly. Chicago, IL, URSI. (2008)
 116. Salih Yarga, Kubilay Sertel, and John L Volakis. "A directive degenerate band edge crystal-dielectric resonator antenna" In: 2008 URSI General Assembly. Chicago, IL, URSI. (2008)
 117. Salih Yarga, Kubilay Sertel, and John L Volakis. "Dielectric Resonator Antenna Design Using Dispersion Engineered Materials" In: 2008 ACES Conference. Niagara Falls, Canada, ACES. (2008)
 118. Bora Cakiroglu, Peter J Collins, Michael J Havrilla, Kubilay Sertel, Andrew J Terzuoli. "Multi-scale Triangular Patch High Impedance Ground Plane to Improve the Bandwidth of Conformal Bow-Tie Antennas" In: IEEE Antennas-and-Propagation-Society International Symposium. New York, IEEE. (2008)
 119. Erdinc Irci, Kubilay Sertel, John L Volakis. "Unidirectional Transmission Characteristics of Printed Magnetic Photonic Crystals" In: IEEE Antennas-and-Propagation-Society International Symposium. NEW YORK, IEEE. (2008)
 120. Gokhan Mumcu, Kubilay Sertel, and John L Volakis. "Miniature antenna using printed coupled lines emulating degenerate band edge crystals" In: 2008 URSI National Radio Science Meeting. Boulder, CO, URSI. (2008)

121. Gokhan Mumcu, Kubilay Sertel, John L Volakis. "Printed Coupled Lines with Lumped Loads for Realizing Degenerate Band Edge and Magnetic Photonic Crystal Modes" In: IEEE Antennas-and-Propagation-Society International Symposium. NEW YORK, IEEE. (2008)
122. Ioannis Tzanidis, Stavros Koulouridis, Kubilay Sertel, Derek Hansford, John L Volakis. "Characterization of Low-loss Magnetodielectric Composites for Antenna Size Reduction" In: IEEE Antennas-and-Propagation-Society International Symposium. NEW YORK, IEEE. (2008)
123. Jae-Young Chung, Kubilay Sertel, John L Volakis. "Synthetic Aperture Gaussian Beam Measurement System for Wideband Characterization of RF Materials and Metamaterials" In: IEEE Antennas-and-Propagation-Society International Symposium. NEW YORK, IEEE. (2008)
124. John L Volakis, Kubilay Sertel. "Printed metamaterials: Antennas emulating anisotropic media" In: IEEE International Workshop on Antenna Technology. NEW YORK, IEEE. (2008)
125. Murat Dogrul, Peter J Collins, Michael Saville, Kubilay Sertel, Andrew J Terzuoli. "Improved Bandwidth Conformal Bow-Tie Antennas Printed on Multi-scale Triangular-Patch High-Impedance Ground Planes" In: IEEE Antennas-and-Propagation-Society International Symposium. NEW YORK, NY, United States: IEEE. (2008)
126. Salih Yarga, Kubilay Sertel, John L Volakis. "Highly Directive Dielectric Resonator Antennas Operating at Higher Order Degenerate Band Edge Modes" In: IEEE Antennas-and-Propagation-Society International Symposium. NEW YORK, IEEE. (2008)
127. J.L. Volakis, K. Sertel, and S. Ghosh. "Multiphysics tools for load bearing antennas incorporating novel materials" In: EuCAP. Edinburgh, UK, EUCAP. (2007)
128. John L Volakis, Kubilay Sertel, Gokhan Mumcu. "Emulating anisotropy to form novel low cost printed metamaterial antennas" In: EuCAP. Edinburgh, UK, EUCAP. (2007)
129. Gokhan Mumcu, Matthew Valerio, Kubilay Sertel, John L Volakis. "Applications of the finite element method to designing composite metamaterials" In: International Conference on Electromagnetics in Advanced Applications. Torino, Italy, ICEAA. (2007)
130. John L Volakis, Gokhan Mumcu, Kubilay Sertel. "Anisotropic periodic assemblies and metamaterials for applications to antennas and microwave devices" In: International Symposium on Antennas and Propagation. Vol. E90B. (2007)
131. Lanlin Zhang, Hendric Verweij, Gokhan Mumcu, Salih Yarga, Kubilay Sertel and John L Volakis. "Fabrication of photonic assemblies for high-gain antennas" In: 2007 Material Science & Technology Conference (2007)
132. Jae-Young Chung, Kubilay Sertel, and John L Volakis. "Free-Space Measurement Using Gaussian Distributed Planar Scanning System" In: URSI General Assembly 2007. Ottawa, Canada, URSI. (2007)
133. Matthew Valerio, Kubilay Sertel, and John L Volakis. "Automated design of engineered metamaterials using the finite element method and genetic algorithms on distributed platforms" In: URSI General Assembly 2007. Ottawa, Canada, URSI. (2007)
134. Gokhan Mumcu, Kubilay Sertel, John L Volakis. "Printed coupled-lines emulating anisotropic materials for miniature antenna design" In: IEEE Antennas-and-Propagation-Society International Symposium. NEW YORK, IEEE. (2007)

135. John L Volakis, Kubilay Sertel. "Periodic materials & printed structures for miniature antennas" In: 3rd Loughborough Antennas and Propagation Conference (LAPC 2007). NEW YORK, IEEE. (2007)
136. John L Volakis, Kubilay Sertel. "Slow wave structures for miniature antennas" In: International Workshop on Anti-counterfeiting, Security, and Identification. NEW YORK, IEEE. (2007)
137. John L Volakis, Kubilay Sertel, Henk Verweij. "Periodic materials and printed structures for miniature antennas" In: 3rd IEEE International Workshop on Antenna Technology. NEW YORK, IEEE. (2007)
138. Salih Yarga, Kubilay Sertel, John L Volakis. "Finite degenerate band edge crystals using barium titanate-alumina layers emulating uniaxial media for directive planar antennas" In: IEEE Antennas-and-Propagation-Society International Symposium. NEW YORK, IEEE. (2007)
139. John L Volakis, Brian Usner, and Kubilay Sertel. "Hybrid volume-surface integral equation method for high contrast composite media and metamaterials" In: IEEE Antennas and Propagation Society Symposium. New York, IEEE. (2006)
140. John L Volakis, Kubilay Sertel, Gokhan Mumcu, and Salih Yarga. "Frozen Modes in Bounded Photonic Crystals for High Gain Antennas" In: IEEE Antennas and Propagation Society Symposium. New York, IEEE. (2006)
141. Salih Yarga, Kubilay Sertel and John L Volakis. "Degenerate Band Edge Crystals and Periodic Assemblies for High Gain Antennas" In: IEEE Antennas and Propagation Society Symposium. New York, IEEE. (2006)
142. Brian C Usner, Kubilay Sertel, and John L Volakis. "A Hybrid VSIE Method for Periodic Media and Metamaterials" In: 2006 ACES Conference. Monterey CA, ACES. (2006)
143. Salih Yarga, Gokhan Mumcu, Kubilay Sertel, John L Volakis. "Degenerate band edge crystals and periodic assemblies for antenna gain enhancement" In: 2nd IEEE International Workshop on Antenna Technology. NEW YORK, IEEE. (2006)
144. Gokhan Mumcu, Kubilay Sertel, and John L Volakis. "Antenna miniaturization using novel magnetic photonic and degenerate band edge crystals" In: Mediterranean Microwave Symposium. (2005)
145. John L Volakis, Gokhan Mumcu, and Kubilay Sertel. "Miniature antennas within degenerate band edge crystals" In: International Conference on Electromagnetics and Advanced Applications (ICEAA'05). Torino, Italy, ICEAA. (2005)
146. Brian C Usner, Kubilay Sertel, Michael A Carr, John L Volakis. "Generalized VSIE formulation for arbitrary high contrast objects" In: 2005 IEEE Antennas and Propagation Society International Symposium. Vol. 3B. Online, IEEE. (2005)
147. Brian Usner, Kubilay Sertel, Michael A Carr, and John L Volakis. "Generalized VSIE formulation for arbitrary high contrast objects" In: 2005 IEEE Antennas and Propagation Society International Symposium. New York, IEEE. (2005)
148. Gokhan Mumcu, Kubilay Sertel, and John L Volakis. "Superdirective miniature antennas embedded within magnetic photonic crystals" In: 2005 IEEE Antennas and Propagation Society International Symposium. New York, IEEE. (2005)

149. Gokhan Mumcu, Kubilay Sertel, John L Volakis. "Superdirective miniature antennas embedded within magnetic photonic crystals" In: 2005 IEEE Antennas and Propagation Society International Symposium. 2A ed, Online, IEEE. (2005)
150. Koray Tap, Titipong Lertwiriayaprapa, Prabhakar H Pathak, and Kubilay Sertel. "A hybrid MoM-UTD analysis of the coupling between large multiple arrays on a large platform" In: 2005 IEEE Antennas and Propagation Society International Symposium. New York, IEEE. (2005)
151. Chaichang P Lim, John L Volakis, Kubilay Sertel, Rickie W Kindt, Andreas Anastasopoulos. "Statistical modeling of site-specific indoor channels in wireless communications" In: IEEE/ACES International Conference on Wireless Communications and Applied Computational Electromagnetics. NEW YORK, IEEE. (2005)
152. Chaichang P Lim, Rickie W Kindt, Kubilay Sertel, John L Volakis, Andreas Anastasopoulos. "Propagation studies using rigorous methods for indoor wireless connectivity" In: IEEE Antennas-and-Propagation-Society International Symposium. NEW YORK, IEEE. (2004)
153. Gokhan Mumcu, Kubilay Sertel, John L Volakis, Ilya Vitebskiy, Alex Figotin. "RF propagation in finite thickness nonreciprocal magnetic photonic crystals" In: IEEE Antennas-and-Propagation-Society International Symposium. NEW YORK, IEEE. (2004)
154. Robert J Burkholder, Kubilay Sertel, Prabhakar H Pathak, John L Volakis, Sunil S Navale. "Analysis of radiation and coupling associated with large multiple antenna arrays on ships" In: IEEE Antennas-and-Propagation-Society International Symposium. NEW YORK, IEEE. (2004)
155. Kubilay Sertel, Maurice Sancer, John L Volakis. "Volume integral equations for permeable structures" In: 2003 IEEE AP-S International Symposium and URSI Radio Science Meeting. New York, IEEE. (2003)
156. Eng Swee Siah, Kubilay Sertel, Rickie W Kindt, John L Volakis, Valdis V Liepa. "Fast frequency domain tools for system analysis of EMI/EMC topologies" In: IEEE International Symposium on Electromagnetic Compatibility (EMC). NEW YORK, IEEE. (2003)
157. Eng Swee Siah, Taesik Yang, Kubilay Sertel, John L Volakis, and Valdis V Liepa. "Electromagnetic analysis and shielding of slots on resonant and non-resonant realistic structures with MLFMM" In: 2002 IEEE AP-S International Symposium and URSI Radio Science Meeting. New York, IEEE. (2002)
158. Rickie W Kindt, Kubilay Sertel, Erdem Topsakal, John L Volakis. "A domain decomposition of the finite element-boundary integral method for finite array analysis" In: 2002 ACES Symposium. Monterey CA, ACES. (2002)
159. Eng Swee Siah, Kubilay Sertel, John L Volakis, Valdis V Liepa. "EM coupling and suppression through slots into lossless overmoded cavities using the multilevel fast multipole algorithm" In: IEEE International Symposium on Electromagnetic Compatibility. NEW YORK, IEEE. (2002)
160. Dejan S Filipovic, Eng Swee Siah, Kubilay Sertel, Valdis V Liepa, John L Volakis. "A thin broadband cavity backed slot spiral antenna for automotive applications" In: 2001 IEEE AP-S International Symposium and URSI Radio Science Meeting. New York, IEEE. (2001)
161. Erdem Topsakal, Rickie W Kindt, Kubilay Sertel, John L Volakis. "Input impedance characteristics of tapered slot antennas" In: 2001 IEEE AP-S International Symposium and URSI Radio Science Meeting. New York, IEEE. (2001)

162. Kubilay Sertel and John L Volakis. "Multilevel fast multipole method solution of volume integral equations using parametric geometry modeling" In: 2001 IEEE AP-S International Symposium and URSI Radio Science Meeting. New York, IEEE. (2001)
163. Yunus E Erdemli, Kubilay Sertel, John L Volakis, D E Wright, Roland Gilbert. "Multilayer frequency selective surfaces to enhance performance of broadband reconfigurable slot arrays" In: International URSI EM theory symposium, Victoria, Canada. NY, URSI. (2001)
164. Kubilay Sertel and John L Volakis. "Volume integral equation formulation using conformal finite elements" In: 2001 17th Annual Review of Progress in Applied Computational Electromagnetics. Monterey CA, ACES. (2001)
165. John L Volakis, Thomas F Eibert, Kubilay Sertel. "Fast integral methods for conformal antenna and array modeling in conjunction with hybrid finite element formulations" In: International Symposium on Electromagnetic Theory. Vol. 35. (2000)
166. Kubilay Sertel and John L Volakis. "Incomplete LU preconditioner for FMM implementation" In: 2000 16th Annual Review of Progress in Applied Computational Electromagnetics. Monterey CA, ACES. (2000)
167. Thomas F Eibert, Kubilay Sertel, John L Volakis. "Hybrid finite element modelling of conformal antenna and array structures utilizing fast integral methods" In: 4th International Workshop on Finite Elements for Microwave Engineering - From Electromagnetics to Microwave Electronics Software. Vol. 13. (2000)
168. Sertel,K; Volakis,J,L. "Multilevel fast multipole method implementation using parametric surface modeling" In: 2000 IEEE Antennas-and-Propagation-Society International Symposium. NEW YORK, IEEE. (2000)
169. Thomas F Eibert, Kubilay Sertel, Dejan S Filipovic, John L Volakis. "Finite element-fast integral methods for antenna analysis" In: NATO Advanced Study Institute on Applied Computational Electromagnetics - State of the Art and Future Trends. Vol. 171. BERLIN, SPRINGER-VERLAG BERLIN. (2000)
170. Kubilay Sertel, John L Volakis. "Effects of the fast multipole method (FMM) parameters on RCS computations" In: 1999 IEEE AP-S International Symposium and URSI Radio Science Meeting. New York, IEEE. (1999)
171. John L Volakis, Lars Andersen, Thomas F Eibert, Kubilay Sertel, and Zhifang Li. "Fast hybrid finite element methods and their applications for conformal antennas" In: 1999 15th Annual Review of Progress in Applied Computational Electromagnetics. Monterey CA, ACES. (1999)
172. Kubilay Sertel, Dejan S Filipovic, Sunil Bindiganavale, John L Volakis. "Comparisons of FMM and AIM compression schemes in finite-element boundary integral implementations for antenna modeling" In: 1998 14th Annual Review of Progress in Applied Computational Electromagnetics. Monterey CA, ACES. (1998)
173. Kubilay Sertel, John L Volakis. "FMM solutions of finite element - Boundary integral implementations for antenna modeling involving curved geometries" In: IEEE Antennas-and-Propagation-Society International Symposium on Antennas - Gateways to the Global Network. NEW YORK, IEEE. (1998)
174. Kubilay Sertel and Levent Gurel. "FMM solution of electromagnetic scattering problems involving curved surfaces" In: Progress in Electromagnetic Research - PIERS. Cambridge, MA, United States: PIERS. (1997)

175. Kubilay Sertel, Levent Gurel. "A comparison of surface-modeling techniques" In: IEEE Antennas-and-Propagation-Society International Symposium / North American Radio Science Meeting. NEW YORK, IEEE. (1997)
176. Levent Gurel, Kursat I Sendur, Kubilay Sertel. "Quantitative comparison of rooftop and RWG basis functions" In: IEEE Antennas-and-Propagation-Society International Symposium / North American Radio Science Meeting. NEW YORK, IEEE. (1997)

PEER REVIEWED ABSTRACTS

1. K.Sertel "Conformal Dual Basis Functions on Curvilinear Quadrilaterals for Calderon Preconditioning of Surface Integral Equations", 2019 International Conference on Electromagnetics in Advanced Applications (ICEAA), Granada, Spain
2. B.Paul, N.K. Nahar, and K.Sertel "Harnessing the Frozen-mode in Coupled Silicon Ridge Waveguides for True-time Delay Applications", 2019 International Conference on Electromagnetics in Advanced Applications (ICEAA), Granada, Spain
3. S. Sahin, N.K. Nahar, and K.Sertel, "Non-Contact Antenna Characterization via One-Port Network Calibration", 2019 International Conference on Electromagnetics in Advanced Applications (ICEAA), Granada, Spain
4. Burak Ozbey , Alebel H. Arage, John Cabigao, Carlos Velasquez, Lucas Newton , Kubilay Sertel , and Niru K. Nahar, "Mitigation of Mutual-coupling Effects in Millimeter-wave Automotive Radars", *2019 IEEE International Symposium on Antennas and Propagation & USNC/URSI National Radio Science Meeting*, Atlanta, GA, 2019
5. Maruf Md Sajjad Hossain, Niru K. Nahar and Kubilay Sertel, "Morphological Feature Extraction in Biomedical Samples using Polarimetric Terahertz Imaging", *2019 IEEE International Symposium on Antennas and Propagation & USNC/URSI National Radio Science Meeting*, Atlanta, GA, 2019
6. Seckin Sahin, Niru K. Nahar and Kubilay Sertel, "Non-Contact Characterization of Antenna Parameters via Network Calibration", *2019 IEEE International Symposium on Antennas and Propagation & USNC/URSI National Radio Science Meeting*, Atlanta, GA, 2019
7. Raed Almhadi and Kubilay Sertel, "Tunable True Time Delay Engine for UWB mm-Wave Beamforming", *2019 IEEE International Symposium on Antennas and Propagation & USNC/URSI National Radio Science Meeting*, Atlanta, GA, 2019
8. B. Ozbey and K. Sertel, "Reflection Characteristics of an Extended Hemispherical Lens for THz Time Domain Spectroscopy", *2019 International Workshop on Antenna Technology*, Miami, FL 2019
9. S. Sahin, N.K. Nahar, and K. Sertel, "Anti-Reflective SUEX Coatings of Silicon Optics for mmW and THz Applications," *2019 USNC-URSI National Radio Science Meeting*, Boulder, Colorado, USA, January, 2019
10. N. Srinivasan, C. Caglayan, N.K. Nahar and K. Sertel "Terahertz Polarimetric Imaging for Biomedical Applications," *2018 IEEE International Symposium on Antennas and Propagation and USNC-URSI Radio Science Meeting*, Boston, Massachusetts, USA, 8-13 July, 2018
11. B. Ozbey and K. Sertel "Characterization of Multiple Reflections within an Extended Hemispherical Lens Used in THz Time Domain Spectroscopy," *2018 IEEE International Symposium on Antennas and Propagation and USNC-URSI Radio Science Meeting*, Boston, Massachusetts, USA, 8-13 July, 2018.
12. Seckin Sahin, Niru K. Nahar, and Kubilay Sertel "SUEX as an Anti-Reflection Coating for Silicon Lenses for mmW and THz Applications," *2018 IEEE International Symposium on Antennas and Propagation and USNC-URSI Radio Science Meeting*, Boston, Massachusetts, USA, 8-13 July, 2018

13. Seckin Sahin, Niru K. Nahar, and Kubilay Sertel "Millimeter-wave and Terahertz Properties of SUEX, an Epoxy-based Dry Photoresist," *2018 IEEE International Symposium on Antennas and Propagation and USNC-URSI Radio Science Meeting*, Boston, Massachusetts, USA, 8-13 July, 2018
14. Wei-Jian Foo and Kubilay Sertel "A 20 GHz – 100 GHz Low Cost, Compact, Conformal, Wideband Phased Array For 5G Applications," *2018 IEEE International Symposium on Antennas and Propagation and USNC-URSI Radio Science Meeting*, Boston, Massachusetts, USA, 8-13 July, 2018
15. Syed An Nazmus Saqueeb, Vince Monardo, Yuejie Chi, and Kubilay Sertel, "Phase-retrieval in Single-pixel THz Imaging via Reshaped Wirtinger Flow," *2018 IEEE International Symposium on Antennas and Propagation and USNC-URSI Radio Science Meeting*, Boston, Massachusetts, USA, 8-13 July, 2018
16. Syed An Nazmus Saqueeb, Alebel H. Arage, John Cabigao, Carlos Velasquez, Kubilay Sertel and Niru K. Nahar, "Pyramidal Corrugations as Wideband, Wide-angle Radomes for Millimeter-wave Automotive Radars," *2018 IEEE International Symposium on Antennas and Propagation and USNC-URSI Radio Science Meeting*, Boston, Massachusetts, USA, 8-13 July, 2018
17. S. A.N. Saqueeb and K. Sertel, "A 4k-pixel Single-bit, Single-pixel Compressive Sensing Camera for THz Imaging Applications," *2018 USNC–URSI National Radio Science Meeting*, Boulder, Colorado, USA, 4–7 January, 2018.
18. B. Ozbey and K. Sertel "Impact of Multiple Lens Reflections on the Performance of Lens-Integrated THz Antennas," *2018 USNC–URSI National Radio Science Meeting*, Boulder, Colorado, USA, 4–7 January, 2018.
19. Seckin Sahin, Niru K. Nahar, Kubilay Sertel, "Monolithic Realization of On-chip UWB Phased Arrays for mmW Connectivity," *2017 IEEE International Symposium on Antennas and Propagation & USNC/URSI National Radio Science Meeting*, San Diego, CA, 2017
20. C. Caglayan and K. Sertel, "Lens-Integrated Differential-Mode Butterfly Antenna for mmW/THz Applications" *2017 International Workshop on Antenna Technology*, Athens, Greece, 2017
21. C. Caglayan, J. Hessler, and K. Sertel, "Non-Contact, On-Wafer Characterization of Schottky Diodes" *USNC-URSI Radio Science Meeting (Joint with AP-S Symposium)*, IEEE, 2017.
22. S. A.N. Saqueeb and K. Sertel, "Terahertz Imaging via Single-bit Compressive Sensing", *2017 USNC–URSI National Radio Science Meeting*, Boulder, Colorado, USA, 3–6 January, 2017.
23. Seckin Sahin, Niru K. Nahar and Kubilay Sertel, "Dielectric Properties of Low-loss Polymers for mmW and THz Applications", *USNC-URSI Radio Science Meeting (Joint with AP-S Symposium)*, IEEE, 2017.
24. R. Almhadi, and K. Sertel, "Frozen Modes in All-Dielectric 3-Way-Coupled Ridge Waveguides" *USNC-URSI Radio Science Meeting (Joint with AP-S Symposium)*, IEEE, 2017.
25. Anas Abumunshar, Kubilay Sertel "5:1 Bandwidth, Dual-Polarized Dielectric Rod Antenna Using a Novel Feed Structure", *USNC-URSI Radio Science Meeting (Joint with AP-S Symposium)*, IEEE, 2017.
26. Anas J. Abumunshar, Woon-Gi Yeo, Niru K. Nahar, Kubilay Sertel. "18-40 GHz Phased Array Antenna Using Printed Circuit Board Fabrication and Surface-Mount MEMS Phase Shifters". *2016 United States National Committee of URSI National Radio Science Meeting (USNC-URSI NRSM)*. NY: IEEE. (2016)
27. Cosan Caglayan, Kubilay Sertel. "On-Wafer, Non-Contact Characterization of Differential-Mode mmW and THz Devices and Integrated Circuits". *2016 United States National Committee of URSI National Radio Science Meeting (USNC-URSI NRSM)*. NY: IEEE. (2016)

28. Seckin Sahin, Niru K. Nahar, Kubilay Sertel. "Monolithic UWB Phased Arrays for mmW and THz Applications". 2016 United States National Committee of URSI National Radio Science Meeting (USNC-URSI NRSM). NY: IEEE. (2016)
29. Syed An Nazmus Saqueeb, Kubilay Sertel. "Phase-Sensitive THz Imaging Using Intensity-only Measurements". 2016 United States National Committee of URSI National Radio Science Meeting (USNC-URSI NRSM). NY: IEEE. (2016)
30. Anas J. Abumunshar, Woon-Gi Yeo, Niru K. Nahar, Daniel J. Hyman, Kubilay Sertel. "15-40GHz Tightly-Coupled Dipole Array with Integrated MEMS Phase Shifter". 2015 IEEE International Symposium on Antennas and Propagation and North American Radio Science Meeting. NY: IEEE. (2015)
31. Cosan Caglayan, Georgios C. Trichopoulos, and Kubilay Sertel. "Wideband on-chip antennas for non-contact characterization of mmW and THz devices and integrated circuits". 2015 IEEE International Symposium on Antennas and Propagation and North American Radio Science Meeting. NY: IEEE. (2015)
32. Seckin Sahin, Nima Ghalichechian, Niru K. Nahar, and Kubilay Sertel. "Lithographically-fabricated ultrawideband phased-arrays for agile mmW connectivity". 2015 IEEE International Symposium on Antennas and Propagation and North American Radio Science Meeting. NY: IEEE. (2015)
33. Syed An Nazmus Saqueeb, Georgios C. Trichopoulos and Kubilay Sertel. "A 4K Pixel Terahertz Compressive Sensing Camera". 2015 IEEE International Symposium on Antennas and Propagation and North American Radio Science Meeting. NY: IEEE. (2015)
34. Anas J Abumunshar, Kubilay Sertel. "5:1 bandwidth, dual-polarized dielectric rod antenna". 2014 United States National Committee of URSI National Radio Science Meeting (USNC-URSI NRSM). NY: IEEE. (2014)
35. Anas J Abumunshar, Woon-Gi Yeo, Niru K Nahar, Daniel J Hyman, Kubilay Sertel. "Tightly coupled Ka-band phased array antenna with integrated MEMS phase shifters". 2014 United States National Committee of URSI National Radio Science Meeting (USNC-URSI NRSM). NY: IEEE. (2014)
36. C. Caglayan, G.C. Trichopoulos, and K. Sertel. "Non-Contact Probes for On-Wafer Characterization of THz Devices and Integrated Circuits". 2014 United States National Committee of URSI National Radio Science Meeting (USNC-URSI NRSM). Boulder: URSI. (2014)
37. G.C. Trichopoulos and K. Sertel. "Limited Angle THz Computed Tomography for Tissue Imaging". 2014 United States National Committee of URSI National Radio Science Meeting (USNC-URSI NRSM). Boulder: URSI. (2014)
38. Georgios C Trichopoulos, Kubilay Sertel. "Sub-wavelength terahertz imaging system using a vector network analyzer". 2014 United States National Committee of URSI National Radio Science Meeting (USNC-URSI NRSM). NY: IEEE. (2014)
39. Muhammed Zuboraj, NK Nahar, Kubilay Sertel, JL Volakis. "High power microwave slow wave structure for relativistic beams". 2014 United States National Committee of URSI National Radio Science Meeting (USNC-URSI NRSM). NY: IEEE. (2014)
40. Seckin Sahin, Nima Ghalichechian, Kubilay Sertel. "Ultra-wideband, high-efficiency, on-chip mmW phased arrays with wafer-level vertical integration". 2014 United States National Committee of URSI National Radio Science Meeting (USNC-URSI NRSM). NY: IEEE. (2014)
41. W.-G. Yeo, N.K. Nahar, C.L. Hitchcock, and K. Sertel. "Human Tissue Characterization and Cancer Margin Assessment toward Real-time THz Imaging for Clinical Applications". 2014 United States National Committee of URSI National Radio Science Meeting (USNC-URSI NRSM). Boulder: URSI. (2014)

42. Woon-Gi Yeo, Niru K Nahar, Charles L Hitchcock, Sungchan Park, Ogan Gurel, Kubilay Sertel. "THz spectroscopy and imaging of major human organ tissues for cancer margin assessment". 2014 United States National Committee of URSI National Radio Science Meeting (USNC-URSI NRSM). NY: IEEE. (2014)
43. Y. Karisan and K. Sertel. "Extraction of Parasitics in Submillimeter Wave Devices via Full Wave Electromagnetic Modeling". 2014 United States National Committee of URSI National Radio Science Meeting (USNC-URSI NRSM). Boulder: URSI. (2014)
44. C. Caglayan, G.C. Trichopoulos, and K. Sertel. "Device Characterization using Non-Contact Probes in the THz Band". 2014 United States National Committee of URSI National Radio Science Meeting (USNC-URSI NRSM). Boulder CO: URSI. (2013)
45. G. Trichopoulos, K. Sertel. "THz Computed Tomography using a Large-format, Real-time Focal Plane Array". 2014 United States National Committee of URSI National Radio Science Meeting (USNC-URSI NRSM). Boulder CO: URSI. (2013)
46. J. Chalas, K. Sertel, J.L. Volakis. "Computation of the Q-limits for Arbitrary-shaped Antennas using Characteristic Modes". 2013 United States National Committee of URSI National Radio Science Meeting (USNC-URSI NRSM). Boulder CO: URSI. (2013)
47. J.P. Doane, K. Sertel, J.L. Volakis. "Improved Scanning of Wideband Arrays with a Reconfigurable Surface". 2013 United States National Committee of URSI National Radio Science Meeting (USNC-URSI NRSM). Boulder CO: URSI. (2013)
48. N. Apaydin, P. Douris, K. Sertel, J.L. Volakis. "Metamaterial Based Slow Wave Structure for travelling Wave Tubes". 2013 United States National Committee of URSI National Radio Science Meeting (USNC-URSI NRSM). Boulder CO: URSI. (2013)
49. W. Moulder, K. Sertel, J.L. Volakis. "Ultra Wide Band Substrate Loaded Tightly Coupled Array with Integrated Feed Structure". 2013 United States National Committee of URSI National Radio Science Meeting (USNC-URSI NRSM). Boulder CO: URSI. (2013)
50. Y. Karisan and K. Sertel. "Wideband Impedance-matched Integrated Transceivers for Future THz-band Wireless Networks". 2013 United States National Committee of URSI National Radio Science Meeting (USNC-URSI NRSM). Boulder CO: URSI. (2013)
51. E. Alwan, K. Sertel, W. Khalil, and J.L. Volakis. "Cost and Power Efficient Ultra-wideband Digital Beam-forming for Cognitive Sensing". 2012 IEEE International Symposium on Antennas and Propagation and North American Radio Science (URSI) Meeting. New York: IEEE. (2012)
52. J.P. Doane, K. Sertel, and J.L. Volakis. "Minimum Q of Arrays above a Ground Plane". 2012 IEEE International Symposium on Antennas and Propagation and North American Radio Science (URSI) Meeting. New York: IEEE. (2012)
53. N. Apaydin, K. Sertel, and J.L. Volakis. "Metamaterial-based slow wave structures for travelling wave tubes". 2012 IEEE International Symposium on Antennas and Propagation and North American Radio Science (URSI) Meeting. New York: IEEE. (2012)
54. T. Peng, K. Sertel, and J.L. Volakis. "Convergence of a Fully-overlapping Domain Decomposition Method". 2012 IEEE International Symposium on Antennas and Propagation and North American Radio Science (URSI) Meeting. New York: IEEE. (2012)
55. W.F. Moulder, K. Sertel, and J.L. Volakis. "Finite Size Effects on Performance of Ultra-Wideband Tightly Coupled Arrays with Resistive Loading within the Substrate". 2012 IEEE International Symposium on Antennas and Propagation and North American Radio Science (URSI) Meeting. New York: IEEE. (2012)
56. N. Apaydin, K. Sertel, and J.L. Volakis. "Finite Element Modeling of Magnetic Metamaterials and Associated Challenges for Their Experimental Characterization". 11th International Workshop on Finite Elements for Microwave Engineering. Estes Park, CO: University of Colorado, Denver. (2012)

57. T. Peng, K. Sertel, and J.L. Volakis. "Fully Overlapping Domain Decomposition in Simulating Irregularly Arranged Arrays in Large Media". 11th International Workshop on Finite Elements for Microwave Engineering. Estes Park, CO: University of Colorado, Denver. (2012)
58. I. Tzanidis, K. Sertel, and J.L. Volakis. "An UWB 7x7 Single-Polarized Tightly Coupled Dipole Array with Integrated Feed and Terminations". 2012 United States National Committee of URSI National Radio Science Meeting (USNC-URSI NRSM). Boulder CO: URSI. (2012)
59. J. Doane, K. Sertel, and J.L. Volakis. "Bandwidth Limits For Low Profile Scanning Arrays". 2012 United States National Committee of URSI National Radio Science Meeting (USNC-URSI NRSM). Boulder CO: URSI. (2012)
60. K. Topalli, G. Trichopoulos, and K. Sertel. "Non-contact THz probes for device characterization". 2012 United States National Committee of URSI National Radio Science Meeting (USNC-URSI NRSM). Boulder CO: URSI. (2012)
61. W.F. Moulder, K. Sertel, and J.L. Volakis. "Superstrate-Enhanced Ultrawideband Tightly Coupled Array with Resistive Frequency-Selective Surface". 2012 United States National Committee of URSI National Radio Science Meeting (USNC-URSI NRSM). Boulder CO: URSI. (2012)
62. E.A. Alwan, I. Tzanidis, K. Sertel, and J.L. Volakis. "Equivalent Circuit Model for a 20:1 Coupled Array with Superstrate". 2011 IEEE International Symposium on Antennas and Propagation and North American Radio Science (URSI) Meeting. New York: IEEE. (2011)
63. I. Tzanidis, K. Sertel, and J.L. Volakis. "A Technique for Feeding Tightly Coupled Antenna Arrays". 2011 IEEE International Symposium on Antennas and Propagation and North American Radio Science (URSI) Meeting. New York: IEEE. (2011)
64. N. Apaydin, K. Sertel and J. L. Volakis. "Magnetically Scanned Leaky Wave Antenna Using Periodic Microstrip Lines on Ferrite Substrate". 2011 IEEE International Symposium on Antennas and Propagation and North American Radio Science (URSI) Meeting. New York: IEEE. (2011)
65. W. Moulder, K. Sertel and J.L. Volakis. "Finite Implementations of Superstrate-Enhanced Wideband Tightly Coupled Arrays". 2011 IEEE International Symposium on Antennas and Propagation and North American Radio Science (URSI) Meeting. New York: IEEE. (2011)
66. E. Irci, K. Sertel, J.L. Volakis. "A Low-Profile, Compact and Broadband Tightly Coupled Patch Array". 2011 United States National Committee of URSI National Radio Science Meeting (USNC-URSI NRSM). Boulder CO: URSI. (2011)
67. G.C. Trichopoulos, K. Topalli, and K. Sertel. "A THz Focal Plane Array Excised Tissue Imaging". 2011 United States National Committee of URSI National Radio Science Meeting (USNC-URSI NRSM). Boulder CO: URSI. (2011)
68. N. Apaydin, L. Zhang, K. Sertel and J. L. Volakis. "Experimental Verification of Unidirectional Propagation in Printed Magnetic Photonic Crystals". 2011 United States National Committee of URSI National Radio Science Meeting (USNC-URSI NRSM). Boulder CO: URSI. (2011)
69. W. Moulder, I. Tzanidis, K. Sertel and J.L. Volakis. "Initial Characterization of a Conformal Metamaterial-Based Antenna Array". 2011 United States National Committee of URSI National Radio Science Meeting (USNC-URSI NRSM). Boulder CO: URSI. (2011)
70. E. Irci, K. Sertel, and J.L. Volakis. "Miniature Multiband Microstrip Antenna Design via Dispersion Engineering". 2010 IEEE International Symposium on Antennas and Propagation and North American Radio Science (URSI) Meeting. New York: IEEE. (2010)
71. E.A. Alwan, I. Tzanidis, K. Sertel, and J.L. Volakis. "Equivalent Circuit Models for Tightly Coupled Interweaved Spiral Antenna Arrays". 2010 IEEE International Symposium on Antennas and Propagation and North American Radio Science (URSI) Meeting. New York: IEEE. (2010)

72. I. Tzanidis, K. Sertel, and J.L. Volakis. "Finite Size, UltraWideband Conformal Dipole Array Antenna with 10:1 Bandwidth". 2010 IEEE International Symposium on Antennas and Propagation and North American Radio Science (URSI) Meeting. New York: IEEE. (2010)
73. J. Chalas, K. Sertel, and J.L. Volakis. "Antenna Optimization for UAV Platforms Using Characteristic Modes". 2010 IEEE International Symposium on Antennas and Propagation and North American Radio Science (URSI) Meeting. New York: IEEE. (2010)
74. L. Zhang, H. Verweij, K. Sertel, and J.L. Volakis. "Experimental validation of non-reciprocal properties in volumetric magnetic photonic crystals". 2010 IEEE International Symposium on Antennas and Propagation and North American Radio Science (URSI) Meeting. New York: IEEE. (2010)
75. T. Peng, K. Sertel, and J.L. Volakis. "3D Fully Overlapping Domain Decomposition Method for Modeling Fine Antenna Features in Large Platforms". 2010 IEEE International Symposium on Antennas and Propagation and North American Radio Science (URSI) Meeting. New York: IEEE. (2010)
76. J. L. Volakis, J. A. Kasemodel, C.C. Chen, K. Sertel, and I. Tzanidis. "Wideband conformal metamaterial apertures". 2010 International Workshop on Antenna Technology. New York: IEEE. (2010)
77. I. Tzanidis, K. Sertel, and J.L. Volakis. "Interweaved Spiral Array (ISPA) providing 10:1 bandwidth in conformal installations". 2010 United States National Committee of URSI National Radio Science Meeting (USNC-URSI NRSM). Boulder CO: URSI. (2010)
78. J. Mahaffey, K. Sertel, and J.L. Volakis. "On the implementation of fast iterative solvers on graphical processor units". 2010 United States National Committee of URSI National Radio Science Meeting (USNC-URSI NRSM). Boulder CO: URSI. (2010)
79. K. Sertel, J.L. Volakis, and E. Irci. "Small Wideband Antennas Based on Magnetic Photonic Crystals". 3rd International Congress on Advanced Electromagnetic Materials in Microwaves and Optics. London, UK: Queen Mary University. (2009)
80. G. Mumcu, K. Sertel, and J.L. Volakis. "Printed Degenerate Band Edge Antennas Loaded with Varactor Diodes". 2009 IEEE International Symposium on Antennas and Propagation and North American Radio Science (URSI) Meeting. New York: IEEE. (2009)
81. G. Mumcu, K. Sertel, J.L. Volakis. "Dual Slot THz Antenna Array for Real Time Excised Tissue Imaging". 2009 IEEE International Symposium on Antennas and Propagation and North American Radio Science (URSI) Meeting. New York: IEEE. (2009)
82. G.C. Trichopoulos, G. Mumcu, K. Sertel, L.H. Mosbacker, Y. Tang, Z. Zhang, and P. Fay. "A Focal Plane Imaging Array for High Sensitivity Direct Detection of Excised Tissue Characteristics". 2009 IEEE International Symposium on Antennas and Propagation and North American Radio Science (URSI) Meeting. New York: IEEE. (2009)
83. G. Mumcu, K. Sertel, and J.L. Volakis. "Partially coupled printed lines for antenna miniaturization". International Workshop on Finite Elements for Microwave Engineering. New York: IEEE. (2009)
84. E. Irci, K. Sertel, and J.L. Volakis. "Miniature Antenna Using Coupled Microstrip Lines". 2009 United States National Committee of URSI National Radio Science Meeting (USNC-URSI NRSM). Boulder CO: URSI. (2009)
85. J.-Y. Chung, K. Sertel, and J.L. Volakis. "Permeability and Permittivity Characterization of Engineered Composites". 2009 United States National Committee of URSI National Radio Science Meeting (USNC-URSI NRSM). Boulder CO: URSI. (2009)
86. L. Zhang, K. Shqau, G. Mumcu, K. Sertel, J.L. Volakis and H. Verweij. "Preparation of low-loss titanium dioxide for microwave frequency applications". Proceeding, Materials Science and Technology Meeting. Pittsburgh, PA: MS&T. (2008)

87. B. Cakiroglu, P.J. Collins, A.J. Terzuoli, and K. Sertel. "Multi-scale triangular patch high impedance ground planes to improve the bandwidth of conformal bow tie antennas". 2008 Progress In Electromagnetics Research Symposium. Boston MA: PIERS. (2008)
88. M. Dogrul, P.J. Collins, M. Saville, K. Sertel, and A.J. Terzuoli. "Triangle patch high-impedance ground plane and bow-tie antenna applications". 2008 Progress In Electromagnetics Research Symposium. Boston MA: PIERS. (2008)
89. T. Peng, K. Sertel, and J.L. Volakis. "Overlapping domain decomposition finite element method for modeling intricate detail in natural and engineered host media". 9th International Workshop on Finite Elements for Microwave Engineering. Bonn, Germany; University of Munich. (2008)
90. J. Volakis and K. Sertel. "Printed metamaterials: Antennas emulating anisotropic media". 2008 International Workshop on Antenna Technology. New York: IEEE. (2008)
91. G. Mumcu, K. Sertel, and J.L. Volakis. "Printed Antennas Using Novel Propagation Modes of Periodic Structures". 2007 International Symposium on Antennas and Propagation, ISAP-2007. Niigata, JAPAN: ISAP. (2007)
92. S. Yarga, G. Mumcu, K. Sertel, and J.L. Volakis. "FEM and SIE modeling of layered uniaxial crystals for compact directive antennas". 2007 Computational Electromagnetics Workshop. Izmir Turkey: IEEE. (2007)
93. J.L. Volakis and K. Sertel. "Periodic materials and printed structures for miniature antennas". 2007 Loughborough Antennas and Propagation Conference. Loughborough, UK: LAPC. (2007)
94. J.L. Volakis, K. Sertel, and H. Verweij. "Periodic Materials and Printed Structures for Miniature Antennas". 2007 International Workshop on Antenna Technology. New York: IEEE. (2007)
95. L. Zhang, G. Mumcu, K. Sertel, J.L. Volakis, and H. Verweij. "High-gain magnetic photonic assembly antennas for GHz frequencies". 2007 The Minerals, Metals & Materials Society (TMS) Meeting. Orlando, FL: TMS. (2007)
96. G. Mumcu, K. Sertel, and J.L. Volakis. "Anisotropic Periodic Assemblies and Metamaterials for Applications to Antennas and Microwave Devices". 2006 International Symposium on Antennas and Propagation, ISAP-2006. Singapore: ISAP. (2006)
97. G. Mumcu, K. Sertel, and J. L. Volakis. "Full Wave Modeling of Miniature Antennas Embedded within 3D Finite Degenerate Band Edge Photonic Crystals". 2006 IEEE International Symposium on Antennas and Propagation and North American Radio Science (URSI) Meeting. New York: IEEE. (2006)
98. S. Yarga, K. Sertel, and J.L. Volakis. "Finite Element Method for Periodic Structures". 8th International Workshop on Finite Elements for Microwave Engineering. Spier Wine Estate, Stellenbosch, South Africa: Stellenbosch. (2006)
99. S. Yarga, G. Mumcu, K. Sertel and J. L. Volakis. "Degenerate Band Edge Crystals and Periodic Assemblies for Antenna Applications". 2006 International Workshop on Antenna Technology. New York: IEEE. (2006)
100. G. Mumcu, S. Yarga, K. Sertel, and J. L. Volakis. "Miniature Antennas Embedded within Finite Extent Degenerate Band Edge Crystals". 2006 United States National Committee of URSI National Radio Science Meeting (USNC-URSI NRSM). Boulder CO: URSI. (2006)
101. J.L. Volakis, C.-C. Chen, G. Mumcu, and K. Sertel. "Miniature antennas and arrays using novel materials". 28th General Assembly of URSI. New Delhi, India: URSI. (2005)
102. B. Usner, K. Sertel, M.A. Carr, and J.L. Volakis. "Application of hierarchical basis functions to the generalized SIE for simulation of metamaterial antennas". 2005 IEEE International Symposium on Antennas and Propagation and North American Radio Science (URSI) Meeting. New York: IEEE. (2005)

103. K. Sertel, R.J. Burkholder, P.H. Pathak, and J. L. Volakis. "Numerical Green's function method for antenna platform analysis". 2005 IEEE International Symposium on Antennas and Propagation and North American Radio Science (URSI) Meeting. New York: IEEE. (2005)
104. S. Yarga, K. Sertel, and J.L. Volakis. "Chiro-ferrites for low-loss magnetic photonic crystals". 2005 IEEE International Symposium on Antennas and Propagation and North American Radio Science (URSI) Meeting. New York: IEEE. (2005)
105. G. Mumcu, K. Sertel, and J. L. Volakis. "Miniature antennas and arrays embedded within magnetic photonic crystals". EPFL Latsis Symposium 2005. Lousanne, Switzerland: EPFL. (2005)
106. G. Mumcu, K. Sertel, and J. L. Volakis. "Receiving antennas embedded within nonreciprocal magnetic photonic crystals". 2005 United States National Committee of URSI National Radio Science Meeting (USNC-URSI NRSM). Boulder CO: URSI. (2005)
107. B. C. Usner, K. Sertel, J. L. Volakis. "Modeling high contrast metamaterials with variable order basis functions". 2004 IEEE AP-S International Symposium and URSI Radio Science Meeting. New York: IEEE. (2004)
108. G. Mumcu, K. Sertel, J. L. Volakis, I. Vitebsky, A. Figotin. "Propagation characteristics of finite non-reciprocal magnetic photonic crystals". 2004 URSI EMT Symposium. Pisa, Italy: URSI. (2004)
109. R.W. Kindt, K. Sertel, and J.L. Volakis. "Composite Finite Array Analysis with Supporting Structure Using a Multi-Dimensional, Multi-Cell Hybrid Array Decomposition-Fast Multipole Method". PIERS Proceedings. Boston MA: PIERS. (2003)
110. K. Sertel and J. L. Volakis. "Comparison of finite element-boundary integral and volume integral equation methods for modeling inhomogeneous targets". 2002 IEEE 6th International Workshop on Finite Elements for Microwave Engineering. Chios GREECE: (2002)
111. R. W. Kindt, K. Sertel and J. L. Volakis. "Finite array analysis using an extended hybrid finite element-boundary integral method". 2002 IEEE 6th International Workshop on Finite Elements for Microwave Engineering. Chios GREECE: (2002)
112. J.L. Volakis and K. Sertel. "Fast integral methods for volumetric structures". 2002 URSI General Assembly. Maastricht: URSI. (2002)
113. K. Sertel and J.L. Volakis. "Multilevel fast multipole method for volumetric integral equations". 2002 National Radio Science Meeting. URSI. (2002)
114. R.W. Kindt, K. Sertel, E. Topsakal and J.L. Volakis. "A domain decomposition method for large finite array analysis". 2002 EMCC Meeting. (2002)
115. J. L. Volakis, K. Sertel, and T. F. Eibert. "Developments and research challenges in frequency domain computational electromagnetics". 2001 IEEE AP-S International Symposium and URSI Radio Science Meeting. New York: IEEE. (2001)
116. J.L. Volakis, K. Sertel, M. Carr, E. Topsakal. "Fast integral methods for electromagnetic scattering". PIERS Conference Proceedings. Boston, MA: PIERS. (2000)
117. K. Sertel and J. L. Volakis. "Error evaluation of fast integral methods for RCS computations". Millennium Conference on Antennas and Propagation (AP2000). Davos, Switzerland: AP2000. (2000)
118. J. L. Volakis, T. F. Eibert, K. Sertel, L. S. Andersen and D. S. Filipovic. "Fast hybrid finite element algorithms for multilayer array and FSS analysis". Proc. XXVI General Assembly URSI, Toronto, Canada. URSI. (1999)
119. J. L. Volakis, T. F. Eibert, K. Sertel, L. S. Andersen and D. S. Filipovic. "Fast hybrid finite element algorithms for conformal antenna analysis". 1999 URSI Meeting, Orlando, FL. New York: IEEE.(1999)

120. J. L. Volakis, T. F. Eibert, S. Bindiganavale and K. Sertel. "Fast integral methods for conformal antenna and array modeling in conjunction with hybrid finite element formulations". URSI Radio Science Meeting. Thessaloniki: (1998)
121. J. L. Volakis, K. Sertel and T. F. Eibert. "Hybrid finite element modeling of conformal antenna and array structures utilizing fast integral methods". 1998 4th International Workshop on Finite Elements for Microwave Engineering. Futuroscope-Poitiers: (1998)
122. L. Gurel, K. Sertel, and K. Sendur. "Symposium Digest". On the charge modeling capabilities of a class of current basis functions. Cambridge: PIERS. (1998)
123. K. Sertel and L. Gurel. "FMM solution of electromagnetic scattering problems involving curved surfaces". Symposium Digest. Cambridge: PIERS. (1997)