

ATEF Z. ELSHERBENI**IEEE Fellow (2007) and ACES Fellow (2008)****Referred Journal Publications: (Total 229 Publications)****In Preparation**

- Si Li; Wenxing Li; Atef Z. Elsherbeni; Wenhua Yu; Yunlong Mao, A Novel Miniaturized Left-Handed Metamaterial Loaded Triple-Band WLAN/WiMAX Antenna, IEEE Transactions on Antennas and Propagations. [Submitted](#)
- Si Li; Wenhua Yu; Atef Z. Elsherbeni; Wenxing Li; Yunlong Mao, A Varactor Loaded Tunable Dual-band Left-Handed Metamaterial, Applied Computational Electromagnetics Society Journal. [Submitted](#)

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- Kaikun Niu, Wenkai Zhang, Minquan Li, Xingang Ren, Yingsong Li, Zhixiang Huang, Bo Wu, Xianliang Wu, and Atef Z. Elsherbeni, “Transient Electromagnetic–Thermal Co-Simulation of Microwave/RF Integrated Circuits by the HIE-FDTD Method,” IEEE Transactions on Microwave Theory and Techniques, vol. 72, no. 9, pp. 5228-5244, 2024. DOI: 10.1109/TMTT.2024.3373767
- Guocui Zhu; Kaikun Niu; Minquan Li; Yingsong Li; Xingang Ren; Guoda Xie; Zhixiang Huang; Xianliang Wu; and Atef Z. Elsherbeni, “High-Order ME-CFS-PML Implementations for Terminating the FDTD Domain Composed of Arbitrary Media,” IEEE Transactions on Microwave Theory and Techniques, vol. 72, no. 4, April 2024.
- Yiming Chen, Veysel Demir, Srirama Bhupatiraju, Atef Z. Elsherbeni, Joselito Gavilan, and Kiril Stoyanov, “Prediction of Antenna Performance based on Scalable Data-informed Machine Learning Methods,” Applied Computational Electromagnetics Society (ACES) Journal, vol. 39, no. 4, pp. 275-290, April 2024.
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<https://doi.org/10.13052/2024.ACES.J.390708>
- Naixing Feng, Huan Wang, Yuxian Zhang, Zhixiang Huang, and Atef Z. Elsherbeni, “[Alternative Implementation of EM Propagation for 3-D Layered Lossy Media by SMM Method](#),” IEEE Transactions on Antennas and Propagation, vol. 72, no. 8, pp. 6599-6613, August 2024. DOI: 10.1109/TAP.2024.3416053
- Matthew J. Dodd and Atef Z. Elsherbeni, “[Design and Implementation of a Printed Circuit Model for a Wideband Circularly Polarized Bow-Tie Antenna](#),” *Electronics*, 13(16), 3323, August 2024.
<https://doi.org/10.3390/electronics13163323>
- Guocui Zhu, Minquan Li, Yingsong Li, Zhixiang Huang, Xianliang Wu, Atef Z. Elsherbeni, and Kaikun Niu, “A Unified Dispersive Media and PML FDTD Formulation Based on the Matrix Exponential Method,” IEEE Transactions on Microwave Theory and Techniques, vol. 72, no. 11, pp. 6336-6348, November 2024. DOI: [10.1109/TMTT.2024.3395465](https://doi.org/10.1109/TMTT.2024.3395465)
- Rob D. Jones, Jerome Cheron, Joseph E. Diener, Peter H. Aaen, Richard A. Chamberlin, Benjamin F. Jamroz, Dylan F. Williams, Ari D. Feldman, Atef Z. Elsherbeni, “A Technique



for Optimal On-Wafer Device Spacing at Millimeter-Wave Frequencies,” *IEEE Microwave and Wireless Technology Letters*, 2024. DOI: 10.1109/LMWT.2024.3522810

- Kaikun Niu, Zijing Xiao Yingsong Li, Guoda Xie, Xingang Ren, Zhixiang Huang, Xianliang Wu, and Atef Z. Elsherbeni, “A Stochastic FDTD Algorithm for Uncertainty Quantification of Electromagnetic-Thermal Simulation,” *IEEE Transactions on Microwave Theory and Techniques*, vol. 72, no. 7, pp. 3935-3946, 2024. DOI: 10.1109/TMTT.2023.3342630

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- Joshua M. Kast and Atef Z. Elsherbeni, “FDTD Simulation of a Two-Port Nonlinear Device Characterized by its X -Parameters,” *Progress in Electromagnetics Research C*, vol. 122, pp. 1–15, 2022.
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