

# IEEE TRANSACTIONS ON **ANTENNAS AND PROPAGATION**

A PUBLICATION OF THE IEEE ANTENNAS AND PROPAGATION SOCIETY



NOVEMBER 2024

VOLUME 72

NUMBER 11

IETPAK

(ISSN 0018-926X)

---

PAPERS

Antennas

[A Wideband Miniaturized Dual-Polarized Antenna Based on Wide-Arm Dipole With Mode Analysis and Recombination](#) ..... *Y. Lei, H. Zhai, H. Zhang, and X. Cui*

[Generalized Deterministic Automated Design of Metasurface Antennas With 3-D Feeding Structures](#) ..... *L. Teodorani, M. Zucchi, and G. Vecchi*

[Shared Aperture Wideband Endfire/Broadside mm-Wave Phased Array With Enhanced Scanning Range Integrated With Metal Frame for Mobile Terminals](#) ..... *X. Tian and Z. Du*

[Shortwave Ultrahigh-Sensitivity Rydberg Atomic Electric Field Sensing Based on a Subminiature Resonator](#) ..... *R. Mao, Y. Lin, A. Zhou, K. Yang, and Y. Fu*

[A Novel Near-Field Calibration Method for Linear Array Based on Plane Wave Expansion](#) ..... *Y. Tang, Z. Wang, W. Fan, X. Chen, T.-H. Loh, Z. Luo, and S. Gao*

[Nonorthogonal Multibeam Network Synthesis Achieving Stein's Limit and Implementation Based on RGW Technology](#) ..... *D. I. Lialios, C. L. Zekios, and S. V. Georgakopoulos*

[Low Sidelobe Level, High-Gain Patch Antennas Operating at Higher-Order Modes](#) ..... *J.-H. Ou, J. Y. Zhong, J. Lan, X. Zheng, S. F. Bo, and X. Y. Zhang*

[A Compact Self-Triplexing Antenna for Head Implants](#) ..... *A. Iqbal, M. Al-Hasan, I. B. Mabrouk, and T. A. Denidni*

[Heuristic Best-Fitting-Paraboloid Method for Gravity-Distorted Reflector Antennas](#) ..... *G. Tan, Q. Wang, P. Rocca, X. Duan, D. Yang, S. Feng, and G. Chen*

[A Wideband Millimeter-Wave Dual-Mode OAM Metal Lens Antenna](#) ..... *S. Gao and H. Wong*

[On-Body Cavity-Backed Slot Antenna With Pattern and Polarization Diversity for Medical Imaging](#) ..... *K. Sultan and A. Abbosh*

[A Millimeter-Wave Dual-Polarized Endfire Antenna With Ultrawideband and High Isolation for 5G Multibeam Systems](#) ..... *Q. Tan, K. Fan, W. Yu, L. Liu, and G. Q. Luo*

[Compact Fully Printed GPS/GNSS Antenna Using Embedded MTM-EBGs](#) ..... *B. P. Smyth, S. Clark, N. Kannan, and A. K. Iyer*

[Miniaturized Broadband Dual-Polarized Magnetolectric Dipole Antenna With High Isolation and Filtering Response](#) ..... *K. Y. Yang, W. J. Zhu, L. H. Ye, S.-Q. Xiao, X. Shi, and D.-L. Wu*

[3-D-Printed Ka-Band Circularly Polarized Monopulse Antenna Array With High Gain and Low Axial Ratio](#) ..... *S. Wu, J. Li, J. Yao, Y. Cao, Y. Li, and X. Y. Zhang*

[Theory of Broadband Super Sensitivity Receiving With Closely Spaced Antenna Arrays](#) ..... *L. K. Yeung and Y. E. Wang*

[Photonic-Assisted Dot-Shaped Beamforming for Frequency Diverse Array With Nonfixed Frequency Offset](#) ..... *X. Zhong, W. Zhai, J. Tan, Y. Wu, R. Wang, W. Wen, D. Zhang, W. Cui, and Y. Gao*

[Commonly Differentially Hybrid-Fed Method for Isolation Enhancement in Two-Port Co-Polarized Co-Radiator Applications](#) ..... *R. Huang, Y. Luo, N. Yan, and K. Ma*

[Wideband Dual-Polarized Parallel-Plate Waveguide Lens Antenna for 5G Applications](#) ..... *Y. Cheng and Y. Dong*

[A Novel Four-Port Phase Mode Antenna and Its Application in Multipolarization Wide-Angle Scanning Phased Array](#) ..... *X. Tang, X. Zhao, H. Zhou, J. Geng, J. Lu, R. Zhao, X. Li, H. Liu, M. Meng, N. Chen, C. He, X. Liang, and G. Tong*

[Theory of Microbump Antennas for Broadside Radiation](#) ..... *Y. Fang and Y. P. Zhang*

[Dual-Polarized Microstrip Antenna With Single-Dimension-Constraint Resonant Frequency](#) ... *Y. Zhang, P. Li, X. Qin, P. Liang, K. Wei, and Y. Li*

[Investigating the Impact of Antenna Dispersion on Time Reversal Wideband THz Imaging Systems](#) ..... *A. Madannejad, M. M. Gohari, U. Shah, and J. Oberhammer*

---