

IEEE TRANSACTIONS ON ANTENNAS AND PROPAGATION

A PUBLICATION OF THE IEEE ANTENNAS AND PROPAGATION SOCIETY



JUNE 2025

VOLUME 73

NUMBER 6

IETPAK

(ISSN 0018-926X)

PAPERS

Antennas

- [Broadband H-Plane Horn Antenna Design Based on Ridge Gap Waveguide](#) *M. Khalily, A. Mallahzadeh, S. Danesh, E. Rajo-Iglesias, R. Tafazolli, and A. A. Kishk*
- [Maximizing Independent Channels and Efficiency in BTS Array Antennas via EM Degrees of Freedom](#) *F. Puggelli, B. Biscontin, E. Martini, and S. Maci*
- [A Single-Layer Wideband Composite Metasurface Consists of Ka-Band Reflectarray and Wide-Angle Scanning X-Band Phased Array](#) *Y. Su, M. Li, Y. Yang, W. Zhang, H. Xie, Y. Fan, and X. Lin*
- [A Compact Planar Multisector Rectenna Array With Full-Wave Rectification for 3-D Uniform Wireless Powering of IoT nodes](#) *M. Kumar and A. Sharma*
- [A Constrained Lens Antenna Generating One Thousand Dual-Polarized Beams for High-Throughput Satellite Systems](#) *G. Ruggerini, L. Russo, J. Galdeano, P. Angeletti, and G. Toso*
- [A New Buffering Scheme for Shared-Aperture Dual-Band Base Station Antenna Array Utilizing Tight-Coupling Concept](#) *Y. He, S. Wang, G. Wei, C. Ding, and Y. J. Guo*
- [FSIW Cavity-Based Self-Packaging Filtering Slot Antennas With Wide-Stopband and High-Frequency Selectivity](#) *X. Zhou, G. Zhang, K.-W. Tam, Z. Pang, Z. Zhang, H. Lin, and J. Hong*
- [A Directional Pattern Reconfigurable Low-Frequency Antenna Based on Permanent Magnet Array](#) *Y. Cui, Z. Yuan, Z. Cui, Y. Zhang, C. Wang, Y. Pei, Y. Li, and X. Song*
- [Fast Surface Error Diagnosis for Radiotelescopes Using Linearized Microwave Holography](#) *C. Fontá Romero, F. Rodríguez Varela, B. Galocha Iragüen, and J.-A. López-Pérez*
- [A Wideband Dual-Circularly Polarized Transmitarray Antenna Based on Magnetolectric Dipole Elements and Source](#) *S. Gao and H. Wong*
- [A Deep-Learning-Based Modeling Method for Phase-Free Near-Field Scanning Measurements](#) *S.-L. Zhao, J.-F. Wu, Y. Song, L.-D. Chen, and Z.-T. Xiao*
- [A Highly Integrated Vehicle's Headlight With a Dielectric Resonant Antenna and a 3-D Printed Beam-Scanning Lens in the Adaptive Front-Lighting System for C-V2X Applications](#) *X. Zhu and B. Zhang*
- [A Broadband and Stable-Gain Substrate-Integrated Cavity Antenna Using Two-Level High-Order Modes](#) *X. Jiang, X. Li, Z. Qi, W. Zhao, Y. Xie, and X. Liu*
- [A Real-Time Approach for Multiphysics Field Reconstruction of Active Phased Array Antenna](#) *S. Feng, Q. Chen, Z. Li, and M. A. Sotelo*
- [A Fully Polarized 1-D Beam-Scanning Phased Array Based on Active Integrated Linear Array](#) *L. Zhang, K. Wang, Y. Gan, and H. Meng*
- [An Ultrawideband Quad-Mode SIW Cavity-Backed Slot Antenna for NextG Communication and Sensing Arrays](#) *A. V. Muppala and K. Sarabandi*
- [3D-Printed All-Metal Modular Low-Profile Ultrawideband Tightly Coupled Dipole Arrays](#) *X. Wu, F. Yang, K. Chen, Y. Chen, J. Hu, and S. Yang*
- [Analysis of High-Order Mutual Coupling Effect of Antenna Arrays Based on Infinitesimal Dipole Model](#) *S. Lou, S. Qian, S. Lian, W. Wang, H. Bao, and G. Leng*
- [High-Gain, Low-Cost Polarization-Reconfigurable Antenna With Switchable Single and Dual Beams by Digital Phase-Coding Method](#) *M. Chen, S. Lei, J. Shu, K. Sun, B. Chen, and H. Hu*
- [An Efficient Multibeamforming Method Based on 1-bit Phase Modulation for Time-Modulated Arrays](#) *Y. Man, P. Yang, L. Yin, H. Yang, Y. Zhao, Z. Wu, Y. Pu, Z. Wen, and Y. Luo*
- [A Dual-Polarized Fixed-Frequency Beam-Scanning Leaky Wave Antenna for 5G Millimeter-Wave Applications](#) *B. Wei, Z. Li, Z. Xiong, Y. Zhao, M. Chen, and J. Wang*
- [Element-Level Polarization-Switchable Beamforming Empowering Three-Stage Phased Array Antennas](#) *Y. Wang, Q. Xue, and Y. Wan*

