

# IEEE TRANSACTIONS ON ANTENNAS AND PROPAGATION

A PUBLICATION OF THE IEEE ANTENNAS AND PROPAGATION SOCIETY



MAY 2024

VOLUME 72

NUMBER 5

IETPAK

(ISSN 0018-926X)

---

## COMMUNICATIONS

- [Mixed-Modes-Enabled Element-Level Beamforming Antenna With Enhanced Isolation for Phased Array Applications](#) ..... Y. Wang, Q. Xue, Z. Hu, and S. Liao
- [Dual-CP Antenna With Wide-HPBW and Wide-ARBW Performance for Wide-Angle Scanning Phased Array](#) ..... L.-X. Xia, N.-W. Liu, L. Zhu, and G. Fu
- [Multifunctional Metasurface: Simultaneous Beam Steering, Polarization Conversion, and Phase Offset](#) ..... X. Yang, E. Wen, D. Bharadia, and D. F. Stevenpiper
- [Compact Dual-Band Shared-Aperture Omnidirectional Biconical Antenna for Microwave and Millimeter-Wave Applications](#) ..... K. Ye, Y. Lu, Q. You, K. Wang, J. Xu, and J. Huang
- [Ultrathin Dual Polarization Huygens' Element With Broadband Electric and Magnetic Resonance Modes Degeneracy for Ka-Band Conformal Lens Antenna](#) ..... Z.-H. Fu, X.-S. Yang, L.-L. Wang, Z. N. Chen, and B.-Z. Wang
- [A Wideband and High-Polarization-Purity Leaky Wave Antenna With Continuous Backward-to-Forward Scanning Based on Mode Modulation](#) ..... M. Wang, J. R. Chen, H. F. Ma, and T. J. Cui
- [A Multipoint Feeding Stub-Loaded Dipole With  \$10 f\_0\$  Out-of-Band Harmonic Suppression](#) ..... Y. Luo, R. Huang, N. Yan, W. An, K. Ma, and W. Lin
- [Synthesis of Sparse Planar Antenna Arrays Using a Matrix Constraints Method](#) ..... K. Miao, Y. Zhang, S. Wang, C. Yao, G. Zhao, and H. Sun
- [Design of Low-Profile Single-Layer Angle-Selective Surfaces Based on the First Odd Mode Resonance](#) ..... Z.-X. Wang, X.-H. Yang, Z.-Y. Zong, W. Wu, and D.-G. Fang
- [A Refinement and High-Degree Stable Marching-on-in-Degree Method for Wideband Scattering From Perfect Conductors](#) ..... R. Bai, M.-D. Zhu, Y.-D. Wang, D. E. Wen, H. Xie, L. Huang, J. Leng, and W.-Y. Yin
- [Fast Pattern Synthesis for Large-Scale Time-Modulated Planar Arrays With a Novel Two-Stage Iterative Convex Optimization Method](#) ..... Z. Zhu, Y. Chen, Y. Feng, and S. Yang
- [Reducing the  \$Q\$  Lower Bound for Electrically Small Antennas Using Dispersive Tuning](#) ..... A. D. Yaghjian
- [A Miniaturized Dual-Polarized Tri-Band Antenna Based on Multimode and Stacked Scheme for Multiband Aperture-Shared Base-Station Applications](#) ..... Y. Li, W. Yang, Q. Xue, and W. Che
- [A Novel Design Method for High-Efficiency Quasi-2-bit Reconfigurable Metasurface Antennas](#) ..... Y.-H. Nam, S.-G. Lee, and J.-H. Lee
- [Efficient Antenna Modeling and Optimization Using Multifidelity Stacked Neural Network](#) ..... J. Tan, Y. Shao, J. Zhang, and J. Zhang
- [A Simple-Structured Dual-Polarized Staggered Array With Enhanced Isolation at E- and H-Planes](#) ..... R. C. Dai, J. H. Ou, H. Su, and X. Y. Zhang
- [Polarization-Correlation-Based Metasurface for Full-Space Independent Amplitude and Phase Modulation](#) ..... Y. Jiao, H. Shi, X. Chen, J. Yi, J. Chen, A. Zhang, Z. Xu, and H. Liu
- [High-Gain and Beam-Switchable Multibeam Holographic Metasurface Antenna Array Coated With Phase-Correcting Metasurface](#) ..... P. Wang, Y. Liu, B. Yin, F. Lin, and W. Wang
- [On the Relationship Between the Vogler Algorithm Derivation and the Parabolic Equation for Multiple Knife-Edge Diffraction](#) ..... V.-D. Nguyen, H. Phan, O. Y. Chén, A. Mansour, A. Coatanhay, and T. Marsault
- [In-Band RCS Reduction Method for the Vivaldi Array Antennas Based on the Manipulation of the Antenna Mode Scattering Field](#) ..... C. Zhao, W. Jiang, W. Hu, and Y. Gao
-