

2025 International Applied Computational Electromagnetics Society Symposium (ACES-China 2025)

Huangshan, China

8-11 August 2025

Pages 1–627

IEEE Catalog Number:
ISBN:

CFP25ACH-POD
979-8-3315-8696-6



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IEEE Catalog Number:	CFP25ACH-POD
ISBN (Print-On-Demand):	979-8-3315-8696-6
ISBN (Online):	978-1-7334-6771-1

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Series-Fed Biconical Antenna Array with Omnidirectional High Gain and Low Sidelobe Levels	1820
<i>Qing Dong, Kai Lu, Nan Yang, Pengfei Hu</i>	
An Effective Power Capacity Calculation Method of PIN Diodes for RIS Applications	1823
<i>Yaojia Yang, Shenheng Xu, Fan Yang, Maokun Li</i>	
Study on Electromagnetic Characteristics of Wide Angle Domain in Slotted Honeycomb	1826
<i>Haijun Lu, Wei Luo, Xiaolong Weng, Xuanjie Xue, Mingchuan Yang</i>	
A Test System for Determining the Electromagnetic Spectrum Susceptibility Thresholds of Electronic Information Devices	1829
<i>Laibing Feng, Yaoyao Li, Jun Zhang, Zongqi Hu</i>	
A Test-Based Method for Predicting the Electromagnetic Spectrum Sensitivity Boundary of Typical Equipment	1832
<i>Laibing Feng, Yaoyao Li, Dechun Qin, Zongqi Hu</i>	
Design and Simulation of Active Frequency Selection Surface Based on Switched PIN	1835
<i>Fang Liang, Li Mengyuan</i>	
Design of an LTCC-Based Transverse LC Filter	1838
<i>Mingpeng Cheng, Xianliang Wu, Gang Wang, Bo Wu</i>	
Improved Swin-Unet colorectal polyp segmentation model	1841
<i>Jin Zhong, Yucheng Wu, Dong Jiang</i>	
Average Power Handling Capability of Coupled Striplines Under Even-Mode Excitation	1844
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Radar emitter signal expansion technology based on generative adversarial network	1847
<i>Chengjing Liu, Lei Shi, Yuefan Du</i>	
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<i>Xinwei Chen, Min Tang</i>	
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A Sparse Measurement Strategy and Efficient Image Reconstruction for Electrical Capacitance Tomography	1856
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<i>Tong Zhao, Zhongbao Wang, Shipeng Zhao, Dehao Zhao</i>	
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<i>Feng-Wei Yao, Shan-Yong Cao</i>	
A Novel Wideband Circularly Polarized Helical Dielectric Antenna	1871
<i>Mengqing Wang, Guanghui Xu, Qianxi Ma, Yanbin Luo, Wei Wang, Zhi-Xiang Huang</i>	
Design of A Broadband Three-Dimensional Frequency Selective Surface	1873
<i>Mengyuan Li, Longfei Liang, Yajing Zheng, Qingdong Zhang</i>	