

# 太赫兹科学与电子信息学报

## TAIHEZI KEXUE YU DIANZI XINXI XUEBAO

第 20 卷 第 3 期 2022 年 3 月

### 目 次

#### 专栏：雷达电子战仿真、试验与评估(二)

前向散射雷达目标回波特性实验·····	徐志明, 王国玉, 郑雨晴, 等 (195)
无人机集群对多雷达参数测量的影响效应·····	欧阳佳康, 周永坤, 饶彬 (200)
基于 RCS 静态宽带数据的雷达目标成像算法·····	郝晓军, 杨晓帆, 赵宏宇, 等 (208)
基于深度残差网络的雷达目标数量估计方法·····	吴明华, 饶彬, 王伟 (213)
钝角二面角全极化双基地 RCS 统计建模·····	朱义奇, 赵艳丽, 艾小锋, 等 (218)
宙斯盾雷达典型信号处理方法仿真分析·····	沈健君, 刘晓斌, 艾小锋, 等 (228)
基于 AHP-PCA 的雷达导引头抗干扰能力评估方法·····	邱梦奇, 徐志明, 艾小锋, 等 (235)

#### 太赫兹科学技术

太赫兹波导发展现状与展望·····	王长, 郑永辉, 谭智勇, 等 (241)
-------------------	-----------------------

#### 探测制导、测控通信与电子对抗

机动多波束测控系统卫星目标跟踪·····	田明辉, 王亚青, 王璐, 等 (261)
面向目标搜索的异类多传感器协同指示引导·····	童俊, 刘旭蓉, 唐宇 (267)

#### 电磁场与微波

基于空间映射的 Ka 频段带通滤波器设计·····	熊阳 (273)
不同气象条件下雷达能量覆盖范围研究·····	李鹏飞, 冯菊 (277)
多功能 8 字线圈的优化设计与实验·····	杨龙成, 孙连海, 胡俊, 等 (286)

#### 信号与信息处理、计算机与控制

无线传感网络中基于探测包的多径路由·····	刘小强 (292)
------------------------	-----------

#### 简讯

第一届太赫兹科学与电子信息前沿学术研讨会第二论通知·····	(n1)
《太赫兹科学与电子信息学报》2022 年第 5 期专栏征稿 主题:轨道交通先进移动通信技术与应用·····	(n2)
《太赫兹科学与电子信息学报》2023 年第 4 期专栏征稿 主题:空天地一体化通信系统的无源互调·····	(n3)
会讯几则·····	(n4)

CONTENTS

**SIMULATION, TEST AND EVALUATION OF RADAR ELECTRONIC WARFARE**

Experimental study on target echo characteristics for forward scattering radar  
.....XU Zhiming, WANG Guoyu, ZHENG Yuqing, et al. (195)

Influence of UAV cluster on multi-radar parameter measurement  
.....OUYANG Jiakang, ZHOU Yongkun, RAO Bin (200)

Radar target imaging algorithm based on RCS static broadband data  
.....HAO Xiaojun, YANG Xiaofan, ZHAO Hongyu, et al. (208)

Radar target number estimation method based on deep residual network  
.....WU Minghua, RAO Bin, WANG Wei (213)

Full polarization bistatic RCS statistical modeling of obtuse dihedral structures  
.....ZHU Yiqi, ZHAO Yanli, AI Xiaofeng, et al. (218)

Simulation analysis of typical signal's processing methods of Aegis radar  
.....SHEN Jianjun, LIU Xiaobin, AI Xiaofeng, et al. (228)

Anti-jamming performance evaluation method for radar seeker based on AHP-PCA  
.....QIU Mengqi, XU Zhiming, AI Xiaofeng, et al. (235)

**TERAHERTZ SCIENCE AND TECHNOLOGY**

Recent advances in terahertz waveguide  
.....WANG Chang, ZHENG Yonghui, TAN Zhiyong, et al. (241)

**DETECTION, GUIDANCE, TTC, COMMUNICATION, ELECTRONIC COUNTERMEASURE**

Satellite target tracking for mobile multi-beam TTC system  
.....TIAN Minghui, WANG Yaqing, WANG Lu, et al. (261)

Inhomogeneous sensors coordination direction and cueing approaches of target search  
.....TONG Jun, LIU Xurong, TANG Yu (267)

**ELECTROMAGNETIC FIELDS & MICROWAVE**

Design of Ka-band bandpass filter based on space mapping method  
.....XIONG Yang (273)

Study on radar energy coverage under different meteorological conditions  
.....LI Pengfei, FENG Ju (277)

Optimization design and experiment of multifunctional 8-shaped coil  
.....YANG Longcheng, SUN Lianhai, HU Jun, et al. (286)

**SIGNAL AND INFORMATION PROCESSING, COMPUTER AND CONTROL**

Exploration packet-based multipath routing in Wireless Sensor Networks  
.....LIU Xiaoqiang (292)