

2022 5th International Conference on Information Communication and Signal Processing (ICICSP 2022)

**Shenzhen, China
26-28 November 2022**



**IEEE Catalog Number: CFP22NYU-POD
ISBN: 978-1-6654-8590-6**

**Copyright © 2022 by the Institute of Electrical and Electronics Engineers, Inc.
All Rights Reserved**

Copyright and Reprint Permissions: Abstracting is permitted with credit to the source. Libraries are permitted to photocopy beyond the limit of U.S. copyright law for private use of patrons those articles in this volume that carry a code at the bottom of the first page, provided the per-copy fee indicated in the code is paid through Copyright Clearance Center, 222 Rosewood Drive, Danvers, MA 01923.

For other copying, reprint or republication permission, write to IEEE Copyrights Manager, IEEE Service Center, 445 Hoes Lane, Piscataway, NJ 08854. All rights reserved.

****** This is a print representation of what appears in the IEEE Digital Library. Some format issues inherent in the e-media version may also appear in this print version.***

IEEE Catalog Number:	CFP22NYU-POD
ISBN (Print-On-Demand):	978-1-6654-8590-6
ISBN (Online):	978-1-6654-8589-0
ISSN:	2770-7911

Additional Copies of This Publication Are Available From:

Curran Associates, Inc
57 Morehouse Lane
Red Hook, NY 12571 USA
Phone: (845) 758-0400
Fax: (845) 758-2633
E-mail: curran@proceedings.com
Web: www.proceedings.com

CURRAN ASSOCIATES INC.
proceedings
.com

2022 5th International Conference on Information Communication and Signal Processing (ICICSP 2022)

Table of Contents

Preface	xiv
Conference Committees	xv

◆ Signal Estimation

A Study and Comparison of Different Sparse Bayesian Learning Algorithms in DOA Estimation	1
<i>Yuyang Shao, Hui Ma, Hongwei Liu</i>	
System Error Real-Time Estimation of Radar Network based on Iterative Generalized Least Squares	6
<i>Jianjuan Xiu, Kai Dong, Meng Wang</i>	
DOA Estimation Using Deep Neural Network with Regression	11
<i>Yutao Xiong, Aifei Liu, Xuyu Gao, Arnatovich Yauhen</i>	
Parameters Estimation in Polarimetric ULA with Cross-Distribution Dipole Pairs	16
<i>Tiantian Zhong, Haihong Tao</i>	
A DOA Estimation Algorithm of Multi-target Recognition Based on Polarization-Sensitive Arrays	21
<i>Qianqiu Shen, Yongwu Zhao, Xinfan Xia, Chi Jiang, Yin Xi, Yingchun Wu, Yaojin Wang</i>	
Sparse Representation-Based DOA Estimation with Concentration Ratio Criteria	27
<i>Aifei Liu, Fujia Xu, Boyang Du, Yanting Wang</i>	
Alternating Projection Based Unitary Matrix Completion Method for DOA Estimation in Nonuniform Noise	31
<i>Luting Lin, Xianpeng Wang, Xiang Lan, Zhiguang Han</i>	
Constrained Adaptive Monopulse Estimation for Planar Arrays	36
<i>Guanglei Zhang, Rong Zhou, Yifeng Wu</i>	
Instantaneous Frequency and AOA Estimation of Multicomponent Signals Based on Choi-Williams Distribution	41
<i>Gan Quan, Tang Jie, Song Huan Huan, Wen Hong</i>	
Off-Grid Error Calibration for Single Snapshot DOA Estimation Based on Sparse Bayesian Learning	46
<i>Haosheng Fu, Yuanyuan Wang, Fengzhou Dai</i>	

A Novel Neural Network Approach for Coherent Source DOA Estimation	51
<i>Shuyao Lu, Jun Wang, Zihan Wu</i>	
◆ Signal Detection and Analysis Method	
A Weak Signal Detection Method Based on Spatial Spectrum-LSTM Neural Network	59
<i>Yaning Dong, Chuanzhang Wu, Huizhu Zhu, Feng Xu, Xin Ren</i>	
Beat Signal Analysis for Terahertz Frequency Modulation Continuous Wave.....	65
<i>Chao Yang, Yi Yang, Defeng Liu, Nai Lin, Wei Liu, Jie Zhuang</i>	
Research on Motion Recognition Technology Based on Nanogenerator.....	70
<i>Yuhang Zhang, Haifeng Xu, Jianjun Zhang, Wei Wang, Jianli Huang, Renhai Feng</i>	
Rolling Bearing Vibration Signal Feature Extraction Based on SVD and Mathematical Morphological Fractal Dimension Spectrum.....	75
<i>Kun Zhang, Xiaohui Gu</i>	
High-Speed Targets Detection with Large Pulse Width Wideband LFM Signal Based on IAA-CICPF Algorithm	80
<i>Hang Dong, Fengzhou Dai, Gaojun Feng</i>	
Analysis of Sleeping Respiratory Signal Utilizing Frequency Energy Features	86
<i>Sixian Zhao, Yu Fang, Weibo Wang, Dongbo Liu</i>	
One-Bit Source Number Detection via Neural Network.....	91
<i>Mingyang Chen, Yu-Hang Xiao, Qiang Li, Lifang Feng, Mohamed Rihan, Nannan Guo</i>	
Detection Mode of the Electric Fish and Its Dynamic Signal Tracking	96
<i>Chunyan Qiu, Yaohui Duan, Hui Ma, Shenghua Zhou</i>	
Adversarial Attack on Communication Signal Modulation Recognition	102
<i>Gang Yang, XiaoLei Wang, LuLu Wang, Yi Zhang, Yu Han, Xin Tan, ShangYong Zhang</i>	
Penalized Semidefinite Programming Method for Elliptic Localization.....	108
<i>Danyan Lin, Gang Wang, Ding Wang</i>	
◆ Modern Signal and Speech Analysis	
Design Waveform with Low Range Sidelobes, Doppler Tolerance and Low Probability of Intercept Based on Alternating Sequential Projection Fusion	113
<i>Yu Fan, Xiang Feng, Yinan Zhao, Zhanfeng Zhao, Fengcong Li, Wenqing Cui</i>	
A Modified Multi-station Combined Processing Algorithm for Telemetry Tracking and Control under Low SNR	118
<i>Yu Wen, Dong Ping, Li Yong</i>	

Genetic-Algorithm-Based Polar Code Construction for OFDM Systems with Frequency Offset and Phase Noise	123
<i>leok Cheng Wong, Benjamin K. Ng, Chan-Tong Lam</i>	
Feasible Point Pursuit and Successive Approximation for Radar Waveform Design in a Spectrally Crowded Environment	128
<i>Jifei Pan, Zhihui Li, Chaoyang Niu, Junpeng Shi, Xiaobo Li, Shujie Shi</i>	
Modulation Recognition Method of Communication Signal Based on CNN-LSTM Dual Channel.....	133
<i>Yanjie Ren, Xiaogang Tang, Binquan Zhang, Junhao Feng, Minghui Gao</i>	
Robust Phase-Coded Waveform Design with Low Range Sidelobes Using Particles Filter Assisted Projection Method.....	138
<i>Xiang Feng, Tao Liu, Wenqing Cui, Chaolin Zhang, Zhanfeng Zhao, Yinan Zhao</i>	
Audio-Visual Speech Enhancement with Deep Multi-modality Fusion.....	143
<i>Bin Yu, Zhan Zhang, Ding Zhao, Yuehai Wang</i>	
Automatic Phonemic Transcription Using Feature Fusing of Articulatory Attribute and Syllable Type	148
<i>Linjia Sun</i>	
HuZhouSpeech: A Huzhou Dialect Speech Recognition Corpus	153
<i>Yejin Wang, Maonian Wu, Bo Zheng, Shaojun Zhu</i>	
A Multi-channel Speech Separation System for Unknown Number of Multiple Speakers	158
<i>Chao Peng, Yiwon Wang, Xihong Wu, Tianshu Qu</i>	
A Novel Machine Learning Algorithm: Music Arrangement and Timbre Transfer System.....	163
<i>Junyang Wang, Wanzhen Sun, Rubi Wu, Yixuan Fang, Ruibin Liu, Shaofei Li, Zheng Li, Xin Steven</i>	
Temporal-Frequency-Spatial Features Fusion for Multi-channel Informed Target Speech Separation	168
<i>Wen Zhang, Bin Lin, Li Ma, Aolong Zhou, Guoli Wu</i>	
◆ Mode Recognition and Tracking	
Moving Target Tracking Based on Multiple Hypothesis Tracking in Video SAR.....	175
<i>Hui Fang, Yongjun Liu, Guisheng Liao, Guoli Nie, Zhixin Liu, Haichuan Li</i>	
CNN-Based Human Identification Method Using Image Photoplethysmographic	180
<i>Yang Lv, Haoyuan Gao, Rui Wu, Xiaopei Wu</i>	
Two-Directional Two-Dimensional PCA: An Efficient Face Recognition Method for Thermal Infrared Images	185
<i>Chi Gao, Xinming Zhang, Hui Wang, Liyao Song, Bingliang Hu, Quan Wang</i>	
Research on Moving Target Shadow Simulation of Video SAR	192
<i>Shize Shang, Fuwei Wu, Yang Zhou, Zhenhua Liu, Yuhao Yang, Pin Li</i>	

Target Tracking Method Based on Information Matrix for Multi-sensor Data Fusion	197
<i>Ying Zhang, Xianpeng Wang, Xiang Lan, Zhiguang Han</i>	

◆ **Intelligent Image Detection and Processing Technology**

Decision Fusion Based Multi-type Shot Boundary Detection in Real Time	203
<i>Huizhong Shi, Yana Zhang, Yanfang Li</i>	

An Improved Symbol Detection Algorithm Based on Expectation-Maximum.....	209
<i>Wang Ge, Liu Junfeng, Wang Tao, Zeng Fanpeng, Guo Bo, Han Long</i>	

Defect Detection of Printed Circuit Board Based on Light-weight YOLOv5s	213
<i>Zhihang Liu, Pengfei He, Tongjing Zhang, Rong Nie</i>	

Multi-scale Attention Adaptive Network for Object Detection in Remote Sensing Images.....	218
<i>Qixi Tan, Weixin Xie, Haojin Tang, Yanshan Li</i>	

Adaptive Target Detection Based on GLRT in the Presence of Clutter and Noise-Like Jamming.....	224
<i>Xinchen Jing, Hongtao Su, Congyue Jia, Ruixing Yang</i>	

An Improved Model Based on Deep Learning for Detecting Insulator Defects.....	229
<i>Tao Yin, Jianfeng Liang, Xunru Liang, Zeting Chen, Xiaoyu Tang</i>	

Dense Convolution Siamese Network for Hyperspectral Image Target Detection	234
<i>Kun Shen, Weixin Xie, Haojin Tang, Yanshan Li</i>	

Special Vehicle Target Detection Based on Improved Yolov5 + Jetson NX	239
<i>Hengxian Tang, Xin Liang, Liqiang Liu, Zehua Zhang</i>	

A Fast Two-Parameter CFAR Algorithm Based on FFT for Ship Detection in Large-Scale SAR Images.....	244
<i>Canming Yao, Chao Li, Xue Jin, Lei Zhang</i>	

◆ **Smart Image Processing and Application**

Point Cloud Alignment Method Based on Improved ISS-ICP Algorithm.....	249
<i>Jing Xiang, Wenqiang Fan, Peng Liu, Mengxia Wang</i>	

Minimum Complementable Coprime Array Design Based on Undirected Adjacency Graph.....	254
<i>Tianyao Long, Qiang Li, Lei Huang, Xinzhu Chen, Hanfei Zhou, Deyin Xia</i>	

High-Resolution Imaging from Gapped Data Based on Fast Sparse Bayesian Learning.....	259
<i>Yuanyuan Wang, Haosheng Fu, Fengzhou Dai</i>	

Three-Dimensional ISAR Imaging under Low SNR.....	265
<i>Shujiang Liu, Yongpeng Gao, Zegang Ding, Tianyi Zhang, Zhi Yang, Guanxing Wang</i>	

Research on the Effect and Repair Strategy of the Array Pattern with Sub-array Failure	270
<i>Wenhui Zhou, Shengfeng Zhang, Yuxin Zhou</i>	

UHF PD Imaging Based on Fusion of Positioning Information and Video Information	276
<i>Xinyan Feng, Haiwen Xing, Youfei Sun, Mingxing Zhang, Kun Wang, Renhai Feng</i>	
Transclaw U-Net: Claw U-Net with Transformers for Medical Image Segmentation.....	280
<i>Chang Yao, Menghan Hu, Qingli Li, Guangtao Zhai, Xiao-Ping Zhang</i>	
A Wide-Swath Imaging Method for the MIMO Bistatic SAR System	285
<i>Hai Huang, Shengqi Zhu, Xiongpeng He, Ximin Li, Jingwei Xu, Kun Liu</i>	
Lightweight Multilevel Feature Fusion Network for Hyperspectral Image Classification	290
<i>Quanyu Huang, Haojin Tang, Weixin Xie, Yanshan Li</i>	
To Investigate the Feasibility of Palm-Video-Based IPPG Technique	296
<i>Rui Wu, Haoyuan Gao, Chao Zhang, Xiaopei Wu</i>	
Low-SLL Beampattern Synthesis Considering Unavoidable Array Errors.....	303
<i>Yanhong Xu, An Jiang, Mengli Zhou, Zhiwen Zhang, Dongyun Wang</i>	
Three-Dimensional Reconstruction of Targets Based on Multi-angle High-Resolution Range Profiles.....	308
<i>Guangyu Zhu, Hui Ma, Yichao Ma</i>	
Cascaded Convolution Neural Network for Color Image Recovery	314
<i>Neng Li, Yuanyuan Deng</i>	
◆ Radar and Communication Technology	
A Method to Suppress the Noise Convolution Jamming in FDA-MIMO Radar	319
<i>Yanxing Wang, Shengqi Zhu, Ximin Li, Jingwei Xu, Lan Lan, Zhuochen Chen</i>	
A Survey on the Development of Low-Orbit Mega-Constellation and Its TT&C Methods	324
<i>Yitong Si, Entao Zhang, Wei Zhang, Hong Ma, Tao Wu</i>	
Cooperative Computation Offloading for Video Analysis in Ultra-Dense LEO Satellite-Terrestrial Networks	333
<i>Qi Zhao, Tianjiao Chen, Jiang Liu, Fangqi Liu, Yuke Zhou</i>	
Integrated Waveform Design for Radar and Communication Based on ACE-NOMA	339
<i>Fengcong Li, Fangqiu Tong, Yinan Zhao, Yibu Wang</i>	
A Range-Ambiguous Clutter Suppression Method via EPC-MIMO Bistatic Airborne Radar.....	344
<i>Yi Wang, Shengqi Zhu, Xiongpeng He, Ximin Li, Xiaochun Wu, Yifan Guo</i>	
A Block Coordinate Descent Approach to Design Constant Modulus Waveform for MIMO Radar with Low-Resolution DACs	349
<i>Jiaying Wen, Bin Liao</i>	
Field Test of 5G FDD Massive MIMO.....	355
<i>Jinyang Yu, Chunlei Hu, Weiliang Xie, Pingping Lin, Xiaohang Xu</i>	

Design of Two Receiver Schemes for FDMA-MIMO Radar	360
<i>Keyi Wang, Guisheng Liao, Jingwei Xu, Qingyun Kan</i>	
Research on Beamforming and Power Allocation in IRS-BASED NOMA System	365
<i>Yirui Guo, Jun Zou, Guangzu Liu, Lin Guo</i>	
◆ Communication Theory and Technology	
A Sparse Recovery Method on EPC-MIMO Radar System.....	370
<i>Kun Liu, Xiongpeng He, Guisheng Liao, Jingwei Xu, Shengqi Zhu, Yifan Guo</i>	
Compressed Sensing Based Joint Sparse Channel Estimation for RIS-Assisted Internet of Things	375
<i>Zhen Chen, Xiaoyu Du, Long Chen</i>	
Research and Trials of 5G SA Network Performance	382
<i>Pingping Lin, Jinyang Yu, Zhirong Zhang</i>	
Cooperated Range-Ambiguous Clutter Suppression Based on PA-FDA Dual-Mode Radar	387
<i>Zhixin Liu, Shengqi Zhu, Jingwei Xu, Ximin Li, Yunfei Fang, Jie Gao</i>	
A Light Traffic Load and Highly Reliable Emergency Message Broadcasting Mechanism for VANETs	392
<i>Huai-ting Xu, Xiao-ying Lei</i>	
An IPv6 Routing Lookup Algorithm Based on Hash Table and HOT	397
<i>Yuqiang Li, Fan Zhou, Xiaoxiang Zhu, Jianming Liao</i>	
Analysis and Monitoring of Paging Message in Mobile Communication System.....	403
<i>Junhao Chen, Rong Shi, Ke Deng</i>	
Optimized Algebraic Decoding Algorithm for (47, 24, 11) QR Code	409
<i>Chunlan Luo, Xiaoxia Zhu</i>	
Research on Satellite Quality of Service Classifier Based on Modified Recursive Flow Classification Algorithm	414
<i>Xuetao Wan, Jie Wang, Jiamin Li, Xinhong Liu, Xuequn Fu, Xiaotian Wang</i>	
A Robust Interference Suppression Method Based on FDA-MIMO Radar	419
<i>Zhixia Wu, Shengqi Zhu, Jingwei Xu, Lan Lan, Mengdi Zhang, Ximin Li</i>	
◆ Advanced Information System and Intelligent Calculation	
Partial Discharge Positioning Based on SDR and TDOA.....	424
<i>Xinyan Feng, Haiwen Xing, Youfei Sun, Mingxing Zhang, Kun Wang, Renhai Feng</i>	
Vital Signs Monitoring Using FMCW Millimeter-Wave Sensor via Simulated Annealing MUSIC Algorithm	429
<i>Yuqi Wang, Xianpeng Wang, Xiang Lan, Zhiguang Han</i>	

Learning Efficient Robot Arm Reaching	435
<i>Tao Zhang, Weiming Qu, Yudi Zou, Dingsheng Luo</i>	
A Design Method of High Parallelism QC-LDPC Decoder Based on FPGA	441
<i>Haojie Bai, Keyuan Zhai, Guangzu Liu, Jun Zou</i>	
Towards Communication Efficient and Fair Federated Personalized Sequential Recommendation	448
<i>Sichun Luo, Yuanzhang Xiao, Yang Liu, Congduan Li, Linqi Song</i>	
Dynamic Reinforcement and Alignment Graph Convolution Networks for Few-Shot Learning	454
<i>Minghao Yan, Qinxin Lu</i>	
◆ Data Calculation and Data Management	
A Novel Path Recommendation Algorithm for Efficient and Secure Government Affairs System.....	460
<i>Xinyu Yao, Yubo Song, Xingmin Zou, Qianhui Lu, Chao-Hsien Hsieh</i>	
A Unified Perspective of Multi-level Cross-Modal Similarity for Cross-Modal Retrieval.....	466
<i>Yingying Huang, Quan Wang, Yipeng Zhang, Bingliang Hu</i>	
Research on Calculation of Feeding Frequency of Fish for Precise Feeding Based on Deep Learning.....	472
<i>Yufeng Zhang, Junchao Yang, Lulu Jia, Jinhui Yang</i>	
A Correlation-Based Local Differential Privacy Scheme Design for Trajectory Data Collection	477
<i>Jingxuan Tian, Hong Chen, Zhijie Qiu, Lei Luo, Peichang Zhang</i>	
Discussion on the Effect of Classroom Concept Learning Based on BERT Text Classification	483
<i>Xiaoyu Tang, Xiaoning Huang, Xi Lin</i>	
Sub-network Multi-objective Evolutionary Algorithm for Filter Pruning.....	488
<i>Xuhua Li, Weize Sun, Lei Huang, Shaowu Chen</i>	
Design and Development of Insurance System Based on PoW Consensus Algorithm.....	493
<i>Qing Zhang, Xinyu Yao, Wenjing Zhang, Yingchuan Yang, Ya Xu, Chao-Hsien Hsieh</i>	
Blockchain-Based Cross-Domain Access Control Mechanism	499
<i>Ming Tan, Xiaohan Wang, Siyuan Shang, Aodi Liu</i>	
◆ Underwater Acoustics, Ocean Exploration, and Signal Processing	
Moving Object Localization for Multistatic Sonar System with Clock Offsets.....	507
<i>Yana Shen, Xiaoping Wu</i>	
Deep Learning-Based Non-synchronous Measurement for Broadband Sound Source Localization	513
<i>Guitong Chen, Long Chen, Weize Sun, Shaowu Chen, Lei Huang</i>	
Acoustic Scene Classification for Bone-Conducted Sound Using Transfer Learning and Feature Fusion ..	519
<i>Sijun Bi, Liang Xu, Shenghui Zhao, Jing Wang</i>	

Waveform Design and Processing for Joint Detection and Communication Based on MIMO Sonar Systems	523
<i>Wei Men, Liang Zhang, Longxiang Guo, Hongyu Yin</i>	
Mesoscale Eddy Detection Based on Hilbert Marginal Spectrum	528
<i>Jie Duan, Hangfang Zhao</i>	
Passive Detection Method of Underwater Maneuvering Target Based on Random Parabolic Hough Transform	534
<i>Xuemin Wang, Shuncheng Tan, Hongbo Yu</i>	
Compatible Sliding-Windows Algorithm for Vessel Trajectory Compression.....	539
<i>Li Hua, Zhang Xiaojun</i>	
Localization Method of Underwater Robot Based on Sonar Image	544
<i>Lirong Li, Bing Mei, Peng Chen, Liang Yu, Pengcheng Gong</i>	
Acoustic Bandwidth Extension by Audio Deep Residual U-Net	549
<i>Linlin Ou, Yuanping Chen</i>	
Modeling and Simulation of Passive Sonar Signal under Channel Conditions	555
<i>Xian-wen Zhao, Zhou Chen, Zheng-wei Wang, Zhi-gang Liu, Mo-ran Wang, Qin Liang</i>	
Transient Ice Events of Underwater Ambient Noise in the Arctic Ocean.....	560
<i>Xueli Sheng, Meng Liu, Mengfei Mu, Chaoran Yang, Jing Xu</i>	
Sound Speed Profiles Inversion by Pressure Inverted Echo Sounder and Reconstruction on Product Graph	565
<i>Xuegang Shi, Hangfang Zhao</i>	
Robust Deconvolution of Underwater Acoustic Channels Corrupted by Impulsive Noise	571
<i>Siyuan Cang, Xueli Sheng, Andreas Jakobsson, Huayong Yang</i>	
Evaluation of Global Sea Surface Salinity from Four Ocean Reanalysis Products	577
<i>Haodi Wang, Wen Zhang, Senliang Bao, Wen Chen, Kaijun Ren</i>	
Passive Detection Method Based on Non-cooperative Underwater Acoustic Pulse Signal.....	584
<i>Cheng Ken, Wang Fangyong, Du Shuanping</i>	
A Large Scale 3D Sound Source Localisation Approach Achieved via Small Size Microphone Array for Service Robots	589
<i>Long Chen, Lei Huang, Guitong Chen, Weize Sun</i>	
A Case Study of Geoacoustic Inversion Based on Convolutional Neural Network Using Vertical Array Data	595
<i>Mingda Liu, Haiqiang Niu, Zhenglin Li, Yonggang Guo</i>	

Propagation of the Vector Sound Field in the Bottom-Reflected Zone in Deep Water.....	601
<i>Mei Sun</i>	
NLOS Error Mitigation for TOA Localization Based on Maximum Correntropy Criterion with Variable Center	606
<i>Wei Wang, Gang Wang</i>	
Separability of Multipath Arrivals by Conventional Beamforming and Its Use for Source Localization	611
<i>Yubo Qi, Shihong Zhou, Changpeng Liu, Jincong Dun, Lei Zhou</i>	
◆ Space Sensing, Information Interpretation and Intelligent Application	
An Element Selection Enhanced Hybrid Relay-RIS Assisted Communication System	617
<i>Gaoze Mu, Yusen Zhao, Shida Zhong, Peichang Zhang, Lei Huang, Tao Yuan</i>	
Airborne Multi-function Radar Air-to-Air Working Pattern Recognition Based on Bayes Inference and SVM	622
<i>Jingwei Xiong, Jifei Pan, Yihong Zhuo, Linqing Guo</i>	
RIS-Assisted Radar NLOS Target Detection	630
<i>Junjie Ye, Yi Peng, Peichang Zhang, Qiang Li, Lei Huang</i>	
Adaptive Altitude Measurement Based on Digital Elevation Model in VHF Array Radar	636
<i>Xu Jin, Zhu Wei, Ding Shengyao, Hu Kunjiao</i>	
Low-Cost One-Bit Non-synchronous Measurements for Sound Source Localization.....	641
<i>Long Chen, Weize Sun, Guitong Chen, Lei Huang</i>	
Comparison of the Performance of Forward-Looking Imaging Systems: Phased-Array or MIMO Radar	646
<i>Yujie Zhang, Hui Ma</i>	
Mean Squared Error Analysis of the One-Bit Signal Power Estimator	651
<i>Xinke Li, Yu-Hang Xiao, Lei Huang</i>	
Feasibility of Starlink Transmissions for Passive Airborne Targets Detection	656
<i>Zhang Maoyi, Cheng Shuiying, Zheng Hui</i>	
Single Channel SAR Deception Jamming Recognition Based on Feature Map Learning.....	662
<i>Huan Liu, Bo Zhao, Lei Huang, Liang Zhang</i>	
Power Allocation Method for Coexistence of Multicarrier Radar and Jamming System	669
<i>Zhuochen Chen, Shengqi Zhu, Yongjun Liu, Ximin Li, Yanxing Wang, Feilong Liu</i>	
Radar Target Recognition with Self-Supplementary Neural Network.....	674
<i>Xuhua Huang, Weize Sun, Lei Huang, Shaowu Chen, Qiang Li</i>	
Joint Angle and Range Estimation with FDA-MIMO Radar in Unknown Mutual Coupling.....	679
<i>Feilong Liu, Shengqi Zhu, Ximin Li, Jingwei Xu, Lan Lan, Zhuochen Chen</i>	

Investigating the Use of Ray Tracing for Signal-Level Radar Simulation in Space Surveillance.....	684
<i>Mogamat Yaaseen Martin, Simon Winberg, Yunus Abdul Gaffar, David Macleod</i>	
Simulation of Dynamic Clutter and Signal Processing of Passive Detection Based on Non-cooperative Airborne Radar Emitter.....	691
<i>Song Jie, Yan Yujia</i>	
Two-Bit Quantization for Harmonic Suppression.....	696
<i>Shiqi Liu, Bing Li, Bo Zhao, Lei Huang, Qiang Li, Min Huang, Yuezhou Wu, Weimin Bao</i>	
A Multiple Measurement Vector-Based Deep Unfolded Network for One-Bit DOA Estimation.....	700
<i>Mengchao Zhan, Feng Xi, Shengyao Chen</i>	
◆ Acoustic Measurement and Signal Processing of Aircraft and Their Equipment	
An Equivalent Source Method Based on Sound Pressure Differential Filter for Particle Velocity Reconstruction	706
<i>Daofang Feng, Wei Pan, Anlai Mao, Bingjian Jin, Yuanwen Li, Min Li</i>	
Experimental Investigation on Acoustic Characteristics of Segmented Local-Reacting Liner	712
<i>Jiafeng Yang, Qun Yan, Dongwen Xue, Zhuohan Li</i>	
Time-domain Sound Field Reconstruction Based on Spherical Acoustic Holography	718
<i>Peihong Jiang, Zhigang Chu, Peiran Li</i>	
Robust Superdirective Beamforming Based on ADPM	723
<i>Pengcheng Gong, Junjia Zhang, Yuntao Wu, Liang Yu, Lirong Li</i>	
A Preliminary Study of the Auditory Stimulation Relieving Mental Fatigue Behaviours	728
<i>Lina Liu, Yu Huang, Yan Song, Linfang Mo, Ying He</i>	
Monopole Time Reversal Method Based on the Partitioned Cross-Spectral Algorithm	733
<i>Yongchang Li, Yuan Liu, Xueyong Zhang</i>	
Impedance Eduction of Acoustic Liners with High Grazing Flow and High Frequency.....	737
<i>Dongwen Xue, Yan Qun Yan, Zhuohan Li, Jiafeng Yang</i>	
Sound Source Localization Method Based on Densely Connected Convolutional Neural Network.....	743
<i>Ge Zhang, Lin Geng, Xingguo Chen</i>	
Weighted Block L1 Norm Regularized Twodimensional Off-grid Compressive Beamforming for Acoustic Source Identification.....	748
<i>Chenyu Zhang, Liang Yu, Baohong Bai, Chen Xu, Ran Wang, Youhong Xiao</i>	
Acoustic Imaging in Four-Layer Medium by Iterative Bayesian Focusing Algorithm	753
<i>Qixin Guo, Liang Yu, Rui Wang, Ran Wang, Weikang Jiang, Wancheng Ge</i>	

Ultrasonic Welding State Monitoring for the Lithium Battery of UAVs	758
<i>Xinhua Shi, Zhixin Gu, Ran Wang, Suiran Yu</i>	
Experimental Analysis on Aeroacoustics of Propeller in Semi-anechoic Chamber.....	763
<i>Kai Wei, Qi Cao, Qun Yan, Jian Xu, Dongwen Xue, Zhuohan Li</i>	
Sound Source Identification Method Based on Location Optimization of Equivalent Sources	769
<i>Wei Pan, Daofang Feng, Yuanwen Li, Min Li</i>	
Data Processing of Noise Flight Test for Large Civil Aircraft Type Certification	775
<i>Chen Ling, Li Qiang, Zhang Zhen</i>	
Sparse Representation of Sound Field Based on KSVD.....	780
<i>Yuan Liu, Wenqiang Liu, Yongchang Li</i>	
Fast Iteration Shrinkage Thresholding Unfolding Network for Acoustic Source Localization.....	784
<i>Fangchao Chen, Youhong Xiao, Liang Yu, Lin Chen</i>	
Sound Sources Reconstruction Based on the Nonsynchronous Measurements of Microphone Arrays and Equivalent Sources Modeling.....	789
<i>Su Yu, Chenyu Zhang, Dingyu Hu, Liang Yu</i>	
A Sparse Real Time Acoustic Holography Method for Nonstationary Acoustic Source Reconstruction	794
<i>Xingguo Chen, Lin Geng, Ge Zhang</i>	

Author Index