

## CONTENTS

### ELECTRONICS TECHNOLOGY

- 413 Widely linear UKF constant modulus algorithm for blind adaptive beamforming**  
Huaming Qian, Ke Liu, Long Li, Linchen Qian, and Junda Ma
- 424 Schemes for synthesizing high-resolution range profile with extended OFDM-MIMO**  
Xinhai Wang, Gong Zhang, Fangqing Wen, and De Ben
- 435 Decoupled estimation of frequency-dependent IQI and channel for OFDM systems with direct-conversion transceivers**  
Yan Liang, Rongfang Song, Fei Li, Xueyun He, and Lihua Yang
- 442 Non-coherent sequence detection scheme for satellite-based automatic identification system**  
Haosu Zhou and Jianxin Wang
- 449 Fractional Fourier domain hopped communication method based on chirp modulation for underwater acoustic channels**  
Xingbin Tu, Xiaomei Xu, Zheguang Zou, Liangliang Yang, and Jianming Wu

### DEFENCE ELECTRONICS TECHNOLOGY

- 457 Robust PolInSAR optimal interferogram estimation method based on generalized scattering vector**  
Zhiyong Suo and Ming Li
- 472 Micro-motion dynamics analysis of ballistic targets based on infrared detection**  
Junliang Liu, Yanfang Li, Shangfeng Chen, Huanzhang Lu, and Bendong Zhao
- 481 Clutter suppression for hypersonic vehicle-borne radar with frequency diverse array**  
Xuzi Wu, Zheng Liu, and Rong Xie
- 493 Parameterized time-frequency analysis to separate multi-radar signals**  
Wenlong Lu, Junwei Xie, Heming Wang, and Chuan Sheng

### SYSTEMS ENGINEERING

- 503 Combination method of conflict evidences based on evidence similarity**  
Wenhao Bi, An Zhang, and Yuan Yuan

**514 Multi-agent decision support system for missile defense based on improved PSO algorithm**

Zilong Cheng, Li Fan, and Yulin Zhang

**526 Optimal search for moving targets with sensing capabilities using multiple UAVs**

Xiaoxuan Hu, Yanhong Liu, and Guoqiang Wang

## **CONTROL THEORY AND APPLICATION**

**536 Missile autopilot design based on robust LPV control**

Yuanchuan Shen, Jianqiao Yu, Guanchen Luo, and Yuesong Mei

**546 Integrated guidance and control design of the suicide UCAV for terminal attack**

Huan Zhou, Hui Zhao, Hanqiao Huang, and Xin Zhao

**556 Generalized cubature quadrature Kalman filters: derivations and extensions**

Hongwei Wang, Wei Zhang, Junyi Zuo, and Heping Wang

**563 Trigger control characteristics of fuze-recoil simulation system based on electromagnetic launcher**

Wenhao Wang, Shihua Bi, Hongjun Xiang, Chao Zhan, and Xichao Yuan

## **SOFTWARE ALGORITHM AND SIMULATION**

**572 Simulation design of fuze warhead system of air defense missile at very low altitude**

Qi Zhao, Guangyu Du, Bin Zhang, Yanbin Zhai, and Yuruo Shi

**585 Adaptive partition intuitionistic fuzzy time series forecasting model**

Xiaoshi Fan, Yingjie Lei, and Yanan Wang

**597 Image haze removal via multiscale fusion and total variation**

Xuemei Wang, Mingye Ju, and Dengyin Zhang

## **RELIABILITY**

**606 Storage reliability assessment model based on competition failure of multi-components in missile**

Yunxiang Chen, Qiang Zhang, Zhongyi Cai, and Lili Wang

**617 Truth finder algorithm entity attributes based on for data conflict solution**

Xiaolong Xu, Xinxin Liu, Xiaoxiao Liu, and Yanfei Sun

Jo  
Vo

Ab  
uns  
UK  
algo  
and  
nal  
inte  
spe  
requ  
a la  
and  
over  
LMS  
CMA  
CMA

Key  
sign  
DO

1. I  
Wid  
have  
year  
plus  
sion  
In g  
seco  
statis  
trix  
lar si

Man  
\*Co  
Thi  
of Chi  
lents  
the N