

# **2025 7th International Conference on Industrial Artificial Intelligence (IAI 2025)**

**Shenyang, China  
21-24 August 2025**



**IEEE Catalog Number: CFP25T69-POD  
ISBN: 979-8-3315-8930-1**

**Copyright © 2025 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:	CFP25T69-POD
ISBN (Print-On-Demand):	979-8-3315-8930-1
ISBN (Online):	979-8-3315-8929-5

**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](mailto:curran@proceedings.com)  
Web: [www.proceedings.com](http://www.proceedings.com)

CURRAN ASSOCIATES INC.  
**proceedings**  
.com

## TABLE OF CONTENTS

Mechanism-Data Co-Driven Sensing of Key Process Indicators in Metal Smelting .....	1
<i>Zexin Chen, Bei Sun, Yuxi Gao, Fakun Zheng, Yucheng Ke</i>	
A Multi - Reactor Collaborative Optimization Method for Nonferrous Metallurgy Based on Self-Organization Analysis .....	7
<i>Jiarui Su, Bei Sun, Peng Kong, Yuxi Gao, Yonggang Li</i>	
Constrained Multi-Objective Optimization of Wastewater Process Based on a Two-Stage Intelligent Decision Constraint Method Strategy.....	13
<i>Yu-Zhen Yang</i>	
Efficient Mapping and Navigation System for Weed Removal Robot in Confined Garden Spaces.....	19
<i>Mohammed Ahmed Elkhatib, Ibrahim Babiker, Bin He, Wen Fang Xie</i>	
Data Transmission in Bluetooth: A Review.....	25
<i>Yu Xiyang, Tian Zhongda</i>	
Distributed Fixed-Time Control of Large-Scale Inverter Air Conditioners for Demand Response .....	31
<i>Fan-Rong Qu, Jing-Zhe Xu, Wenqu Li, Zhi-Wei Liu</i>	
Iris Recognition with Selectively Denoising, Data Augmentation and CNNs.....	37
<i>Guangyi Chen, Wen Fang Xie, Ibrahim Babiker</i>	
Bridging Time Series and Fault Knowledge with Temporal Semantic Diffusion Learning for Zero-Shot Diagnosis.....	42
<i>Jiaqi Yue, Chunhui Zhao, Jiancheng Zhao, Jinliang Ding, Min Xie, Furong Gao</i>	
Boost SAM for Object Detection with Single Point Supervision.....	48
<i>Hao Wang, Shizhuo Deng, Dongyue Chen, Tong Jia</i>	
Bearing Remaining Useful Life Prediction Method Based on Dynamic Feature Selection and LSTM-KAN Modeling.....	54
<i>Yanwei Ma, Jingjing Liu, Yefeng Liu, Zhi Wei Du, Zeyu Zhang</i>	
Cooperative Guidance and Robust Control of Multi-Quadrotor Formation Carrying a Cable-Suspended Payload Under Predecessor Following Topology.....	60
<i>Jinyang Sun, Erquan Wang, Yang Zhu</i>	
Moisture Prediction in Tobacco Drying Process Based on the NRBO-GRU Algorithm.....	66
<i>Hongjing Li, Ming Wang, Shangrong Wang, Tao Wang, Weitao Liu, Chuancai Liu, Songyan Li, Qian Shang</i>	
Preliminary Results for LQR-Based Adaptive Learning Control .....	72
<i>Kangyue Chen, Guoxiang Gu</i>	
Assessment of Flexible Research and Development (R&D) System Maturity of Science and Technology Innovation Enterprises Based on Rough Best and Worst Method .....	77
<i>Min Lin, Jianguo Zheng, Hong Fan</i>	
Adaptive Distributed Consensus with Prescribed Performance Guarantees.....	83
<i>Tao Xu, Guanghui Wen</i>	

A Method of Detector Mileage Positioning in Pipeline Based on Multi-Wheel Fusion Decision.....	89
<i>Jinhe Chang, Jianglin, Senxiang Lu, Qiang Li</i>	
Global Funnel Control of Single-Link Manipulators with Flexible Loads.....	94
<i>Rui-Bo Gao, Jin-Xi Zhang</i>	
Research on Anomaly Detection Algorithm of Pipeline Magnetic Leakage Data Based on STL Decomposition.....	100
<i>Jiahao Zhu, Lin Jiang, Leyao Wang, Leize Zhang, Yi Liang, Senxiang Lu</i>	
LSTM-Based Nonlinear Model Predictive Control for Thermal Management of Proton Exchange Membrane Fuel Cells .....	105
<i>Yujie Yang, Haisong Xu, Lei Wang, Yang Zhu, Hongye Su</i>	
Feature Enhancement Based on YOLOv7 for Prohibited Item Detection .....	111
<i>Zhizhuo Li, Leyao Wang, Zhe Li, Hao Wang</i>	
Study on Hybrid Recycling CLSC Based on Fuzzy Neural Network Robust Control.....	117
<i>Haifeng Guo, Shanshan Xie</i>	
Research on APIOBPCS Closed-Loop Supply Chain Based on Distributed Predictive Control Under Data-Driven.....	123
<i>Haifeng Guo, Weize Sun</i>	
Towards Robust Prediction of Tobacco Box Logistics System Status: A Multi-Feature Framework with Dynamic Graph Learning.....	129
<i>Kaihua Yang, Songliang You, Zhouyi He, Wei Ding, Shubiao Li, Zhongmin Zhang, Cheng Xu, Dingtao Lu, Jianfeng Zhang, Chunhui Zhao</i>	
Coordinated Planning of Ship Speed and Course for Collision Avoidance Based on the Improved Velocity Obstacle Method .....	135
<i>Kun Chen, Dewen Yan, Zhi Liu</i>	
An Improved Backstepping Control Method for Trajectory Tracking of Autonomous Vehicles .....	141
<i>Juqi Hu, Houyi Wang, Changyin Sun, Youmin Zhang</i>	
Adaptive Cooperative Control of Heterogeneous Vehicle Platoons for Nonlinear Uncertainty Compensation with Extended State Observer .....	147
<i>Qixuan Mao, Baorui Wang, Fei Yan</i>	
Research on a Cost-Benefit Estimation Methodology for Old Ship Retrofitting .....	153
<i>Liu Jinxing, Zhang Mingyu, Zhao Yang, You Kaikai, Wang Jiahao, Dai Xiaoqiang</i>	
Feedforward Structure Selection for Linear Motion Systems with Force Ripple.....	159
<i>Ziqing Jia, Yang Zheng, Li Li</i>	
Prediction of Caustic Liquor Concentration in Alumina Evaporation Process Based on Improved Stochastic Configuration Network .....	165
<i>Xuxuan Geng</i>	
Knowledge-Guided Bayesian Network Modeling for Self-Healing Control of the FMF.....	171
<i>Yuning Zhang, Qiang Liu</i>	
Language-Guided Target Grasping in Cluttered Scenes Via Multi-Modal Information Fusion .....	177
<i>Yafei Zheng, Yuzhe Li, Yujie Chen</i>	

Sequence Contrastive Learning for Multi-Modal Alignment in Heavy Plate Rolling.....	183
<i>Yulin Ma, Hao He, Xu Wang, Gaochang Wu</i>	
Changing Time Window-Based Robust Optimization Over Time for Coagulating Process Parameter Optimization.....	189
<i>Zhiyao Li, Yingying Hao, Kang Lin, Yilin Fang</i>	
Optimal Design of Orthogonal Phase-Coded Waveforms for MIMO Radar Based on an Improved Genetic Algorithm.....	195
<i>Min Liu, Yujie Chen, Xin Zhao, Manli Zhou, Peixue Liu, Xiao Cui</i>	
Adaptive Space Decomposition and Directional Sampling Algorithm for Large-Scale Disassembly Line Balancing Problem.....	200
<i>Zhiyao Li, Yige Huang, Kang Lin, Yilin Fang</i>	
Adaptive Neural Output-Feedback Control for Discrete-Time Hysteretic Nonlinear Systems and Their Applications.....	206
<i>Zhengnian He, Xiuyu Zhang, Xinkai Chen, Yue Wang, Yingzhou Wang, Miaolei Zhou</i>	
Adaptive Neural Tracking Control for Switched Nonlinear Systems with Predictive Performance Based on Command Filter.....	212
<i>Xue Wang, Weimin Chen, Zhijie Ye</i>	
Fault Diagnosis of Rod Pumping Systems Based on the Local Density of Dynamometer Cards.....	218
<i>Changhao Jiang, Jinghao Li, Rui Gao</i>	
Design of a Heating Water Tank Monitoring System Based on Node-RED.....	224
<i>Shuaihao Liu, Jialu Fan</i>	
Automated Detection and Counting of Nematodes in Microscopy Images Using Advanced Object Detection Models.....	230
<i>Haoyu Niu, Andreas Westphal, Yangquan Chen</i>	
Lightweight Industrial Anomaly Detection Via Multi-Architecture Knowledge Distillation.....	236
<i>Yuhao Yan, Zhuo Li, Chenyan Zhao, Lin Meng</i>	
Distributed Node-To-Node Monitoring for Multi-ASV Formation Tracking Under Unknown Nonlinear Dynamics.....	242
<i>Yibo Jiang, Xiao Fang, Jinyao Shi, Tingwen Huang</i>	
RIB-SLAM: A Radar-Inertial-Barometer SLAM System with High-Precision Elevation Estimation.....	248
<i>Hang Zhen, Ronghe Jin, Zekai Luan, Zhi Gao</i>	
Pipeline Leakage Diagnosis Method Based on LSTM-Attention-CNN.....	254
<i>Xianming Lang, Jingkai Hua, Jiangtao Cao, Qiang Liu, Jianmiao Zhu</i>	
Applicability of Low-Rank Adaptation in Vision Transformer at Fine-Grained Image Classification Tasks.....	259
<i>Hikaru Fukusaka, Lin Meng</i>	
A Self-Contrastive Learning-Based Method for Small Pipeline Leak Detection.....	265
<i>Xianming Lang, Shuaiqi Yang, Jiangtao Cao, Qiang Liu</i>	
An Ultra Wide Band Ranging Correction Method Based on Improved Whale Optimization Algorithm and Deep Learning.....	270
<i>Zhenbo Song, Yueyang Huang</i>	

Action Recognition Using MEViViT:Modality Embedding ViViT.....	276
<i>Takashi Higashi, Ryoto Ishibashi, Lin Meng</i>	
Distributed Model Predictive Consensus of Discrete-Time Multi-Agent Systems Under DoS Attacks.....	282
<i>Xinhe Wang</i>	
Soft Sensor Modeling Based on Exponential-LSTM and Spatiotemporal Feature Fusion.....	288
<i>Xiaoyue Liu, Danya Xu, Jingfei Wang, Yujie Chen, Tao Yang</i>	
Hybrid Dynamic Multiobjective Optimization Algorithm Via Easy Transfer Learning and Interpolated ESN Prediction.....	294
<i>Zhixuan Qi, Cuili Yang</i>	
Two-Stage-Decoupled Approach for Distributed Prescribed-Time Resource Allocation on Unbalanced Digraphs .....	300
<i>Kai Wu, Yuezhu Lv, Jialing Zhou</i>	
Stability Analysis and Anti-Windup Design of Uncertain Discrete-Time Switched Fuzzy Systems Subject to Actuator Saturation.....	306
<i>Chao Yuan, Xinquan Zhang, Bihe Wu, Jiahui Zhou</i>	
Stability Analysis and Anti-Windup Design of Uncertain Switched Fuzzy Systems with Actuator Saturation .....	312
<i>Bihe Wu, Xinquan Zhang, Chao Yuan, Xinyu Du</i>	
Contour Analysis System of Thick Plates in Hot Rolling Via Machine Vision.....	318
<i>Zhidong Guan, Jinliang Ding</i>	
Detection of Moisture Content in Sintered Mixture Based on Spatial and Channel Reconstruction Convolution and Multimodal Feature Fusion.....	324
<i>Zishang Ning, Ping Zhou</i>	
Hyperparameter Tuning of LSTM Load Forecasting Model Based on Segmented Bayesian Optimization.....	330
<i>Junjie Xu, Yu Feng, Md Alauddin, Wenmin Fan</i>	
MSRDC-ELA: Multi-Scale Domain Generalization Model for Anomaly Detection of Fused Magnesium Furnaces.....	336
<i>Qiang Liu, Yishuai Liu, Jialin An</i>	
A Q-Learning-Based Bi-Objective Memetic Algorithm for Electric Vehicle Charging and Discharging Schedule.....	342
<i>Yanbo Wang, Aohan Wang, Yangzi Yu, Xinfu Pang, Xiang Fang, Wei Liu</i>	
Attack-Free Bipartite Consensus of Multi-Agent Systems Via Distributed Unknown-Input Observers.....	347
<i>Zhe Liu, Wenliang Peng</i>	
Deeply Separable Large Kernel Convolution Merging Global Attention for Pavement Defect Detection .....	353
<i>Aixi Yang, Jiahao Jiang, Kuan Zhang, Xueli Ge, Fumin Wang, Yi Liu</i>	
APDM: Cyclic-Aware Attentional Diffusion Model with Parametric Prior Fusion for Probabilistic Multivariate Time Series Forecasting.....	358
<i>Hongkun Lai, Danya Xu, Jingfei Wang, Yujie Chen, Tao Yang</i>	

Probabilistic Inference-Based Cooperative Path Planning for Multiple Autonomous Surface Vehicle Systems.....	364
<i>Xinyu Liu, Han Shen, Dan Zhao</i>	
Operational Dynamics and Hub Performance of the Beijing-Shanghai High-Speed Railway: A Data-Driven Analysis .....	370
<i>Renlong Li, Xuewu Dai, Dongliang Cui, Shengping Yu, Jianming Li</i>	
Generalizable SOH Prediction Under Variable Conditions: A Hybrid Deep Learning Model Optimized by Grey Wolf Algorithm .....	376
<i>Aohan Wang, Yanbo Wang, Wei Sun, Xinfu Pang, Pengwei Yu, Haibo Li</i>	
Overload Vehicle Detection with Object Detection and Geometric Features .....	381
<i>Mingkun Gao, Tun Qiu, Dehong Yang, Pan Zhang, Zhonghua Zhao, Jie Yang</i>	
Research on Segmental Loads Coal Blending Model and Sulfur Constraint Adjustment .....	387
<i>Yang Li, Ziyuan Wang, Xiaodi Huang, Yanchen Jiang, Qiansheng Li, Guangbo Wang, Jun Li, Yongfu Wang</i>	
VPF-DETR: Improved RT-DETR-Based Object Detection for Traffic Sign.....	394
<i>Bohang Chao, Xiaofei Liao, Qixuan Tan, Guangyu Li, Chunlong Xu, Xi Cheng</i>	
An Online Prediction Approach for Sludge Bulking Utilizing Adaptive Recursive RBFNN .....	399
<i>Qiumei Cong, Kexin Zhang, Xingqiu Jiang, Jian Tang</i>	
Online Prediction of Oxygen Content in Municipal Solid Waste Incineration Process Based on Improved Random Weight Neural Network .....	405
<i>Qiumei Cong, Huan Li, Mengyuan Zhang, Jian Tang</i>	
A Soft Sensor Method for Quality Prediction in Industrial Processes Based on Multi-Rate Autoencoder Regression.....	411
<i>Jingjing Wang, Qiang Liu</i>	
Enhancing Prediction Confidence in Multi-Source Source-Free Domain Adaptation for Fault Diagnosis.....	417
<i>Qinan Sun, Yongchao Zhang, Jinliang Ding</i>	
A Study on the Wafer Fab Scheduling Problem Based on an Improved Differential Evolution Algorithm .....	424
<i>Liheng Zhang, Wenhua Tao, Jiaming Wang, Qingyu Li, Jiayu Wu, Shuang Li</i>	
Motion Control for Quadruped Robots: Integrating Model Predictive and Impedance Control Strategies .....	430
<i>Jiawei Nie, Zhi Li, Aiping Zhou</i>	
A Sequential Transfer Optimization Framework for Expensive Optimization Problems .....	436
<i>Wangpeng Huang, Cuie Yang, Jinliang Ding</i>	
Transferring Vision-Language-Action Models to Industry Applications: Architectures, Performance, and Challenges .....	442
<i>Shuai Li, Yizhe Chen, Dong Li, Sichao Liu, Dapeng Lan, Yu Liu, Zhibo Pang</i>	
A Knowledge Graph and Rule Engine Based Operational Reasoning Framework for Electromechanical Equipments .....	448
<i>Yisong Li, Zhitao Jiang, Yuan Li</i>	

Application of Stochastic Configuration Networks in Offshore Wind Power Forecasting Projects Under Extreme Weather Conditions .....	454
<i>Yonggang Wang, Bingbing Yu, Kai Cui, Yutong Ma, Yongbo Yu</i>	
A Degradation-Enhanced Battery Remaining Useful Life Prediction Framework Based on Auxiliary Learning .....	460
<i>Zhirui Zhao, Juanru Zhao, Ning Li</i>	
Funnel Control of Euler-Lagrange Systems with Independent Control Gains .....	466
<i>Xiao-Ke Tong, Jin-Xi Zhang</i>	
Prescribed Performance Control of Marine Surface Vessels with Dead-Zone Inputs .....	472
<i>Hong-Wei Jia, Jin-Xi Zhang</i>	
Prescribed Performance Control of Spacecraft with Backlash-Like Hysteresis Inputs .....	478
<i>Jia Di, Jin-Xi Zhang</i>	
An Ensemble Stochastic Configuration Network for Soft Sensing in Multi-Condition Industrial Processes .....	484
<i>Zhaoyuan Zhang, Yusai Wang, Chunpeng Yang, Kai Sun</i>	
Liaoh-CobotMagic-PnP: An Imitation Learning Dataset of Intelligent Robot for Industrial Applications.....	490
<i>Yizhe Chen, Qi Wang, Dongxiao Hu, Jingzhe Fang, Sichao Liu, Zixin An, Haoran Liu, Hongliang Niu, Dong Li, Chuanfeng Feng, Dapeng Lan, Yu Liu, Zhibo Pang</i>	
BatteryBERT for Realistic Battery Fault Detection Using Point-Masked Signal Modeling .....	498
<i>Songqi Zhou, Ruixue Liu, Yixing Wang, Jia Lu, Benben Jiang</i>	
Deep Learning for Accurate Angular Speed Estimation: An LSTM-Based Strong Observer .....	504
<i>Iván Hernández, Luis Ibarra, Wen Yu</i>	
PD/PID Control with Neural Compensation for Flexible-Joint Robots .....	510
<i>Saul Villegas, Wen Yu</i>	
Electric Vehicle Battery Manufacturing Supply Chain Network Design with Demand Forecasting: Insights from Fourth-Party Logistics.....	516
<i>Feiyang Yu, Na Yuan, Mingqiang Yin, Yingna Zhao, Baochen Huo</i>	
Optimizing Electric Vehicle Battery Recycling Network with Demand Forecasting from the Fourth-Party Logistics Perspective.....	522
<i>Zhiyun Han, Na Yuan, Mingqiang Yin, Yingna Zhao, Qingyang Liu</i>	
Interactive Visual Analytics Approach for Heavy-Plate Production Schedule Recommendation .....	528
<i>Wenju Liu, Tongkang Zhang, Jinliang Ding</i>	
Data-Driven Normal Operating Zone Modeling and Alarm Monitoring for Thermal Power Unit Blowers.....	534
<i>Zheng Zhang, Hanyu Zhang, Jiandong Wang, Tao Wang, Shujie Liu, Aicheng Wang, Dong Zhang</i>	
Univariate Missing Data Imputation Method Based on Stochastic Configuration Networks and Its Application in Wastewater Treatment.....	540
<i>Zhao-Zhao Zhang, Ke-Qiang Li, Kang Li, Yang Wang, Wen Yu</i>	
Receding-Horizon Diffusion Policy for Dynamic Robotic Trajectory Planning .....	546
<i>Chengzhi Yuan, Jinghan Cui, Jinwu Gao, Yuqi Liu</i>	

VAR-Based Performance Parameter Prediction and Visualization System for High-Speed Train Relays.....	553
<i>Cheng Wang, Zhuo Li, Qiang Liu, Shengping Yu</i>	
Embodiment-Agnostic Legged Manipulation with Whole-Body End-Effector Pose Tracking.....	559
<i>Zhiwei Cai, Aiping Zhou, Xiao Cui, Zhi Li</i>	
An Experimental System for Road Black Ice Formation Feature Acquisition .....	565
<i>Tun Qiu, Jie Yang, Yahui Wang, Liang Sun, Pan Zhang</i>	
Robust Tracking Control of Robotic Manipulators Under Output Constraints .....	571
<i>Qian Zhang, Jin-Xi Zhang</i>	
Construction and Validation of Single-Modal Dataset for Municipal Solid Waste Incineration Processes .....	577
<i>Hao Tian, Jian Tang, Yapeng Hua, Weiwei Yang, Xiaoxian Yang, Chunsheng Yang</i>	
Current Forecasting in Fused Magnesia Furnaces Under Varying Operating Conditions Using Temporal Fusion Transformer .....	582
<i>Han Wang, Shaowen Lu, Meirong Xu</i>	
A Modified Siamese Neural Network for Real-Time Visual Defect Detection in Manufacturing .....	588
<i>Yao Xuan Ng, Xiang Li</i>	
Control Strategy Based on Preventing Impact During the Engagement of Multi-Mode Clutch .....	594
<i>Yang Gao, Yiqiang Liu, Jiangfeng Liu, Zhengxing Dai, Ruiguang Wang, Zhidong Gao, Man Wang, Congqian Wang</i>	
Comparing Traditional Machine Learning and Deep Learning Methods for Imbalanced Vibration Signal-Based Tool Condition Monitoring.....	599
<i>Jianbiao Wan, Kar Peo Yar, Malcolm Yoke Hean Low, Chunling Du</i>	
Optimizing CNC Spare-Parts Inventory with AI: Cutting Costs Without Compromising Availability .....	605
<i>Jianbiao Wan, Kar Peo Yar, Malcolm Yoke Hean Low, David Loke, Chunling Du</i>	
Distributed Nash Equilibrium Seeking for Multi-Cluster Games of Second-Order Nonlinear Systems Over Weight-Unbalanced Digraphs.....	611
<i>Yangchen Li, Shuo Sun, Fan Li, Yujie Chen, Tao Yang</i>	
Detection Method of Cigarette Label Die Cutting Size Based on High Precision CCD Imaging System .....	617
<i>Hong Liang, Mingbing Yao, Lei Ye, Xi Yang, Feiran Pu, Yinchun A</i>	
Evaluation of Packaging Printing Quality Defects Based on Linear Array CCD.....	623
<i>Yong Sun, Xinhan Yang, Ruijun Deng, Jing Jin, Jianfeng Zhang, Yushu Gong</i>	
Convergence Rate Analysis of Distributed Gradient Descent with a Trust Region Method .....	628
<i>Yukun Zhang, Lei Xu, Yujie Chen, Tao Yang</i>	
Modeling and Control of Steam Flow for Municipal Solid Waste Incineration Processes.....	634
<i>Yan Liu, Wei Wang, Jian Tang, Yongqi Zhang, Zenan Li, Yicong Wu</i>	
Multi-Agent Interior-Point Policy Optimization Algorithm for Multi-Objective Resource Allocation Problem .....	639
<i>Shuo Sun, Xuesi Zhao, Yangchen Li, Yujie Chen, Tao Yang</i>	

Benchmark Operation Condition Multimodal Dataset Construction for Municipal Solid Waste Incineration Processes .....	645
<i>Yapeng Hua, Jian Tang, Tianzheng Wang, Hao Tian, Mingjun Sun, Chunsheng Yang</i>	
Distributionally Robust Model Predictive Control with Mixture of Gaussian Processes.....	650
<i>Jingyi Wu, Chao Ning</i>	
End-To-End Predictive Cruise Control of Connected Autonomous and Vehicles Via Distributed Model Predictive Control .....	656
<i>Jiaze Li, Weinan Gao, Yujie Chen</i>	
Constrained Tracking Control of Marine Surface Vessels with Discontinuous References .....	662
<i>Wei-Li Qi, Jin-Xi Zhang, Wei Ding</i>	
Flue Gas Oxygen Content Prediction for MSWI Process Based on Multimodal Deep Features .....	668
<i>Xiaoxian Yang, Jian Tang, Hao Tian, Weiwei Yang, Mingjun Sun, Chunsheng Yang</i>	
Semi-Supervised Modeling of Dioxin in Municipal Solid Waste Incineration Process Based on Partial Least Squares Sample Alignment.....	673
<i>Wangwang Cui, Jian Tang, Zi Wang, Mingjun Sun, Qian Yu, Chunsheng Yang</i>	
Integrating Large Language Models with Electrical Muscle Stimulation for Intelligent Hand Movement and Scene Understanding .....	678
<i>Bohan Deng, Yuxuan She, Yunde Zhang, Tianhang Zheng</i>	
Research on Filter Rod Counting System Based on Computer Vision Technology .....	684
<i>Ren Yao Zhang, Ping Yang, Junhan Wen, Jiaji Li, Silin Yang, Minxian Li, Qingna Duan, Chunhong Li, Chenxi Li, Shuhan Yang, Changsheng Zhang</i>	
VELO: A Variational Autoencoder Enhanced Differential Evolution Algorithm for Task Offloading in Vehicular Edge Computing.....	690
<i>Jiashuo Luo, Junqi Zhang, Yuhao Yang, Yanan Liu, Jiahui Zhai, Jing Bi</i>	
An Image Measurement Method for Indentation of Box Packaging Paper in Cigarette Packaging Production .....	696
<i>Ruijun Deng, Xinhan Yang, Hong Liang, Mingbing Yao, Wenhao Bi, Yushu Gong</i>	
Optimization of Multi-Impurity Water Network Based on GSA with Adaptive Adjustment of Gravitational and Repulsive Forces.....	702
<i>Ziwei Zhou, Siwen Xie, Yongfang Xie</i>	
Machine Learning-Based Design Optimization for Uncertain Rotor Systems.....	708
<i>Yaqiong Zhang, Jinchao Liu, Chao Fu, Heng Zhao, Fubin Wang</i>	
Acidic Gases Prediction Model for Municipal Solid Waste Incineration Processes.....	714
<i>Zenan Li, Wei Wang, Jian Tang, Yicong Wu, Yan Liu, Yongqi Zhang</i>	
Dual-Layer Optimization for Furnace Temperature Optimized Setpoint and Its Tracking Control .....	719
<i>Yicong Wu, Wei Wang, Jian Tang, Zenan Li, Yongqi Zhang, Yan Liu</i>	
Control Strategy for Reducing the Resistance of the Dog Clutch Disengagement.....	724
<i>Yang Gao, Dongyang Xin, Congqian Wang, Man Wang, Ruiguang Wang, Jiangfeng Liu, Zhengxing Dai, Yiqiang Liu</i>	
Operational Optimal Control of Flotation Processes Via Multi-Step Reinforcement Learning .....	730
<i>Wenbo Zhang, Jinna Li, Shaowen Lu</i>	

Data-Driven Simulation System for Industrial Fused Magnesia Furnaces ..... 736  
*Bin Wang, Shaowen Lu*

**Author Index**