

2026 IEEE International conference on Advanced Systems and Emergent Technologies (IC_ASET 2026)

**Hammamet-Yasmine, Tunisia
26-28 March 2026**

IEEE Catalog Number:
ISBN:

CFP26J92-POD
979-8-3195-4162-8



Copyright © 2026, IEEE

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:	CFP26J92-POD
ISBN (Print-On-Demand):	979-8-3195-4162-8
ISBN (Online):	979-8-3195-4161-1

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

TABLE OF CONTENTS

Enhancing Measurement Accuracy Through AI-Driven Calibration and Error Correction in RF Spectrum Analyzers	1
<i>MA. Nadia Fezai, MA. Houda Nfata, Abdessattar Ben Amor</i>	
Hybrid Metaheuristic-Based Decision Support Framework for Employee Transportation Optimization	7
<i>Nefissa Mlika, Hejer Khlif</i>	
Robust State Functional Observer Design for Nonlinear Systems	13
<i>Ridha Aloui, Naceur Benhadj Braiek</i>	
Comparative Study of YOLO Lightweight Models for Real-Time Land Cover Segmentation from High-Resolution Satellite Images	19
<i>Mohamed Mehdi Saied, Mohamed Amine Bouallegui, Imen Saidi</i>	
AI-Driven IT Technologies for Optimization of Accounting and Marketing Strategies	25
<i>Hassan Ali Al-Ababneh</i>	
Modeling, Design, and Enhanced Control of Hybrid Energy Storage for Standalone PV Systems	31
<i>Heba Mohammed Saeed Haji, Mohammed Obaid Mustafa</i>	
A Pallet-Jack-Type Mobile Robot for Pallet Transfer Operations	37
<i>Ryuichi Fujiwara, Yoshimasa Nakano, Ken'ichi Yano, Risako Shimizu, Junya Nakanishi</i>	
Adaptive Robust Self-Triggered Control of Polynomial Fuzzy Systems with Time-Varying Uncertainties and Communication Delays	43
<i>Dine El Houda Hammami, Saber Maraoui, Kais Bouzrara</i>	
Self-Triggered ADMM-Based Distributed NMPC under Communication Delays: A Comparative Study	49
<i>Dine El Houda Hammami, Saber Maraoui, Kais Bouzrara</i>	
Time Series Prediction of Humidity in Greenhouse Using GRU Neural Network Architectures	55
<i>Safa Nahedh, Rayene Kraiem, Elyes Feki, Mohamed Aymen Zermani, Abdelkader Mami</i>	
Effective Intrusion Detection in Industrial IoT Networks Using a Hybrid GAN-CNN Framework	61
<i>Amal Bouazzi, Mariem Benslama, Abdelhamid Helali, Wajdi Saadaoui</i>	
Multiclass Classification of Alzheimer's Disease Stages from MRI Using a CNN	66
<i>Nour El Houda Boulkrinat, Samir Saada, Hamza Taourirt</i>	
AI-Powered Predictive Marketing: Enhancing Customer Engagement Through Data Intelligence	72
<i>Noor Ahmad Alkhudierat</i>	
A Deep Learning Based Intrusion Detection Framework for Smart Grids using CGAN, CNN, and SVM	78
<i>Mariam Ben Slama, Amal Bouazzi, Saadaoui Wajdi, Helali Abdelhamid</i>	
Faults Detection in Wireless Sensor Networks (WSN) Using One Dimensional Convolution Neural Network CNN-1D	84
<i>Fedi Mokhtar Gran, Khaoula Bouazzi, Wajdi Saadaoui, Abdelhamid Helali</i>	
Electrothermal Analysis of 14-nm Silicon Gate-All-Around Transistors	90
<i>Haifa Bahri, Faouzi Nasri, Nejeh Jaba</i>	

An Automated Machine Learning Approach Integrating Explainable AI for Anemia Detection	94
<i>Amel Mounia Djebbar, Adnen El Amraoui</i>	
Techno-Economic Assessment of Hydrogen Integrated Hybrid Renewable Systems for Island Applications	100
<i>Mohamed Hajjaji, Christian Cristofari, Tchougoune Moustapha Mai, Dhafer Mezghani, Maude CHIN Choi Abdelkader Mami</i>	
Cloud-based IoT Monitoring and Analysis of a Real Heating System	107
<i>Nikolay Komitov</i>	
A Radon Transform-Based Framework for Target Detection in Low-Visibility Foggy Environments	113
<i>Asem Khmag, Raja Mostafa Ali Salem, Retaj Abd Almajd Alahresh</i>	
Next Generation IoT Powered Biometric and Face Recognition E-Voting Framework for Instant Authentication and Live Monitoring System	119
<i>V. Parmeshwari, A. Chellamani, S. Deepak Kumar, P. DhilipKumar</i>	
A Composite Inertia Index for Renewable-Dominated Grids: A Case Study on the ERCOT System	125
<i>Ammar Samir Abdelwahab, Istvan Vokony</i>	
Detecting Credential Theft in Vehicular RPL Networks: A Cross-Layer Behavioral Framework	131
<i>Imen Loussaief, Faouzi Jaidi, Khaled Nouri</i>	
RAVYA: Youth - Led and Women Focused Entrepreneurship Through an Inclusive Portal	137
<i>Sabitha R, Mariadarsha Rajam A, Orrin Leroy H</i>	
A Meta-Learning Framework for Resilient UAV Swarm Networks	142
<i>Aymen Shiri, Mohamed Hechmi Jeridi, Riadh Ouersighni</i>	
Enhancing Photovoltaic Performance in Arid Climates Through Synergistic Passive Jute Cooling and PSO-MPPT Optimization	148
<i>Mahmoud Chaabani, Sami Zdiri, Slah Sbika, Moez Soltani, Abderrahmane Zaafouri</i>	
KNN-Assisted Graphene -Based THz Biosensor for Liver Cancer Detection	154
<i>Hamza Wertani, Aymen Hlali, Hamza Ben Krid, Hassen Zairi</i>	
Adaptive AI-Based Crowd Density Estimation for Real-Time Video Analytics in Smart Public Spaces	159
<i>Tejas Pravinbhai Patel</i>	
Intelligent Multi-Gas Sensing Using a Graphene-integrated Terahertz Metasurface Optimized by Machine Learning	165
<i>Aymen Hlali, Hamza Wertani, Hamza Ben Krid, Hassen Zairi</i>	
AI in Islamic Banking: Smart Risk Governance	171
<i>Ibrahim Radwan Alnsour</i>	
From Offline to Real-Time: Deploying AMG-Based Hand Gesture Recognition on Resource-Constrained Embedded Systems	177
<i>Shili Wala Eddine, Slim Yacoub, Youssef SERRESTOU, Kosai Raoof</i>	
SVM-Enhanced Graphene Terahertz Biosensor for Accurate Cervical Cancer Detection	183
<i>Hamza Ben Krid, Aymen Hlali, Hamza Wertani, Hassen Zairi</i>	

Real-Time Implementation of ANFIS-Backstepping MPPT for PV-SEPIC Converters	188
<i>Khalil Chnini, Dalinda Dhifaoui, Houda Jouini, Hatem Allagui</i>	
Single Cavity SIW Band-Pass Filter Using CSRR for WiFi 6E Applications	194
<i>Sirine Aouine Chaieb, Sabri Beldi, Ali Gharsallah</i>	
Impacts of Low-Frequency Speed Ripples from an Islanded Alternator for Diagnostic Purposes	199
<i>Ahmed Sboui, Mohamed Salah, Khmais Bacha, Nasr Ghanmi, Abdelbaki Fahem</i>	
Bond Graph Linear Functional Observer for Sensor Fault Diagnosis	204
<i>Rim Attafi, Sami Souissi, Habib Dallagi</i>	
ML-Driven Row-Hammer Attack Detection and Impact Mitigation for RISC-V Architecture	210
<i>Arya Jain, Anirudh Kulkarni, Ankushkumar Yemekar, Arjun Rao K, Srinivasa V S Sarma D</i>	
Chaos Suppression in Electric Vehicle Application with PM Synchronous Motor by Proposing Adaptive Control	216
<i>Montaha Ghidhaoui, Wahid Souhail, Hedi Khammari</i>	
A Dual-Mode Cryptosystem Based on AES-256 a Key Generated by GEFPE to Secure Images.	222
<i>Riad Saidi, Nada Cherid, Tarek Bentahar</i>	
A Domain-Specific Large Language Model for Security and Non-Security Vulnerability Detection and Remediation in Learning Management Systems	228
<i>Hemant Sharma, Anurag Rana, Mahesh Kumar</i>	
Evaluating Green AI Techniques in the Context of Cybercrime Prevention: A Review of 5G Networks	234
<i>Ibrahim Ali Kh Shati, Mohamed Farid Soliman Gernaz, Riad Soliman Salem Jernz Adel Soliman Ahmed Arfa</i>	
Deep Learning-Based Brain Tumor Detection in MRI Using a Hybrid YOLOv8 and InceptionV3 Model	240
<i>Asem Khmag, Mawada Shhob, Shymaa Khmag</i>	
Reliable LLM-Powered Decision Engines for Large-Scale Supply Chain Operations: Architecture, Safety, and Performance Guarantees	246
<i>Nirmal Kumar Jingar</i>	
Service Robotics for Automated Tourist Assistance in Smart Destinations	252
<i>Maher Odeh Falah Alshamaileh, Lama'a Al-Orainat, Hassan Ali Al-Ababneh, Fatin A. Elhaj, Ahmed Ameen Mhran Alzoubi, Ahmed Farhan Al-Amayreh</i>	
Energy Management and Techno-Economic Optimization of a Hybrid PV/Wind/Diesel/Battery Microgrid Using Metaheuristic Algorithms	258
<i>Abidi Lobna, Saadaoui Wajdi, Bouazzi Khaoula, Helali Abdelhamid</i>	
Impact of Discretisation Methods in Battery SPM Models Design on EKF-Based State Estimation	264
<i>Mohamed Bahloul, Luis D. Couto, Feng Guo, Grietus Mulder</i>	
Edge-GIS: Precision Monitoring of Soil Erosion and Moisture Using Georeferenced Smart Cameras	270
<i>Naji Guedri, Ali Nsaibi, Rached Gharbi</i>	
Hybrid Multi-Stage Clustering for the General Pickup and Delivery Problem	275
<i>Hanan Aydi, Sameh Chtourou, Adnen El-Amraoui, Ahmed Frikha, François Delmotte</i>	

AI-Driven RIS-Assisted OFDM-ISAC Framework for Smart City Target Detection in Terahertz 6G Networks	281
<i>Zid Souad, Becha Anis, Ammar Noemen</i>	
Revisiting 1998 Torque Data: a Machine Learning Analysis of Time Series Data for Tapping Experiments	287
<i>Alaa Al Najjar, Nakul Havaladar, Valentin Plenk, Marco Linß</i>	
Design and Optimal Sizing of a Containerized Hybrid Microgrid for Remote Military Outposts	294
<i>Hamadi Bouaicha, Tarek Azzabi, Khalil Ayari</i>	
Implementation of Machine Learning to Load Forecasting in the Automotive Industry	300
<i>Vishen Sunkardutt, Kumeshan Reddy</i>	
Exploring Implicit Neural Representations in Image Deconvolution with Non-Sparse Kernels	307
<i>Omar Zribi, Mouna Sahnoun, Sébastien Valette, Voichita Maxim, Fathi KALLEL</i>	
Port-Hamiltonian Modeling and IDA-PBC Control of an Extended SEPIC Converter for Bidirectional V2X Applications	313
<i>Hatem SGHIRI, Marouan MARZOUG, Chaouki Mnasri, Faouzi BACHA</i>	
Enhancing Forest Fire Prediction Through Explainable Ai-Driven Feature Selection: A Case Study in Khenchela Province, Algeria	319
<i>Abdelhakim Sahour, Mohamed Lamri, Farouk Boumehrez, Abdelaali Bekhouche, Ferial Aouissi Fouzia Maamri</i>	
Transfer Learning Based-Detection of Mango Leaf Diseases: A Case Study from Gajwel, Telangana	325
<i>M.S.S. Bhargav, Sania Begum</i>	
A Hybrid Multi-Modal Framework for Fake Social Media Account Detection using BERT, ResNet, and Social Network Analysis	332
<i>Santosh R S, Suhas M S, Viresh S Alagawadi, Chetana Srinivas</i>	
A Review of Transcranial Electromagnetic Stimulation Applied in Medical Diagnosis of Psychological and Neurological Disorders	338
<i>Amal Jriri, Adnen CHERIF</i>	
A Triple-Mode OFB-CTR-CBC Cryptosystem Based on AES-256 to Secure InSAR Interferograms	344
<i>Nada Cherrid, Riad Saidi, Tarek Bentahar, Hanfoug Salah</i>	
Power Control of a Low Power DFIG-Wind Turbine Using PI Controller	350
<i>Sabrine Soltani, Mohamed Abbes, Slah Farhani, Faouzi Bacha</i>	
Optuna-Tuned Hybrid A*-DWA Planner for 3D Quadcopter Navigation in Dynamic Environments	356
<i>Nada Braiek, Imen Saidi</i>	
A Mathematical Optimization Model for Operating Room Planning and Scheduling Problem with Variable Time-Slot Discretizations	362
<i>Khadija Sefraoui, Fouad Maliki, Asma Ouled Bedhief, Najla Aissaoui Omrane, Mehdi Souier Safa Bhar Layeb</i>	
Wildfire Risk Prediction using an IoT Sensing Architecture and Fuzzy-Logic-Driven Inference	367
<i>Abdelhakim Sahour, Farouk Boumehrez, Mohamed Lamri, Fouzia Maamri, Hanane Djellab Abdelaali Bekhouche</i>	

Impact of the QUIC Protocol for Video Streaming Applications in Vehicular Environments	373
<i>Farouk Boumehrez, Hana Elhachi, Mohamed Aymen Labiod, Abdelhakim Sahour, Salah Redadaa</i>	
Raspberry Pi4 Implementation for Alzheimer Detection Based CNN Architecture in MRI Images	378
<i>Marwa Fradi, Khaled Issa, Ahmed Iheb Ayed, Wassim Zaraii, Mohsen Machhout</i>	
Dynamic Sliding Mode Control for Complex Multidimensional Systems Applied to an Intelligent Electric Vehicle Platform	384
<i>Lajmi Fatma, Achraf Jabeur Telmoudi, Jaouher Chroua</i>	
Control and Optimal Energy Management for a Pump, Battery, and Photovoltaic System Connected to the Electrical Grid	390
<i>Mokhtar Abbassi, Abdelkarim Aouiti, Faouzi Bacha</i>	
Multi-Resolution Feature Learning for Traffic Light Recognition via Wavelet-Enhanced CNN	395
<i>Rim Trabelsi, Khaled Nouri</i>	
Super-Twisting Sliding Mode Control of an ARVIN Bidirectional DC–DC Converter for V2G/G2V Applications	401
<i>MARZOUG Marouan, GHAFARI Fakhreddine, JOUILI Mabrouk, BACHA Faouzi</i>	
Optimal Integration between Experimental Phenotyping Analysis and a Modified 1D-CNN Network: A Pipelined-Framework for Epileptic Seizures Detection	407
<i>Magdi B. M. Amien, Abdulkareem Abd Ali Mohammed, Ibtihal Hassan Elshekh, Antoun Elias Francis Ahmed Fragoon</i>	
Design and Optimization of an Eight-Thruster Control System for a Ship-Hull Inspection ROV	413
<i>Chiheb Zaoui, Tarek Azzabi, Saber Hachicha, Youssef Ben Gaied Hassine, Habib Dallagi</i>	
Control and Detection of Epileptic Seizure Using Machine Learning Techniques: K-Means Clustering Application	419
<i>Houda Ghidhaoui, Wahid Souhail, Hedi Khammari</i>	
Optimized Elevator Systems Group Control Using Genetic Algorithms	425
<i>Zaid Jaber, Awos Kanan</i>	
Techno-Economic Assessment of an Off-Grid Hybrid PV-Hydrogen Electric Vehicle Charging Station Using HOMER	430
<i>Slah Farhani, Islem Kaddechi, Faouzi Bacha</i>	
Robust Sliding Mode Control for Trajectory Tracking of an Autonomous Mobile Robot	435
<i>Ameni Rezgui, Hosni Rtibi, Salwa Elloumi</i>	
Adaptive Belief-Based Fusion for Robust RF Classification Under Low SNR	441
<i>MA. Houda Nfata, MA. Nadia Fezai</i>	
Dynamic Modeling and Experimental Validation of ARMROV: Pitch/Roll Stability for Underwater Hull Cleaning	447
<i>Chiheb Zaoui, Saber Hachicha, Ahmed Mouhli, Tarek Azzabi, Maher Bouazizi, Habib Dallagi</i>	
Terrain Classification From Human Gait Patterns Using Temporal Feature–Enhanced Multilayer Perceptron Model: A Cross-Participant Study	453
<i>Amal Mekni, Jyotindra Narayan, Hassène Gritli</i>	

Design, Modeling, and Optimization of Flexible Copper-Polyester Interfaces for Human Head Protection Against RF Exposure	459
<i>Bouali Lazhar</i>	
A Systematic Survey of Data-Driven Optimization Approaches for Sustainable and Circular Reverse Logistics	465
<i>Rihab Ben Amor, Nadia Bahria, Najla Aissaoui</i>	
Data-Driven Modeling of a PEM Water Electrolyzer Using Fuzzy C-Regression Models	471
<i>Amal Ben Maiz, Achraf Jabeur Telmoudi, Mahdi Boukerdja, Belkacem OULD BOUAMAMA</i>	
TSA-CA: Tumor-Scale Aware Curriculum Augmentation for Post-Treatment Glioma Segmentation	477
<i>Amel Omri, Khaoula ElBedoui, Giansalvo Cirrincione, Safya Belghith</i>	
PatientCNN-Attention: An Attention-Based Multiple Instance Learning for Parkinson's Disease Detection Using Convolution Neural Network	483
<i>Malek Khedhiri, Wafa Abid Fourati, Jyotindra Narayan, Hassène Gritli</i>	
STRIKE: Secure Transmission via Reconstruction-Integrated Key-based Encoding	489
<i>Khan Farhan Rafat</i>	
Cybersecurity and IT Technologies as a Driver of Digital Marketing Sustainability	495
<i>Hassan Ali Al-Ababneh, Rahmeh Salman Haddadin, Fayez M. Al-Khawaldeh, Akef Yousef Alzyadat</i>	
<i>Noor Ahmad Alkhudierat, Farah Hanna Zawaideh</i>	
Digital Marketing and IT Technologies: Cyber Security as an Element of Brand Trust	502
<i>Hassan Ali Al-Ababneh, Mukhles M. Al-Ababneh, Rahmeh Salman Haddadin, Akef Yousef Alzyadat</i>	
<i>Noor Ahmad Alkhudierat, Farah Hanna Zawaideh</i>	
Deploying a Multilingual Generative AI System for Customer Support: A CRISP-DM Approach	508
<i>Moahmed Aymen Slim, Maryem Chaibi, Afef Abdelkrim</i>	
Deep Learning for Retinal Disease Classification: A Comparison of InceptionV3 and MobileNetV2	514
<i>Samar Ghabhab, Amna Maraoui, Imen Werda</i>	
Geometry-Aware Tensor-Based Channel Estimation for Planar RIS-Assisted OFDM Systems	518
<i>Zid Souad, Becha Anis, Ammar Noemeen</i>	
Polynomial Kolmogorov-Arnold Networks for Fault Detection and Diagnosis in Industrial Systems	524
<i>Lazhar Khriji, Majdi Mansouri, Khadija Attouri, Abdelmalek Kouadri</i>	
Efficient Fault Detection and Classification in Solar Power Systems	530
<i>Majdi Mansouri, Khadija Attouri, Abdulnasir Hossen, Abdullah Al-Badi, Rami Al-Hmouz</i>	
<i>Abdelmalek Kouadri</i>	
Data-Driven Multi-Modal Fusion Approach for Fault Classification in Wind Turbines	536
<i>Khadija Attouri, Majdi Mansouri, Abdelmalek Kouadri, Lazhar Kheriji</i>	
ResNet-101 with Modified Bottleneck Attention for Improved Diabetic Retinopathy Classification	541
<i>Venkata Naga Pushyami Sanikommu, Parimala Garnepudi</i>	
Deep Reinforcement Learning-Based Obstacle Avoidance for Embedded Mobile Robot Navigation	547
<i>Sarra Ben Halima, Faten Ben Abdallah, Joseph Haggege</i>	

Hydrogen System Production for Sustainable Energy: Modeling and Analysis of the PV—Electrolyzer—PEM Fuel Cell Chain	553
<i>Nada Abderrahmen, Intissar Moussa, Adel Khedher</i>	
The Intelligent Electric Vehicle Using Adaptive Sliding Mode Monitoring for Nonlinear Complex Systems	560
<i>Lajmi Fatma, Achraf Jabeur Telmoudi, Jaouher Chroua</i>	
Hybrid Renewable Energy Sources Powered IPMSM Drive With MMC for Electric Vehicle Application	565
<i>Oussama Nasr, Intissar Moussa, Adel Khedher</i>	
Lightweight ECIES-Like Secure Communication Using Optimized ECEG for Constrained IoT Devices	572
<i>Sondes Baccouri, Tarek Azzabi</i>	
Improved Estimation of Wind Turbine Bearing Lifespan via Advanced Machine Learning Models	578
<i>Ameni JELLALI, Hamida MAATALLAH, Kaïs OUNI, Lilia EL AMRAOUI</i>	
Functional Observer of Stringing Machine: Bond Graph Modeling, Simulation and Practice	584
<i>Rim Attafi, Sami Souissi, Habib Dallagi</i>	
A Structured Multi-Criteria Decision Making Approach for Lithium Battery Selection in Electric Vehicle Applications	591
<i>Imen Azzouz, Kais Brik, Faouzi Ben Ammar</i>	
A High-Efficiency Strategy for PV Integration in Highway EV Charging Station	597
<i>Wiem Brahim, Fatma Bouaziz, Achraf Abdelkafi, Abdelkarim Masmoudi, Lotfi Krichen</i>	
Improved Estimation of Wind Turbine Bearing Lifespan via Advanced Machine Learning Models	603
<i>Ameni Jellali, Hamida Maatallah, Kaïs Ouni, Lilia El Amraoui</i>	
Spectro-Temporal Features via 2D-AR Modeling with SWIPE-Based Prosodic Information for Robust ASR	609
<i>Youssef Zouhir, Mohamed Zarka, Lilia El Amraoui, Kaïs Ouni</i>	
Detection and Classification of Cracks on Ship Hulls Using Artificial Intelligence	615
<i>Anis Charrada, Chiheb Zaoui, Habib Dallagi</i>	
Secure and Low-Latency LoRA-Based Wban for Tactical Health Monitoring	621
<i>Sondes Baccouri, Feten Slimeni, Tarek Azzabi, Ahmed Siala</i>	
Employing Transfer Learning Enabled Convolution Neural Networks for Deep Fake Voice Detection	627
<i>Navod Neranjan Thilakarathne, Kasorn Galajit, Hayati Yassin, Chandratilak De Silva Liyanage</i>	
Electric Vehicle-Based Frequency Regulation: A Sustainable Approach for the Power Grid	633
<i>Jihene Jmal, Mouna Rekik, Lotfi Krichen</i>	
Design of an Optimal Load Shedding Management Strategy in a Stand-Alone Wind Power System	639
<i>Asma Majdoub, Abdelkarim Masmoudi, Achraf Abdelkafi, Lotfi Krichen</i>	
Defensive Architectures for LLM-Based Fraud Detection Against Data Poisoning and Prompt Injection	644
<i>Divija Vijaya Ganiga</i>	

Neural Network-Based Soft Sensor for Color Prediction in Turbid Media: Application to Agro-Food Quality Control	650
<i>Yassine Hachaïchi, Elyes Maherzi, Chiheb Naffeti</i>	
A Non Singular Terminal Sliding Mode Control (NTSMC) of BLUE ROV2 for Trajectory Tracking with External Disturbances	655
<i>Sami Souissi, Rim Attafi, Mohamed Boukattaya, Habib Dallagi</i>	
Energy Flow Coordination and Mode-Based Supervision in Off-Grid Residential Systems Combining PV, Energy Storage and Electric Vehicle	661
<i>Mariam Jebali, Fatma Bouaziz, Achraf Abdelkafi, Abdelkarim Masmoudi, Lotfi Krichen</i>	
Predictive Control of a Hybrid PEM Electrolyzer-Fuel Cell System for Frequency and Voltage Regulation in High PV Penetration Grids	667
<i>El Manaa Barhoumi, Sulaiman Z. Almutairi, Kamel Sayahi, Abdel Aziz Raslan, Slah Farhani, Faouzi Bacha</i>	
Perfection in Precision: An Ensemble Deep Learning Framework with Soft Voting for Accurate Date Palm Disease Detection	672
<i>Yassine Hachaïchi</i>	
Transformer-Based AI Modelling of CEO Demographic Profiles and Leadership Archetypes	678
<i>Shailendra Kadre, R.V. Naveenan, Elizabeth Chacko, Krishna Mohgan Durbha</i>	
Energy Management System of the Hybrid Electric Vehicle HEV	683
<i>Dalinda Dhifaoui, Khalil Chnini, Houda JOUINI Chaabouni, Raouf Mobasheri, Abdel Kader Mami</i>	