

No.	Co-authors	Article title	Keywords	Vol., No., pp.	DOI	Citation
1	Doreswamy, D., Bongale, A.M., Hegde, A.H., Bayezeed, A.A., Das, V., S.P., Bhat, S., N.V.K., Castelino, E., Jain, K., Bhat, S.K.	Human-Hand Inspired Elastomeric Soft Pneumatic Actuators: Mapping the Research Landscape and Prospects	soft actuators, PneuNet, elastomers, soft robotics, hand	57, 4, 935-943	https://doi.org/10.18280/jesa.570401	Doreswamy, D., Bongale, A.M., Hegde, A.H., Bayezeed, A.A., Das, V., S.P., Bhat, S., N.V.K., Castelino, E., Jain, K., Bhat, S.K. (2024). Human-hand inspired elastomeric soft pneumatic actuators: Mapping the research landscape and prospects. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 57, No. 4, pp. 935-943. https://doi.org/10.18280/jesa.570401
2	Al-msary, A.J.K., Talib, A.H., Kadhim, B.S.	The Impact of Concurrent Engineering Techniques on Assembly Line Redesign: An Applied Study	concurrent engineering, idle time, team concurrent engineering, assembly line	57, 4, 945-952	https://doi.org/10.18280/jesa.570402	Al-msary, A.J.K., Talib, A.H., Kadhim, B.S. (2024). The impact of concurrent engineering techniques on assembly line redesign: An applied study. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 57, No. 4, pp. 945-952. https://doi.org/10.18280/jesa.570402
3	Hamoodi, S.A., Hamoodi, A.N., Mohammed, R.A.N.	Design and Simulation of Smart Grid Based on Solar Photovoltaic and Wind Turbine Plants	smart grid, solar PV plant, wind turbine plant, power generation, Mosul climate data	57, 4, 953-961	https://doi.org/10.18280/jesa.570403	Hamoodi, S.A., Hamoodi, A.N., Mohammed, R.A.N. (2024). Design and simulation of smart grid based on solar photovoltaic and wind turbine plants. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 57, No. 4, pp. 953-961. https://doi.org/10.18280/jesa.570403
4	Amin, S.A., Kareem, A.H., Marhoon, I.I., Kattab, D.A.A.N., Majdi, H.S.	Investigation of Welding Heat Input Influences on the Characteristics of Welded Joint of Storage Tank Wall Using Multiple Passes	M-A phase, AF formation, ANSYS, SOLIDWORKS design, corrosion resistance	57, 4, 963-973	https://doi.org/10.18280/jesa.570404	Amin, S.A., Kareem, A.H., Marhoon, I.I., Kattab, D.A.A.N., Majdi, H.S. (2024). Investigation of welding heat input influences on the characteristics of welded joint of storage tank wall using multiple passes. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 57, No. 4, pp. 963-973. https://doi.org/10.18280/jesa.570404
5	Huu, H.B., Nga, V.N., Minh, D.B., Thanh, B.D., Quoc, V.D.	Analysis of SPMSMs with Outer Rotor Configuration by Analytical Model and Finite Element Technique	surface-mounted-permanent magnet synchronous motor, outer rotor configuration, analytical method, finite element technique	57, 4, 975-980	https://doi.org/10.18280/jesa.570405	Huu, H.B., Nga, V.N., Minh, D.B., Thanh, B.D., Quoc, V.D. (2024). Analysis of SPMSMs with outer rotor configuration by analytical model and finite element technique. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 57, No. 4, pp. 975-980. https://doi.org/10.18280/jesa.570405
6	Yaseen, F.R., Kadhim, M.Q., Al-Khazraji, H., Humaidi, A.J.	Decentralized Control Design for Heating System in Multi-Zone Buildings Based on Whale Optimization Algorithm	heating system, energy consumption, control system, PID controller, swarm optimization techniques, whale optimization algorithm	57, 4, 981-989	https://doi.org/10.18280/jesa.570406	Yaseen, F.R., Kadhim, M.Q., Al-Khazraji, H., Humaidi, A.J. (2024). Decentralized control design for heating system in multi-zone buildings based on whale optimization algorithm. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 57, No. 4, pp. 981-989. https://doi.org/10.18280/jesa.570406
7	Cheikh, K., Boudi, E.M., Rabi, R., Mokhliss, H.	Evaluating Economic Performance and Robustness of Maintenance Strategies for Degrading Systems	performance, robustness, stochastic degradation, condition-based maintenance, time-based maintenance, renewal process, Monte Carlo method, decision-making	57, 4, 991-1003	https://doi.org/10.18280/jesa.570407	Cheikh, K., Boudi, E.M., Rabi, R., Mokhliss, H. (2024). Evaluating economic performance and robustness of maintenance strategies for degrading systems. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 57, No. 4, pp. 991-1003. https://doi.org/10.18280/jesa.570407
8	Khaleel, R.Z., Khaleel, H.Z., Al-Hareeri, A.A.A., Al-Obaidi, A.S.M., Humaidi, A.J.	Improved Trajectory Planning of Mobile Robot Based on Pelican Optimization Algorithm	mobile robot, POA, PSO, trajectory, obstacles	57, 4, 1005-1013	https://doi.org/10.18280/jesa.570408	Khaleel, R.Z., Khaleel, H.Z., Al-Hareeri, A.A.A., Al-Obaidi, A.S.M., Humaidi, A.J. (2024). Improved trajectory planning of mobile robot based on pelican optimization algorithm. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 57, No. 4, pp. 1005-1013. https://doi.org/10.18280/jesa.570408
9	Al-Yozbaky, O.S., Othman, R.A.	The Influence of Non-Sinusoidal Power Supply on Single-Phase Transformer Performance	non-sinusoidal supply, transformer losses, non-linear loads, B-H curve, THD	57, 4, 1015-1022	https://doi.org/10.18280/jesa.570409	Al-Yozbaky, O.S., Othman, R.A. (2024). The influence of non-sinusoidal power supply on single-phase transformer performance. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 57, No. 4, pp. 1015-1022. https://doi.org/10.18280/jesa.570409
10	Munaf, A., Almusawi, A.R.J.	Integration of Q-Learning and PID Controller for Mobile Robots Trajectory Tracking in Unknown Environments	Q-learning, path planning, differential drive, mobile robot, trajectory tracking, reinforcement learning (RL), robotics, PID controller	57, 4, 1023-1033	https://doi.org/10.18280/jesa.570410	Munaf, A., Almusawi, A.R.J. (2024). Integration of Q-learning and PID controller for mobile robots trajectory tracking in unknown environments. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 57, No. 4, pp. 1023-1033. https://doi.org/10.18280/jesa.570410
11	Mennad, M., Abderrahim, B., Youcef, D.	Enhancing Performance and Optimizing Energy Utilization and Voltage Regulation in Hybrid Wind-Solar Pumping Systems	wind turbines, photovoltaic systems, induction motor, saturation magnetic, pumping systems, sliding mode control, fuzzy logic control	57, 4, 1035-1045	https://doi.org/10.18280/jesa.570411	Mennad, M., Abderrahim, B., Youcef, D. (2024). Enhancing performance and optimizing energy utilization and voltage regulation in hybrid wind-solar pumping systems. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 57, No. 4, pp. 1035-1045. https://doi.org/10.18280/jesa.570411
12	Suphongwibunphan, R., Sangsuwan, T., Hansot, J., Wongsaroj, W., Thong-un, N.	A Novel Method for Knitted Fabric Defect Classification Using Image Processing and Weighted Voting Classifiers	defect classification, knitting fabrics, LabVIEW, machine learning, NI myRIO, weighted voting classifier	57, 4, 1047-1056	https://doi.org/10.18280/jesa.570412	Suphongwibunphan, R., Sangsuwan, T., Hansot, J., Wongsaroj, W., Thong-un, N. (2024). A novel method for knitted fabric defect classification using image processing and weighted voting classifiers. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 57, No. 4, pp. 1047-1056. https://doi.org/10.18280/jesa.570412
13	Al-Sadoon, M.G.D., Ali, O.M.	Energy, Exergy and Economic Analysis of Al-Qayyarah Gas Power Plant	simple cycle, gas turbine, energy analysis, exergy, irreversibility	57, 4, 1057-1066	https://doi.org/10.18280/jesa.570413	Al-Sadoon, M.G.D., Ali, O.M. (2024). Energy, exergy and economic analysis of Al-Qayyarah gas power plant. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 57, No. 4, pp. 1057-1066. https://doi.org/10.18280/jesa.570413
14	Oleiwi, B.K., Aboot, L.H.	Enhanced PD Controller for Speed Control of Electric Vehicle Based on Gorilla Troops Algorithm	electric vehicle, motor speed, nonlinear PD, gorilla troops optimization	57, 4, 1067-1073	https://doi.org/10.18280/jesa.570414	Oleiwi, B.K., Aboot, L.H. (2024). Enhanced PD controller for speed control of electric vehicle based on gorilla troops algorithm. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 57, No. 4, pp. 1067-1073. https://doi.org/10.18280/jesa.570414
15	Rani, M.D., Lakshmi, V.S.G.	Optimization-Based Approaches for Boosting Microgrid Resilience to Fault Events	microgrid, optimization, demand, fault, reliability, load demand, stability	57, 4, 1075-1089	https://doi.org/10.18280/jesa.570415	Rani, M.D., Lakshmi, V.S.G. (2024). Optimization-based approaches for boosting microgrid resilience to fault events. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 57, No. 4, pp. 1075-1089. https://doi.org/10.18280/jesa.570415
16	Namwad, R.S., Mishra, N.K., Ranu, Jain, P.	Optimizing Inventory Management with Seasonal Demand Forecasting in a Fuzzy Environment	supply model, shortages, forecasting demand, artificial intelligence, machine learning, deterioration, carbon pollution policy, finite planning horizon	57, 4, 1091-1102	https://doi.org/10.18280/jesa.570416	Namwad, R.S., Mishra, N.K., Ranu, Jain, P. (2024). Optimizing inventory management with seasonal demand forecasting in a fuzzy environment. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 57, No. 4, pp. 1091-1102. https://doi.org/10.18280/jesa.570416

17	Hadi, E.F., Bin Baharuddin, M.Z., Zuhdi, A.W.M.	Advancing Predictive Maintenance: Median-Based Particle Filtering in MOSFET Prognostics	predictive maintenance, Remaining Useful Life (RUL), MOSFET devices, Adaptive Particle Filter (APF), Gaussian Process Regression (GPR), prognostic model, genetic algorithm, resampling strategies	57, 4, 1103-1117	https://doi.org/10.18280/jesa.570417	Hadi, E.F., Bin Baharuddin, M.Z., Zuhdi, A.W.M. (2024). Advancing predictive maintenance: Median-based particle filtering in MOSFET prognostics. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 57, No. 4, pp. 1103-1117. https://doi.org/10.18280/jesa.570417
18	Namel, A.T., Sahib, M.A.	Data-Driven Based Bispectral Index Prediction During General Anesthesia	general anesthesia, machine learning, BIS prediction, PK-PD model, DOH, regression learning models	57, 4, 1119-1126	https://doi.org/10.18280/jesa.570418	Namel, A.T., Sahib, M.A. (2024). Data-driven based bispectral index prediction during general anesthesia. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 57, No. 4, pp. 1119-1126. https://doi.org/10.18280/jesa.570418
19	Rahi, A.S., Alwash, S.F.	Accurate Power Control for Hybrid PV-Battery/Supercapacitor System	power management, DC microgrids, bidirectional DC-DC converters	57, 4, 1127-1133	https://doi.org/10.18280/jesa.570419	Rahi, A.S., Alwash, S.F. (2024). Accurate power control for hybrid PV-battery/supercapacitor system. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 57, No. 4, pp. 1127-1133. https://doi.org/10.18280/jesa.570419
20	Juwana, W.E., Alfaiz, N.F., Prasetyo, S.D., Rachmanto, R.A., Bangun, W.B., Arifin, Z.	Techno-Economic Analysis of Solar-Wind Powered EV Charging Stations at Train Station Parking Lots	HOMER-Grid, PV-wind turbine hybrid system, EV-charging, train station	57, 4, 1135-1143	https://doi.org/10.18280/jesa.570420	Juwana, W.E., Alfaiz, N.F., Prasetyo, S.D., Rachmanto, R.A., Bangun, W.B., Arifin, Z. (2024). Techno-economic analysis of solar-wind powered EV charging stations at train station parking lots. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 57, No. 4, pp. 1135-1143. https://doi.org/10.18280/jesa.570420
21	Patil, P., Kadam, S.U., Aruna, E.R., More, A., M., B.R., Rao, B.N.K.	Recommendation System for E-Commerce Using Collaborative Filtering	recommendation, collaborative filtering, e-commerce	57, 4, 1145-1153	https://doi.org/10.18280/jesa.570421	Patil, P., Kadam, S.U., Aruna, E.R., More, A., M., B.R., Rao, B.N.K. (2024). Recommendation system for e-commerce using collaborative filtering. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 57, No. 4, pp. 1145-1153. https://doi.org/10.18280/jesa.570421
22	Cheggaga, N., Dahli, K., Hammouda, M.R., Benallal, A., Ilinca, A.	Innovative Shade Mitigation Technique for Maximizing Solar Energy Efficiency in Roof-Mounted PV Systems	astronomical equations, PV efficiency, photovoltaic systems, shading avoidance	57, 4, 1155-1164	https://doi.org/10.18280/jesa.570422	Cheggaga, N., Dahli, K., Hammouda, M.R., Benallal, A., Ilinca, A. (2024). Innovative shade mitigation technique for maximizing solar energy efficiency in roof-mounted PV systems. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 57, No. 4, pp. 1155-1164. https://doi.org/10.18280/jesa.570422
23	Madyatmadja, E.D., Candra, H., Nathaniel, J., Jonathan, M.R., Rudy.	Sentiment Analysis on User Reviews of Threads Applications in Indonesia	user review, machine learning, naive bayes, SVM, random forest, preprocessing, sentiment analysis	57, 4, 1165-1171	https://doi.org/10.18280/jesa.570423	Madyatmadja, E.D., Candra, H., Nathaniel, J., Jonathan, M.R., Rudy. (2024). Sentiment analysis on user reviews of Threads applications in Indonesia. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 57, No. 4, pp. 1165-1171. https://doi.org/10.18280/jesa.570423
24	Bensaad, D., Hadjadj, A., Djekidel, R., Ales, A.	Analytical Modeling and Experimental Validation of Common Mode Impedance in a Low- Voltage DC Micro-Grid	DC micro-grid, electromagnetic interference, common mode, impedance, conducted electromagnetic, converter DC-DC, power converters, analytical modeling electrical installation	57, 4, 1173-1183	https://doi.org/10.18280/jesa.570424	Bensaad, D., Hadjadj, A., Djekidel, R., Ales, A. (2024). Analytical modeling and experimental validation of common mode impedance in a low- voltage DC micro-grid. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 57, No. 4, pp. 1173-1183. https://doi.org/10.18280/jesa.570424
25	Jadhav, P., A, S.V., Singh, A., Kolhar, S., Mahajan, S.	Reinforcement Learning for Rolling Bearing Fault Diagnosis—A Comprehensive Review	deep learning, fault detection, machine learning, reinforcement learning, deep Q networks, predictive maintenance	57, 4, 1185-1193	https://doi.org/10.18280/jesa.570425	Jadhav, P., A, S.V., Singh, A., Kolhar, S., Mahajan, S. (2024). Reinforcement learning for rolling bearing fault diagnosis—A comprehensive review. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 57, No. 4, pp. 1185-1193. https://doi.org/10.18280/jesa.570425
26	Mahmood, M.S., Shareef, I.R.	Applications of Artificial Intelligence for Smart Conveyor Belt Monitoring Systems: A Comprehensive Review	AI systems in conveyor belt, CNN models, densenet classification, learning algorithms, visual recognition	57, 4, 1195-1206	https://doi.org/10.18280/jesa.570426	Mahmood, M.S., Shareef, I.R. (2024). Applications of artificial intelligence for smart conveyor belt monitoring systems: A comprehensive review. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 57, No. 4, pp. 1195-1206. https://doi.org/10.18280/jesa.570426
27	Mistiawan, A., Suhartono, D.	Product Matching with Two-Branch Neural Network Embedding	deep learning, BERT, CharacterBERT, EfficientNet, ArcFace, product matching	57, 4, 1207-1214	https://doi.org/10.18280/jesa.570427	Mistiawan, A., Suhartono, D. (2024). Product matching with two-branch neural network embedding. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 57, No. 4, pp. 1207-1214. https://doi.org/10.18280/jesa.570427
28	Mauludin, M.S., Khairudin, M., Asnawi, R., Prasetyo, S.D., Alfaiz, N.F., Arifin, Z.	Modeling and Application of Rain-Light Sensor in Automatic Clothes Drying Design	prototype, design, automatic clothesline, Arduino	57, 4, 1215-1223	https://doi.org/10.18280/jesa.570428	Mauludin, M.S., Khairudin, M., Asnawi, R., Prasetyo, S.D., Alfaiz, N.F., Arifin, Z. (2024). Modeling and application of rain-light sensor in automatic clothes drying design. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 57, No. 4, pp. 1215-1223. https://doi.org/10.18280/jesa.570428
29	Izgheche, Y., Bahi, T., Lakhdara, A.	Intelligent Power Management Control for Hybrid Wind Solar Battery Systems Connected to Micro-Grids	optimization, hybrid system, energy storage, battery, management, SOC, FLC	57, 4, 1225-1233	https://doi.org/10.18280/jesa.570429	Izgheche, Y., Bahi, T., Lakhdara, A. (2024). Intelligent power management control for hybrid wind solar battery systems connected to micro-grids. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 57, No. 4, pp. 1225-1233. https://doi.org/10.18280/jesa.570429
30	Ikumapayi, O.M., Laseinde, O.T.	Nanomanufacturing in the 21st Century: A Review of Advancements, Applications and Future Prospects	nanomanufacturing, nanotechnology, energy, 21st century, microscopes, innovative techniques	57, 4, 1235-1248	https://doi.org/10.18280/jesa.570430	Ikumapayi, O.M., Laseinde, O.T. (2024). Nanomanufacturing in the 21st century: A review of advancements, applications and future prospects. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 57, No. 4, pp. 1235-1248. https://doi.org/10.18280/jesa.570430
31	Dayananda, P., Srikantaswamy, M., Nagaraju, S., Nanjundaswamy, M.H.	A Machine Learning-Based Smart Grid Protection and Control Framework Using Kalman Filters for Enhanced Power Management	machine learning, smart grid, power management system, kalman filter, renewable energy	57, 3, 639-651	https://doi.org/10.18280/jesa.570301	Dayananda, P., Srikantaswamy, M., Nagaraju, S., Nanjundaswamy, M.H. (2024). A machine learning-based smart grid protection and control framework using Kalman filters for enhanced power management. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 57, No. 3, pp. 639-651. https://doi.org/10.18280/jesa.570301
32	Mohammed, B.M., Alsaadi, M., Khalaf, M., Awad, A.S.	Game Theory-Based Multi-Hop Routing Protocol with Metaheuristic Optimization-Based Clustering Process in WSN for Precision Agriculture	game theory, optimization, WSN, precision agriculture, routing, clustering	57, 3, 653-662	https://doi.org/10.18280/jesa.570302	Mohammed, B.M., Alsaadi, M., Khalaf, M., Awad, A.S. (2024). Game theory-based multi-hop routing protocol with metaheuristic optimization-based clustering process in WSN for precision agriculture. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 57, No. 3, pp. 653-662. https://doi.org/10.18280/jesa.570302

33	Charif, M., Allad, M., Bensidhoum, M.O.	Implementation of Simple Fuzzy PI Controller for Liquid Level Cascade Control	programmable logic controller, PLC, conventional controller, PID, simplest fuzzy controller, SFLC, level/ flow cascade control	57, 3, 663-670	https://doi.org/10.18280/jesa.570303	Charif, M., Allad, M., Bensidhoum, M.O. (2024). Implementation of simple fuzzy PI controller for liquid level cascade control. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 57, No. 3, pp. 663-670. https://doi.org/10.18280/jesa.570303
34	Abdullahi, M.O., Mohamud, I.H., Mohamud, F.A.S.	Mapping the Research Landscape of Reverse Logistics in E-Commerce: A Bibliometric Analysis from 2003 to 2023	reverse logistics, e-commerce, bibliometric, VOSviewer, sustainable development	57, 3, 671-679	https://doi.org/10.18280/jesa.570304	Abdullahi, M.O., Mohamud, I.H., Mohamud, F.A.S. (2024). Mapping the research landscape of reverse logistics in e-commerce: A bibliometric analysis from 2003 to 2023. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 57, No. 3, pp. 671-679. https://doi.org/10.18280/jesa.570304
35	Talha, F., Benmouiza, K., Birane, M.	In-Depth Comparison of PV Array Configurations and Boost Converter Topologies Using P&O and PSO Techniques	PSO, MPPT, topology, PV system, boost converter	57, 3, 681-687	https://doi.org/10.18280/jesa.570305	Talha, F., Benmouiza, K., Birane, M. (2024). In-depth comparison of PV array configurations and boost converter topologies using P&O and PSO techniques. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 57, No. 3, pp. 681-687. https://doi.org/10.18280/jesa.570305
36	Abdelhamid, H., Bahi, T.	Performance Analysis of Maximum Power Point Tracking for Grid-Photovoltaic System	photovoltaic, buck-boost, DC control, MPPT, incremental conductance, grid system	57, 3, 689-697	https://doi.org/10.18280/jesa.570306	Abdelhamid, H., Bahi, T. (2024). Performance analysis of maximum power point tracking for grid-photovoltaic system. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 57, No. 3, pp. 689-694. https://doi.org/10.18280/jesa.570306
37	AL-Qaysi, H.K.	Unified Power Flow Controller (UPFC) Used to Relieve Power Congestion on a 500/230 kV Grid	unified power flow controller (UPFC), power congestion, grid stability, voltage regulation, power system reliability	57, 3, 699-708	https://doi.org/10.18280/jesa.570307	AL-Qaysi, H.K. (2024). Unified power flow controller (UPFC) used to relieve power congestion on a 500/230 kV grid. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 57, No. 3, pp. 699-708. https://doi.org/10.18280/jesa.570307
38	Enad, M.H., Hassan, R.F., Khaleel Mahmoud, A.A., Humaidi, A.J.	Performance Evaluation of a 2DOF_PID Controller Using Metaheuristic Optimization Algorithms	2DOF_PID, optimization, metaheuristic, PSO, genetic, dragonfly	57, 3, 709-715	https://doi.org/10.18280/jesa.570308	Enad, M.H., Hassan, R.F., Khaleel Mahmoud, A.A., Humaidi, A.J. (2024). Performance evaluation of a 2DOF_PID controller using metaheuristic optimization algorithms. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 57, No. 3, pp. 709-715. https://doi.org/10.18280/jesa.570308
39	Kadpan, W.R., Mustafa, F.F., Kadhim, H.T.	A Review of Control Automatically Water Irrigation Canal Using Multi Controllers and Sensors	automatic irrigation, control water irrigation canals, PLC, Arduino, Raspberry Pi, ultrasonic sensor, irrigation gate	57, 3, 717-727	https://doi.org/10.18280/jesa.570309	Kadpan, W.R., Mustafa, F.F., Kadhim, H.T. (2024). A review of control automatically water irrigation canal using multi controllers and sensors. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 57, No. 3, pp. 717-727. https://doi.org/10.18280/jesa.570309
40	Hamoudi, A.K., Rasheed, L.T.	Design of an Adaptive Integral Sliding Mode Controller for Position Control of Electronic Throttle Valve	electronic throttle valve, adaptive integral sliding mode controller, disturbance, parameters uncertainty, chattering	57, 3, 729-735	https://doi.org/10.18280/jesa.570310	Hamoudi, A.K., Rasheed, L.T. (2024). Design of an adaptive integral sliding mode controller for position control of electronic throttle valve. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 57, No. 3, pp. 729-735. https://doi.org/10.18280/jesa.570310
41	Al-Shuka, H., Kaleel, A.H.	Whole-Body Anti-Input Saturation Control of a Bipedal Robot	bipedal locomotion, whole-body control, zero-moment point, decentralized adaptive control, bipedal dynamics	57, 3, 737-745	https://doi.org/10.18280/jesa.570311	Al-Shuka, H., Kaleel, A.H. (2024). Whole-body anti-input saturation control of a bipedal robot. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 57, No. 3, pp. 737-745. https://doi.org/10.18280/jesa.570311
42	Savangboon, T., Chaithanakulwat, A., Thungsuk, N., Tanaram, T., Sardyoung, P.	Fuzzy Logic Control for High-Frequency Switching in Photovoltaic SEPIC DC/DC Converters and Three-Phase Inverters	renewable energy, SEPIC, high-frequency, fuzzy logic control, boost converters, buck-boost converters, Proportional-Integral (PI) control, microcontroller	57, 3, 747-756	https://doi.org/10.18280/jesa.570312	Savangboon, T., Chaithanakulwat, A., Thungsuk, N., Tanaram, T., Sardyoung, P. (2024). Fuzzy logic control for high-frequency switching in photovoltaic SEPIC DC/DC converters and three-phase inverters. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 57, No. 3, pp. 747-756. https://doi.org/10.18280/jesa.570312
43	Lehmam, S., El Hassani, H.	Supply Chain Risk Mitigation: Modeling an Approach for Greater Visibility in Moroccan Automotive Industry	supply chain, resilience, risk management, Covid-19, visibility	57, 3, 757-766	https://doi.org/10.18280/jesa.570313	Lehmam, S., El Hassani, H. (2024). Supply chain risk mitigation: Modeling an approach for greater visibility in Moroccan automotive industry. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 57, No. 3, pp. 757-766. https://doi.org/10.18280/jesa.570313
44	Naji, R.M., Dulaimi, H., Al-Khazraji, H.	An Optimized PID Controller Using Enhanced Bat Algorithm in Drilling Processes	drilling process, production, PID controller, swam optimization, enhance bat algorithm	57, 3, 767-772	https://doi.org/10.18280/jesa.570314	Naji, R.M., Dulaimi, H., Al-Khazraji, H. (2024). An optimized PID controller using enhanced bat algorithm in drilling processes. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 57, No. 3, pp. 767-772. https://doi.org/10.18280/jesa.570314
45	Ghani, N.M.A., Nasir, N.M., Hashim, A.A.A.	Comparative Analysis of Spiral Dynamic Algorithm and Artificial Bee Colony Optimization for Position Control of Flexible Link Manipulators	PID controller, DC motor, MATLAB, ABC SDA, flexible link manipulator	57, 3, 773-779	https://doi.org/10.18280/jesa.570315	Ghani, N.M.A., Nasir, N.M., Hashim, A.A.A. (2024). Comparative analysis of spiral dynamic algorithm and artificial bee colony optimization for position control of flexible link manipulators. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 57, No. 3, pp. 773-779. https://doi.org/10.18280/jesa.570315
46	Jouda, M.A., Shiker, M.A.K.	Comparing the Effectiveness of PERT and CPM Techniques in a House Construction Project: A Case Study	activities, critical path method, CPM, project management, review technology, PERT	57, 3, 781-785	https://doi.org/10.18280/jesa.570316	Jouda, M.A., Shiker, M.A.K. (2024). Comparing the effectiveness of PERT and CPM techniques in a house construction project: A case study. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 57, No. 3, pp. 781-785. https://doi.org/10.18280/jesa.570316
47	Kaittan, K.H., Mohammed, S.J.	PLC-SCADA Automation of Inlet Wastewater Treatment Processes: Design, Implementation, and Evaluation	BOD, COD, PH, PLC-S7300, SCADA, TCP/IP, TIA portal, wastewater treatment	57, 3, 787-796	https://doi.org/10.18280/jesa.570317	Kaittan, K.H., Mohammed, S.J. (2024). PLC-SCADA automation of inlet wastewater treatment processes: Design, implementation, and evaluation. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 57, No. 3, pp. 787-796. https://doi.org/10.18280/jesa.570317
48	Rasheed, I.M., Motlak, H.J.	Design Optimization of CMOS Folded Cascode OTA Using Water Cycle Algorithm for Enhanced Performance	water cycle algorithm, CMOS folded cascode, operational transconductance amplifier, OTA, power consumption, gain bandwidth, voltage gain, phase margin, and slew rate	57, 3, 797-803	https://doi.org/10.18280/jesa.570318	Rasheed, I.M., Motlak, H.J. (2024). Design optimization of CMOS folded cascode OTA using water cycle algorithm for enhanced performance. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 57, No. 3, pp. 797-803. https://doi.org/10.18280/jesa.570318

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50	Hussein, Z.S., Motlak, H.J.	Design Methodology for a Low-Power Two-Stage CMOS Operational Amplifier for Optical Receiver Applications	CMOS, TIA, low-noise, power reduction CMOS, Si-bipolar technology	57, 3, 815-822	https://doi.org/10.18280/jesa.570320	Hussein, Z.S., Motlak, H.J. (2024). Design methodology for a low-power two-stage CMOS operational amplifier for optical receiver applications. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 57, No. 3, pp. 815-822. https://doi.org/10.18280/jesa.570320
51	Abdulkareem, J.J., Ali, H.I., Lutfy, O.F.	Robust and Intelligent Feedforward-Feedback Controller Design for Nonlinear Systems	feedforward-feedback robust control, wavelet neural network, WNN, H-infinity controller, PSO	57, 3, 823-832	https://doi.org/10.18280/jesa.570321	Abdulkareem, J.J., Ali, H.I., Lutfy, O.F. (2024). Robust and intelligent feedforward-feedback controller design for nonlinear systems. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 57, No. 3, pp. 823-832. https://doi.org/10.18280/jesa.570321
52	Hammo, A.N., Sabry, S.S., Saied, B.M.	Design and Evaluation of Galvanic Isolation for Full Bridge DC to DC Converter	performance and evaluation, magnetic core materials, switched mode power supply	57, 3, 833-840	https://doi.org/10.18280/jesa.570322	Hammo, A.N., Sabry, S.S., Saied, B.M. (2024). Design and evaluation of galvanic isolation for full bridge DC to DC converter. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 57, No. 3, pp. 833-840. https://doi.org/10.18280/jesa.570322
53	Yahia, A.M., Alkamachi, A.	Design, Modeling, and Control of Tiltable Tri-Rotors UAV	UAV, Tri-copter, thrust vectoring, PID, genetic algorithm, feedback linearization	57, 3, 841-848	https://doi.org/10.18280/jesa.570323	Yahia, A.M., Alkamachi, A. (2024). Design, modeling, and control of tiltable tri-rotors UAV. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 57, No. 3, pp. 841-848. https://doi.org/10.18280/jesa.570323
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56	Hamad, R.W., Ismail, M.H., Raed, S.	Efficient MRI Image Real-Time Processing Using FPGA-Based IIR Filters	magnetic resonance imaging, image compression, image fusion, edge detection, Xilinx System Generator, FPGA	57, 3, 869-876	https://doi.org/10.18280/jesa.570326	Hamad, R.W., Ismail, M.H., Raed, S. (2024). Efficient MRI image real-time processing using FPGA-based IIR filters. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 57, No. 3, pp. 869-876. https://doi.org/10.18280/jesa.570326
57	Almajeed, L.A., Fadhil, L., Rasheed, A.N., Gaeid, K.S.	Enhancing Photovoltaic Panel Performance Through Artificial Neural Network and Maximum Power Point Tracking	solar radiation, photovoltaic panels, maximum power point tracking, MPPT, artificial neural networks, ANN	57, 3, 877-886	https://doi.org/10.18280/jesa.570327	Almajeed, L.A., Fadhil, L., Rasheed, A.N., Gaeid, K.S. (2024). Enhancing photovoltaic panel performance through artificial neural network and maximum power point tracking. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 57, No. 3, pp. 877-886. https://doi.org/10.18280/jesa.570327
58	Al-Ashtari, W.	Enhancing the Performance of Active Suspension Systems Through Adaptive Control	adaptive control, vehicle suspension systems, LQR, Lyapunov theorem, fine-tuning parameter	57, 3, 887-897	https://doi.org/10.18280/jesa.570328	Al-Ashtari, W. (2024). Enhancing the performance of active suspension systems through adaptive control. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 57, No. 3, pp. 887-897. https://doi.org/10.18280/jesa.570328
59	Berbiche, N., Chakir, M., Hlyal, M., El Alami, J.	An Integrated Inventory-Production-Distribution Model for Crisis Relief Supply Chain Optimization: A Systematic Review and Mixed Integer Programming Formulation	multi-echelon supply chain optimization, inventory-production-distribution model, PRISMA review, deterministic non-stationary demand, mixed integer linear programming, LINGO	57, 3, 899-920	https://doi.org/10.18280/jesa.570329	Berbiche, N., Chakir, M., Hlyal, M., El Alami, J. (2024). An integrated inventory-production-distribution model for crisis relief supply chain optimization: A systematic review and mixed integer programming formulation. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 57, No. 3, pp. 899-920. https://doi.org/10.18280/jesa.570329
60	Tajaldin, K.H., Motlak, H.J.	Enhancement of DC-DC Luo Converter Using Adaptive PI MPPT and P&O MPPT for Photovoltaic System	maximum power point tracking, perturb and observe, incremental conductance, P&O with proportional integral	57, 3, 921-933	https://doi.org/10.18280/jesa.570330	Tajaldin, K.H., Motlak, H.J. (2024). Enhancement of DC-DC Luo converter using adaptive PI MPPT and P&O MPPT for photovoltaic system. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 57, No. 3, pp. 921-933. https://doi.org/10.18280/jesa.570330
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63	Al-azzawi, M.M., Majdi, H.S., Abdullah, A.R.	Study of End-Effector of (2DOF) Five-Bar Robot Positioning: Accuracy, Modeling and Simulation	five-bar planar robot, gripping positioning accuracy, Matlab-Simulink	57, 2, 335-344	https://doi.org/10.18280/jesa.570203	Al-azzawi, M.M., Majdi, H.S., Abdullah, A.R. (2024). Study of end-effector of (2DOF) five-bar robot positioning: Accuracy, modeling and simulation. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 57, No. 2, pp. 335-344. https://doi.org/10.18280/jesa.570203
64	Korabayev, Y., Kosbolov, S., Kubesova, G., Shurenov, M., Duisebayeva, K.	Investigating the Design and Application of Mobile Robotic Devices with Manipulation Devices for Space Technology	space technology, robotic technology, multifunctional model, control model, autonomous robotic systems, robot manipulator	57, 2, 345-352	https://doi.org/10.18280/jesa.570204	Korabayev, Y., Kosbolov, S., Kubesova, G., Shurenov, M., Duisebayeva, K. (2024). Investigating the design and application of mobile robotic devices with manipulation devices for space technology. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 57, No. 2, pp. 345-352. https://doi.org/10.18280/jesa.570204

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66	Krim, S.A., Krim, F., Afghoul, H., Abdelmalek, F.	An Enhanced Perturb and Observe MPPT for Photovoltaic Systems Based on Fuzzy Step	photovoltaic system, matlab/simulink, perturb and observe, MPPT, DC converter	57, 2, 363-372	https://doi.org/10.18280/jesa.570206	Krim, S.A., Krim, F., Afghoul, H., Abdelmalek, F. (2024). An enhanced perturb and observe MPPT for photovoltaic systems based on fuzzy step. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 57, No. 2, pp. 363-372. https://doi.org/10.18280/jesa.570206
67	Sanusi, Bareduan, S.A., Larisang.	Identifying and Prioritizing Waste in OCTG Production Lines Through Value Stream Mapping and Borda Count Method	lean manufacturing, waste, lead time, Value Stream Mapping, Borda Count Methods	57, 2, 373-382	https://doi.org/10.18280/jesa.570207	Sanusi, Bareduan, S.A., Larisang. (2024). Identifying and prioritizing waste in OCTG production lines through Value Stream Mapping and Borda Count Method. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 57, No. 2, pp. 373-382. https://doi.org/10.18280/jesa.570207
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69	Almawla, A.M., Hussein, M.J., Abdullah, A.T.	A Comparative Study of DC Motor Speed Control Techniques Using Fuzzy, SMC and PID	PID controller, fuzzy logic controller, FLC, sliding mode control, SMC, DC motor speed control, MATLAB SIMULINK	57, 2, 397-406	https://doi.org/10.18280/jesa.570209	Almawla, A.M., Hussein, M.J., Abdullah, A.T. (2024). A comparative study of DC motor speed control techniques using fuzzy, SMC and PID. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 57, No. 2, pp. 397-406. https://doi.org/10.18280/jesa.570209
70	Sidi, A.H., Djehaf, M.A.E.D., Kobibi, Y.I.D.	Enhanced Ball Trajectory Tracking Using Visual Servoing with 2-DOF Ball on Plate Balancing System	trajectory tracking, ball balancer, proportional derivative control, linear quadratic regulator, full state feedback control	57, 2, 407-416	https://doi.org/10.18280/jesa.570210	Sidi, A.H., Djehaf, M.A.E.D., Kobibi, Y.I.D. (2024). Enhanced ball trajectory tracking using visual servoing with 2-DOF ball on plate balancing system. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 57, No. 2, pp. 407-416. https://doi.org/10.18280/jesa.570210
71	Al-Khazraji, H., Naji, R.M., Khashan, M.K.	Optimization of Sliding Mode and Back-Stepping Controllers for AMB Systems Using Gorilla Troops Algorithm	active magnetic bearing, sliding mode control, back-stepping control, gorilla troops optimization	57, 2, 417-424	https://doi.org/10.18280/jesa.570211	Al-Khazraji, H., Naji, R.M., Khashan, M.K. (2024). Optimization of sliding mode and back-stepping controllers for AMB systems using gorilla troops algorithm. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 57, No. 2, pp. 417-424. https://doi.org/10.18280/jesa.570211
72	Anh, L.V., Linh, V.T.T.	Position Control and Anti-Sway of Overhead Crane System with Uncertain Nonlinear Model	overhead crane, radial basis function neural network, adaptive control, Lyapunov theory	57, 2, 425-431	https://doi.org/10.18280/jesa.570212	Anh, L.V., Linh, V.T.T. (2024). Position control and anti-sway of overhead crane system with uncertain nonlinear model. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 57, No. 2, pp. 425-431. https://doi.org/10.18280/jesa.570212
73	Gheni, I.Z., Al-Khafaji, H.M.H., Alwan, H.M.	Intelligent Control of Building Vibrations: A Transformer-Based Deep Reinforcement Learning Framework	vibration control, deep reinforcement learning (DRL), LQR model, state space, proximal policy optimization, transformer method	57, 2, 433-441	https://doi.org/10.18280/jesa.570213	Gheni, I.Z., Al-Khafaji, H.M.H., Alwan, H.M. (2024). Intelligent control of building vibrations: A transformer-based deep reinforcement learning framework. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 57, No. 2, pp. 433-441. https://doi.org/10.18280/jesa.570213
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76	Zermane, A.I., Bordjiba, T.	Optimizing Energy Management of Hybrid Battery-Supercapacitor Energy Storage System by Using PSO-Based Fractional Order Controller for Photovoltaic Off-Grid Installation	battery, energy management, FOPI, hybrid energy storage system (HESS), photovoltaic, supercapacitor, Particle Swarm Optimization (PSO)	57, 2, 465-475	https://doi.org/10.18280/jesa.570216	Zermane, A.I., Bordjiba, T. (2024). Optimizing energy management of hybrid battery-supercapacitor energy storage system by using PSO-based fractional order controller for photovoltaic off-grid installation. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 57, No. 2, pp. 465-475. https://doi.org/10.18280/jesa.570216
77	Behloul, R., Mazouz, L., Boudiaf, M., Benmohamed, F.E.	Enhancing Wind Energy Conversion System Performance via Sliding Mode Control and Parameter Estimation with PI-MRAS	doubly fed induction generator, PI-MRAS estimator, robustness, sensorless control, sliding mode control	57, 2, 477-486	https://doi.org/10.18280/jesa.570217	Behloul, R., Mazouz, L., Boudiaf, M., Benmohamed, F.E. (2024). Enhancing wind energy conversion system performance via sliding mode control and parameter estimation with PI-MRAS. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 57, No. 2, pp. 477-486. https://doi.org/10.18280/jesa.570217
78	Hasan, F.A., Hameed, H.Q., Rashad, L.J.	Robust Field Oriented Control of PMSM Using Lyapunov Theorem and Particle Swarm Optimization	Lyapunov theorem, particle swarm optimization (PSO), robust control, PMSM, field oriented control (FOC)	57, 2, 487-496	https://doi.org/10.18280/jesa.570218	Hasan, F.A., Hameed, H.Q., Rashad, L.J. (2024). Robust field oriented control of PMSM using lyapunov theorem and particle swarm optimization. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 57, No. 2, pp. 487-496. https://doi.org/10.18280/jesa.570218
79	Trihastuti, D., Dewi, D.R.S., Santosa, H., Yuliawati, E.	Developing a Framework on Designing a Sustainable Supply Chain by Integrating Input-Output Analysis and DEMATEL Method: A Case Study on Textile Industry in Indonesia	DEMATEL, environmental, input-output, supply chain, textile industry, WIOD	57, 2, 497-504	https://doi.org/10.18280/jesa.570219	Trihastuti, D., Dewi, D.R.S., Santosa, H., Yuliawati, E. (2024). Developing a framework on designing a sustainable supply chain by integrating input-output analysis and DEMATEL method: A case study on textile industry in Indonesia. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 57, No. 2, pp. 497-504. https://doi.org/10.18280/jesa.570219
80	Mishra, N.K., Jain, P., Ranu, Tiwari, A.	Inventory Models Under Carbon Tax and Cap-and-Trade Policies: A Comparative Analysis of Decentralized and Centralized Approaches	decentralized and centralized, linear demand time and inventory sensitive, finite planning horizon, carbon tax, and emissions trading schemes	57, 2, 505-516	https://doi.org/10.18280/jesa.570220	Mishra, N.K., Jain, P., Ranu, Tiwari, A. (2024). Inventory models under carbon tax and cap-and-trade policies: A comparative analysis of decentralized and centralized approaches. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 57, No. 2, pp. 505-516. https://doi.org/10.18280/jesa.570220

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83	Al-Kaoaz, H.N.A., Alsammak, A.N.B.	The Impact of Hybrid Power Generations on a Power System's Voltage Stability	voltage stability, hybrid energy system, ETAP, V-Q sensitivity, P-V curves, solar photovoltaic array, wind turbines, capacitor bank, RES	57, 2, 541-549	https://doi.org/10.18280/jesa.570223	Al-Kaoaz, H.N.A., Alsammak, A.N.B. (2024). The impact of hybrid power generations on a power system's voltage stability. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 57, No. 2, pp. 541-549. https://doi.org/10.18280/jesa.570223
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110	Tajaldin, K.H., Motlak, H.J.	Design and Implementation DC/DC Luo Converter Controlled by Adaptive Fractional PI and P&O MPPT	photovoltaic system, maximum power point tracking, P&O, incremental conductance, fractional order proportional integral, and beluga whale optimization	57, 1, 201-210	https://doi.org/10.18280/jesa.570120	Tajaldin, K.H., Motlak, H.J. (2024). Design and implementation DC/DC Luo Converter controlled by adaptive fractional PI and P&O MPPT. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 57, No. 1, pp. 201-210. https://doi.org/10.18280/jesa.570120
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118	Lorenzini, G., Kamarpushti, M.A., Kanan, M., Solyman, A., Ahmed, M.H., Barhoumi, E.M.	A Solution to Investigate Uncertainties in Reliability Analysis of Distribution System Based on Fuzzy Logic Method	reliability, failure rate, distribution system, fuzzy logic, uncertainties	57, 1, 289-294	https://doi.org/10.18280/jesa.570128	Lorenzini, G., Kamarpushti, M.A., Kanan, M., Solyman, A., Ahmed, M.H., Barhoumi, E.M. (2024). A solution to investigate uncertainties in reliability analysis of distribution system based on fuzzy logic method. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 57, No. 1, pp. 289-294. https://doi.org/10.18280/jesa.570128
119	Prasetyawati, M., Mutmainah, Sudarwati, W., Puteri, R.A.M., Marfuah, U., Nelfiyanti, Panudju, A.T.	Optimal Routing in Supply Chain Network Design	heuristic algorithm, demand, route, distance, supply chain, transportation	57, 1, 295-302	https://doi.org/10.18280/jesa.570129	Prasetyawati, M., Mutmainah, Sudarwati, W., Puteri, R.A.M., Marfuah, U., Nelfiyanti, Panudju, A.T. (2024). Optimal routing in supply chain network design. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 57, No. 1, pp. 295-302. https://doi.org/10.18280/jesa.570129
120	Elizabeth, A.O., Oyaka, O.S., Orowwode, H., Airoboman, A.E., Gabriel, S., Nwenenda, D.H.	Identifying Key Reliability Factors in Micro-Grid Systems Using Principal Component Analysis	micro-grid, PCA, reliability, StatistiXL, variable	57, 1, 303-309	https://doi.org/10.18280/jesa.570130	Elizabeth, A.O., Oyaka, O.S., Orowwode, H., Airoboman, A.E., Gabriel, S., Nwenenda, D.H. (2024). Identifying key reliability factors in micro-grid systems using principal component analysis. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 57, No. 1, pp. 303-309. https://doi.org/10.18280/jesa.570130
121	Truong, T.C., Vu, T.N., Duc, H.B., Quoc, V.D.	Using Genetic Algorithms for Optimal Electromagnetic Parameters of SPM Synchronous Motors	surface-mounted permanent magnet synchronous motor (SPMSM), cogging torque, torque ripple, genetic algorithm (GA), finite element method	56, 6, 899-906	https://doi.org/10.18280/jesa.560601	Truong, T.C., Vu, T.N., Duc, H.B., Quoc, V.D. (2023). Using genetic algorithms for optimal electromagnetic parameters of SPM synchronous motors. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 56, No. 6, pp. 899-906. https://doi.org/10.18280/jesa.560601
122	G, V.A.K., M, D.R.	Optimized PI tuning of DG-Integrated Shunt Active Power Filter Using Biogeography-Based Optimization Algorithm	biogeography-based optimization (BBO), solar cell, particle swarm optimization (PSO), power quality, distribution generation, THD	56, 6, 907-916	https://doi.org/10.18280/jesa.560602	G, V.A.K., M, D.R. (2023). Optimized PI tuning of DG-integrated shunt active power filter using biogeography-based optimization algorithm. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 56, No. 6, pp. 907-916. https://doi.org/10.18280/jesa.560602
123	Motukuri, D.R., Prakash, P.S., Rao, M.V.G.	Hybrid Optimization for Power Quality Assessment in Hybrid Microgrids: A Focus on Harmonics and Voltage	renewable energy, harmonic distortion, hybrid microgrid, hybrid grey wolf supported sparrow search optimization algorithm, PID controller, power quality, renewable energy, voltage quality	56, 6, 917-927	https://doi.org/10.18280/jesa.560603	Motukuri, D.R., Prakash, P.S., Rao, M.V.G. (2023). Hybrid optimization for power quality assessment in hybrid microgrids: A focus on harmonics and voltage. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 56, No. 6, pp. 917-927. https://doi.org/10.18280/jesa.560603
124	Saber, K., Elarkam, M., Zahir, A., Larabi, M.S., Colak, I.	Robust H_{∞} Optimal Control for Longitudinal and Lateral Dynamics in Small-Scale Helicopters	unmanned small-scale helicopter, longitudinal-lateral flight, mixed sensitivity, disturbance, uncertainties, H_{∞}	56, 6, 929-944	https://doi.org/10.18280/jesa.560604	Saber, K., Elarkam, M., Zahir, A., Larabi, M.S., Colak, I. (2023). Robust H_{∞} optimal control for longitudinal and lateral dynamics in small-scale helicopters. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 56, No. 6, pp. 929-944. https://doi.org/10.18280/jesa.560604
125	Ibrahim, M.A., Alsammak, A.N.B.	Reduction of Torque Ripple in Switched Reluctance Motor Drives Through Optimum Commutation Angles Control	switched reluctance motor (SRM), commutation angles control, torque ripple, bacterial foraging algorithm	56, 6, 945-950	https://doi.org/10.18280/jesa.560605	Ibrahim, M.A., Alsammak, A.N.B. (2023). Reduction of torque ripple in switched reluctance motor drives through optimum commutation angles control. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 56, No. 6, pp. 945-950. https://doi.org/10.18280/jesa.560605
126	Oudjama, F., Boumediene, A., Saidi, K., Messirdi, M.	Comparative Study of Linear and Nonlinear H-Infinity Control for an Electric Vehicle	electric vehicle, permanent magnet synchronous motor, linear H-Infinity control, Algebraic Riccati equation, nonlinear H-Infinity control, Hamilton-Jacobi-Isaacs equation, the Galerkin approximation approach	56, 6, 951-961	https://doi.org/10.18280/jesa.560606	Oudjama, F., Boumediene, A., Saidi, K., Messirdi, M. (2023). Comparative study of linear and nonlinear H-Infinity control for an electric vehicle. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 56, No. 6, pp. 951-961. https://doi.org/10.18280/jesa.560606
127	Alwash, S.M., Al-Thahab, O.Q.J., Alwash, S.F.	Modeling and Control Strategies for DFIG in Wind Turbines: A Comparative Analysis of SPWM, THIPWM, and SVPWM Techniques	SVPWM, SPWM, THIPWM, THD, wind turbine, B2B converter	56, 6, 963-972	https://doi.org/10.18280/jesa.560607	Alwash, S.M., Al-Thahab, O.Q.J., Alwash, S.F. (2023). Modeling and control strategies for DFIG in wind turbines: A comparative analysis of SPWM, THIPWM, and SVPWM techniques. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 56, No. 6, pp. 963-972. https://doi.org/10.18280/jesa.560607
128	Mohamed, M.J., Abood, L.H.	Performance Evolution of Different Optimal Controllers for Controlling AVR System	AVR system, terminal voltage, PID, sun flower optimization algorithm	56, 6, 973-979	https://doi.org/10.18280/jesa.560608	Mohamed, M.J., Abood, L.H. (2023). Performance evolution of different optimal controllers for controlling AVR system. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 56, No. 6, pp. 973-979. https://doi.org/10.18280/jesa.560608

129	Ghatage, N.B., Patil, P.D., Shinde, S.	Lightweight RNN-Based Model for Adaptive Time Series Forecasting with Concept Drift Detection in Smart Homes	time series, lightweight, recurrent neural networks (RNN), concept drift detection, adaption to concept drift	56, 6, 981-991	https://doi.org/10.18280/jesa.560609	Ghatage, N.B., Patil, P.D., Shinde, S. (2023). Lightweight RNN-based model for adaptive time series forecasting with concept drift detection in smart homes. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 56, No. 6, pp. 981-991. https://doi.org/10.18280/jesa.560609
130	Abd El Halim, A.A.E.B., Bayoumi, E.H.E., El-Khattam, W., Ibrahim, A.M.	Grid-Connected EV Fast Charging Stations Using Vector Control and CC-CV Techniques	electric vehicles, fast charging station, power quality, vector control, constant current-constant volt control	56, 6, 993-1001	https://doi.org/10.18280/jesa.560610	Abd El Halim, A.A.E.B., Bayoumi, E.H.E., El-Khattam, W., Ibrahim, A.M. (2023). Grid-connected EV fast charging stations using vector control and CC-CV techniques. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 56, No. 6, pp. 993-1001. https://doi.org/10.18280/jesa.560610
131	Pandith, M.M., Ramaswamy, N.K., Srikanthawamy, M., Ramaswamy, R.K.	Efficient Geographic Routing for High-Speed Data in Wireless Multimedia Sensor Networks	geographic routing, multilevel multimedia sensor networks (WMSNs), two-phase geography greedy forwarding (TPGF), wireless sensor network (WSN), duty-cycled WSNs	56, 6, 1003-1017	https://doi.org/10.18280/jesa.560611	Pandith, M.M., Ramaswamy, N.K., Srikanthawamy, M., Ramaswamy, R.K. (2023). Efficient geographic routing for high-speed data in wireless multimedia sensor networks. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 56, No. 6, pp. 1003-1017. https://doi.org/10.18280/jesa.560611
132	Usman, F., Wardhani, J.K., Sari, I.C., Chalim, S.	Assessing Trauma Healing Methods for Volcanic Disaster Evacuees in Indonesia	assessing, trauma healing method, eruption, evacuees, 4D IPA, temporal shelter	56, 6, 1019-1025	https://doi.org/10.18280/jesa.560612	Usman, F., Wardhani, J.K., Sari, I.C., Chalim, S. (2023). Assessing trauma healing methods for volcanic disaster evacuees in Indonesia. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 56, No. 6, pp. 1019-1025. https://doi.org/10.18280/jesa.560612
133	Namwad, R.S., Mishra, N.K., Ranu,	Trade Credit and Preservation Technologies: An Inventory Replenishment Model for a Sustainable Supply Chain	supply chain replenishment, deterioration of materials, carbon emission, preservation technology, and trade credit	56, 6, 1027-1041	https://doi.org/10.18280/jesa.560613	Namwad, R.S., Mishra, N.K., Ranu. (2023). Trade credit and preservation technologies: An inventory replenishment model for a sustainable supply chain. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 56, No. 6, pp. 1027-1041. https://doi.org/10.18280/jesa.560613
134	Al-suod, M.M.S., Ushkarenko, O., Dorohan, O., Awwad, A.E., Al-Quteimat, A.	Software Quality Assessment Technique for the Autonomous Power Plants Automated Control Systems	software quality, testing, user interface, peer review technique, quality attributes	56, 6, 1043-1051	https://doi.org/10.18280/jesa.560614	Al-suod, M.M.S., Ushkarenko, O., Dorohan, O., Awwad, A.E., Al-Quteimat, A. (2023). Software quality assessment technique for the autonomous power plants automated control systems. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 56, No. 6, pp. 1043-1051. https://doi.org/10.18280/jesa.560614
135	Al-Ashtari, W., Ali, K.H.	Design of a Hybrid Adaptive Controller for Series Elastic Actuators of Robots	MRAC, SFC, SEAs, Lyapunov stability analysis, and controller performance	56, 6, 1053-1063	https://doi.org/10.18280/jesa.560615	Al-Ashtari, W., Ali, K.H. (2023). Design of a hybrid adaptive controller for series elastic actuators of robots. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 56, No. 6, pp. 1053-1063. https://doi.org/10.18280/jesa.560615
136	Dhulkefl, E.J., Mahmood, Z.S., Nasret, A.N., Mohammed, A.B.	A New Method Investigation for Robotic Inverted Pendulum Movement and Control	gyroscope sensor, gyro sensor, mobile inverted pendulum	56, 6, 1065-1071	https://doi.org/10.18280/jesa.560616	Dhulkefl, E.J., Mahmood, Z.S., Nasret, A.N., Mohammed, A.B. (2023). A new method investigation for robotic inverted pendulum movement and control. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 56, No. 6, pp. 1065-1071. https://doi.org/10.18280/jesa.560616
137	Meguetta, Z.E.	Designing Model-Free Control with Intelligent Controller for Autopilot Altitude Regulation in Aircraft	model-free control MFC, longitudinal aircraft, intelligent controller, PID controller, autopilot altitude	56, 6, 1073-1081	https://doi.org/10.18280/jesa.560617	Meguetta, Z.E. (2023). Designing model-free control with intelligent controller for autopilot altitude regulation in aircraft. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 56, No. 6, pp. 1073-1081. https://doi.org/10.18280/jesa.560617
138	Saeed, A.M., Rijab, K.S.	PID Controller Enhanced A* Algorithm for Efficient Water Boat	UWB, path planning, avoid obstacles, A* algorithm, PID controller	56, 6, 1083-1093	https://doi.org/10.18280/jesa.560618	Saeed, A.M., Rijab, K.S. (2023). PID controller enhanced A* algorithm for efficient water boat. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 56, No. 6, pp. 1083-1093. https://doi.org/10.18280/jesa.560618
139	Dahmani, A., Himour, K., Guettaf, Y.	Optimization of Power Quality in Grid Connected Photovoltaic Systems	PVG, incremental conductance, three-level flying capacitor inverter, boost converter, pulse width modulation, THD	56, 6, 1095-1103	https://doi.org/10.18280/jesa.560619	Dahmani, A., Himour, K., Guettaf, Y. (2023). Optimization of power quality in grid connected photovoltaic systems. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 56, No. 6, pp. 1095-1103. https://doi.org/10.18280/jesa.560619
140	Hameed, A.M., Hamoudi, A.K.	A 2-Link Robot with Adaptive Sliding Mode Controlled by Barrier Function	adaptive sliding mode controller (ASMC), conventional sliding mode controller (CSMC), barrier function, saturation function, chatter	56, 6, 1105-1113	https://doi.org/10.18280/jesa.560620	Hameed, A.M., Hamoudi, A.K. (2023). A 2-link robot with adaptive sliding mode controlled by barrier function. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 56, No. 6, pp. 1105-1113. https://doi.org/10.18280/jesa.560620
141	Lachtar, N., Driss, I.	Application of Ant Colony Optimization for Job Shop Scheduling in the Pharmaceutical Industry	BIOCARE, ant colony optimization, genetic algorithm, industry, job shop scheduling problem, OR-TOOLS, particle swarm optimization, taboo search	56, 5, 713-723	https://doi.org/10.18280/jesa.560501	Lachtar, N., Driss, I. (2023). Application of ant colony optimization for job shop scheduling in the pharmaceutical industry. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 56, No. 5, pp. 713-723. https://doi.org/10.18280/jesa.560501
142	Mhaouch, A., Elhamzi, W., Abdelali, A.B., Atri, M.	Efficient Design for a Hardware Implementation of the LED Block Cipher	lightweight cryptography, hardware implementation, LED block cipher, key fob, high-performance, security analysis, low-resource	56, 5, 725-733	https://doi.org/10.18280/jesa.560502	Mhaouch, A., Elhamzi, W., Abdelali, A.B., Atri, M. (2023). Efficient design for a hardware implementation of the LED block cipher. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 56, No. 5, pp. 725-733. https://doi.org/10.18280/jesa.560502
143	Kadhim, N.N., Abood, L.H., Mohammed, Y.A.	Design an Optimal Fractional Order PID Controller for Speed Control of Electric Vehicle	electric vehicle, fractional-order PID (FOPID), speed control, sunflower optimization	56, 5, 735-741	https://doi.org/10.18280/jesa.560503	Kadhim, N.N., Abood, L.H., Mohammed, Y.A. (2023). Design an optimal fractional order PID controller for speed control of electric vehicle. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 56, No. 5, pp. 735-741. https://doi.org/10.18280/jesa.560503
144	Mahmood, A., Almaged, M., Alnema, Y.H.S., Noaman, M.N.	Adaptive Cruise Control of A Simscape Driveline Vehicle Model Using Fuzzy Logic Controller	fuzzy logic controller, adaptive cruise control, MATLAB Simulink, autonomous vehicles, Simscape vehicle model	56, 5, 743-749	https://doi.org/10.18280/jesa.560504	Mahmood, A., Almaged, M., Alnema, Y.H.S., Noaman, M.N. (2023). Adaptive cruise control of a Simscape Driveline vehicle model using fuzzy logic controller. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 56, No. 5, pp. 743-749. https://doi.org/10.18280/jesa.560504

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146	Sumasto, F., Arliananda, D.A., Imansuri, F., Aisyah, S., Pratama, I.R.	Fault Tree Analysis: A Path to Improving Quality in Part Stay Protector A Comp	automotive part, fault tree analysis, minimal cut sets, quality	56, 5, 757-764	https://doi.org/10.18280/jesa.560506	Sumasto, F., Arliananda, D.A., Imansuri, F., Aisyah, S., Pratama, I.R. (2023). Fault tree analysis: A path to improving quality in Part Stay Protector A Comp. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 56, No. 5, pp. 757-764. https://doi.org/10.18280/jesa.560506
147	Jasim, M.A., Ahmed, O.K.	Comparative Evaluation of a Conventional and Photovoltaic/Thermal-Integrated Solar Distiller under Iraqi Climatic Conditions	solar distiller, photovoltaic/thermal (PV/T) collector, efficiency enhancement, water depth, performance assessment	56, 5, 765-774	https://doi.org/10.18280/jesa.560507	Jasim, M.A., Ahmed, O.K. (2023). Comparative evaluation of a conventional and photovoltaic/thermal-integrated solar distiller under Iraqi climatic conditions. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 56, No. 5, pp. 765-774. https://doi.org/10.18280/jesa.560507
148	Boudouane, I., Makhlof, A., Djelal, N., Saadia, N., Ramdane-Cherif, A.	Multimodal System of Ambient Assistance Services for Human Activity Monitoring	ambient services, fall detection, heart disorder detection, human activity monitoring, multimodal system, portable system, sensors fusion	56, 5, 775-785	https://doi.org/10.18280/jesa.560508	Boudouane, I., Makhlof, A., Djelal, N., Saadia, N., Ramdane-Cherif, A. (2023). Multimodal system of ambient assistance services for human activity monitoring. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 56, No. 5, pp. 775-785. https://doi.org/10.18280/jesa.560508
149	Hadi, W.H.A., Jassem, A.A., Sabri, A.A., Ali, R.S.	FPGA Implementation of Circular Pseudo-Random Sequence Generator	adaptive, random sequence, circular, FPGA, linear feedback shift register (LFSR)	56, 5, 787-792	https://doi.org/10.18280/jesa.560509	Hadi, W.H.A., Jassem, A.A., Sabri, A.A., Ali, R.S. (2023). FPGA implementation of circular pseudo-random sequence generator. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 56, No. 5, pp. 787-792. https://doi.org/10.18280/jesa.560509
150	Mutuab, G.A., Hassan, M.Y.	Non-Linear PID Control of Fluid Catalytic Cracking Unit	FCCU, nonlinear PID control, PID	56, 5, 793-800	https://doi.org/10.18280/jesa.560510	Mutuab, G.A., Hassan, M.Y. (2023). Non-linear PID control of Fluid Catalytic Cracking Unit. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 56, No. 5, pp. 793-800. https://doi.org/10.18280/jesa.560510
151	Neverov, E., Korotkiy, I., Vladimirov, A., Korotikh, P., Nikolaeva, E., Porokhov, A.	Development of a Raspberry Pi-Based Automation System for an Induction-Heated Milk Pasteurizer	automation, pasteurizer, induction, magnetic flux, food, polymer, induction heating, process control	56, 5, 801-809	https://doi.org/10.18280/jesa.560511	Neverov, E., Korotkiy, I., Vladimirov, A., Korotikh, P., Nikolaeva, E., Porokhov, A. (2023). Development of a Raspberry Pi-based automation system for an induction-heated milk pasteurizer. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 56, No. 5, pp. 801-809. https://doi.org/10.18280/jesa.560511
152	Shanan, D.S., Kadhim, S.K.	Comparative Analysis of Airflow Regulation in Ventilator Systems Using Various Control Strategies	ventilator, PID control, nonlinear PID control, sliding mode control	56, 5, 811-821	https://doi.org/10.18280/jesa.560512	Shanan, D.S., Kadhim, S.K. (2023). Comparative analysis of airflow regulation in ventilator systems using various control strategies. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 56, No. 5, pp. 811-821. https://doi.org/10.18280/jesa.560512
153	Qasim, A.Y., Tahir, F.R., Alsammak, A.N.B.	Utilizing UPQC-Based PAC-SRF Techniques to Mitigate Power Quality Issues under Non-Linear and Unbalanced Loads	voltage swell and sag, reactive power compensation, harmonic elimination, UPQC, power angle control (PAC)	56, 5, 823-831	https://doi.org/10.18280/jesa.560513	Qasim, A.Y., Tahir, F.R., Alsammak, A.N.B. (2023). Utilizing UPQC-based PAC-SRF techniques to mitigate power quality issues under non-linear and unbalanced loads. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 56, No. 5, pp. 823-831. https://doi.org/10.18280/jesa.560513
154	Ezugwu, C.A.K., Fayomi, O.S.I., Onifade, M.K., Adeoye, A.O.M., Okopujie, I.P.	Development of Theoretical and Numerical Framework for Selecting the Cutting Process Parameters for Turned Slender Parts	computational modelling, material removal rate, flexibility, accuracy, productivity	56, 5, 833-847	https://doi.org/10.18280/jesa.560514	Ezugwu, C.A.K., Fayomi, O.S.I., Onifade, M.K., Adeoye, A.O.M., Okopujie, I.P. (2023). Development of theoretical and numerical framework for selecting the cutting process parameters for turned slender parts. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 56, No. 5, pp. 833-847. https://doi.org/10.18280/jesa.560514
155	Ajayi, O., Izang, A.A., Osuji, C.F., Umeozo, C.T., Albert-Sogules, T.	Design and Implementation of a WiFi-Enabled Home Automation System	automation, home appliances, standards, technology, system, microcontroller, electrical appliances	56, 5, 849-855	https://doi.org/10.18280/jesa.560515	Ajayi, O., Izang, A.A., Osuji, C.F., Umeozo, C.T., Albert-Sogules, T. (2023). Design and implementation of a wifi-enabled home automation system. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 56, No. 5, pp. 849-855. https://doi.org/10.18280/jesa.560515
156	Mohammed, H.A., Alsammak, A.N.B.	An Intelligent Hybrid Control System using ANFIS-Optimization for Scalar Control of an Induction Motor	induction motor, scalar control, VFD, optimization, intelligent hybrid control system, ANFIS	56, 5, 857-862	https://doi.org/10.18280/jesa.560516	Mohammed, H.A., Alsammak, A.N.B. (2023). An intelligent hybrid control system using ANFIS-optimization for scalar control of an induction motor. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 56, No. 5, pp. 857-862. https://doi.org/10.18280/jesa.560516
157	Djelal, N., Ouanane, A., Bouriachi, F.	LSTM-Based Visual Control for Complex Robot Interactions	visual servoing, interaction matrix, 6DOF robot, LSTM, identification	56, 5, 863-870	https://doi.org/10.18280/jesa.560517	Djelal, N., Ouanane, A., Bouriachi, F. (2023). LSTM-based visual control for complex robot interactions. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 56, No. 5, pp. 863-870. https://doi.org/10.18280/jesa.560517
158	Mutlak, A.F., Humaidi, A.J.	A Comparative Study of Synergetic and Sliding Mode Controllers for Pendulum Systems	synergetic control, sliding mode control, pendulum system, <i>chattering phenomenon, control design</i>	56, 5, 871-877	https://doi.org/10.18280/jesa.560518	Mutlak, A.F., Humaidi, A.J. (2023). A comparative study of synergetic and sliding mode controllers for pendulum systems. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 56, No. 5, pp. 871-877. https://doi.org/10.18280/jesa.560518
159	Azzawi, H.A., Gitaffa, S.A., Ameen, N.M.	Performance and Robustness Enhancement of Fractional Order Controller (FOC) for Electric Vehicles (EV) Using Intelligent Swarms	fractional-order proportional-integral-derivative (FOPID), proportional-integral-derivative (PID), grey wolf optimization (GWO), particle swarm optimization (PSO), electric vehicles (EV), permanent magnet synchronous motors (PMSMs)	56, 5, 879-887	https://doi.org/10.18280/jesa.560519	Azzawi, H.A., Gitaffa, S.A., Ameen, N.M. (2023). Performance and robustness enhancement of fractional order controller (FOC) for electric vehicles (EV) using intelligent swarms. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 56, No. 5, pp. 879-887. https://doi.org/10.18280/jesa.560519
160	Adegbenjo, A.A., Onuiri, E.E., Kalesanwo, O.B., Agbaje, M.O., Abel, S.B., Fatade, O.B., Amusa, A.I., Umeaka, K.C., Ehioghae, E., Onamade, K.O.	Design and Analysis of an Automated IoT System for Data Flow Optimization in Higher Education Institutions	Internet of Things (IoT), IoT framework, Kafka stream, data lake, advanced analytics, data visualization, automated systems, higher education institutions, real-time data processing	56, 5, 889-897	https://doi.org/10.18280/jesa.560520	Adegbenjo, A.A., Onuiri, E.E., Kalesanwo, O.B., Agbaje, M.O., Abel, S.B., Fatade, O.B., Amusa, A.I., Umeaka, K.C., Ehioghae, E., Onamade, K.O. (2023). Design and analysis of an automated IoT system for data flow optimization in higher education institutions. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 56, No. 5, pp. 889-897. https://doi.org/10.18280/jesa.560520

161	Juwana, W.E., Rachmanto, R.A., Alfaiz, N.F., Prasetyo, S.D., Arifin, Z.	Economic Analysis of PV-Generator Hybrid Off-Grid Systems in Underdeveloped Indonesian Regions	HRES, rural electrification, HOMER, hybrid PV-generator, techno-economic analysis	56, 4, 519-527	https://doi.org/10.18280/jesa.560401	Juwana, W.E., Rachmanto, R.A., Alfaiz, N.F., Prasetyo, S.D., Arifin, Z. (2023). Economic analysis of PV-generator hybrid off-grid systems in underdeveloped Indonesian regions. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 56, No. 4, pp. 519-527. https://doi.org/10.18280/jesa.560401
162	Venkatesh, D.Y., Mallikarjunaiah, K., Srikanthawamy, M.	A High-Throughput Reconfigurable LDPC Codec for Wide Band Digital Communications	low-density parity-check (LDPC), forward error rate (FER), bit error rate (BER), signal to noise ratio (SNR), codec design, error correction codes, reconfigurable parallel processing	56, 4, 529-538	https://doi.org/10.18280/jesa.560402	Venkatesh, D.Y., Mallikarjunaiah, K., Srikanthawamy, M. (2023). A high-throughput reconfigurable LDPC codec for wide band digital communications. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 56, No. 4, pp. 529-538. https://doi.org/10.18280/jesa.560402
163	Ibrahim, M.A., Alsammak, A.N.B.	Adaptive PID Control for 8/6 Switched Reluctance Motor Drive Based on BFO	switched reluctance motor, PID controller, speed control, optimization	56, 4, 539-546	https://doi.org/10.18280/jesa.560403	Ibrahim, M.A., Alsammak, A.N.B. (2023). Adaptive PID control for 8/6 switched reluctance motor drive based on BFO. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 56, No. 4, pp. 539-546. https://doi.org/10.18280/jesa.560403
164	Alobaidy, M.A.A., Saeed, S.Z.	A Comparative Study of Multi-Layer Perceptron and Jordan Recurrent Neural Networks for Signals Classification in a Robotic System	error detection, classification, robot, Jordan, MLP-NN, DWT, RNN, signal	56, 4, 547-551	https://doi.org/10.18280/jesa.560404	Alobaidy, M.A.A., Saeed, S.Z. (2023). A comparative study of multi-layer perceptron and Jordan recurrent neural networks for signals classification in a robotic system. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 56, No. 4, pp. 547-551. https://doi.org/10.18280/jesa.560404
165	Dahdouh, A., Mazouz, L., Elottri, A., Youcef, B.E.	Multivariable Filter-Based New Harmonic Voltage Identification for a 3-Level UPQC	harmonic voltage identification, multivariable filter, unified power quality conditioner (UPQC), space vector modulation, feedback linearization control	56, 4, 553-563	https://doi.org/10.18280/jesa.560405	Dahdouh, A., Mazouz, L., Elottri, A., Youcef, B.E. (2023). Multivariable filter-based new harmonic voltage identification for a 3-level UPQC. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 56, No. 4, pp. 553-563. https://doi.org/10.18280/jesa.560405
166	Maile, A.B., Tekweme, F.K., Gupta, K.	Improving the Response Time of a Soft Robotic Gripper Using a Heat Sink with Shape Memory Alloy Actuators	actuator, heat sink, robotic gripper, shape memory alloy, stiffness	56, 4, 565-574	https://doi.org/10.18280/jesa.560406	Maile, A.B., Tekweme, F.K., Gupta, K. (2023). Improving the response time of a soft robotic gripper using a heat sink with shape memory alloy actuators. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 56, No. 4, pp. 565-574. https://doi.org/10.18280/jesa.560406
167	Ahmed, A.K., Al-Khazraji, H.	Optimal Control Design for Propeller Pendulum Systems Using Gorilla Troops Optimization	nonlinear system, propeller pendulum system, PID controller, state feedback controller, sliding mode control, swarm optimization, gorilla troops optimization	56, 4, 575-582	https://doi.org/10.18280/jesa.560407	Ahmed, A.K., Al-Khazraji, H. (2023). Optimal control design for propeller pendulum systems using gorilla troops optimization. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 56, No. 4, pp. 575-582. https://doi.org/10.18280/jesa.560407
168	Asy'ari, M.K., Nugraha, A.L., Sahrin, A., Rafi, T.A., Indriawati, K., Musyafa, A.	Predicting Photovoltaic Power Output with Convolutional Neural Networks: A Case Study in Cepu, Central Java, Indonesia	CNN, correlation coefficient, solar panel, electric power prediction, ambient temperature	56, 4, 583-592	https://doi.org/10.18280/jesa.560408	Asy'ari, M.K., Nugraha, A.L., Sahrin, A., Rafi, T.A., Indriawati, K., Musyafa, A. (2023). Predicting photovoltaic power output with Convolutional Neural Networks: A case study in Cepu, Central Java, Indonesia. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 56, No. 4, pp. 583-592. https://doi.org/10.18280/jesa.560408
169	Khather, S.I., Ibrahim, M.A., Abdullah, A.I.	Review and Performance Analysis of Nonlinear Model Predictive Control—Current Prospects, Challenges and Future Directions	nonlinear model predictive control, applications and performance analysis, nonlinear dynamics, control system, NMPC algorithms, applications	56, 4, 593-603	https://doi.org/10.18280/jesa.560409	Khather, S.I., Ibrahim, M.A., Abdullah, A.I. (2023). Review and performance analysis of nonlinear model predictive control—current prospects, challenges and future directions. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 56, No. 4, pp. 593-603. https://doi.org/10.18280/jesa.560409
170	Benslimane, M., Bendjebar, M., Bouayed, D.A.	Fault Tolerant Control Implementation for Inverter-Fed Induction Motors: A Real-Time Implementation	induction motor, direct torque control, fault tolerant control, Ds1104	56, 4, 605-614	https://doi.org/10.18280/jesa.560410	Benslimane, M., Bendjebar, M., Bouayed, D.A. (2023). Fault tolerant control implementation for inverter-fed induction motors: A real-time implementation. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 56, No. 4, pp. 605-614. https://doi.org/10.18280/jesa.560410
171	Ezugwu, C.A.K., Fayomi, O.S.I., Onifade, M.K., Adeoye, A.O.M., Okopjuje, I.P.	Modelling the Effects of Workpiece Flexibility on Cutting Performance in Turning Operations	beam model, cutting force, force coefficients, machining accuracy, material removal rate, workpiece flexibility, turning	56, 4, 615-625	https://doi.org/10.18280/jesa.560411	Ezugwu, C.A.K., Fayomi, O.S.I., Onifade, M.K., Adeoye, A.O.M., Okopjuje, I.P. (2023). Modelling the effects of workpiece flexibility on cutting performance in turning operations. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 56, No. 4, pp. 615-625. https://doi.org/10.18280/jesa.560411
172	Adejumo, D.O., Fadare, D.A., Kazeem, R.A., Ikumapayi, O.M., Falana, A., Adedayo, A.S., Fadare, D.A., Adeoye, A.O.M., Ogundipe, A.T., Olarinde, E.S.	A Low-Cost, Modular, Cable-Driven, Anthropomorphic Robotic Hand: A Conceptual Design and Application in Biomimetic Study	biomimetic, anthropomorphic, robotic hand, automation, reinforcement learning	56, 4, 627-639	https://doi.org/10.18280/jesa.560412	Adejumo, D.O., Fadare, D.A., Kazeem, R.A., Ikumapayi, O.M., Falana, A., Adedayo, A.S., Fadare, D.A., Adeoye, A.O.M., Ogundipe, A.T., Olarinde, E.S. (2023). A low-cost, modular, cable-driven, anthropomorphic robotic hand: A conceptual design and application in biomimetic study. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 56, No. 4, pp. 627-639. https://doi.org/10.18280/jesa.560412
173	Torres, K., Espinoza, J., Asanza, V., Lorente-Leyva, L.L., Peluffo-Ordóñez, D.H.	Myoelectric Prosthesis Using Sensor Fusion Between Electromyography and Pulse Oximetry Signals	myoelectric prosthesis, electromyography, bioelectric signal, sensor fusion, artificial intelligence, neural network	56, 4, 641-649	https://doi.org/10.18280/jesa.560413	Torres, K., Espinoza, J., Asanza, V., Lorente-Leyva, L.L., Peluffo-Ordóñez, D.H. (2023). Myoelectric prosthesis using sensor fusion between electromyography and pulse oximetry signals. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 56, No. 4, pp. 641-649. https://doi.org/10.18280/jesa.560413
174	Mohammed, N.A., Abdulateef, O.F., Hamad, A.H.	An IoT and Machine Learning-Based Predictive Maintenance System for Electrical Motors	predictive maintenance, machine learning algorithm, Industrial IoT (IIoT), MQTT, cloud computing/platform, random forest, fault diagnosis/detection, prognostics and health management	56, 4, 651-656	https://doi.org/10.18280/jesa.560414	Mohammed, N.A., Abdulateef, O.F., Hamad, A.H. (2023). An IoT and machine learning-based predictive maintenance system for electrical motors. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 56, No. 4, pp. 651-656. https://doi.org/10.18280/jesa.560414
175	Akande, S., Adetunla, A., Sanni, T., Azeez, T.	Conversion of Roadway Noise to Electrical Energy: An Innovative Approach for Sustainable Energy Generation	vibration, acoustic, automation, embedded system, energy conversion	56, 4, 657-661	https://doi.org/10.18280/jesa.560415	Akande, S., Adetunla, A., Sanni, T., Azeez, T. (2023). Conversion of roadway noise to electrical energy: An innovative approach for sustainable energy generation. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 56, No. 4, pp. 657-661. https://doi.org/10.18280/jesa.560415
176	Obaid, M.H., Hamad, A.H.	Deep Learning Approach for Oil Pipeline Leakage Detection Using Image-Based Edge Detection Techniques	holistically-nested edge detection, Xception networks, leakage detection, oil pipes, dense extreme inception network for edge detection	56, 4, 663-673	https://doi.org/10.18280/jesa.560416	Obaid, M.H., Hamad, A.H. (2023). Deep learning approach for oil pipeline leakage detection using image-based edge detection techniques. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 56, No. 4, pp. 663-673. https://doi.org/10.18280/jesa.560416

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178	Al-Kaoaz, H.N.A., Alsammak, A.N.B.	Utilizing Hybrid Renewable Energy Systems for Enhancing Transient Stability in Power Grids: A Comprehensive Review	hybrid generating systems, transient stability, wind energy PV systems, battery storage	56, 4, 687-696	https://doi.org/10.18280/jesa.560418	Al-Kaoaz, H.N.A., Alsammak, A.N.B. (2023). Utilizing hybrid renewable energy systems for enhancing transient stability in power grids: A comprehensive review. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 56, No. 4, pp. 687-696. https://doi.org/10.18280/jesa.560418
179	Hutabarat, J., Pradana, J.A., Ruwana, I., Basuki, D.W.L., Sari, S.A., Septiari, R.	Ergonomic Chair Design as a Solution to Musculoskeletal Disorders among Traditional Cobblers: An Anthropometric Study	ergonomic chair, cobblers, musculoskeletal disorders, Nordic body maps, Rapid Upper Limb Assessment	56, 4, 697-701	https://doi.org/10.18280/jesa.560419	Hutabarat, J., Pradana, J.A., Ruwana, I., Basuki, D.W.L., Sari, S.A., Septiari, R. (2023). Ergonomic chair design as a solution to musculoskeletal disorders among traditional cobblers: An anthropometric study. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 56, No. 4, pp. 697-701. https://doi.org/10.18280/jesa.560419
180	Maghfiroh, H., Ma'arif, A., Adriyanto, F., Suwarno, I., Caesarendra, W.	Adaptive Linear Quadratic Gaussian Speed Control of Induction Motor Using Fuzzy Logic	adaptive, fuzzy logic, induction motor, Linear Quadratic Gaussian (LQG), speed control	56, 4, 703-711	https://doi.org/10.18280/jesa.560420	Maghfiroh, H., Ma'arif, A., Adriyanto, F., Suwarno, I., Caesarendra, W. (2023). Adaptive linear quadratic gaussian speed control of induction motor using fuzzy logic. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 56, No. 4, pp. 703-711. https://doi.org/10.18280/jesa.560420
181	Ybañez, R.S., De La Cruz, A.R.	Related Literature Review 5D Model for Project and Operation/Maintenance Remote Monitoring of Equipment and Piping System	5D model, BIM, CBS, CMMS, OM, VPM	56, 3, 355-364	https://doi.org/10.18280/jesa.560301	Ybañez, R.S., De La Cruz, A.R. (2023). Related literature review 5D model for project and operation/maintenance remote monitoring of equipment and piping system. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 56, No. 3, pp. 355-364. https://doi.org/10.18280/jesa.560301
182	Al-Suod, M.M.S.	Influence of Time Delays on Network-Controlled Diesel Generator Performance	distributed control system, digital state machine, PID regulator, diesel-generator, Ethernet, transient process quality	56, 3, 365-375	https://doi.org/10.18280/jesa.560302	Al-Suod, M.M.S. (2023). Influence of time delays on network-controlled diesel generator performance. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 56, No. 3, pp. 365-375. https://doi.org/10.18280/jesa.560302
183	Kiran, E.U., Gururaj, B., Ramesha, M., Chakravarthy, M., Nagaraju, M., Ramaiah, M.L., Kumar, A.N.	Inter-Circuit Fault Classification in Parallel Incomplete Journey Transmission Lines Using Artificial Neural Networks: A MATLAB-Based Approach	transmission line, MATLAB, inter circuit fault	56, 3, 377-381	https://doi.org/10.18280/jesa.560303	Kiran, E.U., Gururaj, B., Ramesha, M., Chakravarthy, M., Nagaraju, M., Ramaiah, M.L., Kumar, A.N. (2023). Inter-circuit fault classification in parallel incomplete journey transmission lines using artificial neural networks: A MATLAB-based approach. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 56, No. 3, pp. 377-381. https://doi.org/10.18280/jesa.560303
184	Talib, M.M., Crook, M.S.	AI-Enhanced Power Management System for Buildings: A Review and Suggestions	power management systems, smart buildings, energy efficiency, AI, WSN, BIM	56, 3, 383-391	https://doi.org/10.18280/jesa.560304	Talib, M.M., Crook, M.S. (2023). AI-enhanced power management system for buildings: A review and suggestions. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 56, No. 3, pp. 383-391. https://doi.org/10.18280/jesa.560304
185	Purwanto, E., Suleman, D., Sjarief, R., Sri, D., Juliansyah, M.D., Trisandri, M.I.R.	Traffic Accident Prevention Through Acceptance of Advanced Driver Assistance System (ADAS) among Urban People	ADAS, technology acceptance, attitude, UTAUT, PMT	56, 3, 393-401	https://doi.org/10.18280/jesa.560305	Purwanto, E., Suleman, D., Sjarief, R., Sri, D., Juliansyah, M.D., Trisandri, M.I.R. (2023). Traffic accident prevention through acceptance of Advanced Driver Assistance System (ADAS) among urban people. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 56, No. 3, pp. 393-401. https://doi.org/10.18280/jesa.560305
186	Abdullah, H.J., Kareem, P.R., Algburi, S., Mohammed, A.B.	Predictive Current Control of Voltage Source Inverters Using a Discrete-Time Model	voltage source inverter, current control, dc link capacitor, low electromagnetic interference, control approach performs, low harmonic contents, AC electrical power, DC source	56, 3, 403-408	https://doi.org/10.18280/jesa.560306	Abdullah, H.J., Kareem, P.R., Algburi, S., Mohammed, A.B. (2023). Predictive current control of voltage source inverters using a discrete-time model. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 56, No. 3, pp. 403-408. https://doi.org/10.18280/jesa.560306
187	Al-Saadi, M., Mahafzah, K.A., Hatmi, A.	Improved Frequency Response of Parallel Virtual Synchronous Generators Using Grey Wolf Optimization	virtual synchronous machines, parallel inverters, grey-wolf optimization, frequency, synchronous inverters, metaheuristic optimization, overshoot, response	56, 3, 409-414	https://doi.org/10.18280/jesa.560307	Al-Saadi, M., Mahafzah, K.A., Hatmi, A. (2023). Improved frequency response of parallel Virtual Synchronous Generators using Grey Wolf Optimization. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 56, No. 3, pp. 409-414. https://doi.org/10.18280/jesa.560307
188	Djizi, H., Zahzouh, Z.	A PyQt6-Based Platform for Real-Time Control and Monitoring of a Quadrotor Multibody System Using ROS2 and Gazebo	quadrotor multibody system, ROS2, GAZEBO, control, server-client, PyQt6, proportional-derivative (PD) controller, real-time control	56, 3, 415-424	https://doi.org/10.18280/jesa.560308	Djizi, H., Zahzouh, Z. (2023). A PyQt6-based platform for real-time control and monitoring of a quadrotor multibody system using ROS2 and Gazebo. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 56, No. 3, pp. 415-424. https://doi.org/10.18280/jesa.560308
189	Ibrahim, M.A., Ibrahim, M.H., Khather, S.I.	Design of Fuzzy-ACO Based Controller for Cuk Converter in Electric Vehicles	Cuk converter, intelligent control, fuzzy control, ant colony optimization, electric vehicle, switched-mode power supply	56, 3, 425-430	https://doi.org/10.18280/jesa.560309	Ibrahim, M.A., Ibrahim, M.H., Khather, S.I. (2023). Design of fuzzy-ACO based controller for Cuk converter in electric vehicles. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 56, No. 3, pp. 425-430. https://doi.org/10.18280/jesa.560309
190	Kethiri, M.F., Charrouf, O.	A Methodology for Fault Tolerant Control of Brushless DC Motors with Damaged Hall-Effect Sensors Using Electronic Logic Gates	BLDC, fault tolerant control, hall effect sensor, speed control, electronic logic gates, Matlab/Simulink	56, 3, 431-435	https://doi.org/10.18280/jesa.560310	Kethiri, M.F., Charrouf, O. (2023). A methodology for fault tolerant control of brushless DC motors with damaged hall-effect sensors using electronic logic gates. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 56, No. 3, pp. 431-435. https://doi.org/10.18280/jesa.560310
191	Priyasta, D., Hadiyanto, Septiawan, R.	Enabling EV Roaming Through Cascading WebSockets in OCPP 1.6	EV charging networks, roaming protocols, WebSocket cascading connection, simulation	56, 3, 437-449	https://doi.org/10.18280/jesa.560311	Priyasta, D., Hadiyanto, Septiawan, R. (2023). Enabling EV roaming through cascading webSockets in OCPP 1.6. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 56, No. 3, pp. 437-449. https://doi.org/10.18280/jesa.560311
192	AL-Hussainy, S., Altahir, A.A.R., AL-Gaheeshi, A.	Proposal of Coastal Flooding Scheme Using Smart Balloon Powered by Wind Turbine Generator	coastal flood mitigation, wind turbine generator, air compressor, rechargeable battery, DC motor control, smart balloon system, classical control scenarios, MATLAB simulation	56, 3, 451-458	https://doi.org/10.18280/jesa.560312	AL-Hussainy, S., Altahir, A.A.R., AL-Gaheeshi, A. (2023). Proposal of coastal flooding scheme using smart balloon powered by wind turbine generator. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 56, No. 3, pp. 451-458. https://doi.org/10.18280/jesa.560312

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194	Moghrani, R., Aoulmi, Z., Attia, M.	Hybrid RPI-MCDM Approach for FMEA: A Case Study on Belt Conveyor in Bir El Ater Mine, Algeria	failure mode and effects analysis (FMEA), risk priority index function (RPI), risk priority number (RPN), multiple criteria decision making (MCDM), technique for order preference by similarity to ideal solution (TOPSIS), <i>mining machine</i>	56, 3, 465-473	https://doi.org/10.18280/jesa.560314	Moghrani, R., Aoulmi, Z., Attia, M. (2023). Hybrid RPI-MCDM approach for FMEA: A case study on belt conveyor in Bir El Ater Mine, Algeria. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 56, No. 3, pp. 465-473. https://doi.org/10.18280/jesa.560314
195	Azzawi, H.A., Ameen, N.M., Gitaffa, S.A.	Comparative Performance Evaluation of Swarm Intelligence-Based FOPID Controllers for PMSM Speed Control	fractional-order proportional-integral-derivative (FOPID), proportional-integral-derivative (PID), permanent magnet synchronous motors (PMSMs), mGrey wolf optimization (GWO), ant colony optimization (ACO), particle swarm optimization (PSO)	56, 3, 475-482	https://doi.org/10.18280/jesa.560315	Azzawi, H.A., Ameen, N.M., Gitaffa, S.A. (2023). Comparative performance evaluation of swarm intelligence-based FOPID controllers for PMSM speed control. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 56, No. 3, pp. 475-482. https://doi.org/10.18280/jesa.560315
196	Kichene, M., Stambouli, A.B., Chouder, A., Loukriz, A., Bendib, A., Ahmed, H.	Performance Investigation of a Large-Scale Grid-Tied PV Plant under High Plateau Climate Conditions: Case Study Ain El-Melh, Algeria	photovoltaic installations, performance evaluation, final yield, performance ratio, annual capacity facto, loss calculation, soiling effect evaluation	56, 3, 483-492	https://doi.org/10.18280/jesa.560316	Kichene, M., Stambouli, A.B., Chouder, A., Loukriz, A., Bendib, A., Ahmed, H. (2023). Performance investigation of a large-scale grid-tied PV plant under high plateau climate conditions: Case study Ain El-Melh, Algeria. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 56, No. 3, pp. 483-492. https://doi.org/10.18280/jesa.560316
197	Ouyoussef, N., Moustabchir, H.	Predicting Fracture Placement and Analyzing Fatigue Life in Exhaust Manifold Systems Using Finite Element Analysis	exhaust system, finite element method, simulation, crack, stress, strain, fatigue, and stress intensity factors	56, 3, 493-499	https://doi.org/10.18280/jesa.560317	Ouyoussef, N., Moustabchir, H. (2023). Predicting fracture placement and analyzing fatigue life in exhaust manifold systems using Finite Element Analysis. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 56, No. 3, pp. 493-499. https://doi.org/10.18280/jesa.560317
198	Quoc, V.D., Minh, D.B., Minh, H.N.T., Thanh, B.D.	Performance Comparison of Permanent Magnet and Electrically Excited Motors for Electric Vehicles	electric vehicles, synchronous motors, permanent magnet motors, electrically excited motors, performance analysis, cogging torque	56, 3, 501-506	https://doi.org/10.18280/jesa.560318	Quoc, V.D., Minh, D.B., Minh, H.N.T., Thanh, B.D. (2023). Performance comparison of permanent magnet and electrically excited motors for electric vehicles. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 56, No. 3, pp. 501-506. https://doi.org/10.18280/jesa.560318
199	Mahmood, Z.N., Al-Khazraji, H., Mahdi, S.M.	Adaptive Control and Enhanced Algorithm for Efficient Drilling in Composite Materials	CNC machines, drilling process, composite material, Glass Fibre Reinforced Plastic (GFRP), delamination, controller design, model reference adaptive control, swarm optimization, enhanced flower pollination algorithm	56, 3, 507-512	https://doi.org/10.18280/jesa.560319	Mahmood, Z.N., Al-Khazraji, H., Mahdi, S.M. (2023). Adaptive control and enhanced algorithm for efficient drilling in composite materials. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 56, No. 3, pp. 507-512. https://doi.org/10.18280/jesa.560319
200	Syed, K., Chekka, R.K.	Hybrid PSO-HHO Optimal Control for Power Quality Improvement in Autonomous Microgrids	PSO, HHO, microgrid, optimal, THD	56, 3, 513-517	https://doi.org/10.18280/jesa.560320	Syed, K., Chekka, R.K. (2023). Hybrid PSO-HHO optimal control for power quality improvement in autonomous microgrids. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 56, No. 3, pp. 513-517. https://doi.org/10.18280/jesa.560320
201	Euldji, R., Rebhi, R., Alkhafaji, M.A., Ikumapayi, O.M., Akinlabi, E.T., Akinlabi, S.A., Mohsen, K.S., Menni, Y.	Improved Path Tracking Control in Mobile Robots Using a Hybrid FOPID Controller with Backstepping Technique: An Experimental Study	intelligent robust controller, complex environment, Arduino mega, serial communication protocol, experimental study	56, 2, 173-186	https://doi.org/10.18280/jesa.560201	Euldji, R., Rebhi, R., Alkhafaji, M.A., Ikumapayi, O.M., Akinlabi, E.T., Akinlabi, S.A., Mohsen, K.S., Menni, Y. (2023). Improved path tracking control in mobile robots using a hybrid FOPID controller with backstepping technique: An experimental study. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 56, No. 2, pp. 173-186. https://doi.org/10.18280/jesa.560201
202	Andry, J.F., Hadiyanto, Gunawan, V.	Critical Factors of Supply Chain Based on Structural Equation Modelling for Industry 4.0	supply chain, industry 4.0, decision support system, COBIT 5, ISO 9126, structural equation modelling	56, 2, 187-194	https://doi.org/10.18280/jesa.560202	Andry, J.F., Hadiyanto, Gunawan, V. (2023). Critical factors of supply chain based on structural equation modelling for industry 4.0. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 56, No. 2, pp. 187-194. https://doi.org/10.18280/jesa.560202
203	Sai Kumar, K., Chatterjee, S., Kumar, P.S., Gatla, R.K., Kumar, A.N.	Mitigation of Power Quality Problems Using Fuzzy Logic-Based Unified Power Quality Conditioner (UPQC)	PV system, fault diagnosis, shading defect, identification, residual analysis, detection, indicators method, sensitivity analysis	56, 2, 195-200	https://doi.org/10.18280/jesa.560203	Sai Kumar, K., Chatterjee, S., Kumar, P.S., Gatla, R.K., Kumar, A.N. (2023). Mitigation of power quality problems using fuzzy logic-based unified power quality conditioner (UPQC). <i>Journal Européen des Systèmes Automatisés</i> , Vol. 56, No. 2, pp. 195-200. https://doi.org/10.18280/jesa.560203
204	Shams, O.A., Alturaihi, M.H., Mustafa, M.A.S., Majdi, H.S.	Enhancement of Drones' Control and Guidance Systems Channels: A Review	quad-rotor drone, thruster, EDF, under-actuation and mathematical model	56, 2, 201-212	https://doi.org/10.18280/jesa.560204	Shams, O.A., Alturaihi, M.H., Mustafa, M.A.S., Majdi, H.S. (2023). Enhancement of drones' control and guidance systems channels: A review. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 56, No. 2, pp. 201-212. https://doi.org/10.18280/jesa.560204
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206	Mishra, N.K., Ranu.	A Supply Chain Inventory Model for a Deteriorating Material under a Finite Planning Horizon with the Carbon Tax and Shortage in All Cycles	supply chain management, deterioration, stock-dependent demand, quadratic carbon emission, time demand, a lost sale, shortages, backlog	56, 2, 221-230	https://doi.org/10.18280/jesa.560206	Mishra, N.K., Ranu. (2023). A supply chain inventory model for a deteriorating material under a finite planning horizon with the carbon tax and shortage in all cycles. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 56, No. 2, pp. 221-230. https://doi.org/10.18280/jesa.560206
207	Binh, N.H., Hung, V.D.	Application of Zhou's Balanced Truncation Algorithm for Controlling the Balance of Bicyrobot	robust controller, model order reduction algorithm, bicyrobot	56, 2, 231-236	https://doi.org/10.18280/jesa.560207	Binh, N.H., Hung, V.D. (2023). Application of Zhou's balanced truncation algorithm for controlling the balance of bicyrobot. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 56, No. 2, pp. 231-236. https://doi.org/10.18280/jesa.560207
208	Rusianto, T., Huda, S., Sudarsono, Suyanto, M.	Performance of Axial Generator for a Small Vertical Axis Wind Turbine	generator, axial, wind turbine, threes phase, coil, winding, street lighting	56, 2, 237-243	https://doi.org/10.18280/jesa.560208	Rusianto, T., Huda, S., Sudarsono, Suyanto, M. (2023). Performance of axial generator for a small vertical axis wind turbine. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 56, No. 2, pp. 237-243. https://doi.org/10.18280/jesa.560208

209	Fawzi, A.N., Salloom, M.Y.	Developing Multiple-Actuator Pneumatic Circuits Using the Karnaugh Maps Designing PLC Controlled	karnaugh maps, programmable logic controller PLC, sequential pneumatic circuits, control of ON/OFF, industrial automation, multiple pneumatic actuator	56, 2, 245-252	https://doi.org/10.18280/jesa.560209	Fawzi, A.N., Salloom, M.Y. (2023). Developing multiple-actuator pneumatic circuits using the Karnaugh maps designing PLC controlled. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 56, No. 2, pp. 245-252. https://doi.org/10.18280/jesa.560209
210	Oyelami, A.T., Bambose, O.M., Akintunlaji, O.A.	Mission-Planner Mapped Autonomous Robotic Lawn Mower	robotic chassis, mission planner, microcontrollers, workspace, Ardupilot	56, 2, 253-258	https://doi.org/10.18280/jesa.560210	Oyelami, A.T., Bambose, O.M., Akintunlaji, O.A. (2023). Mission-planner mapped autonomous robotic lawn mower. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 56, No. 2, pp. 253-258. https://doi.org/10.18280/jesa.560210
211	Khalaf, K.D., Ali, O.M.	Effect of the Maintenance Strategy on the Performance and Efficiency of the Gas Turbine Unit: A Review	gas turbine unit, maintenance strategy, performance and efficiency, future energy, diesel stations, power plants, solar power	56, 2, 259-267	https://doi.org/10.18280/jesa.560211	Khalaf, K.D., Ali, O.M. (2023). Effect of the maintenance strategy on the performance and efficiency of the gas turbine unit: A review. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 56, No. 2, pp. 259-267. https://doi.org/10.18280/jesa.560211
212	Okokpujie, I.P., Sinebe, J.E.	An Overview of the Study of ANN-GA, ANN-PSO, ANFIS-GA, ANFIS-PSO and ANFIS-FCM Predictions Analysis on Tool Wear During Machining Process	ANN-GA, ANFIS, ANFIS-PSO, ANFIS-FCM, tool wear, machining process, prediction and optimization	56, 2, 269-280	https://doi.org/10.18280/jesa.560212	Okokpujie, I.P., Sinebe, J.E. (2023). An overview of the study of ANN-GA, ANN-PSO, ANFIS-GA, ANFIS-PSO and ANFIS-FCM predictions analysis on tool wear during machining process. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 56, No. 2, pp. 269-280. https://doi.org/10.18280/jesa.560212
213	Hamoudi, A.K., Rasheed, L.T.	Design and Implementation of Adaptive Backstepping Control for Position Control of Propeller-Driven Pendulum System	Backstepping Controller (BSC), Propeller-Driven Pendulum System (PDPS), Adaptive Back-stepping Controller (ABSC)	56, 2, 281-289	https://doi.org/10.18280/jesa.560213	Hamoudi, A.K., Rasheed, L.T. (2023). Design and implementation of adaptive backstepping control for position control of propeller-driven pendulum system. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 56, No. 2, pp. 281-289. https://doi.org/10.18280/jesa.560213
214	Grairia, M.I., Toufouti, R.	Finite Control Set MPC for Voltage and Frequency Stabilization in Islanded AC Microgrids with Line Impedance Consideration and Enhanced Power Sharing Control	distributed generation, predictive control, power sharing, droop controller, double virtual impedances	56, 2, 291-300	https://doi.org/10.18280/jesa.560214	Grairia, M.I., Toufouti, R. (2023). Finite control set MPC for voltage and frequency stabilization in islanded AC microgrids with line impedance consideration and enhanced power sharing control. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 56, No. 2, pp. 291-300. https://doi.org/10.18280/jesa.560214
215	Anaz, A.H.S., Ibrahim, O.A., Alwan, G.	Enhancing Path Planning of Assistive Robots in Complex Environments Using Geno-Fuzzy Algorithm	path planning, genetic algorithm, Assistive Robot, Geno-fuzzy	56, 2, 301-307	https://doi.org/10.18280/jesa.560215	Anaz, A.H.S., Ibrahim, O.A., Alwan, G. (2023). Enhancing path planning of Assistive Robots in complex environments using Geno-fuzzy algorithm. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 56, No. 2, pp. 301-307. https://doi.org/10.18280/jesa.560215
216	Abdullahi, H.O., Mohamud, I.H.	The Impact of ICT on Supply Chain Management Efficiency and Effectiveness: A Literature Review	ICT, supply chain, literature review	56, 2, 309-315	https://doi.org/10.18280/jesa.560216	Abdullahi, H.O., Mohamud, I.H. (2023). The Impact of ICT on supply chain management efficiency and effectiveness: A literature review. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 56, No. 2, pp. 309-315. https://doi.org/10.18280/jesa.560216
217	Boukoffa, K., Metatla, A., Msabah, I.L., Benzaïou, S.	Faults Diagnosis in PV Systems Using Structured Residuals and Indicator Parameters Techniques	PV system, fault diagnosis, shading defect, identification, residual analysis, detection, indicators method, sensitivity analysis	56, 2, 317-327	https://doi.org/10.18280/jesa.560217	Boukoffa, K., Metatla, A., Msabah, I.L., Benzaïou, S. (2023). Faults diagnosis in PV systems using structured residuals and indicator parameters techniques. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 56, No. 2, pp. 317-327. https://doi.org/10.18280/jesa.560217
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219	Somani, A.A., Kokate, R.D., Mishra, A.	Performance Monitoring of CNC Machine Using Modelsim	Hebbian network, Modelsim, multiple sensors, self-organizing map (SOM), tool condition monitoring (TCM)	56, 2, 337-344	https://doi.org/10.18280/jesa.560219	Somani, A.A., Kokate, R.D., Mishra, A. (2023). Performance monitoring of cnc machine using modelsim. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 56, No. 2, pp. 337-344. https://doi.org/10.18280/jesa.560219
220	Terfia, E., Rezgui, S.E., Mendaci, S., Gasmi, H., Benalla, H.	Optimal Fractional Order Proportional Integral Controller for Dual Star Induction Motor Based on Particle Swarm Optimization Algorithm	DTC, DSIM, Control, FOPI, PSO	56, 2, 345-353	https://doi.org/10.18280/jesa.560220	Terfia, E., Rezgui, S.E., Mendaci, S., Gasmi, H., Benalla, H. (2023). Optimal fractional order proportional integral controller for dual star induction motor based on particle swarm optimization algorithm. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 56, No. 2, pp. 345-353. https://doi.org/10.18280/jesa.560220
221	Atiyah, H.A., Hassan, M.Y.	Outdoor Localization for a Mobile Robot under Different Weather Conditions Using a Deep Learning Algorithm	CNN, deep learning, K-Nearest neighbors algorithm, principal component analysis, mobile robot localization	56, 1, 1-9	https://doi.org/10.18280/jesa.560101	Atiyah, H.A., Hassan, M.Y. (2023). Outdoor localization for a mobile robot under different weather conditions using a deep learning algorithm. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 56, No. 1, pp. 1-9. https://doi.org/10.18280/jesa.560101
222	Hamdouche, S., Drid, S.	Efficient Rectified Stator Currents Hysteresis Control of the Induction Motor Drive and Flux Optimization Using Fuzzy Logic	loss minimization, efficiency machine, optimal rotor flux, hysteresis inverter	56, 1, 11-19	https://doi.org/10.18280/jesa.560102	Hamdouche, S., Drid, S. (2023). Efficient rectified stator currents hysteresis control of the induction motor drive and flux optimization using fuzzy logic. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 56, No. 1, pp. 11-19. https://doi.org/10.18280/jesa.560102
223	Noaman, N.M., Gatea, A.S., Humaidi, A.J., Kadhim, S.K., Hasan, A.F.	Optimal Tuning of PID-Controlled Magnetic Bearing System for Tracking Control of Pump Impeller in Artificial Heart	artificial heart ventricle, PID control, magnetic bearing, PSO	56, 1, 21-27	https://doi.org/10.18280/jesa.560103	Noaman, N.M., Gatea, A.S., Humaidi, A.J., Kadhim, S.K., Hasan, A.F. (2023). Optimal tuning of PID-controlled magnetic bearing system for tracking control of pump impeller in artificial heart. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 56, No. 1, pp. 21-27. https://doi.org/10.18280/jesa.560103
224	Boucenna, K., Sebbagh, T., Benchouia, N.E.	Modeling, Optimization, and Techno-Economic Assessment of a Hybrid System Composed of Photovoltaic-Wind-Fuel Cell and Battery Bank	wind turbine, PV generator, fuel cell, modeling, techno-economic	56, 1, 29-34	https://doi.org/10.18280/jesa.560104	Boucenna, K., Sebbagh, T., Benchouia, N.E. (2023). Modeling, optimization, and techno-economic assessment of a hybrid system composed of photovoltaic-wind-fuel cell and battery bank. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 56, No. 1, pp. 29-34. https://doi.org/10.18280/jesa.560104

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226	Chafia, M., Sihem, G., Mounia, T.	Evaluation of the Variable Component of Truck Travel Time Based on the Maximum Speed for an Optimal Management of the Fleet, Case of Boukhadra Iron Ore Mine, NE Algeria	open pit mining, loading, transport, trucks, speed	56, 1, 43-48	https://doi.org/10.18280/jesa.560106	Chafia, M., Sihem, G., Mounia, T. (2023). Evaluation of the variable component of truck travel time based on the maximum speed for an optimal management of the fleet, case of Boukhadra iron ore mine, NE Algeria. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 56, No. 1, pp. 43-48. https://doi.org/10.18280/jesa.560106
227	Cherfi, M.K., Gacemi, A., Morsli, A., Tlemçani, A.	Photovoltaic Source Powered Shunt Active Power Filter Optimized by Cuckoo Search Algorithm	harmonics, shunt active power filter, photovoltaic, maximum power point tracking, cuckoo search algorithm, P&O method	56, 1, 49-54	https://doi.org/10.18280/jesa.560107	Cherfi, M.K., Gacemi, A., Morsli, A., Tlemçani, A. (2023). Photovoltaic source powered shunt active power filter optimized by cuckoo search algorithm. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 56, No. 1, pp. 49-54. https://doi.org/10.18280/jesa.560107
228	Mahmood, M.B., Abdul-Jabbar, J.M.	Implementation of Dual Internet Links for Industrial IoT to Provide Safe Digital Commands for Process Automations	industrial IoT, OPC UA, network redundancy, KEPServerEx, digital voting, PLC	56, 1, 55-60	https://doi.org/10.18280/jesa.560108	Mahmood, M.B., Abdul-Jabbar, J.M. (2023). Implementation of dual internet links for industrial IoT to provide safe digital commands for process automations. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 56, No. 1, pp. 55-60. https://doi.org/10.18280/jesa.560108
229	Mohamud, I.H., Kafi, M.A., Shahron, S.A., Zainuddin, N., Musa, S.	The Role of Warehouse Layout and Operations in Warehouse Efficiency: A Literature Review	warehouse attributes, warehouse efficiency, warehouse layout, warehouse operation	56, 1, 61-68	https://doi.org/10.18280/jesa.560109	Mohamud, I.H., Kafi, M.A., Shahron, S.A., Zainuddin, N., Musa, S. (2023). The role of warehouse layout and operations in warehouse efficiency: A literature review. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 56, No. 1, pp. 61-68. https://doi.org/10.18280/jesa.560109
230	Wang, D.	Quality Management and Control for the Whole-Process Logistics Service of Multi-Variety Small-Batch Production and Manufacturing	multi-variety small-batch production (MVSBP), logistics service, quality management and control	56, 1, 69-76	https://doi.org/10.18280/jesa.560110	Wang, D. (2023). Quality management and control for the whole-process logistics service of multi-variety small-batch production and manufacturing. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 56, No. 1, pp. 69-76. https://doi.org/10.18280/jesa.560110
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232	Saidi, K., Boumediene, A., Boubekeur, D.	An Optimal GA-Based Backstepping Control Scheme for a MIMO Nonlinear System	nonlinear system, robot manipulator, genetic algorithm, backstepping control, optimization, population	56, 1, 89-96	https://doi.org/10.18280/jesa.560112	Saidi, K., Boumediene, A., Boubekeur, D. (2023). An optimal GA-based backstepping control scheme for a MIMO nonlinear system. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 56, No. 1, pp. 89-96. https://doi.org/10.18280/jesa.560112
233	Adediran, E.M., Fadare, D.A., Falana, A., Kazeem, R.A., Ikumapayi, O.M., Adedayo, A.S., Adetunla, A.O., Ifebunandu, U.J., Fadare, D.A., Olarinde, E.S.	UIArm I: Development of a Low-Cost and Modular 4-DOF Robotic Arm for Sorting Plastic Bottles from Waste Stream	machine vision, complex backgrounds, deep learning, robotic grasping, garbage sorting	56, 1, 97-103	https://doi.org/10.18280/jesa.560113	Adediran, E.M., Fadare, D.A., Falana, A., Kazeem, R.A., Ikumapayi, O.M., Adedayo, A.S., Adetunla, A.O., Ifebunandu, U.J., Fadare, D.A., Olarinde, E.S. (2023). UIArm I: Development of a low-cost and modular 4-DOF robotic arm for sorting plastic bottles from waste stream. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 56, No. 1, pp. 97-103. https://doi.org/10.18280/jesa.560113
234	Qian, G.M., Ghazali, M.R.B., Ahmad, M.A.B., Mohd Shukri, M.S.B.	Data Driven Sigmoid Proportional-Integral-Derivative (SPID) Controller for Twin Rotor MIMO System	ASED method, data driven, sigmoid PID controller, TRMS system	56, 1, 105-113	https://doi.org/10.18280/jesa.560114	Qian, G.M., Ghazali, M.R.B., Ahmad, M.A.B., Mohd Shukri, M.S.B. (2023). Data driven Sigmoid Proportional-Integral-Derivative (SPID) controller for twin rotor MIMO system. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 56, No. 1, pp. 105-113. https://doi.org/10.18280/jesa.560114
235	Duc, H.B., Minh, D.B., Thanh, B.D., Minh, T.P., Quoc, V.D.	Improving Performances of Interior Permanent Magnet Synchronous Motors by Using Different Rotor Angles	interior permanent magnet synchronous motor (IMMSM), one direction step-skew rotor (1D-SSR), two-direction step skew rotor (2D-SSR), back electromotive force (EMF), torque ripple, finite element method (FEM)	56, 1, 115-120	https://doi.org/10.18280/jesa.560115	Duc, H.B., Minh, D.B., Thanh, B.D., Minh, T.P., Quoc, V.D. (2023). Improving performances of interior permanent magnet synchronous motors by using different rotor angles. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 56, No. 1, pp. 115-120. https://doi.org/10.18280/jesa.560115
236	Priyasta, D., Hadiyanto, Septiawan, R., Herminawan, F., Bayu, H.	Ensuring Compliance and Reliability in EV Charging Station Management Systems: A Novel Testing Tool for OCPP 1.6 Messages Conformance	messages testing tool, OCPP version 1.6, central system platform	56, 1, 121-129	https://doi.org/10.18280/jesa.560116	Priyasta, D., Hadiyanto, Septiawan, R., Herminawan, F., Bayu, H. (2023). Ensuring compliance and reliability in EV Charging Station Management Systems: A novel testing tool for OCPP 1.6 messages conformance. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 56, No. 1, pp. 121-129. https://doi.org/10.18280/jesa.560116
237	Al-Shueli, A., Al-Tahar, I.A.	A Novel Spike Detection Method for Real-Time Neural Recordings Applications	neural recordings, LMS adaptive filter noise elimination, spike detection, FPGA	56, 1, 131-137	https://doi.org/10.18280/jesa.560117	Al-Shueli, A., Al-Tahar, I.A. (2023). A novel spike detection method for real-time neural recordings applications. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 56, No. 1, pp. 131-137. https://doi.org/10.18280/jesa.560117
238	Bourenane, H., Berkani, A., Negadi, K., Marignetti, F., Hebré, K.	Artificial Neural Networks Based Power Management for a Battery/Supercapacitor and Integrated Photovoltaic Hybrid Storage System for Electric Vehicles	artificial neural networks, power management, battery, hybrid energy storage system, electric vehicle	56, 1, 139-151	https://doi.org/10.18280/jesa.560118	Bourenane, H., Berkani, A., Negadi, K., Marignetti, F., Hebré, K. (2023). Artificial neural networks based power management for a battery-supercapacitor and integrated photovoltaic hybrid storage system for electric vehicles. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 56, No. 1, pp. 139-151. https://doi.org/10.18280/jesa.560118
239	Fadel, M.Z.	Hybrid Control Algorithm Sliding Mode-PID for an Electrohydraulic Servo Actuator System Based on Particle Swarm Optimization Technique	electrohydraulic servo actuator (EHSA), sliding mode control (SMC), hybrid, SMC-PID controller, particle swarm optimization (PSO)	56, 1, 153-163	https://doi.org/10.18280/jesa.560119	Fadel, M.Z. (2023). Hybrid control algorithm sliding mode-PID for an electrohydraulic servo actuator system based on particle swarm optimization technique. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 56, No. 1, pp. 153-163. https://doi.org/10.18280/jesa.560119
240	Zeghoudi, A., Benmouiza, K.	Solar Power Heliostat Control Using Image Processing Technology and Artificial Neural Networks	sun tracking, heliostat field, image processing technique, artificial neural networks	56, 1, 165-171	https://doi.org/10.18280/jesa.560120	Zeghoudi, A., Benmouiza, K. (2023). Solar power heliostat control using image processing technology and artificial neural networks. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 56, No. 1, pp. 165-171. https://doi.org/10.18280/jesa.560120

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243	Duc, H.B., Minh, D.B., Quoc, V.D.	Analytical and FEM Methods for Line Start Permanent Magnet Synchronous Motor of 2.2kW	line start permanent magnet synchronous motor, magnetic flux density, leakage flux, analytic method, finite element method	55, 6, 715-721	https://doi.org/10.18280/jesa.550603	Duc, H.B., Minh, D.B., Quoc, V.D. (2022). Analytical and FEM methods for line start permanent magnet synchronous motor of 2.2kW. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 55, No. 6, pp. 715-721. https://doi.org/10.18280/jesa.550603
244	Goonatilleke, S.T., Hettige, B.	Past, Present and Future Trends in Multi-Agent System Technology	agents, agent classification, multi-agent systems, MAS applications, MAS trends	55, 6, 723-739	https://doi.org/10.18280/jesa.550604	Goonatilleke, S.T., Hettige, B. (2022). Past, present and future trends in multi-agent system technology. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 55, No. 6, pp. 723-739. https://doi.org/10.18280/jesa.550604
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247	Karim, M.I., Hashim, A.A.A., Ghani, N.M.A.	Control of Double Link Flexible Robotic Manipulator System	Double Link, Fuzzy Logic Control, PID Control, Simscape, Solidworks	55, 6, 759-763	https://doi.org/10.18280/jesa.550607	Karim, M.I., Hashim, A.A.A., Ghani, N.M.A. (2022). Control of double link flexible robotic manipulator system. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 55, No. 6, pp. 759-763. https://doi.org/10.18280/jesa.550607
248	Adetunla, A.O., Kolade, O., Adeoye, A.M., Akande, S.	Development of a Prototype Sensory Device as a Substitute for Single Sided Deaf People in Developing Nations	binaural test, localizer, microcontroller, sensors, unilaterally deaf, white noise	55, 6, 765-769	https://doi.org/10.18280/jesa.550608	Adetunla, A.O., Kolade, O., Adeoye, A.M., Akande, S. (2022). Development of a prototype sensory device as a substitute for single sided deaf people in developing nations. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 55, No. 6, pp. 765-769. https://doi.org/10.18280/jesa.550608
249	Mahdi, M.A., Gittaffa, S.A., Issa, A.H.	Multiple Fault Detection and Smart Monitoring System Based on Machine Learning Classifiers for Infant Incubators Using Raspberry Pi 4	fault detection, infant incubator, Raspberry Pi 4, decision tree (DT), support vector machine (SVM), neural network (NN)	55, 6, 771-778	https://doi.org/10.18280/jesa.550609	Mahdi, M.A., Gittaffa, S.A., Issa, A.H. (2022). Multiple fault detection and smart monitoring system based on machine learning classifiers for infant incubators using raspberry Pi 4. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 55, No. 6, pp. 771-778. https://doi.org/10.18280/jesa.550609
250	Benmouiza, K.	Comparison Analysis of Different Grid-Connected PV Systems Topologies	PV systems, grid connected, topologies, converters	55, 6, 779-785	https://doi.org/10.18280/jesa.550610	Benmouiza, K. (2022). Comparison analysis of different grid-connected PV systems topologies. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 55, No. 6, pp. 779-785. https://doi.org/10.18280/jesa.550610
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252	Jasim, F.M., Al-Isawi, M.M.A., Hamad, A.H.	Guidance the Wall Painting Robot Based on a Vision System	painting wall robot, mathematical models, vision system, path planning and trajectory	55, 6, 793-802	https://doi.org/10.18280/jesa.550612	Jasim, F.M., Al-Isawi, M.M.A., Hamad, A.H. (2022). Guidance the wall painting robot based on a vision system. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 55, No. 6, pp. 793-802. https://doi.org/10.18280/jesa.550612
253	Larabi, M.S., Yahmedi, S., Zennir, Y.	Robust LQG Controller Design by LMI Approach of a Doubly-Fed Induction Generator for Aero-Generator	aero-generator, Linear Quadratic Gaussian (LQG), Linear Matrix Inequality (LMI), Doubly Fed Induction Generator (DFIG), singular values, robustness conditions, Lyapunov stability	55, 6, 803-816	https://doi.org/10.18280/jesa.550613	Larabi, M.S., Yahmedi, S., Zennir, Y. (2022). Robust LQG controller design by LMI approach of a doubly-fed induction generator for aero-generator. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 55, No. 6, pp. 803-816. https://doi.org/10.18280/jesa.550613
254	El Mahdi, B., Ali, E.K., Youssra, E.K., Soufiane, E.	Real Time Assessment of Novel Predictive Maintenance System Based on Artificial Intelligence for Rotating Machines	maintenance 4.0, internet of things, artificial neural network, monitoring, diagnosis, unbalance	55, 6, 817-823	https://doi.org/10.18280/jesa.550614	El Mahdi, B., Ali, E.K., Youssra, E.K., Soufiane, E. (2022). Real time assessment of novel predictive maintenance system based on artificial intelligence for rotating machines. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 55, No. 6, pp. 817-823. https://doi.org/10.18280/jesa.550614
255	Saadi, S.I., Mohammed, I.K.	Power Control Approach for PV Panel System Based on PSO and INC Optimization Algorithms	renewable energy, PV stand-alone system, solar PV panel, boost converter, off-grid	55, 6, 825-834	https://doi.org/10.18280/jesa.550615	Saadi, S.I., Mohammed, I.K. (2022). Power control approach for PV panel system based on PSO and INC optimization algorithms. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 55, No. 6, pp. 825-834. https://doi.org/10.18280/jesa.550615
256	Menighed, K., Yamé, J.J., Chekakta, I.	A Non-Cooperative Distributed Model Predictive Control Using Laguerre Functions for Large-Scale Interconnected Systems	distributed model predictive control, discrete-time Laguerre functions, large-scale interconnected systems, non-cooperative strategy, optimization problem	55, 5, 555-572	https://doi.org/10.18280/jesa.550501	Menighed, K., Yamé, J.J., Chekakta, I. (2022). A non-cooperative distributed model predictive control using Laguerre functions for large-scale interconnected systems. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 55, No. 5, pp. 555-572. https://doi.org/10.18280/jesa.550501

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258	Bommisetty, S.R., Chettu, K.B., Hanumanthappa, S.N.	Study and Experimental Investigation of the Effect of Progressive Feed Rate on Surface Roughness in CNC End Milling Process Using RSM	ANOVA, end milling, progressive feed, RSM, surface roughness, Taguchi	55, 5, 581-591	https://doi.org/10.18280/jesa.550503	Bommisetty, S.R., Chettu, K.B., Hanumanthappa, S.N. (2022). Study and experimental investigation of the effect of progressive feed rate on surface roughness in CNC end milling process using RSM. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 55, No. 5, pp. 581-591. https://doi.org/10.18280/jesa.550503
259	Hassan, M.R., Al-Samarraie, S.A.	Robust Nonlinear Control Design for the HVAC System Based on Adaptive Sliding Mode Control	adaptive sliding mode control, feedback continuous control, HVAC systems, MIMO systems, robust control	55, 5, 593-601	https://doi.org/10.18280/jesa.550504	Hassan, M.R., Al-Samarraie, S.A. (2022). Robust nonlinear control design for the HVAC system based on adaptive sliding mode control. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 55, No. 5, pp. 593-601. https://doi.org/10.18280/jesa.550504
260	Khemili, F.Z., Lefouili, M., Bouhali, O., Rizoug, N., Bekrar, L.	Dual Three Phase Multilevel Space Vector Modulation Control of Diode Clamped Inverter for Dual Star Induction Motor Drive	DSIM, IFOC, six-phase multilevel inverter, SVM	55, 5, 603-613	https://doi.org/10.18280/jesa.550505	Khemili, F.Z., Lefouili, M., Bouhali, O., Rizoug, N., Bekrar, L. (2022). Dual three phase multilevel space vector modulation control of diode clamped inverter for dual star induction motor drive. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 55, No. 5, pp. 603-613. https://doi.org/10.18280/jesa.550505
261	Abdullah, F.S., Mohammed, R.A., Hameed, F.I.	Thermal Design Developing for Steam Power Plants by Using Concentrating Solar Power (CSP) Technologies	CSP, solar, collector, thermal design	55, 5, 615-621	https://doi.org/10.18280/jesa.550506	Abdullah, F.S., Mohammed, R.A., Hameed, F.I. (2022). Thermal design developing for steam power plants by using Concentrating Solar Power (CSP) technologies. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 55, No. 5, pp. 615-621. https://doi.org/10.18280/jesa.550506
262	Bouziane, Y.S., Henini, N., Tlemçani, A.	Energy Management of a Hybrid Generation System Based on Wind Turbine Coupled with a Battery/Supercapacitor	hybrid generation system, wind turbine, permanent magnet synchronous generator, battery, supercapacitor, energy management	55, 5, 623-631	https://doi.org/10.18280/jesa.550507	Bouziane, Y.S., Henini, N., Tlemçani, A. (2022). Energy management of a hybrid generation system based on wind turbine coupled with a battery/supercapacitor. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 55, No. 5, pp. 623-631. https://doi.org/10.18280/jesa.550507
263	MohammadRidha, T., Kadhim, M.Q.	A Barrier Function-Based Variable Structure Control for Maglev System	magnetic levitation, variable structure control, adaptive control, sliding mode control, invariant set, barrier function	55, 5, 633-639	https://doi.org/10.18280/jesa.550508	MohammadRidha, T., Kadhim, M.Q. (2022). A barrier function-based variable structure control for maglev system. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 55, No. 5, pp. 633-639. https://doi.org/10.18280/jesa.550508
264	Abed, I.A., Ali, M.M., Abed, A.A.	Study Comparison Between Enhanced Firefly and Differential Evolution to Solve the Maximum Power Point Tracking Problem	firefly, MPPT, differential evolution, optimization, duty cycle	55, 5, 641-647	https://doi.org/10.18280/jesa.550509	Abed, I.A., Ali, M.M., Abed, A.A. (2022). Study comparison between enhanced firefly and differential evolution to solve the maximum power point tracking problem. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 55, No. 5, pp. 641-647. https://doi.org/10.18280/jesa.550509
265	Thanh, B.T., Trung, N.K.	Study Comparison Between Enhanced Firefly and Differential Evolution to Solve the Maximum Power Point Tracking Problem	order reduction algorithm, angle of attack, aircraft, optimal controller	55, 5, 649-655	https://doi.org/10.18280/jesa.550510	Thanh, B.T., Trung, N.K. (2022). Using the model reduction techniques to find the low-order controller of the aircraft's angle of attack control system. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 55, No. 5, pp. 649-655. https://doi.org/10.18280/jesa.550510
266	Gitaffa, S.A., Issa, A.H., Ibrahim, Y.N.	Deep Neural Network Technique Based Field Digitizing Units (FDUs) Instruments Fault Detection and Isolation	field digitizing unit instrument, fault detection and isolation, deep neural network, artificial intelligence, Raspberry Pi	55, 5, 657-663	https://doi.org/10.18280/jesa.550511	Gitaffa, S.A., Issa, A.H., Ibrahim, Y.N. (2022). Deep neural network technique based Field Digitizing Units (FDUs) instruments fault detection and isolation. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 55, No. 5, pp. 657-663. https://doi.org/10.18280/jesa.550511
267	Remli, A., Khtira, A., El Asri, B.	Reference Architecture for CIM the Bi-Level Architecture for Efficient Manufacturing BLAEM	manufacturing systems, smart manufacturing, computer integrated manufacturing, systems architecture	55, 5, 665-670	https://doi.org/10.18280/jesa.550512	Remli, A., Khtira, A., El Asri, B. (2022). Reference architecture for CIM the Bi-level architecture for efficient manufacturing BLAEM. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 55, No. 5, pp. 665-670. https://doi.org/10.18280/jesa.550512
268	Mohammed, I.K., Noaman, M.N.	Optimal Control Approach for Robot System Using LQG Technique	robot system, linear quadratic gaussian, Kalman filter, linear quadratic regulator, particle swarm optimization, stabilization	55, 5, 671-677	https://doi.org/10.18280/jesa.550513	Mohammed, I.K., Noaman, M.N. (2022). Optimal control approach for robot system using LQG technique. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 55, No. 5, pp. 671-677. https://doi.org/10.18280/jesa.550513
269	Bharadwaj, D., Dutt, D.	Simulation of Reinforcement Learning Algorithm for Motion Control of an Autonomous Humanoid	Markov decision process (MDP), reinforcement learning agents (RL), transition probabilities, reward	55, 5, 679-685	https://doi.org/10.18280/jesa.550514	Bharadwaj, D., Dutt, D. (2022). Simulation of reinforcement learning algorithm for motion control of an autonomous humanoid. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 55, No. 5, pp. 679-685. https://doi.org/10.18280/jesa.550514
270	Ameur, F., Ameur, T., Ameur, K.	Robust Control Simulation and Implementation for DC Motor	DC motor, PI controller, sliding mode controller, control, speed, Arduino hardware	55, 5, 687-692	https://doi.org/10.18280/jesa.550515	Ameur, F., Ameur, T., Ameur, K. (2022). Robust control simulation and implementation for DC motor. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 55, No. 5, pp. 687-692. https://doi.org/10.18280/jesa.550515
271	Bouderres, N., Kerdoun, D., Djellad, A., Chiheb, S., Dekhane, A.	Optimization of Fractional Order PI Controller by PSO Algorithm Applied to a Grid-Connected Photovoltaic System	PV, converter, MPPT, control, VOC, FOPI, PSO, THD	55, 4, 427-438	https://doi.org/10.18280/jesa.550401	Bouderres, N., Kerdoun, D., Djellad, A., Chiheb, S., Dekhane, A. (2022). Optimization of fractional order PI controller by PSO algorithm applied to a grid-connected photovoltaic system. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 55, No. 4, pp. 427-438. https://doi.org/10.18280/jesa.550401
272	Mahmood, T.S., Lutfy, O.F.	A Wavelet Neural Network-Based NARMA-L2 Feedforward Controller Using Genetic Algorithms to Control Nonlinear Systems	NARMA-L2, wavelet neural network, feedback linearization, inverse feedforward control, genetic algorithm, multilayer perceptron, PID controller	55, 4, 439-447	https://doi.org/10.18280/jesa.550402	Mahmood, T.S., Lutfy, O.F. (2022). A wavelet neural network-based NARMA-L2 feedforward controller using genetic algorithms to control nonlinear systems. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 55, No. 4, pp. 439-447. https://doi.org/10.18280/jesa.550402

273	Bendriss, A., Aidaoui, L., Abbes, M.T.	A Wavelet Neural Network-Based NARMA-L2 Feedforward Controller Using Genetic Algorithms to Control Nonlinear Systems	simulation, mechanism, excavation, automation	55, 4, 449-458	https://doi.org/10.18280/jesa.550403	Bendriss, A., Aidaoui, L., Abbes, M.T. (2022). Modeling of an automatic excavation mechanism for a parallelepiped foundation - Application in building construction preparation. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 55, No. 4, pp. 449-458. https://doi.org/10.18280/jesa.550403
274	Waheed, Z.A., Humaidi, A.J.	Design of Optimal Sliding Mode Control of Elbow Wearable Exoskeleton System Based on Whale Optimization Algorithm	exoskeleton system, exoskeleton system for rehabilitation, sliding mode control	55, 4, 459-466	https://doi.org/10.18280/jesa.550404	Waheed, Z.A., Humaidi, A.J. (2022). Design of optimal sliding mode control of elbow wearable exoskeleton system based on whale optimization algorithm. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 55, No. 4, pp. 459-466. https://doi.org/10.18280/jesa.550404
275	Gadouche, Z., Belfedal, C., Allaoui, T., Denai, M., Bey, M.	Hybrid Renewable Energy System Controlled with Intelligent Direct Power Control	photovoltaic, wind turbine (WT), hybrid energy conversion, direct power control (DPC), fuzzy logic controller (FLC)	55, 4, 467-475	https://doi.org/10.18280/jesa.550405	Gadouche, Z., Belfedal, C., Allaoui, T., Denai, M., Bey, M. (2022). Hybrid renewable energy system controlled with intelligent direct power control. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 55, No. 4, pp. 467-475. https://doi.org/10.18280/jesa.550405
276	Arifin, Z., Suyitno, Tjahjana, D.D.D.P., Muqoffa, M., Prasetyo, S.D., Alfaiz, N.F., Sanusi, A.	Grid-Connected Hybrid PV-Wind System Simulation in Urban Java	HOMER, hybrid technology, renewable energy, cost analysis	55, 4, 477-483	https://doi.org/10.18280/jesa.550406	Arifin, Z., Suyitno, Tjahjana, D.D.D.P., Muqoffa, M., Prasetyo, S.D., Alfaiz, N.F., Sanusi, A. (2022). Grid-connected hybrid PV-wind system simulation in urban Java. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 55, No. 4, pp. 477-483. https://doi.org/10.18280/jesa.550406
277	Djehaf, M.A., Kobibi, Y.I.D., Khatir, M., Ouadrafrakou, M.	Transient Stability Improvement of Multi Machine Power System Including DFIG Wind Farm Using HVDC Link	High-Voltage Direct Current (HVDC) transmission, electric power system stability, transient stability, multi-machine power system, fault clearing time, wind farm	55, 4, 485-493	https://doi.org/10.18280/jesa.550407	Djehaf, M.A., Kobibi, Y.I.D., Khatir, M., Ouadrafrakou, M. (2022). Transient stability improvement of multi machine power system including DFIG wind farm using HVDC link. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 55, No. 4, pp. 485-493. https://doi.org/10.18280/jesa.550407
278	Al-Mothafar, M.R.D.	Direct and Cross-Coupling Audio-Susceptibilities of the Peak Current-Mode Controlled Independent-Input Series-Output Boost Converter	audio-susceptibility, modular boost dc-dc converters, independent-input series-output, peak current-mode control, small-signal modeling	55, 4, 495-502	https://doi.org/10.18280/jesa.550408	Al-Mothafar, M.R.D. (2022). Direct and cross-coupling audio-susceptibilities of the peak current-mode controlled independent-input series-output boost converter. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 55, No. 4, pp. 495-502. https://doi.org/10.18280/jesa.550408
279	Tayyeh, I.F., Ali, H.I.	Full State Feedback H-Infinity Controller Design for Nonlinear Systems	nonlinear systems, H-infinity, state feedback, black hole optimization, robust control	55, 4, 503-509	https://doi.org/10.18280/jesa.550409	Tayyeh, I.F., Ali, H.I. (2022). Full state feedback H-infinity controller design for nonlinear systems. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 55, No. 4, pp. 503-509. https://doi.org/10.18280/jesa.550409
280	Li, H., Tian, L.X., Zhao, L., Wang, B.	Modeling and Grid-Connected Control of Wind-Solar-Storage Combined Power Generation System	wind power, photovoltaic arrays, battery, modeling and simulation	55, 4, 511-517	https://doi.org/10.18280/jesa.550410	Li, H., Tian, L.X., Zhao, L., Wang, B. (2022). Modeling and grid-connected control of wind-solar-storage combined power generation system. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 55, No. 4, pp. 511-517. https://doi.org/10.18280/jesa.550410
281	Benamrane, K., Abdelkrim T., Benlahbib, B., Bouarroudj, N., Lakhdari, A., Borni, A., Bahri, A.	New Configuration of Five-Level NPC Inverter with Three-Level Boost Converter for Photovoltaic Solar Energy Conversion	Three-Level Boost, five-level inverter, clamping bridges, SVPWM, DC bus control	55, 4, 519-525	https://doi.org/10.18280/jesa.550411	Benamrane, K., Abdelkrim T., Benlahbib, B., Bouarroudj, N., Lakhdari, A., Borni, A., Bahri, A. (2022). New configuration of five-level NPC inverter with Three-Level Boost converter for photovoltaic solar energy conversion. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 55, No. 4, pp. 519-525. https://doi.org/10.18280/jesa.550411
282	Ali, H.M., Karash, E.T., Elias, M.T.	Study the Machining Accuracy in Hole Reaming of Medium Carbon Steel Using Ultrasonic Vibration Method	ultrasonic vibration, reaming, surface roughness, circular degree	55, 4, 527-533	https://doi.org/10.18280/jesa.550412	Ali, H.M., Karash, E.T., Elias, M.T. (2022). Study the machining accuracy in hole reaming of medium carbon steel using ultrasonic vibration method. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 55, No. 4, pp. 527-533. https://doi.org/10.18280/jesa.550412
283	Olujimi, A., Aaron, I., Adebayo, O., Afolarin, A., Jonathan, E.	Smart Solar Powered Irrigation System	irrigation system, internet of things (IoT), microcontroller, moisture level, solar powered	55, 4, 535-540	https://doi.org/10.18280/jesa.550413	Olujimi, A., Aaron, I., Adebayo, O., Afolarin, A., Jonathan, E. (2022). Smart solar powered irrigation system. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 55, No. 4, pp. 535-540. https://doi.org/10.18280/jesa.550413
284	Husain, S.S., MohammadRidha, T.	Integral Sliding Mode Control for Seismic Effect Regulation on Buildings Using ATMD and MRD	active control, semi active control, ATMD, MRD, seismic effect, integral sliding mode, integral sliding mode control with barrier function, earthquake vibration	55, 4, 541-548	https://doi.org/10.18280/jesa.550414	Husain, S.S., MohammadRidha, T. (2022). Integral sliding mode control for seismic effect regulation on buildings using ATMD and MRD. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 55, No. 4, pp. 541-548. https://doi.org/10.18280/jesa.550414
285	Ha, V.T.	Backstepping-Sliding Mode Control Combined with Load Torque Neural Network Observer for a Two – Mass System	backstepping, sliding mode control, neural network, two-mass system, FOC, NN-observer, TMS	55, 4, 549-554	https://doi.org/10.18280/jesa.550415	Ha, V.T. (2022). Backstepping-sliding mode control combined with load torque neural network observer for a two – mass system. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 55, No. 4, pp. 549-554. https://doi.org/10.18280/jesa.550415
286	Euldji, R., Batel, N., Rebhi, R., Lorenzini, G., Jarasthitkulchai, N., Menni, Y., Ahmad, H., Ameur, H., Sudsutad, W.	Optimal Design and Performance Comparison of a Combined ANFIS-PID with Back Stepping Technique, Using Various Meta-Heuristic Algorithms to Solve Wheeled Mobile Robot Trajectory Tracking Problem	wheeled mobile robot (WMR), trajectory tracking, back-stepping, proportional integral derivative controller (PID), adaptive neuro-fuzzy inference system (ANFIS), meta-heuristics	55, 3, 281-298	https://doi.org/10.18280/jesa.550301	Euldji, R., Batel, N., Rebhi, R., Lorenzini, G., Jarasthitkulchai, N., Menni, Y., Ahmad, H., Ameur, H., Sudsutad, W. (2022). Optimal design and performance comparison of a combined ANFIS-PID with back stepping technique, using various meta-heuristic algorithms to solve wheeled mobile robot trajectory tracking problem. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 55, No. 3, pp. 281-298. https://doi.org/10.18280/jesa.550301
287	Ejidokun, T.O., Omitola, O.O., Fiyinfoluwa, A., Onodjohwo, S., Odogwu, C., Odogwu, C.	A Conceptual Design of a Vision-Based Fire Fighting Robot for Smart City Application	robot, sensor node, SLAM, visual servoing, autonomous, navigation, obstacle avoidance, fire suppression	55, 3, 299-305	https://doi.org/10.18280/jesa.550302	Ejidokun, T.O., Omitola, O.O., Fiyinfoluwa, A., Onodjohwo, S., Odogwu, C., Odogwu, C. (2022). A conceptual design of a vision-based fire fighting robot for smart city application. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 55, No. 3, pp. 299-305. https://doi.org/10.18280/jesa.550302
288	Dahdouh, A., Mazouz, L., Youcef, B.E.	A Conceptual Design of a Vision-Based Fire Fighting Robot for Smart City Application	harmonic extraction, photovoltaic generator (PVG), unified power quality conditioner (UPQC), feedback linearisation controller (FLC), space vector modulation (SVM), power quality enhancement	55, 3, 307-322	https://doi.org/10.18280/jesa.550303	Dahdouh, A., Mazouz, L., Youcef, B.E. (2022). PIL implementation of feedback linearisation-SVM control of 3-phase multifunctional grid-tied solar PV integrated UPQC. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 55, No. 3, pp. 307-322. https://doi.org/10.18280/jesa.550303

289	Ali, H.I., Ibrahim, I.H.	An Optimal Quantitative PID Controller Design for Ball and Beam System	robust control, optimal control, PID controller, black hole optimization, ball and beam system	55, 3, 323-329	https://doi.org/10.18280/jesa.550304	Ali, H.I., Ibrahim, I.H. (2022). An optimal quantitative PID controller design for ball and beam system. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 55, No. 3, pp. 323-329. https://doi.org/10.18280/jesa.550304
290	Abedulabbas, G.W., Yaseen, F.R.	Design a PI Controller Based on PSO and GWO for a Brushless DC Motor	brushless direct current (BLDC) motor, proportional-integral (PI) controller, particle swarm optimization (PSO), grey wolf optimization (GWO)	55, 3, 331-338	https://doi.org/10.18280/jesa.550305	Abedulabbas, G.W., Yaseen, F.R. (2022). Design a PI controller based on PSO and GWO for a brushless DC motor. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 55, No. 3, pp. 331-338. https://doi.org/10.18280/jesa.550305
291	Yosif, Z.M., Mahmood, B.S., Saeed, S.Z.	Artificial Techniques Based on Neural Network and Fuzzy Logic Combination Approach for Avoiding Dynamic Obstacles	dynamic obstacle avoidance, fuzzy logic, neural network, mobile robot navigation, path planning	55, 3, 339-348	https://doi.org/10.18280/jesa.550306	Yosif, Z.M., Mahmood, B.S., Saeed, S.Z. (2022). Artificial techniques based on neural network and fuzzy logic combination approach for avoiding dynamic obstacles. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 55, No. 3, pp. 339-348. https://doi.org/10.18280/jesa.550306
292	Ikubanni, P.P., Adeleke, A.A., Agboola, O.O., Christopher, C.T., Ademola, B.S., Okonkwo, J., Adesina, O.S., Omoniyi, P.O., Akinlabi, E.T.	Present and Future Impacts of Computer-Aided Design/ Computer-Aided Manufacturing (CAD/CAM)	3-D bioprinting, CAD/CAM, automation, manufacturing, virtual reality	55, 3, 349-357	https://doi.org/10.18280/jesa.550307	Ikubanni, P.P., Adeleke, A.A., Agboola, O.O., Christopher, C.T., Ademola, B.S., Okonkwo, J., Adesina, O.S., Omoniyi, P.O., Akinlabi, E.T. (2022). Present and future impacts of Computer-Aided Design/ Computer-Aided Manufacturing (CAD/CAM). <i>Journal Européen des Systèmes Automatisés</i> , Vol. 55, No. 3, pp. 349-357. https://doi.org/10.18280/jesa.550307
293	Mourad, A., Zennir, Y., Tolba, C.	Intelligent and Robust Controller Tuned with WOA: Applied for the Inverted Pendulum	fuzzy logic, radial basis function neural network, integral sliding mode, whale optimizer algorithm, inverted pendulum, control trajectory	55, 3, 359-366	https://doi.org/10.18280/jesa.550308	Mourad, A., Zennir, Y., Tolba, C. (2022). Intelligent and robust controller tuned with WOA: Applied for the inverted pendulum. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 55, No. 3, pp. 359-366. https://doi.org/10.18280/jesa.550308
294	Moulay, F., Habibi, A., Lousdad, A.	The Design and Simulation of a Photovoltaic System Connected to the Grid Using a Boost Converter	irradiance, PV modelling, boost converter, perturb and observe, PV array, grid, MPPT control, power inverter	55, 3, 367-375	https://doi.org/10.18280/jesa.550309	Moulay, F., Habibi, A., Lousdad, A. (2022). The design and simulation of a photovoltaic system connected to the grid using a boost converter. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 55, No. 3, pp. 367-375. https://doi.org/10.18280/jesa.550309
295	Akande, S., Ajisegiri, G.O., Adegoke, A.A., Ikumapayi, O.M., Akinlabi, E.T.	Dispatching Rules for Minimizing Deviation from JIT Schedule Using the Earliness-Tardiness Scheduling Problem with Due Windows Approach	Just-In-Time (JIT), Earliness-Tardiness (E/T) scheduling problem, optimal schedule, deviation, heuristics	55, 3, 377-385	https://doi.org/10.18280/jesa.550310	Akande, S., Ajisegiri, G.O., Adegoke, A.A., Ikumapayi, O.M., Akinlabi, E.T. (2022). Dispatching rules for minimizing deviation from JIT scheduling using the Earliness-Tardiness scheduling problem with due windows approach. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 55, No. 3, pp. 377-385. https://doi.org/10.18280/jesa.550310
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297	Benaouadj, M., Boumous, Z., Boumous, S.	Active Harmonic Filtering for Improving Power Quality of an Electrical Network	parallel active filter, harmonics identification, energy quality, electrical network	55, 3, 397-403	https://doi.org/10.18280/jesa.550312	Benaouadj, M., Boumous, Z., Boumous, S. (2022). Active harmonic filtering for improving power quality of an electrical network. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 55, No. 3, pp. 397-403. https://doi.org/10.18280/jesa.550312
298	Abed, M.S., Lutfy, O.F., Al-Doori, Q.F.	Online Path Planning of Mobile Robots Based on African Vultures Optimization Algorithm in Unknown Environments	APSO, AVOA, path planning, mobile robot, obstacle avoidance	55, 3, 405-412	https://doi.org/10.18280/jesa.550313	Abed, M.S., Lutfy, O.F., Al-Doori, Q.F. (2022). Online path planning of mobile robots based on African vultures optimization algorithm in unknown environments. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 55, No. 3, pp. 405-412. https://doi.org/10.18280/jesa.550313
299	Shivakumar, P., Barik S.K.	Implementation of SVM Based Multi-Level Inverter for Grid Connected PV System	photovoltaic (PV), 51 level multi-level inverter, total harmonic distortion (THD)	55, 3, 413-418	https://doi.org/10.18280/jesa.550314	Shivakumar, P., Barik S.K. (2022). Implementation of SVM based multi-level inverter for grid connected PV system. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 55, No. 3, pp. 413-418. https://doi.org/10.18280/jesa.550314
300	Razooqi, R.A., Hassan, H.J., Saheb, G.M.A.	Selection Algorithm for Reducing IoT Service Delay in the Smart Factory	smart factory, edge server, selection algorithm	55, 3, 419-426	https://doi.org/10.18280/jesa.550315	Razooqi, R.A., Hassan, H.J., Saheb, G.M.A. (2022). Selection algorithm for reducing IoT service delay in the smart factory. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 55, No. 3, pp. 419-426. https://doi.org/10.18280/jesa.550315
301	Gonza, M., Alla, H., Bitjoka, L.	Structural Design of Supreme Controller with Uncontrollable Transitions	discrete event system, controllability, petri net, maximally permissive, reachability graph, supervisory control	55, 2, 155-164	https://doi.org/10.18280/jesa.550201	Gonza, M., Alla, H., Bitjoka, L. (2022). Structural design of supreme controller with uncontrollable transitions. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 55, No. 2, pp. 155-164. https://doi.org/10.18280/jesa.550201
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306	Okokpujie, I.P., Sinebe, J.E., Tartibu, L.K., Adeoye, A.O.M., Kelechi, S.E., Akinlabi, E.T.	Ratio Study of High-Pressure Lubrication and Cutting Parameters Effects on Machining Operations and Its Effect Towards Sustainable Machining: A Review	machining, nano-lubricant, high-pressure-lubrication, chips formation, temperature distribution, tool wear, surface roughness	55, 2, 197-205	https://doi.org/10.18280/jesa.550206	Okokpujie, I.P., Sinebe, J.E., Tartibu, L.K., Adeoye, A.O.M., Kelechi, S.E., Akinlabi, E.T. (2022). Ratio study of high-pressure lubrication and cutting parameters effects on machining operations and its effect towards sustainable machining: A review. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 55, No. 2, pp. 197-205. https://doi.org/10.18280/jesa.550206
307	Jampana, B., Askani, J., Veramalla, R. (DC Component Extraction of Notch Filter Algorithm for Active Power Filters	active power filter, neutral current compensation, notch filter, power quality, harmonics	55, 2, 207-212	https://doi.org/10.18280/jesa.550207	Jampana, B., Askani, J., Veramalla, R. (2022). DC component extraction of notch filter algorithm for active power filters. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 55, No. 2, pp. 207-212. https://doi.org/10.18280/jesa.550207
308	Zhang, Y., Sun, Y.G., Hu, Z.G., Fang, B.F., Xie, Y., Chen, L.K., Teng, Y.Y.	Control Performance Analysis of Mining Ship Heave Compensation System Based on Fuzzy Logic Algorithm	mining vessel, heave compensation, PID control, fuzzy logic, heave displacement response of the vessel	55, 2, 213-220	https://doi.org/10.18280/jesa.550208	Zhang, Y., Sun, Y.G., Hu, Z.G., Fang, B.F., Xie, Y., Chen, L.K., Teng, Y.Y. (2022). Control performance analysis of mining ship heave compensation system based on fuzzy logic algorithm. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 55, No. 2, pp. 213-220. https://doi.org/10.18280/jesa.550208
309	Ghlib, I., Messlem, Y., Chedjara, Z.	An Improved Sensorless Control of Induction Motor Using ADALINE: Theory and Experiment	ADALINE, artificial neural network, induction motor, intelligent controller, Luenberger, sensorless control	55, 2, 221-227	https://doi.org/10.18280/jesa.550209	Ghlib, I., Messlem, Y., Chedjara, Z. (2022). An improved sensorless control of induction motor using ADALINE: Theory and experiment. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 55, No. 2, pp. 221-227. https://doi.org/10.18280/jesa.550209
310	Jamil, A., Baharom, M.B., Abd Aziz, A.R.B.	In-Cylinder Cold-Flow Analysis - 'A Comparison of Crank-Slider Engine and Crank-Rocker Engine'	CAD model, CFD analysis, crank-rocker, flow analysis, visualization	55, 2, 229-236	https://doi.org/10.18280/jesa.550210	Jamil, A., Baharom, M.B., Abd Aziz, A.R.B. (2022). In-cylinder cold-flow analysis - 'a comparison of crank-slider engine and crank-rocker engine'. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 55, No. 2, pp. 229-236. https://doi.org/10.18280/jesa.550210
311	Abdelazziz, A., El Moundher, A., Dhaouadi, G.	Efficient Neuro-Fuzzy Identification Model for Electrocardiogram Signal	nonlinear systems, ECG signal, fuzzy inference models, neural networks, neuro-fuzzy systems	55, 2, 237-244	https://doi.org/10.18280/jesa.550211	Abdelazziz, A., El Moundher, A., Dhaouadi, G. (2022). Efficient neuro-fuzzy identification model for electrocardiogram signal. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 55, No. 2, pp. 237-244. https://doi.org/10.18280/jesa.550211
312	Chatterjee, S.	Fault Detection for a Nonlinear Switched Continuous Time Delayed System Using Machine Learning and Self-Switched UKF	estimation error, hybrid system, noise, PPCA, SVM, three tank system, time delayed estimator	55, 2, 245-251	https://doi.org/10.18280/jesa.550212	Chatterjee, S. (2022). Fault detection for a nonlinear switched continuous time delayed system using machine learning and self-switched UKF. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 55, No. 2, pp. 245-251. https://doi.org/10.18280/jesa.550212
313	Suhail, J., Rijab, K.Sh.	Wireless Sensor Network Based on Kalman Filter	SDN, K-mean, Leach protocol, NRF24, ESP32, Arduino	55, 2, 253-257	https://doi.org/10.18280/jesa.550213	Suhail, J., Rijab, K.Sh. (2022). Wireless sensor network based on Kalman filter. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 55, No. 2, pp. 253-257. https://doi.org/10.18280/jesa.550213
314	Messaoud, M.	Comparative Functional Analysis of Three MPPT Techniques Applied on a Stand-Alone Photovoltaic System with a Charging Battery	drift phenomenon, dynamic state-space averaging model, fuzzy logic, incremental conductance (Inc-Cond), linearization, perturbation and observation (P&O), PID controller, Tayler expansion series	55, 2, 259-266	https://doi.org/10.18280/jesa.550214	Messaoud, M. (2022). Comparative functional analysis of three MPPT techniques applied on a stand-alone photovoltaic system with a charging battery. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 55, No. 2, pp. 259-266. https://doi.org/10.18280/jesa.550214
315	Zhu, C., Jiang, F.C., Tang, Y.L.	Joint Scheduling of Charging and Service Operation of Electric Taxi Based on Reinforcement Learning	charging scheduling, electric taxi, reinforcement learning, service operation scheduling	55, 2, 267-272	https://doi.org/10.18280/jesa.550215	Zhu, C., Jiang, F.C., Tang, Y.L. (2022). Joint scheduling of charging and service operation of electric taxi based on reinforcement learning. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 55, No. 2, pp. 267-272. https://doi.org/10.18280/jesa.550215
316	Srikanth, B., Kumar, A.N., Sridhar, P.	Four Circuit Transmission Line Location for Inter Circuit Faults Using Fuzzy Expert System	mamani fuzzy inference system, inter circuit faults, four circuit transmission line	55, 2, 273-280	https://doi.org/10.18280/jesa.550216	Srikanth, B., Kumar, A.N., Sridhar, P. (2022). Four circuit transmission line location for inter circuit faults using fuzzy expert system. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 55, No. 2, pp. 273-280. https://doi.org/10.18280/jesa.550216
317	Selicati, V., Cardinale, N.	An Overview of Coupled Exergetic and Life Cycle Manufacturing Performance Metrics for Assessing Sustainability	analysis interpretation, exergy, life cycle assessment, manufacturing sustainability, performance metrics, reversibility	55, 1, 1-10	https://doi.org/10.18280/jesa.550101	Selicati, V., Cardinale, N. (2022). An overview of coupled exergetic and life cycle manufacturing performance metrics for assessing sustainability. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 55, No. 1, pp. 1-10. https://doi.org/10.18280/jesa.550101
318	Bendali, W., Saber, I., Bourachdi, B., Amri, O., Boussetta, M., Mourad, Y.	Multi Time Horizon Ahead Solar Irradiation Prediction Using GRU, PCA, and GRID SEARCH Based on Multivariate Datasets	dimensionality reduction, forecasting hyperparameters, gate recurrent unit, grid-search optimization, principal component analysis	55, 1, 11-23	https://doi.org/10.18280/jesa.550102	Bendali, W., Saber, I., Bourachdi, B., Amri, O., Boussetta, M., Mourad, Y. (2022). Multi time horizon ahead solar irradiation prediction using GRU, PCA, and GRID SEARCH based on multivariate datasets. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 55, No. 1, pp. 11-23. https://doi.org/10.18280/jesa.550102
319	Lakhdari, A., Benlahbib, B., Abdelkrim, T.	Model Predictive Control for Three-Phase Three-Level NPC Inverter Based APF Interfacing Single Stage Photovoltaic System to the Grid	TTLNPC inverter, APF, MPPT, model predictive control, cost function	55, 1, 25-34	https://doi.org/10.18280/jesa.550103	Lakhdari, A., Benlahbib, B., Abdelkrim, T. (2022). Model predictive control for three-phase three-level NPC inverter based APF interfacing single stage photovoltaic system to the grid. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 55, No. 1, pp. 25-34. https://doi.org/10.18280/jesa.550103
320	Yalavarthy, U.R.S., Gadi, V.S.K.R.	Indirect Space Vector Modeling of Asynchronous Motor for High-Speed Electric Vehicle Propulsion	asynchronous motor (ASM), electric vehicle (EV), indirect space vector control (IDSVC), second-order low-pass (SOLP), space vector pulse width modulation (SVPWM)	55, 1, 35-48	https://doi.org/10.18280/jesa.550104	Yalavarthy, U.R.S., Gadi, V.S.K.R. (2022). Indirect space vector modeling of asynchronous motor for high-speed electric vehicle propulsion. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 55, No. 1, pp. 35-48. https://doi.org/10.18280/jesa.550104

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322	Abed, M.S., Lutfy, O.F., Al-Doori, Q.F.	Online Optimization Application on Path Planning in Unknown Environments	GWO, MGWO, path planning, mobile robot, obstacle avoidance	55, 1, 61-69	https://doi.org/10.18280/jesa.550106	Abed, M.S., Lutfy, O.F., Al-Doori, Q.F. (2022). Online optimization application on path planning in unknown environments. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 55, No. 1, pp. 61-69. https://doi.org/10.18280/jesa.550106
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324	Lebediev, V.A., Laktionov, I.S., Vovna, O.V., Kabanets, M.M., Sahaida, P.I., Dobrovolska, L.O.	Methods of Improving Technical and Functional Characteristics of Serial Budget Microprocessor Platforms	Arduino, supply voltage, load current, temperature, stabilizer, microcontroller	55, 1, 81-88	https://doi.org/10.18280/jesa.550108	Lebediev, V.A., Laktionov, I.S., Vovna, O.V., Kabanets, M.M., Sahaida, P.I., Dobrovolska, L.O. (2022). Methods of improving technical and functional characteristics of serial budget microprocessor platforms. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 55, No. 1, pp. 81-88. https://doi.org/10.18280/jesa.550108
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329	Abdullah, A.I., Alnema, Y.H.S., Thanoon, M.A.	Stabilization of Three Links Inverted Pendulum with Cart Based on Genetic LQR Approach	GA_LQR, triple link inverted pendulum, stabilization of inverted pendulum	55, 1, 125-130	https://doi.org/10.18280/jesa.550113	Abdullah, A.I., Alnema, Y.H.S., Thanoon, M.A. (2022). Stabilization of three links inverted pendulum with cart based on genetic LQR approach. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 55, No. 1, pp. 125-130. https://doi.org/10.18280/jesa.550113
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332	Merdj, F., Drid, S.	Electromagnetic Forces Effects of MHD Micropump on the Blood Movement	biomedical Microsystems, micropumps, magnetohydrodynamic (MHD), DC MHD, Lorentz force	55, 1, 147-153	https://doi.org/10.18280/jesa.550116	Merdj, F., Drid, S. (2022). Electromagnetic forces effects of MHD micropump on the blood movement. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 55, No. 1, pp. 147-153. https://doi.org/10.18280/jesa.550116
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335	Suratno, Ichtiarto, B.P.	Reduce Carbon Emissions of Logistic Transportation Using Eight Steps Approach in Indonesian Automotive Industry	automotive industry, carbon emissions, eight step approach, focus group discussion, local delivery	54, 6, 819-826	https://doi.org/10.18280/jesa.540603	Suratno, Ichtiarto, B.P. (2021). Reduce carbon emissions of logistic transportation using eight steps approach in Indonesian automotive industry. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 54, No. 6, pp. 819-826. https://doi.org/10.18280/jesa.540603
336	Abboudi, A., Belmajdoub, F.	Dynamic Thresholds for a Reliable Diagnosis of Switched Systems	diagnosis, switched systems, bond graphs, hybrid observers, dynamic thresholds	54, 6, 827-833	https://doi.org/10.18280/jesa.540604	Abboudi, A., Belmajdoub, F. (2021). Dynamic thresholds for a reliable diagnosis of switched systems. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 54, No. 6, pp. 827-833. https://doi.org/10.18280/jesa.540604

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338	Kumar, A.S., Reddy, V.U.	Performance Evaluation of PV Panel Configurations Considering PSC's for PV Standalone Applications	SP, TCT, TT, BL, PV, PSC	54, 6, 847-852	https://doi.org/10.18280/jesa.540606	Kumar, A.S., Reddy, V.U. (2021). Performance evaluation of PV panel configurations considering PSC's for PV standalone applications. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 54, No. 6, pp. 847-852. https://doi.org/10.18280/jesa.540606
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340	Bharadwaj, D., Dutt, D.	Design and Development of Low-Level Automation for the Picking and Placing of the Object Using Pneumatic Suction	pneumatic actuator, pneumatic suction, gripper, relay	54, 6, 865-870	https://doi.org/10.18280/jesa.540608	Bharadwaj, D., Dutt, D. (2021). Design and development of low-level automation for the picking and placing of the object using pneumatic suction. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 54, No. 6, pp. 865-870. https://doi.org/10.18280/jesa.540608
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344	Omar, F., El Mrabet, A.H., Belkraouane, I., Djeriri, Y.	Sliding Mode Control for a DC Motor System with Dead-Zone	sliding mode control, DC motor, nonlinear, dead zone, Coulomb friction	54, 6, 897-902	https://doi.org/10.18280/jesa.540612	Omar, F., El Mrabet, A.H., Belkraouane, I., Djeriri, Y. (2021). Sliding mode control for a DC motor system with dead-zone. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 54, No. 6, pp. 897-902. https://doi.org/10.18280/jesa.540612
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348	Aissaoui, A., Khoudmi, H., Benzouaoui, A., Bessedik, B.	Nonlinear Predictive Control Method for Maximizing Wind Energy Extraction of Variable Speed Wind Turbines under Turbulence	variable-speed wind turbines, wind energy extraction, nonlinear optimization, predictive control	54, 5, 661-670	https://doi.org/10.18280/jesa.540501	Aissaoui, A., Khoudmi, H., Benzouaoui, A., Bessedik, B. (2021). Nonlinear predictive control method for maximizing wind energy extraction of variable speed wind turbines under turbulence. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 54, No. 5, pp. 661-670. https://doi.org/10.18280/jesa.540501
349	Prasad, R.R., Durgasukumar, G.	Performance Analysis of PI, T1NFC, and T2NFC of Indirect Vector Control-Based Induction Motor Using DSpace-2812	PI controller, IVC, induction motor drive (IMD), T2NFC, T1NFC, FOU, MFs	54, 5, 671-682	https://doi.org/10.18280/jesa.540502	Prasad, R.R., Durgasukumar, G. (2021). Performance analysis of PI, T1NFC, and T2NFC of indirect vector control-based induction motor using DSpace-2812. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 54, No. 5, pp. 671-682. https://doi.org/10.18280/jesa.540502
350	Abboudi, A., Belmajdoub, F.	Hybrid Diagnosis Method Applied to Switched Mechatronic Systems	diagnosis, mechatronic systems, switched systems, hybrid observer, bond graph, hybrid automaton	54, 5, 683-691	https://doi.org/10.18280/jesa.540503	Abboudi, A., Belmajdoub, F. (2021). Hybrid diagnosis method applied to switched mechatronic systems. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 54, No. 5, pp. 683-691. https://doi.org/10.18280/jesa.540503
351	Hanif, M.I.F.M., Ahmad, M.A., Jui, J.J.	PID Tuning Method Using Chaotic Safe Experimentation Dynamics Algorithm for Elastic Joint Manipulator	vibration reduction, flexible mechanism, PID controller, self-tuned control, data-based method	54, 5, 693-698	https://doi.org/10.18280/jesa.540504	Hanif, M.I.F.M., Ahmad, M.A., Jui, J.J. (2021). PID tuning method using chaotic safe experimentation dynamics algorithm for elastic joint manipulator. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 54, No. 5, pp. 693-698. https://doi.org/10.18280/jesa.540504
352	Akoue, H.J., Eloundou, P.N., Essiane, S.N., Ele, P., Nneme, L.N., Diboma, B.S., Mayi, O.T.S.	A Novel Hybrid Algorithm of Max-Min Ant System with Quadratic Programming to Solve the Unit Commitment Problem	heuristic algorithms, hybrid algorithm, MAX-MIN ant system, metaheuristic, quadratic programming, unit commitment	54, 5, 699-712	https://doi.org/10.18280/jesa.540505	Akoue, H.J., Eloundou, P.N., Essiane, S.N., Ele, P., Nneme, L.N., Diboma, B.S., Mayi, O.T.S. (2021). A novel hybrid algorithm of max-min ant system with quadratic programming to solve the unit commitment problem. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 54, No. 5, pp. 699-712. https://doi.org/10.18280/jesa.540505

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355	Boukhalfa, A., Khettab, K., Essounbouli, N.	Novel Hybrid Interval Type-2 Fuzzy Adaptive Backstepping Control for a Class of Uncertain Discrete-Time Nonlinear Systems	interval type 2 fuzzy control, backstepping adaptive control, discrete-time nonlinear system, universal approximator, weighted least squares estimators	54, 5, 733-741	https://doi.org/10.18280/jesa.540508	Boukhalfa, A., Khettab, K., Essounbouli, N. (2021). Novel hybrid interval type-2 fuzzy adaptive backstepping control for a class of uncertain discrete-time nonlinear systems. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 54, No. 5, pp. 733-741. https://doi.org/10.18280/jesa.540508
356	Eddine, A.T., Ameur, A., Atallah, B.	RNA Identification Technique and RST Control of a Hybrid Indirect Matrix Converter with a Flying Capacitor Three Level Inverter in Power Active Filtering Application	active power filtering, artificial neuronal network, flying capacitor inverter, indirect matrix converter, RST controller	54, 5, 743-749	https://doi.org/10.18280/jesa.540509	Eddine, A.T., Ameur, A., Atallah, B. (2021). RNA identification technique and RST control of a hybrid indirect matrix converter with a flying capacitor three level inverter in power active filtering application. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 54, No. 5, pp. 743-749. https://doi.org/10.18280/jesa.540509
357	Lalith, M.S., Sridhar, P., Gatla, R.K., Kumar, A.S.	Evaluation of Surge Voltages on the Overhead Lines due to Direct and Indirect Lightning Impulse	surge magnitude, radial basis function, finite difference time domain	54, 5, 751-762	https://doi.org/10.18280/jesa.540510	Lalith, M.S., Sridhar, P., Gatla, R.K., Kumar, A.S. (2021). Evaluation of surge voltages on the overhead lines due to direct and indirect lightning impulse. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 54, No. 5, pp. 751-762. https://doi.org/10.18280/jesa.540510
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360	Leddine, S.D., Chamceddine, R., Ramdane, Z.	Faults Detection and Classification under Variable Condition Using Intrinsic Time - Scale Decomposition and Neural Network	classification, intrinsic time - scale decomposition (ITD), misalignment, (RMS), unbalance	54, 5, 777-782	https://doi.org/10.18280/jesa.540513	Leddine, S.D., Chamceddine, R., Ramdane, Z. (2021). Faults detection and classification under variable condition using intrinsic time - scale decomposition and neural network. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 54, No. 5, pp. 777-782. https://doi.org/10.18280/jesa.540513
361	Anagie, G.A., Hassen, A.A., Sintie, Y.T.	Performance Investigation of Small Wind Turbine Installed over a Pick up Vehicle to Charge an Electric Vehicle Battery	attack angle, battery, regulator, vehicle mounted wind turbine, and small wind turbine	54, 5, 783-788	https://doi.org/10.18280/jesa.540514	Anagie, G.A., Hassen, A.A., Sintie, Y.T. (2021). Performance investigation of small wind turbine installed over a pick up vehicle to charge an electric vehicle battery. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 54, No. 5, pp. 783-788. https://doi.org/10.18280/jesa.540514
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364	Fahmani, L., Benhadou, S., Medromi, H.	Mathematical Model and Attitude Estimation Using Extended Colored Kalman Filter for Transmission Lines Inspection's Unmanned Aerial Vehicle	electromagnetic interferences, extended Kalman filter, quaternions, transmission lines inspection, unmanned aerial vehicle	54, 4, 529-537	https://doi.org/10.18280/jesa.540402	Fahmani, L., Benhadou, S., Medromi, H. (2021). Mathematical model and attitude estimation using extended colored kalman filter for transmission lines inspection's unmanned aerial vehicle. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 54, No. 4, pp. 529-537. https://doi.org/10.18280/jesa.540402
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367	Allaoui, S., Laamari, Y., Chafaa, L., Saad, S.	Position and Speed Estimation of PMSM Based on Extended Kalman Filter Tuned by Biogeography-Based-Optimization	biogeography based optimization, extended Kalman filter, permanent magnet synchronous motors, sensorless control, state estimation	54, 4, 559-568	https://doi.org/10.18280/jesa.540405	Allaoui, S., Laamari, Y., Chafaa, L., Saad, S. (2021). Position and speed estimation of PMSM based on extended Kalman filter tuned by biogeography-based-optimization. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 54, No. 4, pp. 559-568. https://doi.org/10.18280/jesa.540405
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370	Bedhief, A.O.	Comparing Mixed-Integer Programming and Constraint Programming Models for the Hybrid Flow Shop Scheduling Problem with Dedicated Machines	hybrid flow shop scheduling, dedicated machines, mixed-integer programming, constraint programming, Cplex, CP optimizer	54, 4, 591-597	https://doi.org/10.18280/jesa.540408	Bedhief, A.O. (2021). Comparing mixed-integer programming and constraint programming models for the hybrid flow shop scheduling problem with dedicated machines. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 54, No. 4, pp. 591-597. https://doi.org/10.18280/jesa.540408
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375	Wakkumbura, R.T., Hettige, B., Edirisuriya, A.	Real-Time Traffic Controlling System Using Multi-Agent Technology	traffic congestion, multi-agent systems, dynamic environment, agents, junction	54, 4, 633-640	https://doi.org/10.18280/jesa.540413	Wakkumbura, R.T., Hettige, B., Edirisuriya, A. (2021). Real-time traffic controlling system using multi-agent technology. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 54, No. 4, pp. 633-640. https://doi.org/10.18280/jesa.540413
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383	Jie, L.W., Sen, T.P., Ghani, N.M.A., Abas, M.F.	Automatic Control of Color Sorting and Pick/Place of a 6-DOF Robot Arm	automatic wireless control, color sorting, 6-DOF robot arm, IOT-Blynks apps, pick and place tasks	54, 3, 435-443	https://doi.org/10.18280/jesa.540306	Jie, L.W., Sen, T.P., Ghani, N.M.A., Abas, M.F. (2021). Automatic control of color sorting and pick/place of a 6-DOF robot arm. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 54, No. 3, pp. 435-443. https://doi.org/10.18280/jesa.540306
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389	Yadav, R., Kumar, Y.	Detection of Non-Technical Losses in Electric Distribution Network by Applying Machine Learning and Feature Engineering	smart meter, machine learning, non-technical losses, CWR, feature engineering, SMOTE	54, 3, 487-493	https://doi.org/10.18280/jesa.540312	Yadav, R., Kumar, Y. (2021). Detection of non-technical losses in electric distribution network by applying machine learning and feature engineering. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 54, No. 3, pp. 487-493. https://doi.org/10.18280/jesa.540312
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391	Zatla, H., Tolbi, B., Bouriachi, F.	Optimal Reference Trajectory for a Type Xn-1Rp Underactuated Manipulator	manipulator, optimal, trajectory, nonholonomic, underactuated, planning	54, 3, 503-509	https://doi.org/10.18280/jesa.540314	Zatla, H., Tolbi, B., Bouriachi, F. (2021). Optimal reference trajectory for a type Xn-1Rp underactuated manipulator. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 54, No. 3, pp. 503-509. https://doi.org/10.18280/jesa.540314
392	Ogab, C., Hassaine, S., Sbaa, M., Haddouche, K., Bendiabdellah, A.	Sensorless Digital Control of a Permanent Magnet Synchronous Motor	PWM inverter, RST controller, PMSM, μ analysis, Kalman filter	54, 3, 511-517	https://doi.org/10.18280/jesa.540315	Ogab, C., Hassaine, S., Sbaa, M., Haddouche, K., Bendiabdellah, A. (2021). Sensorless digital control of a permanent magnet synchronous motor. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 54, No. 3, pp. 511-517. https://doi.org/10.18280/jesa.540315
393	Wahdan, H.G., Abdelslam, H.M., Kassem, S.S.	An Efficient Optimization Algorithm for Modular Product Design	modular design, Design Structure Matrix, Cuckoo Search, Particle Swarm Optimization, Simulated Annealing, Gravitational Search Algorithm	54, 2, 195-207	https://doi.org/10.18280/jesa.540201	Wahdan, H.G., Abdelslam, H.M., Kassem, S.S. (2021). An efficient optimization algorithm for modular product design. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 54, No. 2, pp. 195-207. https://doi.org/10.18280/jesa.540201
394	Benoudina, L., Redjimi, M.	Multi Agent System Based Approach for Industrial Process Simulation	agent based modelling and simulation (ABMS), industrial system, modeling and simulation, agent/group/role (AGR) model, AALAADIN, MADKIT	54, 2, 209-217	https://doi.org/10.18280/jesa.540202	Benoudina, L., Redjimi, M. (2021). Multi agent system based approach for industrial process simulation. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 54, No. 2, pp. 209-217. https://doi.org/10.18280/jesa.540202
395	Prasad, R.R., Durgasukumar, G.	Enhanced Performance of Indirect Vector Controlled Induction Motor Drive with a Modified Type 2 Neuro-Fuzzy Torque Controller in Interfacing with dSPACE DS-2812	PI controller, indirect vector control (IVC), induction motor drive (IMD), type 2 Neuro-fuzzy controller (T2NFC), type 1 neuro-fuzzy controller, foot print of uncertainty (FOU), induction motor (IM), membership functions (MFs)	54, 2, 219-228	https://doi.org/10.18280/jesa.540203	Prasad, R.R., Durgasukumar, G. (2021). Enhanced performance of indirect vector controlled induction motor drive with a modified type 2 neuro-fuzzy torque controller in interfacing with dSPACE DS-2812. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 54, No. 2, pp. 219-228. https://doi.org/10.18280/jesa.540203
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397	Abdessemad, O., Nemmour, A.L., Louze, L., Khezzar, A.	Real-Time Implementation of a Novel Vector Control Strategy for a Self-Excited Asynchronous Generator Driven by a Wind Turbine	autonomous induction generator, DC-bus voltage regulation, field-oriented control, poles placement method	54, 2, 235-241	https://doi.org/10.18280/jesa.540205	Abdessemad, O., Nemmour, A.L., Louze, L., Khezzar, A. (2021). Real-time implementation of a novel vector control strategy for a self-excited asynchronous generator driven by a wind turbine. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 54, No. 2, pp. 235-241. https://doi.org/10.18280/jesa.540205
398	Margabandu, V., Radhakrishnan, R.	Multi Objective Study on Machining Characteristics of AISI H-11 Tool Steel Prepared by Different Processing Techniques	cryogenic, force, hardness, roughness, turning, Taguchi	54, 2, 243-251	https://doi.org/10.18280/jesa.540206	Margabandu, V., Radhakrishnan, R. (2021). Multi objective study on machining characteristics of AISI H-11 tool steel prepared by different processing techniques. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 54, No. 2, pp. 243-251. https://doi.org/10.18280/jesa.540206
399	Herlambang, H., Purba, H.H., Jaquin, C.	Development of Machine Vision to Increase the Level of Automation in Indonesia Electronic Component Industry	machine vision, image processing, automation, level of automation, hierarchy task analysis, human error identification, gage study, Indonesia	54, 2, 253-262	https://doi.org/10.18280/jesa.540207	Herlambang, H., Purba, H.H., Jaquin, C. (2021). Development of machine vision to increase the level of automation in Indonesia electronic component industry. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 54, No. 2, pp. 253-262. https://doi.org/10.18280/jesa.540207
400	Boussadia, F., Belkhiat, S.	A New Adaptive Underfrequency Load Shedding Scheme to Improve Frequency Stability in Electric Power System	frequency control, load shedding scheme, real time measurement, generation shedding, emergency conditions	54, 2, 263-271	https://doi.org/10.18280/jesa.540208	Boussadia, F., Belkhiat, S. (2021). A new adaptive underfrequency load shedding scheme to improve frequency stability in electric power system. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 54, No. 2, pp. 263-271. https://doi.org/10.18280/jesa.540208

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402	HimaBindu, G., Lakshmeeswari, G., Lalitha, G., Subhashini, P.P.S.	Recognition Using DNN with Bacterial Foraging Optimization Using MFCC Coefficients	bacterial foraging optimization, deep neural network, speech recognition, segmentation, noise removal	54, 2, 283-287	https://doi.org/10.18280/jesa.540210	HimaBindu, G., Lakshmeeswari, G., Lalitha, G., Subhashini, P.P.S. (2021). Recognition using DNN with bacterial foraging optimization using MFCC coefficients. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 54, No. 2, pp. 283-287. https://doi.org/10.18280/jesa.540210
403	Mostefa, B., Kaddour, R., Mimoun, Y., Embarek, D., Amar, K.	Optimizing the Positions of Discs in Order to Obtain High Stability and Minimum Response in a Multi Disc Rotor	positions of discs, Plakett-Burman, bearings, stability, stiffness, gyroscopic forces, critical rotational speeds	54, 2, 289-301	https://doi.org/10.18280/jesa.540211	Mostefa, B., Kaddour, R., Mimoun, Y., Embarek, D., Amar, K. (2021). Optimizing the positions of discs in order to obtain high stability and minimum response in a multi disc rotor. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 54, No. 2, pp. 289-301. https://doi.org/10.18280/jesa.540211
404	Khan, A., Thakur, U.N.	A Design of Supplementary Controller for UPFC to Improve Damping of Inter-Area Oscillations	controller, damping, lead lag compensator, oscillation, pulse width modulation, unified power flow controller, UPFC	54, 2, 303-308	https://doi.org/10.18280/jesa.540212	Khan, A., Thakur, U.N. (2021). A design of supplementary controller for UPFC to improve damping of inter-area oscillations. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 54, No. 2, pp. 303-308. https://doi.org/10.18280/jesa.540212
405	Saeed, M.M., Al Sarraf, Z.S.	Using Artificial Neural Networks to Predict the Effect of Input Parameters on Weld Bead Geometry for SAW Process	ANN, back propagation, welding, input process parameters, bead geometry	54, 2, 309-315	https://doi.org/10.18280/jesa.540213	Saeed, M.M., Al Sarraf, Z.S. (2021). Using artificial neural networks to predict the effect of input parameters on weld bead geometry for SAW process. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 54, No. 2, pp. 309-315. https://doi.org/10.18280/jesa.540213
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409	Mehedi, F., Benbouhenni, H., Nezli, L., Boudana, D.	Feedforward Neural Network-DTC of Multi-phase Permanent Magnet Synchronous Motor Using Five-Phase Neural Space Vector Pulse Width Modulation Strategy	DTC, FP-PMSM, SVPWM, FNNs, PI, THD	54, 2, 345-354	https://doi.org/10.18280/jesa.540217	Mehedi, F., Benbouhenni, H., Nezli, L., Boudana, D. (2021). Feedforward neural network-DTC of multi-phase permanent magnet synchronous motor using five-phase neural space vector pulse width modulation strategy. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 54, No. 2, pp. 345-354. https://doi.org/10.18280/jesa.540217
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412	Gupta, S.K., Khan, M.A., Singh, O., Chauhan, D.K.	Pulse Width Modulation Technique for Multilevel Operation of Five-Phase Dual Voltage Source Inverters	five-phase voltage source inverter, multilevel inverters, space vector pulse width modulation, total harmonic distortion	54, 2, 371-379	https://doi.org/10.18280/jesa.540220	Gupta, S.K., Khan, M.A., Singh, O., Chauhan, D.K. (2021). Pulse width modulation technique for multilevel operation of five-phase dual voltage source inverters. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 54, No. 2, pp. 371-379. https://doi.org/10.18280/jesa.540220
413	Boudali, A., Negadi, K., Bouradi, S., Berkani, A., Marignetti, F.	Design of Nonlinear Backstepping Control Strategy of PMSG for Hydropower Plant Power Generation	PMSG, optimization, electrical grid, DC-DC boost converter	54, 1, 1-8	https://doi.org/10.18280/jesa.540101	Boudali, A., Negadi, K., Bouradi, S., Berkani, A., Marignetti, F. (2021). Design of nonlinear backstepping control strategy of PMSG for hydropower plant power generation. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 54, No. 1, pp. 1-8. https://doi.org/10.18280/jesa.540101
414	Lorenzini, G., Kamarpushti, M.A., Solyman, A.A.A.	Optimal Operation of Micro-Grids to Reduce Energy Production Costs and Environmental Pollution Using Ant Colony Optimization Algorithm (ACO)	distributed generation, microgrid, resources of energy distribution, ant colony optimization algorithm, renewable energy source, reducing cost, reducing pollution	54, 1, 9-19	https://doi.org/10.18280/jesa.540102	Lorenzini, G., Kamarpushti, M.A., Solyman, A.A.A. (2021). Optimal operation of micro-grids to reduce energy production costs and environmental pollution using ant colony optimization algorithm (ACO). <i>Journal Européen des Systèmes Automatisés</i> , Vol. 54, No. 1, pp. 9-19. https://doi.org/10.18280/jesa.540102
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416	Kotla, R.W., Yarlagadda, S.R.	Comparative Analysis of Photovoltaic Generating Systems Using Particle Swarm Optimization and Cuckoo Search Algorithms under Partial Shading Conditions	cuckoo search algorithm, PV generating system, partial shading conditions, particle swarm optimization algorithm	54, 1, 27-33	https://doi.org/10.18280/jesa.540104	Kotla, R.W., Yarlagadda, S.R. (2021). Comparative analysis of photovoltaic generating systems using particle swarm optimization and cuckoo search algorithms under partial shading conditions. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 54, No. 1, pp. 27-33. https://doi.org/10.18280/jesa.540104

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419	Maryani, E., Purba, H.H., Sunadi.	Analysis of Aluminium Alloy Wheels Product Quality Improvement Through DMAIC Method in Casting Process: A Case Study of the Wheel Manufacturing Industry in Indonesia	quality, DMAIC, capability, alloy wheels, improvement, sigma level	54, 1, 55-62	https://doi.org/10.18280/jesa.540107	Maryani, E., Purba, H.H., Sunadi. (2021). Analysis of aluminium alloy wheels product quality improvement through DMAIC method in casting process: A case study of the wheel manufacturing industry in Indonesia. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 54, No. 1, pp. 55-62. https://doi.org/10.18280/jesa.540107
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421	Devineni, G.K., Ganesh, A., Bhoopal, N.	Power Loss Analysis in 15 Level Asymmetric Reduced Switch Inverter Using PLECS Thermal Model & SIMULINK Precise Models	switching losses, conduction losses, power losses, multilevel inverters, switching frequency	54, 1, 73-84	https://doi.org/10.18280/jesa.540109	Devineni, G.K., Ganesh, A., Bhoopal, N. (2021). Power loss analysis in 15 level asymmetric reduced switch inverter using PLECS thermal model & SIMULINK precise models. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 54, No. 1, pp. 73-84. https://doi.org/10.18280/jesa.540109
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423	Salins, S.S., Khan, A.A., Riyaz, K., Mahmoud, I., Naeem, S., Sachidananda, K.H.	Fabrication and Working of a Compressed Air Vehicle	compressed air vehicle, pneumatic rotary engine, compressor, sustainable energy	54, 1, 97-103	https://doi.org/10.18280/jesa.540111	Salins, S.S., Khan, A.A., Riyaz, K., Mahmoud, I., Naeem, S., Sachidananda, K.H. (2021). Fabrication and working of a compressed air vehicle. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 54, No. 1, pp. 97-103. https://doi.org/10.18280/jesa.540111
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427	Ismael, O.Y., Qasim, M., Noaman, M.N.	Equilibrium Optimizer-Based Robust Sliding Mode Control of Magnetic Levitation System	sliding mode control, robust control, equilibrium optimizer, magnetic levitation system	54, 1, 131-138	https://doi.org/10.18280/jesa.540115	Ismael, O.Y., Qasim, M., Noaman, M.N. (2021). Equilibrium optimizer-based robust sliding mode control of magnetic levitation system. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 54, No. 1, pp. 131-138. https://doi.org/10.18280/jesa.540115
428	Manoharan, B., Sahoo, S.K.	Instantaneous Active and Reactive Power Control Using Direct Power Control Strategy for Multilevel Multistring Inverter Fed Photovoltaic System	photovoltaic systems, maximum power point tracker, digital signal processor, Matlab, reactive power control, power quality	54, 1, 139-146	https://doi.org/10.18280/jesa.540116	Manoharan, B., Sahoo, S.K. (2021). Instantaneous active and reactive power control using direct power control strategy for multilevel multistring inverter fed photovoltaic system. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 54, No. 1, pp. 139-146. https://doi.org/10.18280/jesa.540116
429	Griche, I., Messalti, S., Saoudi, K.	Instantaneous Power Control Strategy for Voltage Improvement in Power Network Equipped by Wind Generator	power system, wind turbine (WT), instantaneous power control, voltage regulation, sliding mode control (SMC)	54, 1, 147-154	https://doi.org/10.18280/jesa.540117	Griche, I., Messalti, S., Saoudi, K. (2021). Instantaneous power control strategy for voltage improvement in power network equipped by wind generator. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 54, No. 1, pp. 147-154. https://doi.org/10.18280/jesa.540117
430	Kotapuri, M.R., Samala, R.K.	Distributed Generation Effect on Distribution System	distributed generation, gravitational search analysis, BAT analysis, ant-lion optimization, power loss, optimal location, capacity	54, 1, 155-163	https://doi.org/10.18280/jesa.540118	Kotapuri, M.R., Samala, R.K. (2021). Distributed generation effect on distribution system. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 54, No. 1, pp. 155-163. https://doi.org/10.18280/jesa.540118
431	Majdoubi, R., Masmoudi, L., Bakhti, M., Jabri, B.	Torque Control Oriented Modeling of a Brushless Direct Current Motor (BLDCM) Based on the Extended Park's Transformation	brushless direct current motor, maximum torque, reduced torque ripples, extended park reference frame, proportional integral controller, fuzzy logic controller	54, 1, 165-174	https://doi.org/10.18280/jesa.540119	Majdoubi, R., Masmoudi, L., Bakhti, M., Jabri, B. (2021). Torque control oriented modeling of a brushless direct current motor (BLDCM) based on the extended park's transformation. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 54, No. 1, pp. 165-174. https://doi.org/10.18280/jesa.540119
432	Abderrahim, Z., Eddine, H.K., Sabir, M.	A New Improved Variable Step Size MPPT Method for Photovoltaic Systems Using Grey Wolf and Whale Optimization Technique Based PID Controller	fixed / variable step size algorithms, perturbation and observation (P&O), maximum power point tracking MPPT algorithm, optimization methods, grey wolf optimization (GWO), whale optimization algorithm (WOA), overshoot, ripple	54, 1, 175-185	https://doi.org/10.18280/jesa.540120	Abderrahim, Z., Eddine, H.K., Sabir, M. (2021). A new improved variable step size MPPT method for photovoltaic systems using grey wolf and whale optimization technique based PID controller. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 54, No. 1, pp. 175-185. https://doi.org/10.18280/jesa.540120

433	Yahiaoui, A., Iffouzar, K., Ghedamsi, K., Himour, K.	Dynamic Performance Analysis of VSC-HVDC Based Modular Multilevel Converter under Fault	high voltage direct current, voltage source converter, modular multilevel converter, vector oriented control, AC fault	54, 1, 187-194	https://doi.org/10.18280/jesa.540121	Yahiaoui, A., Iffouzar, K., Ghedamsi, K., Himour, K. (2021). Dynamic performance analysis of VSC-HVDC based modular multilevel converter under fault. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 54, No. 1, pp. 187-194. https://doi.org/10.18280/jesa.540121
434	Chiarello, E., Malagoli, J.A.	Optimal coil design of an electromagnetic actuator using particle swarm optimization	electromagnetic actuator, magnetic bearing, magnetic levitation, finite element method, particle swarm optimization	53, 6, 755-761	https://doi.org/10.18280/jesa.530601	Chiarello, E., Malagoli, J.A. (2020). Optimal coil design of an electromagnetic actuator using particle swarm optimization. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 53, No. 6, pp. 755-761. https://doi.org/10.18280/jesa.530601
435	Koussaila, I., Lyes, K., Himour, K., Abdelhakim, D., Azeddine, H., Kaci, G., Fouad, B.M.	Impact of polyphase induction motor on photovoltaic water pumping system	photovoltaic pumping system, multiphase induction machine, fuzzy logic controller, battery storage	53, 6, 763-770	https://doi.org/10.18280/jesa.530602	Koussaila, I., Lyes, K., Himour, K., Abdelhakim, D., Azeddine, H., Kaci, G., Fouad, B.M. (2020). Impact of polyphase induction motor on photovoltaic water pumping system. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 53, No. 6, pp. 763-770. https://doi.org/10.18280/jesa.530602
436	Gao, Y.H., Lou, W.D., Lu, H.L., Jia, Y.H.	Consensus control of multi-agent robot system with state delay based on fractional-order iterative learning control algorithm	multi-agent robot system, fractional-order iterative learning control (FOILC), state delay, consensus control	53, 6, 771-779	https://doi.org/10.18280/jesa.530603	Gao, Y.H., Lou, W.D., Lu, H.L., Jia, Y.H. (2020). Consensus control of multi-agent robot system with state delay based on fractional-order iterative learning control algorithm. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 53, No. 6, pp. 771-779. https://doi.org/10.18280/jesa.530603
437	Abdullatif, N., Kassem, S.	Modelling of agent-based vehicle routing problem using unified modelling language	agent-based modelling, UML modelling, VRP	53, 6, 781-789	https://doi.org/10.18280/jesa.530604	Abdullatif, N., Kassem, S. (2020). Modelling of agent-based vehicle routing problem using unified modelling language. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 53, No. 6, pp. 781-789. https://doi.org/10.18280/jesa.530604
438	Aramesh, S., Ghorbanian, A.	Multi-objective optimization for a complex intersection using design of experiments and simulation	traffic in urban areas, simulation, multi-objective, design of experiments	53, 6, 791-802	https://doi.org/10.18280/jesa.530605	Aramesh, S., Ghorbanian, A. (2020). Multi-objective optimization for a complex intersection using design of experiments and simulation. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 53, No. 6, pp. 791-802. https://doi.org/10.18280/jesa.530605
439	Li, K., Li, D., Wu, D.Q.	Multi-objective optimization for location-routing-inventory problem in cold chain logistics network with soft time window constraint	cold chain logistics network (CCLN), location-routing-inventory problem (LRIP), soft time window constraint (STW), multi-objective ant colony optimization (MACO)	53, 6, 803-809	https://doi.org/10.18280/jesa.530606	Li, K., Li, D., Wu, D.Q. (2020). Multi-objective optimization for location-routing-inventory problem in cold chain logistics network with soft time window constraint. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 53, No. 6, pp. 803-809. https://doi.org/10.18280/jesa.530606
440	Babes, B., Boutaghane, A., Hamouda, N., Kahla, S., Kellai, H., Ellinger, T., Petzoldt, J.	New optimal control of permanent magnet DC motor for photovoltaic wire feeder systems	solar photovoltaic (PV) module, wire feeder systems (WFSs), DC-DC buck converter, MPPT control, FO-Fuzzy PID controller, particle swarm optimization (PSO) algorithm	53, 6, 811-823	https://doi.org/10.18280/jesa.530607	Babes, B., Boutaghane, A., Hamouda, N., Kahla, S., Kellai, H., Ellinger, T., Petzoldt, J. (2020). New optimal control of permanent magnet DC motor for photovoltaic wire feeder systems. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 53, No. 6, pp. 811-823. https://doi.org/10.18280/jesa.530607
441	Al-Shuka, H.F.N.	Proxy-based sliding mode vibration control with an adaptive approximation compensator for euler-bernoulli smart beams	proxy-based sliding mode control, piezo-patches, Euler-Bernoulli beam, adaptive approximation technique	53, 6, 825-834	https://doi.org/10.18280/jesa.530608	Al-Shuka, H.F.N. (2020). Proxy-based sliding mode vibration control with an adaptive approximation compensator for euler-bernoulli smart beams. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 53, No. 6, pp. 825-834. https://doi.org/10.18280/jesa.530608
442	Zhu, Y.X., Wang, J.J., Li, M.Y.	Collaborative distribution in the soft time window of agricultural-means supply chain based on simulated annealing-genetic algorithm	agricultural-means supply chain (AMSC), collaborative distribution, soft time window, simulated annealing-genetic algorithm (SA-GA)	53, 6, 835-844	https://doi.org/10.18280/jesa.530609	Zhu, Y.X., Wang, J.J., Li, M.Y. (2020). Collaborative distribution in the soft time window of agricultural-means supply chain based on simulated annealing-genetic algorithm. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 53, No. 6, pp. 835-844. https://doi.org/10.18280/jesa.530609
443	Berkani, A., Bey, M., Araria, R., Allaoui, T.	A new approach based on Fuzzy-Q-Learning algorithm to control 3 level T-type voltage source converter	Fuzzy-Q-Learning (FQL), Direct Power Control (DPC), Fuzzy Logic Control (FLC), Voltage Source Converter (VSC)	53, 6, 845-852	https://doi.org/10.18280/jesa.530610	Berkani, A., Bey, M., Araria, R., Allaoui, T. (2020). A new approach based on Fuzzy-Q-Learning algorithm to control 3 level T-type voltage source converter. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 53, No. 6, pp. 845-852. https://doi.org/10.18280/jesa.530610
444	Ezhilvannan, P., Krishnan, S.	An efficient asymmetric direct current (DC) source configured switched capacitor multi-level inverter	switched capacitor multi-level inverter, boost conversion, triangular multi-carrier sine wave pulse width modulation	53, 6, 853-859	https://doi.org/10.18280/jesa.530611	Ezhilvannan, P., Krishnan, S. (2020). An efficient asymmetric direct current (DC) source configured switched capacitor multi-level inverter. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 53, No. 6, pp. 853-859. https://doi.org/10.18280/jesa.530611
445	Fan, H.Y., Liu, D.B., Li, L.G., Liu, G.X.	A scheme for position and capacity determination of distributed generation considering load distribution and system voltage stability	voltage stability, load distribution, Distributed Generation (DG), influence impedance mode, position and capacity determination	53, 6, 861-867	https://doi.org/10.18280/jesa.530612	Fan, H.Y., Liu, D.B., Li, L.G., Liu, G.X. (2020). A scheme for position and capacity determination of distributed generation considering load distribution and system voltage stability. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 53, No. 6, pp. 861-867. https://doi.org/10.18280/jesa.530612
446	Ojha, A.	Design of control system using online tuning of PI controllers for three-phase active front end neutral point clamped three-level converter	PI controllers, 3-level converter, signal constraint, Total Harmonic Distortion (THD), MATLAB/SIMULINK	53, 6, 869-882	https://doi.org/10.18280/jesa.530613	Ojha, A. (2020). Design of control system using online tuning of PI controllers for three-phase active front end neutral point clamped three-level converter. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 53, No. 6, pp. 869-882. https://doi.org/10.18280/jesa.530613
447	Bouradi, S., Negadi, K., Araria, R., Marignetti, F.	Z-source inverter for energy management and vector control for electric vehicle based PMSM	battery, electric vehicle control, energy management, fuel cell, permanent magnet synchronous motor, backstepping control, vector control	53, 6, 883-892	https://doi.org/10.18280/jesa.530614	Bouradi, S., Negadi, K., Araria, R., Marignetti, F. (2020). Z-source inverter for energy management and vector control for electric vehicle based PMSM. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 53, No. 6, pp. 883-892. https://doi.org/10.18280/jesa.530614
448	Huang, X., Huang, P.X., Huang, T.X.	Multi-objective optimization of digital management for renewable energies in smart cities	smart city, renewable energy, digital management, multi-objective optimization	53, 6, 893-902	https://doi.org/10.18280/jesa.530615	Huang, X., Huang, P.X., Huang, T.X. (2020). Multi-objective optimization of digital management for renewable energies in smart cities. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 53, No. 6, pp. 893-902. https://doi.org/10.18280/jesa.530615

449	Belouahchi, F., Merabet, E.	Design of a new direct torque control using synergistic theory for double star induction motor	(DSIM) double star induction motor, (SMC) sliding mode control, (FLC) fuzzy logic control, (SC) synergistic control, (THD) total harmonic distortion, Lyapunov's theory	53, 6, 903-914	https://doi.org/10.18280/jesa.530616	Belouahchi, F., Merabet, E. (2020). Design of a new direct torque control using synergistic theory for double star induction motor. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 53, No. 6, pp. 903-914. https://doi.org/10.18280/jesa.530616
450	Ren, J.F., Ye, C.M., Li, Y.	A two-stage optimization algorithm for multi-objective job-shop scheduling problem considering job transport	Job-shop scheduling problem (JSP), multiple objectives, job transport; two-stage optimization, improved fast elitist nondominated sorting genetic algorithm II (NSGA-II)	53, 6, 915-924	https://doi.org/10.18280/jesa.530617	Ren, J.F., Ye, C.M., Li, Y. (2020). A two-stage optimization algorithm for multi-objective job-shop scheduling problem considering job transport. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 53, No. 6, pp. 915-924. https://doi.org/10.18280/jesa.530617
451	Muthukuri, N.K., Narasipuram, R.P., Mopidevi, S.	Performance analysis of nested multilevel inverter topology for 72V electric vehicle applications	Electric Vehicle (EV), Plug-in Electric Vehicle (PEV), Total Harmonic Distortion (THD), Pulse Width Modulation (PWM), Multilevel Inverter (MLI)	53, 6, 925-930	https://doi.org/10.18280/jesa.530618	Muthukuri, N.K., Narasipuram, R.P., Mopidevi, S. (2020). Performance analysis of nested multilevel inverter topology for 72V electric vehicle applications. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 53, No. 6, pp. 925-930. https://doi.org/10.18280/jesa.530618
452	Qiao, T.B.	Gait control of hexapod robot based on field-programmable gate array and central pattern generator	central pattern generator (CPG), hexapod robots, gait control, field-programmable gate array (FPGA)	53, 6, 931-937	https://doi.org/10.18280/jesa.530619	Qiao, T.B. (2020). Gait control of hexapod robot based on field-programmable gate array and central pattern generator. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 53, No. 6, pp. 931-937. https://doi.org/10.18280/jesa.530619
453	Devineni, G.K., Ganesh, A.	Problem formulations, solving strategies, implementation methods & applications of selective harmonic elimination for multilevel converters	multilevel converters, PWM formulations, SHEPWM, optimization algorithms, solving techniques	53, 6, 939-952	https://doi.org/10.18280/jesa.530620	Devineni, G.K., Ganesh, A. (2020). Problem formulations, solving strategies, implementation methods & applications of selective harmonic elimination for multilevel converters. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 53, No. 6, pp. 939-952. https://doi.org/10.18280/jesa.530620
454	He, Y.J.	Influencing factors and evaluation model of quality risks in intelligent manufacturing mobile supply chain	intelligent manufacturing (IM), mobile supply chain (MSC), quality risk evaluation, backpropagation neural network (BPNN)	53, 6, 953-961	https://doi.org/10.18280/jesa.530621	He, Y.J. (2020). Influencing factors and evaluation model of quality risks in intelligent manufacturing mobile supply chain. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 53, No. 6, pp. 953-961. https://doi.org/10.18280/jesa.530621
455	Minh, V.T., Tamre, M., Musalimov, V., Kovalenko, P., Rubinshtein, I., Ovchinnikov, I., Kremerik, D., Moezzi, R., Hlava, J.	Model predictive control for modeling human gait motions assisted by Vicon technology	human gait plant, human gait model, central nervous system, model predictive control, 5-link mechanism, Vicon motion capture	53, 5, 589-600	https://doi.org/10.18280/jesa.530501	Minh, V.T., Tamre, M., Musalimov, V., Kovalenko, P., Rubinshtein, I., Ovchinnikov, I., Kremerik, D., Moezzi, R., Hlava, J. (2020). Model predictive control for modeling human gait motions assisted by Vicon technology. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 53, No. 5, pp. 589-600. https://doi.org/10.18280/jesa.530501
456	Adjati, A., Rekioua, T., Rekioua, D., Tounzi, A.	Study of dual stator induction motor in photovoltaic-fuel cell hybrid pumping application	centrifugal pump, dual stator induction motor (DSIM), fuel cell (FC), hybrid pumping system (HPS), photovoltaic generator (GPV), renewable energy	53, 5, 601-608	https://doi.org/10.18280/jesa.530502	Adjati, A., Rekioua, T., Rekioua, D., Tounzi, A. (2020). Study of dual stator induction motor in photovoltaic-fuel cell hybrid pumping application. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 53, No. 5, pp. 601-608. https://doi.org/10.18280/jesa.530502
457	Wang, Y., Tian, Z.Z.	Efficient original-destination bandwidth: A novel model for arterial traffic signal coordination	arterial network, traffic signal coordination (TSC), movement sequence, minimum/maximum green intervals, progression bands	53, 5, 609-616	https://doi.org/10.18280/jesa.530503	Wang, Y., Tian, Z.Z. (2020). Efficient original-destination bandwidth: A novel model for arterial traffic signal coordination. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 53, No. 5, pp. 609-616. https://doi.org/10.18280/jesa.530503
458	Moati, Y., Kouzi, K.	An efficient of direct torque control of indirect three level matrix converter fed dual stator induction motor based on synergistic controller	Dual Stator Induction Motor (DSIM), Indirect Three-Level Matrix Converter (ITLMC), Space Vector Modulation (SVM), Constantan Switching Frequency Controller (CSFC), Direct Torque Control (DTC), Synergistic Control (SC)	53, 5, 617-627	https://doi.org/10.18280/jesa.530504	Moati, Y., Kouzi, K. (2020). An efficient of direct torque control of indirect three level matrix converter fed dual stator induction motor based on synergistic controller. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 53, No. 5, pp. 617-627. https://doi.org/10.18280/jesa.530504
459	Joshi, D., Satpathy, S.K.	Production scheduling of open pit mine using sequential branch-and-cut and longest path algorithm: An application from an African copper mine	open pit mine production scheduling, mixed integer programming, net present value, ordinary kriging	53, 5, 629-636	https://doi.org/10.18280/jesa.530505	Joshi, D., Satpathy, S.K. (2020). Production scheduling of open pit mine using sequential branch-and-cut and longest path algorithm: An application from an African copper mine. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 53, No. 5, pp. 629-636. https://doi.org/10.18280/jesa.530505
460	Jiang, F.C., Feng, C.W., Zhu, C., Sun, Y.	Performance analysis of active queue management algorithm based on reinforcement learning	congestion control, active queue management (AQM), random early detection (RED), reinforcement learning AQM (RLAQMP)	53, 5, 637-644	https://doi.org/10.18280/jesa.530506	Jiang, F.C., Feng, C.W., Zhu, C., Sun, Y. (2020). Performance analysis of active queue management algorithm based on reinforcement learning. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 53, No. 5, pp. 637-644. https://doi.org/10.18280/jesa.530506
461	Yahdou, A., Djilali, A.B., Boudjema, Z., Mehedi, F.	Improved vector control of a counter-rotating wind turbine system using adaptive backstepping sliding mode	adaptive gains, backstepping, sliding mode, doubly fed induction generator, counter rotating wind turbine, vector control, proportional-integral regulators	53, 5, 645-651	https://doi.org/10.18280/jesa.530507	Yahdou, A., Djilali, A.B., Boudjema, Z., Mehedi, F. (2020). Improved vector control of a counter-rotating wind turbine system using adaptive backstepping sliding mode. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 53, No. 5, pp. 645-651. https://doi.org/10.18280/jesa.530507
462	Yang, X.P., Liu, X.Y., Kou, G.Y., Xu, C.X., Zhang, W.H., Hu, R., Wang, C., Zhao, Z.Y.	Wind turbine lubrication based on parallel control of multiple factors	wind turbine, dynamic lubrication, control strategy, multiple factors, parallel control	53, 5, 653-660	https://doi.org/10.18280/jesa.530508	Yang, X.P., Liu, X.Y., Kou, G.Y., Xu, C.X., Zhang, W.H., Hu, R., Wang, C., Zhao, Z.Y. (2020). Wind turbine lubrication based on parallel control of multiple factors. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 53, No. 5, pp. 653-660. https://doi.org/10.18280/jesa.530508
463	Yadav, A.K., Pathak, P.K., Gaur, P.	Robust control and stability analysis of computerized numeric controlled machine tool under parametric uncertainty	CNC machine tool, IMC, Kharitonov's theorem, H^∞ controls theory, robustness analysis	53, 5, 661-670	https://doi.org/10.18280/jesa.530509	Yadav, A.K., Pathak, P.K., Gaur, P. (2020). Robust control and stability analysis of computerized numeric controlled machine tool under parametric uncertainty. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 53, No. 5, pp. 661-670. https://doi.org/10.18280/jesa.530509
464	Lemita, A., Boulahbel, S., Kahla, S., Sedraoui, M.	Auto-control technique using gradient method based on radial basis function neural networks to control of an activated sludge process of wastewater treatment	activated sludge process, wastewater treatment, gradient descent algorithm, RBF neural network, PI control	53, 5, 671-679	https://doi.org/10.18280/jesa.530510	Lemita, A., Boulahbel, S., Kahla, S., Sedraoui, M. (2020). Auto-control technique using gradient method based on radial basis function neural networks to control of an activated sludge process of wastewater treatment. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 53, No. 5, pp. 671-679. https://doi.org/10.18280/jesa.530510

465	Liu, J.L., Li, K.	Design of an intelligent symptom differentiation and electrical stimulation rehabilitation system	intelligent symptom differentiation (ISD), electrical stimulation rehabilitation (ESR), artificial intelligence (AI), system design, insomnia	53, 5, 681-693	https://doi.org/10.18280/jesa.530511	Liu, J.L., Li, K. (2020). Design of an intelligent symptom differentiation and electrical stimulation rehabilitation system. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 53, No. 5, pp. 681-693. https://doi.org/10.18280/jesa.530511
466	Chennippan, M., Bhaskaran, P.E., Subramaniam, T., Meenakshipriya, B., Krishnamurthy, K., Kumar, K.A.	Design and experimental investigations on NOx emission control using FOCDM (fractional-order-based coefficient diagram method)-PI ^a D ^b controller	FOCDM-PI ^a D ^b controller, PSO algorithm, CDM-PID controller, NOx emission control	53, 5, 695-703	https://doi.org/10.18280/jesa.530512	Chennippan, M., Bhaskaran, P.E., Subramaniam, T., Meenakshipriya, B., Krishnamurthy, K., Kumar, K.A. (2020). Design and experimental investigations on NOx emission control using FOCDM (fractional-order-based coefficient diagram method)-PI ^a D ^b controller. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 53, No. 5, pp. 695-703. https://doi.org/10.18280/jesa.530512
467	Khelil, J., Khelil, K., Ramdani, M., Boutasseta, N.	Discrete wavelet design for bearing fault diagnosis using particle swarm optimization	discrete wavelet transform (DWT), feature extraction, bearing fault diagnosis, particle swarm optimization (PSO), polyphase representation, filter bank	53, 5, 705-713	https://doi.org/10.18280/jesa.530513	Khelil, J., Khelil, K., Ramdani, M., Boutasseta, N. (2020). Discrete wavelet design for bearing fault diagnosis using particle swarm optimization. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 53, No. 5, pp. 705-713. https://doi.org/10.18280/jesa.530513
468	Gao, L., Dou, H.D.	Inventory management of railway logistics park based on artificial neural network	artificial neural network (ANN), railway logistics park (RLP), inventory prediction, inventory management	53, 5, 715-723	https://doi.org/10.18280/jesa.530514	Gao, L., Dou, H.D. (2020). Inventory management of railway logistics park based on artificial neural network. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 53, No. 5, pp. 715-723. https://doi.org/10.18280/jesa.530514
469	Kotapuri, M.R., Samala, R.K.	Fuzzy logic controlled based ant-lion optimization hybridization for economic power dispatch	economic dispatch, ant-lion optimization, fuzzy logic controller, fuel cost	53, 5, 725-731	https://doi.org/10.18280/jesa.530515	Kotapuri, M.R., Samala, R.K. (2020). Fuzzy logic controlled based ant-lion optimization hybridization for economic power dispatch. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 53, No. 5, pp. 725-731. https://doi.org/10.18280/jesa.530515
470	Wang, H.Y.	Three-dimensional image recognition of athletes' wrong motions based on edge detection	human motion, image recognition, contourlet domain, edge detection, 3D image	53, 5, 733-738	https://doi.org/10.18280/jesa.530516	Wang, H.Y. (2020). Three-dimensional image recognition of athletes' wrong motions based on edge detection. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 53, No. 5, pp. 733-738. https://doi.org/10.18280/jesa.530516
471	Faiza, A.A., Morsli, S., Tayeb, A.	Self tuning filter based fuzzy logic controller for active power filter	active power filter, fuzzy logic controller, hysteresis control, self tuned filter	53, 5, 739-745	https://doi.org/10.18280/jesa.530517	Faiza, A.A., Morsli, S., Tayeb, A. (2020). Self tuning filter based fuzzy logic controller for active power filter. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 53, No. 5, pp. 739-745. https://doi.org/10.18280/jesa.530517
472	Li, L., Zhao, R.H., Li, C.L.	Path planning for chainable non-holonomic system based on iterative learning control	non-holonomic system, iterative learning, path planning, initial configuration error, model error	53, 5, 747-753	https://doi.org/10.18280/jesa.530518	Li, L., Zhao, R.H., Li, C.L. (2020). Path planning for chainable non-holonomic system based on iterative learning control. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 53, No. 5, pp. 747-753. https://doi.org/10.18280/jesa.530518
473	Bounasla, N., Barkat, S.	Optimum design of fractional order PI ^a speed controller for predictive direct torque control of a sensorless five-phase Permanent Magnet Synchronous Machine (PMSM)	five-phase PMSM, DTC, PDTC, fractional order PI controller, grey wolf optimization algorithm, extended Kalman filter	53, 4, 437-449	https://doi.org/10.18280/jesa.530401	Bounasla, N., Barkat, S. (2020). Optimum design of fractional order PI ^a speed controller for predictive direct torque control of a sensorless five-phase Permanent Magnet Synchronous Machine (PMSM). <i>Journal Européen des Systèmes Automatisés</i> , Vol. 53, No. 4, pp. 437-449. https://doi.org/10.18280/jesa.530401
474	Patra, S., Sarkhel, P., Hui, N.B., Banerjee, N.	Modelling and simulation of a fishing rod (flexible link) using simmechanics	flexible rod, simmechanics model, deflection, lumped parameter approach	53, 4, 451-460	https://doi.org/10.18280/jesa.530402	Patra, S., Sarkhel, P., Hui, N.B., Banerjee, N. (2020). Modelling and simulation of a fishing rod (flexible link) using simmechanics. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 53, No. 4, pp. 451-460. https://doi.org/10.18280/jesa.530402
475	Zhang, T., Hao, Q., Zheng, Z., Lu, C.	An electric spring control strategy based on finite control set-model predictive control	electric spring (ES), finite control set-model predictive control (FCS-MPC), voltage fluctuation, power quality	53, 4, 461-468	https://doi.org/10.18280/jesa.530403	Zhang, T., Hao, Q., Zheng, Z., Lu, C. (2020). An electric spring control strategy based on finite control set-model predictive control. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 53, No. 4, pp. 461-468. https://doi.org/10.18280/jesa.530403
476	Hamitouche, K., Chekkal, S., Amimeur, H., Aouzellag, D.	A new control strategy of dual stator induction generator with power regulation	stand-alone wind energy conversion system, DSIG, non-identical stators, field-oriented control, MPPT, storage system	53, 4, 469-478	https://doi.org/10.18280/jesa.530404	Hamitouche, K., Chekkal, S., Amimeur, H., Aouzellag, D. (2020). A new control strategy of dual stator induction generator with power regulation. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 53, No. 4, pp. 469-478. https://doi.org/10.18280/jesa.530404
477	Tavoosi, J.	A new type-2 fuzzy sliding mode control for longitudinal aerodynamic parameters of a commercial aircraft	general type-2 fuzzy, SMC, parameters uncertainty, Boeing 747	53, 4, 479-485	https://doi.org/10.18280/jesa.530405	Tavoosi, J. (2020). A new type-2 fuzzy sliding mode control for longitudinal aerodynamic parameters of a commercial aircraft. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 53, No. 4, pp. 479-485. https://doi.org/10.18280/jesa.530405
478	Liu, C.H.	Multi-agent modeling of the collaborative operation of the producer service supply chain under the intelligent manufacturing clusters in the Yangtze river delta	intelligent manufacturing, producer service supply chain, collaborative operation, multi-agent modeling	53, 4, 487-492	https://doi.org/10.18280/jesa.530406	Liu, C.H. (2020). Multi-agent modeling of the collaborative operation of the producer service supply chain under the intelligent manufacturing clusters in the Yangtze river delta. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 53, No. 4, pp. 487-492. https://doi.org/10.18280/jesa.530406
479	Thabet, A., Frej, G.B.H., Gasmi, N., Metoui, B.	Real time stabilization of Lipschitz nonlinear systems with nonlinear output	Lipschitz nonlinear systems, cost control, stabilization, nonlinear-observer, real-time-implementation	53, 4, 493-498	https://doi.org/10.18280/jesa.530407	Thabet, A., Frej, G.B.H., Gasmi, N., Metoui, B. (2020). Real time stabilization of Lipschitz nonlinear systems with nonlinear output. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 53, No. 4, pp. 493-498. https://doi.org/10.18280/jesa.530407
480	Wang, D.Y., Geng, Z.X.	Adaptive Lp-norm regularized sparse representation for human activity recognition in coal mines	feature extraction, sparse representation, human activity recognition, adaptive-norm regularization, structured regularization	53, 4, 499-504	https://doi.org/10.18280/jesa.530408	Wang, D.Y., Geng, Z.X. (2020). Adaptive Lp-norm regularized sparse representation for human activity recognition in coal mines. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 53, No. 4, pp. 499-504. https://doi.org/10.18280/jesa.530408

481	Pandi, P., Mopidevi, S., Krishnan, S.	Design and analysis of grid tied renewable energy system based e-chopper using main controller	main controller, speed goat, DSPIC, grid, wind, solar, e-chopper	53, 4, 505-515	https://doi.org/10.18280/jesa.530409	Pandi, P., Mopidevi, S., Krishnan, S. (2020). Design and analysis of grid tied renewable energy system based e-chopper using main controller. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 53, No. 4, pp. 505-515. https://doi.org/10.18280/jesa.530409
482	Wang, R., Li, J.Q., Gao, X.B., Dong, Y.H.	Design and simulation of an ozone catalytic oxidation system based on programmable logic controller	ozone catalytic oxidation (OCO), industrial wastewater, programmable logic controller (PLC), potential of hydrogen (pH) control, simulation	53, 4, 517-524	https://doi.org/10.18280/jesa.530410	Wang, R., Li, J.Q., Gao, X.B., Dong, Y.H. (2020). Design and simulation of an ozone catalytic oxidation system based on programmable logic controller. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 53, No. 4, pp. 517-524. https://doi.org/10.18280/jesa.530410
483	Himour, K., Yahiaoui, A., Iffouzar, K.	Comparison of different control strategies of multilevel inverters used to feed a dual star induction machine	dual star induction machine, multilevel inverters, pulse width modulation strategy, simplified space vector control strategy, random pulse width modulation strategy	53, 4, 525-532	https://doi.org/10.18280/jesa.530411	Himour, K., Yahiaoui, A., Iffouzar, K. (2020). Comparison of different control strategies of multilevel inverters used to feed a dual star induction machine. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 53, No. 4, pp. 525-532. https://doi.org/10.18280/jesa.530411
484	Geng, J., Liu, Y.C., Zhang, P.C.	Data collection for mobile crowd sensing based on tensor completion	tensor completion, mobile crowd sensing, sparse sampling, data collection	53, 4, 533-540	https://doi.org/10.18280/jesa.530412	Geng, J., Liu, Y.C., Zhang, P.C. (2020). Data collection for mobile crowd sensing based on tensor completion. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 53, No. 4, pp. 533-540. https://doi.org/10.18280/jesa.530412
485	Machavarapu, S., Rao, M.V.G., Rao, P.V.R.	Design of load frequency controller for multi-area system using AI techniques	backpropagation algorithm, fuzzy logic controller, PI-controller, tie line, load frequency controller, automatic speed governor	53, 4, 541-548	https://doi.org/10.18280/jesa.530413	Machavarapu, S., Rao, M.V.G., Rao, P.V.R. (2020). Design of load frequency controller for multi-area system using AI techniques. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 53, No. 4, pp. 541-548. https://doi.org/10.18280/jesa.530413
486	Wei, D.F.	Modeling and simulation of a multi-agent green supply chain management system for retailers	retailer, multi-agent, green supply chain (GSC), game model	53, 4, 549-557	https://doi.org/10.18280/jesa.530414	Wei, D.F. (2020). Modeling and simulation of a multi-agent green supply chain management system for retailers. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 53, No. 4, pp. 549-557. https://doi.org/10.18280/jesa.530414
487	Kaddouri, L., Adamou-Mitiche, A.B.H., Mitiche, L.	Design of two-dimensional recursive digital filter using multi particle swarm optimization algorithm	2D filter, recursive filters, optimization, multi-PSO, stability	53, 4, 559-566	https://doi.org/10.18280/jesa.530415	Kaddouri, L., Adamou-Mitiche, A.B.H., Mitiche, L. (2020). Design of two-dimensional recursive digital filter using multi particle swarm optimization algorithm. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 53, No. 4, pp. 559-566. https://doi.org/10.18280/jesa.530415
488	Kotla, R.W., Yarlagadda, S.R.	Grid tied solar photovoltaic power plants with constant power injection maximum power point tracking algorithm	P&O MPPT, constant power injection algorithm, SPVPP's, grid tied PV systems, single phase two-stage systems	53, 4, 567-573	https://doi.org/10.18280/jesa.530416	Kotla, R.W., Yarlagadda, S.R. (2020). Grid tied solar photovoltaic power plants with constant power injection maximum power point tracking algorithm. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 53, No. 4, pp. 567-573. https://doi.org/10.18280/jesa.530416
489	Kotla, R.W., Yarlagadda, S.R.	Grid tied solar photovoltaic power plants with constant power injection maximum power point tracking algorithm	OFDM, MCPC, sidelobe suppression, subcarriers, radar communication, subcarrier weighting, BFGS	53, 4, 575-580	https://doi.org/10.18280/jesa.530417	Kotla, R.W., Yarlagadda, S.R. (2020). Grid tied solar photovoltaic power plants with constant power injection maximum power point tracking algorithm. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 53, No. 4, pp. 567-573. https://doi.org/10.18280/jesa.530416
490	Liang, Q.	Production logistics management of industrial enterprises based on wavelet neural network	wavelet neural network (WNN), industrial enterprise, production logistics, intelligent manufacturing	53, 4, 581-588	https://doi.org/10.18280/jesa.530418	Liang, Q. (2020). Production logistics management of industrial enterprises based on wavelet neural network. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 53, No. 4, pp. 581-588. https://doi.org/10.18280/jesa.530418
491	Koulali, M., Berkani, A., Negadi, K., Mankour, M., Mezouar, A.	Sliding fuzzy controller for energy management of residential load by multi-sources power system using wind PV and battery	battery storage system, multi-sources system, three level inverter, MPPT, sliding mode control, fuzzy logic control, photovoltaic system, wind turbine	53, 3, 305-315	https://doi.org/10.18280/jesa.530301	Koulali, M., Berkani, A., Negadi, K., Mankour, M., Mezouar, A. (2020). Sliding fuzzy controller for energy management of residential load by multi-sources power system using wind PV and battery. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 53, No. 3, pp. 305-315. https://doi.org/10.18280/jesa.530301
492	Belattar, A., El Hamdaouy, A., Madi, A.A.	Multi-criteria and hierarchical level energy management system for light solar vehicle integrating a supercapacitor	light solar vehicle, photovoltaic system, battery, supercapacitor, energy management, multi-criteria, hierarchical level, fuzzy logic	53, 3, 317-326	https://doi.org/10.18280/jesa.530302	Belattar, A., El Hamdaouy, A., Madi, A.A. (2020). Multi-criteria and hierarchical level energy management system for light solar vehicle integrating a supercapacitor. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 53, No. 3, pp. 317-326. https://doi.org/10.18280/jesa.530302
493	Guo, Q.	An optimal scheduling path algorithm for enterprise resource allocation based on workflow	workflow, quantification, path, accuracy, efficiency	53, 3, 327-334	https://doi.org/10.18280/jesa.530303	Guo, Q. (2020). An optimal scheduling path algorithm for enterprise resource allocation based on workflow. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 53, No. 3, pp. 327-334. https://doi.org/10.18280/jesa.530303
494	Sharma, R., Singh, I., Prateek, M., Pasricha, A.	Comparative study of learning and execution of bipedal by using forgetting mechanism in reinforcement learning algorithm	humanoid, bipedal, action selection, reinforcement learning, forgetting mechanism, walking robot, vision system, optimal policy	53, 3, 335-343	https://doi.org/10.18280/jesa.530304	Sharma, R., Singh, I., Prateek, M., Pasricha, A. (2020). Comparative study of learning and execution of bipedal by using forgetting mechanism in reinforcement learning algorithm. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 53, No. 3, pp. 335-343. https://doi.org/10.18280/jesa.530304
495	Pasha, K.M.K., El-Fawal, M.M.	Investigating the multi-input multi-output air conditioning control techniques	MIMO, control, HVAC, energy	53, 3, 345-355	https://doi.org/10.18280/jesa.530305	Pasha, K.M.K., El-Fawal, M.M. (2020). Investigating the multi-input multi-output air conditioning control techniques. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 53, No. 3, pp. 345-355. https://doi.org/10.18280/jesa.530305
496	Bedhief, A.O., Dridi, N.	A genetic algorithm for three-stage hybrid flow shop scheduling problem with dedicated machines	flow shop, dedicated machines, genetic algorithm, crossover, mutation, local search	53, 3, 357-368	https://doi.org/10.18280/jesa.530306	Bedhief, A.O., Dridi, N. (2020). A genetic algorithm for three-stage hybrid flow shop scheduling problem with dedicated machines. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 53, No. 3, pp. 357-368. https://doi.org/10.18280/jesa.530306

497	Xiao, N., Liu, Y.Y., Zhang, X.Y., Liu, Y.	Swing angle error compensation of a computer numerical control machining center for special-shaped rocks	five-axis computer numerical control (CNC) machine tool, special-shaped rock, swing angle, error compensation, engraving and milling (EM) head	53, 3, 369-375	https://doi.org/10.18280/jesa.530307	Xiao, N., Liu, Y.Y., Zhang, X.Y., Liu, Y. (2020). Swing angle error compensation of a computer numerical control machining center for special-shaped rocks. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 53, No. 3, pp. 369-375. https://doi.org/10.18280/jesa.530307
498	Saryanto, S., Purba, H.H., Trimarjoko, A.	Improve quality remanufacturing welding and machining process in Indonesia using six sigma methods	quality improvement, remanufacturing, six sigma, product failure, availability, failure mode, DMAIC	53, 3, 377-384	https://doi.org/10.18280/jesa.530308	Saryanto, S., Purba, H.H., Trimarjoko, A. (2020). Improve quality remanufacturing welding and machining process in Indonesia using six sigma methods. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 53, No. 3, pp. 377-384. https://doi.org/10.18280/jesa.530308
499	Medjoudj, R., Mazighi, I.	Estimation of photovoltaic energy conversion using mixed Weibull distribution	photovoltaic system, stochastic modeling, data analysis, power generation, mixed Weibull distribution	53, 3, 385-391	https://doi.org/10.18280/jesa.530309	Medjoudj, R., Mazighi, I. (2020). Estimation of photovoltaic energy conversion using mixed Weibull distribution. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 53, No. 3, pp. 385-391. https://doi.org/10.18280/jesa.530309
500	Soma, S.K., Netapally, R.S.R., Mallapu, V.K.	Low-stress and efficient design of integrated boost series parallel fly-back converters	Integrated Boost Series Parallel Fly-Back Converter (IBSPFC), QSC (Quasi Switched Capacitor), voltage mode control	53, 3, 393-401	https://doi.org/10.18280/jesa.530310	Soma, S.K., Netapally, R.S.R., Mallapu, V.K. (2020). Low-stress and efficient design of integrated boost series parallel fly-back converters. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 53, No. 3, pp. 393-401. https://doi.org/10.18280/jesa.530310
501	Ke, L., Li, W.L., He, G.Q., Lin, G.B.	Fatigue life prediction of electromagnetic brake connection device in high-speed maglev train	high-speed maglev train, electromagnetic brake connection device (the Device), fatigue life prediction, finite-element analysis	53, 3, 403-409	https://doi.org/10.18280/jesa.530311	Ke, L., Li, W.L., He, G.Q., Lin, G.B. (2020). Fatigue life prediction of electromagnetic brake connection device in high-speed maglev train. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 53, No. 3, pp. 403-409. https://doi.org/10.18280/jesa.530311
502	Suryatal, B.K., Sarawade, S.S., Deshmukh, S.P.	A stereolithography system for 3D low cost components	photo-polymer, stereolithography, rapid prototyping, ultra-violet light	53, 3, 411-420	https://doi.org/10.18280/jesa.530312	Suryatal, B.K., Sarawade, S.S., Deshmukh, S.P. (2020). A stereolithography system for 3D low cost components. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 53, No. 3, pp. 411-420. https://doi.org/10.18280/jesa.530312
503	Yadlapalli, R.T., Kotapati, A.	Modeling and control of laptop computer voltage regulator module with multiple power sources	fuel cell, controllers, synchronous rectification (SR)	53, 3, 421-427	https://doi.org/10.18280/jesa.530313	Yadlapalli, R.T., Kotapati, A. (2020). Modeling and control of laptop computer voltage regulator module with multiple power sources. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 53, No. 3, pp. 421-427. https://doi.org/10.18280/jesa.530313
504	Gao, F.M., Wu, P.	A trajectory planning algorithm for medical manipulators based on adaptive particle swarm optimization and fuzzy neural network	particle swarm optimization (PSO) algorithm, medical manipulator, jitter suppression, fuzzy neural network (FNN)	53, 3, 429-435	https://doi.org/10.18280/jesa.530314	Gao, F.M., Wu, P. (2020). A trajectory planning algorithm for medical manipulators based on adaptive particle swarm optimization and fuzzy neural network. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 53, No. 3, pp. 429-435. https://doi.org/10.18280/jesa.530314
505	Hamouda, N., Babes, B., Hamouda, C., Kahla, S., Ellinger, T., Petzoldt, J.	Optimal tuning of fractional order proportional-integral-derivative controller for wire feeder system using ant colony optimization	gas metal arc welding process, wire-feeder system, fractional-order-proportional-integral-derivative controller, ant colony optimization algorithm	53, 2, 157-166	https://doi.org/10.18280/jesa.530201	Hamouda, N., Babes, B., Hamouda, C., Kahla, S., Ellinger, T., Petzoldt, J. (2020). Optimal tuning of fractional order proportional-integral-derivative controller for wire feeder system using ant colony optimization. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 53, No. 2, pp. 157-166. https://doi.org/10.18280/jesa.530201
506	Syam, S., Kurniati, S., Ramang, R.	Design and characteristics of axial magnetic gear using rectangular magnet	DC motor, permanent magnet, torque	53, 2, 167-175	https://doi.org/10.18280/jesa.530202	Syam, S., Kurniati, S., Ramang, R. (2020). Design and characteristics of axial magnetic gear using rectangular magnet. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 53, No. 2, pp. 167-175. https://doi.org/10.18280/jesa.530202
507	Peng, X., Hao, S.J., Zhao, Y.Z., Sun, Y., Liu, W.W.	A novel control system of flexible impact positive displacement motor for underground directional drilling in coalmines	directional drilling, hard rock drilling, axial impact, flexible impact positive displacement motor (PDM)	53, 2, 177-185	https://doi.org/10.18280/jesa.530203	Peng, X., Hao, S.J., Zhao, Y.Z., Sun, Y., Liu, W.W. (2020). A novel control system of flexible impact positive displacement motor for underground directional drilling in coalmines. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 53, No. 2, pp. 177-185. https://doi.org/10.18280/jesa.530203
508	Chennippan, M., Bhaskaran, P.E., Adhulrasheed, I.S.K., Subramanian, T., Govindasamy, R.	Vibration signals based bearing defects identification through online monitoring using LABVIEW	fault identification, ball bearing, online monitoring, Programmable Logic Controller (PLC), LABVIEW	53, 2, 187-193	https://doi.org/10.18280/jesa.530204	Chennippan, M., Bhaskaran, P.E., Adhulrasheed, I.S.K., Subramanian, T., Govindasamy, R. (2020). Vibration signals based bearing defects identification through online monitoring using LABVIEW. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 53, No. 2, pp. 187-193. https://doi.org/10.18280/jesa.530204
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510	Chen, R.C., Ou, Y.T., Fang, W.H., Shi, Y.G., Liu L.	Simulation analysis of a self-balancing hydraulic platform for agricultural machinery in mountainous regions	agricultural machinery, mountainous regions, self-balancing, kinematics, dynamics	53, 2, 203-211	https://doi.org/10.18280/jesa.530206	Chen, R.C., Ou, Y.T., Fang, W.H., Shi, Y.G., Liu L. (2020). Simulation analysis of a self-balancing hydraulic platform for agricultural machinery in mountainous regions. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 53, No. 2, pp. 203-211. https://doi.org/10.18280/jesa.530206
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512	Gunasekaran, S.S., Manivannan, S., Ramakrishnan, P.	An experimental investigation on regulated and unregulated emissions of a gasohol fueled SI engine with a novel three way catalytic converter	alternate fuels, gasohol, regulated and unregulated emissions, catalyst, conversion efficiency, three-way catalytic converter	53, 2, 219-224	https://doi.org/10.18280/jesa.530208	Gunasekaran, S.S., Manivannan, S., Ramakrishnan, P. (2020). An experimental investigation on regulated and unregulated emissions of a gasohol fueled SI engine with a novel three way catalytic converter. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 53, No. 2, pp. 219-224. https://doi.org/10.18280/jesa.530208

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514	Chouidira, I., Khodja, D.E., Chakroune, S.	Fuzzy logic based broken bar fault diagnosis and behavior study of induction machine	induction machine, detection, diagnosis, fuzzy logic, fast fourier transformation	53, 2, 233-242	https://doi.org/10.18280/jesa.530210	Chouidira, I., Khodja, D.E., Chakroune, S. (2020). Fuzzy logic based broken bar fault diagnosis and behavior study of induction machine. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 53, No. 2, pp. 233-242. https://doi.org/10.18280/jesa.530210
515	Li, M., He, S.H., You, L.N., Huang, Z.C.	Dynamic intuitionistic fuzzy multiple attributes decision making method based on prospect theory and VIKOR	VIKOR, dynamic intuitionistic fuzzy, multiple attribute decision making	53, 2, 243-248	https://doi.org/10.18280/jesa.530211	Li, M., He, S.H., You, L.N., Huang, Z.C. (2020). Dynamic intuitionistic fuzzy multiple attributes decision making method based on prospect theory and VIKOR. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 53, No. 2, pp. 243-248. https://doi.org/10.18280/jesa.530211
516	Shaik, G.B., Mani, V., Mopidevi, S.	An improved single phase self-balancing switched capacitor based step-up nine level inverter	Total Standing Voltage (TSV), Phase Disposition Carrier based PWM (PDPCPWM), self-balancing, switched-capacitor, Peak Inverse Voltage (PIV)	53, 2, 249-257	https://doi.org/10.18280/jesa.530212	Shaik, G.B., Mani, V., Mopidevi, S. (2020). An improved single phase self-balancing switched capacitor based step-up nine level inverter. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 53, No. 2, pp. 249-257. https://doi.org/10.18280/jesa.530212
517	Mehedi, F., Yahdou, A., Djilali, A.B., Benbouhenni, H.	Direct torque fuzzy controlled drive for multi-phase IPMSM based on SVM technique	direct torque control, stator flux ripple, fuzzy logic controller, multi-phase interior permanent magnet synchronous motor, torque ripple, space vector modulation	53, 2, 259-266	https://doi.org/10.18280/jesa.530213	Mehedi, F., Yahdou, A., Djilali, A.B., Benbouhenni, H. (2020). Direct torque fuzzy controlled drive for multi-phase IPMSM based on SVM technique. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 53, No. 2, pp. 259-266. https://doi.org/10.18280/jesa.530213
518	Li, W., Lv, G.C., Qi, B.J., Huang, S.T., Jiang, H.N.	Design and application of a dual processor digital control system for ultra-high frequency pulsed gas tungsten arc welding	dual processor, digital control, ultra-high-frequency pulse modulation, gas tungsten arc welding (GTAW)	53, 2, 267-272	https://doi.org/10.18280/jesa.530214	Li, W., Lv, G.C., Qi, B.J., Huang, S.T., Jiang, H.N. (2020). Design and application of a dual processor digital control system for ultra-high frequency pulsed gas tungsten arc welding. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 53, No. 2, pp. 267-272. https://doi.org/10.18280/jesa.530214
519	Adjati, A., Rekioua, T., Rekioua, D.	Degraded mode of dual stator induction motor in pumping	centrifugal pump, degraded mode, dual stator induction motor (DSIM), inverters, phase opening	53, 2, 273-282	https://doi.org/10.18280/jesa.530215	Adjati, A., Rekioua, T., Rekioua, D. (2020). Degraded mode of dual stator induction motor in pumping. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 53, No. 2, pp. 273-282. https://doi.org/10.18280/jesa.530215
520	Li, S.J.	A decision model for bike sharing based on big data analysis	big data analysis, decision model, bike sharing, backpropagation neural network (BPNN), linear regression	53, 2, 283-288	https://doi.org/10.18280/jesa.530216	Li, S.J. (2020). A decision model for bike sharing based on big data analysis. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 53, No. 2, pp. 283-288. https://doi.org/10.18280/jesa.530216
521	Duraisamy, R., Chandrasekaran, G., Perumal, M., Murugesan, R.	Comparison of results of economic load dispatch using various meta-heuristic techniques	economic dispatch, particle swarm optimization, quantum behaved swarm intelligence, shuffled frog leaping, Lambda Iteration, fuel cost	53, 2, 289-295	https://doi.org/10.18280/jesa.530217	Duraisamy, R., Chandrasekaran, G., Perumal, M., Murugesan, R. (2020). Comparison of results of economic load dispatch using various meta-heuristic techniques. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 53, No. 2, pp. 289-295. https://doi.org/10.18280/jesa.530217
522	Wang, W.T., Tian, K., Zhang, J.X.	Dynamic modelling and adaptive control of automobile active suspension system	active suspension system, reinforcement learning (RL), adaptive control, dynamic modelling	53, 2, 297-303	https://doi.org/10.18280/jesa.530218	Wang, W.T., Tian, K., Zhang, J.X. (2020). Dynamic modelling and adaptive control of automobile active suspension system. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 53, No. 2, pp. 297-303. https://doi.org/10.18280/jesa.530218
523	Araria, R., Berkani, A., Negadi, K., Marignetti, F., Boudiaf, M.	Performance analysis of DC-DC converter and DTC based fuzzy logic control for power management in electric vehicle application	fuzzy logic control (FLC), direct torque control (DTC), DC-DC converter, battery, DC-AC inverter, electric vehicle (EV), induction motor (IM) drives	53, 1, 1-9	https://doi.org/10.18280/jesa.530101	Araria, R., Berkani, A., Negadi, K., Marignetti, F., Boudiaf, M. (2020). Performance analysis of DC-DC converter and DTC based fuzzy logic control for power management in electric vehicle application. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 53, No. 1, pp. 1-9. https://doi.org/10.18280/jesa.530101
524	Singh, S.B., Suresha, R., Sachidananda, K.H.	Reliability centered maintenance used in metro railways	reliability, maintenance, predictive, fault, railways, condition based maintenance (CBM)	53, 1, 11-19	https://doi.org/10.18280/jesa.530102	Singh, S.B., Suresha, R., Sachidananda, K.H. (2020). Reliability centered maintenance used in metro railways. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 53, No. 1, pp. 11-19. https://doi.org/10.18280/jesa.530102
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527	Roger, N.P., Teplaira, B.A., Salomé, N.E.	Multi objective optimization of a power distribution system based on mixed integer programming	multi objective optimization, power distribution system, reconfiguration, mixed integer programming	53, 1, 39-46	https://doi.org/10.18280/jesa.530105	Roger, N.P., Teplaira, B.A., Salomé, N.E. (2020). Multi objective optimization of a power distribution system based on mixed integer programming. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 53, No. 1, pp. 39-46. https://doi.org/10.18280/jesa.530105
528	Wang, Y.J., Li, Y., Li, K., Wang, N.D.	Design of a remote meter reading system for residential heating	on-off time-area method, building manager, remote meter reading, heat metering	53, 1, 47-54	https://doi.org/10.18280/jesa.530106	Wang, Y.J., Li, Y., Li, K., Wang, N.D. (2020). Design of a remote meter reading system for residential heating. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 53, No. 1, pp. 47-54. https://doi.org/10.18280/jesa.530106

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530	Cao, H., Fan, Y.S., Chen, Z., Huang, X.Q.	Influence of canopy interception of soybean and corn on water distribution of center pivot sprinkling machine	center pivot sprinkling machine (CPSM), canopy interception, water distribution, sprinkler uniformity, soybean, corn	53, 1, 61-67	https://doi.org/10.18280/jesa.530108	Cao, H., Fan, Y.S., Chen, Z., Huang, X.Q. (2020). Influence of canopy interception of soybean and corn on water distribution of center pivot sprinkling machine. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 53, No. 1, pp. 61-67. https://doi.org/10.18280/jesa.530108
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533	Huang, J.J.	Vibration testing of a certain turbojet engine using the power spectrum analysis	turbojet engine, engine test, vibration testing, power spectrum analysis, fault diagnosis	53, 1, 87-93	https://doi.org/10.18280/jesa.530111	Huang, J.J. (2020). Vibration testing of a certain turbojet engine using the power spectrum analysis. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 53, No. 1, pp. 87-93. https://doi.org/10.18280/jesa.530111
534	Chenna, A., Aouzellag, D., Ghedamsi, K.	Study and control of a pumped storage hydropower system dedicated to renewable energy resources	pumped-storage hydropower, renewable energy, permanent magnet synchronous generator, power control	53, 1, 95-102	https://doi.org/10.18280/jesa.530112	Chenna, A., Aouzellag, D., Ghedamsi, K. (2020). Study and control of a pumped storage hydropower system dedicated to renewable energy resources. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 53, No. 1, pp. 95-102. https://doi.org/10.18280/jesa.530112
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536	Huang, L.W., Li, Z.W., Li, S.R., Liu, L., Shi, Y.G.	Design and application of a free and lightweight aquaculture water quality detection robot	freshwater aquaculture, water quality detection, underwater robot, three-propeller propulsion, control system, remote monitoring	53, 1, 111-122	https://doi.org/10.18280/jesa.530114	Huang, L.W., Li, Z.W., Li, S.R., Liu, L., Shi, Y.G. (2020). Design and application of a free and lightweight aquaculture water quality detection robot. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 53, No. 1, pp. 111-122. https://doi.org/10.18280/jesa.530114
537	Pittu, V.S.R., Gorantla, S.R.	Diseased area recognition and pesticide spraying in farming lands by multicopters and image processing system	unmanned aerial vehicle (UAV)/ multicopter, path planning, image acquisition, disease detection	53, 1, 123-130	https://doi.org/10.18280/jesa.530115	Pittu, V.S.R., Gorantla, S.R. (2020). Diseased area recognition and pesticide spraying in farming lands by multicopters and image processing system. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 53, No. 1, pp. 123-130. https://doi.org/10.18280/jesa.530115
538	Zhang, F.Q.	Fuzzy decision adjustment of train operation plan for high-speed rail network based on multi-objective optimization	high-speed rail (HSR), multi-objective optimization, fuzzy decision, chaotic firefly algorithm (CFA)	53, 1, 131-136	https://doi.org/10.18280/jesa.530116	Zhang, F.Q. (2020). Fuzzy decision adjustment of train operation plan for high-speed rail network based on multi-objective optimization. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 53, No. 1, pp. 131-136. https://doi.org/10.18280/jesa.530116
539	Said, B.M., Eddine, K.D., Salim, C.	Artificial neuron network based faults detection and localization in the high voltage transmission lines with Mho distance relay	fault detection and localization, diagnosis, high voltage transmission, Mho distance relay, artificial neural network	53, 1, 137-147	https://doi.org/10.18280/jesa.530117	Said, B.M., Eddine, K.D., Salim, C. (2020). Artificial neuron network based faults detection and localization in the high voltage transmission lines with Mho distance relay. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 53, No. 1, pp. 137-147. https://doi.org/10.18280/jesa.530117
540	Yang, B.	Multi-goal driven optimization of the beam in straight-side two-point press	mechanical press, beam, parametric design, multi-goal driven optimization (multi-GDO)	53, 1, 149-155	https://doi.org/10.18280/jesa.530118	Yang, B. (2020). Multi-goal driven optimization of the beam in straight-side two-point press. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 53, No. 1, pp. 149-155. https://doi.org/10.18280/jesa.530118
541	Belhadj, S., Belmokhtar, K., Ghedamsi, K.	Improvement of energy management control strategy of fuel cell hybrid electric vehicles based on artificial intelligence techniques	hybrid electric vehicle, energy management strategy, hydrogen economy, autonomy, lifetime, efficiency, artificial intelligence algorithm, battery/FC/PV	52, 6, 541-550	https://doi.org/10.18280/jesa.520601	Belhadj, S., Belmokhtar, K., Ghedamsi, K. (2019). Improvement of energy management control strategy of fuel cell hybrid electric vehicles based on artificial intelligence techniques. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 52, No. 6, pp. 541-550. https://doi.org/10.18280/jesa.520601
542	Aliyev, E.A.	Modeling of the inking apparatus of the sheet printing machine	inking apparatus, offset printing, distribution model, dynamic characteristic	52, 6, 551-557	https://doi.org/10.18280/jesa.520602	Aliyev, E.A. (2019). Modeling of the inking apparatus of the sheet printing machine. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 52, No. 6, pp. 551-557. https://doi.org/10.18280/jesa.520602
543	Lu, H., Wang, T.C.	An extension decision tree algorithm for lightweight design of autobody structure	autobody lightweight design, extension model, divergence reasoning, extension transform, extension decision tree (EDT) model	52, 6, 559-567	https://doi.org/10.18280/jesa.520603	Lu, H., Wang, T.C. (2019). An extension decision tree algorithm for lightweight design of autobody structure. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 52, No. 6, pp. 559-567. https://doi.org/10.18280/jesa.520603
544	Sequeira, A.A., Mohammed, S., Kumar, A.A., Sameer, M., Kareem, Y.A., Sachidananda, K.H.	Design and fabrication of battery operated forklift	battery operated, automatic, steering, four wheel	52, 6, 569-574	https://doi.org/10.18280/jesa.520604	Sequeira, A.A., Mohammed, S., Kumar, A.A., Sameer, M., Kareem, Y.A., Sachidananda, K.H. (2019). Design and fabrication of battery operated forklift. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 52, No. 6, pp. 569-574. https://doi.org/10.18280/jesa.520604

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546	Dasari, M.S., Mani, V.	Simulation and analysis of PI and NN tuned PI controllers for transformer based three-phase multi-level inverter with MC-PWM techniques	multi carrier PWM, multi-level inverter, PD, POD, APOD, THD	52, 6, 587-598	https://doi.org/10.18280/jesa.520606	Dasari, M.S., Mani, V. (2019). Simulation and analysis of PI and NN tuned PI controllers for transformer based three-phase multi-level inverter with MC-PWM techniques. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 52, No. 6, pp. 587-598. https://doi.org/10.18280/jesa.520606
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549	Badugu, J., Obulesu, Y.P., Babu, C.S.	Recharging methods of electric vehicles in residential distribution systems	Electric Vehicles (EVs), coordinated charging, load curve, unplanned charging, Smart Load Management (SLM)	52, 6, 617-623	https://doi.org/10.18280/jesa.520609	Badugu, J., Obulesu, Y.P., Babu, C.S. (2019). Recharging methods of electric vehicles in residential distribution systems. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 52, No. 6, pp. 617-623. https://doi.org/10.18280/jesa.520609
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551	Saritha, S., Mamatha, E., Reddy, C.S.	Performance measures of online warehouse service system with replenishment policy	inventory system, replenishment orders, markov process, queuing system, cost optimization	52, 6, 631-638	https://doi.org/10.18280/jesa.520611	Saritha, S., Mamatha, E., Reddy, C.S. (2019). Performance measures of online warehouse service system with replenishment policy. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 52, No. 6, pp. 631-638. https://doi.org/10.18280/jesa.520611
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555	Joshy, A., Dsouza, R., Muthirulan, V., Sachidananda, K.H.	Experimental analysis on the turning of aluminum alloy 7075 based on taguchi method and artificial neural network	turning, feed rate, cutting speed, depth of cut, surface roughness, Artificial Neural Network (ANN), taguchi method, machining	52, 5, 429-437	https://doi.org/10.18280/jesa.520501	Joshy, A., Dsouza, R., Muthirulan, V., Sachidananda, K.H. (2019). Experimental analysis on the turning of aluminum alloy 7075 based on taguchi method and artificial neural network. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 52, No. 5, pp. 429-437. https://doi.org/10.18280/jesa.520501
556	Wahdan, H.G., Abdelslam, H.E., Abou-El-Enien, T.H.M., Kassem, S.S.	Sustainable product design through non-dominated sorting cuckoo search	Modular Design, Design Structure Matrix (DSM), clustering, non-dominated sorting, cuckoo search, multi-objective optimization	52, 5, 439-447	https://doi.org/10.18280/jesa.520502	Wahdan, H.G., Abdelslam, H.E., Abou-El-Enien, T.H.M., Kassem, S.S. (2019). Sustainable product design through non-dominated sorting cuckoo search. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 52, No. 5, pp. 439-447. https://doi.org/10.18280/jesa.520502
557	Souhila, A.B., Fethi, D., Abdelhafid, O.	Design of a sliding mode observer based on computed torque control for hyper dynamic manipulation	computed torque, golf swing robot, hyper dynamic manipulation, sliding mode observer, stability	52, 5, 449-456	https://doi.org/10.18280/jesa.520503	Souhila, A.B., Fethi, D., Abdelhafid, O. (2019). Design of a sliding mode observer based on computed torque control for hyper dynamic manipulation. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 52, No. 5, pp. 449-456. https://doi.org/10.18280/jesa.520503
558	Feng, M., Cheng, Y.R.	Optimization of drop-and-pull transport network based on shared freight station and hub-and-spoke network	Drop-And-Pull (D-P) Transport, Hub-And-Spoke (H-S) network, shared freight station, optimization	52, 5, 457-464	https://doi.org/10.18280/jesa.520504	Feng, M., Cheng, Y.R. (2019). Optimization of drop-and-pull transport network based on shared freight station and hub-and-spoke network. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 52, No. 5, pp. 457-464. https://doi.org/10.18280/jesa.520504
559	Abdelrazik, M.A., Elsheikh, A.T., Zayan, M.A., Elhady, A.B.M.	A novel systems engineering methodology based on transdisciplinary quality system development lifecycle model. <i>Journal Européen des Systèmes Automatisés</i>	Transdisciplinary Quality System Development Lifecycle (TQSDL) Model, Model-Based Systems Engineering (MBSE), Dependency Structure Matrix (DSM), Quality Function Deployment (QFD), Systems Engineering (SE)	52, 5, 465-476	https://doi.org/10.18280/jesa.520505	Abdelrazik, M.A., Elsheikh, A.T., Zayan, M.A., Elhady, A.B.M. (2019). A novel systems engineering methodology based on transdisciplinary quality system development lifecycle model. <i>Journal Européen des Systèmes Automatisés</i> . <i>Journal Européen des Systèmes Automatisés</i> , Vol. 52, No. 5, pp. 465-476. https://doi.org/10.18280/jesa.520505
560	Lu, Y.P., Pei, X., Zhang, C.Z., Luo, H.Y., Liu, B., Ma, Z.D.	Design of multimodal transport path optimization model and dual pheromone hybrid algorithm	Multimodal Transport, Path Optimization, Scale Effect, Genetic Algorithm (GA), Ant Colony Optimization (ACO)	52, 5, 477-484	https://doi.org/10.18280/jesa.520506	Lu, Y.P., Pei, X., Zhang, C.Z., Luo, H.Y., Liu, B., Ma, Z.D. (2019). Design of multimodal transport path optimization model and dual pheromone hybrid algorithm. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 52, No. 5, pp. 477-484. https://doi.org/10.18280/jesa.520506

561	Vijayan, N., Raj, S.A., Muthirulan, V., Sachidananda, K.H.	Design and fabrication of a continuous polishing machine	polishing, surface roughness, surface finish, machining	52, 5, 485-493	https://doi.org/10.18280/jesa.520507	Vijayan, N., Raj, S.A., Muthirulan, V., Sachidananda, K.H. (2019). Design and fabrication of a continuous polishing machine. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 52, No. 5, pp. 485-493. https://doi.org/10.18280/jesa.520507
562	Chen, C.X., Wei, L.Y., Chen, Z.Y., Guo, C.J.	Operation planning for freight block trains using released transport capacity of existing railways	Passenger-Dedicated Lines (PDLs), Freight Block Trains (FBTs), operation planning, sensitivity analysis	52, 5, 495-500	https://doi.org/10.18280/jesa.520508	Chen, C.X., Wei, L.Y., Chen, Z.Y., Guo, C.J. (2019). Operation planning for freight block trains using released transport capacity of existing railways. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 52, No. 5, pp. 495-500. https://doi.org/10.18280/jesa.520508
563	Nelaturi, N., Devi, G.L.	A product recommendation model based on recurrent neural network	Recurrent Neural Network (RNN), purchase patterns, deep learning, bidirectional model, attention mechanism	52, 5, 501-507	https://doi.org/10.18280/jesa.520509	Nelaturi, N., Devi, G.L. (2019). A product recommendation model based on recurrent neural network. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 52, No. 5, pp. 501-507. https://doi.org/10.18280/jesa.520509
564	Deng, F., Liu, X.Y., Zhang, N., Zhang, F.X.	Dimension synthesis of a 3T2R labelling robot with hybrid mechanism	hybrid mechanism, dimension synthesis, jacobian matrix, pareto frontier approach, multi-objective optimization	52, 5, 509-514	https://doi.org/10.18280/jesa.520510	Deng, F., Liu, X.Y., Zhang, N., Zhang, F.X. (2019). Dimension synthesis of a 3T2R labelling robot with hybrid mechanism. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 52, No. 5, pp. 509-514. https://doi.org/10.18280/jesa.520510
565	Garziad, M., Saka, A.	Influence of rider on the stability and control of two wheeled vehicles	two-wheeled vehicle, rider, lean torque, steering torque, Proportional-Integral-Derivative (PID) Controller	52, 5, 515-520	https://doi.org/10.18280/jesa.520511	Garziad, M., Saka, A. (2019). Influence of rider on the stability and control of two wheeled vehicles. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 52, No. 5, pp. 515-520. https://doi.org/10.18280/jesa.520511
566	Khaldi, L., Iffouzar, K., Ghedamsi, K., Aouzellag, D.	Performance analysis of five-phase induction machine under unbalanced parameters	performance analysis, five-phase induction machine, stator and rotor resistance variation, joule losses, torque ripples, mechanical speed	52, 5, 521-526	https://doi.org/10.18280/jesa.520512	Khaldi, L., Iffouzar, K., Ghedamsi, K., Aouzellag, D. (2019). Performance analysis of five-phase induction machine under unbalanced parameters. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 52, No. 5, pp. 521-526. https://doi.org/10.18280/jesa.520512
567	Li, L., Huang, Y., Guo, X.X.	Kinematics modelling and experimental analysis of a six-joint manipulator	denavit and hartenberg (D-H) parameters, manipulator, kinematics modelling, simulation	52, 5, 527-533	https://doi.org/10.18280/jesa.520513	Li, L., Huang, Y., Guo, X.X. (2019). Kinematics modelling and experimental analysis of a six-joint manipulator. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 52, No. 5, pp. 527-533. https://doi.org/10.18280/jesa.520513
568	Rao, D., Latha, C.P., Kumar, N.B., Venkatesh, P.M.	Oppositional teaching and learning based optimization of economical load dispatch problem with valve point loading effect	economic load dispatch (ELD), cost function, oppositional teaching and learning based optimization (OTLBO), valve point loading effect	52, 5, 535-540	https://doi.org/10.18280/jesa.520514	Rao, D., Latha, C.P., Kumar, N.B., Venkatesh, P.M. (2019). Oppositional teaching and learning based optimization of economical load dispatch problem with valve point loading effect. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 52, No. 5, pp. 535-540. https://doi.org/10.18280/jesa.520514
569	Vovna, O.V., Laktionov, I.S., Dobrovolska, L.O., Kabanets, M.M., Lebediev, V.A.	Evaluation of metrological characteristics of a computerized conductivity meter of irrigation solution based on the uncertainty theory	electrical conductivity, greenhouses, arduino, piecewise linear approximation, hardware components, software	52, 4, 333-340	https://doi.org/10.18280/jesa.520401	Vovna, O.V., Laktionov, I.S., Dobrovolska, L.O., Kabanets, M.M., Lebediev, V.A. (2019). Evaluation of metrological characteristics of a computerized conductivity meter of irrigation solution based on the uncertainty theory. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 52, No. 4, pp. 333-340. https://doi.org/10.18280/jesa.520401
570	Bouamama, M., Elmeiche, A., Elhennani, A., Kebir, T.	Dynamic stability analysis of functionally graded timoshenko beams with internal viscous damping distribution	dynamic stability, functionally graded material (FGM), timoshenko beam, internal viscous damping, finite element method, eigenfrequencies	52, 4, 341-346	https://doi.org/10.18280/jesa.520402	Bouamama, M., Elmeiche, A., Elhennani, A., Kebir, T. (2019). Dynamic stability analysis of functionally graded timoshenko beams with internal viscous damping distribution. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 52, No. 4, pp. 341-346. https://doi.org/10.18280/jesa.520402
571	Lan, C.F.	A coordination contract for green agricultural product supply chain with stochastic output	green supply chain (SC), two-part tariff (TPT) contract, stochastic output, coordination	52, 4, 347-354	https://doi.org/10.18280/jesa.520403	Lan, C.F. (2019). A coordination contract for green agricultural product supply chain with stochastic output. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 52, No. 4, pp. 347-354. https://doi.org/10.18280/jesa.520403
572	Verma, V., Chauhan, P., Gupta, M.K.	Disturbance observer-assisted trajectory tracking control for surgical robot manipulator	nonlinear control, disturbance observer, kinematics, dynamic modeling, tracking	52, 4, 355-362	https://doi.org/10.18280/jesa.520404	Verma, V., Chauhan, P., Gupta, M.K. (2019). Disturbance observer-assisted trajectory tracking control for surgical robot manipulator. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 52, No. 4, pp. 355-362. https://doi.org/10.18280/jesa.520404
573	Mu, W.Z.	A big data-based prediction model for purchase decisions of consumers on cross-border e-commerce platforms	big data, purchase decision, prediction, cross-border e-commerce platform, multilayer perceptron (MLP)	52, 4, 363-368	https://doi.org/10.18280/jesa.520405	Mu, W.Z. (2019). A big data-based prediction model for purchase decisions of consumers on cross-border e-commerce platforms. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 52, No. 4, pp. 363-368. https://doi.org/10.18280/jesa.520405
574	Anand, K., Mamatha, E., Reddy, C.S., Prabha, M.	Design of neural network based expert system for automated lime kiln system	artificial neural network, optimization, lime kiln, shell temperature, furnace oil consumption, intelligent controller	52, 4, 369-376	https://doi.org/10.18280/jesa.520406	Anand, K., Mamatha, E., Reddy, C.S., Prabha, M. (2019). Design of neural network based expert system for automated lime kiln system. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 52, No. 4, pp. 369-376. https://doi.org/10.18280/jesa.520406
575	Dong, L.L., Wu, J., Wang, W.	A safe evacuation mode for ultradeep underground space in urban rail transit stations	safe evacuation mode, ultradeep underground public spaces, horizontal shelter, vertical evacuation system	52, 4, 377-385	https://doi.org/10.18280/jesa.520407	Dong, L.L., Wu, J., Wang, W. (2019). A safe evacuation mode for ultradeep underground space in urban rail transit stations. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 52, No. 4, pp. 377-385. https://doi.org/10.18280/jesa.520407
576	Aswal, A., Jha, A., Tiwari, A., Modi, Y.K.	CNC turning parameter optimization for surface roughness of aluminium-2014 alloy using Taguchi methodology	analysis of variance (ANOVA), computer numerical control (CNC) turning, optimization, taguchi method, surface roughness, signal-to-noise ratio (SNR)	52, 4, 387-390	https://doi.org/10.18280/jesa.520408	Aswal, A., Jha, A., Tiwari, A., Modi, Y.K. (2019). CNC turning parameter optimization for surface roughness of aluminium-2014 alloy using Taguchi methodology. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 52, No. 4, pp. 387-390. https://doi.org/10.18280/jesa.520408

577	Li, D., Liu, C.H., Li, K.	A remanufacturing logistics network model based on improved multi-objective ant colony optimization	remanufacturing logistics network, carbon emissions, multi-objective ant colony optimization (MACO), genetic algorithm (GA)	52, 4, 391-395	https://doi.org/10.18280/jesa.520409	Li, D., Liu, C.H., Li, K. (2019). A remanufacturing logistics network model based on improved multi-objective ant colony optimization. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 52, No. 4, pp. 391-395. https://doi.org/10.18280/jesa.520409
578	Ali, A.A., Hegaze, M.M., Elrodesly, A.S.	Maximizing the onboard capability of the spacecraft attitude control system based on optimal use of reaction wheels	attitude control system, optimal configuration, reaction wheels, spacecraft (SC) agility, torque envelope	52, 4, 397-407	https://doi.org/10.18280/jesa.520410	Ali, A.A., Hegaze, M.M., Elrodesly, A.S. (2019). Maximizing the onboard capability of the spacecraft attitude control system based on optimal use of reaction wheels. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 52, No. 4, pp. 397-407. https://doi.org/10.18280/jesa.520410
579	Qu, C.G., Cao, H.L., Sun, S., Xu, M.J.	Modelling of fuel flow in climb phase through multiple linear regression based on the data collected by quick access recorder	fuel flow, quick access recorder (QAR), multiple linear regression, prediction	52, 4, 409-413	https://doi.org/10.18280/jesa.520411	Qu, C.G., Cao, H.L., Sun, S., Xu, M.J. (2019). Modelling of fuel flow in climb phase through multiple linear regression based on the data collected by quick access recorder. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 52, No. 4, pp. 409-413. https://doi.org/10.18280/jesa.520411
580	Asfar, J., Atieh, A., Al-Mbaideen, R.	Techno-economic analysis of a microgrid hybrid renewable energy system in Jordan	hybrid renewable energy systems, homer software, microgrid, optimization	52, 4, 415-423	https://doi.org/10.18280/jesa.520412	Asfar, J., Atieh, A., Al-Mbaideen, R. (2019). Techno-economic analysis of a microgrid hybrid renewable energy system in Jordan. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 52, No. 4, pp. 415-423. https://doi.org/10.18280/jesa.520412
581	Wahyudnyana, K.D., Gunawan, A.A.N., Paramarta, I.B.A.	Remote control of room lights and coolers automation system SMS based	lm35 sensors, passive infrared receiver (PIR) sensors, automation system, remote control, light intensity	52, 4, 425-428	https://doi.org/10.18280/jesa.520413	Wahyudnyana, K.D., Gunawan, A.A.N., Paramarta, I.B.A. (2019). Remote control of room lights and coolers automation system SMS based. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 52, No. 4, pp. 425-428. https://doi.org/10.18280/jesa.520413
582	Avanzini, P.	Energy and economy: A thermodynamic approach	turning, feed rate, cutting speed, depth of cut, surface roughness, artificial neural network (ANN), taguchi method, machining	52, 3, 429-437	https://doi.org/10.18280/jesa.520301	Avanzini, P. (2019). Energy and economy: A thermodynamic approach. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 52, No. 3, pp. 429-437. https://doi.org/10.18280/jesa.520301
583	Sun, Z.L., Lv, G., Luo, Z.Y., Xie, C.Y., Wang, W.	A novel automatic detection model for single line-to-ground fault	modular design, design structure matrix (DSM), clustering, non-dominated sorting, cuckoo search, multi-objective optimization	52, 3, 439-448	https://doi.org/10.18280/jesa.520302	Sun, Z.L., Lv, G., Luo, Z.Y., Xie, C.Y., Wang, W. (2019). A novel automatic detection model for single line-to-ground fault. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 52, No. 3, pp. 439-448. https://doi.org/10.18280/jesa.520302
584	Sharma, N.R., Agrawal, H., Mishra, A.K.	Maintenance schedules of mining HEMM using an optimization framework model	computed torque, golf swing robot, hyper dynamic manipulation, sliding mode observer, stability	52, 3, 449-456	https://doi.org/10.18280/jesa.520303	Sharma, N.R., Agrawal, H., Mishra, A.K. (2019). Maintenance schedules of mining HEMM using an optimization framework model. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 52, No. 3, pp. 449-456. https://doi.org/10.18280/jesa.520303
585	Chen, W., Hao, Y.F., Jin, N.Q.J.	Product collaborative innovation of project-based supply chain under the influence of knowledge input	computed torque, golf swing robot, hyper dynamic manipulation, sliding mode observer, stability	52, 3, 457-464	https://doi.org/10.18280/jesa.520304	Chen, W., Hao, Y.F., Jin, N.Q.J. (2019). Product collaborative innovation of project-based supply chain under the influence of knowledge input. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 52, No. 3, pp. 457-464. https://doi.org/10.18280/jesa.520304
586	Yamparala, R., Perumal, B.	Secure data transmission with effective routing method using group key management techniques-A survey	Transdisciplinary Quality System Development Lifecycle (TQSDL) Model, Model-Based Systems Engineering (MBSE), Dependency Structure Matrix (DSM), Quality Function Deployment (QFD), Systems Engineering (SE)	52, 3, 465-476	https://doi.org/10.18280/jesa.520305	Yamparala, R., Perumal, B. (2019). Secure data transmission with effective routing method using group key management techniques-A survey. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 52, No. 3, pp. 465-476. https://doi.org/10.18280/jesa.520305
587	Pan, J., Fu, Z., Chen, H.W.	Split delivery vehicle routing problem with minimum delivery amounts	multimodal transport, path optimization, scale effect, Genetic Algorithm (GA), Ant Colony Optimization (ACO)	52, 3, 477-484	https://doi.org/10.18280/jesa.520306	Pan, J., Fu, Z., Chen, H.W. (2019). Split delivery vehicle routing problem with minimum delivery amounts. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 52, No. 3, pp. 477-484. https://doi.org/10.18280/jesa.520306
588	Fadel, M.Z., Rabie, M.G., Youssef, A.M.	Modeling, simulation and control of a fly-by-wire flight control system using classical PID and modified PI-D controllers	polishing, surface roughness, surface finish, machining	52, 3, 485-493	https://doi.org/10.18280/jesa.520307	Fadel, M.Z., Rabie, M.G., Youssef, A.M. (2019). Modeling, simulation and control of a fly-by-wire flight control system using classical PID and modified PI-D controllers. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 52, No. 3, pp. 485-493. https://doi.org/10.18280/jesa.520307
589	Wang, S.J.	Design and simulation of a fuzzy controller for automatic train driving based on multi-swarm optimization	Passenger-Dedicated Lines (PDLs), Freight Block Trains (FBTs), operation planning, sensitivity analysis	52, 3, 495-500	https://doi.org/10.18280/jesa.520308	Wang, S.J. (2019). Design and simulation of a fuzzy controller for automatic train driving based on multi-swarm optimization. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 52, No. 3, pp. 495-500. https://doi.org/10.18280/jesa.520308
590	Koshy, G., Samad, B.A., Suresh, A., Shameem, M., Mana, A.P.	Tribological behaviour of phosphonium based ionic liquid blended with ZDDP	recurrent neural network (rnn), purchase patterns, deep learning, bidirectional model, attention mechanism	52, 3, 501-507	https://doi.org/10.18280/jesa.520309	Koshy, G., Samad, B.A., Suresh, A., Shameem, M., Mana, A.P. (2019). Tribological behaviour of phosphonium based ionic liquid blended with ZDDP. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 52, No. 3, pp. 501-507. https://doi.org/10.18280/jesa.520309
591	Zhang, W.L., Liu, M.J., Wang, X.	Design and simulation of a road maintenance vehicle with a multi-working position manipulator and an automatic feeding mechanism	hybrid mechanism, dimension synthesis, Jacobian matrix, pareto frontier approach, multi-objective optimization	52, 3, 509-514	https://doi.org/10.18280/jesa.520310	Zhang, W.L., Liu, M.J., Wang, X. (2019). Design and simulation of a road maintenance vehicle with a multi-working position manipulator and an automatic feeding mechanism. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 52, No. 3, pp. 509-514. https://doi.org/10.18280/jesa.520310
592	Gupta, A., Mondal, A.K., Gupta, M.K.	Kinematic, dynamic analysis and control of 3 DOF upper-limb robotic exoskeleton	two-wheeled vehicle, rider, lean torque, steering torque, proportional-integral-derivative (PID) controller	52, 3, 515-520	https://doi.org/10.18280/jesa.520311	Gupta, A., Mondal, A.K., Gupta, M.K. (2019). Kinematic, dynamic analysis and control of 3 DOF upper-limb robotic exoskeleton. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 52, No. 3, pp. 515-520. https://doi.org/10.18280/jesa.520311

593	Abadi, M.H., Vaziri, A.M., Jajarmi, A.	On a new and efficient numerical technique to solve a class of discrete-time nonlinear optimal control problems	performance analysis, five-phase induction machine, stator and rotor resistance variation, joule losses, torque ripples, mechanical speed	52, 3, 521-526	https://doi.org/10.18280/jesa.520312	Abadi, M.H., Vaziri, A.M., Jajarmi, A. (2019). On a new and efficient numerical technique to solve a class of discrete-time nonlinear optimal control problems. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 52, No. 3, pp. 521-526. https://doi.org/10.18280/jesa.520312
594	Assam, B., Messalti, S., Harrag, A.	New improved hybrid MPPT based on backstepping-sliding mode for PV system	Denavit and Hartenberg (D-H) parameters, manipulator, kinematics modelling, simulation	52, 3, 527-533	https://doi.org/10.18280/jesa.520313	Assam, B., Messalti, S., Harrag, A. (2019). New improved hybrid MPPT based on backstepping-sliding mode for PV system. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 52, No. 3, pp. 527-533. https://doi.org/10.18280/jesa.520313
595	Abdellaoui, H., Ghedamsi, K., Mecharek, A.	Performance and lifetime increase of the PEM fuel cell in hybrid electric vehicle application by using an NPC seven-level inverter	Economic Load Dispatch (ELD), Cost Function, Oppositional Teaching and Learning Based Optimization (OTLBO), valve point loading effect	52, 3, 535-540	https://doi.org/10.18280/jesa.520314	Abdellaoui, H., Ghedamsi, K., Mecharek, A. (2019). Performance and lifetime increase of the PEM fuel cell in hybrid electric vehicle application by using an NPC seven-level inverter. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 52, No. 3, pp. 535-540. https://doi.org/10.18280/jesa.520314
596	Garziad, M., Saka, A.	Development and modeling of a ptw vehicle: co-simulation approach	motorcycle, modeling, mf tire, suspension, biomechanics, rider, stability, control	52, 2, 115-121	https://doi.org/10.18280/jesa.520201	Garziad, M., Saka, A. (2019). Development and modeling of a ptw vehicle: co-simulation approach. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 52, No. 2, pp. 115-121. https://doi.org/10.18280/jesa.520201
597	Sang, J.G.	A cost-effective pump scheduling method for mine drainage system based on ant colony optimization	pump scheduling, mine drainage system (MDS), ant colony optimization (ACO), cost efficiency	52, 2, 123-128	https://doi.org/10.18280/jesa.520202	Sang, J.G. (2019). A cost-effective pump scheduling method for mine drainage system based on ant colony optimization. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 52, No. 2, pp. 123-128. https://doi.org/10.18280/jesa.520202
598	Zhong, S.	Empirical analysis on function mechanism of factors affecting the efficiency of china's agricultural products logistics	agricultural products logistics, technical efficiency, influencing factors, function mechanism	52, 2, 129-135	https://doi.org/10.18280/jesa.520203	Zhong, S. (2019). Empirical analysis on function mechanism of factors affecting the efficiency of china's agricultural products logistics. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 52, No. 2, pp. 129-135. https://doi.org/10.18280/jesa.520203
599	Mahesh, V., Shastry, S., Murthy, V., Kumar, V., Mahesh, V.	Approach to reduce throughput time in grinding of gundrills	Gundrill, grinding, throughput time, cycle time, arena	52, 2, 137-142	https://doi.org/10.18280/jesa.520204	Mahesh, V., Shastry, S., Murthy, V., Kumar, V., Mahesh, V. (2019). Approach to reduce throughput time in grinding of gundrills. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 52, No. 2, pp. 137-142. https://doi.org/10.18280/jesa.520204
600	Goyal, G.R., Vadhera, S.	Solution of combined economic emission dispatch with demand side management using meta-heuristic algorithms	demand side management, economic emission dispatch, load reduction, meta-heuristic algorithm	52, 2, 143-148	https://doi.org/10.18280/jesa.520205	Goyal, G.R., Vadhera, S. (2019). Solution of combined economic emission dispatch with demand side management using meta-heuristic algorithms. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 52, No. 2, pp. 143-148. https://doi.org/10.18280/jesa.520205
601	Mu, H.P.	Disruption management of flexible job shop scheduling considering behavior perception and machine fault based on improved NSGA-II algorithm	flexible job-shop scheduling, close relative crossover and mutation, NSGA-II; multi-objective optimization, behavior perception	52, 2, 149-156	https://doi.org/10.18280/jesa.520206	Mu, H.P. (2019). Disruption management of flexible job shop scheduling considering behavior perception and machine fault based on improved NSGA-II algorithm. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 52, No. 2, pp. 149-156. https://doi.org/10.18280/jesa.520206
602	Jiang, D.F., Liu, C.H.	Modelling of supply chain risk contagion based on system dynamics	supply chain (SC), risk contagion, system dynamics, evolution	52, 2, 157-162	https://doi.org/10.18280/jesa.520207	Jiang, D.F., Liu, C.H. (2019). Modelling of supply chain risk contagion based on system dynamics. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 52, No. 2, pp. 157-162. https://doi.org/10.18280/jesa.520207
603	Saravanan, S., Kumar, C.R.	Impacts on NOx emission control measures to achieve EURO VI limits - a review	diesel engine, low temperature, homogeneous combustion, porous medium, emission, oxides of nitrogen, smoke opacity, particulate matter	52, 2, 163-171	https://doi.org/10.18280/jesa.520208	Saravanan, S., Kumar, C.R. (2019). Impacts on NOx emission control measures to achieve EURO VI limits - a review. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 52, No. 2, pp. 163-171. https://doi.org/10.18280/jesa.520208
604	Zhang, N.	Design and implementation of walking beam manipulator in automatic production line based on PLC	walking beam manipulator, automatic production line, position servo system, proportional-integral-derivative (PID) control	52, 2, 173-178	https://doi.org/10.18280/jesa.520209	Zhang, N. (2019). Design and implementation of walking beam manipulator in automatic production line based on PLC. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 52, No. 2, pp. 173-178. https://doi.org/10.18280/jesa.520209
605	Wang, C., Zeng, L.	Optimization of multi-objective job-shop scheduling under uncertain environment	job-shop scheduling problem (JSP), multi-objective tradeoff, optimization model, uncertain environment	52, 2, 179-183	https://doi.org/10.18280/jesa.520210	Wang, C., Zeng, L. (2019). Optimization of multi-objective job-shop scheduling under uncertain environment. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 52, No. 2, pp. 179-183. https://doi.org/10.18280/jesa.520210
606	Srivastava, A., Sharma, A., Gaur, A.S., Kumar, R., Modi, Y.K.	Prediction of surface roughness for CNC turning of EN8 steel bar using artificial neural network model	artificial neural network, design of experiment (DOE), predictive model, turning parameters, surface roughness	52, 2, 185-188	https://doi.org/10.18280/jesa.520211	Srivastava, A., Sharma, A., Gaur, A.S., Kumar, R., Modi, Y.K. (2019). Prediction of surface roughness for CNC turning of EN8 steel bar using artificial neural network model. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 52, No. 2, pp. 185-188. https://doi.org/10.18280/jesa.520211
607	Ram, J., Manoharan, A., Sun, S.Y.	Online-to-offline (O2O) business: Empirically examining the adoption vs. non-adoption	online-to-offline (O2O), adoption, technology-organization-environment (TOE), social commerce, diffusion of innovation (DOI)	52, 2, 189-198	https://doi.org/10.18280/jesa.520212	Ram, J., Manoharan, A., Sun, S.Y. (2019). Online-to-offline (O2O) business: Empirically examining the adoption vs. non-adoption. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 52, No. 2, pp. 189-198. https://doi.org/10.18280/jesa.520212
608	Zhao, Y.X.	Optimal decision-making for green supply chain based on overconfidence under the carbon emission constraint	overconfidence, carbon emission, green supply chain, green preference	52, 2, 199-204	https://doi.org/10.18280/jesa.520213	Zhao, Y.X. (2019). Optimal decision-making for green supply chain based on overconfidence under the carbon emission constraint. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 52, No. 2, pp. 199-204. https://doi.org/10.18280/jesa.520213

609	Kumar, R., Chaurasia, O.P.	A review on performance and emissions of compression ignition engine fueled with ethanol-diesel blend	alternative fuel, ethano-diesel fuel blend, performance, emission	52, 2, 205-214	https://doi.org/10.18280/jesa.520214	Kumar, R., Chaurasia, O.P. (2019). A review on performance and emissions of compression ignition engine fueled with ethanol-diesel blend. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 52, No. 2, pp. 205-214. https://doi.org/10.18280/jesa.520214
610	Song, Y., Cao, Y.P.	VMI & TPL supply chain coordination based on evolutionary game	vendor managed inventory, supply chain coordination, evolutionary game, third party logistics	52, 2, 215-222	https://doi.org/10.18280/jesa.520215	Song, Y., Cao, Y.P. (2019). VMI & TPL supply chain coordination based on evolutionary game. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 52, No. 2, pp. 215-222. https://doi.org/10.18280/jesa.520215
611	Ram, J., Xu, D.	Live streaming video e-commerce: Examining the operational strategies	live streaming video (LSV), social media, esport, online games, ecommerce strategies	52, 1, 1-9	https://doi.org/10.18280/jesa.520101	Ram, J., Xu, D. (2019). Live streaming video e-commerce: Examining the operational strategies. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 52, No. 1, pp. 1-9. https://doi.org/10.18280/jesa.520101
612	Kiran, A.V.N.S., Santosh Kumar, B., Loknath, M., Saleemuddin, S.M., Nagendra, S.	Experimental studies on two stroke SI engine by using novel piston and gasoline blends	performance parameters, un burnt hydro carbons emissions, CO emissions, ethanol, and methanol	52, 1, 11-15	https://doi.org/10.18280/jesa.520102	Kiran, A.V.N.S., Santosh Kumar, B., Loknath, M., Saleemuddin, S.M., Nagendra, S. (2019). Experimental studies on two stroke SI engine by using novel piston and gasoline blends. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 52, No. 1, pp. 11-15. https://doi.org/10.18280/jesa.520102
613	Dong, B.K., Zhu, X.N., Yan, R., Wang, Y.	Development of optimization model and algorithm for storage and retrieval in automated stereo warehouses	Automated Storage and Retrieval System (AS/RS), multiple carriers, goods location allocation, picking path, integrated optimization	52, 1, 17-22	https://doi.org/10.18280/jesa.520103	Dong, B.K., Zhu, X.N., Yan, R., Wang, Y. (2019). Development of optimization model and algorithm for storage and retrieval in automated stereo warehouses. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 52, No. 1, pp. 17-22. https://doi.org/10.18280/jesa.520103
614	Vardi, M., Neyestani, M., Ghorbanian, A.	Supplier selection and order allocation problem modeling with the aim of comparing incremental discounts versus wholesale discounts by using GA and NSGA algorithms	supplier selection, fuzzy AHP method, discount, weighting method, GA and NSGA-II	52, 1, 23-34	https://doi.org/10.18280/jesa.520104	Vardi, M., Neyestani, M., Ghorbanian, A. (2019). Supplier selection and order allocation problem modeling with the aim of comparing incremental discounts versus wholesale discounts by using GA and NSGA algorithms. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 52, No. 1, pp. 23-34. https://doi.org/10.18280/jesa.520104
615	Jiao, Q.J., Jin, Y.Y.	Selection of significant community structure based on network partition-based cluster	complex network, module structure, multi-scale module detection, significant partition	52, 1, 35-41	https://doi.org/10.18280/jesa.520105	Jiao, Q.J., Jin, Y.Y. (2019). Selection of significant community structure based on network partition-based cluster. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 52, No. 1, pp. 35-41. https://doi.org/10.18280/jesa.520105
616	Patil, R., Gade, A., Rewatkar, A.	Comprehensive study on task scheduling strategies in multicloud environment	cloud computing, shortest job first scheduling, round robin scheduling, makespan time, response time, completion time	52, 1, 43-47	https://doi.org/10.18280/jesa.520106	Patil, R., Gade, A., Rewatkar, A. (2019). Comprehensive study on task scheduling strategies in multicloud environment. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 52, No. 1, pp. 43-47. https://doi.org/10.18280/jesa.520106
617	Yang, F., Shi, M.H.	Emergency surgery scheduling under urban emergencies based on improved moth-flame optimization	emergencies, surgery scheduling, fatigue effect, moth-flame optimization (MFO), chaotic perturbation	52, 1, 49-55	https://doi.org/10.18280/jesa.520107	Yang, F., Shi, M.H. (2019). Emergency surgery scheduling under urban emergencies based on improved moth-flame optimization. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 52, No. 1, pp. 49-55. https://doi.org/10.18280/jesa.520107
618	Babu, S.N., Tamilselvi, J.	Generating road accident prediction set with road accident data analysis using enhanced expectation-maximization clustering algorithm and improved association rule mining	road accident, enhanced expectation-maximization, association rules, big data, clustering, accident prediction set	52, 1, 57-63	https://doi.org/10.18280/jesa.520108	Babu, S.N., Tamilselvi, J. (2019). Generating road accident prediction set with road accident data analysis using enhanced expectation-maximization clustering algorithm and improved association rule mining. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 52, No. 1, pp. 57-63. https://doi.org/10.18280/jesa.520108
619	Katuri, R., Gorantla, S.	Performance and comparative analysis of math function based controller combined with PID and PI for smooth transition of energy sources	HESS, hybrid electric vehicle, electric vehicle, battery, ultra-capacitor, Uni-directional converter, bi-directional converter, MFB controller, proportional integral (PI) controller, proportional integral derivative (PID) controller	52, 1, 65-72	https://doi.org/10.18280/jesa.520109	Katuri, R., Gorantla, S. (2019). Performance and comparative analysis of math function based controller combined with PID and PI for smooth transition of energy sources. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 52, No. 1, pp. 65-72. https://doi.org/10.18280/jesa.520109
620	Hou, Y., Cao, Z.J., Yang, S.L.	Cloud intelligent logistics service selection based on combinatorial optimization algorithm	cloud intelligent logistics (CIL), internet of things (IOT); combinatorial optimization algorithm (COA), service classification, service negotiation	52, 1, 73-78	https://doi.org/10.18280/jesa.520110	Hou, Y., Cao, Z.J., Yang, S.L. (2019). Cloud intelligent logistics service selection based on combinatorial optimization algorithm. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 52, No. 1, pp. 73-78. https://doi.org/10.18280/jesa.520110
621	Gorantla, S., Katuri, R.	A comparative study of ANN and pi controllers combined with MFB implemented to hybrid energy storage system for smooth switching between battery and ultracapacitor	battery, Ultracapacitor (UC), Bidirectional Converter (BDC), Unidirectional Converter, Math Function Based (MFB) Controller, Proportional-Integral (PI) Controller, Artificial Neural Network (ANN) Controller, Electric Vehicles (EVs), solar power	52, 1, 79-86	https://doi.org/10.18280/jesa.520111	Gorantla, S., Katuri, R. (2019). A comparative study of ANN and pi controllers combined with MFB implemented to hybrid energy storage system for smooth switching between battery and ultracapacitor. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 52, No. 1, pp. 79-86. https://doi.org/10.18280/jesa.520111
622	Nabil, T.	Efficient use of Oxy-hydrogen gas (HHO) in vehicle engines	HHO gas, engine performance, gas emissions	52, 1, 87-96	https://doi.org/10.18280/jesa.520112	Nabil, T. (2019). Efficient use of Oxy-hydrogen gas (HHO) in vehicle engines. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 52, No. 1, pp. 87-96. https://doi.org/10.18280/jesa.520112
623	Pan, J., Fu, Z., Chen, H.W.	A tabu search algorithm for the discrete split delivery vehicle routing problem	vehicle routing, discrete split delivery, ejection chains, tabu search	52, 1, 97-105	https://doi.org/10.18280/jesa.520113	Pan, J., Fu, Z., Chen, H.W. (2019). A tabu search algorithm for the discrete split delivery vehicle routing problem. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 52, No. 1, pp. 97-105. https://doi.org/10.18280/jesa.520113
624	Guo, J.Y., Zhou, S.Q., Zhang, Y.T., Wang, W.Q., Huang, S., Lv M.	Classification and processing of joint inventory information on maintenance equipment for military training vehicles based on system dynamics	joint inventory, vehicle maintenance equipment, military training vehicles (MTVs), system dynamics, information classification	52, 1, 107-114	https://doi.org/10.18280/jesa.520114	Guo, J.Y., Zhou, S.Q., Zhang, Y.T., Wang, W.Q., Huang, S., Lv M. (2019). Classification and processing of joint inventory information on maintenance equipment for military training vehicles based on system dynamics. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 52, No. 1, pp. 107-114. https://doi.org/10.18280/jesa.520114

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626	Suresh, K., Babu, A.R.V., Venkatesh, P.M.	Design and analysis of an intelligent controller for wind-solar hybrid energy conversion system	main controller, speedgoat, DSPIC, grid, wind and solar	51, 4-6, 225-237	https://doi.org/10.3166/JESA.51.225-237	Suresh, K., Babu, A.R.V., Venkatesh, P.M. (2018). Design and analysis of an intelligent controller for wind-solar hybrid energy conversion system. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 51, No. 4-6, pp. 225-237. https://doi.org/10.3166/JESA.51.225-237
627	Liu, S., Ju, Y.X., Wang, J., Yang, F., Ma, S.C., Wang, S.X.	Design of a smart after-service system for sugarcane harvesters based on product lifecycle	sugarcane harvester, service design, product lifecycle, after-service system	51, 4-6, 239-257	https://doi.org/10.3166/JESA.51.239-257	Liu, S., Ju, Y.X., Wang, J., Yang, F., Ma, S.C., Wang, S.X. (2018). Design of a smart after-service system for sugarcane harvesters based on product lifecycle. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 51, No. 4-6, pp. 239-257. https://doi.org/10.3166/JESA.51.239-257
628	Wang, Y., Wang, H., Zhang, M., Rui, J.	Quasi-periodic solutions for a nonlinear non-autonomous Hamiltonian system	kolmogorov-arnold-moser (KAM) method, hamiltonian, beam equation, quasi-periodic solution, normal form	51, 4-6, 259-271	https://doi.org/10.3166/JESA.51.259-271	Wang, Y., Wang, H., Zhang, M., Rui, J. (2018). Quasi-periodic solutions for a nonlinear non-autonomous Hamiltonian system. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 51, No. 4-6, pp. 259-271. https://doi.org/10.3166/JESA.51.259-271
629	Tan, J., Wang, Z.G., Jiang, G.Q.	Modelling and simulation of the balance of supply chain ecosystem	supply chain ecosystem, balance, information volume, information quality, information dissemination speed, information decomposition speed	51, 4-6, 273-281	https://doi.org/10.3166/JESA.51.273-281	Tan, J., Wang, Z.G., Jiang, G.Q. (2018). Modelling and simulation of the balance of supply chain ecosystem. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 51, No. 4-6, pp. 273-281. https://doi.org/10.3166/JESA.51.273-281
630	Singamaneni, K.K., Naidu, P.S., Kumar, P.V.S.	Efficient quantum cryptography technique for key distribution	diffie-hellman, RSA, quantum cryptography, quantum key distribution	51, 4-6, 283-293	https://doi.org/10.3166/JESA.51.283-293	Singamaneni, K.K., Naidu, P.S., Kumar, P.V.S. (2018). Efficient quantum cryptography technique for key distribution. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 51, No. 4-6, pp. 283-293. https://doi.org/10.3166/JESA.51.283-293
631	Fu, H.H., Xu, J.J., Zhang, H., Zhang, M., Xu, X.X.	Fault diagnosis of wireless sensor network based on optimized probabilistic neural network	wireless sensor network (WSN), probabilistic neural network (PNN), fault diagnosis, rough set	51, 4-6, 295-308	https://doi.org/10.3166/JESA.51.295-308	Fu, H.H., Xu, J.J., Zhang, H., Zhang, M., Xu, X.X. (2018). Fault diagnosis of wireless sensor network based on optimized probabilistic neural network. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 51, No. 4-6, pp. 295-308. https://doi.org/10.3166/JESA.51.295-308
632	Nuthalapati, B., Sinha, U.K.	Detection of downed or Broken power line Fault not touching the ground	high impedance faults (HIF'S), active smart wires (ASW), distributed series reactance (DSR), F-PLCCG (frequency power line carrier communication guardian	51, 4-6, 309-321	https://doi.org/10.3166/JESA.51.309-321	Nuthalapati, B., Sinha, U.K. (2018). Detection of downed or Broken power line Fault not touching the ground. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 51, No. 4-6, pp. 309-321. https://doi.org/10.3166/JESA.51.309-321
633	Li, B., Guo, C., Ning, T.	An improved bacterial foraging optimization for multi-objective flexible job-shop scheduling problem	multi-objective flexible scheduling, bacteria foraging optimization algorithm, additional turning, multi-attribute grey target decision	51, 4-6, 323-332	https://doi.org/10.3166/JESA.51.323-332	Li, B., Guo, C., Ning, T. (2018). An improved bacterial foraging optimization for multi-objective flexible job-shop scheduling problem. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 51, No. 4-6, pp. 323-332. https://doi.org/10.3166/JESA.51.323-332
634	Huang, L.L., Zhou, K.	Modeling and application of an embedded real-time system based on real-time colored Petri net	colored petri net, embedded real-time system, formal modeling, model simulation	51, 4-6, 333-345	https://doi.org/10.3166/JESA.51.333-345	Huang, L.L., Zhou, K. (2018). Modeling and application of an embedded real-time system based on real-time colored Petri net. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 51, No. 4-6, pp. 333-345. https://doi.org/10.3166/JESA.51.333-345
635	Djellal, A., Lakel, R.	Adapted reference input to control PID-based active suspension system	active suspension system, pid controller, quarter car model, passive suspension system	51, 1-3, 7-23	https://doi.org/10.3166/JESA.51.7-23	Djellal, A., Lakel, R. (2018). Adapted reference input to control PID-based active suspension system. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 51, No. 1-3, pp. 7-23. https://doi.org/10.3166/JESA.51.7-23
636	Kumar, K.C.R., Dandibhotla, T.S., Bulusu, V.V.	Learned ontology guided opinions analysis of extracted aspects from online product reviews	online reviews, product aspects, opinions, adjective, lexical variations, implicit opinions, ontology learning, semantic orientation	51, 1-3, 25-49	https://doi.org/10.3166/JESA.51.25-49	Kumar, K.C.R., Dandibhotla, T.S., Bulusu, V.V. (2018). Learned ontology guided opinions analysis of extracted aspects from online product reviews. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 51, No. 1-3, pp. 25-49. https://doi.org/10.3166/JESA.51.25-49
637	Li, H.C., Yan, Z.W.	A flexible retraction cable reel based on planetary gear drive	cable reel, flexible retraction, friction disk, planetary gear, torque	51, 1-3, 51-58	https://doi.org/10.3166/JESA.51.51-58	Li, H.C., Yan, Z.W. (2018). A flexible retraction cable reel based on planetary gear drive. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 51, No. 1-3, pp. 51-58. https://doi.org/10.3166/JESA.51.51-58
638	Zhang, S., Cao, D.X., Li, S., Min, H., Fan, F.	Inverse kinematic tension analysis and optimal design of a cable-driven parallel-series hybrid joint towards wheelchair-mounted robotic manipulator	wheelchair-mounted robotic manipulator (WMRM), cable-driven, hybrid mechanism, spring lateral buckling	51, 1-3, 59-74	https://doi.org/10.3166/JESA.51.59-74	Zhang, S., Cao, D.X., Li, S., Min, H., Fan, F. (2018). Inverse kinematic tension analysis and optimal design of a cable-driven parallel-series hybrid joint towards wheelchair-mounted robotic manipulator. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 51, No. 1-3, pp. 59-74. https://doi.org/10.3166/JESA.51.59-74
639	Cui, L.M., Liao, Y.L., Zheng, D.Z.	A design method of preview controller for discrete-time systems with multiple input delays	discrete-time system, input delays, preview control, lifting method	51, 1-3, 75-87	https://doi.org/10.3166/JESA.51.75-87	Cui, L.M., Liao, Y.L., Zheng, D.Z. (2018). A design method of preview controller for discrete-time systems with multiple input delays. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 51, No. 1-3, pp. 75-87. https://doi.org/10.3166/JESA.51.75-87
640	Dutta, P., Kumar, A.	Design an intelligent flow measurement technique by optimized fuzzy logic controller	flow sensor, modelling, fuzzy logic controller, membership function	51, 1-3, 89-107	https://doi.org/10.3166/JESA.51.89-107	Dutta, P., Kumar, A. (2018). Design an intelligent flow measurement technique by optimized fuzzy logic controller. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 51, No. 1-3, pp. 89-107. https://doi.org/10.3166/JESA.51.89-107

641	Wang, S.H., Mao, C.S.	Evaluation of regional manufacturing quality competitiveness based on analytic network	manufacturing quality competitiveness (MQC), analytic network process (ANP), super decision (SD), quality bases, quality subjects, quality supports, quality benefits	51, 1-3, 109-124	https://doi.org/10.3166/JESA.51.109-124	Wang, S.H., Mao, C.S. (2018). Evaluation of regional manufacturing quality competitiveness based on analytic network. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 51, No. 1-3, pp. 109-124. https://doi.org/10.3166/JESA.51.109-124
642	Lan, C.F.	Coordination of vendor managed inventory supply chain with price-sensitive demand under consumer balking behaviour	VMI, CBB, supply chain, retail price, coordination	51, 1-3, 125-140	https://doi.org/10.3166/JESA.51.125-140	Lan, C.F. (2018). Coordination of vendor managed inventory supply chain with price-sensitive demand under consumer balking behavior. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 51, No. 1-3, pp. 125-140. https://doi.org/10.3166/JESA.51.125-140
643	Messoul, A., Laribi, B., Youcef, A., Kolsi, L., Aydi, A., Aichouni, M.	Numerical investigation of the performance of the etoile flow conditioner under different geometric and dynamic configurations	computational fluid dynamics, flow conditioner, pipe flow, fully developed flow, flow rate measurements, international standards, industry 4.0	51, 1-3, 141-152	https://doi.org/10.3166/JESA.51.141-152	Messoul, A., Laribi, B., Youcef, A., Kolsi, L., Aydi, A., Aichouni, M. (2018). Numerical investigation of the performance of the etoile flow conditioner under different geometric and dynamic configurations. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 51, No. 1-3, pp. 141-152. https://doi.org/10.3166/JESA.51.141-152
644	Huang, C.J., Zhou, X.H., Hou, D.S.	Online no-wait scheduling of leather workshop supply chain based on particle swarm optimization	particle swarm optimization (PSO), supply chain, leather workshop, no-wait scheduling	51, 1-3, 153-167	https://doi.org/10.3166/JESA.51.153-167	Huang, C.J., Zhou, X.H., Hou, D.S. (2018). Online no-wait scheduling of leather workshop supply chain based on particle swarm optimization. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 51, No. 1-3, pp. 153-167. https://doi.org/10.3166/JESA.51.153-167
645	Zhang, Y.Z., Li, Q.	Damage analysis of EMU frame considering randomness under different working conditions	emu, frame, dynamic stress test, working condition identification, fatigue strength evaluation, damage randomness	51, 1-3, 169-180	https://doi.org/10.3166/JESA.51.169-180	Zhang, Y.Z., Li, Q. (2018). Damage analysis of EMU frame considering randomness under different working conditions. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 51, No. 1-3, pp. 169-180. https://doi.org/10.3166/JESA.51.169-180
646	Gao, J., Zhang, J.	Simulation and analysis of vehicle rear-end collision based on virtual proving ground technology	vehicles, safety performance, rear-end collision, virtual proving ground (VPG) technology, explicit dynamic finite-element theory	51, 1-3, 181-195	https://doi.org/10.3166/JESA.51.181-195	Gao, J., Zhang, J. (2018). Simulation and analysis of vehicle rear-end collision based on virtual proving ground technology. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 51, No. 1-3, pp. 181-195. https://doi.org/10.3166/JESA.51.181-195
647	Remlaoui, A., Nehari, D., Elmeriah, A., Laissaoui, M.	A TRNSYS model of a direct contact membrane distillation (DCMD) system coupled to a flat plate solar collector (FPC)	solar desalination, direct contact membrane distillation, flat plate solar collector, water treatment, TRNSYS	50, 4-6, 335-360	https://doi.org/10.3166/JESA.50.335-360	Remlaoui, A., Nehari, D., Elmeriah, A., Laissaoui, M. (2017). A TRNSYS model of a direct contact membrane distillation (DCMD) system coupled to a flat plate solar collector (FPC). <i>Journal Européen des Systèmes Automatisés</i> , Vol. 50, No. 4-6, pp. 335-360. https://doi.org/10.3166/JESA.50.335-360
648	Bendriiss, A., Kezrane, C., Lasbet, Y., Awad, S., Loubar, K., Makhlof, M.	Experimental investigation on the influence of a biodiesel (waste cooking oil) on the performance and exhaust emissions of a compression ignition engine	biodiesel, waste cooking oil, diesel engine, heat release analysis, emissions	50, 4-6, 361-378	https://doi.org/10.3166/JESA.50.361-378	Bendriiss, A., Kezrane, C., Lasbet, Y., Awad, S., Loubar, K., Makhlof, M. (2017). Experimental investigation on the influence of a biodiesel (waste cooking oil) on the performance and exhaust emissions of a compression ignition engine. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 50, No. 4-6, pp. 361-378. https://doi.org/10.3166/JESA.50.361-378
649	Zhou, J., Wang, M.	A novel dynamic identification model for small unmanned helicopters	small unmanned helicopter, frequency domain identification, dynamic modeling, time domain verification	50, 4-6, 379-390	https://doi.org/10.3166/JESA.50.379-390	Zhou, J., Wang, M. (2017). A novel dynamic identification model for small unmanned helicopters. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 50, No. 4-6, pp. 379-390. https://doi.org/10.3166/JESA.50.379-390
650	Soumya, R.M., Sheeja, K.L., Pathak, N.P.	Split ring resonator inspired microstrip filtenna for Ku-band application	antenna, filter, filtenna, defected ground structure, split ring resonator, band pass filter	50, 4-6, 391-403	https://doi.org/10.3166/JESA.20.391-403	Soumya, R.M., Sheeja, K.L., Pathak, N.P. (2017). Split ring resonator inspired microstrip filtenna for Ku-band application. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 50, No. 4-6, pp. 391-403. https://doi.org/10.3166/JESA.20.391-403
651	Song, S.X., Sun, W.C., Xiao, F., Peng, S.L., An, J.Y., Wang, D.	A novel coordinated control algorithm for distributed driving electric vehicles	vehicle dynamics, distributed driving electric vehicle, Electric Stability Control (ESC), Drive Force Assisted Steering (DFAS)	50, 4-6, 405-421	https://doi.org/10.3166/JESA.50.405-421	Song, S.X., Sun, W.C., Xiao, F., Peng, S.L., An, J.Y., Wang, D. (2017). A novel coordinated control algorithm for distributed driving electric vehicles. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 50, No. 4-6, pp. 405-421. https://doi.org/10.3166/JESA.50.405-421
652	Suresh, K., Vijay Babu, A.R., Venkatesh, P.M.	Silicon based pentagon current control efficient-cell device memory with equidistant sensing	transistor, memory cell, equidistant sensing	50, 4-6, 423-434	https://doi.org/10.3166/JESA.50.423-434	Suresh, K., Vijay Babu, A.R., Venkatesh, P.M. (2017). Silicon based pentagon current control efficient-cell device memory with equidistant sensing. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 50, No. 4-6, pp. 423-434. https://doi.org/10.3166/JESA.50.423-434
653	Gao, Y., Xu, H., Hu, M.Q., Liu, J., Liu, J.H.	Path planning under localization uncertainty	path planning, localization, map matching, mobile robot	50, 4-6, 435-448	https://doi.org/10.3166/JESA.50.435-448	Gao, Y., Xu, H., Hu, M.Q., Liu, J., Liu, J.H. (2017). Path planning under localization uncertainty. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 50, No. 4-6, pp. 435-448. https://doi.org/10.3166/JESA.50.435-448
654	Dutta, P., Kumar, A.	Design an intelligent calibration technique using optimized GA-ANN for liquid flow control system	liquid flow control process, anemometer type flow sensor, modelling, genetic algorithm, neural network model	50, 4-6, 449-470	https://doi.org/10.3166/JESA.50.449-470	Dutta, P., Kumar, A. (2017). Design an intelligent calibration technique using optimized GA-ANN for liquid flow control system. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 50, No. 4-6, pp. 449-470. https://doi.org/10.3166/JESA.50.449-470
655	Du, H.W., Xiong, W., Wang, H.T., Wang, Z.W.	Physical modeling and deformation simulation of flexible cable under the plane constraint	plane constraint, flexible cable, elastic rod theory, semi-analytical method, deformation simulation	50, 4-6, 471-484	https://doi.org/10.3166/JESA.50.471-484	Du, H.W., Xiong, W., Wang, H.T., Wang, Z.W. (2017). Physical modeling and deformation simulation of flexible cable under the plane constraint. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 50, No. 4-6, pp. 471-484. https://doi.org/10.3166/JESA.50.471-484
656	Haouari, F., Bali, N., Tadjine, M., Seghir Boucherit, M.	Performance improvement of flexible robot using combined observer-controller and particle swarm optimization	flexible robot, backstepping control, coefficient diagram method, nonlinear observer, particle swarm optimization	50, 4-6, 485-505	https://doi.org/10.3166/JESA.50.485-505	Haouari, F., Bali, N., Tadjine, M., Seghir Boucherit, M. (2017). Performance improvement of flexible robot using combined observer-controller and particle swarm optimization. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 50, No. 4-6, pp. 485-505. https://doi.org/10.3166/JESA.50.485-505

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658	Pandi, C., Dandibhotla, T.S., Bulusu, V.V.	Reputation based online product recommendations	product aspects, opinions, aspect rank, frequent aspects, aspect reputation, product similarity, product recommendations	50, 4-6, 521-543	https://doi.org/10.3166/JESA.50.521-543	Pandi, C., Dandibhotla, T.S., Bulusu, V.V. (2017). Reputation based online product recommendations. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 50, No. 4-6, pp. 521-543. https://doi.org/10.3166/JESA.50.521-543
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660	Kumar, R., Kumar Tadepalli, S.	Dissipativity criteria for digital filters with saturation nonlinearity	dissipativity, digital filters, direct form, Lyapunov	50, 4-6, 555-568	https://doi.org/10.3166/JESA.50.555-568	Kumar, R., Kumar Tadepalli, S. (2017). Dissipativity criteria for digital filters with saturation nonlinearity. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 50, No. 4-6, pp. 555-568. https://doi.org/10.3166/JESA.50.555-568
661	Zhao, D.	Application of super-modular game model on quality and safety management of supply chain based on process control	super-modular game, process control, product quality safety problems, supply chain management	50, 4-6, 569-580	https://doi.org/10.3166/JESA.50.569-580	Zhao, D. (2017). Application of super-modular game model on quality and safety management of supply chain based on process control. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 50, No. 4-6, pp. 569-580. https://doi.org/10.3166/JESA.50.569-580
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663	Srivastava, M., Sinha, M.K.	Computational analysis of encapsulated phase change materials latent heat thermal energy storage system	conduction, HTF, interface position, melting, phase change materials, TEEs	50, 3, 227-239	https://doi.org/10.3166/JESA.50.227-239	Srivastava, M., Sinha, M.K. (2017). Computational analysis of encapsulated phase change materials latent heat thermal energy storage system. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 50, No. 3, pp. 227-239. https://doi.org/10.3166/JESA.50.227-239
664	Zhang, L., Zhang, Y.S., Jin, Q., Wang, D.M., Zhang, T.	A triple closed-loop control strategy for intelligent two-car chasing system based on particle swarm optimization	three closed -loop control, two-car chasing, particle swarm optimization (PSO), PID	50, 3, 241-256	https://doi.org/10.3166/JESA.50.241-256	Zhang, L., Zhang, Y.S., Jin, Q., Wang, D.M., Zhang, T. (2017). A triple closed-loop control strategy for intelligent two-car chasing system based on particle swarm optimization. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 50, No. 3, pp. 241-256. https://doi.org/10.3166/JESA.50.241-256
665	Katuri, R., Gorantla, S.	Design and comparative analysis of a control strategy approach implemented to hybrid energy storage system based electric vehicle	Electric Vehicles (EVs), Converters, Battery, Ultracapacitor (UC), Hybrid Energy Storage System (HESS)	50, 3, 257-284	https://doi.org/10.3166/JESA.50.257-284	Katuri, R., Gorantla, S. (2017). Design and comparative analysis of a control strategy approach implemented to hybrid energy storage system based electric vehicle. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 50, No. 3, pp. 257-284. https://doi.org/10.3166/JESA.50.257-284
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667	Koochaki, M., Lotfi, M.	Design of a neural network controller for the electrode control system in the electric arc furnace	Electric Arc Furnace (EAF), electrode control system, Neural Energy Control (NEC)	50, 3, 299-311	https://doi.org/10.3166/JESA.50.299-311	Koochaki, M., Lotfi, M. (2017). Design of a neural network controller for the electrode control system in the electric arc furnace. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 50, No. 3, pp. 299-311. https://doi.org/10.3166/JESA.50.299-311
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669	Wang, H.	Shortest route optimization of job-shop scheduling based on ant colony algorithm	Job-Shop Scheduling Problem (JSP), shortest route optimization, Ant Colony Algorithm (ACA), simulation, number of iterations	50, 3, 323-334	https://doi.org/10.3166/JESA.50.323-334	Wang, H. (2017). Shortest route optimization of job-shop scheduling based on ant colony algorithm. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 50, No. 3, pp. 323-334. https://doi.org/10.3166/JESA.50.323-334
670	Louis, J., Jungers, M., Daafouz, J.	Consistency for switched Lur'e systems. Application to sampled data control with non uniform sampling	consistency of switched systems, Lur'e type nonlinear systems, non-uniform sampling, sampled data control	50, 1-2, 9-27	https://doi.org/10.3166/JESA.50.9-27	Louis, J., Jungers, M., Daafouz, J. (2017). Consistency for switched Lur'e systems. Application to sampled data control with non uniform sampling. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 50, No. 1-2, pp. 9-27. https://doi.org/10.3166/JESA.50.9-27
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672	Taleb, M., Leclercq, E., Lefebvre, D.	Predictive control of dynamic hybride systems	continuous petri net, discrete petri net, elementary hybrid petri net, predictive control	50, 1-2, 49-74	https://doi.org/10.3166/JESA.50.49-74	Taleb, M., Leclercq, E., Lefebvre, D. (2017). Predictive control of dynamic hybride systems. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 50, No. 1-2, pp. 49-74. https://doi.org/10.3166/JESA.50.49-74

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674	Li, Q., Jauberthie, C., Denis-Vidal, L., Cherfi, Z., Maiga, M.	Optimal input design for parameter estimation for nonlinear dynamical systems with bounded-errors and application in aeronautic domain	bounded error, interval analysis, nonlinear system, optimal input design, parameter estimation, state estimation	50, 1-2, 95-115	https://doi.org/10.3166/JESA.50.95-115	Li, Q., Jauberthie, C., Denis-Vidal, L., Cherfi, Z., Maiga, M. (2017). Optimal input design for parameter estimation for nonlinear dynamical systems with bounded-errors and application in aeronautic domain. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 50, No. 1-2, pp. 95-115. https://doi.org/10.3166/JESA.50.95-115
675	Ivanova, E., Malti, R., Moreau, X.	Frequency-domain subspace system identification with fractional differentiation models	fractional state-space representation, identification in frequency domain, deterministic and stochastic contexts, subspace method	50, 1-2, 117-135	https://doi.org/10.3166/JESA.50.117-135	Ivanova, E., Malti, R., Moreau, X. (2017). Frequency-domain subspace system identification with fractional differentiation models. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 50, No. 1-2, pp. 117-135. https://doi.org/10.3166/JESA.50.117-135
676	Jedidi, S., Bourdais, R., Buisson, J., Lefebvre, M.A.	Structural identifiability and decentralized identification for systems coupled by their outputs	decentralized identification, identifiability, large scale systems	50, 1-2, 137-155	https://doi.org/10.3166/JESA.50.137-155	Jedidi, S., Bourdais, R., Buisson, J., Lefebvre, M.A. (2017). Structural identifiability and decentralized identification for systems coupled by their outputs. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 50, No. 1-2, pp. 137-155. https://doi.org/10.3166/JESA.50.137-155
677	Lalami, I., Frein, Y., Gayon, J.P.	Demand variability and value of information sharing in the supply chain. A case study in the automotive industry	demand variability, information sharing, inventory management	50, 1-2, 157-186	https://doi.org/10.3166/JESA.50.157-186	Lalami, I., Frein, Y., Gayon, J.P. (2017). Demand variability and value of information sharing in the supply chain. A case study in the automotive industry. <i>Journal Européen des Systèmes Automatisés</i> , Vol. 50, No. 1-2, pp. 157-186. https://doi.org/10.3166/JESA.50.157-186