

Electrical Engineering Department College of
Engineering/King Khalid University

1444-1445 Journals

1. M. Abdelsattar, M. Ismeil, M. M. Aly, and S. Saber, "Energy Management of Microgrid with Renewable Energy Sources: A Case Study in Hurghada Egypt."
2. S. Abbas, S. Alsubai, G. A. Sampedro, M. Abisado, A. S. Almadhor, N. Kryvinska, et al., "Active Learning for News Article's Authorship Identification," vol. 11, pp. 98415--98426, 2023.
3. S. Abbas, G. A. Sampedro, M. Abisado, A. S. Almadhor, T.-H. Kim, and M. M. Zaidi, "A Novel Drug-Drug Indicator Dataset and Ensemble Stacking Model for Detection and Classification of Drug-Drug Interaction Indicators," vol. 11, pp. 101525--101536, 2023.
4. A. Alfouly, I. Hamdan, and M. A. Ismeil, "Voltage Profile of Hosting Capacity Enhancement Based on Smart Inverter Reactive Power Control for PV Grid Connected System," vol. 4, pp. 234--242, 2023.
5. H. Alghamdi, L.-G. Hua, M. Riaz, G. Hafeez, S. Ullah, M. M. Zaidi, et al., "An optimal power flow solution for a power system integrated with renewable generation," vol. 19, pp. 603--6627, 2023.
6. S. Anwarul, S. Kumar, A. Bhansali, H. Alshazly, and H. S. Hussein, "Hybrid Dynamic Optimization for Multilevel Security System in Disseminating Confidential Information.," vol. 47, 2023.
7. J. V. B. Benifa, C. Chola, A. Y. Muaad, M. A. B. Hayat, M. B. Bin Heyat, R. Mehrotra, et al., "FMDNet: an efficient system for face mask detection based on lightweight model during COVID-19 pandemic in public areas," vol. 23, p. 6090, 2023.
8. B. S. Chikkatti, A. M. Sajjan, N. R. Banapurmath, J. K. Bhutto, R. Verma, and T. M. Y. Khan, "Fabrication of Flexible Films for Supercapacitors Using Halloysite Nano-Clay Incorporated Poly(lactic acid)," vol. 15, p. 4587, 2023.
9. P. K. Chittoor, B. Chokkalingam, R. Verma, and L. Mihet-Popa, "An Assessment of Shortest Prioritized Path-Based Bidirectional Wireless Charging Approach Toward Smart Agriculture," vol. 11, pp. 123742--123755, 2023.
10. M. Farrag and H. S. Hussein, "Most-Correlated Distribution-Based Load Balancing Scheme in Hybrid LiFi/WiGig Network," vol. 11, pp. 109764--109775, 2023.
11. G. M. D. Gandhi, R. Sivaraman, N. Nagabhooshanam, and R. Verma, "Effect of adding Indiana red matta rice husk Si3N4 bioceramic on mechanical, wear, flammability and tensile creep behavior of corn husk fiber polyester composite," 2023.
12. I. Hamdan, A. Alfouly, and M. A. Ismeil, "Hosting capacity improvement for solar systems based on model predictive controller of volt-watt-var smart inverter functions," pp. 1--15, 2023.
13. V. Harika, H. Javvaji, G. Madhavi, M. Azhar, G. Veeranna, and M. HussainMahammad, "Optimal Power Flow Problem Solution Using Diverse Soft Computing Techniques," vol. 101, pp. 5015--5024, 2023.
14. L.-G. Hua, A. Ali, S. Ullah, G. Hafeez, M. M. Zaidi, and L. Jun, "Robust finite-time integral terminal sliding mode control design for maximum power extraction of PMSG-based standalone wind energy system," vol. 11, 2023.

15. H. S. Hussein, M. H. E. Ali, M. Ismeil, M. N. Shaaban, M. L. Mohamed, and H. A. Atallah, "Automatic Modulation Classification: Convolutional Deep Learning Neural Networks Approaches," vol. 11, pp. 98695--98705, 2023.
16. H. S. Hussein and M. Farrag, "OFDM With Double Quadrature Signed Index Shift Keying," 2023.
17. M. Ismeil, M. Orabi, E. Ahmed, and H. S. Hussein, "Refine control methodology and implementation of capacitor voltage control for improved switched inductor Z-source inverter," vol. 51, pp. 5324--5347, 2023.
18. M. A. Ismeil, A. Abdelaleem, M. Nasrallah, and E. E. M. Mohamed, "Split source inverter: Topology and switching modulation improvements—A review," vol. 5, p. 100240, 2023.
19. M. A. Ismeil, O. Abdel-Rahim, H. S. Hussein, and E. H. Abdelhameed, "Implementation of New Optimal Control Methodology of Quazi Z-Source Inverter Based on MPC," vol. 11, pp. 56453--56462, 2023.
20. M. A. Ismeil, A. Alfouly, H. S. Hussein, and I. Hamdan, "Hardware in the Loop Real-Time Simulation of Improving Hosting Capacity in Photovoltaic Systems Distribution Grid With Passive Filtering Using OPAL-RT," vol. 11, pp. 78119--78134, 2023.
21. M. A. Ismeil, A. Alfouly, H. S. Hussein, and I. Hamdan, "Improved Inverter Control Techniques in Terms of Hosting Capacity for Solar Photovoltaic Energy With Battery Energy Storage System," vol. 11, pp. 140161--140173, 2023.
22. B. Jegajothi, S. Arumugam, N. K. Shukla, I. Kathir, P. Yamunaa, and M. Digra, "An Efficient MPPT Tracking in Solar PV System with Smart Grid Enhancement Using CMC MAC Protocol," vol. 47, pp. 2417--2437, 2023.
23. M. A. Khan, H. Arshad, W. Z. Khan, M. Alhaisoni, U. Tariq, H. S. Hussein, et al., "HGRBOL2: human gait recognition for biometric application using Bayesian optimization and extreme learning machine," vol. 143, pp. 337--348, 2023.
24. N. Krishnamoorthy, N. Nagabhooshanam, P. K. V. Rao, and e. al, "A characterization study on toughening natural fibre composites using functionalized barely husk biosilica," 2023.
25. G. Madhavi, V. Harika, H. Javvaji, K. Kiran Kumar, M. Azhar, and M. Hussain Mahammad, "Examination Of Voltage Stability by Considering CPF Algorithm With STATCOM Under Contingency," vol. 101, pp. 5025--5037, 2023.
26. H. H. H. Mousa, A. Ali, and M. F. e. a. Shaaban, "Optimal allocation of multiple capacitors in a hybrid AC/DC microgrid for power quality improvement," vol. 5, 2023.
27. N. A. N. Muhaisen, M. H. Habaebi, F. E. M. Suliman, S. Khan, E. A. A. Elsheikh, M. R. Islam, et al., "Techno-economic feasibility analysis of Kuwait-specific photovoltaic-based street lighting system," vol. 42, pp. 626--647, 2023.
28. M. Nasrallah, H. S. Hussein, and M. A. Ismeil, "Adaptive Electronic Relay for Smart Grid Based on Self-healing Protection," 2023.
29. M. Nasrallah and M. Ismeil, "Micro Inverter Grid Connected for PV Application Based on SEPIC Differential Inverter," vol. 5, 2023.
30. T. Palaniswamy, V. Mahendiran, and M. R. Raja, "TW3-Based ROI Detection and Classification Using a Chaotic ANN and DNN-EVGO Architecture for an Automated Bone Age Assessment on Hand X-Ray Images," pp. 1--15, 2023.
31. M. R. Raja, V. Jayaraj, F. H. Shajin, and E. M. R. Devi, "Radial basis function Neural Network optimized with Salp Swarm algorithm espoused paddy leaf disease classification," vol. 86, p. 105038, 2023.

32. S. A. Saleem, S. Suraya, and S. M. Irshad, "Feasibility study of rooftop solar photovoltaic system for 33/11 kV primary substation at Al Suwairah," vol. 32, p. 11, 2023.
33. N. K. Shukla, A. Garg, J. Bhutto, M. Aggarwal, M. Abbas, H. S. Hussein, et al., "Predicting the compressive strength of SCC containing nano silica using surrogate machine learning algorithms," vol. 32, p. 373, 2023.
34. N. K. Shukla, A. Garg, J. Bhutto, M. Aggarwal, M. R. Raja, H. S. Hussein, et al., "An insight into the prediction of mechanical properties of concrete using machine learning techniques," vol. 32, p. 263, 2023.
35. N. Sivapriya, N. Kalaiarasi, R. Verma, B. Chokkalingam, and J. L. Munda, "Fault Diagnosis of Cascaded Multilevel Inverter Using Multiscale Kernel Convolutional Neural Network," vol. 11, pp. 79513--79530, 2023.
36. F. E. M. Suliman, "Solar- and Wind-Energy Utilization in the Kingdom of Saudi Arabia: A Comprehensive Review," vol. 17, 2023.
37. S. B. Thanikanti, R. K. Pachauri, M. Kumar, N. K. Shukla, P. Kuchhal, A. F. Minai, et al., "Study on Meta-heuristics techniques for shade dispersion to enhance GMPP of PV array systems under PSCs," vol. 58, p. 103353, 2023.
38. S. Abbas, A. Almadhor, G. A. Sampedro, S. Alsubai, A. Al Hejaili, L. Strážovská, et al., "Efficient geospatial mapping of buildings, woodlands, water and roads from aerial imagery using deep learning," vol. 10, p. e2039, 2024.
39. A. Abdelaleem, A. I. M. Ali, M. Nasrallah, E. E. M. Mohamed, H. S. Hussein, and M. A. Ismeil, "Model Predictive Control for Single-Stage Three- Phase Split Source Inverter With Enhanced Switched-Inductor Configuration," vol. 12, pp. 60782--60796, 2024.
40. A. Abdelaleem, M. A. Ismeil, M. Nasrallah, E. E. M. Mohamed, and A. I. M. Ali, "Advanced control of split source inverter through finite control-set model predictive control for improved system performance," vol. 19, 2024.
41. H. Abdelfattah, M. Esmail, S. A. Kotb, M. M. Mahmoud, H. S. Hussein, D. E. Mbadjoun Wapet, et al., "Optimal controller design for reactor core power stabilization in a pressurized water reactor: Applications of gold rush algorithm," vol. 19, p. e0296987, 2024.
42. S. M. Abdelkader, D. Nayebare, T. F. Megahed, A. M. R. F. El-Bab, M. A. Ismeil, and O. Abdel-Rahim, "Development of low-cost micro-fabrication procedures for planar micro-thermoelectric generators based on thin-film technology for energy harvesting applications," vol. 19, 2024.
43. M. Abdelsattar, M. A. Ismeil, M. M. Aly, and S. S. Abu-Elwfa, "Analysis of Renewable Energy Sources and Electrical Vehicles Integration Into Microgrid," vol. 12, pp. 66822--66832, 2024.
44. M. A. Al Husaini, M. H. Habaebi, E. A. A. Elsheikh, and e. al, "Evaluating the Effect of Noisy Thermal Images On the Detection of Early Breast Cancer Using Deep Learning," 2024.
45. M. A. S. Al Husaini, M. H. Habaebi, F. M. Suliman, M. R. Islam, E. A. A. Elsheikh, and N. A. Muhaisen, "Influence of Tissue Thermophysical Characteristics and Situ-Cooling on the Detection of Breast Cancer," vol. 13, 2024.
46. M. S. Alam, E. A. A. Elsheikh, F. M. Suliman, M. M. Rashid, and A. R. Faizabadi, "Innovative Strategies for Early Autism Diagnosis: Active Learning and Domain Adaptation Optimization," vol. 14, p. 629, 2024.
47. A. M. Aly, S.-W. Lee, and H. S. Hussein, "Integrating ISPH simulations with machine learning for thermal radiation and exothermic chemical reaction on heat and mass transfer in spline/triangle star annulus," vol. 54, p. 103948, 2024.

48. A. Balla, M. H. Habaebi, E. A. A. Elsheikh, M. R. Islam, F. E. M. Suliman, and S. Mubarak, "Enhanced CNN-LSTM Deep Learning for SCADA IDS Featuring Hurst Parameter Self-Similarity," vol. 12, pp. 6100--6116, 2024.
49. M. A. I. Dawood, H. S. Hussein, B. M. Hasaneen, and A. M. Abdel-Aziz, "An Efficient Protection Scheme Against Single-Phasing Fault for Three-Phase Induction Motor," vol. 12, pp. 6298--6317, 2024.
50. A. D. Dhaygude, G. K. Ameta, I. R. Khan, P. P. Singh, R. R. Maaliw III, N. Lakshmaiya, et al., "Knowledge-based deep learning system for classifying Alzheimer's disease for multi-task learning," 2024.
51. E. I. Eltahiri, E. A. A. Elsheikh, M. R. Islam, A. H. Abdalla, M. H. Habaebi, A.-H. Zyoud, et al., "Sand and Dust Storm Attenuation Prediction Using Visibility and Humidity Measurements," vol. 12, pp. 79602--79612, 2024.
52. M. Farrag, A. Al Ayidh, and H. S. Hussein, "Conditional Most-Correlated Distribution-Based Load-Balancing Scheme for Hybrid LiFi/WiGig Network," vol. 24, p. 220, 2024.
53. A. Haddad, M. H. Habaebi, E. A. A. Elsheikh, M. R. Islam, S. A. Zabidi, and e. al, "E2EE enhanced patient-centric blockchain-based system for EHR management," vol. 19, p. e0301371, 2024.
54. M. S. Iqbal, M. B. B. Heyat, S. Parveen, M. A. B. Hayat, M. Roshanzamir, R. Alizadehsani, et al., "Progress and Trends in Neurological Disorders Research Based on Deep Learning," p. 102400, 2024.
55. M. A. Ismeil, A. Abelealeem, A. I. M. Ali, M. Nasrallah, H. S. Hussein, and E. E. M. Mohamed, "A Comparison Analysis of a New Switched-Inductor and Conventional Split Source Inverter Structures," vol. 12, pp. 28013--28024, 2024.
56. M. A. Ismeil, H. S. Hussein, and M. Nasrallah, "Performance analysis of smart grid distribution system using global EV charging station as smart load based on automatic variac transformer," pp. 1--10, 2024.
57. M. O. N. J. I. Mohamed Zaidi, G. A. Sampedro, A. Almadhor, S. Alsubai, A. Al Hejaili, M. Gregus, et al., "Suspicious Human Activity Recognition From Surveillance Videos Using Deep Learnin," vol. 12, pp. 105497--105510, 2024.
58. A. Mohammed, N. Battina, H. Majahar, and K. Gottapu, "Implementation of dual-axis solar tracker using smart battery protection system," vol. 6, 2024.
59. A. Rai, A. Roy, S. Qamar, and S. A. Mohammed, "Modeling and simulation of FIR filter using distributed arithmetic algorithm on FPGA," 2024.
60. M. R. Raja, R. Naveen, C. A. D. Durai, M. Usman, N. K. Shukla, and M. A. Muqheet, "Energy efficient enhanced all pass transformation fostered variable digital filter design based on approximate adder and approximate multiplier for eradicating sensor nodes noise," vol. 118, pp. 399--413, 2024.
61. S. Ruhil, V. Khanna, U. Dutta, and N. K. Shukla, "Performance analysis of the novel Quad Gate Stacked nano-sheets FinFET device and its application in common source amplifier," vol. 15, p. 152424, 2024.
62. N. K. Shukla, A. M. Mayet, M. R. Raja, M. Parayangat, M. Usman, R. Verma, et al., "A Unified Test Data Volume Compression Scheme for Circular Scan Architecture using Hosted Cuckoo Optimization," vol. 80, pp. 6411--6434, 2024.
63. N. K. Shukla, F. H. Shajin, and R. Rajendran, "Speech Enhancement System using Deep Neural Network Optimized with Battle Royale Optimization," vol. 92, p. 105991, 2024.

64. S. Ullah, Q. Khan, M. M. Zaidi, and L.-G. Hua, "Neuro-adaptive non-singular terminal sliding mode control for distributed fixed-time synchronization of higher-order uncertain multi-agent nonlinear systems," vol. 959, p. 120087, 2024.

1444-1445 Conferences

65. K. BaAli, M. Abo-Zahhad, M. Farrag, S. Ahmed, and P. Ehkan, "Improving energy detection performance using segment of primary user signal energy in wide-band cognitive radio systems," in AIP Conference Proceedings, 2023.
66. S. Birla, N. K. Shukla, and e. al, "Novel Sandwich-Stacked Heterojunction Junction less TFET for Low Power Applications," in 3rd International Conference on Intelligent Computing Techniques for Smart Systems (ICTSES 2023), 2023.
67. N. K. Shukla, M. S. Alfaifi, S. Birla, V. Khanna, and M. A. Muqet, "A Novel Approach for Dynamic Power Reduction in SRAM Cache Memory Bit-Cell at Deep Sub-Micron CMOS Technology," in IEEE World Conference on Communication & Computing (WCONF-2023), 2023.
68. A. Abdelaleem and e. al, "Advancements in Topology and Modulation Techniques for Split Source Inverters: A Comprehensive Overview," in 2024 6th International Youth Conference on Radio Electronics, Electrical and Power Engineering (REEPE), 2024, pp. 1--8.
69. A. Alfouly, M. A. Ismeil, A. Ali, M. F. Shaaban, and I. Hamdan, "State of the Art of Hosting Capacity Criteria and Limitations for Renewable Energy Sources," in 2024 6th International Youth Conference on Radio Electronics, Electrical and Power Engineering (REEPE), 2024, pp. 1--6.
70. M. A. Ismeil, A. Ali, M. F. Shaaban, and A. Alfouly, "Single-Phase Semi-Z-Source Inverter for PV Applications," in 2024 6th International Youth Conference on Radio Electronics, Electrical and Power Engineering (REEPE), 2024, pp. 1--5.
71. S. Suraya, S. M. Irshad, S. A. Saleem, G. P. Ramesh, and M. Hussain, "Adaptive Neuro-Fuzzy Inference System based Control of Non-Isolated Boost Converter for Hybrid Renewable Sources," in 2024 IEEE International Conference on Information and Communication Technologies for Education, Science and Research (ICIESTR), 2024, pp. 979--8.
72. M. M. Zaidi, A. A. Asiri, and I. R. Bouazzi, "Simple Digital Design to Optimize TDOA Algorithm Reducing Energy Consumption: WSN for Forest Fire Localization," in 2024 IEEE 5th International Conference on Mobile Computing and Sustainable Informatics (ICMCSI), 2024, pp. 617--623.

1444-1445 Books/Chapters

1. N. Singh, S. Birla, N. K. Shukla, and S. Kaur, "Trending technologies in patient-centric Healthcare 4.0," ed, 2023.
2. M. S. Habeeb, "Predictive Analytics and Cybersecurity," in Intelligent Techniques for Predictive Data Analytics, ed, 2024, p. 151.
3. S. R. Sahu, S. R. Pandey, V. R. Jagtap, M. M. Jasmine, and S. A. Mohammed, "An Introductory Approach in Research Methodology," ed: Publication, 2024, p. 300.

1444-1445 Patents

1. H. Kousar, D. P. Kumar, S. A. Mohammed, N. Sharma, R. Sundaram, J. Kumar, et al. (2024, 6335588). AI-Enabled Robotic Device for Business Automation.