International Journal of Engineering Research and Applications (IJERA)

Editor-In-Chief

Prof. Manju Sharma

Editorial Board Members

Dr. Hadi Arabshahi, Iran A. K. M Nazmus Sakib, Bangladesh

Dr. Eugen Axinte, Romanian Dr. Rao, P.hd, USA

Dr. Yaduvir Singh, India Dr. Aknuas William, Australia

Dr. Shahram Jamali, Iran

Associate Editorial Board members

Sukumar Senthil Kumar

Universiti Sains Malaysia, School of Mathematical Sciences, Malaysia

Dr. Bensafi Abd-El-Hamid

Abou Bekr Belkaid University of Tlemcen, Algeria Tamilnadu, India

Dr. Prasanta K Sinha

Deputy Director, Durgapur Institute of Advanced Technology & Management, West Bengal

Hari Mohan Pandey

Middle East College of Information Technology, Under Coventry University, U.K.

Dr. V S Giridhar Akula

Professor and Principal, Avanthi's Scientifi Technological and Research Academy (JNTU), Hyderabad

Dr. Prasanta K Sinha

Durgapur Institute of Advanced Technology & Management, Durgapur

Dr. A.V.Senthil Kumar

Director, MCA depart, Hindusthan College of Arts and Science,

Dr. Suresh Prasad Singh

H.O.D.(Chemical Engineering), B. I. T. Sindri, Dhanbad

Patrick Tiong Liq Yee

Universiti Teknologi Malaysia, Malaysia,

Dr. Santosh K. Pandey

Department of Information Technology Board of Studies , The Institute of Chartered Accountants of India

Contact Details

Ukraine Office

First floor, ST Street, Ivano-Frankivsk, 76008, Ukraine **India Office**

SC-89, Shastri Nagar, Ghaziabad, UP, India

Email: ijera.editor@gmail.com Website: www.ijera.com









ISSN: 2248-9622



International Journal of Engineering Research and Applications (IJERA)

Volume 14 - Issue 05 May 2024

Peer Reviewed Refereed Journal







All Papers are indexed in Index Copernicus



International Journal of Engineering Research and Applications (IJERA)

Volume : 14 Issue : 05 ISSN : 2248-9622 May 2024

Contents:

A Review on Battery Super capacitor Hybrid Storage System	01-06
A Modified Observer Method for the Joint Estimation of States and Parameters for the Class of Linear Uncertain Discrete Time Systems	07-18
Sliding Mode Direct Power Control of a DC-DC Bidirectional Converter for High Voltage Applications	19-26
Youniverse: Crafting Experiences through Intelligent Profiling, XR Time Travel, and Consciousness Transfer Travel	27-32
Low Power Design Techniques for 6T SRAM Cell in 45nm Technology Node: A Comparative Analysis	33-40
GLCM Feature Analysis Using CT Images to Detect Lung Tumor	41-44
A Review on manufacturing of wiper blade for car windscreen using graphene	45-48
Microhardness and Taguchi Analysis of CuTiO2 Nanocoating on Mild steel	49-55
Enhancing Interior Design with OpenAI Sora: A Fusion of Creativity and Computational Intelligence	56-61
Performance of Fillet Weld when using E6013 Electrode	62-68
Lane Detection Methodologies for Autonomous Driving Systems: A Comprehensive Review with a Focus on the Hough Transform	69-76
Investigative Analysis for Material Characterization of SRM Rotor for Electric Vehicles	77-82
Experimental and Numerical Evaluation of Cutting Force In Pneumatic Sheet Cutting Machine	83-86
Characteristic Investigation of Motorized Control Valve	87-92
Examination of POCSO Law in India in the light of international developments	93-103