

Table of Contents

Vol. 20, No.11, November 2025

SL. No.	Title of the Paper	Name of the Author/s	Page No.
1	DYNAMIC AND STRUCTURAL OPTIMIZATION OF THE TOWERS'S CENTRAL CORES BRACING FOR TARGETED DESIGN AND UPGRADED SEISMIC RESPONSE	T. El Bahloul ¹ , O. Hniad ²	01 – 09
2	IMPACT OF PLATE THICKNESS ON 3D TEMPERATURE DISTRIBUTION IN WELDING: FINITE DIFFERENCE METHOD APPROACH	Adak M ¹ . and Mandal A ²	20 – 29
3	PLASMON FREQUENCY FOR ENHANCEMENT OPTICAL COMMUNICATION SYSTEMS	Aghssan Mohammed Nwehil ¹ , Husam Noman Mohammed Ali ²	30 – 54
4	RESOURCE-EFFICIENT FPGA IMPLEMENTATION OF CRYSTAL KYBER: ACHIEVING ULTRA-LOW POWER POST-QUANTUM CRYPTOGRAPHY WITH MINIMAL HARDWARE FOOTPRINT	Keshav Kumar ¹ , Bhushan Bhimrao Chavan ² , Lakhichand Khushal Patil ³ Man Mohan Shukla ⁴ , Bishwajeet Pandey ⁵	55 – 70
5	MITIGATION OF SUPRAHARMONICS IN MICROGRIDS USING PARABOLIC CARRIER-BASED PWM-CONTROLLED SHUNT ACTIVE FILTERS	Saad T. Y. Alfalahi ¹ , Muhamad Bin Mansor ² , Afaneen A. Abbood ³	71 – 90
6	RESEARCH OF CHARACTERISTICS OF THE BATTERY USED ON HYBRID VEHICLES	Lam Kim Thanh Vo ¹ , Xuan Ngoc Nguyen ² , Hong Phuc Vo ³ , Tien Phuc Dang ⁴ , Khoi Nguyen Nguyen ⁵ , Thanh Tam Tran ⁶	91 - 101
7	A LIGHTWEIGHT EDGE-LAYER GROUP KEY AGREEMENT PROTOCOL FOR IOT USING ELLIPTIC CURVE CRYPTOGRAPHY AND SHAMIR'S SECRET SHARING	Kavita Agrawal ¹ , P.V.G. D Prasad Reddy ² , Suresh Chittineni ³	102 – 123
8	DESIGN A NON-COHERENT MULTI-CARRIER CHAOTIC SYSTEM BASED ON GENERALIZED CARRIER AND PERMUTATION INDEXES MODULATION MECHANISM	Ban M. Alameri ¹ , Aya Jamal Kamal ² and Lubna Abbas Ali ³	124 – 139
9	ANALYSIS OF MAGNETOHYDRODYNAMIC INTERVAL-VALUED OPEN SETS VIA MINIMAL AND MAXIMAL IN INTERVAL-VALUED TOPOLOGICAL SPACES	Dijitha Selvendhiran ¹ , Navaneethakrishnan Malaisamy ²	140 – 157
10	COLORECTAL CANCER (CRC) DETECTION USING CONVOLUTIONAL NEURAL NETWORK (CNN)	Sombit Pramanik ¹ , Snehasish Biswas ² , Soumyadeep Jana ³ , Asish Mitra ⁴	158 – 166