#### Design and Implementation of a Frequency Hopping Spread Spectrum System based on FPGA

#### Ahmed M. Alfadhel



### Optimization Technique Based on Genetic Algorithm for Cognitive Relay Networks

#### **Ban Khalid Ammar**



#### A NOVEL DESIGN AND ANALYSIS STUDY OF OPTICAL MICROSTRIP NANOANTENNA

#### **Bassam Raoof Mohammed Ali**



# DESIGNING OPTICAL FIBER TO THE HOME (FTTH) NETWORKS BY USING HYBRID TECHNIQUES

#### Haidar S. Zaeer Dhaam



#### DESIGN AND PERFORMANCE EVALUATION OF HORN NANOANTENNAS FOR MODERN APPLICATIONS

#### Doaa Maryam Abbas Mohammed



# ENHANCEMENT OF TWINS FETUSES ECG SIGNAL EXTRACTION BASED ON MODIFIED STONE BLIND SOURCE SEPARATION TECHNIQUE

#### **Mushtaq Talib Mezaal**



#### Design and Analysis of MIMO Optical Visible Light Communication with Based On Neural Network

#### **Mustafa Aqeel Abbas**



### **Energy Harvesting Analysis Using Relay Protocols for Wireless Information Process**

#### **Nada Taher Malik**



#### Investigation the Performance of Underwater Optical Wireless Communication Under Impacts of Different Modulation Schemes and MIMO Configuration

#### **MONTHER NOAMAN HASAN**



#### **Vehicle Speed Control Based on IoT**

#### **Ali Fadhel Athab**



### **Enhancement of Microstrip Antenna using Fractal Metasurfaces**

#### **Noor Fadhel Habib**



# NEW TECHNIQUE FOR RELIABLE POWER MANAGEMENT OF MICROGRID BASED ON IOT

#### **Noor Saleh Mohammed**



#### Design of Substrate Integrated Waveguide Antennas for Wireless Communication Systems

#### Rand Muwafaq Hadi



#### ADAPTIVE GAIN SCHEDULING BASED CONTROLLER FOR NETWORK CONTROL SYSTEMS

#### Rasha Shamit Salman



#### WIRELESS AND IMAGING APPLICATIONS ANTENNA BASED ON METASURFACE MODIFIED DESIGNS

#### **Qahtan Mutar Gatea**



#### Enhancement the Detection Performance for the Primary User Traffic in Cognitive Radio Networks

#### **Akil Hassan Hamied**



#### AUTOMATIC EPILEPTIC SEIZURE DETECTION IN EEG BASED ON AN EFFICIENT MACHINE LEARNING TECHNIQUE

#### AMAL SALMAN ABDULHUSSEIN



# ORBITAL ANGULAR MOMENTUM PHENOMENA BASED MICROWAVE ANTENNA ARRAY DESIGN

#### MUSTAFA ABDULMAHDI MOHAMMED HASAN



# DEPLOYMENT OF SEAMLESS HANDOVERS IN MOBILE WIMAX NETWORKS

#### **HUDA HASSAN SAHEB**



### EEG SIGNALS SEPARATION USING BSS TECHNIQUES

#### **Safaa Mahmood Hamad**



#### SCALABLE MILLIMETER WAVE ANTENNA ARRAY DESIGN WITH BEAMFORMING CAPABILITIES FOR 5G APPLICATIONS

#### **Amjad Abdulsatar Maseer**



#### OPTIMAL PLACEMENT OF CLUSTER HEAD IN TRANSMIT ONLY WIRELESS SENSORS NETWORKS

#### ZAHRAA HAMMODI BAQER



#### DUAL-BAND RF ENERGY HARVESTING RECTENNA DESIGN WITH OMNI-DIRECTIONAL RADIATION PROPERTIES

#### MARWA JASIM MOHAMMED



#### NEW APPROACH OF HIGH-POWER RF ENERGY HARVESTING SYSTEM BASED ON BEAMFORMING TECHNIQUE

#### **SARAH MOHAMMAD ALIWI**



### DESIGNING AND IMPLEMENTATION OF SMART HOME MONITORING SYSTEM

#### **MUSTAFA ASAAD OMRAN**



# DESIGN AND SIMULATION OF OPTICAL LOGIC GATES BASED ON DIFFRENT PLASMONIC WAVEGUIDES FOR OPTICAL COMMUNICATIONS

#### WISSAM ABED JASIM AL-ETHARI



# INTERFERENCE SOURCES IDENTIFICATION FOR ETHERNET CABLE IN ELECTROMAGNETICALLY NOISY ENVIRONMENTS BASED ON BLIND SOURCE SEPARATION TECHNIQUES

#### AMEER THABIT RASHEED HADI



#### INDOOR MIMO – OPTICAL SYSTEM USING LASER DIODES ANGLE DIVERSITY RECEIVER WITH OFDM TECHNIQUE

#### Halla Kadhem Mohammad



#### Performance Enhancement of Non-Orthogonal Multiple Access (NOMA) Based on Optimization Techniques

#### AHMED JASIM MOHAMMED YOUNIS



# SECRECY PERFORMANCE ANALYSIS OF THE FSO LINK FOR THE COMMUNICATION SYSTEMS

### RUWAIDA ABDUL AMEER ABDUL KAREEM



# DESIGN AND SIMULATION OF FLIGHT CONTROL SYSTEM FOR PARROT MINI DRONE

#### **ESRAA HADI KADHIM**



#### DESIGN AND IMPLEMENTATION OF NONRECIPROCAL REFLECTION-LESSRADIO FREQUENCY SYSTEM

#### **BAHAA HAMZAH JASIM**



### PERFOMANCE ENHANCEMENT OF DOUBLE GAIN CHAIN FIBER LASER

#### **HAIDER YAHYA SAEED**



### ERROR CORRETION ENHANCEMENT FOR OFDM COMMUNICATION SYSTEM

### MAYS ALREEM AMER MAHMOOD CHABOK



# CONVOLUTIONAL NEURAL NETWORKS BASED ON NON LINEAR FREQUENCY ESTIMATOR

#### RANA HASAN JAFAR MOHAMED



# ENHANCED DETECTION OF COVID-19 USING FUZZY LOGIC AND INDEPENDENT COMPONENT ANALYSIS TECHNIQUES

#### MOHANAD SAREM ABDULLAH



#### PLANNING OF SMALL CELL BASE STATIONS USING GENETIC ALGORITHM

#### **MURTADHA HASSAN NAJI**



# DESIGN AND SIMULATION AN ABSORBER BASED ON FRACTAL GEOMETRY IN X- BAND APPLICATIONS

#### WASSAN HASSAN YASEEN



#### Design and Implementation of Microstrip Fractal Band Pass Filter with Metamaterial Performance

#### **Mohammed Yaqoob Yousif**



### OPTIMAL TARGET DETECTION AND TRACKING VIA WSN NETWORKS

#### MARWAH ADEEB DHAHIR

