**بحوث قسم الهندسة الالكترونية والاتصالات**

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| **البحث** |
| Di-iron trioxide hydrate-multi-walled carbon nanotube nanocomposite for arsenite detectionusing surface plasmon resonance technique. |
| Fabrication and Characterizations of a Novel Etched-tapered Single Mode Optical Fiber Ammonia Sensors Integrating PANI/GNF Nanocomposite. |
| Sensing performance of Modified Single Mode Optical Fiber Coated with Nanomaterials Based Ammonia Sensors Operated in the C- Band. |
| 320Gbps Free Space Optic Communication System Deploying Ultra Dense Wavelength Division Multiplexing and Polarization Mode Division Multiplexing. |
| Appraise LTE Data Transmission through Polar Code. |
| Pilot Based Channel Estimation and Synchronization in OFDM System |
| Dynamic Stability Analysis of Generator with Power System Stabilizers Using Matlab Simulink. |
| Comparative Studies of Fuzzy Logic Base Power System Stabilizers in Enhancing Dynamic Stability of a Generator Connected to Infinite Bus. |
| STABILITY STUDIES OF FUZZY LOGIC BASED POWER SYSTEM STABILIZER IN ENHANCING DYNAMIC STABILITY OF A TWO GENERATORS TIE-LINE SYSTEM. |
|  EFFECT OF DOUBLE FUZZY LOGIC CONTROLLER (DFLC) BASED ON POWER SYSTEM STABILIZER (PSS) ON A TIE- LINE TWO GENERATORS SYSTEM. |
| read operation performance analysis of modified crossbar array structures with self-rectifying memristive device model. |
|  A self-rectifying memristor model for simulation and ReRAM applications. |
| Estimation of Channel State Information (CSI) in Cell-Free Massive MIMO Based on Time of Arrival (ToA).  |
|  New Algorithm for Autonomous Dynamic Path Planning in Real-Time Intelligent Robot Car. |
|  Design and Implementation of Enhanced Smart Energy Metering System. |
| Simple 2D Chaotic Remapping Scheme for Securing Optical Communication networks. |
| Design and implementation of vehicles identification and tracking system. |
| Scattering Correction of CBCT Projections for the Quality Enhanced CT Reconstruction Using an Efficient Monte Carlo Photon Transport Model. |
| Joint carrier frequency and symbol timing synchronization sequence for FBMC based system. |
| Cyclostationary Feature Detection Scheme for FBMC and OFDM Cognitive Radio Systems. |
| FPGA Implementation of Prototype Filter Bank Multicarrier Modulator. |
| Theoretical and Complexity Analysis of FBMC. |
| A Multiple-Input Cascaded DC–DC Converter for Very Small Wind Turbines. |
| Reduced Complexity SLM Method for PAPR Reduction. |
| Power Envelope Variation Mitigation of LTE System using Constellation-Shaping Approach. |
| A High Efficiency Antenna Array for Wireless Communication Systems. |
| Microwave Nondestructive Testing for Defect Detection in Composites Based on K-Means Clustering Algorithm. |
| Nondestructive Evaluation of Coatings Delamination Using Microwave Time Domain Reflectometry Technique. |
| Design of Enhanced Distance-Based Neighbor Protocol for MANET with the Aid of ELECTRE Algorithm. |
| Comparative Study of Various CFAR Algorithms for NonHomogenous Environments. |
| Comparative Study of Combined FAR Algor ithms for Non -Homogenous Environment. |
| Human, Robotics Close Motion Classification Based on the Micro Doppler Signature Using HSVD. |
| Moving Target Tracking and Classification Based on Micro-Doppler Signatures. |
| Classification of radar non-homogenous clutter based on statistical features using neural network. |
|  OFDM PAPR reduction for image transmission using improved tone reservation. |
| A partial image encryption scheme based on DWT and texture segmentation. |
| FPGA Implementation of Prototype Filter Bank Multicarrier Modulator. |
| Theoretical and Complexity Analysis of FBMC. |
| Evaluation of GPR Detection for buried objects material with different depths and scanning angles. |
| MODIFIED FIBER BRAGG GRATING BASED HEAVY METAL IONS SENSOR IN C-BAND. |
| Real Time in Situ Remote Monitoring for Cladding Modified SMF Integrating Nanocomposite Based Ammonia Sensors Deploying EDFA. |
| Optimising spatial distance for alleviating the compound interference of in-band full-duplex D2D communications. |
| A past, present, and prospective review on microwave destructive evaluation of composite coatings.  |
| IFFT Based Microwave non destructive testing for delamination detection and thickness estimation.  |
| DECREASING THE RA COLLISION IMPACT FOR MASSIVE NB-IOT IN 5G WIRELESS NETWORKS. |
| Where in the World is My Suitcase? Air Passenger Luggage Tracking Using RFID Tags. |
| Modified methods for assessing photovoltaic solar thermal collectors. |
| Feature extraction for RGB-D cameras. |
| Broadband Reflectarray Design for Wireless Applications. |
| Strongly Connected Ramanujan Graphs for Highly Symmetric LDPC Codes. |
| Cyclotomic Construction of Sparse Code Multiple Access With Improved Diversity. |
| Arsenic Detection Using Surface Plasmon Resonance Sensor With Hydrous Ferric Oxide Layer. |
| Optical fiber sensor network integrating SAC-OCDMA and cladding modified optical fiber sensors coated with nanomaterial. |
| Highly sensitive fiber Bragg grating based gas sensor integrating polyaniline nanofiber for remote monitoring. |
| Performance Evaluations of Ammonia Sensors Using Cladding Modified Single-Mode Optical Fiber Coated with Polyaniline Nanofibers. |
| A Simple Chaotic Base Encryption Scheme for Securing OFDM-PON Communications. |
| A Low Latency Scheme for Securing OFDM-based Communications. |
| Assessment of Delamination Under Insulation Using Ridge Waveguide. |
| Scheme for Generating True Random Numbers using Electro-mechanical Switches. |
| SHE Networks: Security, Health, and Emergency Networks Traffic Priority Management Based on ML and SDN. |
| Optimized energy-aware cellular network planning with random waypoint user mobility. |
| Robot control interaction with cloud-assisted analysis control. |
| Variable length error correcting code for image in OFDM and PAPR reduction. |