2022 International Conference for Natural and Applied Sciences (ICNAS 2022)

Baghdad, Iraq 14-15 May 2022



IEEE Catalog Number: CFP22CL4-POD ISBN: 978-1-6654-7241-8

Copyright © 2022 by the Institute of Electrical and Electronics Engineers, Inc. All Rights Reserved

Copyright and Reprint Permissions: Abstracting is permitted with credit to the source. Libraries are permitted to photocopy beyond the limit of U.S. copyright law for private use of patrons those articles in this volume that carry a code at the bottom of the first page, provided the per-copy fee indicated in the code is paid through Copyright Clearance Center, 222 Rosewood Drive, Danvers, MA 01923.

For other copying, reprint or republication permission, write to IEEE Copyrights Manager, IEEE Service Center, 445 Hoes Lane, Piscataway, NJ 08854. All rights reserved.

*** This is a print representation of what appears in the IEEE Digital Library. Some format issues inherent in the e-media version may also appear in this print version.

 IEEE Catalog Number:
 CFP22CL4-POD

 ISBN (Print-On-Demand):
 978-1-6654-7241-8

 ISBN (Online):
 978-1-6654-7240-1

Additional Copies of This Publication Are Available From:

Curran Associates, Inc 57 Morehouse Lane Red Hook, NY 12571 USA Phone: (845) 758-0400

Fax: (845) 758-2633

E-mail: curran@proceedings.com Web: www.proceedings.com



2022 International Conference on Natural and Applied Sciences (ICNAS2022), AL-Hikma University, Baghdad, Iraq

Table of Contents

No.	Title of Papers	Page No.
1-	A New Method for Ensuring the Integrity in Wireless LAN (WiFi)	1-4
2-	A Review of HVDC Cables Technologies and Their Challenges	N/A
3-	Additive Manufacturing of Custom Orthopedic Implants: A Review	11-16
4-	An Accurate Deep Learning Threat Image Detection Algorithm for X-Ray Baggage Dataset	N/A
5-	An Improved Energy Efficient Clustering Protocol for Wireless Sensor Networks	23-28
6-	Automatic Modulation Classification Based Deep Learning: A Review	29-34
7-	Comparison of Data Mining Techniques in Healthcare Data	35-38
8-	Data Reduction Based on Adaptive Stream Window Size for IoT Data	39-44
9-	Deep learning for Covid-19 classification using CT scan slices of lung	45-51
10-	Design a medical device to monitor the human body (blood oxygen saturation, heart rate, body temperature)	52-57
11-	Design and Implementation of Smart Energy Billing System Based on RFID and Zigbee Technologies	58-63
12-	Extraction & Purification of plasmid from some spices of E.coli in different ways	N/A
13-	Fractional Two-Dimensional Linear Discriminant Analysis	70-75
14-	Multi-Objective Cellular Manufacturing Metaheuristics: Review Paper	76-82
15-	Performance Analysis of Content Serving Through Device-to-Device Communication	83-88
16-	Photodegradation of Automobile Exhaust Gases Using Catalytic Asphalt Pavement	89-94
17-	Textual Plagiarism Detection Using Embedding Models and Siamese LSTM	95-100
18-	The Block chains Technologies for Cryptocurrencies: A Review	101-106
19-	The Effect of Coated Electrodes on MRR of Titanium Metal by Spark Machining	107-113
20-	Free Space Optical Communications Security and Reliability Trade-off: A Survey	114-119
21-	The Reality of E-learning in Iraqi Universities	120-125
22-	Wide Band Omni-Directional Bow-Tie Antenna for Wireless LAN Application	N/A
Keyno	otes and Special Events	
23-	Grand Challenges in Image Processing	130
24-	The relationship between different blood groups and infection with Covid-19	131
25-	Author index	