

SCI Publications in last six years (2023-2014)

2023

1. Das, S., Mandal, J.K. A modified column block Toeplitz matrix for compressed sensing. Signal, Image and Video Processing(SIViP) (2023). <https://doi.org/10.1007/s11760-023-02529-8>, Springer Nature(SCIE, IF:1.583), March 4 2023
2. Jyotsna Kumar Mandal, Srishti Dey, and Ajay Kumar, A Steganographic Approach for Secured Communication via Boustrophedon Transformation to Develop IoT Based Smart City, IETE Journal of Research, Tailor & Francis (SCI, IF: 1.877) (Oct. 2022) (published on line).

2022

1. Bandyopadhyay, S., Thakur, S.S. & Mandal, J.K. Emotion Detection for online recommender system using deep learning: a proposed method, Innovations Syst Softw Eng 17th May, 2022. <https://link.springer.com/article/10.1007/s11334-022-00437-7>
2. Krishan Kundu, Prasun Halder & Jyotsna Kumar Mandal (2022) Estimation and Analysis of Change Detection, Forest Canopy Density, and Forest Fragmentation: A Case Study of the Indian Sundarbans, Journal of Sustainable Forestry, SCIE(IF:1.515); DOI: 10.1080/10549811.2022.2059515, published 30th March 2022, link: <https://www.tandfonline.com/doi/full/10.1080/10549811.2022.2059515>
3. Priyadarshini R, Chintalapati R, Nath V, Shylashree N, Sharma J B, Mandal, J K, "A Novel Approach for Node localization in Wireless Multimedia Sensor Network", IETE Journal of Research, communicated May 2, 2022.
4. Ghosh, S, Chakraborty, A, Mandal, J K, "Fusion: An EXOR Based Vertex Synthesis to Minimize Switching Functions", Theory of computing Systems, Springer Nature(SCI, IF:0.582)(communicated on 12th May,2022).(<https://www.springer.com/journal/224>).
5. Ghosh, P., Goto, T., Mandal, J.K. et al. View materialization using fuzzy MAX-MIN composition with association rule mining (VMFCA). Innovations Syst Softw Eng (2022). <https://doi.org/10.1007/s11334-022-00484-0>

2021

Patents:

Patent Title: Enhancing Cyber Security using Hybrid Authentication Technique, Gaurav Gambhir, M Gambhir, J K Mandal, Patent Number 2021100948, Innovation Patent, Australian Government, Eight years from 19.02.2021.

1. Santra, D., Basu, S. K., Mandal, J. K., & Goswami, S. (2019). Rough set based lattice structure for knowledge representation in medical expert systems: low back pain management case study. Expert Systems with Applications, Elsevier (Impact factor: 6.954 (2019)) [SCI], 145,113084
2. Kundu, K, Halder P and Mandal, J K, Change Detection and Patch Analysis of Sundarban Forest During 1975–2018 Using Remote Sensing and GIS Data, SN Computer Science , Springer(June 2021), 2:364.
3. Debarpita Santra, Subrata Goswami, Jyotsna Kumar Mandal and Swapan Kumar Basu, Low Back Pain Expert Systems: Clinical Resolution through Probabilistic Considerations and Poset”, Journal Artificial Intelligence in Medicine, Science Direct Elsevier,Volume 120,October 2021, 102163(SCI, IF:5.326) (<https://www.sciencedirect.com/science/article/pii/S0933365721001561>), September, 2021.
4. Krishan Kundu, Prasun Halder & Jyotsna Kumar Mandal, Detection and Prediction of Sundarban Reserve Forest using the CA-Markov Chain Model and Remote Sensing Data”, Earth Science Informatics (2021), Springer Nature(17th July 2021(SCIE with IF: 2.878))2021, DOI: <https://doi.org/10.1007/s12145-021-00648-9>, 2021.
5. *M Marjit Sing, Mandal, J K, A Novel Wide & Deep Transfer Learning Stacked GRU Framework for Network Intrusion Detection*, Journal of Information Security Applications, ELSEVIER, Vol 91,SCIE(IF 3.872), June, 2021, <https://doi.org/10.1016/j.jisa.2021.102899>, <https://www.sciencedirect.com/science/article/pii/S2214212621001265>.
6. Soumik Sadhukhan, P.K. Mishra, S.K. Basu, J.K. Mandal, A multi-scale agent-based model for avascular tumour growth, Biosystems, Volume 206,2021, 104450,ISSN 0303-2647,<https://doi.org/10.1016/j.biosystems.2021.104450>, ELSEVIER SCI, SCIE with IF:1.808. (<https://www.sciencedirect.com/science/article/pii/S0303264721001040>).
7. Arindam Sarkar, Moirangthem Marjit Singh, Jyotsna Kumar Mandal, Neural Synchronization guided Concatenation of Header and Secret Shares for Secure transmission of Patients' Electronic Medical Record: Enhancing Telehealth Security for COVID-19, Arabian Journal for Science and Engineering(SCIE, IF 2.334, Springer Nature, January 2021).
8. Gambhir, G and Mandal, J K, Shared memory implementation and performance analysis of LSB steganography based on chaotic tent map, Innovations in Systems and Software Engineering, <https://doi.org/10.1007/s11334-021-00385-8>(March 2021)
9. Bandyopadhyay, S., Thakur, S.S. & Mandal, J.K. Product recommendation for e-commerce business by applying principal component analysis (PCA) and K-means clustering: benefit for the society. Innovations Syst Softw Eng 17, 45–52 (2021). <https://doi.org/10.1007/s11334-020-00372-5>

2020

10. Santra, D., Mandal, J. K., Basu, S.K. et al. Medical expert system for low back pain management: design issues and conflict resolution with Bayesian network. Med Biol Eng Comput (2020). <https://doi.org/10.1007/s11517-020-02222-9>, Springer(SCI, IF-2.6022), 7 September,2020.

11. Soma Bandyopadhyay, S. S. Thakur, J. K. Mandal, Product recommendation for e-commerce business by applying principal component analysis (PCA) and K-means clustering: benefit for the society, Innovations in Software and Systems Engineering (NASA Journal), Springer, SCIMago, June, 2020
12. Mandal, J K., Chakraborty, R, A 10nm MOS and Its Applications, Microsystem technologies, Springer (Microsyst Technol (Feb, 19,2020) (IF:1.**581**).
13. Kundu, K, Mandal, J K., Halder, P, Urban Change Detection Analysis during 1978-2017 in Kolkata, India using Multi-temporal Satellite Data, Journal of the Indian Society of Remote Sensing (Sept., 2020) (SCIE, IF: 1.563)
14. Das, S, Mandal, J K., An enhanced block based Compress Sensing Technique using orthogonal matching pursuit, Signal, Image and Video Processing, Springer (2020) (in press)(SCI, IF 2.157).
15. Gambhir, G. & Mandal, J.K. Multicore implementation and performance analysis of a chaos based LSB steganography technique, Microsystem technologies, Springer (Microsyst Technol (2020) 25: 1669. <https://doi.org/10.1007/s00542-020-04762-4> Feb. 2020 (IF:2.276).
16. Das, S., Mandal, J.K. Saliency detection via outlier pursuit in compress domain (SDOPCD). Microsyst Technol (2020). <https://doi.org/10.1007/s00542-020-04769-x>
17. Santra, D., Mandal, J. K., Basu, S. K., & Goswami, S. (2019). Addressing Design Issues in Medical Expert System for Low Back Pain Management: Knowledge Representation, Inference Mechanism, and Conflict Resolution Using Bayesian Network. Medical & Biological Engineering & Computing, Springer (Impact factor: 2.039 (2019) [SCI]) [In revision]

2019

18. Hassan, K L, Mandal, J K, Mondal, S, Enhanced Trust-based Intrusion Detection System in MANET,Journal of Scientific & Industrial Research(JSIR), Vol. 78, August 2019, pp. 509-512, 2019(**IF:0.735**)
19. Chakraborty, R. & Mandal, J.K. An FPGA based cascaded CBC block cipher through RPSPNC and TE, Microsystem technologies, Springer (Microsyst Technol (2019) 25: 1669. <https://doi.org/10.1007/s00542-017-3458-x>) May 2019, Volume 25, Issue 5, pp 1669–1677(**IF:1.581**).
20. Chakraborty, R, Mandal, J K, An FPGA based non-feistel block cipher through recursive substitutions of bits on prime-nonprime detection of sub-stream (RSBPNDS), Microsystem Technologies (2019) (Microsyst Technol (2019) 25: 1679. <https://doi.org/10.1007/s00542-017-3662-8>), May 2019, Volume 25, Issue 5, pp 1679–1687(**IF:1.581**)
21. Hassan, K. L., Mandal, J. K. (2019), “Risk Factor Based Ad-hoc On Demand Multipath Distance Vector Routing Protocol (RF-AOMDV), JSIR (SCI E Journal), (vol 78, pp 746-750, Nov, 2019) (**IF:0.557**).
22. Dutta, P., Chatterjee, R. & Mandal, J.K.(2019) , “An approach for deployment of BRS in software-defined network”, Innovations Syst Softw Eng(ESCI) (2019). <https://doi.org/10.1007/s11334-019-00340-8>, A Nasa journal, Springer, pp 1-7(**IF:1.10**)
23. Kundu K., Halder P., Mandal J.K. (2019) Forest Cover Change Analysis in Sundarban Delta Using Remote Sensing Data and GIS. In: Mandal J., Sinha D. (eds) Intelligent Computing Paradigm: Recent Trends. Studies in Computational Intelligence (Web of Science Indexed), vol 784, pp 85-101, https://doi.org/10.1007/978-981-13-7334-3_7, Springer, Singapore.

2018

24. Das, S., Mandal, J.K, An information Hiding scheme in wavelet domain using Chaos dynamics, Journal of scientific & industrial research, vol 77, May 2018,pp 264-267.
25. Saha, S Ghoshal, S K Chakraborty A, Drargupta S, Sarkar, Mandal, J K, Improved exploiting modification direction-based steganography using dynamic weightage array, Electronica Letters, Vol. 54 No. 8 pp. 498-500, (IF:1.59)19th April, 2018(2018)
26. R Chatterjee, R Chakraborty, J K Mandal (2018), Design of Cryptographic model for End-to-End Encryption in FPGA based systems Microsystems Technology, Springer (SCI)(online first), (IF:1.581)
27. Mandal J., K., Chakraborty Raktim “Design of 4nm MOSFET and its Applications”, Microsystem Technology, Springer, July 2018 (SCI) (online first) (IF:1.581).
28. Ghosal, S and Mandal, J., K., “High Payload Image Steganography based on Laplacian of Gaussian (LOG) Edge Detector”, Multimedia Tools and Applications (IF:1.530), Springer (Science Citation Index Expanded (SciSearch), May, 2018.
29. Ghosal, S and Mandal, J., K., On the use of the Stirling Transform in Image Steganography, Journal of Information Security and Applications (IF:1.357), Elsevier (in Press), 2018
30. Mandal, J. K.,Das, S.(2018). An Information Hiding Scheme in Wavelet Domain using Chaos Dynamics, Journal of Scientific and Industrial Research (IF:0.557), ISSN: 0022-4456(SCI)(Vol 77(05), pp264-267
31. Chatterjee R, Mandal J. K., (2018), A Content Proposer System (CPS) based on deficiencies of Confidence Based Learning (CBL), Journal of Scientific and Industrial Research (IF:0.557), ISSN: 0022-4456. (SCI), Vol. 78(1), pp 35-38
32. Das, S, Mandal, J. K., Secured Hand Sacking Based Two Phase Data Concealing Architecture in Spectral Domain, Microsystem Technology (IF:1.581), Springer (Online first) March 2018(SCI)
33. Shaswata Saha ; Sudipta Ghosal ; Anuran Chakraborty ; Souvik Dhargupta ; Ram Sarkar ;Jyotsna Mandal, “Improved exploiting modification direction based steganography using dynamic weightage array”, Electronics Letters, IET Digital Library(IF:1.155), DOI: 10.1049/el.2017.3336 , Print ISSN 0013-5194, Online ISSN 1350-911X Available online: 02 March 2018(SCI)(IF:1.232).

2017

34. Chakraborty Rajdeep and Mandal J.K., Recursive Substitutions of Bits on Prime-Nonprime Detection of Sub-stream: FPGA Based Non-Feistel Block Cipher, Microsystem Technology (**IF:1.581**), Springer, 2017(SCI) (online first) (2017)
35. Amit Kumar Gupta1,Jyotsna Kumar Mandal, Indrajit Bhattacharya1 Tamal Mondal and & Sourav Sanu Shaw(2017), “CTMR-collaborative time-stamp based multicast routing for delay tolerant networks in post disaster scenario”, Peer-to-Peer Netw. Appl. (**IF:1.514**), Springer, DOI 10.1007/s12083-016-0533-5, 16th Nov.2017
36. Singh, M.M. and Mandal, J.K. (2017), “Reliability of MANET under the Influence of Black Hole Attack in Adhoc On Demand Distance Vector Routing Protocol”, Journal of Scientific and Industrial Research (**IF:537**), vol 76(07), 2017, pp 423-426, ISSN: 0022-4456. (SCI)(2017)
37. Singh, M.M. and Mandal, J.K., “Logistic regression-based reliability analysis for mobile ad hoc network with fixed maximum speed and varying pause times”, Journal of Scientific & Industrial Research (**IF:537**), Vol.76 (02) 2017, pp 81-84, ISSN: 0022-4456(SCI) (2017)

2016

38. Utpal Nandi & Jyotsna Kumar Mandal (2016), Efficiency of adaptive fractal image compression with archetype classification and its modifications, International Journal of Computers and Applications, 38:2-3, 156-163; Taylor & Francis (**SCIMago**)link: <http://dx.doi.org/10.1080/1206212X.2016.1237130>
39. Singh, M.M. and Mandal, J.K. (2016), “Logistic Regression Based Reliability Analysis for Mobile Ad hoc Network with Fixed Maximum Speed and Varying Pause Times”, Journal of Scientific and Industrial Research. (SCI, IF:537), ISSN: 0022-4456, Vol. 76, pp 81-84
40. Arindam sarkar, Jyotsna Kumar Mandal (2015), Cryptanalysis of Key Exchange Method in Wireless Communication, International Journal of Network Security (**SCIMago**), Vol.17, No.4, PP.484-493, July 2015
41. AK Gupta, I Bhattacharya, PS Banerjee, JK Mandal, A Mukherjee, DirMove: direction of movement-based routing in DTN architecture for post-disaster scenario, Wireless Networks (**IF:1.981**), 22(3), pp.723-740,2016(389 download, 4 citation)(SCI)
42. D Acharya, A Mukherjee, J K Mandal, NMukherjee (2016), Activity Recognition System Using Inbuilt Sensors of Smart Mobile Phone and Minimizing Feature Vectors. Microsystem Technology (**IF:1.581**), Springer, Volume 22 Issue 11, pp 2715-2722(SCI)

2015

43. Arindam Sarkar, Jyotsna Kumar Mandal(2015), Cryptanalysis of Key Exchange Method in Wireless Communication, International Journal of Network Security, Vol.17, No.4, PP.484-493(SCIMago)

2014

44. Mukhopadhyay, S and Mandal, J. K. (2014), A Fuzzy Switching Median Filter of Impulses in Digital Imagery (FSMF), Circuits, Systems, and Signal Processing (**IF:1.998**), February 2014, DOI:10.1007/s00034-014-9739-z,ISSN: 0278-081X, Springer US, <http://link.springer.com/article/10.1007%2Fs00034-014-9739-z>, Volume 33 Issue 7, pp 2193-2216