# SELECTED JOURNAL PUBLICATIONS

| Sl. No. | autohrs | title | year | publisher | JCR_Quartile |
|---|---|---|---|---|---|
| 1 | A Sahu, S Sinha, H Banka | Fuzzy inference system using genetic algorithm and pattern search for predicting roof fall rate in underground coal mines | 2024 | International Journal of Coal Science &Technology | Q1 |
| 2 | J Singh, AK Verma, H Banka, A Jaiswal | Optics-based metaheuristic approach to assess critical failure surfaces in both circular and non-circular failure modes for slope stability analysis | 2024 | Rock Mechanics Bulletin | Q1 |
| 3 | S Kumar, H Banka, B Kaushik | Lightweight group authentication protocol for secure RFID system | 2024 | Multimedia Tools and Applications | Q2 |
| 4 | S Kumar, H Banka, B Kaushik, S Sharma | An ultra-lightweight secure rfid authentication protocol for low-cost tags | 2024 | Journal of Computer Virology and Hacking Techniques | Q3 |
| 5 | S Shukla, H Banka | Markov-based genetic algorithm with ?-greedy exploration for Indian classical music composition | 2023 | Expert Systems with Applications | Q1 |
| 6 | A Kumar, M Nadeem, H Banka | Nature inspired optimization algorithms: a comprehensive overview | 2023 | Evolving Systems | Q3 |
| 7 | S Kumar, H Banka, B Kaushik | Ultra-lightweight blockchain-enabled RFID authentication protocol for supply chain in the domain of 5G mobile edge computing | 2023 | Wireless Networks | Q3 |
| 8 | N Chauhan, R Agrawal, H Banka | Adaptive application offloading for QoS maximization in cloud-fog environment with delay-constraint | 2023 | Peer-to-Peer Networking and Applications | Q3 |
| 9 | S Shukla, H Banka | Monophonic music composition using genetic algorithm and Bresenham$^{1}$'s line algorithm | 2022 | Multimedia Tools and Applications | Q2 |
| 10 | J Pradhan, AK Pal, H Banka | A CBIR system based on saliency driven local image features and multi orientation texture features | 2022 | Journal of Visual Communication and Image Representation | Q2 |
| 11 | RK Huda, H Banka | Efficient feature selection methods using PSO with fuzzy rough set as fitness function | 2022 | Soft Computing | Q3 |
| 12 | G Mohindru, K Mondal, H Banka | Different hybrid machine intelligence techniques for handling IoT-based imbalanced data | 2021 | CAAI Transactions on Intelligence Technology | Q1 |

| | | | | | |
|---|---|---|---|---|---|
| 13 | J Pradhan, AK Pal, H Banka, P Dansena | Fusion of region based extracted features for instance-and class-based CBIR applications | 2021 | Applied Soft Computing | Q1 |
| 14 | I Rasheed, H Banka, HM Khan | Pseudo-relevance feedback-based query expansion using boosting algorithm | 2021 | Artificial Intelligence Review | Q1 |
| 15 | PCS Rao, P Lalwani, H Banka, GSN Rao | Competitive swarm optimization based unequal clustering and routing algorithms (CSO-UCRA) for wireless sensor networks | 2021 | Multimedia Tools and Applications | Q2 |
| 16 | N Chauhan, H Banka, R Agrawal | Adaptive bandwidth adjustment for resource constrained services in fog queueing system | 2021 | Cluster computing | Q2 |
| 17 | TK Sahoo, H Banka, A Negi | Design and analysis of various bidirectional 2DPCAs in feature partitioning framework | 2021 | Multimedia Tools and Applications | Q2 |
| 18 | S Kumar, H Banka, B Kaushik, S Sharma | A review and analysis of secure and lightweight ECC-based RFID authentication protocol for Internet of Vehicles | 2021 | Transactions on Emerging Telecommunications Technologies | Q3 |
| 19 | N Chauhan, H Banka, R Agrawal | Delay-aware application offloading in fog environment using multi-class Brownian model | 2021 | Wireless Networks | Q3 |
| 20 | I Rasheed, H Banka, HM Khan | Building a text collection for Urdu information retrieval | 2021 | ETRI Journal | Q3 |
| 21 | RK Huda, H Banka | A group evaluation based binary PSO algorithm for feature selection in high dimensional data | 2021 | Evolutionary Intelligence | Q3 |
| 22 | G Mohindru, K Mondal, H Banka | Internet of Things and data analytics: A current review | 2020 | Wiley Interdisciplinary Reviews: Data Mining and Knowledge Discovery 10 (3ĩ ĩ... | Q1 |
| 23 | RK Huda, H Banka | New efficient initialization and updating mechanisms in PSO for feature selection and classification | 2020 | Neural Computing and Applications | Q2 |
| 24 | TK Sahoo, H Banka, A Negi | Novel approaches to one-directional two-dimensional principal component analysis in hybrid pattern framework | 2020 | Neural Computing and Applications | Q2 |
| 25 | J Pradhan, S Kumar, AK Pal, H Banka | Texture and colour region separation based image retrieval using probability annular histogram and weighted similarity matching scheme | 2020 | IET Image Processing | Q3 |
| 26 | J Singh, H Banka, AK Verma | A BBO-based algorithm for slope stability analysis by locating critical failure surface | 2019 | Neural computing and applications | Q2 |

| | | | | | |
|---|---|---|---|---|---|
| 27 | RK Huda, H Banka | Efficient feature selection and classification algorithm based on PSO and rough sets | 2019 | Neural Computing and Applications | Q2 |
| 28 | J Pradhan, AK Pal, H Banka | Principal texture direction based block level image reordering and use of color edge features for application of object based image retrieval | 2019 | Multimedia Tools and Applications | Q2 |
| 29 | J Singh, H Banka, AK Verma | Locating critical failure surface using meta-heuristic approaches: a comparative assessment | 2019 | Arabian Journal of Geosciences | Q3 |
| 30 | P Lalwani, S Das, H Banka, C Kumar | CRHS: clustering and routing in wireless sensor networks using harmony search algorithm | 2018 | Neural Computing and Applications | Q2 |
| 31 | J Pradhan, S Kumar, AK Pal, H Banka | A hierarchical CBIR framework using adaptive tetrolet transform and novel histograms from color and shape features | 2018 | Digital Signal Processing | Q2 |
| 32 | TK Sahoo, H Banka | Multi-feature-based facial age estimation using an incomplete facial aging database | 2018 | Arabian Journal for Science and Engineering | Q2 |
| 33 | P Lalwani, H Banka, C Kumar | BERA: a biogeography-based energy saving routing architecture for wireless sensor networks | 2018 | Soft Computing | Q3 |
| 34 | M Nadeem, H Banka, R Venugopal | A neural network-based approach for steady-state modelling and simulation of continuous balling process | 2018 | Soft Computing | Q3 |
| 35 | AK Jaiswal, H Banka | Epileptic seizure detection in EEG signal using machine learning techniques | 2018 | Australasian physical &engineering sciences in medicine | Q4 |
| 36 | AK Jaiswal, H Banka | Local transformed features for epileptic seizure detection in EEG signal | 2018 | Journal of Medical and Biological Engineering | Q4 |
| 37 | M Nadeem, H Banka, R Venugopal | Estimation of pellet size and strength of limestone and manganese concentrate using soft computing techniques | 2017 | Applied Soft Computing | Q1 |
| 38 | AK Jaiswal, H Banka | Local pattern transformation based feature extraction techniques for classification of epileptic EEG signals | 2017 | Biomedical Signal Processing and Control | Q2 |
| 39 | TK Sahoo, H Banka | New hybrid PCA-based facial age estimation using inter-age group variation-based hierarchical classifier | 2017 | Arabian Journal for Science and Engineering | Q2 |
| 40 | PCS Rao, PK Jana, H Banka | A particle swarm optimization based energy efficient cluster head | 2017 | Wireless networks | Q3 |

| | | | | | |
|---|---|---|---|---|---|
| | | selection algorithm for wireless sensor networks | | | |
| 41 | PC Srinivasa Rao, H Banka | Novel chemical reaction optimization based unequal clustering and routing algorithms for wireless sensor networks | 2017 | Wireless Networks | Q3 |
| 42 | PC Srinivasa Rao, H Banka | Energy efficient clustering algorithms for wireless sensor networks: novel chemical reaction optimization approach | 2017 | Wireless Networks | Q3 |
| 43 | P Lalwani, H Banka, C Kumar | CRWO: Clustering and routing in wireless sensor networks using optics inspired optimization | 2017 | Peer-to-Peer Networking and Applications | Q3 |
| 44 | AK Jaiswal, H Banka | Epileptic seizure detection in EEG signal with GModPCA and support vector machine | 2017 | Bio-medical materials and engineering | Q4 |
| 45 | CSR Annavarapu, S Dara, H Banka | Cancer microarray data feature selection using multi-objective binary particle swarm optimization algorithm | 2016 | EXCLI journal | Q1 |
| 46 | M Nadeem, H Banka, R Venugopal | SVM-based predictive modelling of wet palettization using experimental and GA-based synthetic data | 2016 | Arabian Journal for Science and Engineering | Q2 |
| 47 | J Singh, AK Verma, H Banka, TN Singh, S Maheshwar | A study of soft computing models for prediction of longitudinal wave velocity | 2016 | Arabian Journal of Geosciences | Q3 |
| 48 | H Banka, SK Ray, DC Panigrahi | Standardization of a method for studying susceptibility of Indian coals to self-heating | 2016 | Arabian Journal of Geosciences | Q3 |
| 49 | RK Yadav, H Banka | IBBOMSA: An improved biogeography-based approach for multiple sequence alignment | 2016 | Evolutionary Bioinformatics 12, EBO. S | Q4 |
| 50 | B Kaushik, H Banka | Performance evaluation of approximated artificial neural network (AANN) algorithm for reliability improvement | 2015 | Applied Soft Computing | Q1 |
| 51 | H Banka, S Dara | A Hamming distance based binary particle swarm optimization (HDBPSO) algorithm for high dimensional feature selection, classification and validation | 2015 | Pattern Recognition Letters | Q2 |
| 52 | M Pal, D Bhati, B Kaushik, H Banka | Solving Classification Problem using Reduced Dimension and Eigen Structure in RSVM | 2015 | International Journal of Computer Applications | Q4 |
| 53 | MK Shukla, H Banka | Line-wise Script segmentation for Indian language documents | 2014 | INTERNATIONAL JOURNAL OF COMPUTER | Q4 |

| | | | | | |
|---|---|---|---|---|---|
| | | | | APPLICATIONS IN TECHNOLOGY | |
| 54 | R Chaturvedi, H Banka | Modified Ant Colony Optimization Algorithm for Travelling Salesman Problem | 2014 | International Journal of Computer Applications | Q4 |
| 55 | MK Shukla, H Banka | Degraded script identification for Indian language-A survey | 2014 | International Journal of Computer Applications | Q4 |
| 56 | V Kumar, B Kaushik, H Banka | Improved Multi-Agent Reinforcement Learning for Minimizing Traffic Waiting Time | 2013 | International Journal of Computer Applications | Q4 |
| 57 | M Banerjee, S Mitra, H Banka | Evolutionary rough feature selection in gene expression data | 2007 | IEEE Transactions on Systems, Man, and Cybernetics, Part C (Applications and… | Q1 |
| 58 | S Mitra, H Banka | Multi-objective evolutionary biclustering of gene expression data | 2006 | Pattern Recognition | Q1 |
| 59 | S Mitra, H Banka, W Pedrycz | Rough–fuzzy collaborative clustering | 2006 | IEEE Transactions on Systems, Man, and Cybernetics, Part B (Cybernetics) 36… | Q1 |

## SELECTED CONFERENCES PAPERS/ BOOK CHAPTERS

1. Mitra, Sushmita, **Haider Banka**, and Witold Pedrycz. "Collaborative rough clustering." In International Conference on Pattern Recognition and Machine Intelligence, pp. 768-773. Springer, Berlin, Heidelberg, 2005. [*Book chapter* ]
2. Mitra, Sushmita, **Haider Banka**, and Sankar K. Pal. "A MOE framework for biclustering of microarray data." In Pattern Recognition, 2006. ICPR 2006. 18th International Conference on, vol. 1, pp. 1154-1157. IEEE, 2006.
3. **Haider Banka**, and Sushmita Mitra. "Soft Computing in BI clustering." Introduction to Machine Learning and Bioinformatics (2008): 277. [*Book chapter* ]
4. **Haider Banka** and Suresh Dara. "Feature Selection and Classification for Gene Expression Data Using Evolutionary Computation." In Database and Expert Systems Applications (DEXA), 2012 23rd International Workshop on, pp. 185-189. IEEE, 2012.
5. Filippone, Maurizio, Francesco Masulli, Stefano Rovetta, Sushmita Mitra, and **Haider Banka**. "Possibilistic approach to biclustering: An application to oligonucleotide microarray data analysis." In International Conference on Computational Methods in Systems Biology, pp. 312-322. Springer, Berlin, Heidelberg, 2006. [*Book chapter* ]
6. Das, Ranajit, Sushmita Mitra, **Haider Banka**, and Subhasis Mukhopadhyay. "Evolutionary biclustering with correlation for gene interaction networks." In International Conference on Pattern Recognition and Machine Intelligence (PReMI), pp. 416-424. Springer, Berlin, Heidelberg, 2007.
7. Mitra, Sushmita, **Haider Banka**, and Jiaul Hoque Paik. "Evolutionary fuzzy biclustering of gene expression data." In International Conference on Rough Sets and Knowledge Technology, pp. 284-291. Springer, Berlin, Heidelberg, 2007. [*Book chapter* ]
8. **Haider Banka**, and Sushmita Mitra. "Feature selection, classification and rule generation using rough sets." In Rough Sets: Selected Methods and Applications in Management and Engineering, pp. 51-76. Springer, London, 2012.
9. Rao, A. Chandra Sekhara, Durvasula VLN Somayajulu, and **Haider Banka**. "Modified correlation based technique in micro array data analysis for searching differentially expressed genes." In Recent Advances in Information Technology (RAIT), 2012 1st Inter-national Conference on, pp. 526-530. IEEE, 2012.
10. Rao, A. Chandra Sekhara, D. V. L. N. Somayajulu, **Haider Banka**, and Rohit Chaturvedi. "Outlier detection in microarray data using hybrid evolutionary algorithm, "*Procedia Tech-nology 6 (2012): 291-298.*[*Book chapter* ]
11. Dara, Suresh, and **Haider Banka**. "A binary PSO feature selection algorithm for gene expression data." Advances in Communication and Computing Technologies (ICACACT), 2014 International Conference on. IEEE, 2014. [*Book chapter* ]
12. Dara, Suresh, and **Haider Banka**. "An Elitist Binary PSO Algorithm for Selecting Features in High Dimensional Data." Advanced Computing, Networking and Informatics-Volume 1. Springer International Publishing, 2014. 679-686.

13. Rao, PC Srinivasa, **Haider Banka**, and Prasanta K. Jana. ”Energy Efficient Clustering for Wireless Sensor Networks: A Gravitational Search Algorithm.” In International Conference on Swarm, Evolutionary, and Memetic Computing, pp. 247-259. Springer, Cham, 2015.
14. Rao, PC Srinivasa, **Haider Banka**, and Prasanta K. Jana. “A gravitational search algorithm for energy efficient multi-sink placement in wireless sensor networks.” In International conference on swarm, evolutionary, and memetic computing, pp. 222-234. Springer, Cham, 2015.
15. Yadav, Rohit Kumar, and **Haider Banka**. “Genetic Algorithm with Improved Mutation Operator for Multiple Sequence Alignment.” Information Systems Design and Intelligent Applications. Springer India, 2015. 515-523. [*Book chapter* ]
16. P. CH Srinivas, **H. Banka**, and Prasanta K. Jana. ”PSO-Based Multiple-sink Placement Algorithm for Protracting the Lifetime of Wireless Sensor Networks.” In Proceedings of the Second International Conference on Computer and Communication Technologies, pp. 605-616. Springer India, 2016.
17. Alam, Manaar, Soumyajit Chatterjee, and **Haider Banka**. ”A novel parallel search tech-nique for optimization.” In Recent Advances in Information Technology (RAIT), 2016 3rd International Conference on, pp. 259-263. IEEE, 2016.
18. Seth, Himanshu Ranjan, and **Haider Banka**. ”Hardware implementation of Nave Bayes classifier: A cost effective technique.” In Recent Advances in Information Technology (RAIT), 2016 3rd International Conference on, pp. 264-267. IEEE, 2016.
19. Singh, Jayraj, A. K. Verma, and **Haider Banka**. “Application of biogeography based optimization to locate critical slip surface in slope stability evaluation.” In 2018 4th In-ternational Conference on Recent Advances in Information Technology (RAIT), pp. 1-5. IEEE, 2018.
20. Singh, Jayraj, **Haider Banka**, and A. K. Verma. “Analysis of slope stability and detection of critical failure surface using gravitational search algorithm.” In 2018 4th International Conference on Recent Advances in Information Technology (RAIT), pp. 1-6. IEEE, 2018.

21. Singh, Jayraj, A. K. Verma, and **Haider Banka**. ”A Comparative Study for Locating Critical Failure Surface in Slope Stability Analysis via Meta-Heuristic Approach.” In Handbook of Research on Predictive Modeling and Optimization Methods in Science and Engineering, pp. 1-18. IGI Global, 2018. [*Book chapter* ]