**Complete List of Publications of Sushmita Mitra**

1. Publications (List of papers published in SCI Journals, in year wise descending order).

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| S.No. | Author(s) | Title | Name of Journal | Vol | Page | Year |
| 1. | S. Banerji and **S. Mitra** | Deep learning in histopathology: A review | Wiley Interdisciplinary Research in Data Mining and Knowledge Discovery | 12 | e1439 | 2022 |
| 2. | S. Banerjee, **S. Mitra** and L. O. Hall | Analysis of MRI biomarkers for brain cancer survival prediction | http://arxiv.org/abs/2109.02785 |  |  | 2021 |
| 3. | **S. Mitra** | Deep learning with radiogenomics towards personalized management of gliomas | IEEE Reviews in Biomedical Engineering (to appear) |  | 10.1109/RBME.2021.3075500 | 2021 |
| 4. | R. Kirtania, S. Banerjee, S. Laha, B. Uma Shankar, R. Chatterjee and **S. Mitra** | DeepSGP: Deep learning for gene selection and survival group prediction in Glioblastoma | Electronics | 10 | 1463, https://doi.org/10.3390/electronics10121463 | 2021 |
| 5. | S. Banerjee and **S. Mitra** | Machine learning: An introduction | Current Indian Eye Research | 7 | 40-48 | 2020 |
| 6. | M. Sardar, S. Banerjee and **S. Mitra** | Iris segmentation using interactive deep learning | IEEE Access | 8 | 219322-219330, https://ieeexplore.ieee.org/document/9274419?source=authoralert | 2020 |
| 7. | S. Banerjee, **S. Mitra**, F. Masulli and S. Rovetta | Glioma classification using deep radiomics | Springer Nature Computer Science | 1 | 1-14 | 2020 |
| 8. | S. Basu, **S. Mitra** and N. Saha | Deep learning for screening COVID-19 using chest X-Ray images | arXiv:2004.10507 https://www.medrxiv.org/content/10.1101/2020.05.04.20090423v1.full.pdf |  |  | 2020 |
| 9. | S. Banerjee and **S. Mitra** | Novel volumetric sub-region segmentation in brain tumors | Frontiers in Computational Neuroscience | 14 | DOI: 10.3389/fncom.2020.00003 | 2020 |
| 10. | S. Bhadani, **S. Mitra** and S. Banerjee | Fuzzy volumetric delineation of brain tumor and survival prediction | Soft Computing | 24 | 13115-13134, DOI:10.1007/s00500-020-04728-8 | 2020 |
| 11. | R. Kirtania, **S. Mitra** and B. Uma Shankar | Novel adaptive k-NN classifier for handling imbalance: Application to brain MRI | Intelligent Data Analysis | 24 | 909-924, https://content.iospress.com/articles/intelligent-data-analysis/ida194647 | 2020 |
| 12. | K. A. Dauda, B. Pradhan, B. Uma Shankar and **S. Mitra** | Decision trees for modeling survival data with competing risks | Biocybernetics and Biomedical Engineering | 39 | 697-708 | 2019 |
| 13. | S. Mandal, **S. Mitra** and B. Uma Shankar | FuzzyCIE: Fuzzy Colour Image Enhancement for low exposure images | Soft Computing | 24 | 1-17, DOI: 10.1007/s00500-019-04048-6 | 2019 |
| 14. | B. Spyridon, et al., S. Banerjee, et al. **S. Mitra**, et al. | Identifying the best machine learning algorithms for brain tumor segmentation, progression assessment, and overall survival prediction in the BRATS Challenge | arXiv:1811.02629 |  |  | 2018 |
| 15. | A. Mukherjee, S. Misra, N. S. Raghuwanshi and **S. Mitra** | Blind entity identification for agricultural IoT deployments | IEEE Internet of Things Journal | 6 | 3156-3163, DOI: 10.1109/JIOT.2018.2879454 | 2018 |
| 16. | S. Banerjee, **S. Mitra**, A. Sharma and B. Uma Shankar | A CADe system for gliomas in brain MRI using Convolutional Neural Networks | arXiv: 1806.07589v1 [cs.CV] |  |  | 2018 |
| 17. | M. Sardar, **S. Mitra** and B. Uma Shankar | Iris localization using rough entropy: A soft computing approach | Applied Soft Computing | 67 | 61-69 | 2018 |
| 18. | S. Banerjee**, S. Mitra** and B. Uma Shankar | Automated 3D segmentation of brain tumor using visual saliency | Information Sciences | 424 | 337-353 | 2018 |
| 19. | P. P. Kundu and **S. Mitra** | Feature selection through message passing | IEEE Transactions on Cybernetics | 47 | 4356-4366 | 2017 |
| 20. | S. Banerjee**, S. Mitra**, B. Uma Shankar and Y. Hayashi | A novel GBM saliency detection model using multi-channel MRI | PLOS ONE | 11 | e0146388 | 2016 |
| 21. | S. Banerjee, **S. Mitra** and B. Uma Shankar | Single seed delineation of brain tumor using multi-thresholding | Information Sciences | 330 | 88-103 | 2016 |
| 22. | Y. Hayashi, Y. Tanaka, T. Takagi, T. Saito, H. Iiduka, H. Kikuchi, G. Bologna and **S. Mitra** | Recursive rule extraction algorithm with J48graft and applications to generating credit scores | Journal of Artificial Intelligence and Soft Computing Research | 6 | 35-44 | 2016 |
| 23. | P. P. Kundu and **S. Mitra** | Multi-objective optimization of shared nearest neighbor similarity for feature selection | Applied Soft Computing | 37 | 751-762 | 2015 |
| 24. | **S. Mitra** and B. Uma Shankar | Medical image analysis for cancer management in natural computing framework | Information Sciences | 306 | 111-131 | 2015 |
| 25. | **S. Mitra** and B. Uma Shankar | Integrating radio imaging with gene expressions towards a personalized management of cancer | IEEE Transactions on Human-Machine Systems | 44 | 664-677 | 2014 |
| 26. | C. Parmar, E. R. Velazquez, R. Leijenaar, M. Jermoumi, S. Carvalho, R. H. Mak, **S. Mitra**, B. Uma Shankar, R. Kikinis, B. Haibe-Kains, P. Lambin, H. J. W. L. Aerts | Robust radiomics feature quantification using semiautomatic volumetric segmentation | PLOS ONE | 9 | e102107 | 2014 |
| 27. | S. Ghosh, **S. Mitra** and R. Dattagupta | Fuzzy clustering with biological knowledge for gene selection | Applied Soft Computing | 16 | 102-111 | 2014 |
| 28. | S. Ghosh and **S. Mitra** | Clustering large data with uncertainty | Applied Soft Computing | 13 | 1639-1645 | 2013 |
| 29. | **S. Mitra** and S. Ghosh | Feature selection and clustering of gene expression profiles using biological knowledge | IEEE Transactions on Systems, Man, and Cybernetics, Part C: Applications and Reviews | 42 | 1590-1599 | 2012 |
| 30. | R. Das, **S. Mitra** and C. A. Murthy | Extracting gene-gene interactions through curve fitting | IEEE Transactions on NanoBioscience | 11 | 402-409 | 2012 |
| 31. | **S. Mitra**, P. P. Kundu and W. Pedrycz | Feature selection using structural similarity | Information Sciences | 198 | 48–61 | 2012 |
| 32. | **S. Mitra** and P. P. Kundu | Satellite image segmentation with Shadowed c-means | Information Sciences | 181 | 3601-3613 | 2011 |
| 33. | **S. Mitra**, R. Das and Y. Hayashi | Genetic networks and soft  computing | IEEE/ACM Transactions on Computational Biology and  Bioinformatics | 8 | 94-107 | 2011 |
| 34. | D. Mazumdar, S. Mitra and **S. Mitra** | Evolutionary-rough feature selection for face recognition | Transactions on Rough Sets | XII | 117-142 | 2010 |
| 35. | **S. Mitra**, W. Pedrycz and B. Barman | Shadowed $C$-Means:  Integrating fuzzy and rough clustering | Pattern Recognition | 43 | 1282-1291 | 2010 |
| 36. | **S. Mitra**, R. Das, H. Banka and S. Mukhopadhyay | Gene interaction - An evolutionary biclustering approach | Information Fusion | 10 | 242-249 | 2009 |
| 37. | F. Masulli and **S. Mitra** | Natural computing methods in Bioinformatics: A survey | Information Fusion | 10 | 211-216 | 2009 |
| 38. | **S. Mitra** | Soft computing application in Bioinformatics | Annals of the Indian National Academy of Engineering | V | 49-56 | `2008 |
| 39. | M. Banerjee, **S. Mitra** and H. Banka | Evolutionary-rough  feature selection in gene expression data | IEEE Transactions  on Systems, Man, and Cybernetics, Part C: Applications and  Reviews | 37 | 622-632 | 2007 |
| 40. | **S. Mitra** and T. Acharya | Gesture recognition: A survey | IEEE Transactions on Systems, Man, and Cybernetics, Part C:  Applications and Reviews | 37 | 311-324 | 2007 |
| 41. | **S. Mitra** and H. Banka | Application of rough sets in  pattern recognition | Transactions on Rough Sets | VII | 151-169 | 2007 |
| 42. | **S. Mitra**, H. Banka and W. Pedrycz | Rough-fuzzy collaborative clustering | IEEE Transactions on Systems, Man,  and Cybernetics, Part B: Cybernetics | 36 | 795-805 | 2006 |
| 43. | **S. Mitra** and H. Banka | Multi-objective evolutionary  biclustering of gene expression data | Pattern Recognition | 39 | 2464-2477 | 2006 |
| 44. | **S. Mitra** and Y. Hayashi | Bioinformatics with soft  computing | IEEE Transactions on Systems, Man, and  Cybernetics, Part C: Applications and Reviews | 36 | 616-635 | 2006 |
| 45. | S. Choudhury and **S. Mitra** | Feature extraction and  connectionist classification of SODAR echograms | IEEE Geoscience and Remote  Sensing Letters | 3 | 19-22 | 2006 |
| 46. | K. Mali, **S. Mitra** and T. Acharya | A multiresolution fuzzy clustering of images | International Journal of Computational  Cognition | 4 | 30-38 | 2006 |
| 47. | **S. Mitra** and S. K. Pal | Fuzzy sets in pattern recognition  and machine intelligence | Fuzzy Sets and Systems | 156 | 381-386 | 2005 |
| 48. | S. Mukherjee and **S. Mitra** | Fuzzy measures in Hidden Markov Models | Neural Network World | 10 | 269-280 | 2005 |
| 49. | K. Mali and **S. Mitra** | Symbolic classification, clustering and fuzzy radial basis function network | Fuzzy Sets and Systems | 152 | 553-564 | 2005 |
| 50. | S. Mukherjee and **S. Mitra** | Hidden Markov Models and  grammars in biology: A tutorial | Journal of Bioinformatics  and Computational Biology | 3 | 491-526 | 2005 |
| 51. | **S. Mitra** | Computational intelligence in Bioinformatics | Transactions on Rough Sets | III | 134-152 | 2005 |
| 52. | S. Choudhury and **S. Mitra** | A connectionist approach to  SODAR pattern classification | IEEE Geoscience and Remote  Sensing Letters | 1 | 42-46 | 2004 |
| 53. | **S. Mitra** | An evolutionary rough partitive  clustering | Pattern Recognition Letters | 25 | 1439-1449 | 2004 |
| 54. | D. Arotaritei and **S. Mitra** | Web mining: A survey in the fuzzy framework | Fuzzy Sets and Systems | 148 | 5-19 | 2004 |
| 55. | **S. Mitra** | Fuzzy radial basis function network: A parallel design | Neural Computing and Applications | 13 | 261-267 | 2004 |
| 56. | S. K. Pal, **S. Mitra** and P. Mitra | Rough fuzzy MLP: Modular evolution, rule generation and evaluation | IEEE Transactions on  Knowledge and Data Engineering | 15 | 14-25 | 2003 |
| 57. | K. Mali and **S. Mitra** | Clustering and its validation in a symbolic framework | Pattern Recognition Letters | 24 | 2367-2376 | 2003 |
| 58. | S. Choudhury, **S. Mitra** and S. K. Pal | Neuro-fuzzy classification and rule generation of modes of radiowave propagation | IEEE Transactions on Antennas and  Propagation | 51 | 862-871 | 2003 |
| 59. | **S. Mitra**, S. K. Pal and P. Mitra | Data mining in soft computing framework: A survey | IEEE Transactions on Neural  Networks | 13 | 3-14 | 2002 |
| 60. | **S. Mitra**, K. M. Konwar and S. K. Pal | Fuzzy decision tree, linguistic rules and fuzzy knowledge-based network: Generation and evaluation | IEEE Transactions on Systems, Man, and Cybernetics, Part C: Applications and Reviews | 32 | 328-339 | 2002 |
| 61. | **S. Mitra**, P. Mitra and S. K. Pal | Evolutionary modular design of rough knowledge-based network using fuzzy attributes | Neurocomputing | 36 | 45-66 | 2001 |
| 62. | **S. Mitra** and J. Basak | FRBF: A fuzzy radial basis function network | Neural  Computing and Applications | 10 | 244-252 | 2001 |
| 63. | P. K. Singal, **S. Mitra** and S. K. Pal | Incorporation of fuzziness in ID3 and generation of network architecture | Neural  Computing and Applications | 10 | 155-164 | 2001 |
| 64. | P. Mitra, **S. Mitra** and S. K. Pal | Evolutionary modular MLP with rough sets and ID3 algorithm for staging of Cervical Cancer | Neural  Computing and Applications | 10 | 67-76 | 2001 |
| 65. | S. Choudhury, **S. Mitra** and S. K. Pal | Modes of radiowave propagation:  Neural learning | Indian Journal of Physics | 75B | 247-249 | 2001 |
| 66. | P. Mitra, **S. Mitra** and S. K. Pal | Staging of cervical cancer with softcomputing | IEEE Transactions on Biomedical Engineering | 47 | 934-940 | 2000 |
| 67. | **S. Mitra** and Y. Hayashi | Neuro-fuzzy rule generation: Survey in soft computing  framework | IEEE Transactions on Neural Networks | 11 | 748-768 | 2000 |
| 68. | J. Basak and **S. Mitra** | Feature selection using Radial Basis Function network | Neural Computing and Applications | 8 | 297-302 | 1999 |
| 69. | **S. Mitra**, M. Banerjee and S. K. Pal | Rough knowledge-based network, fuzziness  and classification | Neural Computing and Applications | 7 | 17-25 | 1998 |
| 70. | M. Banerjee, **S. Mitra** and S. K. Pal | Rough fuzzy MLP: Knowledge encoding and classification | IEEE Transactions on Neural Networks | 9 | 1203-1216 | 1998 |
| 71. | **S. Mitra**, R. K. De and S. K. Pal | Knowledge-based fuzzy MLP for classification and rule generation | IEEE Transactions on Neural Networks | 8 | 1338-1350 | 1997 |
| 72. | S. K. Pal and **S. Mitra** | Noisy fingerprint classification using multilayer perceptron with fuzzy geometrical and textural features | Fuzzy Sets and Systems | 80 | 121-132 | 1996 |
| 73. | **S. Mitra** and S. K. Pal | Fuzzy self organization, inferencing and rule generation | IEEE  Transactions on Systems, Man and Cybernetics, Part A: Systems and  Humans | 26 | 608-620 | 1996 |
| 74. | **S. Mitra**, S. N. Sarbadhikari and S. K. Pal | An MLP-based model for  identifying qEEG in depression | International Journal of  Biomedical Computing | 43 | 179-187 | 1996 |
| 75. | **S. Mitra** and S. K. Pal | Neuro-fuzzy expert systems:  Relevance, features and methodologies | Journal of the  Institute of Electronics and Telecomm. Engineers | 42 | 335-347 | 1996 |
| 76. | **S. Mitra** and L. I. Kuncheva | Improving classification performance using fuzzy MLP and two-level  selective partitioning of the feature space | Fuzzy Sets and Systems | 70 | 1-13 | 1995 |
| 77. | **S. Mitra** and S. K. Pal | Fuzzy multi-layer perceptron, inferencing and rule generation | IEEE Transactions on Neural Networks | 6 | 51-63 | 1995 |
| 78. | **S. Mitra** | Fuzzy MLP based expert system for medical diagnosis | Fuzzy Sets and Systems | 65 | 285-296 | 1994 |
| 79. | **S. Mitra**, S. K. Pal and M. K. Kundu | Fingerprint classification using a fuzzy multilayer perceptron | Neural Computing & Applications | 2 | 227-233 | 1994 |
| 80. | **S. Mitra** and S. K. Pal | Self-organizing neural network as a fuzzy classifier | IEEE Transactions on Systems, Man and Cybernetics | 24 | 385-399 | 1994 |
| 81. | **S. Mitra** and S. K. Pal | Logical operation based fuzzy MLP for classification and rule generation | Neural Networks | 7 | 353-373 | 1994 |
| 82. | S. K. Pal and **S. Mitra** | Fuzzy versions of Kohonen's net and MLP-based classification: Performance evaluation for certain nonconvex decision regions | Information Sciences | 76 | 297-337 | 1994 |
| 83. | **S. Mitra** and S. K. Pal | Fusion of fuzzy sets and layered neural networks at the input, output and neuronal levels | Indian Journal of Pure and Applied Mathematics | 24 | 121-133 | 1994 |
| 84. | S. K. Pal and **S. Mitra** | Multi-layer perceptron, fuzzy sets and classification | IEEE Transactions on Neural Networks | 3 | 683-697 | 1992 |
| 85. | S. K. Pal and **S. Mitra** | Fuzzy dynamic clustering algorithm | Pattern Recognition Letters | 11 | 525-535 | 1990 |
| 86. | **S. Mitra** and B. Saha | Implementation of fault simulation and testing of combinational circuits | Intl. Journal of Electronics | 66 | 665-678 | 1989 |

1. Detail of patents.

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| --- | --- | --- | --- | --- | --- | --- |
| S.No | Patent Title | Name of Applicant(s) | Patent No. | Award Date | Agency/Country | Status |
| 1. | Extracting Gene-Gene Interactions from Gene Expression Data | **S. Mitra**, C. A. Murthy and R. Das | US 8,478,541 B2 | July 02, 2013 | USA | Awarded |
| 2. | Data Set Dimensionality Reduction Processes and Machines | **S. Mitra** | Pub. No. US 2011/0246409 A1 | -- | USA & India | Pending |

1. Books/Reports/Chapters/General articles etc.

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| --- | --- | --- | --- | --- |
| S.No | Title |  | Publisher | Year of Publication |
| 1. | Introduction to Machine Learning and Bioinformatics | **S. Mitra**, S. Datta, T. Perkins and G. Michailidis | CRC Press | 2008 |
| 2. | Data Mining: Multimedia, Soft Computing, and  Bioinformatics | **S. Mitra** and T. Acharya | John Wiley | 2003 |
| 3. | Neuro-Fuzzy Pattern Recognition: Methods in Soft Computing | S. K. Pal and **S. Mitra** | John Wiley | 1999 |
|  |  |  |  |  |
| 4. | Intelligent Systems, Technologies and Applications | M. Paprzycki, S. M. Thampi, **S. Mitra**, L. Trajkovic and E. -S. M. El-Alfy (Eds.) | Springer Nature | 2020 |
| 5. | Intelligent Systems Technologies and Applications | S. M. Thampi, L. Trajkovic, **S. Mitra**, P. Nagabhushan, E. -S. El-Alfy, Z. Bojkovic and D. Mishra (Eds.) | Springer Nature | 2019 |
| 6. | Intelligence Enabled Research | S. Bhattacharyya, **S. Mitra** and P. Dutta (Eds.) | Springer Nature | 2019 |
| 7. | Pattern Recognition and Machine Intelligence | B. Deka, P. Maji, **S. Mitra**, D. K. Bhattacharyya, P. K. Bora and S. K. Pal (Eds.) | Springer Verlag | 2019 |
| 8. | Intelligent Systems Technologies and Applications | S. M. Thampi, L. Trajkovic, **S. Mitra,** P. Nagabhushan, J. Mukhopadhyay, J. M. Corchado, S. Berretti, and D. Mishra (Eds.) | Springer Verlag | 2018 |
| 9. | Intelligent Systems Technologies and Applications | S. M. Thampi, **S. Mitra**, J. Mukhopadhyay, K. -C. Li, A. P. James, S. Berretti (Eds.) | Springer Verlag | 2017 |
| 10. | Intelligent Systems Technologies and Applications | J. M. C. Rodriguez, **S. Mitra**, S. M. Thampi and E.-S. El-Alfy (Eds.) | Springer Verlag | 2016 |
| 11. | Rough Sets and Knowledge Technology | D. Ciucci, G. Wang, **S. Mitra**, W.-Z. Wu (Eds.) | Springer Verlag | 2015 |
| 12. | Rough Sets and Knowledge Technology | P. Lingras, M. Wolski, C. Cornelis, **S. Mitra**, P. Wasilewski (Eds.) | Springer Verlag | 2013 |
| 13. | Rough Sets and Current Trends in Computing | J. Yao, Y. Yang, R. Slowinski, S. Greco, H. Li, **S. Mitra,** L. Polkowski (Eds.), | Springer Verlag | 2012 |
| 14. | Perception and Machine Intelligence | M. K. Kundu, **S. Mitra**, D. Mazumdar and S. K. Pal (Eds.) | Springer Verlag | 2012 |
| 15. | Pattern Recognition and Machine Intelligence | S. Chaudhury, **S. Mitra**, C. A. Murthy, P. S. Sastry and S. K. Pal (Eds.) | Springer Verlag | 2009 |
| 16. | Proceedings of the 9th IEEE/WIC/ACM International Conference on Intelligent Agent Technology | R. Baeza-Yates, J. Lang, **S. Mitra**, S. Parsons and G. Pasi (Eds.) | IEEE Computer Society | 2009 |
| 17. | Applications of Fuzzy Sets Theory | F. Masulli, **S. Mitra** and G. Pasi (Eds.) | Springer Verlag | 2007 |
|  |  |  |  |  |
| 18. | Segmentation in Diabetic Retinopathy using deeply-supervised multiscalar attention | S. Basu and **S. Mitra** | Proc. of 43rd Annual International Conference of the IEEE Engineering in Medicine & Biology Society (EMBC) | 2021 |
| 19. | Deep learning for screening COVID-19 using chest X-Ray images | S. Basu, **S. Mitra** and N. Saha | Proc. of IEEE Symposium Series on Computational Intelligence (IEEE SSCI), DOI: 10.1109/SSCI47803.2020.9308571 | 2020 |
| 20. | Evolving optimal convolutional neural networks. | S. Banerjee and **S. Mitra** | Proc.of IEEE Symposium Series on Computational Intelligence (IEEE SSCI), DOI: 10.1109/SSCI47803.2020.9308201 | 2020 |
| 21. | À survey on applications of Siamese neural networks in computer vision | A. Nandy, S. Haldar, S. Banerjee and **S. Mitra** | Proc. of International Conference for Emerging Technology | 2020 |
| 22. | Ensemble of CNNs for segmentation of glioma sub-regions with survival prediction | S. Banerjee, H. S. Arora and **S. Mitra** | Proc. of MICCAI BrainLes  Springer Verlag, <https://doi.org/10.1007/978-3-030-46643-5\4> (ranked among the top four methods in the Challenge) | 2020 |
| 23. | Brain tumor detection and classification from multi-sequence MRI: Study using ConvNets | S. Banerjee, **S. Mitra**, F. Masulli, and S. Rovetta | Proc. MICCAI  Springer Verlag | 2018 |
| 24. | Multi-planar spatial-ConvNet for segmentation and survival prediction in brain cancer | S. Banerjee, **S. Mitra**, and B. Uma Shankar | Proc. MICCAI  Springer Verlag | 2018 |
| 25. | Predictive intra-edge packet-source mapping in agricultural Internet of Things | A. Mukherjee, N. Pathak, S. Misra, and **S. Mitra** | EEE Globecom Workshops, https://ieeexplore.ieee.org/abstract/document/8644296 | 2018 |
| 26. | GAN based novel approach for data augmentation with improved disease classification | D. Bhattacharya, S. Banerjee, S. Bhattacharya, B. Uma Shankar, and **S. Mitra** | Springer Nature, DOI: 10.1007/978-981-15-1100-4\_11 | 2018 |
| 27. | Synergetic neuro-fuzzy feature selection and classification of brain tumors | S. Banerjee, **S. Mitra** and B. Uma Shankar | IEEE, DOI: 10.1109/FUZZ-IEEE.2017.8015514 | 2017 |
| 28. | ROI segmentation from brain MR images with a fast multi-level thresholding | S. Banerjee, **S. Mitra** and B. Uma Shankar | IEEE, DOI 10.1007/978-981-10-2104-6\_23 | 2016 |
| 29. | Facial expressions: A cross-cultural study | C. Saha, W. Ahmed, S. Mitra, D. Mazumdar and **S. Mitra** | John Wiley | 2015 |
| 30. | Fuzzy texture descriptors for early diagnosis of osteoarthritis | G. Chetty, J. Scarvell and **S. Mitra** | IEEE | 2013 |
| 31. | A new approach to three ensemble neural network rule extraction using recursive-rule extraction algorithm | Y. Hayashi, R. Sato and **S. Mitra** | IEEE | 2013 |
| 32. | Gene selection using biological knowledge and fuzzy clustering | S. Ghosh and **S. Mitra** | IEEE | 2012 |
| 33. | Feature selection, classification and rule generation using rough sets | H. Banka and **S. Mitra** | Springer Verlag | 2012 |
| 34. | Aggregation of correlation measures for the reverse engineering of gene regulatory sub-networks | R. Das and **S. Mitra** | Springer Verlag | 2012 |
| 35. | Recognizing hand gestures of a dancer | D. Hariharan, T. Acharya and **S. Mitra** | Springer Verlag | 2011 |
| 36. | Hybridization with rough sets | **S. Mitra** | IEEE CIS | 2010 |
| 37. | Cross-correlation and evolutionary biclustering: Extracting gene interaction sub-networks | R. Das, **S. Mitra** and S. Mukhopadhyay | Springer Verlag | 2009 |
| 38. | A least squares fitting-based modeling of gene regulatory sub-networks | R. Das, **S. Mitra**, C. A. Murthy and S. Mukhopadhyay | Speinger Verlag | 2009 |
| 39. | Incorporating fuzziness to CLARANS | S. Ghosh and **S. Mitra** | Springer Verlag | 2009 |
| 40. | Multiobjective evolutionary feature selection | P. P. Kundu and **S. Mitra** | Springer Verlag | 2009 |
| 41. | Gene interactions sub-networks and soft computing | R. Das and **S. Mitra** | Springer Verlag | 2008 |
| 42. | Shadowed clustering for speech data and medical image segmentation | B. Barman, **S. Mitra** and W. Pedrycz | Springer Verlag | 2008 |
| 43. | Rough-fuzzy clustering: An application to medical imagery | **S. Mitra** and B. Barman | Springer Verlag | 2008 |
| 44. | Rough-neural methodologies in  granular computing | **S. Mitra** and M. Banerjee | John Wiley | 2008 |
| 45. | Evolutionary biclustering with correlation for gene interaction  networks | R. Das, **S. Mitra**, H. Banka and S. Mukhopadhyay | Springer Verlag | 2007 |
| 46. | Evolutionary fuzzy  biclustering of gene expression data | **S. Mitra**, H. Banka and J. H. Paik | Springer Verlag | 2007 |
| 47. | Possibilistic approach to biclustering: An application to  oligonucleotide microarray data analysis | M. Filippone, F. Masulli, S. Rovetta, **S. Mitra** and H. Banka | Springer Verlag | 2006 |
| 48. | Feature selection using rough sets | M. Banerjee, **S. Mitra** and A. Anand | Springer Verlag | 2006 |
| 49. | Collaborative rough clustering | **S. Mitra**, H. Banka and W. Pedrycz | Springer Verlag | 2005 |
| 50. | Soft computing, pattern  recognition, data mining and Web intelligence | S. K. Pal, **S. Mitra** and P. Mitra | Springer Verlag | 2004 |
| 51. | Protein structure prediction using soft computing | **S. Mitra**, A. Ghosh and G. Phukan | World Scientific | 2002 |
| 52. | Clustering of symbolic data and its validation | K. Mali and **S. Mitra** | Springer Verlag | 2002 |
| 53. | Rough fuzzy knowledge-based network - A soft computing approach | **S. Mitra**, S. K. Pal and M. Banerjee | Springer Verlag | 1999 |
| 54. | Modular rough fuzzy MLP: Evolutionary design | P. Mitra, **S. Mitra** and S. K. Pal | Springer Verlag | 1999 |
| 55. | Expert systems in soft computing paradigm | S. K. Pal and **S. Mitra** | Academic Press | 1998 |
| 56. | Neuro-fuzzy expert systems: Overview with a case study | **S. Mitra** and S. K. Pal | Kluwer Academic | 1994 |

1. Any other Information

Publication citations of over 13,000, h-index: 40, i-10 index: 83 (by Google Scholar).

**Ranked 856 among top 2% (of 2,53,359) scientists worldwide** by [Stanford List](https://journals.plos.org/plosbiology/article?id=10.1371/journal.pbio.3000918) in the domain ``Artificial Intelligence and Image Processing" (2021).

Listed among the top 100 women scientists of India in the prestigious volume “Lilavati’s Daughters: The Women Scientists of India”, Bangalore: Indian Academy of Sciences (2008).

Founding Associate Editor of Wiley Interdisciplinary Reviews: Data Mining and Knowledge Discovery (WIRE DMKD), from 2008 to date.

Associate Editor of Information Sciences, IEEE/ACM Transactions on Computational Biology and Bioinformatics, Fundamenta Informaticae, Transactions of the INAE, Springer Nature Computer Science, and Computers in Biology and Medicine.

General Chair/ Program Chair of many international conferences.

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