

- **Peer Reviewed Journal Articles**

1. **Rathin K. Joshi**, Varun Kumar, Megha Agrawal, Avinash Rao, Latika Mohan, M. Jayachandra, and Hardik J. Pandya. "*Spatiotemporal analysis of interictal EEG for automated seizure detection and classification.*" Biomedical Signal Processing and Control 79 (2023): 104086.
[\(Link to the paper\)](#)
2. **Rathin K. Joshi**, Manu K S, Hari R S, Mahesh Jayachandra, Manjunath Dandi, Hardik J. Pandya "*Automated ABR and MMN Extraction using Customized Headband for Hearing Screening.*" Biomedical Signal Processing and Control 94 (2024): 106264.
[\(Link to the paper\)](#)
3. Suman Chatterjee, **Rathin K. Joshi**, Tushar Sakorikar, Bhagaban Behera, Nitu Bhaskar, Shabari Girishan K V, Mahesh Jayachandra, and Hardik J. Pandya. "*Design and fabrication of a microelectrode array for studying epileptiform discharges from rodents.*" Biomedical Microdevices 25, no. 3 (2023): 31.
[\(Link to the paper\)](#)
4. Suman Chatterjee, Tushar Sakorikar, Arjun Bs, **Rathin K. Joshi**, Abhay Sikaria, Mahesh Jayachandra, Vikas V, and Hardik J. Pandya. "*A flexible implantable microelectrode array for recording electrocorticography signals from rodents.*" Biomedical Microdevices 24, no. 4 (2022): 31.
[\(Link to the paper\)](#)
5. Bhagaban Behera, **Rathin K. Joshi**, GK Anil Vishnu, Sanjay Bhalerao, and Hardik J. Pandya. "*Electronic nose: A non-invasive technology for breath analysis of diabetes and lung cancer patients.*" Journal of Breath Research 13, no. 2 (2019): 024001.
[\(Link to the Paper\)](#)

- **Conferences/Symposiums Publications (In Reverse Chronological Order):**

1. **Rathin K. Joshi**, Hardik J. Pandya "*Design and Development of a Bimodal, Auditory event-related Potential Extractor System for Neonatal Hearing Screening.*" In EECS Research Student Symposium, IISc, 2021. [\(Link To the Book of Abstracts\)](#)

2. Suman Chatterjee, **Rathin K. Joshi**, Shabari Girishan K V, and Hardik J. Pandya “*Flexible Microelectrode Array for Chronic Electrocorticography Recording under Different Neurophysiological Conditions.*” In 2023 IEEE EMBS Conference on Neural Engineering (NER 2023). ([Link to The Paper](#))
3. **Rathin K. Joshi**, K. S. Manu, R. S. Hari, Mahesh Jayachandra, and Hardik J. Pandya. "*Design, Development, and Validation of a Portable Visual P300 Event-Related Potential Extraction System.*" In 2022 IEEE Biomedical Circuits and Systems Conference (BioCAS), pp. 409-413. IEEE, 2022. ([Link to the Paper](#))
4. **Rathin K. Joshi**, Hema Hariharan, K. Srinivasan, A. Tak, S. Kubakkadi, Hardik J. Pandya, and Mahesh Jayachandra “*Teaching Cognitive Neuroscience: Neuro-Instrumentation, an Indian perspective.*” Society for Neuroscience (SfN, 2022). ([Link to the Abstract Page](#))
5. Hema Hariharan, A. Tak, **Rathin. K. Joshi**, Bhargavi Budhial, Suzzane Thomas, K. Srinivas, Hardik J. Pandya, and Mahesh Jayachandra. “*Dynamic variations in P300 Attention and Working Memory components in Males and Females, in an Indian cohort.*” Society for Neuroscience (SfN, 2022). ([Link to the Abstract Page](#))
6. **Rathin K. Joshi** and Hardik J. Pandya, “*Design and Development of a Headband for Cortical Response Extraction,*” EECS Research Student Symposium, IISc, 2021. (([Link To the Book of Abstracts](#)))
7. **Rathin K. Joshi**, Rutu Parekh, and Yash Agrawal. "*Design and optimization of single electron transistor based 4-bit arithmetic and logic unit at room temperature operation.*" In 2017 IEEE International Symposium on Nanoelectronic and Information Systems (iNIS), pp. 34-39. IEEE, 2017. ([Link to the Paper](#))
8. Sreenivas Bhaskara, Shabari Girishan K V, Saravanan M., **Rathin K. Joshi**, Harik J. Pandya. “*Neural interface for ECoG signal recording in Rat Models*” Annual Symposium, Centre for Neuroscience, IISc, 2023.