Mahsa Shoaran

List of Publications by Citations

34 papers	345 citations	10 h-index	17 g-index
39 ext. papers	478 ext. citations	4.2 avg, IF	4.12 L-index

#	Paper	IF	Citations
34	Compact low-power cortical recording architecture for compressive multichannel data acquisition. *IEEE Transactions on Biomedical Circuits and Systems*, **2014**, 8, 857-70	5.1	59
33	Energy-Efficient Classification for Resource-Constrained Biomedical Applications. *IEEE Journal on Emerging and Selected Topics in Circuits and Systems*, **2018**, 8, 693-707	5.2	46
32	Migraine classification using somatosensory evoked potentials. *Cephalalgia*, **2019**, 39, 1143-1155	6.1	23
31	Improved detection of Parkinsonian resting tremor with feature engineering and Kalman filtering. *Clinical Neurophysiology*, **2020**, 131, 274-284	4.3	23
30	A Fully Integrated IC With 0.85-W/Channel Consumption for Epileptic iEEG Detection. *IEEE Transactions on Circuits and Systems II: Express Briefs*, **2015**, 62, 114-118	3.5	20
29	Tunnel FET-based ultra-low power, low-noise amplifier design for bio-signal acquisition **2014**,		17
28	Neural variability quenching during decision-making: Neural individuality and its prestimulus complexity. *NeuroImage*, **2019**, 192, 1-14	7.9	16
27	Resting Tremor Detection in Parkinson's Disease with Machine Learning and Kalman Filtering **2019**, 2018,		14
26	ResOT: Resource-Efficient Oblique Trees for Neural Signal Classification. *IEEE Transactions on Biomedical Circuits and Systems*, **2020**, 14, 692-704	5.1	11
25	Hardware Complexity Analysis of Deep Neural Networks and Decision Tree Ensembles for Real-time Neural Data Classification **2019**,		10
24	Adaptive Learning-Based Compressive Sampling for Low-power Wireless Implants. *IEEE Transactions on Circuits and Systems I: Regular Papers*, **2018**, 65, 3929-3941	3.9	10
23	Design techniques and analysis of high-resolution neural recording systems targeting epilepsy focus localization. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference*, **2012**, 2012, 5150-3	0.9	8
22	Analysis and Characterization of Variability in Subthreshold Source-Coupled Logic Circuits. *IEEE Transactions on Circuits and Systems I: Regular Papers*, **2015**, 62, 458-467	3.9	7
21	A low-power area-efficient compressive sensing approach for multi-channel neural recording **2013**,		7
20	Cost-Efficient Classification for Neurological Disease Detection **2019**,		7
19	Hardware-friendly seizure detection with a boosted ensemble of shallow decision trees. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference*, **2016**, 2016, 1826-1829	0.9	6
18	Learning-Based Near-Optimal Area-Power Trade-offs in Hardware Design for Neural Signal Acquisition **2016**,		5

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17	Structured sampling and recovery of iEEG signals **2015**,		5
16	Compressive multichannel cortical signal recording **2013**,		5
15	Enhanced Classification of Individual Finger Movements with ECoG **2019**,		5
14	A novel compressive sensing architecture for high-density biological signal recording **2014**,		4
13	Closed-Loop Neural Interfaces with Embedded Machine Learning **2020**,		4
12	Neural interface systems with on-device computing: machine learning and neuromorphic architectures. *Current Opinion in Biotechnology*, **2021**, 72, 95-101	11.4	4
11	A Low Power Multi-Class Migraine Detection Processor Based on Somatosensory Evoked Potentials. *IEEE Transactions on Circuits and Systems II: Express Briefs*, **2021**, 68, 1720-1724	3.5	4
10	A 41.2 nJ/class, 32-Channel On-Chip Classifier for Epileptic Seizure Detection. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference*, **2018**, 2018, 3693-3696	0.9	4
9	A 16-channel 1.1mm2 implantable seizure control SoC with sub-W/channel consumption and closed-loop stimulation in 0.18m CMOS **2016**,		3
8	Hardware-Efficient Seizure Detection **2019**,		3
7	Predicting task performance from biomarkers of mental fatigue in global brain activity. *Journal of Neural Engineering*, **2021**, 18,	5	3
6	Closed-Loop Neural Prostheses With On-Chip Intelligence: A Review and a Low-Latency Machine Learning Model for Brain State Detection. *IEEE Transactions on Biomedical Circuits and Systems*, **2021**, 15, 877-897	5.1	3
5	Mental Fatigue Prediction from Multi-Channel ECOG Signal **2020**,		2
4	Towards Adaptive Deep Brain Stimulation in Parkinson's Disease: Lfp-Based Feature Analysis and Classification **2018**,		2
3	Unsupervised Domain Adaptation for Cross-Subject Few-Shot Neurological Symptom Detection **2021**,		1
2	An 8.7 J/class. FFT accelerator and DNN-based configurable SoC for Multi-Class Chronic Neurological Disorder Detection **2021**,		1
1	A Power-Efficient Compressive Sensing Platform for Cortical Implants **2016**, 103-122		