

## **BlackRock Microsystems Publications List**

Mayo, J. Patrick, and John HR Maunsell

**Graded Neuronal Modulations Related to Visual Spatial Attention**

*The Journal of Neuroscience* 36.19 (2016): 5353-5361.

Tobaa, Adil A., et al.

**Properties of primary motor cortical local field potentials in the leg and trunk representations during arm movements**

*Engineering in Medicine and Biology Society (EMBC), 2016 IEEE 38th Annual International Conference of the. IEEE, 2016.*

Schroeder, Karen E., et al.

**Disruption of corticocortical information transfer during ketamine anesthesia in the primate brain**

*NeuroImage* 134 (2016): 459-465.

Torre, Emiliano, et al.

**Synchronous Spike Patterns in Macaque Motor Cortex during an Instructed-Delay Reach-to-Grasp Task**

*Journal of Neuroscience* 36.32 (2016): 8329-8340.

Kryger, Michael, et al.

**Flight simulation using a Brain-Computer Interface: A pilot, pilot study**

*Experimental neurology* (2016).

Best, Matthew D., et al.

**Spatio-Temporal Patterning in Primary Motor Cortex at Movement Onset**

*Cerebral Cortex* (2016)

Friedenberg, David A., et al.

**Big data challenges in decoding cortical activity in a human with quadriplegia to inform a brain computer interface**

*Engineering in Medicine and Biology Society (EMBC), 2016 IEEE 38th Annual International Conference of the. IEEE, 2016.*

Scott, Liam, et al.

**Neuronal network activity in the hippocampus of tau transgenic (Tg4510) mice**

*Neurobiology of aging* 37 (2016): 66-73.

Zavitz, Elizabeth, et al.

**Rapid Adaptation Induces Persistent Biases in Population Codes for Visual Motion**

*The Journal of Neuroscience* 36.16 (2016): 4579-4590.

Okada, Sakura, et al.

**A new device for the simultaneous recording of cerebral, cardiac, and muscular electrical activity in freely moving rodents**

*Journal of Pharmacological Sciences* 132.1 (2016): 105-108.

Kao, Jonathan C., et al.

**A high-performance neural prosthesis incorporating discrete state selection with hidden Markov models**

*IEEE Transactions on Biomedical Engineering* (2016).

Yuan, Yi, et al.

**Noninvasive focused ultrasound stimulation can modulate phase-amplitude coupling between neuronal oscillations in the rat hippocampus**

*Frontiers in Neuroscience* 10 (2016).

Boulay, Chadwick B., et al.

**Single-trial decoding of intended eye movement goals from lateral prefrontal cortex neural ensembles**

*Journal of neurophysiology* 115.1 (2016): 486-499.

Ross, Shani E., et al.

**Hysteretic behavior of bladder afferent neurons in response to changes in bladder pressure**

*BMC neuroscience* 17.1 (2016): 57.

Charkhkar, Hamid, et al.

**Chronic intracortical neural recordings using microelectrode arrays coated with PEDOT-TFB**

*Acta biomaterialia* 32 (2016): 57-67.

Hu, Meng, et al.

**Data on copula modeling of mixed discrete and continuous neural time series**

*Data in brief* 7 (2016): 1364-1369.

Niemeyer, James Edward, and Michael A. Paradiso.

**Contrast sensitivity, V1 neural activity, and natural vision**

*Journal of Neurophysiology* (2016)

Chernov, Mykyta M., et al.

**Microelectrode array stimulation combined with intrinsic optical imaging: A novel tool for functional brain mapping**

*Journal of neuroscience methods* 263 (2016): 7-14.

Li, Hongbao, et al.

**Maximum correntropy based attention-gated reinforcement learning designed for brain machine interface**

*Engineering in Medicine and Biology Society (EMBC), 2016 IEEE 38th Annual International Conference of the. IEEE, 2016.*

Ethier, Christian, et al.

**Adaptive neuron-to-EMG decoder training for FES neuroprostheses**

*Journal of neural engineering* 13.4 (2016): 046009.

Ma, Zengguang, et al.

**Negative hemodynamic response without neuronal inhibition investigated by combining optical imaging and electrophysiological recording**

*Neuroscience Letters* (2016).

Murphy, Brian A., et al.

**Contributions of Subsurface Cortical Modulations to Discrimination of Executed and Imagined Grasp Forces through Stereoelectroencephalography**

*PloS one* 11.3 (2016): e0150359.

Yuan, Yi, Yudong Chen, and Xiaoli Li.

**Noninvasive transcranial focused ultrasonic-magnetic stimulation for modulating brain oscillatory activity**

*The European Physical Journal Applied Physics* 73.2 (2016): 21201.

Oby, Emily R., et al.

**Extracellular voltage threshold settings can be tuned for optimal encoding of movement and stimulus parameters**

*Journal of neural engineering* 13.3 (2016): 036009.

Li, Zhaohui, Dong Cui, and Xiaoli Li.

**Unbiased and robust quantification of synchronization between spikes and local field potential**

*Journal of neuroscience methods* 269 (2016): 33-38.

Sabri, Mohammad Mahdi, Mehdi Adibi, and Ehsan Arabzadeh.

**Dynamics of Population Activity in Rat Sensory Cortex: Network Correlations Predict Anatomical Arrangement and Information Content**

*Frontiers in Neural Circuits* 10 (2016)

Telenczuk, Bartosz, et al.

**Local field potentials primarily reflect inhibitory neuron activity in human and monkey cortex**

*bioRxiv* (2016): 052282.

Sarma, Anish A., et al.

**A modular, closed-loop platform for intracranial stimulation in people with neurological disorders**

*Engineering in Medicine and Biology Society (EMBC), 2016 IEEE 38th Annual International Conference of the. IEEE, 2016.*

Reed, Jamie L., et al.

**Plasticity and Recovery After Dorsal Column Spinal Cord Injury in Nonhuman Primates**

*Journal of Experimental Neuroscience* 10.Suppl 1 (2016): 11.

Borzello, Mia, et al.

**The Spatiotemporal Dynamics of Oscillatory Activity in Humans Across Micro, Meso, and Macro Scales**

Working paper, Harvard Medical School (2016)

Christensen, Michael B., Heather AC Wark, and Douglas T. Hutchinson.

**A histological analysis of human median and ulnar nerves following implantation of Utah slanted electrode arrays**

*Biomaterials* 77 (2016): 235-242.

Kagan, Zachary B., et al.

**Linear methods for reducing EMG contamination in peripheral nerve motor decodes**  
*Engineering in Medicine and Biology Society (EMBC), 2016 IEEE 38th Annual International Conference of the. IEEE, 2016.*

Dadarlat, Maria, and Philip Sabes.

**Encoding and decoding of multi-channel ICMS in macaque somatosensory cortex**  
*IEEE Transactions on Haptics (2016)*

Ruff, Douglas A., and Marlene R. Cohen.

**Attention increases spike count correlations between visual cortical areas**  
*Journal of Neuroscience 36.28 (2016): 7523-7534.*

Aghagolzadeh, Mehdi, et al.

**Predicting seizures from local field potentials recorded via intracortical microelectrode arrays**  
*Engineering in Medicine and Biology Society (EMBC), 2016 IEEE 38th Annual International Conference of the. IEEE, 2016.*

Datta, Abhishek, et al.

**On comparing in vivo intracranial recordings in non-human primates to predictions of optimized transcranial electrical stimulation**  
*Engineering in Medicine and Biology Society (EMBC), 2016 IEEE 38th Annual International Conference of the. IEEE, 2016.*

Tankus, Ariel.

**Exploring human epileptic activity at the single-neuron level**  
*Epilepsy & Behavior 58 (2016): 11-17.*

Zanos, Theodoros P., et al.

**Mechanisms of Saccadic Suppression in Primate Cortical Area V4**  
*Journal of Neuroscience 36.35 (2016): 9227-9239.*

Alegre-Cortés, J., et al.

**Time–frequency analysis of neuronal populations with instantaneous resolution based on noise-assisted multivariate empirical mode decomposition**  
*Journal of neuroscience methods 267 (2016): 35-44.*

Ruff, Douglas A., and Marlene R. Cohen.

**Stimulus dependence of correlated variability across cortical areas**  
*Journal of Neuroscience 36.28 (2016): 7546-7556.*

Lopour, Beth A., et al.

**Characterization of long-range functional connectivity in epileptic networks by neuronal spike-triggered local field potentials**  
*Journal of neural engineering 13.2 (2016): 026031.*

Flint, Robert D., et al.

**Long-Term Stability of Motor Cortical Activity: Implications for Brain Machine Interfaces and Optimal Feedback Control**  
*The Journal of Neuroscience 36.12 (2016): 3623-3632.*

Downey, John E., et al.

**Blending of brain-machine interface and vision-guided autonomous robotics improves neuroprosthetic arm performance during grasping**

*Journal of neuroengineering and rehabilitation* 13.1 (2016): 1.

Irwin, Zachary T., et al.

**Enabling Low-Power, Multi-Modal Neural Interfaces Through a Common, Low-Bandwidth Feature Space**

*IEEE Transactions on Neural Systems and Rehabilitation Engineering* 24.5 (2016): 521-531.

Ramkumar, Pavan, et al.

**Premotor and Motor Cortices Encode Reward**

*PloS one* 11.8 (2016)

Sussillo, David, et al.

**Making brain-machine interfaces robust to future neural variability**

*arXiv preprint arXiv:1610.05872* (2016)

Richardson, Andrew G., et al.

**A chronic neural interface to the macaque dorsal column nuclei**

*Journal of neurophysiology* 115.5 (2016): 2255-2264.

Bataineh, Mohammad, et al.

**Pilot Study for Grip Force Prediction Using Neural Signals from Different Brain Regions**

*2016 32nd Southern Biomedical Engineering Conference (SBEC)*. IEEE, 2016.

Dubey, Agrita, and Supratim Ray.

**Spatial spread of local field potential is band-pass in the primary visual cortex**

*Journal of Neurophysiology* 116.4 (2016): 1986-1999.

Le Van Quyen, Michel, et al.

**High-frequency oscillations in human and monkey neocortex during the wake-sleep cycle**

*Proceedings of the National Academy of Sciences* 113.33 (2016): 9363-9368.

Wen, Haiguang, and Zhongming Liu.

**Broadband Electrophysiological Dynamics Contribute to Global Resting-State fMRI Signal**

*The Journal of Neuroscience* 36.22 (2016): 6030-6040.

Matlack, Charles, Howard Chizeck, and Chet T. Moritz.

**Empirical Movement Models for Brain Computer Interfaces**

*IEEE Transactions on Neural Systems and Rehabilitation Engineering* (2016).

Bartholomew, Ryan A., et al.

**Striatonigral control of movement velocity in mice**

*European Journal of Neuroscience* (2016).