

# Marc W Slutzky

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/8267850/publications.pdf>

Version: 2024-02-01

44  
papers

2,163  
citations

331259

21  
h-index

344852

36  
g-index

47  
all docs

47  
docs citations

47  
times ranked

2201  
citing authors

| #  | ARTICLE   | IF  | CITATIONS |
|----|---|-----|-----------|
| 1  | Brain-machine interfaces in neurorehabilitation of stroke. <i>Neurobiology of Disease</i> , 2015, 83, 172-179.  | 2.1 | 256       |
| 2  | Accurate decoding of reaching movements from field potentials in the absence of spikes. <i>Journal of Neural Engineering</i> , 2012, 9, 046006.                               | 1.8 | 182       |
| 3  | Long term, stable brain machine interface performance using local field potentials and multiunit spikes. <i>Journal of Neural Engineering</i> , 2013, 10, 056005.             | 1.8 | 167       |
| 4  | Optimal spacing of surface electrode arrays for brain-machine interface applications. <i>Journal of Neural Engineering</i> , 2010, 7, 026004.                                 | 1.8 | 152       |
| 5  | Direct classification of all American English phonemes using signals from functional speech motor cortex. <i>Journal of Neural Engineering</i> , 2014, 11, 035015.            | 1.8 | 149       |
| 6  | Speech synthesis from ECoG using densely connected 3D convolutional neural networks. <i>Journal of Neural Engineering</i> , 2019, 16, 036019.                                 | 1.8 | 138       |
| 7  | Enhancing Nervous System Recovery through Neurobiologics, Neural Interface Training, and Neurorehabilitation. <i>Frontiers in Neuroscience</i> , 2016, 10, 584.               | 1.4 | 121       |
| 8  | Extracting kinetic information from human motor cortical signals. <i>NeuroImage</i> , 2014, 101, 695-703.   | 2.1 | 84        |
| 9  | Long-Term Stability of Motor Cortical Activity: Implications for Brain Machine Interfaces and Optimal Feedback Control. <i>Journal of Neuroscience</i> , 2016, 36, 3623-3632. | 1.7 | 80        |
| 10 | Local field potentials allow accurate decoding of muscle activity. <i>Journal of Neurophysiology</i> , 2012, 108, 18-24.  | 0.9 | 77        |
| 11 | Generating Natural, Intelligible Speech From Brain Activity in Motor, Premotor, and Inferior Frontal Cortices. <i>Frontiers in Neuroscience</i> , 2019, 13, 1267.             | 1.4 | 76        |
| 12 | Statistical assessment of the stability of neural movement representations. <i>Journal of Neurophysiology</i> , 2011, 106, 764-774.   | 0.9 | 67        |
| 13 | Continuous decoding of human grasp kinematics using epidural and subdural signals. <i>Journal of Neural Engineering</i> , 2017, 14, 016005.                                   | 1.8 | 64        |
| 14 | Differential Representation of Articulatory Gestures and Phonemes in Precentral and Inferior Frontal Gyri. <i>Journal of Neuroscience</i> , 2018, 38, 9803-9813.              | 1.7 | 62        |
| 15 | Reducing Abnormal Muscle Coactivation After Stroke Using a Myoelectric-Computer Interface. <i>Neurorehabilitation and Neural Repair</i> , 2014, 28, 443-451.                  | 1.4 | 55        |
| 16 | Decoding the rat forelimb movement direction from epidural and intracortical field potentials. <i>Journal of Neural Engineering</i> , 2011, 8, 036013.                        | 1.8 | 54        |
| 17 | Brain-Machine Interfaces: Powerful Tools for Clinical Treatment and Neuroscientific Investigations. <i>Neuroscientist</i> , 2019, 25, 139-154.                                | 2.6 | 51        |
| 18 | Physiological properties of brain-machine interface input signals. <i>Journal of Neurophysiology</i> , 2017, 118, 1329-1343.  | 0.9 | 38        |

| #  | ARTICLE   | IF  | CITATIONS |
|----|---|-----|-----------|
| 19 | Deterministic Chaos and Noise in Three In Vitro Hippocampal Models of Epilepsy. <i>Annals of Biomedical Engineering</i> , 2001, 29, 607-618.  | 1.3 | 37        |
| 20 | Manipulating epileptiform bursting in the rat hippocampus using chaos control and adaptive techniques. <i>IEEE Transactions on Biomedical Engineering</i> , 2003, 50, 559-570.  | 2.5 | 35        |
| 21 | Myoelectric Computer Interface Training for Reducing Co-Activation and Enhancing Arm Movement in Chronic Stroke Survivors: A Randomized Trial. <i>Neurorehabilitation and Neural Repair</i> , 2019, 33, 284-295.                    | 1.4 | 30        |
| 22 | Changes in cortical network connectivity with long-term brain-machine interface exposure after chronic amputation. <i>Nature Communications</i> , 2017, 8, 1796.  | 5.8 | 19        |
| 23 | A new rodent behavioral paradigm for studying forelimb movement. <i>Journal of Neuroscience Methods</i> , 2010, 192, 228-232.   | 1.3 | 17        |
| 24 | Hemicraniectomy in Traumatic Brain Injury: A Noninvasive Platform to Investigate High Gamma Activity for Brain Machine Interfaces. <i>IEEE Transactions on Neural Systems and Rehabilitation Engineering</i> , 2019, 27, 1467-1472. | 2.7 | 16        |
| 25 | Electromyogram (EMG) Removal by Adding Sources of EMG (ERASE) – A Novel ICA-Based Algorithm for Removing Myoelectric Artifacts From EEG. <i>Frontiers in Neuroscience</i> , 2020, 14, 597941.                                       | 1.4 | 15        |
| 26 | The Representation of Finger Movement and Force in Human Motor and Premotor Cortices. <i>ENeuro</i> , 2020, 7, ENEURO.0063-20.2020.   | 0.9 | 15        |
| 27 | Identification of determinism in noisy neuronal systems. <i>Journal of Neuroscience Methods</i> , 2002, 118, 153-161.   | 1.3 | 11        |
| 28 | Cortical encoding of phonemic context during word production. , 2014, 2014, 6790-3.   |     | 11        |
| 29 | Portable, open-source solutions for estimating wrist position during reaching in people with stroke. <i>Scientific Reports</i> , 2021, 11, 22491.   | 1.6 | 11        |
| 30 | Wearable myoelectric interface enables high-dose, home-based training in severely impaired chronic stroke survivors. <i>Annals of Clinical and Translational Neurology</i> , 2021, 8, 1895-1905.                                    | 1.7 | 10        |
| 31 | Real-Time Control of the Hand by Intracortically Controlled Functional Neuromuscular Stimulation. , 2007, , .   |     | 9         |
| 32 | Myoelectric interface training enables targeted reduction in abnormal muscle co-activation. <i>Journal of NeuroEngineering and Rehabilitation</i> , 2022, 19, .   | 2.4 | 9         |
| 33 | Emergent coordination underlying learning to reach to grasp with a brain-machine interface. <i>Journal of Neurophysiology</i> , 2018, 119, 1291-1304.   | 0.9 | 8         |
| 34 | Memory Reactivation during Sleep Improves Execution of a Challenging Motor Skill. <i>Journal of Neuroscience</i> , 2021, 41, 9608-9616.   | 1.7 | 6         |
| 35 | Use of Intracortical Recordings to Control a Hand Neuroprosthesis. , 2007, , .  |     | 3         |
| 36 | Optimal spatial resolution of epidural and subdural electrode arrays for brain-machine interface applications. , 2008, 2008, 3771-4.  |     | 3         |

| #  | ARTICLE   | IF   | CITATIONS |
|----|---|------|-----------|
| 37 | Articles from the Seventh International Brain-Computer Interface Meeting. Brain-Computer Interfaces, 2019, 6, 103-105.  | 0.9  | 3         |
| 38 | Refinement of High-Gamma EEG Features From TBI Patients With Hemispherectomy Using an ICA Informed by Simulated Myoelectric Artifacts. Frontiers in Neuroscience, 2020, 14, 599010.                     | 1.4  | 3         |
| 39 | Noninvasively recorded high-gamma signals improve synchrony of force feedback in a novel neurorehabilitation brain-machine interface for brain injury. Journal of Neural Engineering, 2022, 19, 036024. | 1.8  | 3         |
| 40 | Decoding muscle activity with local field potentials. , 2011, , .   |      | 2         |
| 41 | Increasing power efficiency. Nature Biomedical Engineering, 2020, 4, 937-938.   | 11.6 | 2         |
| 42 | Brain machine interfaces: state of the art and challenges to translation. Neurobiology of Disease, 2015, 83, 152-153.   | 2.1  | 0         |
| 43 | Response to "Contribution of EEG signals to brain-machine interfaces". Journal of Neurophysiology, 2018, 119, 763-763.  | 0.9  | 0         |
| 44 | Towards Speech Synthesis from Intracranial Signals. Springer Briefs in Electrical and Computer Engineering, 2020, , 47-54.  | 0.3  | 0         |