

# Jason J Kutch

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/3553010/publications.pdf>

Version: 2024-02-01

45  
papers

1,487  
citations

430874

18  
h-index

330143

37  
g-index

47  
all docs

47  
docs citations

47  
times ranked

1609  
citing authors

#	ARTICLE	IF	CITATIONS
1	Challenges and New Approaches to Proving the Existence of Muscle Synergies of Neural Origin. <i>PLoS Computational Biology</i> , 2012, 8, e1002434.	3.2	220
2	Endpoint Force Fluctuations Reveal Flexible Rather Than Synergistic Patterns of Muscle Cooperation. <i>Journal of Neurophysiology</i> , 2008, 100, 2455-2471.	1.8	121
3	Brain signature and functional impact of centralized pain: a multidisciplinary approach to the study of chronic pelvic pain (MAPP) network study. <i>Pain</i> , 2017, 158, 1979-1991.	4.2	106
4	Computational Models for Neuromuscular Function. <i>IEEE Reviews in Biomedical Engineering</i> , 2009, 2, 110-135.	18.0	95
5	Alterations in Resting State Oscillations and Connectivity in Sensory and Motor Networks in Women with Interstitial Cystitis/Painful Bladder Syndrome. <i>Journal of Urology</i> , 2014, 192, 947-955.	0.4	93
6	Urologic chronic pelvic pain syndrome: insights from the MAPP Research Network. <i>Nature Reviews Urology</i> , 2019, 16, 187-200.	3.8	91
7	Muscle redundancy does not imply robustness to muscle dysfunction. <i>Journal of Biomechanics</i> , 2011, 44, 1264-1270.	2.1	84
8	Altered resting state neuromotor connectivity in men with chronic prostatitis/chronic pelvic pain syndrome: A MAPP. <i>NeuroImage: Clinical</i> , 2015, 8, 493-502.	2.7	66
9	Unique Microstructural Changes in the Brain Associated with Urological Chronic Pelvic Pain Syndrome (UCPPS) Revealed by Diffusion Tensor MRI, Super-Resolution Track Density Imaging, and Statistical Parameter Mapping: A MAPP Network Neuroimaging Study. <i>PLoS ONE</i> , 2015, 10, e0140250.	2.5	64
10	Cortical Activation Associated with Muscle Synergies of the Human Male Pelvic Floor. <i>Journal of Neuroscience</i> , 2014, 34, 13811-13818.	3.6	52
11	Brain Connectivity Associated with Muscle Synergies in Humans. <i>Journal of Neuroscience</i> , 2015, 35, 14708-14716.	3.6	51
12	Resting-state functional connectivity predicts longitudinal pain symptom change in urologic chronic pelvic pain syndrome: a MAPP network study. <i>Pain</i> , 2017, 158, 1069-1082.	4.2	46
13	Beta Band Corticomuscular Drive Reflects Muscle Coordination Strategies. <i>Frontiers in Computational Neuroscience</i> , 2017, 11, 17.	2.1	46
14	Brain white matter changes associated with urological chronic pelvic pain syndrome: multisite neuroimaging from a MAPP case-control study. <i>Pain</i> , 2016, 157, 2782-2791.	4.2	43
15	Distributed representation of pelvic floor muscles in human motor cortex. <i>Scientific Reports</i> , 2018, 8, 7213.	3.3	30
16	Decrease in Muscle Contraction Time Complements Neural Maturation in the Development of Dynamic Manipulation. <i>Journal of Neuroscience</i> , 2013, 33, 15050-15055.	3.6	24
17	When 90% of the variance is not enough: residual EMG from muscle synergy extraction influences task performance. <i>Journal of Neurophysiology</i> , 2020, 123, 2180-2190.	1.8	22
18	A Novel Synthesis of Computational Approaches Enables Optimization of Grasp Quality of Tendon-Driven Hands. <i>IEEE Transactions on Robotics</i> , 2012, 28, 958-966.	10.3	20

#	ARTICLE	IF	CITATIONS
19	Extraction of Individual Muscle Mechanical Action From Endpoint Force. <i>Journal of Neurophysiology</i> , 2010, 103, 3535-3546.	1.8	18
20	Saliency network functional connectivity is spatially heterogeneous across sensorimotor cortex in healthy humans. <i>NeuroImage</i> , 2020, 221, 117177.	4.2	17
21	The Multidisciplinary Approach to The Study of Chronic Pelvic Pain (MAPP) Research Network*: Design and implementation of the Symptom Patterns Study (SPS). <i>Neurourology and Urodynamics</i> , 2020, 39, 1803-1814.	1.5	17
22	Impact of early adverse life events and sex on functional brain networks in patients with urological chronic pelvic pain syndrome (UCPPS): A MAPP Research Network study. <i>PLoS ONE</i> , 2019, 14, e0217610.	2.5	15
23	Human elbow joint torque is linearly encoded in electromyographic signals from multiple muscles. <i>Neuroscience Letters</i> , 2001, 311, 97-100.	2.1	14
24	Altered brain connectivity in dysmenorrhea. <i>Pain</i> , 2016, 157, 5-6.	4.2	14
25	Motor cortical neuromodulation of pelvic floor muscle tone: Potential implications for the treatment of urologic conditions. <i>Neurourology and Urodynamics</i> , 2019, 38, 1517-1523.	1.5	14
26	Analysis of the effects of firing rate and synchronization on spike-triggered averaging of multidirectional motor unit torque. <i>Journal of Computational Neuroscience</i> , 2007, 22, 347-361.	1.0	13
27	Natural bladder filling alters resting brain function at multiple spatial scales: a proof-of-concept MAPP Network Neuroimaging Study. <i>Scientific Reports</i> , 2020, 10, 19901.	3.3	11
28	The probability of choosing both hands depends on an interaction between motor capacity and limb-specific control in chronic stroke. <i>Experimental Brain Research</i> , 2020, 238, 2569-2579.	1.5	10
29	The motor cortical representation of a muscle is not homogeneous in brain connectivity. <i>Experimental Brain Research</i> , 2017, 235, 2767-2776.	1.5	9
30	Analytic consistency and neural correlates of peak alpha frequency in the study of pain. <i>Journal of Neuroscience Methods</i> , 2022, 368, 109460.	2.5	9
31	Changes in brain white matter structure are associated with urine proteins in urologic chronic pelvic pain syndrome (UCPPS): A MAPP Network study. <i>PLoS ONE</i> , 2018, 13, e0206807.	2.5	8
32	Transperineal Sonography Evaluation of Muscles and Vascularity in the Male Pelvic Floor. <i>Journal of Diagnostic Medical Sonography</i> , 2013, 29, 3-10.	0.3	7
33	Individuals with recurrent low back pain exhibit further altered frontal plane trunk control in remission than when in pain. <i>Clinical Biomechanics</i> , 2021, 87, 105391.	1.2	7
34	12 weeks of strength training improves fluid cognition in older adults: A nonrandomized pilot trial. <i>PLoS ONE</i> , 2021, 16, e0255018.	2.5	6
35	Sensitivity of functional connectivity to periaqueductal gray localization, with implications for identifying disease-related changes in chronic visceral pain: A MAPP Research Network neuroimaging study. <i>NeuroImage: Clinical</i> , 2020, 28, 102443.	2.7	5
36	Cortical activity predicts good variation in human motor output. <i>Experimental Brain Research</i> , 2017, 235, 1139-1147.	1.5	3

#	ARTICLE	IF	CITATIONS
37	Corticomotor excitability of gluteus maximus and hip extensor strength: The influence of sex. <i>Human Movement Science</i> , 2021, 78, 102830.	1.4	3
38	Impaired Ability to Relax Pelvic Floor Muscles in Men With Chronic Prostatitis/Chronic Pelvic Pain Syndrome. <i>Physical Therapy</i> , 2022, 102, .	2.4	3
39	Paired associative stimulation applied to the cortex can increase resting-state functional connectivity: A proof of principle study. <i>Neuroscience Letters</i> , 2022, 784, 136753.	2.1	3
40	Reliability of Superficial Male Pelvic Floor Structural Measurements Using Linear-Array Transperineal Sonography. <i>Ultrasound in Medicine and Biology</i> , 2015, 41, 610-617.	1.5	2
41	Evidence for increased neuromuscular drive following spinal manipulation in individuals with subacromial pain syndrome. <i>Clinical Biomechanics</i> , 2021, 90, 105485.	1.2	2
42	Cerebral Perfusion and Sensory Testing Results Differ in Interstitial Cystitis/Bladder Pain Syndrome Patients with and without Fibromyalgia: A Site-Specific MAPP Network Study. <i>Journal of Pain Research</i> , 2021, Volume 14, 3887-3895.	2.0	2
43	Analysis of the effects of firing rate and synchronization on spike-triggered averaging of neuronal output. , 2006, , .		0
44	Computational Hypothesis testing for neuromuscular systems. , 2010, 2010, 5436-9.		0
45	Complete Solution Sets for Neuromuscular Models Reveal How Mechanical Constraints Limit Neural Control Options. , 2010, , .		0