

Rune W Berg

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/658803/publications.pdf>

Version: 2024-02-01

33
papers

1,996
citations

393982

19
h-index

414034

32
g-index

43
all docs

43
docs citations

43
times ranked

2067
citing authors

#	ARTICLE	IF	CITATIONS
1	Rhythmic Whisking by Rat: Retraction as Well as Protraction of the Vibrissae Is Under Active Muscular Control. <i>Journal of Neurophysiology</i> , 2003, 89, 104-117.	0.9	347
2	Influence of Phasic and Tonic Dopamine Release on Receptor Activation. <i>Journal of Neuroscience</i> , 2010, 30, 14273-14283.	1.7	340
3	Balanced Inhibition and Excitation Drive Spike Activity in Spinal Half-Centers. <i>Science</i> , 2007, 315, 390-393.	6.0	209
4	Invited Review Anatomical loops and their electrical dynamics in relation to whisking by rat. <i>Somatosensory & Motor Research</i> , 1999, 16, 69-88.	0.4	187
5	Coherent Electrical Activity Between Vibrissa Sensory Areas of Cerebellum and Neocortex Is Enhanced During Free Whisking. <i>Journal of Neurophysiology</i> , 2002, 87, 2137-2148.	0.9	117
6	Vibrissa Movement Elicited by Rhythmic Electrical Microstimulation to Motor Cortex in the Aroused Rat Mimics Exploratory Whisking. <i>Journal of Neurophysiology</i> , 2003, 90, 2950-2963.	0.9	75
7	Unilateral vibrissa contact: changes in amplitude but not timing of rhythmic whisking. <i>Somatosensory & Motor Research</i> , 2003, 20, 163-169.	0.4	63
8	Lognormal firing rate distribution reveals prominent fluctuation-driven regime in spinal motor networks. <i>ELife</i> , 2016, 5, .	2.8	62
9	Advances and perspectives in tissue clearing using CLARITY. <i>Journal of Chemical Neuroanatomy</i> , 2017, 86, 19-34.	1.0	52
10	Commentary: Synaptic Excitation in Spinal Motoneurons Alternates with Synaptic Inhibition and Is Balanced by Outward Rectification during Rhythmic Motor Network Activity. <i>Frontiers in Neural Circuits</i> , 2018, 12, 1.	1.4	48
11	CLARITY-compatible lipophilic dyes for electrode marking and neuronal tracing. <i>Scientific Reports</i> , 2016, 6, 32674.	1.6	46
12	Intense Synaptic Activity Enhances Temporal Resolution in Spinal Motoneurons. <i>PLoS ONE</i> , 2008, 3, e3218.	1.1	44
13	Motoneuron membrane potentials follow a time inhomogeneous jump diffusion process. <i>Journal of Computational Neuroscience</i> , 2011, 31, 563-579.	0.6	43
14	Activation of Nucleus Basalis Facilitates Cortical Control of a Brain Stem Motor Program. <i>Journal of Neurophysiology</i> , 2005, 94, 699-711.	0.9	39
15	Premotor Spinal Network with Balanced Excitation and Inhibition during Motor Patterns Has High Resilience to Structural Division. <i>Journal of Neuroscience</i> , 2014, 34, 2774-2784.	1.7	39
16	Exploratory Whisking by Rat Is Not Phase Locked to the Hippocampal Theta Rhythm. <i>Journal of Neuroscience</i> , 2006, 26, 6518-6522.	1.7	36
17	Synaptic inhibition and excitation estimated via the time constant of membrane potential fluctuations. <i>Journal of Neurophysiology</i> , 2013, 110, 1021-1034.	0.9	33
18	Divisive Gain Modulation of Motoneurons by Inhibition Optimizes Muscular Control. <i>Journal of Neuroscience</i> , 2015, 35, 3711-3723.	1.7	29

#	ARTICLE	IF	CITATIONS
19	Stereological Estimate of the Total Number of Neurons in Spinal Segment D9 of the Red-Eared Turtle. <i>Journal of Neuroscience</i> , 2011, 31, 2431-2435.	1.7	25
20	Intense Activity of the Raphe Spinal Pathway Depresses Motor Activity via a Serotonin Dependent Mechanism. <i>Frontiers in Neural Circuits</i> , 2017, 11, 111.	1.4	23
21	When networks walk a fine line: balance of excitation and inhibition in spinal motor circuits. <i>Current Opinion in Physiology</i> , 2019, 8, 76-83.	0.9	20
22	Decoupling of timescales reveals sparse convergent CPG network in the adult spinal cord. <i>Nature Communications</i> , 2019, 10, 2937.	5.8	16
23	Opposing effects of intrinsic conductance and correlated synaptic input on Vm-fluctuations during network activity. <i>Frontiers in Computational Neuroscience</i> , 2012, 6, 40.	1.2	15
24	A method for unit recording in the lumbar spinal cord during locomotion of the conscious adult rat. <i>Journal of Neuroscience Methods</i> , 2009, 182, 49-54.	1.3	14
25	Signaling in large-scale neural networks. <i>Cognitive Processing</i> , 2009, 10, S9-15.	0.7	13
26	Neuronal Population Activity in Spinal Motor Circuits: Greater Than the Sum of Its Parts. <i>Frontiers in Neural Circuits</i> , 2017, 11, 103.	1.4	11
27	Estimation of Synaptic Conductances in Presence of Nonlinear Effects Caused by Subthreshold Ionic Currents. <i>Frontiers in Computational Neuroscience</i> , 2017, 11, 69.	1.2	10
28	What are the gray and white matter volumes of the human spinal cord?. <i>Journal of Neurophysiology</i> , 2020, 124, 1792-1797.	0.9	9
29	Comment on "Penetration of Action Potentials During Collision in the Median and Lateral Giant Axons of Invertebrates". <i>Physical Review X</i> , 2017, 7, .	2.8	7
30	Why Firing Rate Distributions Are Important for Understanding Spinal Central Pattern Generators. <i>Frontiers in Human Neuroscience</i> , 2021, 15, 719388.	1.0	6
31	Spinal Cord Preparation from Adult Red-eared Turtles for Electrophysiological Recordings during Motor Activity. <i>Bio-protocol</i> , 2017, 7, e2381.	0.2	6
32	Viral strategies for targeting spinal neuronal subtypes in adult wild-type rodents. <i>Scientific Reports</i> , 2022, 12, .	1.6	4
33	The turtle as a model for spinal motor circuits. , 2020, , 205-219.		1