

# Rodrigo Felipe de Oliveira Pena

## List of Publications by Year in descending order

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Version: 2024-02-01

25  
papers

172  
citations

1478505

6  
h-index

1281871

11  
g-index

31  
all docs

31  
docs citations

31  
times ranked

192  
citing authors

#	ARTICLE	IF	CITATIONS
1	The voltage and spiking responses of subthreshold resonant neurons to structured and fluctuating inputs: persistence and loss of resonance and variability. <i>Biological Cybernetics</i> , 2022, 116, 163-190.	1.3	4
2	Oscillations and variability in neuronal systems: interplay of autonomous transient dynamics and fast deterministic fluctuations. <i>Journal of Computational Neuroscience</i> , 2022, 50, 331-355.	1.0	1
3	Modelos de redes de neurônios para o neocórtex e fenômenos emergentes observados. <i>Revista Brasileira De Ensino De Fisica</i> , 2021, 43, .	0.2	0
4	Building a model of the brain: from detailed connectivity maps to network organization. <i>European Physical Journal: Special Topics</i> , 2021, 230, 2887-2909.	2.6	4
5	Self-sustained activity of low firing rate in balanced networks. <i>Physica A: Statistical Mechanics and Its Applications</i> , 2020, 537, 122671.	2.6	19
6	Optimal Interplay between Synaptic Strengths and Network Structure Enhances Activity Fluctuations and Information Propagation in Hierarchical Modular Networks. <i>Brain Sciences</i> , 2020, 10, 228.	2.3	4
7	Modeling Hippocampal CA1 Gabaergic Synapses of Audiogenic Rats. <i>International Journal of Neural Systems</i> , 2020, 30, 2050022.	5.2	2
8	Firing properties of ventral medullary respiratory neurons in sinoaortic denervated rats. <i>Experimental Physiology</i> , 2019, 104, 39-49.	2.0	1
9	Asymmetrical voltage response in resonant neurons shaped by nonlinearities. <i>Chaos</i> , 2019, 29, 103135.	2.5	7
10	Aplicações da teoria da informação à neurociência. <i>Revista Brasileira De Ensino De Fisica</i> , 2019, 41, .	0.2	0
11	Interplay of activation kinetics and the derivative conductance determines resonance properties of neurons. <i>Physical Review E</i> , 2018, 97, 042408.	2.1	6
12	Non-Decaying postsynaptic potentials and delayed spikes in hippocampal pyramidal neurons generated by a zero slope conductance created by the persistent $\text{Na}^+$ current. <i>Channels</i> , 2018, 12, 81-88.	2.8	2
13	Dynamics of spontaneous activity in random networks with multiple neuron subtypes and synaptic noise. <i>Journal of Computational Neuroscience</i> , 2018, 45, 1-28.	1.0	22
14	Intrinsic and synaptic properties of hippocampal CA1 pyramidal neurons of the Wistar Audiogenic Rat (WAR) strain, a genetic model of epilepsy. <i>Scientific Reports</i> , 2018, 8, 10412.	3.3	21
15	Self-Consistent Scheme for Spike-Train Power Spectra in Heterogeneous Sparse Networks. <i>Frontiers in Computational Neuroscience</i> , 2018, 12, 9.	2.1	19
16	26th Annual Computational Neuroscience Meeting (CNS*2017): Part 2. <i>BMC Neuroscience</i> , 2017, 18, .	1.9	7
17	Mechanisms of Self-Sustained Oscillatory States in Hierarchical Modular Networks with Mixtures of Electrophysiological Cell Types. <i>Frontiers in Computational Neuroscience</i> , 2016, 10, 23.	2.1	14
18	A cortical multi-layered model and the properties of its internally-generated activity. <i>BMC Neuroscience</i> , 2015, 16, .	1.9	0

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19	Effect of synaptic plasticity on functional connectivity and global activity of a neocortical network model. BMC Neuroscience, 2015, 16, .	1.9	2
20	Sustained oscillations, irregular firing, and chaotic dynamics in hierarchical modular networks with mixtures of electrophysiological cell types. Frontiers in Computational Neuroscience, 2014, 8, 103.	2.1	22
21	Self-sustained activity in neural networks: influence of network topology and cell types. BMC Neuroscience, 2013, 14, .	1.9	1
22	Impact of the activation rate of the hyperpolarization-activated current $I_{\mathrm{h}}$ on the neuronal membrane time constant and synaptic potential duration. European Physical Journal: Special Topics, 0, , 1.	2.6	2
23	Modeling and characterizing stochastic neurons based on in vitro voltage-dependent spike probability functions. European Physical Journal: Special Topics, 0, , 1.	2.6	1
24	Self-sustained activity in cortical network models. Frontiers in Neuroinformatics, 0, 8, .	2.5	0
25	Granger causality in the frequency domain: derivation and applications. Revista Brasileira De Ensino De Fisica, 0, 42, .	0.2	3