Svetlana Postnova

List of Publications by Citations

40 papers	590 citations	15 h-index	23 g-index
41 ext. papers	694 ext. citations	3.5 avg, IF	4.2 L-index

#	Paper	IF	Citations
40	A unified model of melatonin, 6-sulfatoxymelatonin, and sleep dynamics. *Journal of Pineal Research* , **2018**, 64, e12474	10.4	59
39	Neural synchronization at tonic-to-bursting transitions. *Journal of Biological Physics*, **2007**, 33, 129-43	1.6	47
38	A mathematical model of homeostatic regulation of sleep-wake cycles by hypocretin/orexin. *Journal of Biological Rhythms*, **2009**, 24, 523-35	3.2	40
37	A physiologically based model of orexinergic stabilization of sleep and wake. *PLoS ONE*, **2014**, 9, e91982	3.7	34
36	Exploring sleepiness and entrainment on permanent shift schedules in a physiologically based model. *Journal of Biological Rhythms*, **2012**, 27, 91-102	3.2	32
35	Propagation effects of current and conductance noise in a model neuron with subthreshold oscillations. *Mathematical Biosciences*, **2008**, 214, 109-21	3.9	30
34	Noise-induced precursors of tonic-to-bursting transitions in hypothalamic neurons and in a conductance-based model. *Chaos*, **2011**, 21, 047509	3.3	26
33	What works for jetlag? A systematic review of non-pharmacological interventions. *Sleep Medicine Reviews*, **2019**, 43, 47-59	10.2	25
32	Adaptation to shift work: physiologically based modeling of the effects of lighting and shiftsastart time. *PLoS ONE*, **2013**, 8, e53379	3.7	24
31	A computational study of the interdependencies between neuronal impulse pattern, noise effects and synchronization. *Journal of Physiology (Paris)*, **2010**, 104, 176-89		22
30	Physiological Markers of Arousal Change with Psychological Treatment for Insomnia: A Preliminary Investigation. *PLoS ONE*, **2015**, 10, e0145317	3.7	19
29	A minimal physiologically based model of the HPA axis under influence of the sleep-wake cycles. *Pharmacopsychiatry*, **2013**, 46 Suppl 1, S36-43	2	18
28	Neurones and synapses for systemic models of psychiatric disorders. *Pharmacopsychiatry*, **2010**, 43 Suppl 1, S82-91	2	18
27	Impulse pattern in bi-directionally coupled model neurons of different dynamics. *BioSystems*, **2007**, 89, 135-42	1.9	17
26	Effects of rotation interval on sleepiness and circadian dynamics on forward rotating 3-shift systems. *Journal of Biological Rhythms*, **2014**, 29, 60-70	3.2	16
25	Generalizability of A Neural Network Model for Circadian Phase Prediction in Real-World Conditions. *Scientific Reports*, **2019**, 9, 11001	4.9	15
24	Sleep Propensity under Forced Desynchrony in a Model of Arousal State Dynamics. *Journal of Biological Rhythms*, **2016**, 31, 498-508	3.2	15

23	Prediction of Cognitive Performance and Subjective Sleepiness Using a Model of Arousal Dynamics. *Journal of Biological Rhythms*, **2018**, 33, 203-218	3.2	14
22	Modeling melanopsin-mediated effects of light on circadian phase, melatonin suppression, and subjective sleepiness. *Journal of Pineal Research*, **2020**, 69, e12681	10.4	13
21	Diversity and noise effects in a model of homeostatic regulation of the sleep-wake cycle. *PLoS Computational Biology*, **2012**, 8, e1002650	5	13
20	Computational approaches for individual circadian phase prediction in field settings. *Current Opinion in Systems Biology*, **2020**, 22, 39-51	3.2	12
19	Sleep Modelling across Physiological Levels. *Clocks & Sleep*, **2019**, 1, 166-184	2.9	11
18	INTER-PATTERN TRANSITIONS IN A NOISY BURSTING CELL. *Fluctuation and Noise Letters*, **2004**, 04, L521-L533	1.2	11
17	Spiking patterns and synchronization of thalamic neurons along the sleep-wake cycle. *Chaos*, **2018**, 28, 106314	3.3	9
16	Modeling neuronal activity in relation to experimental voltage-/patch-clamp recordings. *Brain Research*, **2013**, 1536, 159-67	3.7	8
15	Real-Time Simulations of Synchronization in a Conductance-Based Neuronal Network with a Digital FPGA Hardware-Core. *Lecture Notes in Computer Science*, **2012**, 97-104	0.9	7
14	The effect of consecutive transmeridian flights on alertness, sleep-wake cycles and sleepiness: A case study. *Chronobiology International*, **2018**, 35, 1471-1480	3.6	6
13	A critical firing rate associated with tonic-to-bursting transitions in synchronized gap-junction coupled neurons. *European Physical Journal: Special Topics*, **2017**, 226, 1939-1951	2.3	5
12	Comparison of different methods for the evaluation of treatment effects from the sleep EEG of patients with major depression. *Journal of Biological Physics*, **2008**, 34, 393-404	1.6	5
11	Conductance-Based Models for the Evaluation of Brain Functions, Disorders, and Drug Effects **2011** , 97-132		4
10	Modelling the Hypothalamic Control of Thalamic Synchronization Along the Sleep-Wake Cycles **2011**, 563-570		4
9	How do travelers manage jetlag and travel fatigue? A survey of passengers on long-haul flights. *Chronobiology International*, **2020**, 37, 1621-1628	3.6	3
8	Stochastic Resonance and Stochastic Encoding: Cooperative Effects of Noise and Intrinsic Dynamics in a Model Neuron with Subthreshold Oscillations **2011**, 571-575		2
7	Progress in modelling of brain dynamics during anaesthesia and the role of sleep-wake circuitry. *Biochemical Pharmacology*, **2021**, 191, 114388	6	2
6	Biological Rhythms in Mental Disorders197-231		1

5	Mechanism-Based Models of Neurons and Synapses for Multi-Level Simulations of Brain Functions. *IEICE Proceeding Series*, **2014**, 1, 308-311		1
4	Forced Wakefulness for Entrainment to Permanent Shift Work: A Computational Study **2013**, 105-111		1
3	Prediction of shiftworker alertness, sleep, and circadian phase using a model of arousal dynamics constrained by shift schedules and light exposure. *Sleep*, **2021**, 44,	1.1	1
2	Desynchrony and synchronisation underpinning sleep–wake cycles. *European Physical Journal Plus*, **2021**, 136, 1	3.1	0
1	Introduction to Focus Issue: Nonlinear science of living systems: From cellular mechanisms to functions. *Chaos*, **2018**, 28, 106201	3.3	