Markus A Dahlem

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/5999790/publications.pdf

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44 papers

1,862 citations

279798 23 h-index 289244 40 g-index

50 all docs 50 docs citations

50 times ranked

1731 citing authors

#	Article	IF	CITATIONS
1	The continuum of spreading depolarizations in acute cortical lesion development: Examining Leão's legacy. Journal of Cerebral Blood Flow and Metabolism, 2017, 37, 1571-1594.	4.3	297
2	Recording, analysis, and interpretation of spreading depolarizations in neurointensive care: Review and recommendations of the COSBID research group. Journal of Cerebral Blood Flow and Metabolism, 2017, 37, 1595-1625.	4.3	255
3	Time-delayed feedback in neurosystems. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2009, 367, 1079-1096.	3.4	141
4	Is Spreading Depolarization Characterized by an Abrupt, Massive Release of Gibbs Free Energy from the Human Brain Cortex?. Neuroscientist, 2013, 19, 25-42.	3.5	74
5	The Role of Cell Volume in the Dynamics of Seizure, Spreading Depression, and Anoxic Depolarization. PLoS Computational Biology, 2015, 11, e1004414.	3.2	72
6	Self-induced splitting of spiral-shaped spreading depression waves in chicken retina. Experimental Brain Research, 1997, 115, 319-324.	1.5	65
7	Radial, spiral and reverberating waves of spreading depolarization occur in the gyrencephalic brain. Neurolmage, 2014, 99, 244-255.	4.2	65
8	Migraine Aura: Retracting Particle-Like Waves in Weakly Susceptible Cortex. PLoS ONE, 2009, 4, e5007.	2.5	61
9	Two-dimensional wave patterns of spreading depolarization: Retracting, re-entrant, and stationary waves. Physica D: Nonlinear Phenomena, 2010, 239, 889-903.	2.8	59
10	Failure of feedback as a putative common mechanism of spreading depolarizations in migraine and stroke. Chaos, 2008, 18, 026110.	2.5	54
11	DYNAMICS OF DELAY-COUPLED EXCITABLE NEURAL SYSTEMS. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2009, 19, 745-753.	1.7	54
12	Dynamics from Seconds to Hours in Hodgkin-Huxley Model with Time-Dependent Ion Concentrations and Buffer Reservoirs. PLoS Computational Biology, 2014, 10, e1003941.	3.2	51
13	The role of extracellular potassium dynamics in the different stages of ictal bursting and spreading depression: A computational study. Journal of Theoretical Biology, 2009, 258, 219-228.	1.7	50
14	Bistable Dynamics Underlying Excitability of Ion Homeostasis in Neuron Models. PLoS Computational Biology, 2014, 10, e1003551.	3.2	48
15	Controlling the onset of traveling pulses in excitable media by nonlocal spatial coupling and time-delayed feedback. Chaos, 2009, 19, 015110.	2.5	46
16	How does spreading depression spread? Physiology and modeling. Reviews in the Neurosciences, 2015, 26, 183-98.	2.9	33
17	Migraine aura dynamics after reverse retinotopic mapping of weak excitation waves in the primary visual cortex. Biological Cybernetics, 2003, 88, 419-424.	1.3	32
18	Does the migraine aura reflect cortical organization?. European Journal of Neuroscience, 2000, 12, 767-770.	2.6	31

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19	Migraine generator network and spreading depression dynamics as neuromodulation targets in episodic migraine. Chaos, 2013, 23, 046101.	2.5	31
20	Transient Localized Wave Patterns and Their Application to Migraine. Journal of Mathematical Neuroscience, 2013, 3, 7.	2.4	28
21	Circles are different: The perception of Glass patterns modulates early event-related potentials. Vision Research, 2005, 45, 2668-2676.	1.4	27
22	Understanding migraine using dynamic network biomarkers. Cephalalgia, 2015, 35, 627-630.	3.9	27
23	Heterogeneous propagation of spreading depolarizations in the lissencephalic and gyrencephalic brain. Journal of Cerebral Blood Flow and Metabolism, 2017, 37, 2639-2643.	4.3	27
24	Extracellular potassium alters frequency and profile of retinal spreading depression waves. Experimental Brain Research, 2003, 152, 221-228.	1.5	26
25	Validation of an algorithm for automated classification of migraine and tension-type headache attacks in an electronic headache diary. Journal of Headache and Pain, 2020, 21, 75.	6.0	26
26	CONTROL OF SYNCHRONIZATION IN COUPLED NEURAL SYSTEMS BY TIME-DELAYED FEEDBACK. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2010, 20, 813-825.	1.7	24
27	Nucleation of reaction-diffusion waves on curved surfaces. New Journal of Physics, 2014, 16, 053010.	2.9	22
28	Simulation of spreading depolarization trajectories in cerebral cortex: Correlation of velocity and susceptibility in patients with aneurysmal subarachnoid hemorrhage. NeuroImage: Clinical, 2017, 16, 524-538.	2.7	22
29	Linking a genetic defect in migraine to spreading depression in a computational model. PeerJ, 2014, 2, e379.	2.0	21
30	Towards dynamical network biomarkers in neuromodulation of episodic migraine. Translational Neuroscience, 2013, 4, .	1.4	19
31	Image Processing Techniques Applied to Excitation Waves in the Chicken Retina. Methods, 2000, 21, 317-323.	3.8	17
32	Cortical hot spots and labyrinths: why cortical neuromodulation for episodic migraine with aura should be personalized. Frontiers in Computational Neuroscience, 2015, 9, 29.	2.1	16
33	Time-Delayed Feedback Control: From Simple Models to Lasers and Neural Systems. Understanding Complex Systems, 2009, , 85-150.	0.6	8
34	Predicted Selective Increase of Cortical Magnification Due to Cortical Folding. Journal of Mathematical Neuroscience, 2012, 2, 14.	2.4	7
35	Determining the Evolution of Headache Among Regular Users of a Daily Electronic Diary via a Smartphone App: Observational Study. JMIR MHealth and UHealth, 2021, 9, e26401.	3.7	7
36	Spatio-Temporal Aspects of a Dynamical Disease: Waves of Spreading Depression. , 2004, , 421-434.		3

#	Article	IF	CITATIONS
37	Synchronization of noise-induced oscillations by time-delayed feedback. AIP Conference Proceedings, 2007, , .	0.4	2
38	Study Design and Protocol of a Randomized Controlled Trial of the Efficacy of a Smartphone-Based Therapy of Migraine (SMARTGEM). Frontiers in Neurology, 0, 13 , .	2.4	2
39	ECoG-based short-range recurrent stimulation techniques to stabilize tissue at risk of progressive damage: Theory based on clinical observations. Nature Precedings, 2009, , .	0.1	1
40	Rotation-Invariant Optical Flow by Gaze-Depended Retino-Cortical Mapping. Lecture Notes in Computer Science, 2002, , 137-145.	1.3	1
41	Migraines and Cortical Spreading Depression. , 2013, , 1-10.		1
42	Migraines and Cortical Spreading Depression. , 2014, , 1-9.		0
43	Migraines and Cortical Spreading Depression. , 2018, , 1-9.		0
44	Migraines and Cortical Spreading Depression. , 2022, , 2035-2043.		0