# John Wade

## List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/7803697/publications.pdf

Version: 2024-02-01

| 30 | 630 | 933447 | 839539 |
|---|---|---|---|
| papers | citations | 10 h-index | 18 g-index |

| 30 | 30 | 30 | 558 |
|---|---|---|---|
| all docs | docs citations | times ranked | citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | A Computational Study of Astrocytic GABA Release at the Glutamatergic Synapse: EAAT-2 and GAT-3 Coupled Dynamics. Frontiers in Cellular Neuroscience, 2021, 15, 682460. | 3.7 | 5 |
| 2 | Mathematical modelling of human P2X-mediated plasma membrane electrophysiology and calcium dynamics in microglia. PLoS Computational Biology, 2021, 17, e1009520. | 3.2 | 1 |
| 3 | Computational Study of Astroglial Calcium Homeostasis in a Semi-isolated Synaptic Cleft. , 2020, , . | | 0 |
| 4 | GABA Regulation of Burst Firing in Hippocampal Astrocyte Neural Circuit: A Biophysical Model. Frontiers in Cellular Neuroscience, 2019, 13, 335. | 3.7 | 6 |
| 5 | Calcium Microdomain Formation at the Perisynaptic Cradle Due to NCX Reversal: A Computational Study. Frontiers in Cellular Neuroscience, 2019, 13, 185. | 3.7 | 16 |
| 6 | SPANNER: A Self-Repairing Spiking Neural Network Hardware Architecture. IEEE Transactions on Neural Networks and Learning Systems, 2018, 29, 1287-1300. | 11.3 | 48 |
| 7 | Onâ€chip communication for neuroâ€glia networks. IET Computers and Digital Techniques, 2018, 12, 130-138. | 1.2 | 0 |
| 8 | Potassium and sodium microdomains in thin astroglial processes: A computational model study. PLoS Computational Biology, 2018, 14, e1006151. | 3.2 | 52 |
| 9 | A computational study of astrocytic glutamate influence on post-synaptic neuronal excitability. PLoS Computational Biology, 2018, 14, e1006040. | 3.2 | 34 |
| 10 | Self-repairing Learning Rule for Spiking Astrocyte-Neuron Networks. Lecture Notes in Computer Science, 2017, , 384-392. | 1.3 | 3 |
| 11 | Astrocyte to spiking neuron communication using Networks-on-Chip ring topology. , 2016, , . | | 5 |
| 12 | Self-repairing hardware with astrocyte-neuron networks. , 2016, , . | | 16 |
| 13 | Scalable Networks-on-Chip Interconnected Architecture for Astrocyte-Neuron Networks. IEEE Transactions on Circuits and Systems I: Regular Papers, 2016, 63, 2290-2303. | 5.4 | 40 |
| 14 | Si elegans: Modeling the C. elegans Nematode Nervous System Using High Performance FPGAS. Biosystems and Biorobotics, 2016, , 31-45. | 0.3 | 2 |
| 15 | On the role of astroglial syncytia in self-repairing spiking neural networks. IEEE Transactions on Neural Networks and Learning Systems, 2015, 26, 2370-2380. | 11.3 | 42 |
| 16 | Si elegans: Hardware architecture and communications protocol. , 2015, , . | | 2 |
| 17 | Si elegans: FPGA hardware emulation of C. elegans nematode nervous system. , 2014, , . | | 4 |
| 18 | The Si elegans Project â€“ The Challenges and Prospects of Emulating Caenorhabditis elegans. Lecture Notes in Computer Science, 2014, , 436-438. | 1.3 | 5 |

| # | Article | IF | Citations |
|---|---|---|---|
| 19 | Si elegans - Computational Modelling of C. elegans Nematode Nervous System using FPGAs. , 2014, , . | | 1 |
| 20 | Exploring Neural Principles with Si elegans, a Neuromimetic Representation of the Nematode Caenorhabditis elegans. , 2014, , . | | 2 |
| 21 | Biophysically based computational models of astrocyte ~ neuron coupling and their functional significance. Frontiers in Computational Neuroscience, 2013, 7, 44. | 2.1 | 13 |
| 22 | Synchrony: A spiking-based mechanism for processing sensory stimuli. Neural Networks, 2012, 32, 26-34. | 5.9 | 3 |
| 23 | Self-repair in a bidirectionally coupled astrocyte-neuron (AN) system based on retrograde signaling. Frontiers in Computational Neuroscience, 2012, 6, 76. | 2.1 | 48 |
| 24 | Lateral inhibitory networks: Synchrony, edge enhancement, and noise reduction. , 2011, , . | | 3 |
| 25 | Bidirectional Coupling between Astrocytes and Neurons Mediates Learning and Dynamic Coordination in the Brain: A Multiple Modeling Approach. PLoS ONE, 2011, 6, e29445. | 2.5 | 109 |
| 26 | Exploring retrograde signaling via astrocytes as a mechanism for self repair. , 2011, , . | | 8 |
| 27 | Problem solving techniques in cognitive science. Artificial Intelligence Review, 2010, 34, 221-234. | 15.7 | 7 |
| 28 | SWAT: A Spiking Neural Network Training Algorithm for Classification Problems. IEEE Transactions on Neural Networks, 2010, 21, 1817-1830. | 4.2 | 148 |
| 29 | Online Remote Control of a Wireless Home Automation Network. International Journal of Ambient Computing and Intelligence, 2009, 1, 39-52. | 1.1 | 0 |
| 30 | SWAT: An unsupervised SNN training algorithm for classification problems. , 2008, , . | | 7 |