

Biswa Sengupta

List of Publications by Year in descending order

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Version: 2024-02-01

25
papers

1,399
citations

394421

19
h-index

580821

25
g-index

25
all docs

25
docs citations

25
times ranked

1585
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|--|------|-----------|
| 1 | Neural Dynamics under Active Inference: Plausibility and Efficiency of Information Processing. <i>Entropy</i> , 2021, 23, 454. | 2.2 | 22 |
| 2 | Pillar Networks: Combining parametric with non-parametric methods for action recognition. <i>Robotics and Autonomous Systems</i> , 2019, 118, 47-54. | 5.1 | 2 |
| 3 | Hemispheric brain asymmetry differences in youths with attention-deficit/hyperactivity disorder. <i>NeuroImage: Clinical</i> , 2018, 18, 744-752. | 2.7 | 35 |
| 4 | Gauge Fields in the Central Nervous System. <i>Springer Series in Cognitive and Neural Systems</i> , 2017, , 193-212. | 0.1 | 7 |
| 5 | Editorial: Self-Organization in the Nervous System. <i>Frontiers in Systems Neuroscience</i> , 2017, 11, 69. | 2.5 | 8 |
| 6 | Towards a Neuronal Gauge Theory. <i>PLoS Biology</i> , 2016, 14, e1002400. | 5.6 | 86 |
| 7 | Annealed Importance Sampling for Neural Mass Models. <i>PLoS Computational Biology</i> , 2016, 12, e1004797. | 3.2 | 13 |
| 8 | Gradient-based MCMC samplers for dynamic causal modelling. <i>NeuroImage</i> , 2016, 125, 1107-1118. | 4.2 | 43 |
| 9 | mpdcm: A toolbox for massively parallel dynamic causal modeling. <i>Journal of Neuroscience Methods</i> , 2016, 257, 7-16. | 2.5 | 35 |
| 10 | Dynamic causal modelling of electrographic seizure activity using Bayesian belief updating. <i>NeuroImage</i> , 2016, 125, 1142-1154. | 4.2 | 41 |
| 11 | Characterising seizures in anti-NMDA-receptor encephalitis with dynamic causal modelling. <i>NeuroImage</i> , 2015, 118, 508-519. | 4.2 | 39 |
| 12 | Gradient-free MCMC methods for dynamic causal modelling. <i>NeuroImage</i> , 2015, 112, 375-381. | 4.2 | 38 |
| 13 | Knowing one's place: a free-energy approach to pattern regulation. <i>Journal of the Royal Society Interface</i> , 2015, 12, 20141383. | 3.4 | 153 |
| 14 | Consequences of Converting Graded to Action Potentials upon Neural Information Coding and Energy Efficiency. <i>PLoS Computational Biology</i> , 2014, 10, e1003439. | 3.2 | 41 |
| 15 | Ten Simple Rules for Effective Computational Research. <i>PLoS Computational Biology</i> , 2014, 10, e1003506. | 3.2 | 47 |
| 16 | Power Consumption During Neuronal Computation. <i>Proceedings of the IEEE</i> , 2014, 102, 738-750. | 21.3 | 65 |
| 17 | Cognitive Dynamics: From Attractors to Active Inference. <i>Proceedings of the IEEE</i> , 2014, 102, 427-445. | 21.3 | 66 |
| 18 | Efficient gradient computation for dynamical models. <i>NeuroImage</i> , 2014, 98, 521-527. | 4.2 | 48 |

| # | ARTICLE | IF | CITATIONS |
|----|--|-----|-----------|
| 19 | A naturally occurring amino acid substitution in the voltage-dependent sodium channel selectivity filter affects channel gating. <i>Journal of Comparative Physiology A: Neuroethology, Sensory, Neural, and Behavioral Physiology</i> , 2013, 199, 829-842. | 1.6 | 5 |
| 20 | Balanced Excitatory and Inhibitory Synaptic Currents Promote Efficient Coding and Metabolic Efficiency. <i>PLoS Computational Biology</i> , 2013, 9, e1003263. | 3.2 | 77 |
| 21 | Information and Efficiency in the Nervous System—A Synthesis. <i>PLoS Computational Biology</i> , 2013, 9, e1003157. | 3.2 | 163 |
| 22 | The Effect of Cell Size and Channel Density on Neuronal Information Encoding and Energy Efficiency. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 2013, 33, 1465-1473. | 4.3 | 80 |
| 23 | Functional analysis of ultra high information rates conveyed by rat vibrissal primary afferents. <i>Frontiers in Neural Circuits</i> , 2013, 7, 190. | 2.8 | 35 |
| 24 | Comparison of Langevin and Markov channel noise models for neuronal signal generation. <i>Physical Review E</i> , 2010, 81, 011918. | 2.1 | 34 |
| 25 | Action Potential Energy Efficiency Varies Among Neuron Types in Vertebrates and Invertebrates. <i>PLoS Computational Biology</i> , 2010, 6, e1000840. | 3.2 | 216 |