

Sean L Hill

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/1463944/publications.pdf>

Version: 2024-02-01

70
papers

9,038
citations

172207

29
h-index

118652

62
g-index

81
all docs

81
docs citations

81
times ranked

10899
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|---|------|-----------|
| 1 | Traumatic brain injury: integrated approaches to improve prevention, clinical care, and research. <i>Lancet Neurology</i> , The, 2017, 16, 987-1048. | 4.9 | 1,571 |
| 2 | Reconstruction and Simulation of Neocortical Microcircuitry. <i>Cell</i> , 2015, 163, 456-492. | 13.5 | 1,258 |
| 3 | The Sleep Slow Oscillation as a Traveling Wave. <i>Journal of Neuroscience</i> , 2004, 24, 6862-6870. | 1.7 | 1,002 |
| 4 | New insights into the classification and nomenclature of cortical GABAergic interneurons. <i>Nature Reviews Neuroscience</i> , 2013, 14, 202-216. | 4.9 | 707 |
| 5 | Reduced sleep in <i>Drosophila</i> Shaker mutants. <i>Nature</i> , 2005, 434, 1087-1092. | 13.7 | 420 |
| 6 | Collaborative European NeuroTrauma Effectiveness Research in Traumatic Brain Injury (CENTER-TBI). <i>Neurosurgery</i> , 2015, 76, 67-80. | 0.6 | 386 |
| 7 | Modeling Sleep and Wakefulness in the Thalamocortical System. <i>Journal of Neurophysiology</i> , 2005, 93, 1671-1698. | 0.9 | 372 |
| 8 | Sleep Homeostasis in <i>Drosophila Melanogaster</i> . <i>Sleep</i> , 2004, 27, 628-639. | 0.6 | 362 |
| 9 | Models of Neocortical Layer 5b Pyramidal Cells Capturing a Wide Range of Dendritic and Perisomatic Active Properties. <i>PLoS Computational Biology</i> , 2011, 7, e1002107. | 1.5 | 313 |
| 10 | Sleep Homeostasis and Cortical Synchronization: I. Modeling the Effects of Synaptic Strength on Sleep Slow Waves. <i>Sleep</i> , 2007, 30, 1617-1630. | 0.6 | 288 |
| 11 | A Biophysically Detailed Model of Neocortical Local Field Potentials Predicts the Critical Role of Active Membrane Currents. <i>Neuron</i> , 2013, 79, 375-390. | 3.8 | 259 |
| 12 | BigNeuron: Large-Scale 3D Neuron Reconstruction from Optical Microscopy Images. <i>Neuron</i> , 2015, 87, 252-256. | 3.8 | 202 |
| 13 | Modeling the Effects of Transcranial Magnetic Stimulation on Cortical Circuits. <i>Journal of Neurophysiology</i> , 2005, 94, 622-639. | 0.9 | 189 |
| 14 | Statistical connectivity provides a sufficient foundation for specific functional connectivity in neocortical neural microcircuits. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2012, 109, E2885-94. | 3.3 | 178 |
| 15 | The neocortical microcircuit collaboration portal: a resource for rat somatosensory cortex. <i>Frontiers in Neural Circuits</i> , 2015, 9, 44. | 1.4 | 138 |
| 16 | Breakdown of Effective Connectivity During Slow Wave Sleep: Investigating the Mechanism Underlying a Cortical Gate Using Large-Scale Modeling. <i>Journal of Neurophysiology</i> , 2009, 102, 2096-2111. | 0.9 | 118 |
| 17 | Interoperable atlases of the human brain. <i>NeuroImage</i> , 2014, 99, 525-532. | 2.1 | 78 |
| 18 | <i>SCN1A</i> gain of function in early infantile encephalopathy. <i>Annals of Neurology</i> , 2019, 85, 514-525. | 2.8 | 76 |

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|----|--|-----|-----------|
| 19 | Channelpedia: An Integrative and Interactive Database for Ion Channels. <i>Frontiers in Neuroinformatics</i> , 2011, 5, 36. | 1.3 | 65 |
| 20 | A Hierarchical Structure of Cortical Interneuron Electrical Diversity Revealed by Automated Statistical Analysis. <i>Cerebral Cortex</i> , 2013, 23, 2994-3006. | 1.6 | 63 |
| 21 | Sleep improves the variability of motor performance. <i>Brain Research Bulletin</i> , 2008, 76, 605-611. | 1.4 | 58 |
| 22 | Evaluating automated parameter constraining procedures of neuron models by experimental and surrogate data. <i>Biological Cybernetics</i> , 2008, 99, 371-379. | 0.6 | 53 |
| 23 | Effective Stimuli for Constructing Reliable Neuron Models. <i>PLoS Computational Biology</i> , 2011, 7, e1002133. | 1.5 | 49 |
| 24 | The Resource Identification Initiative: A cultural shift in publishing. <i>F1000Research</i> , 2015, 4, 134. | 0.8 | 47 |
| 25 | To the Cloud! A Grassroots Proposal to Accelerate Brain Science Discovery. <i>Neuron</i> , 2016, 92, 622-627. | 3.8 | 46 |
| 26 | Intrinsic morphological diversity of thickâ€tufted layer 5 pyramidal neurons ensures robust and invariant properties of <i>in silico</i> synaptic connections. <i>Journal of Physiology</i> , 2012, 590, 737-752. | 1.3 | 44 |
| 27 | The Resource Identification Initiative: A cultural shift in publishing. <i>F1000Research</i> , 2015, 4, 134. | 0.8 | 42 |
| 28 | The Resource Identification Initiative: a cultural shift in publishing. <i>Brain and Behavior</i> , 2016, 6, e00417. | 1.0 | 37 |
| 29 | A Neuron Membrane Mesh Representation for Visualization of Electrophysiological Simulations. <i>IEEE Transactions on Visualization and Computer Graphics</i> , 2012, 18, 214-227. | 2.9 | 34 |
| 30 | Brainhack: a collaborative workshop for the open neuroscience community. <i>GigaScience</i> , 2016, 5, 16. | 3.3 | 34 |
| 31 | Experimentally-constrained biophysical models of tonic and burst firing modes in thalamocortical neurons. <i>PLoS Computational Biology</i> , 2019, 15, e1006753. | 1.5 | 33 |
| 32 | GABA-mediated tonic inhibition differentially modulates gain in functional subtypes of cortical interneurons. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020, 117, 3192-3202. | 3.3 | 33 |
| 33 | The Resource Identification Initiative: A cultural shift in publishing. <i>Journal of Comparative Neurology</i> , 2016, 524, 8-22. | 0.9 | 32 |
| 34 | Identifying, tabulating, and analyzing contacts between branched neuron morphologies. <i>IBM Journal of Research and Development</i> , 2008, 52, 43-55. | 3.2 | 29 |
| 35 | Association of accelerometer-derived sleep measures with lifetime psychiatric diagnoses: A cross-sectional study of 89,205 participants from the UK Biobank. <i>PLoS Medicine</i> , 2021, 18, e1003782. | 3.9 | 28 |
| 36 | International data governance for neuroscience. <i>Neuron</i> , 2022, 110, 600-612. | 3.8 | 28 |

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|----|--|-----|-----------|
| 37 | NineML: the network interchange for neuroscience modeling language. BMC Neuroscience, 2011, 12, . | 0.8 | 27 |
| 38 | The Resource Identification Initiative: A Cultural Shift in Publishing. Neuroinformatics, 2016, 14, 169-182. | 1.5 | 26 |
| 39 | Conceptualising fairness: three pillars for medical algorithms and health equity. BMJ Health and Care Informatics, 2022, 29, e100459. | 1.4 | 22 |
| 40 | Dynamic transitions in global network activity influenced by the balance of excitation and inhibition. Network: Computation in Neural Systems, 1997, 8, 165-184. | 2.2 | 21 |
| 41 | Large-scale extraction of brain connectivity from the neuroscientific literature. Bioinformatics, 2015, 31, 1640-1647. | 1.8 | 21 |
| 42 | Dynamic transitions in global network activity influenced by the balance of excitation and inhibition. , 0, . | | 20 |
| 43 | Digitization of Measurement-Based Care Pathways in Mental Health Through REDCap and Electronic Health Record Integration: Development and Usability Study. Journal of Medical Internet Research, 2021, 23, e25656. | 2.1 | 19 |
| 44 | A Component-Based Extension Framework for Large-Scale Parallel Simulations in NEURON. Frontiers in Neuroinformatics, 2009, 3, 10. | 1.3 | 18 |
| 45 | Feeding the human brain model. Current Opinion in Neurobiology, 2015, 32, 107-114. | 2.0 | 17 |
| 46 | Towards a supervised classification of neocortical interneuron morphologies. BMC Bioinformatics, 2018, 19, 511. | 1.2 | 17 |
| 47 | An Approach to Capturing Neuron Morphological Diversity. , 2009, , 211-232. | | 16 |
| 48 | Combinatorial Expression Rules of Ion Channel Genes in Juvenile Rat (Rattus norvegicus) Neocortical Neurons. PLoS ONE, 2012, 7, e34786. | 1.1 | 14 |
| 49 | Data Publications Correlate with Citation Impact. Frontiers in Neuroscience, 2016, 10, 419. | 1.4 | 14 |
| 50 | Comments and General Discussion on "The Anatomical Problem Posed by Brain Complexity and Size: A Potential Solution" Frontiers in Neuroanatomy, 2016, 10, 60. | 0.9 | 13 |
| 51 | Rodent somatosensory thalamocortical circuitry: Neurons, synapses, and connectivity. Neuroscience and Biobehavioral Reviews, 2021, 126, 213-235. | 2.9 | 13 |
| 52 | Modeling the Gabaergic Action of Etomidate on the Thalamocortical System. Anesthesia and Analgesia, 2009, 108, 160-167. | 1.1 | 11 |
| 53 | Computational Neuroscience Ontology: a new tool to provide semantic meaning to your models. BMC Neuroscience, 2012, 13, . | 0.8 | 10 |
| 54 | Automatic target validation based on neuroscientific literature mining for tractography. Frontiers in Neuroanatomy, 2015, 9, 66. | 0.9 | 9 |

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|----|--|-----|-----------|
| 55 | Reconstructing the brain: from image stacks to neuron synthesis. <i>Brain Informatics</i> , 2016, 3, 205-209. | 1.8 | 9 |
| 56 | A Framework for Collaborative Curation of Neuroscientific Literature. <i>Frontiers in Neuroinformatics</i> , 2017, 11, 27. | 1.3 | 7 |
| 57 | Agile text mining with Sherlock. , 2015, , . | | 5 |
| 58 | “The Blue Brain Project”. , 2008, , . | | 4 |
| 59 | Modeling the effects of midazolam on cortical and thalamic neurons. <i>Neuroscience Letters</i> , 2009, 464, 135-139. | 1.0 | 4 |
| 60 | How do we know what we know? Discovering neuroscience data sets through minimal metadata. <i>Nature Reviews Neuroscience</i> , 2016, 17, 735-736. | 4.9 | 3 |
| 61 | Symptom dimensions of major depression in a large community-based cohort. <i>Psychological Medicine</i> , 2021, , 1-8. | 2.7 | 3 |
| 62 | The Neuron Phenotype Ontology: A FAIR Approach to Proposing and Classifying Neuronal Types. <i>Neuroinformatics</i> , 2022, 20, 793-809. | 1.5 | 3 |
| 63 | The Blue Brain Project: building the neocortical column. <i>BMC Neuroscience</i> , 2007, 8, . | 0.8 | 2 |
| 64 | Morningness-eveningness scores predict outcomes differentially for depressed patients attending morning vs. afternoon day treatment streams. <i>Chronobiology International</i> , 2019, 36, 1581-1591. | 0.9 | 2 |
| 65 | Individualized real-time prediction of working memory performance by classifying electroencephalography signals. <i>International Journal of Imaging Systems and Technology</i> , 0, , . | 2.7 | 2 |
| 66 | Network-Related Challenges and Insights from Neuroscience. <i>Lecture Notes in Computer Science</i> , 2008, , 67-78. | 1.0 | 2 |
| 67 | The Blue Brain Project: calibrating the neocortical column. <i>BMC Neuroscience</i> , 2007, 8, . | 0.8 | 1 |
| 68 | OMNI: Towards a comprehensive object model for neuroinformatics. <i>Frontiers in Neuroinformatics</i> , 0, 5, . | 1.3 | 0 |
| 69 | Cortical Columns, Models of. , 2015, , 868-871. | | 0 |
| 70 | Cortical Columns, Models of. , 2022, , 1037-1040. | | 0 |