

# Cheng Ly

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/8750770/publications.pdf>

Version: 2024-02-01

31  
papers

465  
citations

840728

11  
h-index

752679

20  
g-index

37  
all docs

37  
docs citations

37  
times ranked

399  
citing authors

| #  | ARTICLE   | IF  | CITATIONS |
|----|---|-----|-----------|
| 1  | Critical Analysis of Dimension Reduction by a Moment Closure Method in a Population Density Approach to Neural Network Modeling. <i>Neural Computation</i> , 2007, 19, 2032-2092.                           | 2.2 | 87        |
| 2  | Population density methods for stochastic neurons with realistic synaptic kinetics: Firing rate dynamics and fast computational methods. <i>Network: Computation in Neural Systems</i> , 2006, 17, 373-418. | 3.6 | 45        |
| 3  | Synchronization dynamics of two coupled neural oscillators receiving shared and unshared noisy stimuli. <i>Journal of Computational Neuroscience</i> , 2009, 26, 425-443.                                   | 1.0 | 44        |
| 4  | Spike Train Statistics and Dynamics with Synaptic Input from any Renewal Process: A Population Density Approach. <i>Neural Computation</i> , 2009, 21, 360-396.   | 2.2 | 33        |
| 5  | Cellular and Circuit Mechanisms Maintain Low Spike Co-Variability and Enhance Population Coding in Somatosensory Cortex. <i>Frontiers in Computational Neuroscience</i> , 2012, 6, 7.                       | 2.1 | 31        |
| 6  | Divisive Gain Modulation with Dynamic Stimuli in Integrate-and-Fire Neurons. <i>PLoS Computational Biology</i> , 2009, 5, e1000365.   | 3.2 | 23        |
| 7  | Phase-resetting curve determines how BK currents affect neuronal firing. <i>Journal of Computational Neuroscience</i> , 2011, 30, 211-223.  | 1.0 | 21        |
| 8  | Coupling regularizes individual units in noisy populations. <i>Physical Review E</i> , 2010, 81, 011911.  | 2.1 | 15        |
| 9  | Analysis of Recurrent Networks of Pulse-Coupled Noisy Neural Oscillators. <i>SIAM Journal on Applied Dynamical Systems</i> , 2010, 9, 113-137.  | 1.6 | 15        |
| 10 | When do correlations increase with firing rates in recurrent networks?. <i>PLoS Computational Biology</i> , 2017, 13, e1005506.   | 3.2 | 15        |
| 11 | Firing rate dynamics in recurrent spiking neural networks with intrinsic and network heterogeneity. <i>Journal of Computational Neuroscience</i> , 2015, 39, 311-327.                                       | 1.0 | 13        |
| 12 | Analytic approximations of statistical quantities and response of noisy oscillators. <i>Physica D: Nonlinear Phenomena</i> , 2011, 240, 719-731.  | 2.8 | 12        |
| 13 | A theoretical framework for analyzing coupled neuronal networks: Application to the olfactory system. <i>PLoS Computational Biology</i> , 2017, 13, e1005780.   | 3.2 | 12        |
| 14 | One-Dimensional Population Density Approaches to Recurrently Coupled Networks of Neurons with Noise. <i>SIAM Journal on Applied Mathematics</i> , 2015, 75, 2333-2360.                                      | 1.8 | 11        |
| 15 | Investigating the Correlation-Firing Rate Relationship in Heterogeneous Recurrent Networks. <i>Journal of Mathematical Neuroscience</i> , 2018, 8, 8.   | 2.4 | 10        |
| 16 | A Principled Dimension-Reduction Method for the Population Density Approach to Modeling Networks of Neurons with Synaptic Dynamics. <i>Neural Computation</i> , 2013, 25, 2682-2708.                        | 2.2 | 9         |
| 17 | Automaticity in ventricular myocyte cell pairs with ephaptic and gap junction coupling. <i>Chaos</i> , 2022, 32, 033123.  | 2.5 | 8         |
| 18 | 26th Annual Computational Neuroscience Meeting (CNS*2017): Part 3. <i>BMC Neuroscience</i> , 2017, 18, .  | 1.9 | 7         |

| #  | ARTICLE   | IF  | CITATIONS |
|----|---|-----|-----------|
| 19 | Noise-enhanced coding in phasic neuron spike trains. PLoS ONE, 2017, 12, e0176963.  | 2.5 | 7         |
| 20 | Dynamics of Coupled Noisy Neural Oscillators with Heterogeneous Phase Resetting Curves. SIAM Journal on Applied Dynamical Systems, 2014, 13, 1733-1755.   | 1.6 | 6         |
| 21 | Analysis of heterogeneous cardiac pacemaker tissue models and traveling wave dynamics. Journal of Theoretical Biology, 2018, 459, 18-35.  | 1.7 | 6         |
| 22 | Practical approximation method for firing-rate models of coupled neural networks with correlated inputs. Physical Review E, 2017, 96, 022413.   | 2.1 | 5         |
| 23 | Odor-evoked increases in olfactory bulb mitral cell spiking variability. IScience, 2021, 24, 102946.  | 4.1 | 5         |
| 24 | Development of a decerebrate model for investigating mechanisms mediating viscerosympathetic reflexes in the spinalized rat. American Journal of Physiology - Heart and Circulatory Physiology, 2019, 316, H1332-H1340. | 3.2 | 4         |
| 25 | Differences in olfactory bulb mitral cell spiking with ortho- and retronasal stimulation revealed by data-driven models. PLoS Computational Biology, 2021, 17, e1009169.  | 3.2 | 4         |
| 26 | Variable synaptic strengths controls the firing rate distribution in feedforward neural networks. Journal of Computational Neuroscience, 2018, 44, 75-95.   | 1.0 | 3         |
| 27 | Efficient calculation of heterogeneous non-equilibrium statistics in coupled firing-rate models. Journal of Mathematical Neuroscience, 2019, 9, 2.  | 2.4 | 3         |
| 28 | A Competition of Critics in Human Decision-Making. Computational Psychiatry, 2021, 5, 81.   | 2.0 | 2         |
| 29 | Firing rate distributions in a feedforward network of neural oscillators with intrinsic and network heterogeneity. Mathematical Biosciences and Engineering, 2019, 16, 2023-2048.                                       | 1.9 | 2         |
| 30 | Statistical Analysis of Decoding Performances of Diverse Populations of Neurons. Neural Computation, 2021, 33, 764-801.   | 2.2 | 1         |
| 31 | Interplay of intrinsic and network heterogeneity in strongly recurrent spiking networks. BMC Neuroscience, 2015, 16, .  | 1.9 | 0         |