# Sten RÃ¼diger

List of Publications by Year
in descending order

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|---|---|---|---|
| **18**<br>papers | **351**<br>citations | 759233<br>**12**<br>h-index | 839539<br>**18**<br>g-index |
| **18**<br>all docs | **18**<br>docs citations | **18**<br>times ranked | **451**<br>citing authors |

| # | ARTICLE | IF | CITATIONS |
|---|---------|-----|-----------|
| 1 | Ryanodine Receptor Activation Induces Long-Term Plasticity of Spine Calcium Dynamics. PLoS Biology, 2015, 13, e1002181. | 5.6 | 48 |
| 2 | Stochastic models of intracellular calcium signals. Physics Reports, 2014, 534, 39-87. | 25.6 | 40 |
| 3 | Diffusive spatio-temporal noise in a first-passage time model for intracellular calcium release. Journal of Chemical Physics, 2013, 138, 154103. | 3.0 | 38 |
| 4 | Modulation of Elementary Calcium Release Mediates a Transition from Puffs to Waves in an IP3R Cluster Model. PLoS Computational Biology, 2015, 11, e1003965. | 3.2 | 25 |
| 5 | Termination of Ca2+ Release for Clustered IP3R Channels. PLoS Computational Biology, 2012, 8, e1002485. | 3.2 | 24 |
| 6 | Epidemics with mutating infectivity on small-world networks. Scientific Reports, 2020, 10, 5919. | 3.3 | 22 |
| 7 | Degree Correlations Optimize Neuronal Network Sensitivity to Sub-Threshold Stimuli. PLoS ONE, 2015, 10, e0121794. | 2.5 | 22 |
| 8 | Pattern formation in Rayleigh-Bénard convection in a cylindrical container. Physical Review E, 2000, 62, 4927-4931. | 2.1 | 21 |
| 9 | Particle-Based Multiscale Modeling of Calcium Puff Dynamics. Multiscale Modeling and Simulation, 2016, 14, 997-1016. | 1.6 | 20 |
| 10 | Determining the Roles of Inositol Trisphosphate Receptors in Neurodegeneration: Interdisciplinary Perspectives on a Complex Topic. Molecular Neurobiology, 2017, 54, 6870-6884. | 4.0 | 14 |
| 11 | Channel-based Langevin approach for the stochastic Hodgkin-Huxley neuron. Physical Review E, 2013, 87, 012716. | 2.1 | 13 |
| 12 | Frequency and Relative Prevalence of Calcium Blips and Puffs in a Model of Small IP3R Clusters. Biophysical Journal, 2014, 106, 2353-2363. | 0.5 | 13 |
| 13 | Accurate Langevin approaches to simulate Markovian channel dynamics. Physical Biology, 2015, 12, 061001. | 1.8 | 13 |
| 14 | New Insights on Temporal Lobe Epilepsy Based on Plasticity-Related Network Changes and High-Order Statistics. Molecular Neurobiology, 2018, 55, 3990-3998. | 4.0 | 13 |
| 15 | Mode interaction in rotating Rayleigh–Bénard convection. Fluid Dynamics Research, 2003, 33, 477-492. | 1.3 | 9 |
| 16 | Functional regulation of neuronal nitric oxide synthase expression and activity in the rat retina. Experimental Neurology, 2014, 261, 510-517. | 4.1 | 8 |
| 17 | Langevin approach for stochastic Hodgkin–Huxley dynamics with discretization of channel open fraction. Physics Letters, Section A: General, Atomic and Solid State Physics, 2013, 377, 3223-3227. | 2.1 | 5 |
| 18 | Modeling of Stochastic $\mathrm{Ca}^{2+}$ Signals. Springer Series in Computational Neuroscience, 2019, , 91-114. | 0.3 | 3 |