Mechanisms of Phase-Locking and Frequency Control in Oscillators* *Work partially supported by NIH grant RC 9706694 to NK and a NSF grant to GBE. We thank J. Ritt a and helpful comments.

Handbook of Dynamical Systems 2, 3-54 DOI: 10.1016/s1874-575x(02)80022-4

Citation Report

#	Article	IF	CITATIONS
1	Dissipativity characterization of a class of oscillators and networks of oscillators. , 0, , .		6
2	Standing waves, clustering, and phase waves in 1D simulations of kinetic relaxation oscillations in NO+NH3 on Pt(100) coupled by diffusion. Physica D: Nonlinear Phenomena, 2004, 190, 249-265.	2.8	9
3	Multimodal regimes in a compartmental model of the dopamine neuron. Physica D: Nonlinear Phenomena, 2004, 194, 333-356.	2.8	50
4	Course 3 Geometric singular perturbation analysis of neuronal dynamics. Les Houches Summer School Proceedings, 2005, 80, 73-122.	0.2	0
5	An Introduction to Dynamical Systems and Neuronal Dynamics. Lecture Notes in Mathematics, 2005, , 21-68.	0.2	40
6	Local network parameters can affect inter-network phase lags in central pattern generators. Journal of Mathematical Biology, 2006, 52, 115-140.	1.9	9
7	Generation of theta oscillations by weakly coupled neural oscillators in the presence of noise. Journal of Computational Neuroscience, 2007, 22, 173-189.	1.0	8
8	Transitions between irregular and rhythmic firing patterns in excitatory-inhibitory neuronal networks. Journal of Computational Neuroscience, 2007, 23, 217-235.	1.0	39
9	Reducing neuronal networks to discrete dynamics. Physica D: Nonlinear Phenomena, 2008, 237, 324-338.	2.8	36
10	Stable Synchrony in Globally Coupled Integrate-and-Fire Oscillators. SIAM Journal on Applied Dynamical Systems, 2008, 7, 1445-1476.	1.6	7
11	NMDA receptor-dependent switching between different gamma rhythm-generating microcircuits in entorhinal cortex. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 18572-18577.	7.1	102
12	Polyrhythmic synchronization in bursting networking motifs. Chaos, 2008, 18, 037120.	2.5	64
13	Electrical Coupling Promotes Fidelity of Responses in the Networks of Model Neurons. Neural Computation, 2009, 21, 3057-3078.	2.2	12
14	Burst-duration mechanism of in-phase bursting in inhibitory networks. Regular and Chaotic Dynamics, 2010, 15, 146-158.	0.8	3
15	Analysis of Synchronization in a Neural Population by a Population Density Approach. Mathematical Modelling of Natural Phenomena, 2010, 5, 5-25.	2.4	3
16	Fast reciprocal inhibition can synchronize bursting neurons. Physical Review E, 2010, 81, 045201.	2.1	48
17	Frequency Locking in Countable Cellular Systems, Localization of (Asymptotic) Quasi-Periodic Solutions of Autonomous Differential Systems. SIAM Journal on Applied Mathematics, 2011, 71, 1-19.	1.8	2
18	The effects of synaptic time delay on motifs of chemically coupled Rulkov model neurons. Communications in Nonlinear Science and Numerical Simulation, 2011, 16, 623-633.	3.3	16

TATION REDO

#	Article	IF	CITATIONS
19	Dynamic mechanisms of generation of oscillatory cluster patterns in a globally coupled chemical system. Journal of Chemical Physics, 2012, 137, 104908.	3.0	6
20	Phase Resetting Curve Analysis of Global Synchrony, the Splay Mode and Clustering in N Neuron all to all Pulse-Coupled Networks. , 2012, , 453-473.		1
21	The hyperpolarizationâ€activated current regulates synchronization of gap–junction oupled dopaminergic neurons in the midbrain—a combined approach between computational modeling and electrophysiological recording. IEEJ Transactions on Electrical and Electronic Engineering, 2012, 7, 283-290.	1.4	0
22	Transition from winnerless competition to synchronization in time-delayed neuronal motifs. Europhysics Letters, 2012, 97, 58001.	2.0	9
23	Mechanisms of Gamma Oscillations. Annual Review of Neuroscience, 2012, 35, 203-225.	10.7	2,160
24	Dynamical changes in neurons during seizures determine tonic to clonic shift. Journal of Computational Neuroscience, 2012, 33, 41-51.	1.0	19
25	Cortical Control of Arm Movements: A Dynamical Systems Perspective. Annual Review of Neuroscience, 2013, 36, 337-359.	10.7	633
26	When Transitions Between Bursting Modes Induce Neural Synchrony. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2014, 24, 1440013.	1.7	11
27	Neurosystems: brain rhythms and cognitive processing. European Journal of Neuroscience, 2014, 39, 705-719.	2.6	186
28	Networks of diffusively time-delay coupled systems: Conditions for synchronization and its relation to the network topology. Physica D: Nonlinear Phenomena, 2014, 277, 22-39.	2.8	21
29	Analysis of chaotic oscillations induced in two coupled Wilson–Cowan models. Biological Cybernetics, 2014, 108, 355-363.	1.3	16
30	Inhibitory and excitatory pulse coupling of two frequency-different chemical oscillators with time delay. Chaos, 2015, 25, 064601.	2.5	24
31	Stabilizing synchrony with heterogeneity. BMC Neuroscience, 2015, 16, .	1.9	0
32	Stabilizing synchrony by inhomogeneity. Scientific Reports, 2015, 5, 13854.	3.3	6
33	Stability of Antiphase Oscillations in a Network of Inhibitory Neurons. SIAM Journal on Applied Dynamical Systems, 2015, 14, 448-480.	1.6	6
34	A positive feedback at the cellular level promotes robustness and modulation at the circuit level. Journal of Neurophysiology, 2015, 114, 2472-2484.	1.8	18
35	Stimulus-dependent synchronization in delayed-coupled neuronal networks. Scientific Reports, 2016, 6, 23471.	3.3	40
36	Erosion of synchronization: Coupling heterogeneity and network structure. Physica D: Nonlinear Phenomena, 2016, 323-324, 40-48.	2.8	10

#	Article	IF	CITATIONS
37	Mixed-mode synchronization between two inhibitory neurons with post-inhibitory rebound. Communications in Nonlinear Science and Numerical Simulation, 2016, 36, 175-191.	3.3	14
38	When Repulsive Inhibition Promotes Synchrony of Bursting Neurons: Help from the Enemy. Advances in Dynamics, Patterns, Cognition, 2017, , 161-185.	0.3	0
39	A kind of structural frequency locking in generalized spatial automata. Journal of Mathematical Analysis and Applications, 2017, 455, 105-126.	1.0	0
40	Phase models and clustering in networks of oscillators with delayed coupling. Physica D: Nonlinear Phenomena, 2018, 363, 44-55.	2.8	12
41	Computational Neuroscience: Mathematical and Statistical Perspectives. Annual Review of Statistics and Its Application, 2018, 5, 183-214.	7.0	48
42	Rhythmic patterns in the neuronal motifs induced by nonequal time-delays and correlated noises. International Journal of Modern Physics C, 2018, 29, 1850052.	1.7	0
43	Microsaccade-rhythmic modulation of neural synchronization and coding within and across cortical areas V1 and V2. PLoS Biology, 2018, 16, e2004132.	5.6	18
44	Mixed mode oscillations and phase locking in coupled FitzHugh-Nagumo model neurons. Chaos, 2019, 29, 033105.	2.5	31
45	Minimal model of calcium dynamics in two heterogeneous coupled cells. Neurocomputing, 2019, 323, 128-138.	5.9	1
46	Symmetric coupling of multiple timescale systems with Mixed-Mode Oscillations and synchronization. Physica D: Nonlinear Phenomena, 2020, 401, 132129.	2.8	10
47	A phase model with large time delayed coupling. Physica D: Nonlinear Phenomena, 2020, 411, 132559.	2.8	4
48	Spatially localized cluster solutions in inhibitory neural networks. Mathematical Biosciences, 2021, 336, 108591.	1.9	1
51	Inter-Network Interactions: Impact of Connections between Oscillatory Neuronal Networks on Oscillation Frequency and Pattern. PLoS ONE, 2014, 9, e100899.	2.5	9
52	Brain rhythms and neural syntax: implications for efficient coding of cognitive content and neuropsychiatric disease Dialogues in Clinical Neuroscience, 2012, 14, 345-367.	3.7	404
53	Are Different Rhythms Good for Different Functions?. Frontiers in Human Neuroscience, 2010, 4, 187.	2.0	119
54	Phase models and oscillators with time delayed coupling. Discrete and Continuous Dynamical Systems, 2012, 32, 2653-2673.	0.9	18
55	A quantitative theory of gamma synchronization in macaque V1. ELife, 2017, 6, .	6.0	57
56	DYNAMICAL INVARIANTS FOR CPG CONTROL IN AUTONOMOUS ROBOTS. , 2010, , .		1

CITATION REPORT

CITATION REPORT

#	Article	IF	CITATIONS
60	Mechanism of carbachol-induced 40ÂHz gamma oscillations and the effects of NMDA activation on oscillatory dynamics in a model of the CA3 subfield of the hippocampus. Journal of Theoretical Biology, 2022, 548, 111200.	1.7	0
61	The emergence of polyglot entrainment responses to periodic inputs in vicinities of Hopf bifurcations in slow-fast systems. Chaos, 2022, 32, .	2.5	1
62	Tuning Neural Synchronization: The Role of Variable Oscillation Frequencies in Neural Circuits. Frontiers in Systems Neuroscience, 0, 16, .	2.5	4
63	Patterns of synchronization in 2D networks of inhibitory neurons. Frontiers in Computational Neuroscience, 0, 16, .	2.1	Ο
64	Correlation sum scalings from mixed-mode oscillations in weakly coupled molecular lasers. Chaos, 2022, 32, .	2.5	5
65	Frequency modulation of cortical rhythmicity governs behavioral variability, excitability and synchrony of neurons in the visual cortex. Scientific Reports, 2022, 12, .	3.3	0
67	Mitigation and suppression of rare events in weakly coupled lasers. Chaos, Solitons and Fractals, 2023, 171, 113462.	5.1	1