Synchronizing genetic relaxation oscillators by intercel

Citation Report

#	ARTICLE	IF	CITATIONS
1	Stress-Induced Fas Ligand Expression in T Cells Is Mediated through a MEK Kinase 1-Regulated Response Element in the Fas Ligand Promoter. Molecular and Cellular Biology, 1998, 18, 5414-5424.	1.1	186
2	Engineered gene circuits. Nature, 2002, 420, 224-230.	13.7	660
3	Genetic circuit building blocks for cellular computation, communications, and signal processing. Natural Computing, 2003, 2, 47-84.	1.8	165
4	Modeling Genetic Switches with Positive Feedback Loops. Journal of Theoretical Biology, 2003, 221, 379-399.	0.8	106
5	Constructive effects of fluctuations in genetic and biochemical regulatory systems. BioSystems, 2003, 72, 241-251.	0.9	51
6	All together now. Nature, 2003, 421, 780-782.	13.7	16
7	Building a cell cycle oscillator: hysteresis and bistability in the activation of Cdc2. Nature Cell Biology, 2003, 5, 346-351.	4.6	676
8	The Engineering of Gene Regulatory Networks. Annual Review of Biomedical Engineering, 2003, 5, 179-206.	5.7	174
9	Oscillatory Growth of Silica Tubes in Chemical Gardens. Journal of the American Chemical Society, 2003, 125, 4338-4341.	6.6	144
10	Motifs, modules and games in bacteria. Current Opinion in Microbiology, 2003, 6, 125-134.	2.3	280
11	Selectivity of explicit internal signal stochastic resonance in a chemical model. Journal of Chemical Physics, 2003, 119, 7050-7053.	1.2	2
12	Estimation of gene regulatory network by genetic algorithm and pairwise correlation analysis. , 0, , .		4
13	Modelling periodic oscillation of biological systems with multiple timescale networks. IET Systems Biology, 2004, 1, 71-84.	2.0	66
14	Biochemical Network Stochastic Simulator (BioNetS): software for stochastic modeling of biochemical networks. BMC Bioinformatics, 2004, 5, 24.	1.2	111
15	Frequency domain chemical Langevin analysis of stochasticity in gene transcriptional regulation. Journal of Theoretical Biology, 2004, 229, 383-394.	0.8	74
16	Control of internal and external noise in genetic regulatory networks. Journal of Theoretical Biology, 2004, 230, 301-312.	0.8	59
17	Synthetic gene oscillators by negative feedback networks. , 2004, 2004, 2877-80.		0
18	Dynamics of gene regulatory networks with cell division cycle. Physical Review E, 2004, 70, 011909.	0.8	47

#	Article	IF	Citations
19	Design of artificial cell-cell communication using gene and metabolic networks. Proceedings of the National Academy of Sciences of the United States of America, 2004, 101, 2299-2304.	3.3	151
20	Frequency domain chemical Langevin analysis of stochasticity in gene transcriptional regulation. Journal of Theoretical Biology, 2004, , .	0.8	0
21	Modeling a synthetic multicellular clock: Repressilators coupled by quorum sensing. Proceedings of the National Academy of Sciences of the United States of America, 2004, 101, 10955-10960.	3.3	512
22	Synchrony in a Population of Hysteresis-Based Genetic Oscillators. SIAM Journal on Applied Mathematics, 2004, 65, 392-425.	0.8	103
23	Emerging foundations: nano-engineering and bio-microelectronics for environmental biotechnology. Current Opinion in Microbiology, 2004, 7, 267-273.	2.3	29
24	Engineering in the biological substrate: information processing in genetic circuits. Proceedings of the IEEE, 2004, 92, 848-863.	16.4	41
26	Stochastic resonance in overdamped two coupled anharmonic oscillators. Physica A: Statistical Mechanics and Its Applications, 2005, 347, 99-116.	1.2	18
27	Effect of time delay on pattern formation: Competition between homogenisation and patterning. Physica D: Nonlinear Phenomena, 2005, 207, 254-271.	1.3	19
28	Single-cell gene-switching networks and heterogeneous cell population phenotypes. Computers and Chemical Engineering, 2005, 29, 631-643.	2.0	8
29	Explicit internal signal stochastic resonance and mechanic of noise-resistance in a chemical oscillator. Computers and Chemical Engineering, 2005, 29, 1801-1804.	2.0	1
30	Advances in synthetic biology: on the path from prototypes to applications. Current Opinion in Biotechnology, 2005, 16, 476-483.	3.3	162
31	Cellular oscillators: rhythmic gene expression and metabolism. Current Opinion in Cell Biology, 2005, 17, 223-229.	2.6	124
32	Dose–response modeling in reproductive toxicology in the systems biology era. Reproductive Toxicology, 2005, 19, 327-337.	1.3	30
33	A mechanism of synchronization in interacting multi-cell genetic systems. Physica D: Nonlinear Phenomena, 2005, 211, 107-127.	1.3	16
34	Noise-induced cooperative behavior in a multicell system. Bioinformatics, 2005, 21, 2722-2729.	1.8	82
35	Stochastic multiresonance in the coupled relaxation oscillators. Chaos, 2005, 15, 023105.	1.0	25
36	Molecular Communication through Stochastic Synchronization Induced by Extracellular Fluctuations. Physical Review Letters, 2005, 95, 178103.	2.9	138
37	Excitation functions of coupling. Physical Review E, 2005, 71, 066211.	0.8	10

#	ARTICLE	IF	CITATIONS
38	Synchronizing Genetic Oscillators by Signaling Molecules. Journal of Biological Rhythms, 2005, 20, 257-269.	1.4	64
39	Designing Gene Regulatory Networks With Specified Functions. IEEE Transactions on Circuits and Systems Part 1: Regular Papers, 2006, 53, 2444-2450.	0.1	22
40	Model Reduction and Physical Understanding of Slowly Oscillating Processes: The Circadian Cycle. Multiscale Modeling and Simulation, 2006, 5, 1297-1332.	0.6	69
41	Synthetic biology: new engineering rules for an emerging discipline. Molecular Systems Biology, 2006, 2, 2006.0028.	3.2	820
42	Harmonies from noise. Nature, 2006, 439, 27-28.	13.7	35
43	Systems analysis of a quorum sensing network: Design constraints imposed by the functional requirements, network topology and kinetic constants. BioSystems, 2006, 83, 178-187.	0.9	79
44	Synchronizing a multicellular system by external input: an artificial control strategy. Bioinformatics, 2006, 22, 1775-1781.	1.8	17
45	Noise-induced inhibitory suppression of frequency-selective stochastic resonance. Physical Review E, 2006, 74, 046220.	0.8	11
46	Synchronization of electronic genetic networks. Chaos, 2006, 16, 013127.	1.0	16
47	COHERENT SYNCHRONIZATION IN LINEARLY COUPLED NONLINEAR SYSTEMS. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2006, 16, 1375-1387.	0.7	3
48	Synchronization of coupled nonidentical genetic oscillators. Physical Biology, 2006, 3, 37-44.	0.8	120
49	Quantized cycling time in artificial gene networks induced by noise and intercell communication. Physical Review E, 2007, 76, 020901.	0.8	10
50	Multistability and Clustering in a Population of Synthetic Genetic Oscillators via Phase-Repulsive Cell-to-Cell Communication. Physical Review Letters, 2007, 99, 148103.	2.9	206
51	Effective mechanisms for the synchronization of stochastic oscillators. Physical Review E, 2007, 76, 041136.	0.8	13
52	Inherent multistability in arrays of autoinducer coupled genetic oscillators. Physical Review E, 2007, 75, 031916.	0.8	82
53	Effects of coupling strength and space on the dynamics of coupled toggle switches in stochastic gene networks with multiple-delayed reactions. Physical Review E, 2007, 75, 061903.	0.8	18
54	Stochastic suppression of gene expression oscillators under intercell coupling. Physical Review E, 2007, 75, 031917.	0.8	15
55	A synthetic biology challenge: making cells compute. Molecular BioSystems, 2007, 3, 343.	2.9	35

#	ARTICLE	IF	CITATIONS
56	Biology by design: reduction and synthesis of cellular components and behaviour. Journal of the Royal Society Interface, 2007, 4, 607-623.	1.5	56
57	Contraction principle and its applications in synchronization of nonlinearly coupled systems. Chaos, Solitons and Fractals, 2007, 32, 1147-1153.	2.5	5
58	Synchronization rate of synchronized coupled systems. Physica A: Statistical Mechanics and Its Applications, 2007, 385, 689-699.	1.2	3
59	Extracellular noise-induced stochastic synchronization in heterogeneous quorum sensing network. Journal of Theoretical Biology, 2007, 245, 726-736.	0.8	14
60	Discovering functions and revealing mechanisms at molecular level from biological networks. Proteomics, 2007, 7, 2856-2869.	1.3	110
61	Noise-induced switches in network systems of the genetic toggle switch. BMC Systems Biology, 2007, 1, 50.	3.0	83
62	Stochastic synchronization of genetic oscillator networks. BMC Systems Biology, 2007, 1, 6.	3.0	52
63	Mode decomposition for a synchronous state and its applications. Chaos, Solitons and Fractals, 2007, 31, 718-725.	2.5	1
64	Regulative differentiation as bifurcation of interacting cell population. Journal of Theoretical Biology, 2008, 253, 779-787.	0.8	22
65	Synchronization among tumour-like cell aggregations coupled by quorum sensing: A theoretical study. Computers and Mathematics With Applications, 2008, 55, 1842-1853.	1.4	4
66	The General Growth Logistics of Cell Populations. Cell Biochemistry and Biophysics, 2008, 51, 51-66.	0.9	8
67	Positive feedback in cellular control systems. BioEssays, 2008, 30, 542-555.	1.2	236
68	Modeling and Analyzing Biological Oscillations in Molecular Networks. Proceedings of the IEEE, 2008, 96, 1361-1385.	16.4	31
69	OptCircuit: An optimization based method for computational design of genetic circuits. BMC Systems Biology, 2008, 2, 24.	3.0	74
70	Synchronization of genetic oscillators. Chaos, 2008, 18, 037126.	1.0	65
71	Genetic oscillation deduced from Hopf bifurcation in a genetic regulatory network with delays. Mathematical Biosciences, 2008, 215, 55-63.	0.9	77
72	Stochastic model and synchronization analysis for large-scale oscillator networks and their applications. Proceedings of the Institution of Mechanical Engineers Part I: Journal of Systems and Control Engineering, 2008, 222, 711-720.	0.7	0
73	Synchronization and clustering across a population of genetic oscillators via attractive or repulsive coupling. , 2008, , .		0

#	ARTICLE	IF	CITATIONS
74	Implications of Rewiring Bacterial Quorum Sensing. Applied and Environmental Microbiology, 2008, 74, 437-445.	1.4	70
75	Noise Reduction by Diffusional Dissipation in a Minimal Quorum Sensing Motif. PLoS Computational Biology, 2008, 4, e1000167.	1.5	48
76	Environmental noise-induced synchronized switching between gene states. , 2008, , .		0
77	Noise-induced rhythm and synchronization across an ensemble of stochastic genetic oscillators. , 2008, , .		0
78	Coherence, collective rhythm, and phase difference distribution in populations of stochastic genetic oscillators with cellular communication. Physical Review E, 2008, 78, 031901.	0.8	8
79	Multistability of synthetic genetic networks with repressive cell-to-cell communication. Physical Review E, 2008, 78, 031904.	0.8	84
81	Timing Cellular Decision Making Under Noise via Cell–Cell Communication. PLoS ONE, 2009, 4, e4872.	1.1	47
82	How to Achieve Fast Entrainment? The Timescale to Synchronization. PLoS ONE, 2009, 4, e7057.	1.1	56
83	Entraining synthetic genetic oscillators. Chaos, 2009, 19, 033139.	1.0	3
84	Synchronization and clustering of synthetic genetic networks: A role for cis-regulatory modules. Physical Review E, 2009, 79, 041903.	0.8	27
85	Characterization and merger of oscillatory mechanisms in an artificial genetic regulatory network. Chaos, 2009, 19, 033115.	1.0	18
86	Forced periodic expression of G$_1$ cyclins phase-locks the budding yeast cell cycle. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 6632-6637.	3.3	60
87	Detuning-dependent dominance of oscillation death in globally coupled synthetic genetic oscillators. Europhysics Letters, 2009, 85, 28002.	0.7	60
88	Modelling of intercellular synchronization in the *Drosophila* circadian clock. Chinese Physics B, 2009, 18, 1294-1300.	0.7	5
89	The pedestrian watchmaker: Genetic clocks from engineered oscillators. FEBS Letters, 2009, 583, 3931-3937.	1.3	25
91	Next-generation synthetic gene networks. Nature Biotechnology, 2009, 27, 1139-1150.	9.4	321
92	Engineering multicellular systems by cell–cell communication. Current Opinion in Biotechnology, 2009, 20, 461-470.	3.3	48
93	Synthetic biology: exploring and exploiting genetic modularity through the design of novel biological networks. Molecular BioSystems, 2009, 5, 704.	2.9	55

#	ARTICLE	IF	CITATIONS
94	How to Synchronize Biological Clocks. Journal of Computational Biology, 2009, 16, 379-393.	0.8	38
95	Decoding biological principles using gene circuits. Molecular BioSystems, 2009, 5, 695.	2.9	13
96	An algorithm for the construction of synthetic self synchronizing biological circuits. , 2009, , .		5
97	Collective dynamics of genetic oscillators with cell-to-cell communication: a study case of signal integration. European Physical Journal B, 2010, 75, 365-372.	0.6	6
98	Parameter mismatches and oscillation death in coupled oscillators. Chaos, 2010, 20, 023132.	1.0	75
99	Intrinsic common noise in a system of two coupled Brusselators. Chemical Physics, 2010, 375, 348-358.	0.9	6
100	Cooperative differentiation through clustering in multicellular populations. Journal of Theoretical Biology, 2010, 263, 189-202.	0.8	98
101	Synchronization of stochastic genetic oscillator networks with time delays and Markovian jumping parameters. Neurocomputing, 2010, 73, 2532-2539.	3.5	47
102	Robust dynamical pattern formation from a multifunctional minimal genetic circuit. BMC Systems Biology, 2010, 4, 48.	3.0	8
103	Proteomic signals in modular transcriptional cascades: A discrete time and cellular automaton approach. Physica D: Nonlinear Phenomena, 2010, 239, 967-971.	1.3	1
104	A synchronized quorum of genetic clocks. Nature, 2010, 463, 326-330.	13.7	916
105	GA-based Design Algorithms for the Robust Synthetic Genetic Oscillators with Prescribed Amplitude, Period and Phase. Gene Regulation and Systems Biology, 2010, 4, GRSB.S4818.	2.3	28
106	A synthetic low-frequency mammalian oscillator. Nucleic Acids Research, 2010, 38, 2702-2711.	6.5	93
107	Cell cycle-dependent variations in protein concentration. Nucleic Acids Research, 2010, 38, 2676-2681.	6.5	57
108	The Onset of Collective Behavior in Social Amoebae. Science, 2010, 328, 1021-1025.	6.0	283
109	Tuning and controlling gene expression noise in synthetic gene networks. Nucleic Acids Research, 2010, 38, 2712-2726.	6.5	143
110	Engineering scalable biological systems. Bioengineered Bugs, 2010, 1, 378-384.	2.0	11
111	Phase Transitions of Nonlinear Waves in Quadratic Waveguide Arrays. Physical Review Letters, 2010, 105, 233905.	2.9	19

#	ARTICLE	IF	CITATIONS
112	Dynamical properties of the repressilator model. Physical Review E, 2010, 81, 066206.	0.8	62
113	Topological structures enhance the presence of dynamical regimes in synthetic networks. Chaos, 2010, 20, 045111.	1.0	16
114	A comparative analysis of synthetic genetic oscillators. Journal of the Royal Society Interface, 2010, 7, 1503-1524.	1.5	180
115	A design principle underlying the synchronization of oscillations in cellular systems. Journal of Cell Science, 2010, 123, 537-543.	1.2	55
116	Architecture-Dependent Robustness and Bistability in a Class of Genetic Circuits. Biophysical Journal, 2010, 99, 1034-1042.	0.2	15
117	Global convergence of quorum-sensing networks. Physical Review E, 2010, 82, 041919.	0.8	54
118	Crowd Synchrony and Quorum Sensing in Delay-Coupled Lasers. Physical Review Letters, 2010, 105, 264101.	2.9	87
119	Watch the clockâ€"engineering biological systems to be on time. Current Opinion in Genetics and Development, 2010, 20, 634-643.	1.5	14
120	Approaching the molecular origins of collective dynamics in oscillating cell populations. Current Opinion in Genetics and Development, 2010, 20, 574-580.	1.5	26
121	Dynamics in the mixed microbial concourse. Genes and Development, 2010, 24, 2603-2614.	2.7	159
122	Understanding Bacterial Cellâˆ'Cell Communication with Computational Modeling. Chemical Reviews, 2011, 111, 238-250.	23.0	40
123	Physical approaches to the dynamics of genetic circuits: a tutorial. Contemporary Physics, 2011, 52, 439-464.	0.8	13
124	Automated refinement and inference of analytical models for metabolic networks. Physical Biology, 2011, 8, 055011.	0.8	108
125	Synchronization in networks of genetic oscillators with delayed coupling. Asian Journal of Control, 2011, 13, 713-725.	1.9	26
126	Modeling circadian clocks: Roles, advantages, and limitations. Open Life Sciences, 2011, 6, 712-729.	0.6	9
127	Modeling a synthetic biological chaotic system: relaxation oscillators coupled by quorum sensing. Nonlinear Dynamics, 2011, 63, 711-718.	2.7	15
128	Influences of a periodic signal on a noisy synthetic gene network. Science China Chemistry, 2011, 54, 992-997.	4.2	0
129	Autonomous Synchronization of Chemically Coupled Synthetic Oscillators. Bulletin of Mathematical Biology, 2011, 73, 2678-2706.	0.9	7

#	ARTICLE	IF	CITATIONS
130	Noise regulation by quorum sensing in low mRNA copy number systems. BMC Systems Biology, 2011, 5, 11.	3.0	16
131	Model for a population-based microbial oscillator. BioSystems, 2011, 105, 286-294.	0.9	7
132	Model for biological communication in a nanofabricated cell-mimic driven by stochastic resonance. Nano Communication Networks, 2011, 2, 39-49.	1.6	12
133	Synthetic multicellular oscillatory systems: controlling protein dynamics with genetic circuits. Physica Scripta, 2011, 84, 045007.	1.2	5
134	Communication-induced multistability and multirhythmicity in a synthetic multicellular system. Physical Review E, 2011, 83, 051907.	0.8	5
135	Dynamics of coupled repressilators: The role of mRNA kinetics and transcription cooperativity. Physical Review E, 2011, 83, 031901.	0.8	24
136	Heat-inducible transgene expression with transcriptional amplification mediated by a transactivator. International Journal of Hyperthermia, 2012, 28, 788-798.	1.1	8
137	Small-World Network Spectra in Mean-Field Theory. Physical Review Letters, 2012, 108, 218701.	2.9	35
138	FEEDBACK-INDUCED COMPLEX DYNAMICS IN A TWO-COMPONENT REGULATORY CIRCUIT. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2012, 22, 1250059.	0.7	1
139	The Relevance of the Time Domain to Neural Network Models. , 2012, , .		1
140	Phase-flip transition in nonlinear oscillators coupled by dynamic environment. Chaos, 2012, 22, 023147.	1.0	38
141	A Synthetic Biology Approach to Understanding Cellular Information Processing. ACS Synthetic Biology, 2012, 1, 389-402.	1.9	27
142	Modeling synthetic gene oscillators. Mathematical Biosciences, 2012, 236, 1-15.	0.9	55
143	Dynamical quorum-sensing in oscillators coupled through an external medium. Physica D: Nonlinear Phenomena, 2012, 241, 1782-1788.	1.3	44
144	â€œQuorum sensingâ€•generated multistability and chaos in a synthetic genetic oscillator. Chaos, 2012, 22, 023117.	1.0	13
145	Effect of Model Selection on Prediction of Periodic Behavior in Gene Regulatory Networks. Bulletin of Mathematical Biology, 2012, 74, 1706-1726.	0.9	5
146	Application of mode decomposition approach to the synchronization of the non-identical dynamical systems. Applied Mathematical Modelling, 2012, 36, 779-791.	2.2	0
147	Genetic design automation: engineering fantasy or scientific renewal?. Trends in Biotechnology, 2012, 30, 120-126.	4.9	47

#	ARTICLE	IF	CITATIONS
148	A Curie-Weiss Model with Dissipation. Journal of Statistical Physics, 2013, 152, 37-53.	0.5	20
149	Synchronization and chaos control by quorum sensing mechanism. Nonlinear Dynamics, 2013, 73, 1253-1269.	2.7	13
150	Common noise induced synchronous circadian oscillations in uncoupled non-identical systems. Biophysical Chemistry, 2013, 173-174, 15-20.	1.5	2
151	Bio-inspired computation using synthetic genetic network. Physics Letters, Section A: General, Atomic and Solid State Physics, 2013, 377, 367-369.	0.9	9
152	Oscillation quenching mechanisms: Amplitude vs. oscillation death. Physics Reports, 2013, 531, 173-199.	10.3	340
153	Oscillation and Synchronization of Molecular Machines by the Diffusion of Inhibitory Molecules. IEEE Nanotechnology Magazine, 2013, 12, 601-608.	1.1	72
154	Optimal Transmission Probability in Binary Molecular Communication. IEEE Communications Letters, 2013, 17, 1152-1155.	2.5	24
155	Synthetic circuits integrating logic and memory in living cells. Nature Biotechnology, 2013, 31, 448-452.	9.4	569
156	How a â€˜drive to makeâ€™ shapes synthetic biology. Studies in History and Philosophy of Science Part C:Studies in History and Philosophy of Biological and Biomedical Sciences, 2013, 44, 632-640.	0.8	15
157	Synthetic analog computation in living cells. Nature, 2013, 497, 619-623.	13.7	467
158	Entrained Collective Rhythms of Multicellular Systems: Partial Impulsive Control Strategy. Abstract and Applied Analysis, 2013, 2013, 1-10.	0.3	0
159	COMPLEX DYNAMICAL ANALYSIS OF A COUPLED NETWORK FROM INNATE IMMUNE RESPONSES. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2013, 23, 1350180.	0.7	20
160	Electronic Implementation of a Repressilator with Quorum Sensing Feedback. PLoS ONE, 2013, 8, e62997.	1.1	19
161	Bacterial Sensors in Microfouling Assays. , 0, , .		1
162	Control of protein concentrations in heterogeneous cell populations. , 2013, , .		17
163	Analog synthetic biology. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2014, 372, 20130110.	1.6	86
164	Quasisynchronization in Quorum Sensing Systems with Parameter Mismatches. Abstract and Applied Analysis, 2014, 2014, 1-7.	0.3	0
166	Dynamic Behavior of an Isolated Repressilator with Feedback. Radiophysics and Quantum Electronics, 2014, 56, 697-707.	0.1	1

#	ARTICLE	IF	CITATIONS
167	Coarse-grained optimization-driven design and piecewise linear modeling of synthetic genetic circuits. European Journal of Operational Research, 2014, 237, 665-676.	3.5	10
168	Biological Noise Abatement: Coordinating the Responses of Autonomous Bacteria in a Synthetic Biofilm to a Fluctuating Environment Using a Stochastic Bistable Switch. ACS Synthetic Biology, 2014, 3, 286-297.	1.9	8
169	A Computational Method for Automated Characterization of Genetic Components. ACS Synthetic Biology, 2014, 3, 578-588.	1.9	23
170	Molecular communication with Brownian motion and a positive drift: performance analysis of amplitude modulation schemes. IET Communications, 2014, 8, 2413-2422.	1.5	9
171	Synchronization error bound of chaotic delayed neural networks. Nonlinear Dynamics, 2014, 78, 2349-2357.	2.7	8
172	Bipolar disorder dynamics: affective instabilities, relaxation oscillations and noise. Journal of the Royal Society Interface, 2015, 12, 20150670.	1.5	41
173	Can the Natural Diversity of Quorum-Sensing Advance Synthetic Biology?. Frontiers in Bioengineering and Biotechnology, 2015, 3, 30.	2.0	41
174	Modeling of the ComRS Signaling Pathway Reveals the Limiting Factors Controlling Competence in Streptococcus thermophilus. Frontiers in Microbiology, 2015, 6, 1413.	1.5	36
175	Evaluation of Molecular Oscillation for Nanonetworks Based on Quorum Sensing. , 2015, , .		1
176	Power-rate synchronization of coupled genetic oscillators with unbounded time-varying delay. Cognitive Neurodynamics, 2015, 9, 549-559.	2.3	7
177	Collective relaxation dynamics of small-world networks. Physical Review E, 2015, 91, 052815.	0.8	31
178	Intra-layer synchronization in multiplex networks. Europhysics Letters, 2015, 110, 20010.	0.7	105
179	Bipartite networks of oscillators with distributed delays: Synchronization branches and multistability. Physical Review E, 2015, 91, 042906.	0.8	3
180	Performance Analysis of Amplitude Modulation Schemes for Diffusion-Based Molecular Communication. IEEE Transactions on Wireless Communications, 2015, 14, 5681-5691.	6.1	55
181	Boolean network model for GPR142 against Type 2 diabetes and relative dynamic change ratio analysis using systems and biological circuits approach. Systems and Synthetic Biology, 2015, 9, 45-54.	1.0	21
182	Using shortcut edges to maximize the number of triangles in graphs. Operations Research Letters, 2015, 43, 586-591.	0.5	4
183	Colored Noise Induced Bistable Switch in the Genetic Toggle Switch Systems. IEEE/ACM Transactions on Computational Biology and Bioinformatics, 2015, 12, 579-589.	1.9	12
184	Type-dependent irreversible stochastic spin models for genetic regulatory networks at the level of promotionâ€"inhibition circuitry. Physica A: Statistical Mechanics and Its Applications, 2015, 440, 33-41.	1.2	1

#	Article	IF	Citations
185	Analog Computation by DNA Strand Displacement Circuits. ACS Synthetic Biology, 2016, 5, 898-912.	1.9	106
186	Qualitative and quantitative stability analysis of penta-rhythmic circuits. Nonlinearity, 2016, 29, 3647-3676.	0.6	15
187	Synchronization of Bio-Nanomachines Based on Molecular Diffusion. IEEE Sensors Journal, 2016, 16, 7267-7277.	2.4	18
188	Mathematical Modelling of Bacterial Quorum Sensing: A Review. Bulletin of Mathematical Biology, 2016, 78, 1585-1639.	0.9	66
189	Dynamic information routing in complex networks. Nature Communications, 2016, 7, 11061.	5.8	145
190	Programming Biology: Expanding the Toolset for the Engineering of Transcription. , 2016, , 1-64.		2
191	Convergence, Consensus and Synchronization of Complex Networks via Contraction Theory. Understanding Complex Systems, 2016, , 313-339.	0.3	14
192	Flexible dynamics of two quorum-sensing coupled repressilators. Physical Review E, 2017, 95, 022408.	0.8	14
193	Novel phase-fitted symmetric splitting methods for chemical oscillators. Journal of Mathematical Chemistry, 2017, 55, 238-258.	0.7	2
194	Design of a translation resource allocation controller to manage cellular resource limitations * *APSD and DGB acknowledge funding from the University of Warwick and the EPSRC & BBSRC Centre for Doctoral Training in Synthetic Biology (grant EP/L016494/1). JK and JIJ acknowledge funding from the BBSRC (grant BB/M009769/1). IFAC-PapersOnLine, 2017, 50, 12653-12660.	0.5	2
195	Effect of transcription cooperativity on population behavior. , 2017, , .		0
196	General partial synchronization of drive-response boolean networks. , 2017, , .		0
197	How to couple identical ring oscillators to get quasiperiodicity, extended chaos, multistability, and the loss of symmetry. Communications in Nonlinear Science and Numerical Simulation, 2018, 62, 462-479.	1.7	17
198	A dual role of extrinsic noise in coupled synthetic clock cells due to a two-steps synchronization mechanism. Physica A: Statistical Mechanics and Its Applications, 2018, 501, 170-177.	1.2	1
199	Combining a Toggle Switch and a Repressilator within the AC-DC Circuit Generates Distinct Dynamical Behaviors. Cell Systems, 2018, 6, 521-530.e3.	2.9	96
200	Chimera at the phase-flip transition of an ensemble of identical nonlinear oscillators. Communications in Nonlinear Science and Numerical Simulation, 2018, 59, 30-46.	1.7	12
201	Synchronization in networks of RÃ¶ssler oscillators with long-range interactions. , 2018, , .		0
202	Synchronization by uncorrelated noise: interacting rhythms in interconnected oscillator networks. Scientific Reports, 2018, 8, 6949.	1.6	28

#	Article	IF	Citations
203	Synchronous Optimal Design of Genetic Oscillator Networks Using a Novel VonPSO Algorithm. , 2019, , .		0
204	Chimera state in a two-dimensional network of coupled genetic oscillators. Europhysics Letters, 2019, 127, 40001.	0.7	2
205	The Clock-Free Asynchronous Receiver Design for Molecular Timing Channels in Diffusion-Based Molecular Communications. IEEE Transactions on Nanobioscience, 2019, 18, 585-596.	2.2	10
206	Connectivity in Molecular Communication With Random Time Constraints. IEEE Access, 2019, 7, 113121-113130.	2.6	8
207	Molecular Communication With Anomalous Diffusion in Stochastic Nanonetworks. IEEE Transactions on Communications, 2019, 67, 8378-8393.	4.9	16
208	Synchronization in a multiplex network of gene oscillators. Physics Letters, Section A: General, Atomic and Solid State Physics, 2019, 383, 125919.	0.9	6
209	Synchronization Analysis for a Class of Genetic Oscillator Networks. Journal of Mathematical Sciences, 2019, 238, 236-247.	0.1	0
210	Integrated Information as a Measure of Cognitive Processes in Coupled Genetic Repressilators. Entropy, 2019, 21, 382.	1.1	6
211	G-protein-coupled receptors function as logic gates for nanoparticle binding using systems and synthetic biology approach. Journal of Materials Research, 2019, 34, 1854-1867.	1.2	3
212	Evaluation and validation of synergistic effects of amyloid-beta inhibitorâ€"gold nanoparticles complex on Alzheimerâ€™s disease using deep neural network approach. Journal of Materials Research, 2019, 34, 1845-1853.	1.2	25
213	Pervasive Positive and Negative Feedback Regulation of Insulin-Like Signaling in<i>Caenorhabditis elegans</i>. Genetics, 2019, 211, 349-361.	1.2	22
214	Quorum sensing for population-level control of bacteria and potential therapeutic applications. Cellular and Molecular Life Sciences, 2020, 77, 1319-1343.	2.4	101
215	Periodic Switching in a Recombinase-Based Molecular Circuit. , 2020, 4, 241-246.		4
216	A Novel Time-Based Modulation Scheme in Time-Asynchronous Channels for Molecular Communications. IEEE Transactions on Nanobioscience, 2020, 19, 59-67.	2.2	9
217	Exploring the mechanisms of cell reprogramming and transdifferentiation via intercellular communication. Physical Review E, 2020, 102, 012406.	0.8	3
218	Modeling and Analysis of Coupled Bio-molecular Circuits. , 2020, , 215-248.		0
219	Sampled-data general partial synchronization of Boolean control networks. Journal of the Franklin Institute, 2022, 359, 1-11.	1.9	34
220	Evolution of quasiperiodicity in quorum-sensing coupled identical repressilators. Chaos, 2020, 30, 043122.	1.0	9

#	Article	IF	Citations
221	Robustness and timing of cellular differentiation through population-based symmetry breaking. Development (Cambridge), 2021, 148, .	1.2	16
222	Exponential Synchronization of Delayed Switching Genetic Oscillator Networks via Mode-Dependent Partial Impulsive Control. Neural Processing Letters, 2021, 53, 1845-1863.	2.0	3
223	Vertical and horizontal quorum-sensing-based multicellular communications. Trends in Microbiology, 2021, 29, 1130-1142.	3.5	17
224	Cut the noise or couple up: Coordinating circadian and synthetic clocks. IScience, 2021, 24, 103051.	1.9	7
225	Quorum sensing in synthetic biology: A review. Current Opinion in Systems Biology, 2021, 28, 100378.	1.3	28
226	The effect of characteristic times on collective modes of two quorum sensing coupled identical ring oscillators. Chaos, Solitons and Fractals, 2021, 151, 111176.	2.5	1
227	CRISPR interference and its applications. Progress in Molecular Biology and Translational Science, 2021, 180, 123-140.	0.9	8
231	Noise-induced Periodicity: Some Stochastic Models for Complex Biological Systems. Springer INdAM Series, 2014, , 25-35.	0.4	4
233	Dynamics of Multicellular Synthetic Gene Networks. World Scientific Lecture Notes in Complex Systems, 2009, , 33-58.	0.1	1
234	External Stimuli Mediate Collective Rhythms: Artificial Control Strategies. PLoS ONE, 2007, 2, e231.	1.1	15
235	Towards a Synthetic Chloroplast. PLoS ONE, 2011, 6, e18877.	1.1	59
236	Parameter Estimation Methods for Chaotic Intercellular Networks. PLoS ONE, 2013, 8, e79892.	1.1	5
237	A synthetic multi-cellular network of coupled self-sustained oscillators. PLoS ONE, 2017, 12, e0180155.	1.1	7
238	Effective reduction of a three-dimensional circadian oscillator model. Discrete and Continuous Dynamical Systems - Series B, 2020, .	0.5	1
239	Chaosâ€"hyperchaos transition in three identical quorum-sensing mean-field coupled ring oscillators. Chaos, 2021, 31, 103112.	1.0	11
241	Genetic networks: between theory and experimentation. World Scientific Lecture Notes in Complex Systems, 2007, , 215-236.	0.1	0
242	Modeling and Dynamical Analysis of Molecular Networks. Lecture Notes of the Institute for Computer Sciences, Social-Informatics and Telecommunications Engineering, 2009, , 2139-2148.	0.2	1
244	Dynamics analysis of coupled synthetic genetic repressilators. Computer Research and Modeling, 2010, 2, 403-418.	0.2	0

#	Article	IF	Citations
245	Topological Determinants of Synchronizability of Oscillators on Large Complex Networks. Open Bioinformatics Journal, 2011, 5, 42-52.	1.0	0
246	Nonlinear Control of Multicolor Beams in Coupled Optical Waveguides. Springer Series in Optical Sciences, 2012, , 111-132.	0.5	0
247	Adaptation and Contraction Theory for the Synchronization of Complex Neural Networks. , 2012, , 9-32.		1
248	Effects of system size on population behavior. Wuli Xuebao/Acta Physica Sinica, 2013, 62, 118701.	0.2	1
251	Remote and Relay Synchronization. SpringerBriefs in Applied Sciences and Technology, 2018, , 75-91.	0.2	0
253	Complex and Surprising Dynamics in Gene Regulatory Networks. , 2020, , 147-187.		0
254	Engineered Living Materials For Sustainability. Chemical Reviews, 2023, 123, 2349-2419.	23.0	34
255	Quorum Sensing from Two Engineers' Perspectives. Israel Journal of Chemistry, 2023, 63, .	1.0	1
256	Symmetry-breaking rhythms in coupled, identical fast–slow oscillators. Chaos, 2023, 33, .	1.0	3