Kunihiko Kaneko

List of Publications by Year
in descending order

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195 papers	8,474 citations	57631 44 h-index	53109 85 g-index
212 all docs	212 docs citations	212 times ranked	4435 citing authors

#	Article	IF	Citations
1	Clustering, coding, switching, hierarchical ordering, and control in a network of chaotic elements. Physica D: Nonlinear Phenomena, 1990, 41, 137-172.	1.3	754
2	Pattern dynamics in spatiotemporal chaos. Physica D: Nonlinear Phenomena, 1989, 34, 1-41.	1.3	518
3	Overview of coupled map lattices. Chaos, 1992, 2, 279-282.	1.0	326
4	Chaotic but regular posi-nega switch among coded attractors by cluster-size variation. Physical Review Letters, 1989, 63, 219-223.	2.9	251
5	Adaptive Response of a Gene Network to Environmental Changes by Fitness-Induced Attractor Selection. PLoS ONE, 2006, 1, e49.	1.1	237
6	Open Problems in Artificial Life. Artificial Life, 2000, 6, 363-376.	1.0	235
7	Are Attractors Relevant to Turbulence?. Physical Review Letters, 1988, 60, 2715-2718.	2.9	234
8	Lyapunov analysis and information flow in coupled map lattices. Physica D: Nonlinear Phenomena, 1986, 23, 436-447.	1.3	226
9	Chaotic itinerancy. Chaos, 2003, 13, 926-936.	1.0	215
10	Zipfâ€™s Law in Gene Expression. Physical Review Letters, 2003, 90, 088102.	2.9	213
11	Relevance of dynamic clustering to biological networks. Physica D: Nonlinear Phenomena, 1994, 75, 55-73.	1.3	200
12	A Dynamical-Systems View of Stem Cell Biology. Science, 2012, 338, 215-217.	6.0	172
13	Globally coupled circle maps. Physica D: Nonlinear Phenomena, 1991, 54, 5-19.	1.3	148
14	Ubiquity of log-normal distributions in intra-cellular reaction dynamics. Biophysics (Nagoya-shi,) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 22	0.4	145
15	Noise-driven growth rate gain in clonal cellular populations. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 3251-3256.	3.3	144
16	On the relation between fluctuation and response in biological systems. Proceedings of the National Academy of Sciences of the United States of America, 2003, 100, 14086-14090.	3.3	137
17	Evolution of Robustness to Noise and Mutation in Gene Expression Dynamics. PLoS ONE, 2007, 2, e434.	1.1	135
18	Mean field fluctuation of a network of chaotic elements. Physica D: Nonlinear Phenomena, 1992, 55, 368-384.	1.3	131

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19	Fractalization of a torus as a strange nonchaotic attractor. Physical Review E, 1996, 54, 6114-6124.	0.8	124
20	Supertransients, spatiotemporal intermittency and stability of fully developed spatiotemporal chaos. Physics Letters, Section A: General, Atomic and Solid State Physics, 1990, 149, 105-112.	0.9	122
21	Spontaneous Structure Formation in a Network of Chaotic Units with Variable Connection Strengths. Physical Review Letters, 2001, 88, 028701.	2.9	108
22	Oscillatory Protein Expression Dynamics Endows Stem Cells with Robust Differentiation Potential. PLoS ONE, 2011, 6, e27232.	1.1	108
23	Dominance of Milnor Attractors and Noise-Induced Selection in a Multiattractor System. Physical Review Letters, 1997, 78, 2736-2739.	2.9	106
24	Isologous diversification: A theory of cell differentiation. Bulletin of Mathematical Biology, 1997, 59, 139-196.	0.9	94
25	Theory of Robustness of Irreversible Differentiation in a Stem Cell System: Chaos Hypothesis. Journal of Theoretical Biology, 2001, 209, 395-416.	0.8	91
26	Cell division, differentiation and dynamic clustering. Physica D: Nonlinear Phenomena, 1994, 75, 89-102.	1.3	85
27	Transitions Induced by the Discreteness of Molecules in a Small Autocatalytic System. Physical Review Letters, 2001, 86, 2459-2462.	2.9	83
28	On the strength of attractors in a high-dimensional system: Milnor attractor network, robust global attraction, and noise-induced selection. Physica D: Nonlinear Phenomena, 1998, 124, 322-344.	1.3	81
29	Isologous Diversification for Robust Development of Cell Society. Journal of Theoretical Biology, 1999, 199, 243-256.	0.8	79
30	Emergence of Rules in Cell Society: Differentiation, Hierarchy, and Stability. Bulletin of Mathematical Biology, 1998, 60, 659-687.	0.9	78
31	Homeochaos: dynamics stability of a symbiotic network with population dynamics and evolving mutation rates. Physica D: Nonlinear Phenomena, 1992, 56, 406-429.	1.3	70
32	Pluripotency, Differentiation, and Reprogramming: A Gene Expression Dynamics Model with Epigenetic Feedback Regulation. PLoS Computational Biology, 2015, 11, e1004476.	1.5	68
33	Collective Chaos. Physical Review Letters, 1998, 81, 4116-4119.	2.9	66
34	A Generic Mechanism for Adaptive Growth Rate Regulation. PLoS Computational Biology, 2008, 4, e3.	1.5	63
35	Network Evolution of Body Plans. PLoS ONE, 2008, 3, e2772.	1.1	62
36	How selection affects phenotypic fluctuation. Molecular Systems Biology, 2009, 5, 264.	3.2	51

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37	Noisy cell growth rate leads to fluctuating protein concentration in bacteria. Physical Biology, 2009, 6, 036015.	0.8	51
38	Information cascade with marginal stability in a network of chaotic elements. Physica D: Nonlinear Phenomena, 1994, 77, 456-472.	1.3	50
39	Pattern dynamics of a coupled map lattice for open flow. Physica D: Nonlinear Phenomena, 1995, 86, 428-455.	1.3	50
40	Origin of multicellular organisms as an inevitable consequence of dynamical systems. The Anatomical Record, 2002, 268, 327-342.	2.3	48
41	An evolutionary relationship between genetic variation and phenotypic fluctuation. Journal of Theoretical Biology, 2006, 240, 78-86.	0.8	48
42	Emergence of Multicellular Organisms with Dynamic Differentiation and Spatial Pattern. Artificial Life, 1998, 4, 79-93.	1.0	46
43	Chaotic expression dynamics implies pluripotency: when theory and experiment meet. Biology Direct, 2009, 4, 17.	1.9	46
44	Fluctuation and response in biology. Cellular and Molecular Life Sciences, 2011, 68, 1005-1010.	2.4	46
45	Noiseless Collective Motion out of Noisy Chaos. Physical Review Letters, 1999, 82, 4424-4427.	2.9	45
46	Spontaneous structure formation in a network of dynamic elements. Physical Review E, 2003, 67, 046226.	0.8	45
47	On a Kinetic Origin of Heredity: Minority Control in a Replicating System with Mutually Catalytic Molecules. Journal of Theoretical Biology, 2002, 214, 563-576.	0.8	44
48	Evolution equation of phenotype distribution: General formulation and application to error catastrophe. Physical Review E, 2007, 75, 061909.	0.8	43
49	Chemophoresis as a driving force for intracellular organization: Theory and application to plasmid partitioning. Biophysics (Nagoya-shi, Japan), 2011, 7, 77-88.	0.4	43
50	Origin of Complexity in Multicellular Organisms. Physical Review Letters, 2000, 84, 6130-6133.	2.9	42
51	Characterization of stem cells and cancer cells on the basis of gene expression profile stability, plasticity, and robustness. BioEssays, 2011, 33, 403-413.	1.2	42
52	Adaptation to Optimal Cell Growth through Self-Organized Criticality. Physical Review Letters, 2012, 108, 208103.	2.9	42
53	Gene-specific selective sweeps in bacteria and archaea caused by negative frequency-dependent selection. BMC Biology, 2015, 13, 20.	1.7	42
54	Molecular discreteness in reaction-diffusion systems yields steady states not seen in the continuum limit. Physical Review E, 2004, 70, 020901.	0.8	39

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55	From globally coupled maps to complex-systems biology. Chaos, 2015, 25, 097608.	1.0	38
56	Formation of dominant mode by evolution in biological systems. Physical Review E, 2018, 97, 042410.	0.8	38
57	The origin of a primordial genome through spontaneous symmetry breaking. Nature Communications, 2017, 8, 250.	5.8	33
58	Coupled map gas: structure formation and dynamics of interacting motile elements with internal dynamics. Physica D: Nonlinear Phenomena, 2003, 181, 197-214.	1.3	30
59	Tongue-like bifurcation structures of the mean-field dynamics in a network of chaotic elements. Physica D: Nonlinear Phenomena, 1998, 124, 177-200.	1.3	28
60	Recursiveness, switching, and fluctuations in a replicating catalytic network. Physical Review E, 2003, 68, 031909.	0.8	28
61	Imitation games. Physica D: Nonlinear Phenomena, 1994, 75, 328-342.	1.3	27
62	Evolutionâ€development congruence in pattern formation dynamics: Bifurcations in gene expression and regulation of networks structures. Journal of Experimental Zoology Part B: Molecular and Developmental Evolution, 2016, 326, 61-84.	0.6	27
63	Long-range correlation in protein dynamics: Confirmation by structural data and normal mode analysis. PLoS Computational Biology, 2020, 16, e1007670.	1.5	27
64	Dynamics-Evolution Correspondence in Protein Structures. Physical Review Letters, 2021, 127, 098103.	2.9	27
65	Sympatric speciation: compliance with phenotype diversification from a single genotype. Proceedings of the Royal Society B: Biological Sciences, 2000, 267, 2367-2373.	1.2	26
66	How fast elements can affect slow dynamics. Physica D: Nonlinear Phenomena, 2003, 180, 1-16.	1.3	26
67	Funnel Landscape and Mutational Robustness as a Result of Evolution under Thermal Noise. Physical Review Letters, 2009, 102, 148101.	2.9	26
68	Minimal model for stem-cell differentiation. Physical Review E, 2013, 88, 032718.	0.8	25
69	Functional dynamics. I: Articulation process. Physica D: Nonlinear Phenomena, 2000, 138, 225-250.	1.3	24
70	Reproduction of a Protocell by Replication of a Minority Molecule in a Catalytic Reaction Network. Physical Review Letters, 2010, 105, 268103.	2.9	24
71	Reciprocity Between Robustness of Period and Plasticity of Phase in Biological Clocks. Physical Review Letters, 2015, 115, 218101.	2.9	24
72	Dominance of Milnor attractors in globally coupled dynamical systems with more than7Â±2degrees of freedom. Physical Review E, 2002, 66, 055201.	0.8	23

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73	Evolution of Cooperation, Differentiation, Complexity, and Diversity in an Iterated Three-Person Game. Artificial Life, 1995, 2, 293-304.	1.0	22
74	Regulative differentiation as bifurcation of interacting cell population. Journal of Theoretical Biology, 2008, 253, 779-787.	0.8	22
75	Cooperative Adaptive Responses in Gene Regulatory Networks with Many Degrees of Freedom. PLoS Computational Biology, 2013, 9, e1003001.	1.5	22
76	Evolution of Robustness and Plasticity under Environmental Fluctuation: Formulation in Terms of Phenotypic Variances. Journal of Statistical Physics, 2012, 148, 687-705.	0.5	21
77	Epigenetic Feedback Regulation Accelerates Adaptation and Evolution. PLoS ONE, 2013, 8, e61251.	1.1	21
78	Isologous diversification: A theory of cell differentiation. Bulletin of Mathematical Biology, 1997, 59, 139-196.	0.9	20
79	Relationship among phenotypic plasticity, phenotypic fluctuations, robustness, and evolvability; Waddingtonâ€™s legacy revisited under the spirit of Einstein. Journal of Biosciences, 2009, 34, 529-542.	0.5	20
80	Proportionality between variances in gene expression induced by noise and mutation: consequence of evolutionary robustness. BMC Evolutionary Biology, 2011, 11, 27.	3.2	20
81	Global relationships in fluctuation and response in adaptive evolution. Journal of the Royal Society Interface, 2015, 12, 20150482.	1.5	20
82	Theoretical analysis of discreteness-induced transition in autocatalytic reaction dynamics. Physical Review E, 2015, 91, 022707.	0.8	20
83	Homeorhesis in Waddington's landscape by epigenetic feedback regulation. Physical Review Research, 2020, 2, .	1.3	20
84	Chaos as a Source of Complexity and Diversity in Evolution. Artificial Life, 1993, 1, 163-177.	1.0	19
85	Robust development as a consequence of generated positional information. Journal of Theoretical Biology, 2003, 224, 413-435.	0.8	19
86	Alteration of Chemical Concentrations through Discreteness-Induced Transitions in Small Autocatalytic Systems. Journal of the Physical Society of Japan, 2003, 72, 62-68.	0.7	19
87	Embedding Responses in Spontaneous Neural Activity Shaped through Sequential Learning. PLoS Computational Biology, 2013, 9, e1002943.	1.5	19
88	Challenges for Complex Microbial Ecosystems: Combination of Experimental Approaches with Mathematical Modeling. Microbes and Environments, 2013, 28, 285-294.	0.7	19
89	Universal Relationship in Gene-Expression Changes for Cells in Steady-Growth State. Physical Review X, 2015, 5, .	2.8	19
90	Evolutionary dimension reduction in phenotypic space. Physical Review Research, 2020, 2, .	1.3	19

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91	Discreteness-induced transition in catalytic reaction networks. Physical Review E, 2007, 76, 041915.	0.8	17
92	Entropy production of a steady-growth cell with catalytic reactions. Physical Review E, 2014, 90, 042714.	0.8	17
93	Statistical Evolutionary Laws in Music Styles. Scientific Reports, 2019, 9, 15993.	1.6	17
94	Robustness under Functional Constraint: The Genetic Network for Temporal Expression in Drosophila Neurogenesis. PLoS Computational Biology, 2010, 6, e1000760.	1.5	17
95	Discreteness-induced stochastic steady state in reaction diffusion systems: self-consistent analysis and stochastic simulations. Physica D: Nonlinear Phenomena, 2005, 205, 87-99.	1.3	16
96	Self-organized criticality of a catalytic reaction network under flow. Physical Review E, 2009, 80, 010902.	0.8	16
97	Macroscopic Theory for Evolving Biological Systems Akin to Thermodynamics. Annual Review of Biophysics, 2018, 47, 273-290.	4.5	16
98	Functional dynamics. Physica D: Nonlinear Phenomena, 2001, 149, 174-196.	1.3	15
99	Evolutionary origin of power-laws in a biochemical reaction network: Embedding the distribution of abundance into topology. Physical Review E, 2006, 73, 011912.	0.8	15
100	Bifurcation cascade as chaotic itinerancy with multiple time scales. Chaos, 2003, 13, 1041-1056.	1.0	14
101	On Recursive Production and Evolvability of Cells: Catalytic Reaction Network Approach. Advances in Chemical Physics, 2005, , 543-598.	0.3	14
102	Shaping robust system through evolution. Chaos, 2008, 18, 026112.	1.0	14
103	Symbiotic Cell Differentiation and Cooperative Growth in Multicellular Aggregates. PLoS Computational Biology, 2016, 12, e1005042.	1.5	14
104	Relaxation, the Boltzmann-Jeans conjecture, and chaos. Physical Review E, 2001, 64, 055205.	0.8	13
105	Developmental potential for morphogenesis in vivo and in vitro. Journal of Experimental Zoology Part B: Molecular and Developmental Evolution, 2008, 310B, 492-503.	0.6	13
106	Energy Storage in a Hamiltonian System in Partial Contact with a Heat Bath. Journal of the Physical Society of Japan, 2000, 69, 1255-1258.	0.7	12
107	Evolution of Genetic Codes through Isologous Diversification of Cellular States. Artificial Life, 2000, 6, 283-305.	1.0	12
108	Baldwin effect under multipeaked fitness landscapes: Phenotypic fluctuation accelerates evolutionary rate. Physical Review E, 2013, 87, 052701.	0.8	12

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109	Embedding dual function into molecular motors through collective motion. Scientific Reports, 2017, 7, 44288.	1.6	12
110	Stronger selection can slow down evolution driven by recombination on a smooth fitness landscape. PLoS ONE, 2017, 12, e0183120.	1.1	12
111	Selection of initial conditions for recursive production of multicellular organisms. Journal of Theoretical Biology, 2005, 233, 501-514.	0.8	11
112	Question 8: From a Set of Chemical Reactions to Reproducing Cells. Origins of Life and Evolution of Biospheres, 2007, 37, 449-453.	0.8	11
113	Kinetic Selection of Template Polymer with Complex Sequences. Physical Review Letters, 2018, 121, 118101.	2.9	11
114	The origin of the central dogma through conflicting multilevel selection. Proceedings of the Royal Society B: Biological Sciences, 2019, 286, 20191359.	1.2	11
115	Advantage of Leakage of Essential Metabolites for Cells. Physical Review Letters, 2020, 124, 048101.	2.9	11
116	Emergence of exploitation as symmetry breaking in iterated prisoner's dilemma. Physical Review Research, 2019, 1, .	1.3	11
117	Functional sensitivity and mutational robustness of proteins. Physical Review Research, 2020, 2, .	1.3	11
118	Relaxation to Equilibrium Can Be Hindered by Transient Dissipative Structures. Physical Review Letters, 2004, 92, 258302.	2.9	10
119	Magic Number7Â±2in Networks of Threshold Dynamics. Physical Review Letters, 2005, 94, 058102.	2.9	10
120	Associative memory model with spontaneous neural activity. Europhysics Letters, 2012, 98, 48002.	0.7	10
121	Phenotypic Plasticity and Robustness: Evolutionary Stability Theory, Gene Expression Dynamics Model, and Laboratory Experiments. Advances in Experimental Medicine and Biology, 2012, 751, 249-278.	0.8	10
122	Kinetic Memory Based on the Enzyme-Limited Competition. PLoS Computational Biology, 2014, 10, e1003784.	1.5	10
123	Optimal size for emergence of self-replicating polymer system. Physical Review E, 2016, 93, 032503.	0.8	10
124	Evolution of kinship structures driven by marriage tie and competition. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 2378-2384.	3.3	10
125	Adaptation of metabolite leakiness leads to symbiotic chemical exchange and to a resilient microbial ecosystem. PLoS Computational Biology, 2021, 17, e1009143.	1.5	10
126	Consistency principle in biological dynamical systems. Theory in Biosciences, 2008, 127, 195-204.	0.6	9

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127	Chaotic Griffiths Phase with Anomalous Lyapunov Spectra in Coupled Map Networks. Physical Review Letters, 2016, 117, 254101.	2.9	9
128	Dynamics robustness of cascading systems. PLoS Computational Biology, 2017, 13, e1005434.	1.5	9
129	Dimensional Reduction in Evolving Spin-Glass Model: Correlation of Phenotypic Responses to Environmental and Mutational Changes. Physical Review Letters, 2020, 124, 218101.	2.9	9
130	Inaccessibility and undecidability in computation, geometry, and dynamical systems. Physica D: Nonlinear Phenomena, 2001, 155, 1-33.	1.3	8
131	Dynamical systems basis of metamorphosis: diversity and plasticity of cellular states in reaction diffusion network. Journal of Theoretical Biology, 2005, 234, 173-186.	0.8	8
132	Replica symmetry breaking in an adiabatic spin-glass model of adaptive evolution. Europhysics Letters, 2012, 99, 68004.	0.7	8
133	Enzyme oscillation can enhance the thermodynamic efficiency of cellular metabolism: consequence of anti-phase coupling between reaction flux and affinity. Physical Biology, 2016, 13, 026002.	0.8	8
134	Geometry of Undecidable Systems. Progress of Theoretical Physics, 1998, 99, 885-890.	2.0	7
135	Repeated sequential learning increases memory capacity via effective decorrelation in a recurrent neural network. Physical Review Research, 2020, 2, .	1.3	7
136	Dynamic Organization of Hierarchical Memories. PLoS ONE, 2016, 11, e0162640.	1.1	7
137	Slow Stochastic Switching by Collective Chaos of Fast Elements. Physical Review Letters, 2013, 111, 144102.	2.9	6
138	Transition to diversification by competition for multiple resources in catalytic reaction networks. Journal of Systems Chemistry, 2015, 6, 5.	1.7	6
139	Negative scaling relationship between molecular diversity and resource abundances. Physical Review E, 2016, 93, 062419.	0.8	6
140	Boundary-induced pattern formation from uniform temporal oscillation. Chaos, 2018, 28, 045110.	1.0	6
141	Exploitation by asymmetry of information reference in coevolutionary learning in prisonerâ€™s dilemma game. Journal of Physics Complexity, 2021, 2, 045007.	0.9	6
142	Multiple-Timescale Neural Networks: Generation of History-Dependent Sequences and Inference Through Autonomous Bifurcations. Frontiers in Computational Neuroscience, 2021, 15, 743537.	1.2	6
143	PATTERN DYNAMICS OF A MULTI-COMPONENT REACTIONâ€“DIFFUSION SYSTEM: DIFFERENTIATION OF REPLICATING SPOTS. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2002, 12, 2579-2598.	0.7	5
144	Evolution of genetic redundancy: the relevance of complexity in genotypeâ€“phenotype mapping. New Journal of Physics, 2014, 16, 063013.	1.2	5

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145	Motif analysis for small-number effects in chemical reaction dynamics. Journal of Chemical Physics, 2016, 145, 094111.	1.2	5
146	Boundary-induced pattern formation from temporal oscillation: Spatial map analysis. Europhysics Letters, 2016, 116, 48005.	0.7	5
147	Chaos with a high-dimensional torus. Physical Review Research, 2020, 2, .	1.3	5
148	Emergence of kinship structures and descent systems: multi-level evolutionary simulation and empirical data analysis. Proceedings of the Royal Society B: Biological Sciences, 2022, 289, 20212641.	1.2	5
149	The Challenges Facing Systemic Approaches in Biology: An Interview with Kunihiko Kaneko. Frontiers in Physiology, 2011, 2, 93.	1.3	4
150	Correction: Proportionality between variances in gene expression induced by noise and mutation: consequence of evolutionary robustness. BMC Evolutionary Biology, 2012, 12, 240.	3.2	4
151	Compartmentalization and Cell Division through Molecular Discreteness and Crowding in a Catalytic Reaction Network. Life, 2014, 4, 586-597.	1.1	4
152	Cooperative reliable response from sloppy gene-expression dynamics. Europhysics Letters, 2018, 124, 38002.	0.7	4
153	Dynamical systems approach to evolutionâ€“development congruence: Revisiting Haeckel's recapitulation theory. Journal of Experimental Zoology Part B: Molecular and Developmental Evolution, 2022, 338, 62-75.	0.6	4
154	Short-term memory by transient oscillatory dynamics in recurrent neural networks. Physical Review Research, 2021, 3, .	1.3	4
155	Natural language from function dynamics. BioSystems, 2000, 57, 1-11.	0.9	3
156	Sensitive boundary condition dependence of noise-sustained structure. Physical Review E, 2001, 63, 036218.	0.8	3
157	Statistical-mechanical study of evolution of robustness in noisy environments. Physical Review E, 2009, 80, 051919.	0.8	3
158	Molecular Diversity and Network Complexity in Growing Protocells. Life, 2019, 9, 53.	1.1	3
159	Functional dynamic by intention recognition in iterated games. New Journal of Physics, 2019, 21, 023025.	1.2	3
160	Epigenetic Ratchet: Spontaneous Adaptation via Stochastic Gene Expression. Scientific Reports, 2020, 10, 459.	1.6	3
161	Entangled gene regulatory networks with cooperative expression endow robust adaptive responses to unforeseen environmental changes. Physical Review Research, 2021, 3, .	1.3	3
162	Evolution of family systems and resultant socio-economic structures. Humanities and Social Sciences Communications, 2021, 8, .	1.3	3

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163	A scaling law of multilevel evolution: how the balance between within- and among-collective evolution is determined. Genetics, 2022, 220, .	1.2	3
164	Dynamical systems theory of cellular reprogramming. Physical Review Research, 2022, 4, .	1.3	3
165	Question 9: Minority Control and Genetic Takeover. Origins of Life and Evolution of Biospheres, 2007, 37, 465-468.	0.8	2
166	Exponential growth for self-reproduction in a catalytic reaction network: relevance of a minority molecular species and crowdedness. New Journal of Physics, 2018, 20, 035001.	1.2	2
167	Direction and Constraint in Phenotypic Evolution: Dimension Reduction and Global Proportionality in Phenotype Fluctuation and Responses. , 2021, , 35-58.		2
168	Evolution of dominance in gene expression pattern associated with phenotypic robustness. Bmc Ecology and Evolution, 2021, 21, 110.	0.7	2
169	Evolution of phenotypic fluctuation under host-parasite interactions. PLoS Computational Biology, 2021, 17, e1008694.	1.5	2
170	A statistical-mechanical study of evolution of robustness: An approach from two-temperature models. Journal of Physics: Conference Series, 2009, 197, 012003.	0.3	1
171	Topological, statistical, and dynamical origins of genetic code. Physics of Life Reviews, 2010, 7, 379-380.	1.5	1
172	Discreteness-induced transitions in multibody reaction systems. Physical Review E, 2016, 94, 022140.	0.8	1
173	Heterosis of fitness and phenotypic variance in the evolution of a diploid gene regulatory network. , 2022, 1, .		1
174	From Coupled Dynamical Systems to Biological Irreversibility. Advances in Chemical Physics, 2003, , 53-73.	0.3	0
175	Bottleneck in Energy Relaxation and its Self-Organization. AIP Conference Proceedings, 2004, , .	0.3	0
176	1P490 A Mathematical Model of Cell Size Homeostasis(24. Mathematical biology,Poster) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 222 Td (	0.0	0
177	2P-246 A statistical-mechanical study of evolution of robustness in noisy environment(Mathematical) Tj ETQq1 1 0.784314 rgBT /Ove	0.0	0
178	3P193 Phase singularity analysis of self-organizing phosphatidylinositol waves in Dictyostelium discoideum cells(Cell biology,The 48th Annual Meeting of the Biophysical Society of Japan). Seibutsu Butsuri, 2010, 50, S179.	0.0	0
179	3K1012 Phase singularity dynamics in self-organizing phosphatidylinositiol waves(Cell biology 3,The) Tj ETQq1 1 0.784314 rgBT /Over	0.0	0
180	1SC-05 Homeostasis and memory by autonomous regulation of time-scales through enzyme abundances(1SC Frontiers in mathematical methods in biology,Symposium,The 50th Annual Meeting of) Tj ETQq0 0 0 rgBT /Overlock 10	0.0	0

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181	FROM CATALYTIC REACTION NETWORKS TO PROTOCELLS. World Scientific Lecture Notes in Complex Systems, 2013, , 345-358.	0.1	0
182	Dynamical Systems++ for a Theory of Biological System. , 2015, , 345-354.		0
183	Robustness and Plasticity in Biological Rhythms. Seibutsu Butsuri, 2017, 57, 186-190.	0.0	0
184	Reply to Read and Parkin: Our model correctly expresses the ethnographic nature of the cultural incest taboo and kinship structures. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 9167-9168.	3.3	0
185	UNIVERSAL STATISTICS OF CELLS WITH RECURSIVE PRODUCTION. World Scientific Lecture Notes in Complex Systems, 2005, , 155-176.	0.1	0
186	2P459 Molecular Deficiency Induced Transitions in Catalytic Reaction Network(50. Non-equilibrium) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 5 Butsuri, 2006, 46, S410.	0.0	0
187	On Compatible Condition for Morphogenetic Diversity and Recursive Production of Multicellular Organisms. Seibutsu Butsuri, 2007, 47, 029-035.	0.0	0
188	Approach of Complex-Systems Biology to Reproduction and Evolution. The Frontiers Collection, 2011, , 241-259.	0.1	0
189	Balancing Robustness with Plasticity Through Evolution and Learning. , 2013, , 379-385.		0
190	Microbial Symbiosis through Advantageous Leakage of Essential Metabolites. Seibutsu Butsuri, 2021, 61, 400-403.	0.0	0
191	Complex systems biology: exploring universal statistical and dynamical features in cellular processes. Genome Informatics, 2004, 15, 302-3.	0.4	0
192	Title is missing!. , 2020, 16, e1007670.		0
193	Title is missing!. , 2020, 16, e1007670.		0
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195	Title is missing!. , 2020, 16, e1007670.		0