

Stefano Boccaletti

List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

286
papers

20,542
citations

52
h-index

140
g-index

308
ext. papers

23,754
ext. citations

4.8
avg, IF

6.92
L-index

#	Paper	IF	Citations
286	Identifying symmetries and predicting cluster synchronization in complex networks. <i>Chaos, Solitons and Fractals</i> , 2022 , 155, 111703	9.3	0
285	Social physics. <i>Physics Reports</i> , 2022 , 948, 1-148	27.7	23
284	The synchronized dynamics of time-varying networks. <i>Physics Reports</i> , 2022 , 949, 1-63	27.7	14
283	Topological synchronization of chaotic systems.. <i>Scientific Reports</i> , 2022 , 12, 2508	4.9	1
282	The Master Stability Function for Synchronization in Simplicial Complexes. <i>Understanding Complex Systems</i> , 2022 , 249-267	0.4	
281	Network Theory in Neuroscience 2022 , 2190-2206		
280	Growing scale-free simplices. <i>Communications Physics</i> , 2021 , 4,	5.4	10
279	Multilayer representation of collaboration networks with higher-order interactions. <i>Scientific Reports</i> , 2021 , 11, 5666	4.9	18
278	D-dimensional oscillators in simplicial structures: Odd and even dimensions display different synchronization scenarios. <i>Chaos, Solitons and Fractals</i> , 2021 , 146, 110888	9.3	14
277	Chimeras. <i>Physics Reports</i> , 2021 , 898, 1-114	27.7	47
276	Chunking Rhythmic Synchronization: Bellerophon States and Quantized Clusters of Globally Coupled Phase Oscillators. <i>Nonlinear Physical Science</i> , 2021 , 103-114	0.1	
275	Stability of synchronization in simplicial complexes. <i>Nature Communications</i> , 2021 , 12, 1255	17.4	30
274	Predicting transitions in cooperation levels from network connectivity. <i>New Journal of Physics</i> , 2021 , 23, 093040	2.9	1
273	Evolutionary games on simplicial complexes. <i>Chaos, Solitons and Fractals</i> , 2021 , 150, 111103	9.3	6
272	Collective dynamics of heterogeneously and nonlinearly coupled phase oscillators. <i>Physical Review Research</i> , 2021 , 3,	3.9	6
271	Contagion in simplicial complexes. <i>Chaos, Solitons and Fractals</i> , 2021 , 152, 111307	9.3	2
270	Controlling Symmetries and Clustered Dynamics of Complex Networks. <i>IEEE Transactions on Network Science and Engineering</i> , 2021 , 8, 282-293	4.9	2

269	Contrarians Synchronize beyond the Limit of Pairwise Interactions.. <i>Physical Review Letters</i> , 2021 , 127, 258301	7.4	2
268	Discontinuous Transitions and Rhythmic States in the D-Dimensional Kuramoto Model Induced by a Positive Feedback with the Global Order Parameter. <i>Physical Review Letters</i> , 2020 , 125, 194101	7.4	24
267	The dynamics of cooperation in asymmetric sub-populations. <i>New Journal of Physics</i> , 2020 , 22, 083015	2.9	8
266	A novel route to cyclic dominance in voluntary social dilemmas. <i>Journal of the Royal Society Interface</i> , 2020 , 17, 20190789	4.1	22
265	Explosive synchronization in populations of cooperative and competitive oscillators. <i>Chaos, Solitons and Fractals</i> , 2020 , 132, 109589	9.3	16
264	Synchronization of phase oscillators under asymmetric and bimodal distributions of natural frequencies. <i>Chaos, Solitons and Fractals</i> , 2020 , 136, 109777	9.3	2
263	Diverse strategic identities induce dynamical states in evolutionary games. <i>Physical Review Research</i> , 2020 , 2,	3.9	6
262	Double explosive transitions to synchronization and cooperation in intertwined dynamics and evolutionary games. <i>New Journal of Physics</i> , 2020 , 22, 123026	2.9	5
261	Epidemic spreading under infection-reduced-recovery. <i>Chaos, Solitons and Fractals</i> , 2020 , 140, 110130	9.3	9
260	Steering complex networks toward desired dynamics. <i>Scientific Reports</i> , 2020 , 10, 20744	4.9	1
259	Winner-weaken-loser-strengthen rule leads to optimally cooperative interdependent networks. <i>Nonlinear Dynamics</i> , 2019 , 96, 49-56	5	31
258	Self-organized interdependence among populations promotes cooperation by means of coevolution. <i>Chaos</i> , 2019 , 29, 013139	3.3	32
257	Synchronization clusters emerge as the result of a global coupling among classical phase oscillators. <i>New Journal of Physics</i> , 2019 , 21, 053002	2.9	7
256	Self-organized Cultured Neuronal Networks: Longitudinal Analysis and Modeling of the Underlying Network Structure. <i>SEMA SIMAI Springer Series</i> , 2019 , 59-85	0.2	
255	Synaptic modifications driven by spike-timing-dependent plasticity in weakly coupled bursting neurons. <i>Physical Review E</i> , 2019 , 99, 032419	2.4	1
254	Synchronization in starlike networks of phase oscillators. <i>Physical Review E</i> , 2019 , 100, 012212	2.4	12
253	Universal phase transitions to synchronization in Kuramoto-like models with heterogeneous coupling. <i>New Journal of Physics</i> , 2019 , 21, 113018	2.9	14
252	Universal behavior of cascading failures in interdependent networks. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2019 , 116, 22452-22457	11.5	32

251	Characterizing nonstationary coherent states in globally coupled conformist and contrarian oscillators. <i>Physical Review E</i> , 2019 , 100, 052310	2.4	
250	Dynamic interdependence and competition in multilayer networks. <i>Nature Physics</i> , 2019 , 15, 178-185	16.2	43
249	Emergent explosive synchronization in adaptive complex networks. <i>Physical Review E</i> , 2018 , 97, 042301	2.4	26
248	Adaptive control of dynamical synchronization on evolving networks with noise disturbances. <i>Physical Review E</i> , 2018 , 97, 022211	2.4	8
247	Punishment diminishes the benefits of network reciprocity in social dilemma experiments. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2018 , 115, 30-35	11.5	166
246	Multiple peaks patterns of epidemic spreading in multi-layer networks. <i>Chaos, Solitons and Fractals</i> , 2018 , 107, 135-142	9.3	9
245	Exploiting a cognitive bias promotes cooperation in social dilemma experiments. <i>Nature Communications</i> , 2018 , 9, 2954	17.4	115
244	Multiplex networks of musical artists: The effect of heterogeneous inter-layer links. <i>Physica A: Statistical Mechanics and Its Applications</i> , 2018 , 510, 671-677	3.3	2
243	Relay synchronization in multiplex networks. <i>Scientific Reports</i> , 2018 , 8, 8629	4.9	41
242	Betweenness centrality in urban networks: revealing the transportation backbone of the country from the demographic data. <i>IOP Conference Series: Earth and Environmental Science</i> , 2018 , 177, 012017	0.3	3
241	Explosive synchronization in mono and multilayer networks. <i>Discrete and Continuous Dynamical Systems - Series B</i> , 2018 , 23, 1931-1944	1.3	3
240	Synchronization: From Coupled Systems to Complex Networks 2018 ,		92
239	Origin of Bellerophon states in globally coupled phase oscillators. <i>Physical Review E</i> , 2018 , 98,	2.4	18
238	Synchronization of chaotic systems: A microscopic description. <i>Physical Review E</i> , 2018 , 98,	2.4	8
237	Popularity enhances the interdependent network reciprocity. <i>New Journal of Physics</i> , 2018 , 20, 123012	2.9	37
236	Rhythmic synchronization and hybrid collective states of globally coupled oscillators. <i>Scientific Reports</i> , 2018 , 8, 12950	4.9	3
235	Assortative mixing in spatially-extended networks. <i>Scientific Reports</i> , 2018 , 8, 13825	4.9	2
234	Inter-layer competition in adaptive multiplex network. <i>New Journal of Physics</i> , 2018 , 20, 075004	2.9	12

233	Unveiling the multi-fractal structure of complex networks. <i>Chaos, Solitons and Fractals</i> , 2017 , 97, 11-14	9.3	18
232	Interplay of delay and multiplexing: Impact on cluster synchronization. <i>Chaos</i> , 2017 , 27, 043103	3.3	10
231	Statistical physics of human cooperation. <i>Physics Reports</i> , 2017 , 687, 1-51	27.7	725
230	Reconstructing multi-mode networks from multivariate time series. <i>Europhysics Letters</i> , 2017 , 119, 50008.6	8.6	9
229	Macroscopic and microscopic spectral properties of brain networks during local and global synchronization. <i>Physical Review E</i> , 2017 , 96, 012316	2.4	36
228	Inter-layer synchronization in non-identical multi-layer networks. <i>Scientific Reports</i> , 2017 , 7, 45475	4.9	72
227	Interplay between geo-population factors and hierarchy of cities in multilayer urban networks. <i>Scientific Reports</i> , 2017 , 7, 17246	4.9	9
226	Connection adaption for control of networked mobile chaotic agents. <i>Scientific Reports</i> , 2017 , 7, 16069	4.9	5
225	Self-similarity in explosive synchronization of complex networks. <i>Physical Review E</i> , 2017 , 96, 062312	2.4	13
224	Inhomogeneity induces relay synchronization in complex networks. <i>Physical Review E</i> , 2016 , 93, 042203	2.4	20
223	Synchronization in slowly switching networks of coupled oscillators. <i>Scientific Reports</i> , 2016 , 6, 35979	4.9	14
222	Synchronization in networks with multiple interaction layers. <i>Science Advances</i> , 2016 , 2, e1601679	14.3	72
221	Coexistence of Quantized, Time Dependent, Clusters in Globally Coupled Oscillators. <i>Physical Review Letters</i> , 2016 , 117, 204101	7.4	49
220	Explosive transitions in complex networks—structure and dynamics: Percolation and synchronization. <i>Physics Reports</i> , 2016 , 660, 1-94	27.7	165
219	Corporate Strategy on GMOs under Alternative Futures: The Case of a Large Food Retailer in Italy. <i>EuroChoices</i> , 2016 , 15, 52-58	2	2
218	Concurrent enhancement of percolation and synchronization in adaptive networks. <i>Scientific Reports</i> , 2016 , 6, 27111	4.9	10
217	Experimental implementation of maximally synchronizable networks. <i>Physica A: Statistical Mechanics and Its Applications</i> , 2016 , 448, 113-121	3.3	4
216	Emergence of a multilayer structure in adaptive networks of phase oscillators. <i>Chaos, Solitons and Fractals</i> , 2016 , 84, 23-30	9.3	14

215	Synchronization and Bellerophon states in conformist and contrarian oscillators. <i>Scientific Reports</i> , 2016 , 6, 36713	4.9	26
214	Impacts of non-GMO standards on poultry supply chain governance: transaction cost approach vs resource-based view. <i>Supply Chain Management</i> , 2016 , 21, 743-758	10	13
213	Explosive synchronization coexists with classical synchronization in the Kuramoto model. <i>Chaos</i> , 2016 , 26, 065307	3.3	20
212	Inter-layer synchronization in multiplex networks of identical layers. <i>Chaos</i> , 2016 , 26, 065304	3.3	61
211	Topological stability criteria for networking dynamical systems with Hermitian Jacobian. <i>European Journal of Applied Mathematics</i> , 2016 , 27, 888-903	1	2
210	Introduction to Focus Issue: Complex Dynamics in Networks, Multilayered Structures and Systems. <i>Chaos</i> , 2016 , 26, 065101	3.3	3
209	Assortativity and leadership emerge from anti-preferential attachment in heterogeneous networks. <i>Scientific Reports</i> , 2016 , 6, 21297	4.9	13
208	Combining complex networks and data mining: Why and how. <i>Physics Reports</i> , 2016 , 635, 1-44	27.7	105
207	Observability coefficients for predicting the class of synchronizability from the algebraic structure of the local oscillators. <i>Physical Review E</i> , 2016 , 94, 042205	2.4	19
206	Explosive synchronization in adaptive and multilayer networks. <i>Physical Review Letters</i> , 2015 , 114, 038701	7.4	213
205	Anomalous consistency in Mild Cognitive Impairment: A complex networks approach. <i>Chaos, Solitons and Fractals</i> , 2015 , 70, 144-155	9.3	4
204	Emergent hybrid synchronization in coupled chaotic systems. <i>Physical Review E</i> , 2015 , 91, 022920	2.4	7
203	Effects of degree correlations on the explosive synchronization of scale-free networks. <i>Physical Review E</i> , 2015 , 91, 032811	2.4	25
202	Functional Hubs in Mild Cognitive Impairment. <i>International Journal of Bifurcation and Chaos in Applied Sciences and Engineering</i> , 2015 , 25, 1550034	2	10
201	Synchronization of intermittent behavior in ensembles of multistable dynamical systems. <i>Physical Review E</i> , 2015 , 91, 032902	2.4	23
200	Experimental evidence of explosive synchronization in mercury beating-heart oscillators. <i>Physical Review E</i> , 2015 , 91, 062909	2.4	34
199	Graph-based unsupervised segmentation algorithm for cultured neuronal networks' structure characterization and modeling. <i>Cytometry Part A: the Journal of the International Society for Analytical Cytology</i> , 2015 , 87, 513-23	4.6	8
198	Editorial on Multiplex networks: Structure, dynamics and applications. <i>Chaos, Solitons and Fractals</i> , 2015 , 72, 1-3	9.3	4

197	Networks of networks [An introduction. <i>Chaos, Solitons and Fractals</i> , 2015 , 80, 1-6	9.3	103
196	Landau damping effects in the synchronization of conformist and contrarian oscillators. <i>Scientific Reports</i> , 2015 , 5, 18235	4.9	5
195	Enhancing the stability of the synchronization of multivariable coupled oscillators. <i>Physical Review E</i> , 2015 , 92, 032804	2.4	17
194	Synchronization in dynamical networks with unconstrained structure switching. <i>Physical Review E</i> , 2015 , 92, 062819	2.4	11
193	Effective centrality and explosive synchronization in complex networks. <i>Physical Review E</i> , 2015 , 92, 062820	2.4	12
192	Governance implications of non-GM private standards on poultry meat value chains. <i>British Food Journal</i> , 2015 , 117, 2564-2581	2.8	11
191	Explosive synchronization as a process of explosive percolation in dynamical phase space. <i>Scientific Reports</i> , 2014 , 4, 5200	4.9	50
190	Exact solution for first-order synchronization transition in a generalized Kuramoto model. <i>Scientific Reports</i> , 2014 , 4, 7262	4.9	49
189	Functional brain networks: great expectations, hard times and the big leap forward. <i>Philosophical Transactions of the Royal Society B: Biological Sciences</i> , 2014 , 369,	5.8	54
188	Complex network theory and the brain. <i>Philosophical Transactions of the Royal Society B: Biological Sciences</i> , 2014 , 369,	5.8	84
187	The structure and dynamics of multilayer networks. <i>Physics Reports</i> , 2014 , 544, 1-122	27.7	1892
186	Hysteretic transitions in the Kuramoto model with inertia. <i>Physical Review E</i> , 2014 , 90, 042905	2.4	79
185	Emergence of disassortative mixing from pruning nodes in growing scale-free networks. <i>Scientific Reports</i> , 2014 , 4, 7536	4.9	12
184	Parentlitic networks: uncovering new functions in biological data. <i>Scientific Reports</i> , 2014 , 4, 5112	4.9	15
183	Emergence of small-world anatomical networks in self-organizing clustered neuronal cultures. <i>PLoS ONE</i> , 2014 , 9, e85828	3.7	24
182	Collective stochastic coherence and synchronizability in weighted scale-free networks. <i>New Journal of Physics</i> , 2014 , 16, 013036	2.9	9
181	Analysis of Complex Data by Means of Complex Networks. <i>IFIP Advances in Information and Communication Technology</i> , 2014 , 39-46	0.5	2
180	Eigenvector centrality of nodes in multiplex networks. <i>Chaos</i> , 2013 , 23, 033131	3.3	149

179	Modeling the multi-layer nature of the European Air Transport Network: Resilience and passengers re-scheduling under random failures. <i>European Physical Journal: Special Topics</i> , 2013 , 215, 23-33	2.3	182
178	Explosive transitions to synchronization in networks of phase oscillators. <i>Scientific Reports</i> , 2013 , 3, 12814.9	4.9	80
177	Computing with complex-valued networks of phase oscillators. <i>Europhysics Letters</i> , 2013 , 102, 40007	1.6	0
176	Explosive synchronization in weighted complex networks. <i>Physical Review E</i> , 2013 , 88, 042808	2.4	67
175	Emergence of network features from multiplexity. <i>Scientific Reports</i> , 2013 , 3, 1344	4.9	314
174	Generalized synchronization in relay systems with instantaneous coupling. <i>Physical Review E</i> , 2013 , 88, 052908	2.4	27
173	Feature selection in the reconstruction of complex network representations of spectral data. <i>PLoS ONE</i> , 2013 , 8, e72045	3.7	8
172	Knowledge discovery in spectral data by means of complex networks. <i>Metabolites</i> , 2013 , 3, 155-67	5.6	6
171	Topological measure locating the effective crossover between segregation and integration in a modular network. <i>Physical Review Letters</i> , 2012 , 108, 228701	7.4	26
170	Generalized synchronization in mutually coupled oscillators and complex networks. <i>Physical Review E</i> , 2012 , 86, 036216	2.4	44
169	Targeting the dynamics of complex networks. <i>Scientific Reports</i> , 2012 , 2, 396	4.9	35
168	Optimizing functional network representation of multivariate time series. <i>Scientific Reports</i> , 2012 , 2, 630	4.9	59
167	Assortative and modular networks are shaped by adaptive synchronization processes. <i>Physical Review E</i> , 2012 , 86, 015101	2.4	19
166	Graphical notation reveals topological stability criteria for collective dynamics in complex networks. <i>Physical Review Letters</i> , 2012 , 108, 194102	7.4	16
165	Explosive first-order transition to synchrony in networked chaotic oscillators. <i>Physical Review Letters</i> , 2012 , 108, 168702	7.4	126
164	NONLOCAL ANALYSIS OF MODULAR ROLES. <i>International Journal of Bifurcation and Chaos in Applied Sciences and Engineering</i> , 2012 , 22, 1250167	2	
163	Functional Brain Networks: beyond the small-world paradigm*. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , 2012 , 45, 57-62		3
162	Preprocessing and analyzing genetic data with complex networks: An application to Obstructive Nephropathy. <i>Networks and Heterogeneous Media</i> , 2012 , 7, 473-481	1.6	6

161	Principles of recovery from traumatic brain injury: reorganization of functional networks. <i>NeuroImage</i> , 2011 , 55, 1189-99	7.9	63
160	Analyses of antigen dependency networks unveil immune system reorganization between birth and adulthood. <i>Chaos</i> , 2011 , 21, 016109	3.3	25
159	Reduced synchronization persistence in neural networks derived from atm-deficient mice. <i>Frontiers in Neuroscience</i> , 2011 , 5, 46	5.1	11
158	Unveiling protein functions through the dynamics of the interaction network. <i>PLoS ONE</i> , 2011 , 6, e17679	3.7	14
157	Node vulnerability under finite perturbations in complex networks. <i>PLoS ONE</i> , 2011 , 6, e20236	3.7	7
156	Experimental observations of synchronization interfaces in networks of oscillators 2011 ,		2
155	Emergence of structural patterns out of synchronization in networks with competitive interactions. <i>Scientific Reports</i> , 2011 , 1, 99	4.9	55
154	Emerging meso- and macroscales from synchronization of adaptive networks. <i>Physical Review Letters</i> , 2011 , 107, 234103	7.4	47
153	Complex networks analysis of obstructive nephropathy data. <i>Chaos</i> , 2011 , 21, 033103	3.3	14
152	Synchronization waves in geometric networks. <i>Physical Review E</i> , 2011 , 84, 065101	2.4	9
151	Computation as an emergent feature of adaptive synchronization. <i>Physical Review E</i> , 2011 , 84, 060102	2.4	5
150	Computation emerges from adaptive synchronization of networking neurons. <i>PLoS ONE</i> , 2011 , 6, e26467	3.7	14
149	Reorganization of functional networks in mild cognitive impairment. <i>PLoS ONE</i> , 2011 , 6, e19584	3.7	100
148	NETWORKS OF SPRINGS: A PRACTICAL APPROACH. <i>International Journal of Bifurcation and Chaos in Applied Sciences and Engineering</i> , 2010 , 20, 937-942	2	6
147	INTERACTING OSCILLATORS IN COMPLEX NETWORKS: SYNCHRONIZATION AND THE EMERGENCE OF SCALE-FREE TOPOLOGIES. <i>International Journal of Bifurcation and Chaos in Applied Sciences and Engineering</i> , 2010 , 20, 753-763	2	4
146	ENTRAINMENT COMPETITION IN COMPLEX NETWORKS. <i>International Journal of Bifurcation and Chaos in Applied Sciences and Engineering</i> , 2010 , 20, 827-833	2	
145	Dynamics of overlapping structures in modular networks. <i>Physical Review E</i> , 2010 , 82, 016115	2.4	28
144	Functional neural networks underlying semantic encoding of associative memories. <i>NeuroImage</i> , 2010 , 50, 1258-70	7.9	28

143	Real-time estimation of interaction delays. <i>Physical Review E</i> , 2009 , 80, 036203	2.4	14
142	Regulating synchronous states of complex networks by pinning interaction with an external node. <i>Physical Review E</i> , 2009 , 80, 066111	2.4	4
141	Entraining the topology and the dynamics of a network of phase oscillators. <i>Physical Review E</i> , 2009 , 79, 046105	2.4	5
140	VULNERABILITY AND FALL OF EFFICIENCY IN COMPLEX NETWORKS: A NEW APPROACH WITH COMPUTATIONAL ADVANTAGES. <i>International Journal of Bifurcation and Chaos in Applied Sciences and Engineering</i> , 2009 , 19, 727-735	2	6
139	Generation of scale-free topology in complex networks by phase entrainment. <i>International Journal of Systems Science</i> , 2009 , 40, 923-930	2.3	
138	The Formation of synchronization cliques during the development of modular neural networks. <i>Physical Biology</i> , 2009 , 6, 036018	3	28
137	Experimental approach to the study of complex network synchronization using a single oscillator. <i>Physical Review E</i> , 2009 , 79, 055202	2.4	14
136	Synchronization interfaces and overlapping communities in complex networks. <i>Physical Review Letters</i> , 2008 , 101, 168701	7.4	86
135	The Synchronized Dynamics of Complex Systems. <i>Monograph Series on Nonlinear Science and Complexity</i> , 2008 , 1-239		59
134	SYNCHRONIZATION IN NETWORKS OF SLIGHTLY NONIDENTICAL ELEMENTS. <i>International Journal of Bifurcation and Chaos in Applied Sciences and Engineering</i> , 2008 , 18, 845-850	2	15
133	Synchronization in networks of spatially extended systems. <i>Chaos</i> , 2008 , 18, 023133	3.3	16
132	Synchronization of moving chaotic agents. <i>Physical Review Letters</i> , 2008 , 100, 044102	7.4	132
131	Disorder and decision cost in spatial networks. <i>Chaos</i> , 2008 , 18, 023103	3.3	9
130	Attractor selection in a modulated laser and in the Lorenz circuit. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 2008 , 366, 475-86	3	5
129	Pinning control of spatio temporal chaos in nonlinear optics. <i>Journal of Physics: Conference Series</i> , 2008 , 134, 012051	0.3	
128	Phase locking induces scale-free topologies in networks of coupled oscillators. <i>PLoS ONE</i> , 2008 , 3, e2644	3.7	29
127	Detecting complex network modularity by dynamical clustering. <i>Physical Review E</i> , 2007 , 75, 045102	2.4	149
126	The complex network of musical tastes. <i>New Journal of Physics</i> , 2007 , 9, 172-172	2.9	16

125	Awaking and sleeping of a complex network. <i>Neural Networks</i> , 2007 , 20, 102-8	9.1	6
124	Active control of the synchronization manifold in a ring of mutually coupled oscillators. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 2007 , 371, 48-57	2.3	8
123	The birth of defects in pattern formation: Testing of the Kibble-Zurek mechanism. <i>European Physical Journal: Special Topics</i> , 2007 , 146, 87-98	2.3	14
122	Synchronization processes in complex networks. <i>European Physical Journal: Special Topics</i> , 2007 , 146, 129-144	2.3	11
121	COHERENCE RESONANCE IN A FITZHUGH-NAGUMO ELECTRONIC SYSTEM. <i>International Journal of Bifurcation and Chaos in Applied Sciences and Engineering</i> , 2007 , 17, 3431-3436	2	
120	GROWING HIERARCHICAL SCALE-FREE NETWORKS BY MEANS OF NONHIERARCHICAL PROCESSES. <i>International Journal of Bifurcation and Chaos in Applied Sciences and Engineering</i> , 2007 , 17, 2447-2452	2	12
119	Synchronization properties of network motifs. <i>Europhysics Letters</i> , 2007 , 78, 28001	1.6	40
118	Identification of network modules by optimization of ratio association. <i>Chaos</i> , 2007 , 17, 023114	3.3	44
117	Multiscale vulnerability of complex networks. <i>Chaos</i> , 2007 , 17, 043110	3.3	53
116	Chaos suppression through asymmetric coupling. <i>Chaos</i> , 2007 , 17, 043107	3.3	22
115	Automatic control and tracking of periodic orbits in chaotic systems. <i>Physical Review E</i> , 2007 , 75, 066211	2.4	2
114	Detecting and localizing the foci in human epileptic seizures. <i>Chaos</i> , 2007 , 17, 043113	3.3	15
113	Length distribution of laminar phases for type-I intermittency in the presence of noise. <i>Physical Review E</i> , 2007 , 76, 026206	2.4	27
112	Synchronization in Coupled and Free Chaotic Systems 2007 , 181-198		
111	Pinning control of spatiotemporal chaos in the LCLV device. <i>Mathematical Biosciences and Engineering</i> , 2007 , 4, 523-30	2.1	2
110	Synchronization in weighted scale-free networks with degree-degree correlation. <i>Physica D: Nonlinear Phenomena</i> , 2006 , 224, 123-129	3.3	61
109	Dynamical network model of infective mobile agents. <i>Physical Review E</i> , 2006 , 74, 036110	2.4	64
108	Synchronization of spontaneous bursting in a CO ₂ laser. <i>Physical Review E</i> , 2006 , 74, 066207	2.4	10

107	Introduction: stability and pattern formation in networks of dynamical systems. <i>Chaos</i> , 2006 , 16, 0151013,3	9
106	Ring intermittency in coupled chaotic oscillators at the boundary of phase synchronization. <i>Physical Review Letters</i> , 2006 , 97, 114101	7.4 61
105	Degree mixing and the enhancement of synchronization in complex weighted networks. <i>Physical Review E</i> , 2006 , 74, 066107	2.4 30
104	Experimental synchronization of spatiotemporal chaos in nonlinear optics. <i>Physical Review E</i> , 2006 , 73, 036213	2.4 1
103	Synchronizing weighted complex networks. <i>Chaos</i> , 2006 , 16, 015106	3.3 44
102	Synchronization of chaotic systems with coexisting attractors. <i>Physical Review Letters</i> , 2006 , 96, 244102	7.4 79
101	Synchronization in dynamical networks: evolution along commutative graphs. <i>Physical Review E</i> , 2006 , 74, 016102	2.4 74
100	Controlling spatio-temporal chaos in the scenario of the one-dimensional complex Ginzburg-Landau equation. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 2006 , 364, 2383-95	3 11
99	Opinion dynamics and synchronization in a network of scientific collaborations. <i>Physica A: Statistical Mechanics and Its Applications</i> , 2006 , 372, 316-325	3.3 39
98	Complex networks: Structure and dynamics. <i>Physics Reports</i> , 2006 , 424, 175-308	27.7 6980
97	Stability of the synchronous state of an arbitrary network of coupled elements. <i>Radiophysics and Quantum Electronics</i> , 2006 , 49, 826-833	0.7 1
96	On the intrinsic time scales involved in synchronization: a data-driven approach. <i>Chaos</i> , 2005 , 15, 23904	3.3 22
95	Synchronization is enhanced in weighted complex networks. <i>Physical Review Letters</i> , 2005 , 94, 218701	7.4 377
94	Localized structures in an optical feedback interferometer: properties and interactions. <i>Applied Physics B: Lasers and Optics</i> , 2005 , 81, 921-926	1.9 1
93	Synchronization of spatially extended chaotic systems with asymmetric coupling. <i>Brazilian Journal of Physics</i> , 2005 , 35, 411	1.2 4
92	Dissipative solitons driving and bound state control via parameter gradients. <i>Chaos</i> , 2005 , 15, 13501	3.3 5
91	Defect-enhanced anomaly in frequency synchronization of asymmetrically coupled spatially extended systems. <i>Physical Review E</i> , 2005 , 71, 025201	2.4 8
90	Signatures of noise-enhanced stability in metastable states. <i>Physical Review E</i> , 2005 , 72, 061110	2.4 124

89	Coherence resonance in excitable electronic circuits in the presence of colored noise. <i>Physical Review E</i> , 2005 , 71, 062101	2.4	7
88	Synchronization in complex networks with age ordering. <i>Physical Review Letters</i> , 2005 , 94, 138701	7.4	150
87	ANOMALOUS SYNCHRONIZATION OF SPATIALLY EXTENDED CHAOTIC SYSTEMS IN THE PRESENCE OF ASYMMETRIC COUPLING. <i>Fluctuation and Noise Letters</i> , 2005 , 05, L251-L258	1.2	
86	Thresholds for epidemic outbreaks in finite scale-free networks. <i>Mathematical Biosciences and Engineering</i> , 2005 , 2, 317-27	2.1	17
85	Synchronization of spatially extended chaotic systems in the presence of asymmetric coupling. <i>Physical Review E</i> , 2004 , 70, 036219	2.4	16
84	Experimental control of coherence of a chaotic oscillator. <i>Physical Review E</i> , 2004 , 69, 066211	2.4	11
83	Predicting phase synchronization in a spiking chaotic CO2 laser. <i>Physical Review E</i> , 2004 , 70, 035204	2.4	7
82	Experimental targeting and control of spatiotemporal chaos in nonlinear optics. <i>Physical Review Letters</i> , 2004 , 93, 063902	7.4	15
81	Irrational phase synchronization. <i>Physical Review E</i> , 2004 , 69, 056228	2.4	11
80	Detecting local synchronization in coupled chaotic systems. <i>Physical Review E</i> , 2004 , 69, 036201	2.4	5
79	Frequency entrainment of nonautonomous chaotic oscillators. <i>Physical Review E</i> , 2004 , 69, 016208	2.4	10
78	Convective instabilities of synchronization manifolds in spatially extended systems. <i>Physical Review E</i> , 2004 , 69, 047202	2.4	22
77	In phase and antiphase synchronization of coupled homoclinic chaotic oscillators. <i>Chaos</i> , 2004 , 14, 118-223	3.3	12
76	SYMMETRY INDUCED HETEROCLINIC CYCLES IN A CO2 LASER. <i>International Journal of Bifurcation and Chaos in Applied Sciences and Engineering</i> , 2004 , 14, 1121-1127	2	1
75	Chaotic spreading of epidemics in complex networks of excitable units. <i>Mathematical Biosciences and Engineering</i> , 2004 , 1, 49-55	2.1	6
74	Controlling transient dynamics to communicate with homoclinic chaos. <i>Chaos</i> , 2003 , 13, 921-5	3.3	4
73	Information encoding in homoclinic chaotic systems. <i>Chaos</i> , 2003 , 13, 286-90	3.3	16
72	Introduction: Control and synchronization in chaotic dynamical systems. <i>Chaos</i> , 2003 , 13, 126-7	3.3	55

71	Competition of synchronization domains in arrays of chaotic homoclinic systems. <i>Physical Review E</i> , 2003 , 68, 066209	2.4	23
70	Control of localized structures in an optical feedback interferometer. <i>Chaos</i> , 2003 , 13, 335-41	3.3	10
69	Asymmetric coupling effects in the synchronization of spatially extended chaotic systems. <i>Physical Review Letters</i> , 2003 , 91, 064103	7.4	29
68	Noise-enhanced synchronization of homoclinic chaos in a CO2 laser. <i>Physical Review E</i> , 2003 , 67, 015205	2.4	46
67	Constructive effects of noise in homoclinic chaotic systems. <i>Physical Review E</i> , 2003 , 67, 066220	2.4	49
66	The synchronization of chaotic systems. <i>Physics Reports</i> , 2002 , 366, 1-101	27.7	1934
65	Tailoring the profile and interactions of optical localized structures. <i>Physical Review E</i> , 2002 , 65, 066204	2.4	39
64	Experimental characterization of the transition to phase synchronization of chaotic CO2 laser systems. <i>Physical Review Letters</i> , 2002 , 89, 194101	7.4	72
63	Reconstructing embedding spaces of coupled dynamical systems from multivariate data. <i>Physical Review E</i> , 2002 , 65, 035204	2.4	44
62	Collective phase locked states in a chain of coupled chaotic oscillators. <i>Physical Review E</i> , 2002 , 65, 055204	2.4	9
61	Sistemas complejos en medicina y gesti3n de organizaciones. <i>Revista De Calidad Asistencial: 3gano De La Sociedad Espa3ola De Calidad Asistencial</i> , 2002 , 17, 429		
60	DEFECT DYNAMICS DURING A QUENCH IN A B3ARD-MARANGONI CONVECTION SYSTEM. <i>International Journal of Bifurcation and Chaos in Applied Sciences and Engineering</i> , 2001 , 11, 2887-2894	2	6
59	INTERMITTENT LAG SYNCHRONIZATION IN A PAIR OF COUPLED CHAOTIC OSCILLATORS. <i>International Journal of Bifurcation and Chaos in Applied Sciences and Engineering</i> , 2001 , 11, 2699-2704	2	5
58	SIGNAL DROPOUT RECONSTRUCTION IN COMMUNICATING WITH CHAOS. <i>International Journal of Bifurcation and Chaos in Applied Sciences and Engineering</i> , 2001 , 11, 2621-2629	2	
57	CONTROL AND SYNCHRONIZATION OF SPACE EXTENDED DYNAMICAL SYSTEMS. <i>International Journal of Bifurcation and Chaos in Applied Sciences and Engineering</i> , 2001 , 11, 2715-2729	2	10
56	Topological defects after a quench in a B3ard-Marangoni convection system. <i>Physical Review E</i> , 2001 , 63, 057301	2.4	32
55	Unifying framework for synchronization of coupled dynamical systems. <i>Physical Review E</i> , 2001 , 63, 066219	2.4	97
54	PATTERN FORMATION AND DYNAMICS IN AN ANNULAR CO2 LASER. <i>International Journal of Bifurcation and Chaos in Applied Sciences and Engineering</i> , 2001 , 11, 2759-2770	2	

53	EFFECT OF A VARIABLE DELAY IN DELAYED DYNAMICAL SYSTEMS. <i>International Journal of Bifurcation and Chaos in Applied Sciences and Engineering</i> , 2001 , 11, 2875-2880	2	14
52	The control of chaos: theory and applications. <i>Physics Reports</i> , 2000 , 329, 103-197	27.7	614
51	Pattern dynamics in an annular laser. <i>European Physical Journal D</i> , 2000 , 12, 329-337	1.3	
50	THE LIQUID CRYSTAL LIGHT VALVE WITH OPTICAL FEEDBACK: A CASE STUDY IN PATTERN FORMATION. <i>Journal of Nonlinear Optical Physics and Materials</i> , 2000 , 09, 183-204	0.8	21
49	Localized versus delocalized patterns in a nonlinear optical interferometer. <i>Journal of Optics B: Quantum and Semiclassical Optics</i> , 2000 , 2, 399-405		52
48	Experimental phase synchronization of a chaotic convective flow. <i>Physical Review Letters</i> , 2000 , 85, 5567-70	7.0	48
47	Synchronization of chaotic structurally nonequivalent systems. <i>Physical Review E</i> , 2000 , 61, 3712-5	2.4	49
46	Domain segregation in a two-dimensional system in the presence of drift. <i>Physical Review E</i> , 2000 , 61, R6045-8	2.4	5
45	Characterization of intermittent lag synchronization. <i>Physical Review E</i> , 2000 , 62, 7497-500	2.4	136
44	Integral behavior for localized synchronization in nonidentical extended systems. <i>Physical Review E</i> , 2000 , 62, 6346-51	2.4	15
43	CHARACTERIZATION OF SYNCHRONIZED SPATIOTEMPORAL STATES IN COUPLED NONIDENTICAL COMPLEX GINZBURG-PANDAU EQUATIONS. <i>International Journal of Bifurcation and Chaos in Applied Sciences and Engineering</i> , 2000 , 10, 2381-2389	2	14
42	PHASE CLUSTERING AND COLLECTIVE BEHAVIORS IN GLOBALLY COUPLED MAP LATTICES DUE TO MEAN FIELD EFFECTS. <i>International Journal of Bifurcation and Chaos in Applied Sciences and Engineering</i> , 2000 , 10, 829-833	2	6
41	Chaos in the Brain: A New Strategy to Discriminate Deterministic Low Dimensional Dynamics in the Spontaneous Activity of the Human Cortex 2000 , 963-966		
40	Synchronization in Nonidentical Extended Systems. <i>Physical Review Letters</i> , 1999 , 83, 536-539	7.4	86
39	TRANSPORT INDUCED PATTERN SELECTION IN A NONLINEAR OPTICAL SYSTEM. <i>Journal of Nonlinear Optical Physics and Materials</i> , 1999 , 08, 235-252	0.8	2
38	Pattern formation and competition in nonlinear optics. <i>Physics Reports</i> , 1999 , 318, 1-83	27.7	239
37	Investigating the fractal properties of geological fault systems: The Main Ethiopian Rift Case. <i>Geophysical Research Letters</i> , 1999 , 26, 1633-1636	4.9	13
36	Controlling and synchronizing space time chaos. <i>Physical Review E</i> , 1999 , 59, 6574-8	2.4	45

35	Discrimination of deterministic dynamics in the spontaneous activity of the human brain cortex. <i>Europhysics Letters</i> , 1998 , 42, 247-252	1.6	2
34	Weak Synchronization of Chaotic Coupled Map Lattices. <i>Physical Review Letters</i> , 1998 , 81, 3639-3642	7.4	34
33	Control of Amplitude Turbulence in Delayed Dynamical Systems. <i>International Journal of Bifurcation and Chaos in Applied Sciences and Engineering</i> , 1998 , 08, 1843-1848	2	11
32	The Control of Chaos: Theoretical Schemes and Experimental Realizations. <i>International Journal of Bifurcation and Chaos in Applied Sciences and Engineering</i> , 1998 , 08, 1643-1655	2	52
31	Pattern and Vortex Dynamics in Photorefractive Oscillators. <i>Springer Series in Synergetics</i> , 1998 , 161-216	0.4	
30	Excitability following an avalanche-collapse process. <i>Europhysics Letters</i> , 1997 , 38, 85-90	1.6	45
29	Control of Defects and Spacelike Structures in Delayed Dynamical Systems. <i>Physical Review Letters</i> , 1997 , 79, 5246-5249	7.4	52
28	Adaptive targeting of chaos. <i>Physical Review E</i> , 1997 , 55, R4845-R4848	2.4	14
27	Adaptive recognition and filtering of noise using wavelets. <i>Physical Review E</i> , 1997 , 55, 5393-5397	2.4	13
26	Adaptive synchronization of chaos for secure communication. <i>Physical Review E</i> , 1997 , 55, 4979-4981	2.4	65
25	Adaptive strategies for recognition, noise filtering, control, synchronization and targeting of chaos. <i>Chaos</i> , 1997 , 7, 621-634	3.3	14
24	Pattern dynamics in a large Fresnel number laser close to threshold. <i>Physical Review A</i> , 1997 , 56, 2237-2241	6	
23	Adaptive strategies for recognition, control and synchronization of chaos. <i>Chaos, Solitons and Fractals</i> , 1997 , 8, 1431-1448	9.3	19
22	Transport induced patterns in an optical system with focussing nonlinearity. <i>Optics Communications</i> , 1997 , 136, 267-272	2	7
21	SUPEREXCITABILITY INDUCED SPIRAL BREAKUP IN EXCITABLE SYSTEMS. <i>International Journal of Bifurcation and Chaos in Applied Sciences and Engineering</i> , 1996 , 06, 1753-1759	2	6
20	Competition and coexistence of two-dimensional optical patterns. <i>Physica Scripta</i> , 1996 , T67, 7-11	2.6	
19	Adaptive recognition and control of chaos. <i>Physica D: Nonlinear Phenomena</i> , 1996 , 96, 9-16	3.3	12
18	Quantum-classical comparison in chaotic systems. <i>Physical Review E</i> , 1996 , 53, 4447-4450	2.4	5

17	Optical pattern selection by a lateral wave-front shift. <i>Physical Review A</i> , 1996 , 54, 3472-3475	2.6	24
16	Domain coexistence in two-dimensional optical patterns. <i>Physical Review Letters</i> , 1996 , 76, 1063-1066	7.4	33
15	Optical morphogenesis: Dynamics of patterns in passive optical systems 1996 , 473-489		
14	Adaptive Control of Chaos. <i>Europhysics Letters</i> , 1995 , 31, 127-132	1.6	47
13	Pattern and Vortex Dynamics in Photorefractive Oscillators. <i>Springer Series in Synergetics</i> , 1995 , 161-216	0.4	
12	BOUNDARY DOMINATED VERSUS BULK DOMINATED REGIME IN OPTICAL SPACE-TIME COMPLEXITY. <i>International Journal of Bifurcation and Chaos in Applied Sciences and Engineering</i> , 1994 , 04, 1281-1295	2	1
11	ADAPTIVE RECOGNITION OF CHAOS. <i>International Journal of Bifurcation and Chaos in Applied Sciences and Engineering</i> , 1994 , 04, 1275-1280	2	3
10	Adaptive Recognition of a Chaotic Dynamics. <i>Europhysics Letters</i> , 1994 , 26, 327-332	1.6	54
9	Pattern formation and competition in photorefractive oscillators. <i>Chaos</i> , 1994 , 4, 491-498	3.3	4
8	Modeling excitable media by a one variable cellular automaton: Application to the cardiac case. <i>Chaos</i> , 1994 , 4, 557-561	3.3	2
7	Mutually recursive method to detect and remove noise in chaotic dynamics 1994 , 2242, 130		1
6	Transition from boundary- to bulk-controlled regimes in optical pattern formation. <i>Physical Review Letters</i> , 1993 , 70, 2277-2280	7.4	66
5	Periodic and chaotic alternation in systems with imperfect O(2) symmetry. <i>Physical Review Letters</i> , 1992 , 69, 3723-3726	7.4	26
4	Patterns, space-time chaos and topological defects in nonlinear optics. <i>Physica D: Nonlinear Phenomena</i> , 1992 , 61, 25-39	3.3	13
3	Controlling Spatiotemporal Chaos: The Paradigm of the Complex Ginzburg-Landau Equation 181-195		
2	Interlayer Hebbian plasticity induces first-order transition in multiplex networks. <i>New Journal of Physics</i> ,	2.9	6
1	Combining complex networks and data mining: why and how		1