Jens Timmer

List of Publications by Year
in descending order

246	11,574	22099	38300
papers	citations	59 h-index	95 g-index

262	262	262	14341
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	WNT and DKK Determine Hair Follicle Spacing Through a Reaction-Diffusion Mechanism. Science, 2006, 314, 1447-1450.	6.0	538
2	Granger Causality: Basic Theory and Application to Neuroscience. , 0, , 437-460.		357
3	Control of Plant Organ Size by KLUH/CYP78A5-Dependent Intercellular Signaling. Developmental Cell, 2007, 13, 843-856.	3.1	334
4	Lessons Learned from Quantitative Dynamical Modeling in Systems Biology. PLoS ONE, 2013, 8, e74335.	1.1	275
5	Design principles of a bacterial signalling network. Nature, 2005, 438, 504-507.	13.7	260
6	Testing for directed influences among neural signals using partial directed coherence. Journal of Neuroscience Methods, 2006, 152, 210-219.	1.3	259
7	Comparison of three nonlinear seizure prediction methods by means of the seizure prediction characteristic. Physica D: Nonlinear Phenomena, 2004, 194, 357-368.	1.3	254
8	NONLINEAR DYNAMICAL SYSTEM IDENTIFICATION FROM UNCERTAIN AND INDIRECT MEASUREMENTS. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2004, 14, 1905-1933.	0.7	251
9	Combining functional and anatomical connectivity reveals brain networks for auditory language comprehension. NeuroImage, 2010, 49, 3187-3197.	2.1	246
10	Systems biology: experimental design. FEBS Journal, 2009, 276, 923-942.	2.2	220
11	Genome-wide analysis of DNA copy number changes and LOH in CLL using high-density SNP arrays. Blood, 2007, 109, 1202-1210.	0.6	219
12	Systemsâ€level interactions between insulinâ€“EGF networks amplify mitogenic signaling. Molecular Systems Biology, 2009, 5, 256.	3.2	205
13	Effects of attention and precision of exerted force on beta range EEG-EMG synchronization during a maintained motor contraction task. Clinical Neurophysiology, 2002, 113, 124-131.	0.7	188
14	Assessing the strength of directed influences among neural signals using renormalized partial directed coherence. Journal of Neuroscience Methods, 2009, 179, 121-130.	1.3	187
15	<scp>USP</scp> 18 lack in microglia causes destructive interferonopathy of the mouse brain. EMBO Journal, 2015, 34, 1612-1629.	3.5	178
16	A red/far-red light-responsive bi-stable toggle switch to control gene expression in mammalian cells. Nucleic Acids Research, 2013, 41, e77-e77.	6.5	161
17	Spleen Tyrosine Kinase Is Overexpressed and Represents a Potential Therapeutic Target in Chronic Lymphocytic Leukemia. Cancer Research, 2009, 69, 5424-5432.	0.4	160
18	Comparison of linear signal processing techniques to infer directed interactions in multivariate neural systems. Signal Processing, 2005, 85, 2137-2160.	2.1	154

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19	EPILEPSIAE â€“ A European epilepsy database. Computer Methods and Programs in Biomedicine, 2012, 106, 127-138.	2.6	153
20	Covering a Broad Dynamic Range: Information Processing at the Erythropoietin Receptor. Science, 2010, 328, 1404-1408.	6.0	152
21	Photoconversion and Nuclear Trafficking Cycles Determine Phytochrome A's Response Profile to Far-Red Light. Cell, 2011, 146, 813-825.	13.5	151
22	Comparison of approaches for parameter identifiability analysis of biological systems. Bioinformatics, 2014, 30, 1440-1448.	1.8	149
23	Deconstructing and Reconstructing Resilience: A Dynamic Network Approach. Perspectives on Psychological Science, 2019, 14, 765-777.	5.2	145
24	Multi-chromatic control of mammalian gene expression and signaling. Nucleic Acids Research, 2013, 41, e124-e124.	6.5	138
25	Two-Dimensional Patterning by a Trapping/Depletion Mechanism: The Role of TTG1 and GL3 in Arabidopsis Trichome Formation. PLoS Biology, 2008, 6, e141.	2.6	135
26	The EPILEPSIAE database: An extensive electroencephalography database of epilepsy patients. Epilepsia, 2012, 53, 1669-1676.	2.6	127
27	On structural and practical identifiability. Current Opinion in Systems Biology, 2021, 25, 60-69.	1.3	127
28	Profile likelihood in systems biology. FEBS Journal, 2013, 280, 2564-2571.	2.2	124
29	Oscillatory cerebral hemodynamicsâ€”the macro- vs. microvascular level. Journal of the Neurological Sciences, 2006, 250, 103-109.	0.3	120
30	Involvement of cranial muscles and high intermuscular coherence in orthostatic tremor. Annals of Neurology, 1999, 45, 384-388.	2.8	114
31	Corticomuscular coherence in the 6-15 Hz band: is the cortex involved in the generation of physiologic tremor?. Experimental Brain Research, 2002, 142, 32-40.	0.7	113
32	Division of labor by dual feedback regulators controls JAK2/STAT5 signaling over broad ligand range. Molecular Systems Biology, 2011, 7, 516.	3.2	110
33	Partial Phase Synchronization for Multivariate Synchronizing Systems. Physical Review Letters, 2006, 96, 208103.	2.9	107
34	Likelihood based observability analysis and confidence intervals for predictions of dynamic models. BMC Systems Biology, 2012, 6, 120.	3.0	104
35	Gene expression profiling in polycythaemia vera: overexpression of transcription factor NF-E2. British Journal of Haematology, 2005, 129, 138-150.	1.2	101
36	Do False Predictions of Seizures Depend on the State of Vigilance? A Report from Two Seizure-Prediction Methods and Proposed Remedies. Epilepsia, 2006, 47, 2058-2070.	2.6	97

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37	Transcription factors ETF, E2F, and SP-1 are involved in cytokine-independent proliferation of murine hepatocytes. Hepatology, 2010, 52, 2127-2136.	3.6	95
38	Joining forces of Bayesian and frequentist methodology: a study for inference in the presence of non-identifiability. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2013, 371, 20110544.	1.6	94
39	Saccadic reaction times: a statistical analysis of multimodal distributions. Vision Research, 1997, 37, 2119-2131.	0.7	93
40	Definition and characterization of the systemic T-cell dysregulation in untreated indolent B-cell lymphoma and very early CLL. Blood, 2011, 117, 3836-3846.	0.6	93
41	Network modulation during complex syntactic processing. NeuroImage, 2012, 59, 815-823.	2.1	90
42	A competitive complex formation mechanism underlies trichome patterning on Arabidopsis leaves. Molecular Systems Biology, 2008, 4, 217.	3.2	89
43	Spatio-temporal patientâ€“individual assessment of synchronization changes for epileptic seizure prediction. Clinical Neurophysiology, 2006, 117, 2399-2413.	0.7	87
44	An Integrative Model for Phytochrome B Mediated Photomorphogenesis: From Protein Dynamics to Physiology. PLoS ONE, 2010, 5, e10721.	1.1	84
45	Dynamic Mathematical Modeling of IL13-Induced Signaling in Hodgkin and Primary Mediastinal B-Cell Lymphoma Allows Prediction of Therapeutic Targets. Cancer Research, 2011, 71, 693-704.	0.4	82
46	Cerebral Autoregulation Dynamics in Acute Ischemic Stroke after rtPA Thrombolysis. Cerebrovascular Diseases, 2008, 26, 147-155.	0.8	81
47	Secondary decline of cerebral autoregulation is associated with worse outcome after intracerebral hemorrhage. Intensive Care Medicine, 2010, 36, 264-271.	3.9	80
48	Enzymatic study on AtCCD4 and AtCCD7 and their potential to form acyclic regulatory metabolites. Journal of Experimental Botany, 2016, 67, 5993-6005.	2.4	79
49	Driving the Model to Its Limit: Profile Likelihood Based Model Reduction. PLoS ONE, 2016, 11, e0162366.	1.1	79
50	Application of a multivariate seizure detection and prediction method to non-invasive and intracranial long-term EEG recordings. Clinical Neurophysiology, 2008, 119, 197-211.	0.7	77
51	Zebrafish Pou5f1â€dependent transcriptional networks in temporal control of early development. Molecular Systems Biology, 2010, 6, 354.	3.2	77
52	Liquid-liquid phase separation of light-inducible transcription factors increases transcription activation in mammalian cells and mice. Science Advances, 2021, 7, .	4.7	73
53	Theoretical and experimental analysis links isoformâ€•specific ERK signalling to cell fate decisions. Molecular Systems Biology, 2009, 5, 334.	3.2	72
54	Caspase-3 feeds back on caspase-8, Bid and XIAP in type I Fas signaling in primary mouse hepatocytes. Apoptosis: an International Journal on Programmed Cell Death, 2012, 17, 503-515.	2.2	72

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55	Protein abundance of AKT and ERK pathway components governs cell typeâ€specific regulation ofÂproliferation. Molecular Systems Biology, 2017, 13, 904.	3.2	72
56	Optogenetic control of gene expression in plants in the presence of ambient white light. Nature Methods, 2020, 17, 717-725.	9.0	72
57	Joining the benefits: Combining epileptic seizure prediction methods. Epilepsia, 2010, 51, 1598-1606.	2.6	70
58	Dynamic annual daylight simulations based on one-hour and one-minute means of irradiance data. Solar Energy, 2002, 72, 385-395.	2.9	68
59	Computational processing and error reduction strategies for standardized quantitative data in biological networks. FEBS Journal, 2005, 272, 6400-6411.	2.2	66
60	Tremor-correlated neuronal activity in the subthalamic nucleus of Parkinsonian patients. Neuroscience Letters, 2008, 442, 195-199.	1.0	66
61	Quantitative analyses of anaerobic wastewater treatment processes: Identifiability and parameter estimation. Biotechnology and Bioengineering, 2002, 78, 89-103.	1.7	65
62	Cerebral dysautoregulation and the risk of ischemic events in occlusive carotid artery disease. Journal of Neurology, 2008, 255, 1182-1189.	1.8	65
63	Experimental Design for Parameter Estimation of Gene Regulatory Networks. PLoS ONE, 2012, 7, e40052.	1.1	62
64	Gene profiling of polycystic kidneys. Nephrology Dialysis Transplantation, 2006, 21, 1816-1824.	0.4	61
65	Benchmark problems for dynamic modeling of intracellular processes. Bioinformatics, 2019, 35, 3073-3082.	1.8	61
66	A Green-Light-Responsive System for the Control of Transgene Expression in Mammalian and Plant Cells. ACS Synthetic Biology, 2018, 7, 1349-1358.	1.9	60
67	Orthogonal Optogenetic Triple-Gene Control in Mammalian Cells. ACS Synthetic Biology, 2014, 3, 796-801.	1.9	58
68	Inference of Granger causal time-dependent influences in noisy multivariate time series. Journal of Neuroscience Methods, 2012, 203, 173-185.	1.3	57
69	A Quantitative and Dynamic Model for Plant Stem Cell Regulation. PLoS ONE, 2008, 3, e3553.	1.1	56
70	PI3Kâ€p110â€alphaâ€subtype signalling mediates survival, proliferation and neurogenesis of cortical progenitor cells via activation of <scp>mTORC</scp>2. Journal of Neurochemistry, 2014, 130, 255-267.	2.1	55
71	Resolving the Combinatorial Complexity of Smad Protein Complex Formation and Its Link to Gene Expression. Cell Systems, 2018, 6, 75-89.e11.	2.9	55
72	PEtabâ€”Interoperable specification of parameter estimation problems in systems biology. PLoS Computational Biology, 2021, 17, e1008646.	1.5	55

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73	Cytokine Production during Sleep and Wakef ulness and Its Relationship to Cortisol in Healthy Humans. Neuropsychobiology, 1993, 28, 9-16.	0.9	53
74	Expression profiling on chronically rejected transplant kidneys1. Transplantation, 2003, 76, 539-547.	0.5	49
75	Representative Sinusoids for Hepatic Four-Scale Pharmacokinetics Simulations. PLoS ONE, 2015, 10, e0133653.	1.1	47
76	Seizure prediction: The impact of long prediction horizons. Epilepsy Research, 2007, 73, 213-217.	0.8	46
77	Signatures of nonlinearity in single cell noise-induced oscillations. Journal of Theoretical Biology, 2013, 335, 222-234.	0.8	45
78	Heterogeneous kinetics of AKT signaling in individual cells are accounted for by variable protein concentration. Frontiers in Physiology, 2012, 3, 451.	1.3	43
79	The virtual liver: state of the art and future perspectives. Archives of Toxicology, 2014, 88, 2071-2075.	1.9	41
80	Identification of Cell Type-Specific Differences in Erythropoietin Receptor Signaling in Primary Erythroid and Lung Cancer Cells. PLoS Computational Biology, 2016, 12, e1005049.	1.5	41
81	Disentangling molecular mechanisms regulating sensitization of interferon alpha signal transduction. Molecular Systems Biology, 2020, 16, e8955.	3.2	41
82	Genome-wide analysis of genetic alterations in Barrett's adenocarcinoma using single nucleotide polymorphism arrays. Laboratory Investigation, 2009, 89, 385-397.	1.7	39
83	Predicting ligand-dependent tumors from multi-dimensional signaling features. Npj Systems Biology and Applications, 2017, 3, 27.	1.4	39
84	A novel approach for reliable microarray analysis of microdissected tumor cells from formalin-fixed and paraffin-embedded colorectal cancer resection specimens. Journal of Molecular Medicine, 2009, 87, 211-224.	1.7	38
85	Higher-order Lie symmetries in identifiability and predictability analysis of dynamic models. Physical Review E, 2015, 92, 012920.	0.8	38
86	RPPanalyzer Toolbox: An improved R package for analysis of reverse phase protein array data. BioTechniques, 2014, 57, 125-135.	0.8	36
87	Integration of Boolean models exemplified on hepatocyte signal transduction. Briefings in Bioinformatics, 2012, 13, 365-376.	3.2	35
88	Summary of the DREAM8 Parameter Estimation Challenge: Toward Parameter Identification for Whole-Cell Models. PLoS Computational Biology, 2015, 11, e1004096.	1.5	35
89	Hepatocyte Ploidy Is a Diversity Factor for Liver Homeostasis. Frontiers in Physiology, 2017, 8, 862.	1.3	35
90	Sensitivity and specificity of coherence and phase synchronization analysis. Physics Letters, Section A: General, Atomic and Solid State Physics, 2006, 356, 26-34.	0.9	34

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91	Cerebellar Autoregulation Dynamics in Humans. Journal of Cerebral Blood Flow and Metabolism, 2008, 28, 1605-1612.	2.4	34
92	Effects of light and chronotherapy on human circadian rhythms in delayed sleep phase syndrome: Cytokines, cortisol, growth hormone, and the sleep-wake cycle. Biological Psychiatry, 1996, 40, 794-797.	0.7	33
93	Plant-type phytoene desaturase: Functional evaluation of structural implications. PLoS ONE, 2017, 12, e0187628.	1.1	30
94	Linear and nonlinear time series analysis of the black hole candidate CygnusX-1. Physical Review E, 2000, 61, 1342-1352.	0.8	27
95	Cause and cure of sloppiness in ordinary differential equation models. Physical Review E, 2014, 90, 023303.	0.8	27
96	Systems biology of JAK/STAT signalling. Essays in Biochemistry, 2008, 45, 109-120.	2.1	27
97	L Â1 regularization facilitates detection of cell type-specific parameters in dynamical systems. Bioinformatics, 2016, 32, i718-i726.	1.8	26
98	Graphical Modeling of Dynamic Relationships in Multivariate Time Series. , 0, , 335-372.		24
99	Testing for phase synchronization. Physics Letters, Section A: General, Atomic and Solid State Physics, 2007, 366, 382-390.	0.9	23
100	Spatial mapping of dynamic cerebral autoregulation by multichannel near-infrared spectroscopy in high-grade carotid artery disease. Journal of Biomedical Optics, 2014, 19, 097005.	1.4	23
101	Increased sensitivity of the inositol-phospholipid system in neutrophils from patients with acute major depressive episodes. Psychiatry Research, 1996, 65, 45-51.	1.7	22
102	On identification of Na + channel gating schemes using moving-average filtered hidden Markov models. European Biophysics Journal, 1999, 28, 605-609.	1.2	22
103	Diagnosis of Sleep Apnea by Automatic Analysis of Nasal Pressure and Forced Oscillation Impedance. American Journal of Respiratory and Critical Care Medicine, 2002, 165, 940-944.	2.5	22
104	Data-Based Mathematical Modeling of Vectorial Transport across Double-Transfected Polarized Cells. Drug Metabolism and Disposition, 2007, 35, 1476-1481.	1.7	22
105	Are prodromes preictal events? A prospective PDA-based study. Epilepsy and Behavior, 2011, 21, 184-188.	0.9	22
106	Spatial analysis of riparian forest soil macrofauna and its relation to abiotic soil properties. Pedobiologia, 2016, 59, 27-36.	0.5	22
107	Profile likelihood-based analyses of infectious disease models. Statistical Methods in Medical Research, 2018, 27, 1979-1998.	0.7	22
108	Synthetic Biology Makes Polymer Materials Count. Advanced Materials, 2018, 30, e1800472.	11.1	22

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109	High functional connectivity of tremor related subthalamic neurons in Parkinsonâ€™s disease. Clinical Neurophysiology, 2009, 120, 1755-1761.	0.7	21
110	Identification of Preseizure States in Epilepsy: A Data-Driven Approach for Multichannel EEG Recordings. Frontiers in Computational Neuroscience, 2011, 5, 32.	1.2	21
111	Fast integration-based prediction bands for ordinary differential equation models. Bioinformatics, 2016, 32, 1204-1210.	1.8	21
112	Synthetic biology-inspired design of signal-amplifying materials systems. Materials Today, 2019, 22, 25-34.	8.3	21
113	Computer Intensive Testing for the Influence Between Time Series. , 0, , 411-436.		20
114	Host cell responses induced by hepatitis C virus binding. Hepatology, 2006, 43, 1326-1336.	3.6	20
115	Pre-Clustering of the B Cell Antigen Receptor Demonstrated by Mathematically Extended Electron Microscopy. Frontiers in Immunology, 2013, 4, 427.	2.2	20
116	Mathematical modeling of drug-induced receptor internalization in the HER2-positive SKBR3 breast cancer cell-line. Scientific Reports, 2019, 9, 12709.	1.6	20
117	Dynamic Modeling, Parameter Estimation, and Uncertainty Analysis in R. Journal of Statistical Software, 2019, 88, .	1.8	20
118	On the Detection of Direct Directed Information Flow in fMRI. IEEE Journal on Selected Topics in Signal Processing, 2008, 2, 965-974.	7.3	19
119	Customized Steady-State Constraints for Parameter Estimation in Non-Linear Ordinary Differential Equation Models. Frontiers in Cell and Developmental Biology, 2016, 4, 41.	1.8	19
120	Quantification of oxygen metabolic rates in Human brain with dynamic ¹⁷O MRI: Profile likelihood analysis. Magnetic Resonance in Medicine, 2017, 78, 1157-1167.	1.9	19
121	Model Based Targeting of IL-6-Induced Inflammatory Responses in Cultured Primary Hepatocytes to Improve Application of the JAK Inhibitor Ruxolitinib. Frontiers in Physiology, 2017, 8, 775.	1.3	19
122	Model-based identification of TNFÎ±-induced IKKÎ²-mediated and IÎºBÎ±-mediated regulation of NFÎºB signal transduction as a tool to quantify the impact of drug-induced liver injury compounds. Npj Systems Biology and Applications, 2018, 4, 23.	1.4	19
123	Failure of dimension analysis in a simple five-dimensional system. Physical Review E, 1994, 50, 1770-1780.	0.8	18
124	Detecting Coupling in the Presence of Noise and Nonlinearity. , 0, , 265-282.		18
125	Signatures of gene expression noise in cellular systems. Progress in Biophysics and Molecular Biology, 2009, 100, 57-66.	1.4	18
126	A numerically efficient implementation of the expectation maximization algorithm for state space models. Applied Mathematics and Computation, 2014, 241, 222-232.	1.4	18

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127	Real-time monitoring of ethene/1-hexene copolymerizations: determination of catalyst activity, copolymer composition and copolymerization parameters. Polymer, 2003, 44, 6179-6186.	1.8	17
128	Control of the specificity of T cell-mediated anti-idiotype immunity by natural regulatory T cells. Cancer Immunology, Immunotherapy, 2011, 60, 49-60.	2.0	17
129	Joint EEG/fMRI state space model for the detection of directed interactions in human brainsâ€"a simulation study. Physiological Measurement, 2011, 32, 1725-1736.	1.2	17
130	A Boolean view separates platelet activatory and inhibitory signalling as verified by phosphorylation monitoring including threshold behaviour and integrin modulation. Molecular BioSystems, 2013, 9, 1326.	2.9	16
131	Assessing the strength of directed influences among neural signals: An approach to noisy data. Journal of Neuroscience Methods, 2015, 239, 47-64.	1.3	16
132	Multivariate Signal Analysis by Parametric Models. , 0, , 373-409.		15
133	Disentangling the Complexity of HGF Signaling by Combining Qualitative and Quantitative Modeling. PLoS Computational Biology, 2015, 11, e1004192.	1.5	15
134	Detecting multimodality in saccadic reaction time distributions in gap and overlap tasks. Biological Cybernetics, 1998, 78, 293-305.	0.6	14
135	MeDIP coupled with a promoter tiling array as a platform to investigate global DNA methylation patterns in AML cells. Leukemia Research, 2013, 37, 102-111.	0.4	14
136	Networks: On the relation of bi- and multivariate measures. Scientific Reports, 2015, 5, 10805.	1.6	14
137	IL-1Î²-induced and p38MAPK-dependent activation of the mitogen-activated protein kinase-activated protein kinase 2 (MK2) in hepatocytes: Signal transduction with robust and concentration-independent signal amplification. Journal of Biological Chemistry, 2017, 292, 6291-6302.	1.6	14
138	Confidence Regions for Spectral Peak Frequencies. Biometrical Journal, 1997, 39, 849-861.	0.6	13
139	Dynamic Pathway Modeling: Feasibility Analysis and Optimal Experimental Design. Annals of the New York Academy of Sciences, 2007, 1115, 212-220.	1.8	13
140	Rewiring and dosing of systems modules as a design approach for synthetic mammalian signaling networks. Molecular BioSystems, 2012, 8, 1824.	2.9	13
141	Preventing COVID-19 outbreaks through surveillance testing in healthcare facilities: a modelling study. BMC Infectious Diseases, 2022, 22, 105.	1.3	13
142	Granger Causality on Spatial Manifolds: Applications to Neuroimaging. , 0, , 461-491.		12
143	A common strategy and database to compare the performance of seizure prediction algorithms. Epilepsy and Behavior, 2010, 17, 154-156.	0.9	12
144	A Thymic Epithelial Stem Cell Pool Persists throughout Ontogeny and Is Modulated by TGF-Î². Cell Reports, 2016, 17, 448-457.	2.9	12

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145	The Effects of Non-Identifiability on Testing for Detailed Balance in Aggregated Markov Models for Ion-Channel Gating. Biophysical Journal, 2000, 79, 2918-2924.	0.2	11
146	DETECTING COUPLING DIRECTIONS IN MULTIVARIATE OSCILLATORY SYSTEMS. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2007, 17, 3735-3739.	0.7	11
147	Dynamical modelling of prostaglandin signalling in platelets reveals individual receptor contributions and feedback properties. Molecular BioSystems, 2013, 9, 2520.	2.9	11
148	Biofunctionalized Materials Featuring Feedforward and Feedback Circuits Exemplified by the Detection of Botulinum Toxin A. Advanced Science, 2019, 6, 1801320.	5.6	11
149	Model-based extension of high-throughput to high-content data. BMC Systems Biology, 2010, 4, 106.	3.0	10
150	The apparent electrical conductivity as a surrogate variable for predicting earthworm abundances in tilled soils. Journal of Plant Nutrition and Soil Science, 2010, 173, 584-590.	1.1	10
151	Block-bootstrapping for noisy data. Journal of Neuroscience Methods, 2013, 219, 285-291.	1.3	10
152	Cell-to-cell variability in JAK2/STAT5 pathway components and cytoplasmic volumes defines survival threshold in erythroid progenitor cells. Cell Reports, 2021, 36, 109507.	2.9	10
153	Mathematical model of early Reelin-induced Src family kinase-mediated signaling. PLoS ONE, 2017, 12, e0186927.	1.1	10
154	Modeling Volatility Using State Space Models. International Journal of Neural Systems, 1997, 08, 385-398.	3.2	9
155	SURROGATE-BASED HYPOTHESIS TEST WITHOUT SURROGATES. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2004, 14, 2107-2114.	0.7	9
156	A Systems Biology Study on NFÎºB Signaling in Primary Mouse Hepatocytes. Frontiers in Physiology, 2012, 3, 466.	1.3	9
157	Local Riemannian geometry of model manifolds and its implications for practical parameter identifiability. PLoS ONE, 2019, 14, e0217837.	1.1	9
158	Mapping connections in signaling networks with ambiguous modularity. Npj Systems Biology and Applications, 2019, 5, 19.	1.4	9
159	Functional Proteomics of Breast Cancer Metabolism Identifies GLUL as Responder during Hypoxic Adaptation. Journal of Proteome Research, 2019, 18, 1352-1362.	1.8	9
160	Covid-19 in Deutschland â€“ ErklÃrung, Prognose und Einfluss gesundheitspolitischer MaÃŸnahmen. Perspektiven Der Wirtschaftspolitik, 2020, 21, 250-262.	0.2	9
161	PHASE SYNCHRONIZATION AND COHERENCE ANALYSIS: SENSITIVITY AND SPECIFICITY. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2007, 17, 3551-3556.	0.7	8
162	cDNA Microarray Analysis of Adaptive Changes after Renal Ablation in a Sclerosis-Resistant Mouse Strain. Kidney and Blood Pressure Research, 2007, 30, 377-387.	0.9	8

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163	A comparative analysis of the bistability switch for platelet aggregation by logic ODE based dynamical modeling. Molecular BioSystems, 2014, 10, 2082.	2.9	8
164	Extensions of â„“1 regularization increase detection specificity for cell-type specific parameters in dynamic models. BMC Bioinformatics, 2019, 20, 395.	1.2	8
165	A Multivariate Approach to Correlation Analysis Based on Random Matrix Theory. , 0, , 209-226.		7
166	Parametric Versus Nonparametric Transfer Function Estimation of Cerebral Autoregulation from Spontaneous Blood-Pressure Oscillations. Cardiovascular Engineering (Dordrecht, Netherlands), 2009, 9, 72-82.	1.0	7
167	Assessing parameter identifiability for dynamic causal modeling of fMRI data. Frontiers in Neuroscience, 2015, 9, 43.	1.4	7
168	Characterization of the synthetic biology-inspired implementation of a materials-based positive feedback loop. Data in Brief, 2018, 19, 665-677.	0.5	7
169	Dynamic modeling of Nrf2 pathway activation in liver cells after toxicant exposure. Scientific Reports, 2022, 12, 7336.	1.6	7
170	Modeling of Single Noninactivating Na+ Channels: Evidence for Two Open and Several Fast Inactivated States. Biophysical Journal, 2006, 90, 3511-3522.	0.2	6
171	Robust Detail-Preserving Signal Extraction. , 0, , 131-157.		6
172	MSPypeline: a python package for streamlined data analysis of mass spectrometry-based proteomics. Bioinformatics Advances, 2022, 2, .	0.9	6
173	Model Selection in Non-nested Hidden Markov Models for Ion Channel Gating. Journal of Theoretical Biology, 2001, 208, 439-450.	0.8	5
174	Local and Cluster Weighted Modeling for Time Series Prediction. , 0, , 39-65.		5
175	A spatial approach to soilâ€ecological experimentation at landscape scale. Journal of Plant Nutrition and Soil Science, 2008, 171, 338-343.	1.1	5
176	EFFECT OF JUMP DISCONTINUITY FOR PHASE-RANDOMIZED SURROGATE DATA TESTING. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2009, 19, 403-408.	0.7	5
177	On the estimation of the direction of information flow in networks of dynamical systems. Journal of Neuroscience Methods, 2011, 196, 182-189.	1.3	5
178	The course of dynamic cerebral autoregulation during cervical internal carotid artery occlusion. Neurological Research, 2011, 33, 921-926.	0.6	5
179	In vitro study to simulate the intracardiac magnetohydrodynamic effect. Magnetic Resonance in Medicine, 2015, 74, 850-857.	1.9	5
180	BRAF V600E Mutations in Nevi and Melanocytic Tumors of Uncertain Malignant Potential. Journal of Investigative Dermatology, 2018, 138, 2489-2491.	0.3	5

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181	Identification of Interleukin1Î² as an Amplifier of Interferon alpha-induced Antiviral Responses. PLoS Pathogens, 2020, 16, e1008461.	2.1	5
182	Cross-TCR Antagonism Revealed by Optogenetically Tuning the Half-Life of the TCR Ligand Binding. International Journal of Molecular Sciences, 2021, 22, 4920.	1.8	5
183	Pathological tremors: Deterministic chaos or nonlinear stochastic oscillators?. AIP Conference Proceedings, 2000, , .	0.3	4
184	Method-Independent Effect in Testing for Detailed Balance in Ion Channel Gating. Biophysical Journal, 2002, 82, 2275-2276.	0.2	4
185	Estimating rate constants from single ion channel currents when the initial distribution is known. European Biophysics Journal, 2005, 34, 306-313.	1.2	4
186	Analysis of single ion channel data incorporating time-interval omission and sampling. Journal of the Royal Society Interface, 2006, 3, 87-97.	1.5	4
187	Synchronization Analysis and Recurrence in Complex Systems. , 0, , 231-264.		4
188	Linear Models for Multivariate Time Series. , 0, , 283-308.		4
189	Coupled Oscillators Approach in Analysis of Bivariate Data. , 0, , 159-180.		4
190	BISTABILITY AND SELF-OSCILLATIONS IN CELL CYCLE CONTROL. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2006, 16, 1057-1066.	0.7	4
191	Estimation of Gene Induction Enables a Relevance-Based Ranking of Gene Sets. Journal of Computational Biology, 2009, 16, 959-967.	0.8	4
192	Optimized spectral estimation for nonlinear synchronizing systems. Physical Review E, 2014, 89, 032912.	0.8	4
193	Modeling the inflammatory response in the hypothalamus ensuing heat stroke: Iterative cycle of model calibration, identifiability analysis, experimental design and data collection. Mathematical Biosciences, 2015, 260, 35-46.	0.9	4
194	A Dynamic Mathematical Model of Bile Acid Clearance in HepaRG Cells. Toxicological Sciences, 2018, 161, 48-57.	1.4	4
195	Recipes for Analysis of Molecular Networks Using the Data2Dynamics Modeling Environment. Methods in Molecular Biology, 2019, 1945, 341-362.	0.4	4
196	Proximal Soil Sensing â€“ A Contribution for Species Habitat Distribution Modelling of Earthworms in Agricultural Soils?. PLoS ONE, 2016, 11, e0158271.	1.1	4
197	Disentangling ERBB Signaling in Breast Cancer Subtypesâ€”A Model-Based Analysis. Cancers, 2022, 14, 2379.	1.7	4
198	An Open Source Protein Gel Documentation System for Proteome Analyses. Journal of Chemical Information and Computer Sciences, 2004, 44, 168-169.	2.8	3

#	Article	IF	Citations
199	Nonlinear Analysis of Time Series Data. , 0, , 5-37.		3
200	Handbook of Time Series Analysis: Introduction and Overview. , 0, , 1-4.		3
201	Dealing with Randomness in Biosignals. , 0, , 89-130.		3
202	Grading of Dynamic Cerebral Autoregulation Without Blood Pressure Recordings: A Simple Doppler-Based Method. Ultrasound in Medicine and Biology, 2012, 38, 1546-1551.	0.7	3
203	Magnitude of Ubiquitination Determines the Fate of Epidermal Growth Factor Receptor Upon Ligand Stimulation. Journal of Molecular Biology, 2021, 433, 167240.	2.0	3
204	Incomplete Forced Expiration â€“ Estimating Vital Capacity by a Mathematical Method. Respiration, 2004, 71, 353-359.	1.2	2
205	Spatio-Temporal Modeling for Biosurveillance Using a Spatially Constrained State Space Model. , 0, , 309-334.		2
206	Bivariate and Multivariate Time Series Analysis Techniques and their Potential Impact for Seizure Prediction. , 0, , 189-208.		2
207	Testing a Prediction Algorithm: Assessment of Performance. , 0, , 249-259.		2
208	Chronic Anterior Thalamic Deep-Brain Stimulation as a Treatment for Intractable Epilepsy. , 0, , 307-316.		2
209	Statistical evaluation of forecasts. Physical Review E, 2014, 90, 022133.	0.8	2
210	The ratio of the lateral correlation length and particle radius determines the density profile of spherical molecules near a fluctuating membrane. Soft Matter, 2014, 10, 8475-8481.	1.2	2
211	Testing the Pattern of AKT Activation by Variational Parameter Estimation. IEEE Life Sciences Letters, 2016, 2, 13-16.	1.2	2
212	Efficient simulation of clinical target response surfaces. CPT: Pharmacometrics and Systems Pharmacology, 2022, 11, 512-523.	1.3	2
213	Individualizing deep dynamic models for psychological resilience data. Scientific Reports, 2022, 12, 8061.	1.6	2
214	Nonlinear Dynamical Models from Chaotic Time Series: Methods and Applications. , 0, , 181-211.		1
215	Impact of Computational Models for an Improved Understanding of Ictogenesis: From Single Neurons to Networks of Neurons. , 0, , 25-44.		1
216	Time Series Analysis with Cellular Neural Networks. , 0, , 131-148.		1

#	Article	IF	Citations
217	Neuronal Synchronization and theâ€˜Ictio-Centricâ€™ vs the Network Theory for Ictiogenesis: Mechanistic and Therapeutic Implications for Clinical Epileptology. , 0, , 109-115.		1
218	Epilepsy as a Disease of the Dynamics of Neuronal Networksâ€“ Models and Predictions. , 0, , 97-107.		1
219	Biomaterials: Phytochromeâ€Based Extracellular Matrix with Reversibly Tunable Mechanical Properties (Adv. Mater. 12/2019). Advanced Materials, 2019, 31, 1970083.	11.1	1
220	Intrinsic Cortical Mechanisms which Oppose Epileptiform Activity: Implications for Seizure Prediction. , 0, , 149-161.		1
221	Seizure Prediction in Epilepsy: Does a Combination of Methods Help?. , 0, , 227-236.		1
222	Vagus Nerve and Hippocampal Stimulation for Refractory Epilepsy. , 0, , 283-297.		1
223	Network Models of Epileptiform Activity: Explorations in Seizure Evolution and Alteration. , 0, , 61-81.		1
224	Quantitative analyses of anaerobic wastewater treatment processes: Identifiability and parameter estimation. , 2002, 78, 89.		1
225	Responsive Neurostimulation for the Treatment of Epileptic Seizures. , 0, , 299-306.		1
226	Optimal Experimental Design Based on Two-Dimensional Likelihood Profiles. Frontiers in Molecular Biosciences, 2022, 9, 800856.	1.6	1
227	Considerations on Database Requirements for Seizure Prediction. , 0, , 261-267.		1
228	Cellular Neural Networks and Seizure Prediction: An Overview. , 0, , 117-129.		1
229	Estimating parameters in differential equations with application to laser data. AIP Conference Proceedings, 2000, , .	0.3	0
230	Deterministic and Probabilistic Forecasting in Reconstructed State Spaces. , 0, , 67-88.		0
231	Data-Driven Analysis of Nonstationary Brain Signals. , 0, , 213-230.		0
232	The History of Seizure Prediction. , 0, , 11-24.		0
233	3P-178 Computer simulation and theoretical formulation of stimulus/response relationships of intracellular signaling network cascades(The 46th Annual Meeting of the Biophysical Society of) Tj ETQq1 1 0.784314 rgBT /Overlock	1.4	0
234	Effective and Anatomical Connectivity in a Rat Model of Spontaneous Limbic Seizure. , 0, , 45-59.		0

#	Article	IF	Citations
235	Characterizing the Epileptic Process with Stochastic Qualifiers of Brain Dynamics. , 0, , 175-188.		0
236	Dealing with prognostic signature instability: a strategy illustrated for cardiovascular events in patients with end-stage renal disease. BMC Medical Genomics, 2016, 9, 43.	0.7	0
237	Biomaterials: Synthetic Biology Makes Polymer Materials Count (Adv. Mater. 21/2018). Advanced Materials, 2018, 30, 1870150.	11.1	0
238	Estimating chain lengths for time delays in dynamical systems using profile likelihood. Bioinformatics, 2019, 36, 1848-1854.	1.8	0
239	Spleen Tyrosine Kinase (SYK) Is Overexpressed and Represents a Potential Therapeutic Target in Chronic Lymphocytic Leukemia. Blood, 2008, 112, 543-543.	0.6	0
240	Distinct Patterns of Systemic Immune Dysregulation in Indolent B Cell Lymphoma. Blood, 2008, 112, 3780-3780.	0.6	0
241	Is Prediction of the Time of a Seizure Onset the Only Value of Seizure-Prediction Studies?. , 0, , 163-168.		0
242	High-Frequency Pre-Seizure Activity and Seizure Prediction. , 0, , 169-173.		0
243	Beyond Predictionâ€“ Focal Cooling and Optical Activation to Terminate Focal Seizures. , 0, , 269-282.		0
244	Thoughts about Seizure Prediction from the Perspective of a Clinical Neurophysiologist. , 0, , 317-323.		0
245	State of Seizure Prediction: A Report on Informal Discussions with Participants of the Third International Workshop on Seizure Prediction. , 0, , 325-330.		0
246	Recurrent Cortical Network Activity and Modulation of Synaptic Transmission. , 0, , 83-95.		0