Luc Berthouze

List of Publications by Year
in descending order

51	917	430874	501196
papers	citations	18 h-index	28 g-index

61	61	61	1062
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Exploiting Functional Connectivity Inference for Efficient Root Cause Analysis. , 2022, , .		1
2	Inference of brain networks with approximate Bayesian computation â€“ assessing face validity with an example application in Parkinsonism. NeuroImage, 2021, 236, 118020.	4.2	8
3	The Impact of Contact Structure and Mixing on Control Measures and Disease-Induced Herd Immunity in Epidemic Models: A Mean-Field Model Perspective. Bulletin of Mathematical Biology, 2021, 83, 117.	1.9	8
4	Temporal ordering of input modulates connectivity formation in a developmental neuronal network model of the cortex. PLoS ONE, 2020, 15, e0226772.	2.5	7
5	Network inference from population-level observation of epidemics. Scientific Reports, 2020, 10, 18779.	3.3	11
6	PDE limits of stochastic SIS epidemics on networks. Journal of Complex Networks, 2020, 8, .	1.8	1
7	Title is missing!. , 2020, 15, e0226772.		0
8	Title is missing!. , 2020, 15, e0226772.		0
9	Title is missing!. , 2020, 15, e0226772.		0
10	Inferring Functional Connectivity From Time-Series of Events in Large Scale Network Deployments. IEEE Transactions on Network and Service Management, 2019, 16, 857-870.	4.9	8
11	Epidemic threshold in pairwise models for clustered networks: closures and fast correlations. Journal of Mathematical Biology, 2019, 79, 823-860.	1.9	7
12	Mapping Structural Diversity in Networks Sharing a Given Degree Distribution and Global Clustering: Adaptive Resolution Grid Search Evolution with Diophantine Equation-Based Mutations. Studies in Computational Intelligence, 2019, , 718-730.	0.9	0
13	Relating Vertex and Global Graph Entropy in Randomly Generated Graphs. Entropy, 2018, 20, 481.	2.2	3
14	Edge-Based Compartmental Modelling of an SIR Epidemic on a Dual-Layer Staticâ€“Dynamic Multiplex Network with Tunable Clustering. Bulletin of Mathematical Biology, 2018, 80, 2698-2733.	1.9	9
15	Network events in a large commercial network: What can we learn?. , 2018, , .		3
16	Propagation of beta/gamma rhythms in the cortico-basal ganglia circuits of the parkinsonian rat. Journal of Neurophysiology, 2018, 119, 1608-1628.	1.8	62
17	Mapping Out Emerging Network Structures in Dynamic Network Models Coupled with Epidemics. Theoretical Biology, 2017, , 267-289.	0.1	0
18	Clustered Arrangement of Inhibitory Neurons Can Lead to Oscillatory Dynamics in a Model of Activity-Dependent Structural Plasticity. , 2017, , 123-154.		0

#	Article	IF	Citations
19	A genetic algorithm-based approach to mapping the diversity of networks sharing a given degree distribution and global clustering. Studies in Computational Intelligence, 2017, , 223-233.	0.9	1
20	The Parkinsonian Subthalamic Network: Measures of Power, Linear, and Non-linear Synchronization and their Relationship to L-DOPA Treatment and OFF State Motor Severity. Frontiers in Human Neuroscience, 2016, 10, 517.	2.0	28
21	Oscillating epidemics in a dynamic network model: stochastic and mean-field analysis. Journal of Mathematical Biology, 2016, 72, 1153-1176.	1.9	27
22	Beyond clustering: mean-field dynamics on networks with arbitrary subgraph composition. Journal of Mathematical Biology, 2016, 72, 255-281.	1.9	12
23	Resting state MEG oscillations show long-range temporal correlations of phase synchrony that break down during finger movement. Frontiers in Physiology, 2015, 6, 183.	2.8	22
24	Using Novelty-Biased GA to Sample Diversity in Graphs Satisfying Constraints. , 2015, , .		3
25	Markers of criticality in phase synchronization. Frontiers in Systems Neuroscience, 2014, 8, 176.	2.5	40
26	Impact of constrained rewiring on network structure and node dynamics. Physical Review E, 2014, 90, 052806.	2.1	11
27	Identification of Criticality in Neuronal Avalanches: II. A Theoretical and Empirical Investigation of the Driven Case. Journal of Mathematical Neuroscience, 2014, 4, 9.	2.4	12
28	Higher-order structure and epidemic dynamics in clustered networks. Journal of Theoretical Biology, 2014, 348, 21-32.	1.7	31
29	Identification of Criticality in Neuronal Avalanches: I. A Theoretical Investigation of the Non-driven Case. Journal of Mathematical Neuroscience, 2013, 3, 5.	2.4	22
30	Rectification of EMG in low force contractions improves detection of motor unit coherence in the beta-frequency band. Journal of Neurophysiology, 2013, 110, 1744-1750.	1.8	65
31	Modelling approaches for simple dynamic networks and applications to disease transmission models. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2012, 468, 1332-1355.	2.1	47
32	Power-law distribution of phase-locking intervals does not imply critical interaction. Physical Review E, 2012, 86, 051920.	2.1	16
33	Adaptive time-varying detrended fluctuation analysis. Journal of Neuroscience Methods, 2012, 209, 178-188.	2.5	24
34	Long-Range Temporal Correlations in the EEG Bursts of Human Preterm Babies. PLoS ONE, 2012, 7, e31543.	2.5	26
35	Detecting the presence of long-range temporal correlations in a time-varying measure of phase synchrony. BMC Neuroscience, 2011, 12, .	1.9	0
36	Design and validation of surface-marker clusters for the quantification of joint rotations in general movements in early infancy. Journal of Biomechanics, 2011, 44, 1212-1215.	2.1	13

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37	Human EEG shows long-range temporal correlations of oscillation amplitude in Theta, Alpha and Beta bands across a wide age range. Clinical Neurophysiology, 2010, 121, 1187-1197.	1.5	58
38	Assembly, tuning, and transfer of action systems in infants and robots. Infant and Child Development, 2008, 17, 25-42.	1.5	11
39	Passive compliance for a RC servo-controlled bouncing robot. Advanced Robotics, 2006, 20, 953-961.	1.8	22
40	A Neural Model for Context-dependent Sequence Learning. Neural Processing Letters, 2006, 23, 27-45.	3.2	18
41	Robot Bouncing: On the Synergy Between Neural and Body-Environment Dynamics. Lecture Notes in Computer Science, 2004, , 86-97.	1.3	5
42	Motor Skill Acquisition Under Environmental Perturbations: On the Necessity of Alternate Freezing and Freeing of Degrees of Freedom. Adaptive Behavior, 2004, 12, 47-64.	1.9	71
43	Epigenetic roboticsâ€"modelling cognitive development in robotic systems. Connection Science, 2003, 15, 147-150.	3.0	16
44	On the Interplay Between Morphological, Neural, and Environmental Dynamics: A Robotic Case Study. Adaptive Behavior, 2002, 10, 223-241.	1.9	28
45	EXPLORING Kansei IN MULTIMEDIA INFORMATION. KANSEI Engineering International, 2001, 2, 1-10.	0.2	14
46	Interfacing Agents through Boundaries of Interaction Dynamics. , 2000, , 289-296.		0
47	Cognitive Robotics. Towards emergence of embodied interaction dynamics.. Journal of the Robotics Society of Japan, 1999, 17, 29-33.	0.1	3
48	Emergence and Categorization of Coordinated Visual Behavior Through Embodied Interaction. Machine Learning, 1998, 31, 187-200.	5.4	26
49	Emergence and Categorization of Coordinated Visual Behavior Through Embodied Interaction. Autonomous Robots, 1998, 5, 369-379.	4.8	9
50	Neural learning of embodied interaction dynamics. Neural Networks, 1998, 11, 1259-1276.	5.9	57
51	Generation and analysis of networks with a prescribed degree sequence and subgraph family: higher-order structure matters. Journal of Complex Networks, 0, , cnw011.	1.8	9