

Luc Berthouze

List of Publications by Year in descending order

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Version: 2024-02-01

51
papers

917
citations

430874

18
h-index

501196

28
g-index

61
all docs

61
docs citations

61
times ranked

1062
citing authors

#	ARTICLE	IF	CITATIONS
1	Motor Skill Acquisition Under Environmental Perturbations: On the Necessity of Alternate Freezing and Freeing of Degrees of Freedom. <i>Adaptive Behavior</i> , 2004, 12, 47-64.	1.9	71
2	Rectification of EMG in low force contractions improves detection of motor unit coherence in the beta-frequency band. <i>Journal of Neurophysiology</i> , 2013, 110, 1744-1750.	1.8	65
3	Propagation of beta/gamma rhythms in the cortico-basal ganglia circuits of the parkinsonian rat. <i>Journal of Neurophysiology</i> , 2018, 119, 1608-1628.	1.8	62
4	Human EEG shows long-range temporal correlations of oscillation amplitude in Theta, Alpha and Beta bands across a wide age range. <i>Clinical Neurophysiology</i> , 2010, 121, 1187-1197.	1.5	58
5	Neural learning of embodied interaction dynamics. <i>Neural Networks</i> , 1998, 11, 1259-1276.	5.9	57
6	Modelling approaches for simple dynamic networks and applications to disease transmission models. <i>Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences</i> , 2012, 468, 1332-1355.	2.1	47
7	Markers of criticality in phase synchronization. <i>Frontiers in Systems Neuroscience</i> , 2014, 8, 176.	2.5	40
8	Higher-order structure and epidemic dynamics in clustered networks. <i>Journal of Theoretical Biology</i> , 2014, 348, 21-32.	1.7	31
9	The Parkinsonian Subthalamic Network: Measures of Power, Linear, and Non-linear Synchronization and their Relationship to L-DOPA Treatment and OFF State Motor Severity. <i>Frontiers in Human Neuroscience</i> , 2016, 10, 517.	2.0	28
10	On the Interplay Between Morphological, Neural, and Environmental Dynamics: A Robotic Case Study. <i>Adaptive Behavior</i> , 2002, 10, 223-241.	1.9	28
11	Oscillating epidemics in a dynamic network model: stochastic and mean-field analysis. <i>Journal of Mathematical Biology</i> , 2016, 72, 1153-1176.	1.9	27
12	Emergence and Categorization of Coordinated Visual Behavior Through Embodied Interaction. <i>Machine Learning</i> , 1998, 31, 187-200.	5.4	26
13	Long-Range Temporal Correlations in the EEG Bursts of Human Preterm Babies. <i>PLoS ONE</i> , 2012, 7, e31543.	2.5	26
14	Adaptive time-varying detrended fluctuation analysis. <i>Journal of Neuroscience Methods</i> , 2012, 209, 178-188.	2.5	24
15	Passive compliance for a RC servo-controlled bouncing robot. <i>Advanced Robotics</i> , 2006, 20, 953-961.	1.8	22
16	Identification of Criticality in Neuronal Avalanches: I. A Theoretical Investigation of the Non-driven Case. <i>Journal of Mathematical Neuroscience</i> , 2013, 3, 5.	2.4	22
17	Resting state MEC oscillations show long-range temporal correlations of phase synchrony that break down during finger movement. <i>Frontiers in Physiology</i> , 2015, 6, 183.	2.8	22
18	A Neural Model for Context-dependent Sequence Learning. <i>Neural Processing Letters</i> , 2006, 23, 27-45.	3.2	18

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19	Epigenetic roboticsâ€™ modelling cognitive development in robotic systems. <i>Connection Science</i> , 2003, 15, 147-150.	3.0	16
20	Power-law distribution of phase-locking intervals does not imply critical interaction. <i>Physical Review E</i> , 2012, 86, 051920.	2.1	16
21	EXPLORING Kansei IN MULTIMEDIA INFORMATION. <i>KANSEI Engineering International</i> , 2001, 2, 1-10.	0.2	14
22	Design and validation of surface-marker clusters for the quantification of joint rotations in general movements in early infancy. <i>Journal of Biomechanics</i> , 2011, 44, 1212-1215.	2.1	13
23	Identification of Criticality in Neuronal Avalanches: II. A Theoretical and Empirical Investigation of the Driven Case. <i>Journal of Mathematical Neuroscience</i> , 2014, 4, 9.	2.4	12
24	Beyond clustering: mean-field dynamics on networks with arbitrary subgraph composition. <i>Journal of Mathematical Biology</i> , 2016, 72, 255-281.	1.9	12
25	Assembly, tuning, and transfer of action systems in infants and robots. <i>Infant and Child Development</i> , 2008, 17, 25-42.	1.5	11
26	Impact of constrained rewiring on network structure and node dynamics. <i>Physical Review E</i> , 2014, 90, 052806.	2.1	11
27	Network inference from population-level observation of epidemics. <i>Scientific Reports</i> , 2020, 10, 18779.	3.3	11
28	Emergence and Categorization of Coordinated Visual Behavior Through Embodied Interaction. <i>Autonomous Robots</i> , 1998, 5, 369-379.	4.8	9
29	Generation and analysis of networks with a prescribed degree sequence and subgraph family: higher-order structure matters. <i>Journal of Complex Networks</i> , 0, , cnw011.	1.8	9
30	Edge-Based Compartmental Modelling of an SIR Epidemic on a Dual-Layer Staticâ€™Dynamic Multiplex Network with Tunable Clustering. <i>Bulletin of Mathematical Biology</i> , 2018, 80, 2698-2733.	1.9	9
31	Inferring Functional Connectivity From Time-Series of Events in Large Scale Network Deployments. <i>IEEE Transactions on Network and Service Management</i> , 2019, 16, 857-870.	4.9	8
32	Inference of brain networks with approximate Bayesian computation â€™ assessing face validity with an example application in Parkinsonism. <i>NeuroImage</i> , 2021, 236, 118020.	4.2	8
33	The Impact of Contact Structure and Mixing on Control Measures and Disease-Induced Herd Immunity in Epidemic Models: A Mean-Field Model Perspective. <i>Bulletin of Mathematical Biology</i> , 2021, 83, 117.	1.9	8
34	Epidemic threshold in pairwise models for clustered networks: closures and fast correlations. <i>Journal of Mathematical Biology</i> , 2019, 79, 823-860.	1.9	7
35	Temporal ordering of input modulates connectivity formation in a developmental neuronal network model of the cortex. <i>PLoS ONE</i> , 2020, 15, e0226772.	2.5	7
36	Robot Bouncing: On the Synergy Between Neural and Body-Environment Dynamics. <i>Lecture Notes in Computer Science</i> , 2004, , 86-97.	1.3	5

#	ARTICLE	IF	CITATIONS
37	Using Novelty-Biased GA to Sample Diversity in Graphs Satisfying Constraints. , 2015, , .		3
38	Relating Vertex and Global Graph Entropy in Randomly Generated Graphs. Entropy, 2018, 20, 481.	2.2	3
39	Network events in a large commercial network: What can we learn?. , 2018, , .		3
40	Cognitive Robotics. Towards emergence of embodied interaction dynamics.. Journal of the Robotics Society of Japan, 1999, 17, 29-33.	0.1	3
41	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
42	PDE limits of stochastic SIS epidemics on networks. Journal of Complex Networks, 2020, 8, .	1.8	1
43	Exploiting Functional Connectivity Inference for Efficient Root Cause Analysis. , 2022, , .		1
44	Detecting the presence of long-range temporal correlations in a time-varying measure of phase synchrony. BMC Neuroscience, 2011, 12, .	1.9	0
45	Mapping Out Emerging Network Structures in Dynamic Network Models Coupled with Epidemics. Theoretical Biology, 2017, , 267-289.	0.1	0
46	Clustered Arrangement of Inhibitory Neurons Can Lead to Oscillatory Dynamics in a Model of Activity-Dependent Structural Plasticity. , 2017, , 123-154.		0
47	Interfacing Agents through Boundaries of Interaction Dynamics. , 2000, , 289-296.		0
48	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
49	Title is missing!. , 2020, 15, e0226772.		0
50	Title is missing!. , 2020, 15, e0226772.		0
51	Title is missing!. , 2020, 15, e0226772.		0