

Matheus Viana

List of Publications by Year in descending order

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Version: 2024-02-01

48
papers

2,406
citations

304743

22
h-index

243625

44
g-index

51
all docs

51
docs citations

51
times ranked

3482
citing authors

#	ARTICLE	IF	CITATIONS
1	Analyzing and modeling real-world phenomena with complex networks: a survey of applications. <i>Advances in Physics</i> , 2011, 60, 329-412.	14.4	532
2	Mechanosensing is critical for axon growth in the developing brain. <i>Nature Neuroscience</i> , 2016, 19, 1592-1598.	14.8	478
3	Predicting breast tumor proliferation from whole-slide images: The TUPAC16 challenge. <i>Medical Image Analysis</i> , 2019, 54, 111-121.	11.6	182
4	Mitochondrial Network Size Scaling in Budding Yeast. <i>Science</i> , 2012, 338, 822-824.	12.6	158
5	The Structure of Spatial Networks and Communities in Bicycle Sharing Systems. <i>PLoS ONE</i> , 2013, 8, e74685.	2.5	86
6	Urban Street Networks, a Comparative Analysis of Ten European Cities. <i>Environment and Planning B: Planning and Design</i> , 2013, 40, 1071-1086.	1.7	82
7	Accurate concentration control of mitochondria and nucleoids. <i>Science</i> , 2016, 351, 169-172.	12.6	78
8	Quantifying mitochondrial content in living cells. <i>Methods in Cell Biology</i> , 2015, 125, 77-93.	1.1	60
9	Methods for imaging mammalian mitochondrial morphology: A prospective on MitoGraph. <i>Analytical Biochemistry</i> , 2018, 552, 81-99.	2.4	60
10	A comparison of morphometric characteristics of sperm from fertile <i>Bos taurus</i> and <i>Bos indicus</i> bulls in Brazil. <i>Animal Reproduction Science</i> , 2005, 85, 105-116.	1.5	43
11	On time-varying collaboration networks. <i>Journal of Informetrics</i> , 2013, 7, 371-378.	2.9	43
12	The simplicity of planar networks. <i>Scientific Reports</i> , 2013, 3, 3495.	3.3	40
13	Mitochondrial Fission and Fusion Dynamics Generate Efficient, Robust, and Evenly Distributed Network Topologies in Budding Yeast Cells. <i>Cell Systems</i> , 2020, 10, 287-297.e5.	6.2	37
14	Mitochondrial volume fraction and translation duration impact mitochondrial mRNA localization and protein synthesis. <i>ELife</i> , 2020, 9, .	6.0	36
15	Unveiling the Neuromorphological Space. <i>Frontiers in Computational Neuroscience</i> , 2010, 4, 150.	2.1	33
16	Mitochondrial anchorage and fusion contribute to mitochondrial inheritance and quality control in the budding yeast <i>Saccharomyces cerevisiae</i> . <i>Molecular Biology of the Cell</i> , 2016, 27, 776-787.	2.1	33
17	Prominent Effect of Soil Network Heterogeneity on Microbial Invasion. <i>Physical Review Letters</i> , 2012, 109, 098102.	7.8	31
18	On the efficiency of transportation systems in large cities. <i>Europhysics Letters</i> , 2010, 91, 18003.	2.0	26

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19	Modularity and robustness of bone networks. <i>Molecular BioSystems</i> , 2009, 5, 255.	2.9	25
20	Border detection in complex networks. <i>New Journal of Physics</i> , 2009, 11, 063019.	2.9	24
21	Investigating relationships within and between category networks in Wikipedia. <i>Journal of Informetrics</i> , 2011, 5, 431-438.	2.9	24
22	Effective number of accessed nodes in complex networks. <i>Physical Review E</i> , 2012, 85, 036105.	2.1	24
23	Mapping road network communities for guiding disease surveillance and control strategies. <i>Scientific Reports</i> , 2018, 8, 4744.	3.3	24
24	Predicting epidemic outbreak from individual features of the spreaders. <i>Journal of Statistical Mechanics: Theory and Experiment</i> , 2012, 2012, P07005.	2.3	22
25	Objective characterization of the course of the parasellar internal carotid artery using mathematical tools. <i>Surgical and Radiologic Anatomy</i> , 2008, 30, 519-526.	1.2	16
26	Automated high-content morphological analysis of muscle fiber histology. <i>Computers in Biology and Medicine</i> , 2015, 63, 28-35.	7.0	15
27	A computational approach to characterization of bovine sperm chromatin alterations. <i>Biotechnic and Histochemistry</i> , 2004, 79, 17-23.	1.3	13
28	A spectral framework for sperm shape characterization. <i>Computers in Biology and Medicine</i> , 2005, 35, 463-473.	7.0	13
29	Complex channel networks of bone structure. <i>Applied Physics Letters</i> , 2006, 88, 033903.	3.3	13
30	Three-dimensional description and mathematical characterization of the parasellar internal carotid artery in human infants. <i>Journal of Anatomy</i> , 2008, 212, 636-644.	1.5	13
31	Accessibility in networks: A useful measure for understanding social insect nest architecture. <i>Chaos, Solitons and Fractals</i> , 2013, 46, 38-45.	5.1	13
32	Identifying the borders of mathematical knowledge. <i>Journal of Physics A: Mathematical and Theoretical</i> , 2010, 43, 325202.	2.1	12
33	Fast long-range connections in transportation networks. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 2011, 375, 1626-1629.	2.1	12
34	Effects of stereochemistry, saturation, and hydrocarbon chain length on the ability of synthetic constrained azacyclic sphingolipids to trigger nutrient transporter down-regulation, vacuolation, and cell death. <i>Bioorganic and Medicinal Chemistry</i> , 2016, 24, 4390-4397.	3.0	11
35	Morphological Homogeneity of Neurons: Searching for Outlier Neuronal Cells. <i>Neuroinformatics</i> , 2012, 10, 379-389.	2.8	9
36	The relationship between structure and function in locally observed complex networks. <i>New Journal of Physics</i> , 2013, 15, 013048.	2.9	6

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37	Characterizing topological and dynamical properties of complex networks without border effects. <i>Physica A: Statistical Mechanics and Its Applications</i> , 2010, 389, 1771-1778.	2.6	5
38	Random walks in directed modular networks. <i>Journal of Statistical Mechanics: Theory and Experiment</i> , 2014, 2014, P12003.	2.3	4
39	A mathematical model for thermoregulation in endotherms including heat transport by blood flow and thermal feedback control mechanisms: changes in coat, metabolic rate, blood fluxes, ventilation and sweating rates. <i>Letters in Biomathematics</i> , 2018, 5, 129-173.	0.1	4
40	A spectral framework for sperm shape characterization. <i>Computers in Biology and Medicine</i> , 2005, 35, 463-473.	7.0	4
41	A framework for analyzing the relationship between gene expression and morphological, topological, and dynamical patterns in neuronal networks. <i>Journal of Neuroscience Methods</i> , 2015, 245, 1-14.	2.5	3
42	Biological invasion in soil: Complex network analysis. , 2009, , .		2
43	STRUCTURE AND DYNAMICS: THE TRANSITION FROM NONEQUILIBRIUM TO EQUILIBRIUM IN INTEGRATE-AND-FIRE DYNAMICS. <i>International Journal of Bifurcation and Chaos in Applied Sciences and Engineering</i> , 2012, 22, 1250174.	1.7	2
44	Archetypes and Outliers in the Neuromorphological Space. <i>Springer Series in Computational Neuroscience</i> , 2014, , 41-59.	0.3	1
45	Characterizing the Trabecular Bone Tissue of the Toco Toucan Bill. , 2018, , .		0
46	A New Open Source Toolkit for Segmenting 3D Intracellular Structures in Microscopy Images. <i>Biophysical Journal</i> , 2019, 116, 290a.	0.5	0
47	The Effect of Host Morphology on Network Characteristics and Thermodynamical Properties of Ising Model Defined on the Network of Human Pyramidal Neurons. <i>Communications in Computer and Information Science</i> , 2011, , 96-107.	0.5	0
48	Imaging and Quantifying Mitochondrial Morphology: a Focus on the 3D Freeware MitoGraph. <i>FASEB Journal</i> , 2018, 32, lb185.	0.5	0