# Dante R Chialvo

## List of Publications by Year in Descending Order

**Source:** https://exaly.com/author-pdf/2892278/dante-r-chialvo-publications-by-year.pdf
**Version:** 2024-04-25

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.
The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

| | | | |
|---|---|---|---|
| 121 papers | 10,628 citations | 43 h-index | 102 g-index |
| 132 ext. papers | 12,402 ext. citations | 6 avg, IF | 6.41 L-index |

| # | Paper | IF | Citations |
|---|---|---|---|
| 121 | Similar local neuronal dynamics may lead to different collective behavior.. *Physical Review E*, **2021**, 104, 064309 | 2.4 | 0 |
| 120 | Revisiting Nonlinear Functional Brain Co-activations: Directed, Dynamic, and Delayed. *Frontiers in Neuroscience*, **2021**, 15, 700171 | 5.1 | 1 |
| 119 | Box scaling as a proxy of finite size correlations. *Scientific Reports*, **2021**, 11, 15937 | 4.9 | 2 |
| 118 | Observing changes in human functioning during induced sleep deficiency and recovery periods. *PLoS ONE*, **2021**, 16, e0255771 | 3.7 | 1 |
| 117 | Non-linear Functional Brain Co-activations in Short-Term Memory Distortion Tasks.. *Frontiers in Neuroscience*, **2021**, 15, 778242 | 5.1 | 0 |
| 116 | Evaluating the reliability of neurocognitive biomarkers of neurodegenerative diseases across countries: A machine learning approach. *NeuroImage*, **2020**, 208, 116456 | 7.9 | 18 |
| 115 | Controlling a complex system near its critical point via temporal correlations. *Scientific Reports*, **2020**, 10, 12145 | 4.9 | 11 |
| 114 | Scale-Free Dynamics in Animal Groups and Brain Networks. *Frontiers in Systems Neuroscience*, **2020**, 14, 591210 | 3.5 | 2 |
| 113 | Universal and nonuniversal neural dynamics on small world connectomes: A finite-size scaling analysis. *Physical Review E*, **2019**, 100, 052138 | 2.4 | 4 |
| 112 | On the pros and cons of using temporal derivatives to assess brain functional connectivity. *NeuroImage*, **2019**, 184, 577-585 | 7.9 | 5 |
| 111 | Mitochondrial network complexity emerges from fission/fusion dynamics. *Scientific Reports*, **2018**, 8, 363 | 4.9 | 42 |
| 110 | Fibronectin rescues estrogen receptor  from lysosomal degradation in breast cancer cells. *Journal of Cell Biology*, **2018**, 217, 2777-2798 | 7.3 | 22 |
| 109 | Nrf2 stabilization prevents critical oxidative damage in Down syndrome cells. *Aging Cell*, **2018**, 17, e12816 | 7.9 | 29 |
| 108 | How ants move: individual and collective scaling properties. *Journal of the Royal Society Interface*, **2018**, 15, | 4.1 | 2 |
| 107 | Life at the Edge: Complexity and Criticality in Biological Function. *Acta Physica Polonica B*, **2018**, 49, 1955 | 1.9 | 4 |
| 106 | Critical Fluctuations in the Native State of Proteins. *Physical Review Letters*, **2017**, 118, 088102 | 7.4 | 29 |
| 105 | Tackling variability: A multicenter study to provide a gold-standard network approach for frontotemporal dementia. *Human Brain Mapping*, **2017**, 38, 3804-3822 | 5.9 | 34 |

| | | | |
|---|---|---|---|
| 104 | Large-scale signatures of unconsciousness are consistent with a departure from critical dynamics. *Journal of the Royal Society Interface*, **2016**, 13, 20151027 | 4.1 | 100 |
| 103 | Morphology and microchemistry of the otoliths of the inner ear of anuran larvae. *Hearing Research*, **2016**, 335, 47-52 | 3.9 | 3 |
| 102 | Invited review: Fluctuation-induced transport. From the very small to the very large scales. *Papers in Physics*, **2016**, 8, | | 3 |
| 101 | The Voxel-Wise Functional Connectome Can Be Efficiently Derived from Co-activations in a Sparse Spatio-Temporal Point-Process. *Frontiers in Neuroscience*, **2016**, 10, 381 | 5.1 | 40 |
| 100 | Seeking a fingerprint: analysis of point processes in actigraphy recording. *Journal of Statistical Mechanics: Theory and Experiment*, **2016**, 2016, 054034 | 1.9 | 4 |
| 99 | Brain Network Organization and Social Executive Performance in Frontotemporal Dementia. *Journal of the International Neuropsychological Society*, **2016**, 22, 250-62 | 3.1 | 51 |
| 98 | Extreme brain events: Higher-order statistics of brain resting activity and its relation with structural connectivity. *Europhysics Letters*, **2015**, 111, 68007 | 1.6 | 11 |
| 97 | How we move is universal: Scaling in the average shape of human activity. *Papers in Physics*, **2015**, 7, | | 9 |
| 96 | Critical Brain Dynamics at Large Scale **2014**, 43-66 | | 5 |
| 95 | Neurologic dysfunction and genotoxicity induced by low levels of chlorpyrifos. *NeuroToxicology*, **2014**, 45, 22-30 | 4.4 | 19 |
| 94 | Enhanced repertoire of brain dynamical states during the psychedelic experience. *Human Brain Mapping*, **2014**, 35, 5442-56 | 5.9 | 211 |
| 93 | How do you feel when you can't feel your body? Interoception, functional connectivity and emotional processing in depersonalization-derealization disorder. *PLoS ONE*, **2014**, 9, e98769 | 3.7 | 73 |
| 92 | The entropic brain: a theory of conscious states informed by neuroimaging research with psychedelic drugs. *Frontiers in Human Neuroscience*, **2014**, 8, 20 | 3.3 | 409 |
| 91 | Scale-free fluctuations in behavioral performance: delineating changes in spontaneous behavior of humans with induced sleep deficiency. *PLoS ONE*, **2014**, 9, e107542 | 3.7 | 11 |
| 90 | Disruption of transfer entropy and inter-hemispheric brain functional connectivity in patients with disorder of consciousness. *BMC Neuroscience*, **2013**, 14, P83 | 3.2 | 5 |
| 89 | Age-of-onset of menopause is associated with enhanced painful and non-painful sensitivity in fibromyalgia. *Clinical Rheumatology*, **2013**, 32, 975-81 | 3.9 | 29 |
| 88 | Strobing brain thunders: Functional correlation of extreme activity events. *Chaos, Solitons and Fractals*, **2013**, 55, 102-108 | 9.3 | 7 |
| 87 | Brain organization into resting state networks emerges at criticality on a model of the human connectome. *Physical Review Letters*, **2013**, 110, 178101 | 7.4 | 269 |

| | | | |
|---|---|---|---|
| 86 | Brain complexity born out of criticality **2013**, | | 11 |
| 85 | Disruption of transfer entropy and inter-hemispheric brain functional connectivity in patients with disorder of consciousness. *Frontiers in Neuroinformatics*, **2013**, 7, 24 | 3.9 | 35 |
| 84 | The ghost of stochastic resonance: an introductory review. *Contemporary Physics*, **2012**, 53, 17-38 | 3.3 | 20 |
| 83 | Disrupted functional connectivity of the pain network in fibromyalgia. *Psychosomatic Medicine*, **2012**, 74, 55-62 | 3.7 | 118 |
| 82 | Criticality in large-scale brain FMRI dynamics unveiled by a novel point process analysis. *Frontiers in Physiology*, **2012**, 3, 15 | 4.6 | 384 |
| 81 | What kind of noise is brain noise: anomalous scaling behavior of the resting brain activity fluctuations. *Frontiers in Physiology*, **2012**, 3, 307 | 4.6 | 67 |
| 80 | Spontaneous BOLD event triggered averages for estimating functional connectivity at resting state. *Neuroscience Letters*, **2011**, 488, 158-63 | 3.3 | 49 |
| 79 | The environmental pollutant endosulfan disrupts cerebral cortical function at low doses. *NeuroToxicology*, **2011**, 32, 31-7 | 4.4 | 8 |
| 78 | Altered associative learning and emotional decision making in fibromyalgia. *Journal of Psychosomatic Research*, **2011**, 70, 294-301 | 4.1 | 72 |
| 77 | Self-similar correlation function in brain resting-state functional magnetic resonance imaging. *Journal of the Royal Society Interface*, **2011**, 8, 472-9 | 4.1 | 94 |
| 76 | THE COLLECTIVE BRAIN **2011**, | | 6 |
| 75 | Emergent complex neural dynamics. *Nature Physics*, **2010**, 6, 744-750 | 16.2 | 632 |
| 74 | Modular organization of brain resting state networks in chronic back pain patients. *Frontiers in Neuroinformatics*, **2010**, 4, 116 | 3.9 | 39 |
| 73 | Spike avalanches exhibit universal dynamics across the sleep-wake cycle. *PLoS ONE*, **2010**, 5, e14129 | 3.7 | 127 |
| 72 | A simple conceptual model to interpret the 100 000 years dynamics of paleo-climate records. *Nonlinear Processes in Geophysics*, **2010**, 17, 585-592 | 2.9 | 2 |
| 71 | Brain resting state is disrupted in chronic back pain patients. *Neuroscience Letters*, **2010**, 485, 26-31 | 3.3 | 138 |
| 70 | Poissonian bursts in e-mail correspondence. *European Physical Journal B*, **2010**, 75, 389-394 | 1.2 | 23 |
| 69 | Ising-like dynamics in large-scale functional brain networks. *Physical Review E*, **2009**, 79, 061922 | 2.4 | 133 |

| | | | |
|---|---|---|---|
| 68 | Emergent self-organized complex network topology out of stability constraints. *Physical Review Letters*, **2009**, 103, 108701 | 7.4 | 32 |
| 67 | Spontaneous cortical activity in awake monkeys composed of neuronal avalanches. *Proceedings of the National Academy of Sciences of the United States of America*, **2009**, 106, 15921-6 | 11.5 | 368 |
| 66 | Unraveling the fluctuations of animal motor activity. *Chaos*, **2009**, 19, 033123 | 3.3 | 32 |
| 65 | Emergent complexity: What uphill analysis or downhill invention cannot do. *New Ideas in Psychology* , **2008**, 26, 158-173 | 2.5 | 19 |
| 64 | Flattened cortical maps of cerebral function in the rat: a region-of-interest approach to data sampling, analysis and display. *Neuroscience Letters*, **2008**, 434, 179-84 | 3.3 | 6 |
| 63 | Solar forced Dansgaard-Oeschger events and their phase relation with solar proxies. *Geophysical Research Letters*, **2008**, 35, | 4.9 | 23 |
| 62 | Beyond feeling: chronic pain hurts the brain, disrupting the default-mode network dynamics. *Journal of Neuroscience*, **2008**, 28, 1398-403 | 6.6 | 569 |
| 61 | The Brain: What is Critical About It?. *AIP Conference Proceedings*, **2008**, | 0 | 15 |
| 60 | The brain near the edge. *AIP Conference Proceedings*, **2007**, | 0 | 4 |
| 59 | Identifying directed links in large scale functional networks: application to brain fMRI. *BMC Cell Biology*, **2007**, 8 Suppl 1, S5 | | 29 |
| 58 | Brain activity for spontaneous pain of postherpetic neuralgia and its modulation by lidocaine patch therapy. *Pain*, **2007**, 128, 88-100 | 8 | 134 |
| 57 | Circadian rhythms of heart rate and locomotion after treatment with low-dose acetylcholinesterase inhibitors. *Journal of Applied Toxicology*, **2006**, 26, 410-8 | 4.1 | 2 |
| 56 | Chronic pain and the emotional brain: specific brain activity associated with spontaneous fluctuations of intensity of chronic back pain. *Journal of Neuroscience*, **2006**, 26, 12165-73 | 6.6 | 510 |
| 55 | Ghost stochastic resonance with distributed inputs in pulse-coupled electronic neurons. *Physical Review E*, **2006**, 73, 021101 | 2.4 | 27 |
| 54 | GHOST STOCHASTIC RESONANCE IN AN ELECTRONIC CIRCUIT. *International Journal of Bifurcation and Chaos in Applied Sciences and Engineering*, **2006**, 16, 731-735 | 2 | 26 |
| 53 | Inflammatory and neuropathic pain animals exhibit distinct responses to innocuous thermal and motoric challenges. *Molecular Pain*, **2006**, 2, 1 | 3.4 | 15 |
| 52 | Expression of IL-1beta in supraspinal brain regions in rats with neuropathic pain. *Neuroscience Letters*, **2006**, 407, 176-81 | 3.3 | 85 |
| 51 | The shadows of pain. *Pain*, **2006**, 123, 221-222 | 8 | 9 |

| | | | |
|---|---|---|---|
| 50 | Dynamics of pain: fractal dimension of temporal variability of spontaneous pain differentiates between pain States. *Journal of Neurophysiology*, **2006**, 95, 730-6 | 3.2 | 74 |
| 49 | Scale-free brain functional networks. *Physical Review Letters*, **2005**, 94, 018102 | 7.4 | 1047 |
| 48 | Single subject pharmacological-MRI (phMRI) study: modulation of brain activity of psoriatic arthritis pain by cyclooxygenase-2 inhibitor. *Molecular Pain*, **2005**, 1, 32 | 3.4 | 27 |
| 47 | Spared nerve injury rats exhibit thermal hyperalgesia on an automated operant dynamic thermal escape task. *Molecular Pain*, **2005**, 1, 18 | 3.4 | 33 |
| 46 | Low-dose cholinesterase inhibitors do not induce delayed effects on cerebral blood flow and metabolism. *Pharmacology Biochemistry and Behavior*, **2005**, 80, 529-40 | 3.9 | 5 |
| 45 | Anticipated synchronization: a metaphorical linear view. *Chaos*, **2004**, 14, 7-13 | 3.3 | 31 |
| 44 | Critical brain networks. *Physica A: Statistical Mechanics and Its Applications*, **2004**, 340, 756-765 | 3.3 | 168 |
| 43 | Organization, development and function of complex brain networks. *Trends in Cognitive Sciences*, **2004**, 8, 418-25 | 14 | 1549 |
| 42 | Chronic pain patients are impaired on an emotional decision-making task. *Pain*, **2004**, 108, 129-36 | 8 | 376 |
| 41 | Ghost resonance in a semiconductor laser with optical feedback. *Europhysics Letters*, **2003**, 64, 178-184 | 1.6 | 28 |
| 40 | How we hear what is not there: a neural mechanism for the missing fundamental illusion. *Chaos*, **2003**, 13, 1226-30 | 3.3 | 43 |
| 39 | Heart rate dynamics in monoamine oxidase-A- and -B-deficient mice. *American Journal of Physiology - Heart and Circulatory Physiology*, **2002**, 282, H1751-9 | 5.2 | 12 |
| 38 | Subharmonic stochastic synchronization and resonance in neuronal systems. *Physical Review E*, **2002**, 65, 050902 | 2.4 | 51 |
| 37 | Adaptive learning by extremal dynamics and negative feedback. *Physical Review E*, **2001**, 63, 031912 | 2.4 | 52 |
| 36 | LARGE SCALE-INVARIANT FLUCTUATIONS IN NORMAL BLOOD CELL COUNTS: A SIGN OF CRITICALITY?. *Fractals*, **2000**, 08, 279-283 | 3.2 | 8 |
| 35 | Noise-induced memory in extended excitable systems. *Physical Review E*, **2000**, 61, 5654-7 | 2.4 | 16 |
| 34 | Noise in neurons is message dependent. *Proceedings of the National Academy of Sciences of the United States of America*, **2000**, 97, 5557-61 | 11.5 | 75 |
| 33 | Electrical restitution, critical mass, and the riddle of fibrillation. *Journal of Cardiovascular Electrophysiology*, **1999**, 10, 1087-9 | 2.7 | 56 |

| | | | |
|---|---|---|---|
| 32 | Learning from mistakes. *Neuroscience*, **1999**, 90, 1137-48 | 3.9 | 108 |
| 31 | Stochastic and Deterministic Resonances for Excitable Systems. *Physical Review Letters*, **1998**, 81, 4012-4015 | 7.4 | 109 |
| 30 | Noise-induced tuning curve changes in mechanoreceptors. *Journal of Neurophysiology*, **1998**, 79, 1879-90 | 3.2 | 41 |
| 29 | Fluctuation-Induced Transport in a Periodic Potential: Noise versus Chaos. *Physical Review Letters*, **1997**, 78, 1605-1605 | 7.4 | 14 |
| 28 | Stochastic resonance in models of neuronal ensembles. *Physical Review E*, **1997**, 55, 1798-1808 | 2.4 | 134 |
| 27 | Control of voltage-dependent biomolecules via nonequilibrium kinetic focusing. *Physical Review Letters*, **1996**, 76, 550-553 | 7.4 | 30 |
| 26 | Nonequilibrium fluctuation-induced phenomena in Josephson junctions. *Physical Review E*, **1996**, 53, 2239-2242 | 2.4 | 34 |
| 25 | General relation between variance-time curve and power spectral density for point processes exhibiting 1/f beta-fluctuations, with special reference to heart rate variability. *Biological Cybernetics*, **1995**, 73, 255-63 | 2.8 | 17 |
| 24 | Pattern formation and functionality in swarm models. *Physics Letters, Section A: General, Atomic and Solid State Physics*, **1995**, 207, 185-193 | 2.3 | 97 |
| 23 | Asymmetric unbiased fluctuations are sufficient for the operation of a correlation ratchet. *Physics Letters, Section A: General, Atomic and Solid State Physics*, **1995**, 209, 26-30 | 2.3 | 128 |
| 22 | Generic excitable dynamics on a two-dimensional map. *Chaos, Solitons and Fractals*, **1995**, 5, 461-479 | 9.3 | 58 |
| 21 | How Swarms Build Cognitive Maps **1995**, 439-450 | | 45 |
| 20 | DENDRITIC COMPLEXITY AND THE EVOLUTION OF CEREBELLAR PURKINJE CELLS. *Fractals*, **1994**, 02, 95-102 | 3.2 | 6 |
| 19 | DEMONSTRATION OF 1/f FLUCTUATIONS AND WHITE NOISE IN THE HUMAN HEART RATE BY THE VARIANCE-TIME-CURVE: IMPLICATIONS FOR SELF-SIMILARITY. *Fractals*, **1993**, 01, 312-320 | 3.2 | 18 |
| 18 | Noise sampled signal transmission in an array of Schmitt Triggers. *AIP Conference Proceedings*, **1993** , | 0 | 2 |
| 17 | One more reason why neurons need to be noisy **1993**, | | 2 |
| 16 | Low-dimensional dynamics in cardiac tissues: experiments and theory **1993**, | | 1 |
| 15 | Modulated noisy biological dynamics: Three examples. *Journal of Statistical Physics*, **1993**, 70, 375-391 | 1.5 | 80 |

| | | | |
|---|---|---|---|
| 14 | Bifurcations in a simple hydraulic oscillator: the ՏTantalusScupՏ *European Journal of Physics*, **1991**, 12, 297-302 | 0.8 | 1 |
| 13 | 1/f Power spectral density of the cardiac QRS complex is not associated with a fractal Purkinje system. *Biophysical Journal*, **1991**, 60, 1303-5 | 2.9 | 5 |
| 12 | Nonlinear Dynamics and Ionic Mechanisms of Excitation Patterns in Models of the Cardiac Myocyte. *NATO ASI Series Series B: Physics*, **1991**, 295-312 | | |
| 11 | Low Dimensional Chaos and the Transition from Rhythmic to Arrhythmic Behavior in Cardiac Tissue. *Developments in Cardiovascular Medicine*, **1991**, 115-123 | | |
| 10 | Low dimensional chaos in cardiac tissue. *Nature*, **1990**, 343, 653-7 | 50.4 | 205 |
| 9 | Sustained vortex-like waves in normal isolated ventricular muscle. *Proceedings of the National Academy of Sciences of the United States of America*, **1990**, 87, 8785-9 | 11.5 | 109 |
| 8 | Supernormal excitability as a mechanism of chaotic dynamics of activation in cardiac Purkinje fibers. *Circulation Research*, **1990**, 66, 525-45 | 15.7 | 140 |
| 7 | Dynamics of synchronization in the sinoatrial node. *Annals of the New York Academy of Sciences*, **1990**, 591, 154-65 | 6.5 | 9 |
| 6 | Toward very simple generic models of excitable cells. Order and chaos in cardiac tissues. Facts and conjectures. *Annals of the New York Academy of Sciences*, **1990**, 591, 351-66 | 6.5 | 8 |
| 5 | Irregular dynamics of excitation in biologic and mathematical models of cardiac cells. *Annals of the New York Academy of Sciences*, **1990**, 601, 281-98 | 6.5 | 8 |
| 4 | On the Problem of Anisotropic Propagation in Ventricular Muscle. *Developments in Cardiovascular Medicine*, **1989**, 181-197 | | 5 |
| 3 | Non-linear dynamics of cardiac excitation and impulse propagation. *Nature*, **1987**, 330, 749-52 | 50.4 | 149 |
| 2 | Further results on why a point process is effective for estimating correlation between brain regions. *Papers in Physics*,12, 120003 | | 6 |
| 1 | Trial-by-trial variability in cortical responses exhibits scaling in spatial correlations predicted from critical dynamics | | 4 |