Pedro Juan Carpena SÃ;nchez

List of Publications by Year in descending order

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74 papers 4,487 citations

28 h-index 102487 66 g-index

77 all docs

77 docs citations

77 times ranked

4257 citing authors

#	Article	IF	Citations
1	On the Validity of Detrended Fluctuation Analysis at Short Scales. Entropy, 2022, 24, 61.	2.2	7
2	On the Autocorrelation Function of 1/f Noises. Mathematics, 2022, 10, 1416.	2.2	4
3	An example of social interaction: Spatial contagion effect in exams. Physica A: Statistical Mechanics and Its Applications, 2022, , 127666.	2.6	O
4	Generalizing the Mach cone for sources traveling along arbitrary trajectories. European Journal of Physics, 2021, 42, 025009.	0.6	0
5	Transforming Gaussian correlations. Applications to generating long-range power-law correlated time series with arbitrary distribution. Chaos, 2020, 30, 083140.	2.5	4
6	Connection of the nearest-neighbor spacing distribution and the local box-counting dimension for discrete sets. Physical Review E, 2019, 100, 022205.	2.1	3
7	Comparison of methods for the assessment of nonlinearity in short-term heart rate variability under different physiopathological states. Chaos, 2019, 29, 123114.	2.5	38
8	Differences in nonlinear heart dynamics during rest and exercise and for different training. Physiological Measurement, 2018, 39, 084008.	2.1	6
9	Correlations in magnitude series to assess nonlinearities: Application to multifractal models and heartbeat fluctuations. Physical Review E, 2017, 96, 032218.	2.1	26
10	NGSmethDB 2017: enhanced methylomes and differential methylation. Nucleic Acids Research, 2017, 45, D97-D103.	14.5	16
11	Spurious Results of Fluctuation Analysis Techniques in Magnitude and Sign Correlations. Entropy, 2017, 19, 261.	2.2	14
12	Magnitude and sign of long-range correlated time series: Decomposition and surrogate signal generation. Physical Review E, 2016, 93, 042201.	2.1	40
13	Probability distribution of intersymbol distances in random symbolic sequences: Applications to improving detection of keywords in texts and of amino acid clustering in proteins. Physical Review E, 2016, 94, 052302.	2.1	10
14	First-Passage Time Properties of Correlated Time Series with Scale-Invariant Behavior and with Crossovers in the Scaling. Contributions To Statistics, 2016, , 89-102.	0.2	2
15	On the circular orbits of a particle sliding on the inside of a generic surface of revolution. European Journal of Physics, 2014, 35, 015025.	0.6	3
16	Losses produced by soiling in the incoming radiation to photovoltaic modules. Progress in Photovoltaics: Research and Applications, 2013, 21, 790-796.	8.1	71
17	Improving statistical keyword detection in short texts: Entropic and clustering approaches. Physica A: Statistical Mechanics and Its Applications, 2013, 392, 1481-1492.	2.6	37
18	Towards a Deeper Understanding of the Complex Behaviour Observed in the Distribution of Words in Written Texts. Springer Proceedings in Complexity, 2013, , 241-249.	0.3	1

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19	Phase transitions in the first-passage time of scale-invariant correlated processes. Physical Review E, 2012, 85, 011139.	2.1	27
20	On the length of stabilograms: A study performed with detrended fluctuation analysis. Physica A: Statistical Mechanics and Its Applications, 2012, 391, 4933-4942.	2.6	5
21	Segmentation of time series with long-range fractal correlations. European Physical Journal B, 2012, 85, 1.	1.5	26
22	Corrigendum to "Characterizing the human postural control system using detrended fluctuation analysis―[J. Comp. Appl. Math. 233 (2010) 1478–1482]. Journal of Computational and Applied Mathematics, 2012, 236, 2605.	2.0	0
23	Clustering of DNA words and biological function: A proof of principle. Journal of Theoretical Biology, 2012, 297, 127-136.	1.7	22
24	High-level organization of isochores into gigantic superstructures in the human genome. Physical Review E, $2011, 83, 031908$.	2.1	20
25	WordCluster: detecting clusters of DNA words and genomic elements. Algorithms for Molecular Biology, 2011, 6, 2.	1.2	21
26	Prediction of CpG-island function: CpG clustering vs. sliding-window methods. BMC Genomics, 2010, 11, 327.	2.8	40
27	Characterizing the human postural control system using detrended fluctuation analysis. Journal of Computational and Applied Mathematics, 2010, 233, 1478-1482.	2.0	18
28	Study of the human postural control system during quiet standing using detrended fluctuation analysis. Physica A: Statistical Mechanics and Its Applications, 2009, 388, 1857-1866.	2.6	39
29	Level statistics of words: Finding keywords in literary texts and symbolic sequences. Physical Review E, 2009, 79, 035102.	2.1	65
30	An analysis of geometrical shapes for PV module glass encapsulation. Solar Energy Materials and Solar Cells, 2008, 92, 323-331.	6.2	28
31	Phylogenetic distribution of large-scale genome patchiness. BMC Evolutionary Biology, 2008, 8, 107.	3.2	8
32	Metal–insulator transition in a ternary model with long range correlated disorder. Journal of Statistical Mechanics: Theory and Experiment, 2007, 2007, P09014-P09014.	2.3	13
33	Identifying characteristic scales in the human genome. Physical Review E, 2007, 75, 032903.	2.1	44
34	On the focal point of a lens: beyond the paraxial approximation. European Journal of Physics, 2006, 27, 231-241.	0.6	11
35	CpGcluster: a distance-based algorithm for CpG-island detection. BMC Bioinformatics, 2006, 7, 446.	2.6	155
36	Specific heat of random fractal energy spectra. Physical Review E, 2006, 73, 016124.	2.1	7

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37	Metal-insulator transition in random Kronig-Penney superlattices with long-range correlated disorder. Physical Review B, 2006, 74, .	3.2	36
38	Study of the log-periodic oscillations of the specific heat of Cantor energy spectra. Physica A: Statistical Mechanics and Its Applications, 2005, 358, 299-312.	2.6	8
39	The Biased Distribution of Alus in Human Isochores Might Be Driven by Recombination. Journal of Molecular Evolution, 2005, 60, 365-377.	1.8	42
40	Size Effects on Correlation Measures. Journal of Biological Physics, 2005, 31, 121-133.	1.5	56
41	Effect of nonlinear filters on detrended fluctuation analysis. Physical Review E, 2005, 71, 011104.	2.1	215
42	New Class of Level Statistics in Correlated Disordered Chains. Physical Review Letters, 2004, 93, 176804.	7.8	35
43	IsoFinder: computational prediction of isochores in genome sequences. Nucleic Acids Research, 2004, 32, W287-W292.	14.5	77
44	Quantifying intrachromosomal GC heterogeneity in prokaryotic genomes. Gene, 2004, 333, 121-133.	2.2	28
45	On the determination of the critical micelle concentration by the pyrene 1:3 ratio method. Journal of Colloid and Interface Science, 2003, 258, 116-122.	9.4	690
46	Isochores merit the prefix â€~iso'. Computational Biology and Chemistry, 2003, 27, 5-10.	2.3	45
47	Electronic Delocalization in Finite One-Dimensional Correlated-Disordered Binary Solids. AIP Conference Proceedings, 2003, , .	0.4	0
48	Comment on "Factorial Moments Analyses Show a Characteristic Length Scale in DNA Sequences― Physical Review Letters, 2002, 88, 219803; discussion 219804.	7.8	4
49	Keyword detection in natural languages and DNA. Europhysics Letters, 2002, 57, 759-764.	2.0	94
50	Signal processing and statistical methods in analysis of text and DNA. , 2002, , .		4
51	Analysis of symbolic sequences using the Jensen-Shannon divergence. Physical Review E, 2002, 65, 041905.	2.1	227
52	Isochores Merit the Prefix 'Iso'. Genome Biology, 2002, 3, preprint0009.1.	9.6	0
53	Isochore chromosome maps of the human genome. Gene, 2002, 300, 117-127.	2.2	56
54	Study of statistical correlations in DNA sequences. Gene, 2002, 300, 105-115.	2.2	79

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55	A simple and species-independent coding measure. Gene, 2002, 300, 97-104.	2.2	17
56	Metal–insulator transition in chains with correlated disorder. Nature, 2002, 418, 955-959.	27.8	192
57	Problems Associated with the Treatment of Conductivityâ°'Concentration Data in Surfactant Solutions:Â Simulations and Experiments. Langmuir, 2002, 18, 6054-6058.	3.5	293
58	Effect of trends on detrended fluctuation analysis. Physical Review E, 2001, 64, 011114.	2.1	1,070
59	Isochore chromosome maps of eukaryotic genomes. Gene, 2001, 276, 47-56.	2.2	92
60	Comparison of multifractal and thermodynamical properties of fractal and natural spectra. Physica A: Statistical Mechanics and Its Applications, 2000, 287, 37-48.	2.6	10
61	Finding Borders between Coding and Noncoding DNA Regions by an Entropic Segmentation Method. Physical Review Letters, 2000, 85, 1342-1345.	7.8	115
62	Thermodynamics of fractal spectra: Cantor sets and quasiperiodic sequences. Physical Review E, 2000, 61, 2281-2289.	2.1	22
63	Compositional complexity of DNA sequence models. Computer Physics Communications, 1999, 121-122, 136-138.	7.5	3
64	Number of bound states of a Kronig-Penney finite-periodic superlattice. European Physical Journal B, 1999, 8, 635-641.	1.5	7
65	Statistical characterization of the mobility edge of vibrational states in disordered materials. Physical Review B, 1999, 60, 201-205.	3.2	20
66	Energy dependence of the effective mass in the envelope-function approximation. Physica B: Condensed Matter, 1998, 253, 242-249.	2.7	5
67	Comment on "Confinement in a double barrier structure in the presence of an electric field―by Nimour et al Physics Letters, Section A: General, Atomic and Solid State Physics, 1998, 241, 131-134.	2.1	0
68	Easy calculation of magnetic flux. European Journal of Physics, 1998, 19, 325-329.	0.6	1
69	Electronic spectrum of quantum-l´-wells superlattices in an electric field. Physical Review B, 1997, 56, 14929-14932.	3.2	6
70	Velocity measurements through magnetic induction. American Journal of Physics, 1997, 65, 135-140.	0.7	15
71	The rolling body paradox: an oscillatory motion approach. European Journal of Physics, 1997, 18, 409-416.	0.6	3
72	Finite periodic and quasiperiodic systems in an electric field. Zeitschrift Fýr Physik B-Condensed Matter, 1997, 102, 425-431.	1.1	15

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73	Anomalous electric field-induced localization in quasiperiodic systems. Physics Letters, Section A: General, Atomic and Solid State Physics, 1997, 231, 439-448.	2.1	5
74	Energy spectra and level statistics of Fibonacci and Thue-Morse chains. Physical Review B, 1995, 51, 12813-12816.	3.2	32