

Alain Arneodo

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/4162640/publications.pdf>

Version: 2024-02-01

270
papers

13,724
citations

21215

62
h-index

31191

106
g-index

278
all docs

278
docs citations

278
times ranked

7535
citing authors

#	ARTICLE	IF	CITATIONS
1	Loss of Mammographic Tissue Homeostasis in Invasive Lobular and Ductal Breast Carcinomas vs. Benign Lesions. <i>Frontiers in Physiology</i> , 2021, 12, 660883.	1.3	4
2	Emergence of Log-Normal Type Distributions in Avalanche Processes in Living Systems: A Network Model. <i>Frontiers in Applied Mathematics and Statistics</i> , 2021, 6, .	0.7	6
3	Experimental evidence of a phase transition in the multifractal spectra of turbulent temperature fluctuations at a forest canopy top. <i>Journal of Fluid Mechanics</i> , 2020, 896, .	1.4	7
4	Multifractal Desynchronization of the Cardiac Excitable Cell Network During Atrial Fibrillation. II. Modeling. <i>Frontiers in Physiology</i> , 2019, 10, 480.	1.3	1
5	The Role of Nucleosome Positioning in Genome Function and Evolution. , 2018, , 41-79.		2
6	Evidence for DNA Sequence Encoding of an Accessible Nucleosomal Array across Vertebrates. <i>Biophysical Journal</i> , 2018, 114, 2308-2316.	0.2	8
7	A minimal rupture cascade model for living cell plasticity. <i>New Journal of Physics</i> , 2018, 20, 053057.	1.2	7
8	Fractional rheology of muscle precursor cells. <i>Journal of Rheology</i> , 2018, 62, 1347-1362.	1.3	1
9	Developmental and cancer-associated plasticity of DNA replication preferentially targets GC-poor, lowly expressed and late-replicating regions. <i>Nucleic Acids Research</i> , 2018, 46, 10157-10172.	6.5	30
10	Prestressed cells are prone to cytoskeleton failures under localized shear strain: an experimental demonstration on muscle precursor cells. <i>Scientific Reports</i> , 2018, 8, 8602.	1.6	10
11	Multifractal Desynchronization of the Cardiac Excitable Cell Network During Atrial Fibrillation. I. Multifractal Analysis of Clinical Data. <i>Frontiers in Physiology</i> , 2018, 8, 1139.	1.3	3
12	The eukaryotic bell-shaped temporal rate of DNA replication origin firing emanates from a balance between origin activation and passivation. <i>ELife</i> , 2018, 7, .	2.8	14
13	Mammographic evidence of microenvironment changes in tumorous breasts. <i>Medical Physics</i> , 2017, 44, 1324-1336.	1.6	25
14	Dynamical study of \mathbf{Na}_v channel excitability under mechanical stress. <i>Biological Cybernetics</i> , 2017, 111, 129-148.	0.6	2
15	Resonant Waveguide Imaging of Living Systems: From Evanescent to Propagative Light. , 2017, , 613-654.		0
16	Multi-scale structural community organisation of the human genome. <i>BMC Bioinformatics</i> , 2017, 18, 209.	1.2	11
17	High-resolution-scanning waveguide microscopy: spatial refractive index and topography quantification. <i>Optics Letters</i> , 2017, 42, 2523.	1.7	3
18	Evidence of selection for an accessible nucleosomal array in human. <i>BMC Genomics</i> , 2016, 17, 526.	1.2	25

#	ARTICLE	IF	CITATIONS
19	Comparative Multifractal Analysis of Dynamic Infrared Thermograms and X-Ray Mammograms Enlightens Changes in the Environment of Malignant Tumors. <i>Frontiers in Physiology</i> , 2016, 7, 336.	1.3	18
20	From elasticity to inelasticity in cancer cell mechanics: A loss of scale-invariance. <i>AIP Conference Proceedings</i> , 2016, , .	0.3	8
21	Combining multifractal analyses of digital mammograms and infrared thermograms to assist in early breast cancer diagnosis. <i>AIP Conference Proceedings</i> , 2016, , .	0.3	11
22	Deciphering DNA replication dynamics in eukaryotic cell populations in relation with their averaged chromatin conformations. <i>Scientific Reports</i> , 2016, 6, 22469.	1.6	9
23	Revealing stiffening and brittling of chronic myelogenous leukemia hematopoietic primary cells through their temporal response to shear stress. <i>Physical Biology</i> , 2016, 13, 03LT01.	0.8	13
24	Genome-wide alterations of the DNA replication program during tumor progression. <i>AIP Conference Proceedings</i> , 2016, , .	0.3	0
25	Passive microrheology of soft materials with atomic force microscopy: A wavelet-based spectral analysis. <i>Applied Physics Letters</i> , 2016, 108, .	1.5	20
26	Tracking in real time the crawling dynamics of adherent living cells with a high resolution surface plasmon microscope. <i>Proceedings of SPIE</i> , 2016, , .	0.8	1
27	Time-lapse scanning surface plasmon microscopy of living adherent cells with a radially polarized beam. <i>Applied Optics</i> , 2016, 55, 1216.	2.1	28
28	Enlightening intracellular complexity of living cells with quantitative phase microscopy. , 2016, , .		3
29	Resonant Waveguide Imaging of Living Systems: From Evanescent to Propagative Light. , 2016, , 1-42.		0
30	Ubiquitous human "master" origins of replication are encoded in the DNA sequence via a local enrichment in nucleosome excluding energy barriers. <i>Journal of Physics Condensed Matter</i> , 2015, 27, 064102.	0.7	11
31	SWDreader: A wavelet-based algorithm using spectral phase to characterize spike-wave morphological variation in genetic models of absence epilepsy. <i>Journal of Neuroscience Methods</i> , 2015, 242, 127-140.	1.3	20
32	Embryonic Stem Cell Specific "Master" Replication Origins at the Heart of the Loss of Pluripotency. <i>PLoS Computational Biology</i> , 2015, 11, e1003969.	1.5	22
33	Structural organization of human replication timing domains. <i>FEBS Letters</i> , 2015, 589, 2944-2957.	1.3	28
34	Single Cell Wall Nonlinear Mechanics Revealed by a Multiscale Analysis of AFM Force-Indentation Curves. <i>Biophysical Journal</i> , 2015, 108, 2235-2248.	0.2	32
35	Deciphering the internal complexity of living cells with quantitative phase microscopy: a multiscale approach. <i>Journal of Biomedical Optics</i> , 2015, 20, 096005.	1.4	22
36	The Spatiotemporal Program of DNA Replication Is Associated with Specific Combinations of Chromatin Marks in Human Cells. <i>PLoS Genetics</i> , 2014, 10, e1004282.	1.5	123

#	ARTICLE	IF	CITATIONS
37	Wavelet-based multifractal analysis of dynamic infrared thermograms to assist in early breast cancer diagnosis. <i>Frontiers in Physiology</i> , 2014, 5, 176.	1.3	68
38	Diffraction phase microscopy: retrieving phase contours on living cells with a wavelet-based space-scale analysis. <i>Journal of Biomedical Optics</i> , 2014, 19, 036007.	1.4	25
39	From the chromatin interaction network to the organization of the human genome into replication N/U-domains. <i>New Journal of Physics</i> , 2014, 16, 115014.	1.2	12
40	Large replication skew domains delimit GC-poor gene deserts in human. <i>Computational Biology and Chemistry</i> , 2014, 53, 153-165.	1.1	5
41	A Wavelet-Based Method for Multifractal Analysis of Medical Signals: Application to Dynamic Infrared Thermograms of Breast Cancer. <i>Communications in Computer and Information Science</i> , 2014, , 288-300.	0.4	5
42	Wavelet-Based 3D Reconstruction of Microcalcification Clusters from Two Mammographic Views: New Evidence That Fractal Tumors Are Malignant and Euclidean Tumors Are Benign. <i>PLoS ONE</i> , 2014, 9, e107580.	1.1	31
43	Wavelet-based multifractal analysis of dynamic infrared thermograms and X-ray mammograms to assist in early breast cancer diagnosis. , 2014, , .		0
44	From Simple Bacterial and Archaeal Replicons to Replication N/U-Domains. <i>Journal of Molecular Biology</i> , 2013, 425, 4673-4689.	2.0	32
45	Relating mammalian replication program to large-scale chromatin folding. , 2013, , .		0
46	Multifractal analysis of dynamic infrared imaging of breast cancer. <i>Europhysics Letters</i> , 2013, 104, 68001.	0.7	34
47	Revealing Long-Range Interconnected Hubs in Human Chromatin Interaction Data Using Graph Theory. <i>Physical Review Letters</i> , 2013, 111, 118102.	2.9	52
48	Multiscale analysis of genome-wide replication timing profiles using a wavelet-based signal-processing algorithm. <i>Nature Protocols</i> , 2013, 8, 98-110.	5.5	50
49	Megabase Replication Domains Along the Human Genome: Relation to Chromatin Structure and Genome Organisation. <i>Sub-Cellular Biochemistry</i> , 2013, 61, 57-80.	1.0	15
50	Wavelet-based decomposition of high resolution surface plasmon microscopy V (Z) curves at visible and near infrared wavelengths. <i>Optics Express</i> , 2013, 21, 7456.	1.7	13
51	Guided wave microscopy: mastering the inverse problem. <i>Optics Letters</i> , 2013, 38, 4269.	1.7	9
52	Human Genome Replication Proceeds through Four Chromatin States. <i>PLoS Computational Biology</i> , 2013, 9, e1003233.	1.5	54
53	Epigenetic regulation of the human genome: coherence between promoter activity and large-scale chromatin environment. <i>Frontiers in Life Science: Frontiers of Interdisciplinary Research in the Life Sciences</i> , 2013, 7, 44-62.	1.1	8
54	Evolutionary comparisons reveal a positional switch for spindle pole oscillations in <i>Caenorhabditis</i> embryos. <i>Journal of Cell Biology</i> , 2013, 201, 653-662.	2.3	29

#	ARTICLE	IF	CITATIONS
55	Replication Fork Polarity Gradients Revealed by Megabase-Sized U-Shaped Replication Timing Domains in Human Cell Lines. <i>PLoS Computational Biology</i> , 2012, 8, e1002443.	1.5	70
56	Publisher's Note: Inferring Where and When Replication Initiates from Genome-Wide Replication Timing Data [<i>Phys. Rev. Lett.</i> 108, 268101 (2012)]. <i>Physical Review Letters</i> , 2012, 109, .	2.9	0
57	Inferring Where and When Replication Initiates from Genome-Wide Replication Timing Data. <i>Physical Review Letters</i> , 2012, 108, 268101.	2.9	25
58	3D chromatin conformation correlates with replication timing and is conserved in resting cells. <i>Nucleic Acids Research</i> , 2012, 40, 9470-9481.	6.5	76
59	Gene organization inside replication domains in mammalian genomes. <i>Comptes Rendus - Mecanique</i> , 2012, 340, 745-757.	2.1	12
60	DNA structure, nucleosome placement and chromatin remodelling: a perspective. <i>Biochemical Society Transactions</i> , 2012, 40, 335-340.	1.6	35
61	Linking the DNA strand asymmetry to the spatio-temporal replication program. <i>European Physical Journal E</i> , 2012, 35, 92.	0.7	16
62	Linking the DNA strand asymmetry to the spatio-temporal replication program. <i>European Physical Journal E</i> , 2012, 35, 123.	0.7	13
63	A phenomenological theory of Eulerian and Lagrangian velocity fluctuations in turbulent flows. <i>Comptes Rendus Physique</i> , 2012, 13, 899-928.	0.3	42
64	FractalsFractal and WaveletsWavelets : What Can We Learn on Transcription and Replication from Wavelet-Based Multifractal AnalysisMultifractal analysis of DNA SequencesDNA sequence ?. , 2012, , 606-636.		0
65	Mechanics of the IL2RA Gene Activation Revealed by Modeling and Atomic Force Microscopy. <i>PLoS ONE</i> , 2011, 6, e18811.	1.1	7
66	Influence of the genomic sequence on the primary structure of chromatin. <i>Frontiers in Life Science: Frontiers of Interdisciplinary Research in the Life Sciences</i> , 2011, 5, 29-68.	1.1	12
67	<i>in vivo</i> analysis of local wall stiffness at the shoot apical meristem in Arabidopsis using atomic force microscopy. <i>Plant Journal</i> , 2011, 67, 1116-1123.	2.8	186
68	Revisiting polymer statistical physics to account for the presence of long-range-correlated structural disorder in 2D DNA chains. <i>European Physical Journal E</i> , 2011, 34, 119.	0.7	2
69	Multi-scale coding of genomic information: From DNA sequence to genome structure and function. <i>Physics Reports</i> , 2011, 498, 45-188.	10.3	108
70	Functional Coupling between HIV-1 Integrase and the SWI/SNF Chromatin Remodeling Complex for Efficient <i>in vitro</i> Integration into Stable Nucleosomes. <i>PLoS Pathogens</i> , 2011, 7, e1001280.	2.1	57
71	Replication-Associated Mutational Asymmetry in the Human Genome. <i>Molecular Biology and Evolution</i> , 2011, 28, 2327-2337.	3.5	66
72	Evidence for Sequential and Increasing Activation of Replication Origins along Replication Timing Gradients in the Human Genome. <i>PLoS Computational Biology</i> , 2011, 7, e1002322.	1.5	124

#	ARTICLE	IF	CITATIONS
73	CHARACTERIZING COMPLEXITY IN SOLAR MAGNETOGRAM DATA USING A WAVELET-BASED SEGMENTATION METHOD. <i>Astrophysical Journal</i> , 2010, 717, 995-1005.	1.6	27
74	Perinuclear distribution of heterochromatin in developing <i>C. elegans</i> embryos. <i>Chromosome Research</i> , 2010, 18, 873-885.	1.0	21
75	Automated Detection of Coronal Loops Using a Wavelet Transform Modulus Maxima Method. <i>Solar Physics</i> , 2010, 262, 387-397.	1.0	22
76	Wavelet-based method to disentangle transcription- and replication-associated strand asymmetries in mammalian genomes. <i>Applied and Computational Harmonic Analysis</i> , 2010, 28, 150-170.	1.1	22
77	A novel strategy of transcription regulation by intragenic nucleosome ordering. <i>Genome Research</i> , 2010, 20, 59-67.	2.4	64
78	Impact of replication timing on non-CpG and CpG substitution rates in mammalian genomes. <i>Genome Research</i> , 2010, 20, 447-457.	2.4	187
79	Effect of Genomic Long-Range Correlations on DNA Persistence Length: From Theory to Single Molecule Experiments. <i>Journal of Physical Chemistry B</i> , 2010, 114, 5125-5143.	1.2	33
80	Nucleosome positioning by genomic excluding-energy barriers. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2009, 106, 22257-22262.	3.3	54
81	Open chromatin encoded in DNA sequence is the signature of "master" replication origins in human cells. <i>Nucleic Acids Research</i> , 2009, 37, 6064-6075.	6.5	52
82	Analysis of fine-scale mammalian evolutionary breakpoints provides new insight into their relation to genome organisation. <i>BMC Genomics</i> , 2009, 10, 335.	1.2	58
83	Revisiting the physical processes of vapodeposited thin gold films on chemically modified glass by atomic force and surface plasmon microscopies. <i>Surface Science</i> , 2009, 603, 3307-3320.	0.8	36
84	Evidence for inherent nonlinearity in temporal rainfall. <i>Advances in Water Resources</i> , 2009, 32, 41-48.	1.7	29
85	Towards A New Generation Of Single Molecule High Resolution Sensors. <i>Biophysical Journal</i> , 2009, 96, 29a.	0.2	0
86	Thermodynamics of Intragenic Nucleosome Ordering. <i>Physical Review Letters</i> , 2009, 103, 188103.	2.9	57
87	Generalized wormlike chain model for long-range correlated heteropolymers. <i>Europhysics Letters</i> , 2009, 86, 48001.	0.7	6
88	Fractals and Wavelets : What Can We Learn on Transcription and Replication from Wavelet-Based Multifractal Analysis of DNA Sequences. <i>DNA sequence ?</i> , 2009, , 3893-3924.		2
89	Phenomenological relation between the Kolmogorov constant and the skewness in turbulence. <i>Springer Proceedings in Physics</i> , 2009, , 719-720.	0.1	0
90	A multifractal formalism for vector-valued random fields based on wavelet analysis: application to turbulent velocity and vorticity 3D numerical data. <i>Stochastic Environmental Research and Risk Assessment</i> , 2008, 22, 421-435.	1.9	16

#	ARTICLE	IF	CITATIONS
91	Spontaneous emergence of sequence-dependent rosettelike folding of chromatin fiber. <i>Physical Review E</i> , 2008, 77, 061923.	0.8	14
92	Universal Intermittent Properties of Particle Trajectories in Highly Turbulent Flows. <i>Physical Review Letters</i> , 2008, 100, 254504.	2.9	145
93	Wavelet-based multifractal analysis. <i>Scholarpedia Journal</i> , 2008, 3, 4103.	0.3	39
94	Estimating intermittency exponent in neutrally stratified atmospheric surface layer flows: A robust framework based on magnitude cumulant and surrogate analyses. <i>Physics of Fluids</i> , 2007, 19, .	1.6	28
95	Bifractality of human DNA strand-asymmetry profiles results from transcription. <i>Physical Review E</i> , 2007, 75, 032902.	0.8	37
96	Probing Persistence in DNA Curvature Properties with Atomic Force Microscopy. <i>Physical Review Letters</i> , 2007, 98, 178101.	2.9	61
97	Experiments Confirm the Influence of Genome Long-Range Correlations on Nucleosome Positioning. <i>Physical Review Letters</i> , 2007, 99, 218103.	2.9	60
98	Human gene organization driven by the coordination of replication and transcription. <i>Genome Research</i> , 2007, 17, 1278-1285.	2.4	147
99	DNA in Chromatin: from Genome-Wide Sequence Analysis to the Modeling of Replication in Mammals. <i>Advances in Chemical Physics</i> , 2007, , 203-252.	0.3	3
100	DNA Replication Timing Data Corroborate <i>In Silico</i> Human Replication Origin Predictions. <i>Physical Review Letters</i> , 2007, 99, 248102.	2.9	39
101	Lagrangian intermittencies in dynamic and static turbulent velocity fields from direct numerical simulations. <i>Journal of Turbulence</i> , 2007, 8, N3.	0.5	6
102	Chromosome territories have a highly nonspherical morphology and nonrandom positioning. <i>Chromosome Research</i> , 2007, 15, 899-916.	1.0	95
103	Chromosome neighborhood composition determines translocation outcomes after exposure to high-dose radiation in primary cells. <i>Chromosome Research</i> , 2007, 15, 1061-1073.	1.0	48
104	Revisiting multifractality of high-resolution temporal rainfall using a wavelet-based formalism. <i>Water Resources Research</i> , 2006, 42, .	1.7	121
105	Unified multifractal description of velocity increments statistics in turbulence: Intermittency and skewness. <i>Physica D: Nonlinear Phenomena</i> , 2006, 218, 77-82.	1.3	62
106	Scaling behavior of high resolution temporal rainfall: New insights from a wavelet-based cumulant analysis. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 2006, 348, 335-345.	0.9	35
107	Formation and positioning of nucleosomes: Effect of sequence-dependent long-range correlated structural disorder. <i>European Physical Journal E</i> , 2006, 19, 263-277.	0.7	32
108	Morphological Analysis of H_i Features. II. Wavelet-based Multifractal Formalism. <i>Astrophysical Journal, Supplement Series</i> , 2006, 165, 512-550.	3.0	77

#	ARTICLE	IF	CITATIONS
109	Une aventure transdisciplinaire - À l'interface de la physique et de la biologie : le laboratoire Joliot-Curie de l'ENS de Lyon. , 2006, , 14-16.	0.1	0
110	Thermodynamics of DNA Loops with Long-Range Correlated Structural Disorder. Physical Review Letters, 2005, 95, 068101.	2.9	43
111	Intermittency of Velocity Time Increments in Turbulence. Physical Review Letters, 2005, 95, 064501.	2.9	41
112	From DNA Sequence Analysis to Modeling Replication in the Human Genome. Physical Review Letters, 2005, 94, 248103.	2.9	52
113	Replication-associated strand asymmetries in mammalian genomes: Toward detection of replication origins. Proceedings of the National Academy of Sciences of the United States of America, 2005, 102, 9836-9841.	3.3	133
114	Low Frequency Rhythms in Human DNA Sequences: A Key to the Organization of Gene Location and Orientation?. Physical Review Letters, 2004, 93, 108101.	2.9	36
115	A practical method to experimentally evaluate the Hausdorff dimension: An alternative phase-transition-based methodology. Chaos, 2004, 14, 1004-1017.	1.0	5
116	Transcription-coupled and splicing-coupled strand asymmetries in eukaryotic genomes. Nucleic Acids Research, 2004, 32, 4969-4978.	6.5	73
117	Wavelet Analysis of DNA Bending Profiles reveals Structural Constraints on the Evolution of Genomic Sequences. Journal of Biological Physics, 2004, 30, 33-81.	0.7	30
118	Generalizing the Wavelet-Based Multifractal Formalism to Random Vector Fields: Application to Three-Dimensional Turbulence Velocity and Vorticity Data. Physical Review Letters, 2004, 93, 044501.	2.9	57
119	From scale invariance to deterministic chaos in DNA sequences: towards a deterministic description of gene organization in the human genome. Physica A: Statistical Mechanics and Its Applications, 2004, 342, 270-280.	1.2	11
120	Title is missing!. Journal of Statistical Physics, 2003, 113, 701-717.	0.5	38
121	Three-Dimensional Wavelet-Based Multifractal Method: The Need for Revisiting the Multifractal Description of Turbulence Dissipation Data. Physical Review Letters, 2003, 91, 194501.	2.9	64
122	A wavelet-based method for multifractal image analysis: From theoretical concepts to experimental applications. Advances in Imaging and Electron Physics, 2003, 126, 1-92.	0.1	60
123	Transcription-coupled TA and GC strand asymmetries in the human genome. FEBS Letters, 2003, 555, 579-582.	1.3	65
124	Lagrangian Velocity Statistics in Turbulent Flows: Effects of Dissipation. Physical Review Letters, 2003, 91, 214502.	2.9	81
125	Influence of the sequence on elastic properties of long DNA chains. Physical Review E, 2003, 67, 032901.	0.8	16
126	Wavelet Based Multifractal Formalism: Applications to DNA Sequences, Satellite Images of the Cloud Structure, and Stock Market Data. , 2002, , 26-102.		65

#	ARTICLE	IF	CITATIONS
127	A Wavelet-based method for multifractal analysis of rough surfaces : Applications to high-resolution satellite images of cloud structure. AIP Conference Proceedings, 2002, , .	0.3	2
128	Long-range Correlations between DNA Bending Sites: Relation to the Structure and Dynamics of Nucleosomes. Journal of Molecular Biology, 2002, 316, 903-918.	2.0	99
129	Long Time Correlations in Lagrangian Dynamics: A Key to Intermittency in Turbulence. Physical Review Letters, 2002, 89, 254502.	2.9	105
130	Wavelet-based estimators of scaling behavior. IEEE Transactions on Information Theory, 2002, 48, 2938-2954.	1.5	90
131	Multifractal returns and hierarchical portfolio theory. Quantitative Finance, 2001, 1, 131-148.	0.9	96
132	Intermittency of 1D velocity spatial profiles in turbulence: a magnitude cumulant analysis. European Physical Journal B, 2001, 23, 243-248.	0.6	86
133	Oscillating Viscosity in a Lyotropic Lamellar Phase under Shear Flow. Physical Review Letters, 2001, 86, 1374-1377.	2.9	90
134	Long-Range Correlations in Genomic DNA: A Signature of the Nucleosomal Structure. Physical Review Letters, 2001, 86, 2471-2474.	2.9	127
135	WAVELET-BASED MULTIFRACTAL FORMALISM TO ASSIST IN DIAGNOSIS IN DIGITIZED MAMMOGRAMS. Image Analysis and Stereology, 2001, 20, 169.	0.4	76
136	Analysis of random cascades using the wavelet transform: from theoretical concepts to experimental applications. , 2000, 4119, 58.		1
137	A wavelet-based method for multifractal image analysis. I. Methodology and test applications on isotropic and anisotropic random rough surfaces. European Physical Journal B, 2000, 15, 567-600.	0.6	159
138	A wavelet-based method for multifractal image analysis. II. Applications to synthetic multifractal rough surfaces. European Physical Journal B, 2000, 15, 739-764.	0.6	71
139	A wavelet-based method for multifractal image analysis. III. Applications to high-resolution satellite images of cloud structure. European Physical Journal B, 2000, 15, 765-786.	0.6	76
140	The thermodynamics of fractals revisited with wavelets. , 1999, , 339-390.		0
141	Intermittency, Log-Normal Statistics, and Multifractal Cascade Process in High-Resolution Satellite Images of Cloud Structure. Physical Review Letters, 1999, 83, 1255-1258.	2.9	50
142	Detecting vorticity filaments using wavelet analysis: About the statistical contribution of vorticity filaments to intermittency in swirling turbulent flows. European Physical Journal B, 1999, 8, 301-322.	0.6	35
143	Experimental Evidence for Anomalous Scale Dependent Cascading Process in Turbulent Velocity Statistics. Applied and Computational Harmonic Analysis, 1999, 6, 374-381.	1.1	5
144	Revealing a lognormal cascading process in turbulent velocity statistics with wavelet analysis. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 1999, 357, 2415-2438.	1.6	43

#	ARTICLE	IF	CITATIONS
145	Oscillating singularities and fractal functions. CRM Proceedings & Lecture Notes, 1999, , 315-329.	0.1	6
146	Thermodynamics of fractal signals based on wavelet analysis: application to fully developed turbulence data and DNA sequences. Physica A: Statistical Mechanics and Its Applications, 1998, 254, 24-45.	1.2	39
147	Towards log-normal statistics in high Reynolds number turbulence. European Physical Journal B, 1998, 1, 129-140.	0.6	60
148	Singularity spectrum of multifractal functions involving oscillating singularities. Journal of Fourier Analysis and Applications, 1998, 4, 159-174.	0.5	57
149	What can we learn with wavelets about DNA sequences?. Physica A: Statistical Mechanics and Its Applications, 1998, 249, 439-448.	1.2	81
150	Nucleotide composition effects on the long-range correlations in human genes. European Physical Journal B, 1998, 1, 259-263.	0.6	37
151	â€œDirectâ€ causal cascade in the stock market. European Physical Journal B, 1998, 2, 277-282.	0.6	205
152	Analyzing Chaotic Behavior in a Belousovâ Zhabotinsky Reaction by Using a Global Vector Field Reconstruction. Journal of Physical Chemistry A, 1998, 102, 10265-10273.	1.1	21
153	Random cascades on wavelet dyadic trees. Journal of Mathematical Physics, 1998, 39, 4142-4164.	0.5	153
154	Analysis of Random Cascades Using Space-Scale Correlation Functions. Physical Review Letters, 1998, 80, 708-711.	2.9	66
155	Uncovering a Log-Normal Cascade Process in High Reynolds Number Turbulence from Wavelet Analysis. Fluid Mechanics and Its Applications, 1998, , 215-218.	0.1	0
156	Wavelet Based Multifractal Analysis of Rough Surfaces: Application to Cloud Models and Satellite Data. Physical Review Letters, 1997, 79, 75-78.	2.9	79
157	Dynamical Characterization of Electroless Deposition in the Diffusion-Limited Regime. Fractals, 1997, 05, 75-86.	1.8	9
158	Experimental Analysis of Self-Similarity and Random Cascade Processes: Application to Fully Developed Turbulence Data. Journal De Physique II, 1997, 7, 363-370.	0.9	52
159	Oscillating singularities on cantor sets: A grand-canonical multifractal formalism. Journal of Statistical Physics, 1997, 87, 179-209.	0.5	54
160	Scale Invariance and Beyond: What Can We Learn from Wavelet Analysis ?. , 1997, , 37-51.		0
161	Structure functions in turbulence, in various flow configurations, at Reynolds number between 30 and 5000, using extended self-similarity. Europhysics Letters, 1996, 34, 411-416.	0.7	213
162	Wavelet based fractal analysis of DNA sequences. Physica D: Nonlinear Phenomena, 1996, 96, 291-320.	1.3	138

#	ARTICLE	IF	CITATIONS
163	Statistical analysis of off-lattice diffusion-limited aggregates in channel and sector geometries. <i>Physical Review E</i> , 1996, 53, 6200-6223.	0.8	19
164	Complex Fractal Dimensions Describe the Hierarchical Structure of Diffusion-Limited-Aggregate Clusters. <i>Physical Review Letters</i> , 1996, 76, 251-254.	2.9	79
165	The thermodynamics of fractals revisited with wavelets. <i>Physica A: Statistical Mechanics and Its Applications</i> , 1995, 213, 232-275.	1.2	422
166	Oscillating Singularities in Locally Self-Similar Functions. <i>Physical Review Letters</i> , 1995, 74, 4823-4826.	2.9	42
167	Characterizing Long-Range Correlations in DNA Sequences from Wavelet Analysis. <i>Physical Review Letters</i> , 1995, 74, 3293-3296.	2.9	341
168	<title>Wavelet analysis of DNA sequences</title>. , 1995, , .		1
169	Uncovering a multiplicative process in one-dimensional cuts of diffusion-limited aggregates. <i>Journal of Difference Equations and Applications</i> , 1995, 1, 117-124.	0.7	5
170	Type-II Intermittency in the Presence of Additive and Multiplicative Noise. , 1995, , 99-113.		1
171	Modeling Front Pattern Formation and Intermittent Bursting Phenomena in the Couette Flow Reactor. , 1995, , 517-570.		0
172	Solving the Inverse Fractal Problem from Wavelet Analysis. <i>Europhysics Letters</i> , 1994, 25, 479-484.	0.7	27
173	Structural Analysis of Electroless Deposits in the Diffusion-Limited Regime. <i>Physical Review Letters</i> , 1994, 73, 2998-3001.	2.9	54
174	THE MULTIFRACTAL FORMALISM REVISITED WITH WAVELETS. <i>International Journal of Bifurcation and Chaos in Applied Sciences and Engineering</i> , 1994, 04, 245-302.	0.7	508
175	Wavelet Based Structural Analysis of Electroless Deposits in the Diffusion Limited Regime. <i>Materials Research Society Symposia Proceedings</i> , 1994, 367, 43.	0.1	0
176	Experimental evidence for homoclinic chaos in an electrochemical growth process. <i>Physica D: Nonlinear Phenomena</i> , 1993, 62, 170-185.	1.3	43
177	Singularity spectrum of fractal signals from wavelet analysis: Exact results. <i>Journal of Statistical Physics</i> , 1993, 70, 635-674.	0.5	321
178	Homoclinic chaos in chemical systems. <i>Physica D: Nonlinear Phenomena</i> , 1993, 62, 134-169.	1.3	60
179	Multifractal formalism for fractal signals: The structure-function approach versus the wavelet-transform modulus-maxima method. <i>Physical Review E</i> , 1993, 47, 875-884.	0.8	472
180	BEYOND CLASSICAL MULTIFRACTAL ANALYSIS USING WAVELETS: UNCOVERING A MULTIPLICATIVE PROCESS HIDDEN IN THE GEOMETRICAL COMPLEXITY OF DIFFUSION LIMITED AGGREGATES. <i>Fractals</i> , 1993, 01, 629-649.	1.8	48

#	ARTICLE	IF	CITATIONS
181	Statistical mechanics of Laplacian fractals. <i>Physical Review Letters</i> , 1993, 71, 2425-2428.	2.9	8
182	Wavelet Analysis of Fractal Signals Application to Fully Developed Turbulence Data. <i>Fluid Mechanics and Its Applications</i> , 1993, , 153-158.	0.1	4
183	Fibonacci Sequences in Diffusion-Limited Aggregation. <i>NATO ASI Series Series B: Physics</i> , 1993, , 191-202.	0.2	2
184	Optical-diffraction measurement of fractal dimensions and $f(\hat{\pm})$ spectrum. <i>Physical Review A</i> , 1992, 45, 8961-8964.	1.0	6
185	Golden mean arithmetic in the fractal branching of diffusion-limited aggregates. <i>Physical Review Letters</i> , 1992, 68, 3456-3459.	2.9	66
186	Crisis-induced intermittent bursting in reaction-diffusion chemical systems. <i>Physical Review Letters</i> , 1992, 68, 714-717.	2.9	34
187	Structural five-fold symmetry in the fractal morphology of diffusion-limited aggregates. <i>Physica A: Statistical Mechanics and Its Applications</i> , 1992, 188, 217-242.	1.2	28
188	Uncovering Fibonacci sequences in the fractal morphology of diffusion-limited aggregates. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 1992, 171, 31-36.	0.9	28
189	Wavelets and multifractal formalism for singular signals: Application to turbulence data. <i>Physical Review Letters</i> , 1991, 67, 3515-3518.	2.9	686
190	Optical wavelet transform and local scaling properties of fractals. <i>Journal of Applied Crystallography</i> , 1991, 24, 526-530.	1.9	6
191	Instabilities of front patterns in reaction-diffusion systems. <i>Physica D: Nonlinear Phenomena</i> , 1991, 49, 141-160.	1.3	21
192	Modeling reaction-diffusion pattern formation in the Couette flow reactor. <i>Journal of Chemical Physics</i> , 1991, 95, 323-350.	1.2	24
193	Anisotropic Laplacian growths: From diffusion-limited aggregates to dendritic fractals. <i>Physical Review Letters</i> , 1991, 66, 2332-2335.	2.9	42
194	Diffusion Controlled Growth Phenomena: From Smooth Interfaces to Fractal Structures. <i>NATO ASI Series Series B: Physics</i> , 1991, , 297-315.	0.2	2
195	Wavelet analysis of fully developed turbulence data and measurement of scaling exponents. <i>Fluid Mechanics and Its Applications</i> , 1991, , 203-215.	0.1	45
196	Experimental Evidence for Spatio-Temporal Chaos in Diffusion-Limited Growth Phenomena. <i>NATO ASI Series Series B: Physics</i> , 1991, , 329-343.	0.2	0
197	Spatiotemporal patterns and diffusion-induced chaos in a chemical system with equal diffusion coefficients. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 1990, 143, 25-33.	0.9	24
198	Wavelet analysis of the self-similarity of diffusion-limited aggregates and electrodeposition clusters. <i>Physical Review A</i> , 1990, 41, 5537-5560.	1.0	74

#	ARTICLE	IF	CITATIONS
199	Transformation en ondelettes et renormalisation. Lecture Notes in Mathematics, 1990, , 125-191.	0.1	8
200	Statistical properties of fractal dendrites and anisotropic diffusion-limited aggregates. Physical Review A, 1990, 42, 3499-3503.	1.0	71
201	Optical wavelet transform of fractal aggregates. Physical Review Letters, 1990, 64, 745-748.	2.9	85
202	Pattern Growth: From Smooth Interfaces to Fractal Structures. NATO ASI Series Series B: Physics, 1990, , 481-486.	0.2	1
203	Sustained Non-Equilibrium Patterns in a One-Dimensional Reaction-Diffusion Chemical System. NATO ASI Series Series B: Physics, 1990, , 21-23.	0.2	2
204	Analyse en ondelettes de croissances fractales electrochimiques. Journal De Chimie Physique Et De Physico-Chimie Biologique, 1990, 87, 1487-1545.	0.2	2
205	Experimental evidence for deterministic chaos in electrochemical deposition. Journal De Physique, 1990, 51, 2477-2487.	1.8	20
206	Wavelet Transform Analysis of Invariant Measures of Some Dynamical Systems. Inverse Problems and Theoretical Imaging, 1990, , 182-196.	0.2	0
207	Argoulet al.reply. Physical Review Letters, 1989, 63, 1323-1323.	2.9	8
208	Uncovering the analytical Saffman-Taylor finger in unstable viscous fingering and diffusion-limited aggregation. Physical Review Letters, 1989, 63, 984-987.	2.9	95
209	Comment on "Self-similarity of diffusion-limited aggregates and electrodeposition clusters". Physical Review Letters, 1989, 63, 1322-1322.	2.9	24
210	Wavelet transform of fractal aggregates. Physics Letters, Section A: General, Atomic and Solid State Physics, 1989, 135, 327-336.	0.9	91
211	Wavelet analysis of turbulence reveals the multifractal nature of the Richardson cascade. Nature, 1989, 338, 51-53.	13.7	208
212	Characterizing Spatio-Temporal Chaos in Electrodeposition Experiments. NATO ASI Series Series B: Physics, 1989, , 433-443.	0.2	2
213	Wavelet Transform Analysis of Invariant Measures of Some Dynamical Systems. Inverse Problems and Theoretical Imaging, 1989, , 182-196.	0.2	21
214	Fractal dimensions and homeomorphic conjugacies. Journal of Statistical Physics, 1988, 50, 995-1020.	0.5	15
215	Fractal Dimensions and $f(\pm)$ Spectrum for Strange Attractors. ZAMM Zeitschrift Fur Angewandte Mathematik Und Mechanik, 1988, 68, 519-522.	0.9	8
216	Wavelet Transform of Multifractals. Physical Review Letters, 1988, 61, 2281-2284.	2.9	271

#	ARTICLE	IF	CITATIONS
217	Self-Similarity of Diffusion-Limited Aggregates and Electrodeposition Clusters. <i>Physical Review Letters</i> , 1988, 61, 2558-2561.	2.9	171
218	A three-dimensional dissipative map modeling type-II intermittency. <i>Journal De Physique</i> , 1988, 49, 767-775.	1.8	14
219	Oscillatory instability induced by mass interchange between two coupled steady-state reactors. <i>The Journal of Physical Chemistry</i> , 1987, 91, 5843-5845.	2.9	53
220	Transitions to Chaos in the Presence of an External Periodic Field: Cross-Over Effect in the Measure of Critical Exponents. <i>Europhysics Letters</i> , 1987, 3, 643-651.	0.7	9
221	Crossover Effect in the $f(\pm)$ Spectrum for Quasiperiodic Trajectories at the Onset of Chaos. <i>Physical Review Letters</i> , 1987, 58, 2007-2010.	2.9	29
222	From quasiperiodicity to chaos in the Belousov-Zhabotinskii reaction. I. Experiment. <i>Journal of Chemical Physics</i> , 1987, 86, 3325-3338.	1.2	124
223	From quasiperiodicity to chaos in the Belousov-Zhabotinskii reaction. II. Modeling and theory. <i>Journal of Chemical Physics</i> , 1987, 86, 3339-3356.	1.2	88
224	Chemical chaos: from hints to confirmation. <i>Accounts of Chemical Research</i> , 1987, 20, 436-442.	7.6	91
225	Fractal dimensions and $f(\pm)$ spectrum of the Hénon attractor. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 1987, 124, 426-432.	0.9	58
226	Experimental evidence for homoclinic chaos in the Belousov-Zhabotinskii reaction. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 1987, 120, 269-275.	0.9	89
227	Transitions to Chaos in a Finite Macroscopic System: Direct Numerical Simulations Versus Normal Form Predictions. <i>Springer Series in Synergetics</i> , 1987, , 313-333.	0.2	2
228	Lyapunov exponents and phase transitions in dynamical systems. <i>Lecture Notes in Mathematics</i> , 1986, , 338-360.	0.1	7
229	Type-II intermittency in a periodically driven nonlinear oscillator. <i>Physical Review A</i> , 1986, 34, 726-729.	1.0	52
230	The periodic-chaotic sequences in chemical reactions: A scenario close to homoclinic conditions?. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 1985, 109, 359-366.	0.9	17
231	Direct numerical simulations of a triple convection problem versus normal form predictions. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 1985, 109, 367-373.	0.9	16
232	Asymptotic chaos. <i>Physica D: Nonlinear Phenomena</i> , 1985, 14, 327-347.	1.3	164
233	Scaling for a Periodic Forcing of a Period-Doubling System. <i>Physical Review Letters</i> , 1985, 54, 86-86.	2.9	3
234	The dynamics of triple convection. <i>Geophysical and Astrophysical Fluid Dynamics</i> , 1985, 31, 1-48.	0.4	74

#	ARTICLE	IF	CITATIONS
235	Scaling for a periodic forcing at the onset of intermittency. Journal De Physique (Paris), Lettres, 1985, 46, 901-907.	2.8	7
236	Scaling for a Periodic Forcing of a Period-Doubling System. Physical Review Letters, 1984, 53, 1240-1243.	2.9	14
237	Monte Carlo Random-Walk Experiments as a Test of Chaotic Orbits of Maps of the Interval. Physical Review Letters, 1984, 52, 1857-1860.	2.9	10
238	Sharkovskii's order for the appearance of superstable cycles in one-parameter families of simple real maps: An elementary proof. Communications on Pure and Applied Mathematics, 1984, 37, 13-17.	1.2	7
239	Scaling for External Excitations of a Period-Doubling System. Springer Proceedings in Physics, 1984, , 187-194.	0.1	1
240	Chaos, pseudo-random number generators and the random walk problem. Journal De Physique, 1984, 45, 1843-1857.	1.8	6
241	Nonlinear Interactions Between Instabilities Leading to Chaos in the Belousov-Zhabotinsky Reaction. Springer Series in Synergetics, 1984, , 146-148.	0.2	0
242	Cascade of period doublings of tori. Physics Letters, Section A: General, Atomic and Solid State Physics, 1983, 94, 1-6.	0.9	95
243	On the observation of an uncompleted cascade in a Rayleigh-Bénard experiment. Physica D: Nonlinear Phenomena, 1983, 6, 385-392.	1.3	23
244	Chaos in a finite macroscopic system. Physics Letters, Section A: General, Atomic and Solid State Physics, 1982, 92, 369-373.	0.9	37
245	Strange attractors in volterra equations for species in competition. Journal of Mathematical Biology, 1982, 14, 153-157.	0.8	66
246	Oscillators with chaotic behavior: An illustration of a theorem by Shil'nikov. Journal of Statistical Physics, 1982, 27, 171-182.	0.5	137
247	A possible new mechanism for the onset of turbulence. Physics Letters, Section A: General, Atomic and Solid State Physics, 1981, 81, 197-201.	0.9	128
248	Possible new strange attractors with spiral structure. Communications in Mathematical Physics, 1981, 79, 573-579.	1.0	259
249	Transition to turbulence for doubly periodic flows. Physics Letters, Section A: General, Atomic and Solid State Physics, 1980, 77, 327-331.	0.9	41
250	A mechanism for a soft mode instability. Physics Letters, Section A: General, Atomic and Solid State Physics, 1980, 78, 11-14.	0.9	17
251	Occurrence of strange attractors in three-dimensional Volterra equations. Physics Letters, Section A: General, Atomic and Solid State Physics, 1980, 79, 259-263.	0.9	141
252	Topological horseshoe and numerically observed chaotic behaviour in the Henon mapping. Journal of Physics A, 1980, 13, L123-L127.	1.6	9

#	ARTICLE	IF	CITATIONS
253	Strong decays of the vector states of charmonium. Nuclear Physics B, 1980, 167, 413-453.	0.9	1
254	On the existence of hysteresis in a transition to chaos after a single bifurcation. Journal De Physique (Paris), Lettres, 1980, 41, 243-246.	2.8	35
255	A renormalization group with periodic behaviour. Physics Letters, Section A: General, Atomic and Solid State Physics, 1979, 70, 74-76.	0.9	24
256	Transition to stochasticity for a class of forced oscillators. Physics Letters, Section A: General, Atomic and Solid State Physics, 1979, 72, 268-270.	0.9	107
257	Multi-Regge cluster model versus multiparticle experimental data. Zeitschrift für Physik C-Particles and Fields, 1979, 2, 77-84.	1.5	0
258	Strong decays of $\psi(4.03)$ and $\psi(4.16)$ as radial excitations of charmonium. Zeitschrift für Physik C-Particles and Fields, 1979, 3, 37-41.	1.5	3
259	Cluster models, local compensation of transverse momenta and transverse data. Nuclear Physics B, 1978, 143, 163-188.	0.9	3
260	Cluster models against new and old experimental data on multiparticle production. Nuclear Physics B, 1976, 107, 262-284.	0.9	39
261	What semi-inclusive data say about clusters. Nuclear Physics B, 1976, 113, 156-172.	0.9	12
262	Kinematical effects, neutral-cluster models and neutral- to charged-pion correlations in multiparticle production. Lettere Al Nuovo Cimento Rivista Internazionale Della Società Italiana Di Fisica, 1975, 12, 1-8.	0.4	7
263	Zero-contours in low-energy $K\bar{K}$ scattering. Il Nuovo Cimento A, 1975, 25, 511-533.	0.2	0
264	Charge dependent effects in azimuthal two-particle correlations and cluster production. Nuclear Physics B, 1975, 97, 51-60.	0.9	6
265	Quantum effects in photodetection processes. European Physical Journal A, 1974, 269, 205-213.	1.0	6
266	Correlations between neutral and charged pions in multiparticle production. Nuclear Physics B, 1974, 77, 309-336.	0.9	10
267	Zero contours and ρ -dominance in low-energy $\bar{K}K$ scattering. Il Nuovo Cimento A, 1973, 17, 329-342.	0.2	2
268	Low-energy $\bar{K}K$ scattering in a crossing-symmetric model. Il Nuovo Cimento A, 1973, 15, 107-126.	0.2	4
269	Mechanical Sensing of Living Systems "From Statics to Dynamics". , 0, , .		0
270	Multifractal returns and hierarchical portfolio theory. , 0, .		9