

Raoul Nigmatullin

List of Publications by Year in descending order

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200
papers

3,359
citations

186265

28
h-index

175258

52
g-index

203
all docs

203
docs citations

203
times ranked

1412
citing authors

#	ARTICLE	IF	CITATIONS
1	The realization of the generalized transfer equation in a medium with fractal geometry. <i>Physica Status Solidi (B): Basic Research</i> , 1986, 133, 425-430.	1.5	540
2	Fractional integral and its physical interpretation. <i>Theoretical and Mathematical Physics (Russian)</i> Tj ETQq0 0 0 rgBT/Overlock, 10 Tf 50 7 0.9 202	0.9	202
3	To the Theoretical Explanation of the "Universal Response". <i>Physica Status Solidi (B): Basic Research</i> , 1984, 123, 739-745.	1.5	185
4	Cole-Davidson dielectric relaxation as a self-similar relaxation process. <i>Physics of the Solid State</i> , 1997, 39, 87-90.	0.6	109
5	Is there geometrical/physical meaning of the fractional integral with complex exponent?. <i>Journal of Non-Crystalline Solids</i> , 2005, 351, 2888-2899.	3.1	107
6	On the Theory of Relaxation for Systems with "Remnant" Memory. <i>Physica Status Solidi (B): Basic Research</i> , 1984, 124, 389-393.	1.5	86
7	Recognition of nonextensive statistical distributions by the eigencoordinates method. <i>Physica A: Statistical Mechanics and Its Applications</i> , 2000, 285, 547-565.	2.6	64
8	Newtonian law with memory. <i>Nonlinear Dynamics</i> , 2010, 60, 81-86.	5.2	60
9	Mechanism of the cooperative relaxation in microemulsions near the percolation threshold. <i>Physical Review E</i> , 1996, 54, 5420-5427.	2.1	59
10	"Fractional" kinetic equations and "universal" decoupling of a memory function in mesoscale region. <i>Physica A: Statistical Mechanics and Its Applications</i> , 2006, 363, 282-298.	2.6	58
11	Correction of the power law of ac conductivity in ion-conducting materials due to the electrode polarization effect. <i>Physical Review E</i> , 2014, 89, 032303.	2.1	57
12	The statistics of the fractional moments: Is there any chance to "read quantitatively" any randomness?. <i>Signal Processing</i> , 2006, 86, 2529-2547.	3.7	51
13	Theory of dielectric relaxation in non-crystalline solids: from a set of micromotions to the averaged collective motion in the mesoscale region. <i>Physica B: Condensed Matter</i> , 2005, 358, 201-215.	2.7	46
14	Recognition of the "fractional" kinetics in complex systems: Dielectric properties of fresh fruits and vegetables from 0.01 to 1.8GHz. <i>Signal Processing</i> , 2006, 86, 2744-2759.	3.7	44
15	Fractional Newtonian mechanics. <i>Open Physics</i> , 2010, 8, .	1.7	42
16	Eigen-coordinates: New method of analytical functions identification in experimental measurements. <i>Applied Magnetic Resonance</i> , 1998, 14, 601-633.	1.2	41
17	Strongly correlated variables and existence of a universal distribution function for relative fluctuations. <i>Physics of Wave Phenomena</i> , 2008, 16, 119.	1.1	41
18	Universal distribution function for the strongly-correlated fluctuations: General way for description of different random sequences. <i>Communications in Nonlinear Science and Numerical Simulation</i> , 2010, 15, 637-647.	3.3	40

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19	A fractal pore model for Archie's law in sedimentary rocks. <i>Journal Physics D: Applied Physics</i> , 1992, 25, 32-37.	2.8	38
20	The first experimental confirmation of the fractional kinetics containing the complex-power-law exponents: Dielectric measurements of polymerization reactions. <i>Physica B: Condensed Matter</i> , 2007, 388, 418-434.	2.7	38
21	Possibility between earthquake and explosion seismogram differentiation by discrete stochastic non-Markov processes and local Hurst exponent analysis. <i>Physical Review E</i> , 2001, 64, 066132.	2.1	36
22	Liquid Helium-4 in the Static Fluctuation Approximation. <i>International Journal of Theoretical Physics</i> , 2001, 40, 1033-1060.	1.2	35
23	Recognition of a new permittivity function for glycerol by the use of the eigen-coordinates method. <i>Journal of Non-Crystalline Solids</i> , 2002, 305, 96-111.	3.1	33
24	Accurate relationships between fractals and fractional integrals: New approaches and evaluations. <i>Fractional Calculus and Applied Analysis</i> , 2017, 20, 1263-1280.	2.2	32
25	Identification of the generalized Weibull distribution in wind speed data by the Eigen-coordinates method. <i>Renewable Energy</i> , 2003, 28, 93-110.	8.9	31
26	Fluctuation-noise spectroscopy and a "universal" fitting function of amplitudes of random sequences. <i>Physica A: Statistical Mechanics and Its Applications</i> , 2003, 320, 291-317.	2.6	30
27	Invariant behaviour classes for the response of simple fractal circuits. <i>Journal of Physics Condensed Matter</i> , 1991, 3, 9773-9790.	1.8	29
28	Is It Possible to Derive Newtonian Equations of Motion with Memory?. <i>International Journal of Theoretical Physics</i> , 2010, 49, 701-708.	1.2	29
29	New approach in the description of dielectric relaxation phenomenon: correct deduction and interpretation of the Vogel-Fulcher-Tamman equation. <i>Journal of Physics Condensed Matter</i> , 2003, 15, 3481-3503.	1.8	28
30	The Fading of Memory During the Regression of Structural Fluctuations. <i>Advances in Chemical Physics</i> , 2007, , 253-292.	0.3	28
31	Detection of the OH band fine structure in liquid water by means of new treatment procedure based on the statistics of the fractional moments. <i>Laser Physics Letters</i> , 2007, 4, 809-813.	1.4	28
32	Microscopic model of a non-Debye dielectric relaxation: The Cole-Cole law and its generalization. <i>Theoretical and Mathematical Physics(Russian Federation)</i> , 2012, 173, 1604-1619.	0.9	28
33	The generalized Jonscher's relationship for conductivity and its confirmation for porous structures. <i>Journal of Non-Crystalline Solids</i> , 2012, 358, 1-7.	3.1	28
34	New relationships connecting a class of fractal objects and fractional integrals in space. <i>Fractional Calculus and Applied Analysis</i> , 2013, 16, 911-936.	2.2	28
35	Identification of a new function model for the AC-impedance of thermally evaporated undoped selenium films using the Eigen-coordinates method. <i>Thin Solid Films</i> , 2001, 396, 282-296.	1.8	26
36	Log-periodic corrections to the Cole-Cole expression in dielectric relaxation. <i>Physica A: Statistical Mechanics and Its Applications</i> , 2013, 392, 136-148.	2.6	26

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37	The general theory of the Quasi-reproducible experiments: How to describe the measured data of complex systems?. Communications in Nonlinear Science and Numerical Simulation, 2017, 42, 324-341.	3.3	26
38	The relationship between the fractional integral and the fractal structure of a memory set. Physica A: Statistical Mechanics and Its Applications, 1997, 246, 419-429.	2.6	24
39	Dielectric study of neutral and charged hydrogels during the swelling process. Journal of Chemical Physics, 2006, 125, 234705.	3.0	24
40	The justified data-curve fitting approach: recognition of the new type of kinetic equations in fractional derivatives from analysis of raw dielectric data. Journal Physics D: Applied Physics, 2003, 36, 2281-2294.	2.8	23
41	Detection of quasi-periodic processes in complex systems: how do we quantitatively describe their properties?. Physica Scripta, 2014, 89, 015201.	2.5	23
42	On fractional filtering versus conventional filtering in economics. Communications in Nonlinear Science and Numerical Simulation, 2010, 15, 979-986.	3.3	21
43	Justification of the empirical laws of the anomalous dielectric relaxation in the framework of the memory function formalism. Fractional Calculus and Applied Analysis, 2014, 17, 247-258.	2.2	21
44	The generalized mean value function approach: a new statistical tool for the detection of weak signals in spectroscopy. Journal Physics D: Applied Physics, 2005, 38, 328-337.	2.8	20
45	Dielectric relaxation in complex systems: quality sensing and dielectric properties of honeydew melons from 10 MHz to 1.8 GHz. Journal of Instrumentation, 2006, 1, P10002-P10002.	1.2	20
46	Signal processing and recognition of true kinetic equations containing non-integer derivatives from raw dielectric data. Signal Processing, 2003, 83, 2433-2453.	3.7	19
47	NIMRAD: novel technique for respiratory data treatment. Signal, Image and Video Processing, 2014, 8, 1517-1532.	2.7	19
48	Effect of Penetration Enhancers on the Dynamic Behavior of Phosphatidylcholine Headgroups in Liposomes. Journal of Physical Chemistry B, 2000, 104, 1373-1381.	2.6	18
49	NAFASS: Discrete spectroscopy of random signals. Chaos, Solitons and Fractals, 2011, 44, 226-240.	5.1	18
50	Conductivity in disordered structures: Verification of the generalized Jonscher's law on experimental data. Journal of Applied Physics, 2012, 112, .	2.5	18
51	Proton model of ferroelectrics with tunneling in the static fluctuation approximation. Physical Review E, 2000, 61, 3441-3449.	2.1	17
52	The derivation of the generalized functional equations describing self-similar processes. Fractional Calculus and Applied Analysis, 2012, 15, .	2.2	17
53	Reduced fractional modeling of 3D video streams: the FERMA approach. Nonlinear Dynamics, 2015, 80, 1869-1882.	5.2	17
54	New approach for PEMFC diagnostics based on quantitative description of quasi-periodic oscillations. International Journal of Hydrogen Energy, 2016, 41, 12582-12590.	7.1	17

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55	Characterization of a benzoic acid modified glassy carbon electrode expressed quantitatively by new statistical parameters. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2009, 41, 609-616.	2.7	16
56	One-, Two-, and Three-Dimensional Ising Model in the Static Fluctuation Approximation. <i>International Journal of Theoretical Physics</i> , 2000, 39, 405-446.	1.2	15
57	Reduced fractal model for quantitative analysis of averaged micromotions in mesoscale: Characterization of blow-like signals. <i>Chaos, Solitons and Fractals</i> , 2015, 76, 166-181.	5.1	15
58	The Generalized Fractals and Statistical Properties of the Pore Space of the Sedimentary Rocks. <i>Physica Status Solidi (B): Basic Research</i> , 1989, 153, 49-57.	1.5	14
59	Application of the generalized mean value function to the statistical detection of water in decane by near-infrared spectroscopy. <i>Physica A: Statistical Mechanics and Its Applications</i> , 2005, 352, 379-396.	2.6	14
60	Microscopic model of dielectric $\hat{\epsilon}$ -relaxation in disordered media. <i>Fractional Calculus and Applied Analysis</i> , 2013, 16, 158-170.	2.2	14
61	General theory of experiment containing reproducible data: The reduction to an ideal experiment. <i>Communications in Nonlinear Science and Numerical Simulation</i> , 2015, 27, 175-192.	3.3	14
62	Thermodynamics of the two-dimensional and three-dimensional Ising models in the static fluctuation approximation. <i>Theoretical and Mathematical Physics(Russian Federation)</i> , 1989, 80, 736-745.	0.9	13
63	Analysis of a Nanofilm of the Mercaptophenyl Diazonium Modified Gold Electrode Within New Statistical Parameters. <i>Journal of Computational and Theoretical Nanoscience</i> , 2010, 7, 562-570.	0.4	13
64	On the Laplace integral representation of multivariate Mittag-Leffler functions in anomalous relaxation. <i>Mathematical Methods in the Applied Sciences</i> , 2016, 39, 2983-2992.	2.3	13
65	Design and Characterization of a Microwave Planar Sensor for Dielectric Assessment of Vegetable Oils. <i>Electronics (Switzerland)</i> , 2019, 8, 1030.	3.1	13
66	Is it Possible to Replace the Probability Distribution Function Describing a Random Process by the Prony's Spectrum? (I). <i>Journal of Applied Nonlinear Dynamics</i> , 2012, 1, 173-194.	0.3	13
67	Fluctuation Metrology Based on the Prony's Spectroscopy (II). <i>Journal of Applied Nonlinear Dynamics</i> , 2012, 1, 207-226.	0.3	13
68	A Relationship Between the Universal Law of Susceptibility Response and the Correlation Weakening Principle. <i>Physica Status Solidi (B): Basic Research</i> , 1983, 118, 769-778.	1.5	12
69	Application of fractional-moments statistics to data for two-phase dielectric mixtures. <i>IEEE Transactions on Dielectrics and Electrical Insulation</i> , 2008, 15, 1385-1392.	2.9	12
70	Thermodynamics of an interacting Fermi system in the static fluctuation approximation. <i>Journal of Experimental and Theoretical Physics</i> , 2012, 114, 314-323.	0.9	11
71	Parameters of a noisy Lorenz system reconstructed using the method of proper coordinates. <i>Technical Physics Letters</i> , 2004, 30, 675-676.	0.7	10
72	Membrane current series monitoring: essential reduction of data points to finite number of stable parameters. <i>Frontiers in Computational Neuroscience</i> , 2014, 8, 120.	2.1	10

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73	Detection of quasi-periodic processes in repeated measurements: New approach for the fitting and clusterization of different data. Communications in Nonlinear Science and Numerical Simulation, 2014, 19, 4080-4093.	3.3	10
74	Multiple-trapping model of dielectric relaxation of the ice Ih. Journal of Chemical Physics, 2017, 147, 204502.	3.0	10
75	Direct evaluation of the desired correlations: Verification on real data. Physica A: Statistical Mechanics and Its Applications, 2019, 534, 121558.	2.6	10
76	New quantitative "reading" of dielectric spectra of complex biological systems. IEEE Transactions on Dielectrics and Electrical Insulation, 2006, 13, 1325-1334.	2.9	9
77	NAFASS in action: How to control randomness?. Communications in Nonlinear Science and Numerical Simulation, 2013, 18, 547-558.	3.3	9
78	The First Observation of Memory Effects in the InfraRed (FT-IR) Measurements: Do Successive Measurements Remember Each Other?. PLoS ONE, 2014, 9, e94305.	2.5	9
79	The concept of fractal experiments: New possibilities in quantitative description of quasi-reproducible measurements. Chaos, Solitons and Fractals, 2016, 91, 319-328.	5.1	9
80	Dielectric relaxation phenomenon based on the fractional kinetics: theory and its experimental confirmation. Physica Scripta, 2009, T136, 014001.	2.5	8
81	Chemical bonding structure of TiO ₂ thin films grown on n-type Si. Thin Solid Films, 2011, 519, 5712-5719.	1.8	8
82	Description of the anomalous dielectric relaxation in disordered systems in the frame of the Mori-Zwanzig formalism. Journal of Physics: Conference Series, 2012, 394, 012013.	0.4	8
83	Self-similarity principle: the reduced description of randomness. Open Physics, 2013, 11, .	1.7	8
84	Calculation of a pair correlation function for the three-dimensional Ising model with long-range exchange forces. Physica A: Statistical Mechanics and Its Applications, 1982, 116, 612-621.	2.6	7
85	Solving inverse problems in applied spectroscopy with random fractal noise. Journal of Quantitative Spectroscopy and Radiative Transfer, 2000, 67, 239-252.	2.3	7
86	A Few Exact Solutions for the Model of Equal Spin-Spin Interactions. Theoretical and Mathematical Physics(Russian Federation), 2005, 145, 1727-1735.	0.9	7
87	New approach for consideration of adsorption/desorption data. Communications in Nonlinear Science and Numerical Simulation, 2011, 16, 4643-4648.	3.3	7
88	Predictions based on the cumulative curves: Basic principles and nontrivial example. Communications in Nonlinear Science and Numerical Simulation, 2011, 16, 895-915.	3.3	7
89	Sequences of the ranged amplitudes as a universal method for fast noninvasive characterization of SPAD dark counts. Applied Optics, 2018, 57, 57.	1.8	7
90	The "Universal" Set of Quantitative Parameters for Reading of the Trendless Sequences. Fluctuation and Noise Letters, 2019, 18, 1950023.	1.5	7

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91	Dipole-phonon coupling and dielectric relaxation. <i>Chemical Physics</i> , 1983, 79, 455-463.	1.9	6
92	Dielectric relaxation of the cowle-cowle type and self-similar relaxation processes. <i>Russian Physics Journal</i> , 1997, 40, 314-318.	0.4	6
93	Detection of weak signals based on a new class of transformations of random series. <i>Physica A: Statistical Mechanics and Its Applications</i> , 2001, 289, 18-36.	2.6	6
94	The quantified histograms: detection of the hidden unsteadiness. <i>Physica A: Statistical Mechanics and Its Applications</i> , 2002, 309, 214-230.	2.6	6
95	The origin of the "Excess Wing" and \hat{I}^2 -relaxation phenomena in glass-forming materials. <i>Journal of Non-Crystalline Solids</i> , 2012, 358, 1516-1522.	3.1	6
96	NAFASS: Fluctuation spectroscopy and the Prony spectrum for description of multi-frequency signals in complex systems. <i>Communications in Nonlinear Science and Numerical Simulation</i> , 2018, 56, 252-269.	3.3	6
97	Temporal multi-sensor system for voltammetric recognition of l - and d -tryptophan enantiomers based on generalized principal component analysis. <i>New Journal of Chemistry</i> , 2018, 42, 465-475.	2.8	6
98	Mesoscopic theory of percolation currents associated with quantitative description of VAGs: Confirmation on real data. <i>Chaos, Solitons and Fractals</i> , 2018, 106, 171-183.	5.1	6
99	Lithium Battery Transient Response as a Diagnostic Tool. <i>Journal of Electronic Materials</i> , 2018, 47, 4493-4501.	2.2	6
100	Correlation functions for anisotropic heisenberg model in zero magnetic field. <i>Theoretical and Mathematical Physics(Russian Federation)</i> , 1986, 68, 694-701.	0.9	5
101	Statistical detection of the hidden distortions in diffusive spectra. <i>Journal Physics D: Applied Physics</i> , 2003, 36, 1044-1052.	2.8	5
102	Detection of collective motions in dielectric spectra and the meaning of the generalized Vogel-Fulcher-Tamman equation. <i>Physica B: Condensed Matter</i> , 2009, 404, 255-269.	2.7	5
103	New Noninvasive Methods for "Reading" of Random Sequences and Their Applications in Nanotechnology. , 2010, , 43-56.		5
104	Conductivity in disordered structures: Verification of the generalized Jonscher's law on experimental data. <i>Journal of Physics: Conference Series</i> , 2012, 394, 012026.	0.4	5
105	The influence of the secondary relaxation processes on the structural relaxation in glass-forming materials. <i>Journal of Chemical Physics</i> , 2013, 138, 244502.	3.0	5
106	New Challenges in Fractional Systems 2014. <i>Mathematical Problems in Engineering</i> , 2015, 2015, 1-3.	1.1	5
107	Modeling and experimental validation of walking processes. <i>Biocybernetics and Biomedical Engineering</i> , 2020, 40, 200-210.	5.9	5
108	Balance equations with generalised memory and the emerging fractional kernels. <i>Nonlinear Dynamics</i> , 2021, 104, 4149.	5.2	5

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109	New Digital Signal Processing Methods. , 2020, , .		5
110	Exact structure of equations for the longitudinal correlation function in the anisotropic Heisenberg ferromagnet. Theoretical and Mathematical Physics(Russian Federation), 1976, 28, 869-877.	0.9	4
111	Analysis of dielectric relaxation data in water-saturated sands and clays. Journal of Non-Crystalline Solids, 2002, 305, 255-260.	3.1	4
112	Experimental confirmation of oscillating properties of the complex conductivity: Dielectric study of polymerization/vitrification reaction. Journal of Non-Crystalline Solids, 2007, 353, 4143-4156.	3.1	4
113	Quantitative universal label: How to use it to mark any randomness. Physics of Wave Phenomena, 2009, 17, 100-131.	1.1	4
114	Thermodynamics of the model of equal spin-spin interactions. Theoretical and Mathematical Physics(Russian Federation), 2010, 165, 1371-1386.	0.9	4
115	New method and treatment technique applied to interband transition in GaAs $1-x$ P x ternary alloys. Open Physics, 2011, 9, .	1.7	4
116	Raman Spectra of Nanodiamonds: New Treatment Procedure Directed for Improved Raman Signal Marker Detection. Mathematical Problems in Engineering, 2013, 2013, 1-11.	1.1	4
117	New Approach for Voltammetry Near Limit of Detection: Integrated Voltammograms and Reduction of Measurements to an "Ideal" Experiment. Electroanalysis, 2015, 27, 1416-1426.	2.9	4
118	A novel approach for characterizing multimedia 3D video streams by means of quasiperiodic processes. Signal, Image and Video Processing, 2016, 10, 1113-1118.	2.7	4
119	New quantitative methods of electrode evaluation under continuous voltammetric conditions. New Journal of Chemistry, 2017, 41, 2561-2573.	2.8	4
120	The usage of unremovable artefacts for the quantitative "reading" of nanonoises in voltammetry. New Journal of Chemistry, 2019, 43, 6168-6178.	2.8	4
121	Mesoscopic Fractional Kinetic Equations versus a Riemann"Liouville Integral Type. , 2007, , 155-167.		4
122	Fractional moments. New source of information in radiospectroscopy. Physica Status Solidi (B): Basic Research, 1986, 133, 713-720.	1.5	3
123	Three-dimensional fractal models of electrochemical processes. Russian Journal of Electrochemistry, 2009, 45, 1276-1286.	0.9	3
124	Evidences of the fractional kinetics in temperature region: Evolution of extreme points in ibuprofen. Communications in Nonlinear Science and Numerical Simulation, 2010, 15, 2942-2966.	3.3	3
125	Application of new treatment methods for "reading" of the complex capacitance: A quantitative description of the aging phenomenon in polymer glasses. Communications in Nonlinear Science and Numerical Simulation, 2010, 15, 1286-1307.	3.3	3
126	Classification of speech files by waveforms. Lobachevskii Journal of Mathematics, 2015, 36, 496-502.	0.9	3

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127	Detection of Quasi-Periodic Processes in Experimental Measurements: Reduction to an "Ideal Experiment" Advances in Dynamics, Patterns, Cognition, 2016, , 1-37.	0.3	3
128	Advanced and sensitive method by discrete geometrical invariants for detection of differences between complex fluids. Communications in Nonlinear Science and Numerical Simulation, 2019, 73, 265-274.	3.3	3
129	Generalized Hurst Hypothesis: Description of Time-Series in Communication Systems. Mathematics, 2021, 9, 381.	2.2	3
130	Spectral method for PEMFC operation mode monitoring based on electrical fluctuation analysis. Scientia Iranica, 2017, 24, 1437-1447.	0.4	3
131	Application of the method of approximate integrals of the motion to Fermi and Bose systems. IV. Soviet Physics Journal (English Translation of Izvestiia Vysshikh Uchebnykh Zavedenii, Fizika), 1980, 23, 459-461.	0.0	2
132	Thermodynamics of the basic three-dimensional ferromagnetic models in the fluctuation approximation. Theoretical and Mathematical Physics(Russian Federation), 1988, 74, 79-88.	0.9	2
133	Real time dielectric monitoring of glass transition in n-vinyl pyrrolidone polymerization. Journal of Non-Crystalline Solids, 2007, 353, 4366-4370.	3.1	2
134	Magnetic properties of magnetoactive spin clusters. Journal of Experimental and Theoretical Physics, 2010, 111, 1028-1038.	0.9	2
135	Log-periodic oscillations in the specific heat behaviour for self-similar Ising type spin systems. Journal of Physics: Conference Series, 2012, 394, 012008.	0.4	2
136	Dielectric response of different complex materials. IEEE Transactions on Dielectrics and Electrical Insulation, 2012, 19, 1344-1350.	2.9	2
137	Thermodynamic and magnetic properties of linear spin complexes of ortho-water molecules. Doklady Physical Chemistry, 2013, 452, 247-250.	0.9	2
138	The fluctuation spectroscopy based on the scaling properties of beta-distribution: Analysis of triple pendulum data. Mechanical Systems and Signal Processing, 2015, 52-53, 278-292.	8.0	2
139	Forecasting of random sequences and Prony decomposition of finance data. Analysis (Germany), 2016, 36, .	0.4	2
140	An Improved Nonparametric Method for Fault Detection of Induction Motors Based on the Statistics of the Fractional Moments. , 2018, , .		2
141	Description of Complex Fluids Electrochemical Data in the Frame of Percolation Model. Electroanalysis, 2018, 30, 2053-2065.	2.9	2
142	Fractal description of the complex beatings: How to describe quantitatively seismic waves?. Chaos, Solitons and Fractals, 2019, 120, 171-182.	5.1	2
143	Discrete Geometrical Invariants in 3D Space: How Three Random Sequences Can Be Compared in Terms of "Universal" Statistical Parameters. Frontiers in Physics, 2020, 8, .	2.1	2
144	Noise Cancellation of Helicopter Blade Deformations Measurement by Fiber Bragg Gratings. Sensors, 2021, 21, 4028.	3.8	2

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145	Differentiation of Different Sorts of Sugars by the CAPoNeF Method. <i>Electroanalysis</i> , 2021, 33, 2508-2515.	2.9	2
146	Comparison of the capabilities of histograms and a method of ranged amplitudes in noise analysis of singlephoton detectors. <i>Computer Optics</i> , 2018, 42, 338-342.	2.2	2
147	“Fuzzy”Calculus: The Link Between Quantum Mechanics and Discrete Fractional Operators. <i>Fractional Calculus and Applied Analysis</i> , 2020, 23, 764-786.	2.2	2
148	Propagation and Transformation of Vortexes in Linear and Nonlinear Radio-Photon Systems. <i>Fibers</i> , 2022, 10, 4.	4.0	2
149	Description of multi-periodic signals generated by complex systems: NOCFASS - New possibilities of the Fourier analysis. <i>Numerical Algebra, Control and Optimization</i> , 2024, 14, 1-19.	1.6	2
150	Separation of composite spectra into lorentz components. <i>Journal of Applied Spectroscopy</i> , 1988, 49, 1183-1187.	0.7	1
151	Influence of self-similar collisions on the Doppler broadening. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2000, 33, 2525-2538.	1.5	1
152	Application of probability circles analysis to the construction of calibration curves for infra red spectroscopy. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2005, 61, 2691-2696.	3.9	1
153	The NMR line shape of a system of nuclear spins with equal spin-spin coupling constants. <i>Theoretical and Mathematical Physics(Russian Federation)</i> , 2011, 167, 496-505.	0.9	1
154	Application of the linear principle for the strongly-correlated variables: Calculations of differences between spectra. <i>Communications in Nonlinear Science and Numerical Simulation</i> , 2011, 16, 4028-4036.	3.3	1
155	Calculation of a static potential created by plane fractal cluster. <i>Communications in Nonlinear Science and Numerical Simulation</i> , 2011, 16, 4649-4656.	3.3	1
156	Linear discrete systems with memory: a generalization of the Langmuir model. <i>Open Physics</i> , 2013, 11, .	1.7	1
157	Application of the generalized Prony spectrum for extraction of information hidden in chaotic trajectories of triple pendulum. <i>Open Physics</i> , 2014, 12, .	1.7	1
158	Thermodynamics of Ising rare-earth magnet in the static fluctuation approximation. <i>Optics and Spectroscopy (English Translation of Optika I Spektroskopiya)</i> , 2014, 116, 842-848.	0.6	1
159	Analytical investigation of the specific heat for the Cantor energy spectrum. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 2015, 379, 928-932.	2.1	1
160	Application of new signal processing methods for electrochemical power source relaxation modes detection. , 2017, , .		1
161	Detection of Additives with the Help of Discrete Geometrical Invariants. <i>Applied Sciences (Switzerland)</i> , 2019, 9, 926.	2.5	1
162	A Novel Approach to Radiometric Identification. <i>Frontiers in Artificial Intelligence and Applications</i> , 2020, , .	0.3	1

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163	Discrete Geometrical Invariants: How to Differentiate the Pattern Sequences from the Tested Ones?. Springer Proceedings in Mathematics and Statistics, 2019, , 47-68.	0.2	1
164	Application of the Complex Moments for Selection of an Optimal Sensor. Sensors, 2021, 21, 8242.	3.8	1
165	Equations for magnetization in the generalized Hartree-Fock approximation (GHFA). II. Soviet Physics Journal (English Translation of Izvestiia Vysshikh Uchebnykh Zavedenii, Fizika), 1977, 20, 1616-1619.	0.0	0
166	New method of computing correlation functions. I. Soviet Physics Journal (English Translation of) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 6	0.0	0
167	Method of calculating locally equilibrium correlation functions. Soviet Physics Journal (English) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 6	0.0	0
168	Method of approximate integrals of the motion. III. Soviet Physics Journal (English Translation of) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 5	0.0	0
169	Problem of estimating approximate integrals of motion of multiparticle systems. Soviet Physics Journal (English Translation of Izvestiia Vysshikh Uchebnykh Zavedenii, Fizika), 1981, 24, 1079-1082.	0.0	0
170	Structure of inhomogeneous media within the random fractal model. Journal of Engineering Physics, 1989, 57, 958-964.	0.0	0
171	An algorithm for determining dispersion and Doppler line widths from limited experimental data. Journal of Quantitative Spectroscopy and Radiative Transfer, 1991, 45, 355-358.	2.3	0
172	The "Fractional" Kinetic Equations and General Theory of Dielectric Relaxation. , 2005, , 1513.		0
173	New method of reading strongly correlated sequences: treatment and analysis of the CCD-matrix noise. Proceedings of SPIE, 2010, , .	0.8	0
174	Application of the method of static fluctuational approach to the Bogolyubov"Kolesnikov"Shelah model. Russian Physics Journal, 2010, 53, 722-731.	0.4	0
175	The NMR line shape of magneto-active nanoclusters in moveable nano-containers with self-similar stochastic dynamics. Journal of Physics: Conference Series, 2011, 324, 012005.	0.4	0
176	Fractionl dynamics. Open Physics, 2013, 11, .	1.7	0
177	Application of the Prony's method to analysis of the FTIR data. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2013, 46, 581-586.	0.4	0
178	Statistics of fractional moments applied to 3D video streams. , 2014, , .		0
179	New Methods of Complex Systems Inspection: Comparison of the ADC Device in Different Operating Modes. Lecture Notes in Electrical Engineering, 2015, , 187-204.	0.4	0
180	Application of new statistical methods for triangular sensor signal analysis. , 2016, , .		0

#	ARTICLE	IF	CITATIONS
181	Process of electrochemical electrode modification by polyaniline in the frame of percolation model. Journal of Solid State Electrochemistry, 2019, 23, 1221-1235.	2.5	0
182	How to read the trendless sequences: the "universal" set of quantitative parameters. Journal of Physics: Conference Series, 2019, 1368, 042055.	0.4	0
183	New Method for Calibrating a Complex Equipment: Creation of the Confidence Tube for Fractal-Like Noise. , 2019, , .		0
184	Microcontroller Realization of an Induction Motors Fault Detection Method based on FFT and Statistics of Fractional Moments. , 2021, , .		0
185	The Detection of Self-Similar/Branching Processes in Complex Biological Systems: Analysis of the Temporal Evolution of Impedance Measurements in Tulsi (Holy Basil) Leaves "Ocimum tenuiflorum". IEEE/ACM Transactions on Computational Biology and Bioinformatics, 2022, 19, 3038-3047.	3.0	0
186	Quasi-Fractals: New Possibilities in Description of Disordered Media. , 2007, , 377-388.		0
187	Application of the Generalized Mean Value Function for Detection of Defects in Metal Cylindrical Slugs. Journal of Applied Nonlinear Dynamics, 2016, 5, 33-41.	0.3	0
188	"Universal" Fitting Function for Complex Systems: Case of the Short Samplings. Journal of Applied Nonlinear Dynamics, 2017, 6, 427-443.	0.3	0
189	New Solutions of the Functional Equations and Their Possible Application in Treatment of Complex Systems. Advances in Dynamics, Patterns, Cognition, 2019, , 3-24.	0.3	0
190	The Eigen-Coordinates Method: Reduction of Non-linear Fitting Problems. , 2020, , 1-48.		0
191	Description of Partly Correlated Random Sequences: Replacement of Random Sequences by the Generalised Prony Spectrum. , 2020, , 207-233.		0
192	Applications of NIMRAD in Electrochemistry. , 2020, , 343-408.		0
193	The Eigen-Coordinates Method: Description of Blow-Like Signals. , 2020, , 49-86.		0
194	Reduction of Trendless Sequences of Data by Universal Parameters. , 2020, , 409-429.		0
195	The Quantitative "Universal" Label and the Universal Distribution Function for Relative Fluctuations. Qualitative Description of Trendless Random Functions. , 2020, , 141-206.		0
196	The General Theory of Reproducible and Quasi-Reproducible Experiments. , 2020, , 235-287.		0
197	The Statistics of Fractional Moments and its Application for Quantitative Reading of Real Data. , 2020, , 87-139.		0
198	The Non-orthogonal Amplitude Frequency Analysis of Smoothed Signals Approach and Its Application for Describing Multi-Frequency Signals. , 2020, , 289-341.		0

#	ARTICLE	IF	CITATIONS
199	New class of fractal elements with log-periodic corrections: Confirmation on experimental data. Chaos, Solitons and Fractals, 2021, 153, 111519.	5.1	0
200	Quantitative description of voltammetric time series of unclosed electric circuits for detection of differences between different potentiostats/galvanostats. New Journal of Chemistry, 0, , .	2.8	0