Jose Tenreiro Machado

List of Publications by Year in descending order

871 papers	21,462 citations	19657 61 h-index	27406 106 g-index
916 all docs	916 docs citations	916 times ranked	8373 citing authors

#	Article	IF	Citations
1	Delay-dependent robust stability analysis of uncertain fractional-order neutral systems with distributed delays and nonlinear perturbations subject to input saturation. International Journal of Nonlinear Sciences and Numerical Simulation, 2023, 24, 329-347.	1.0	3
2	Numerical solutions for variable-order fractional Grossâ€“Pitaevskii equation with two spectral collocation approaches. International Journal of Nonlinear Sciences and Numerical Simulation, 2023, 24, 421-435.	1.0	2
3	An accurate localized meshfree collocation technique for the telegraph equation in propagation of electrical signals. Engineering With Computers, 2023, 39, 2327-2344.	6.1	8
4	Optimal solution of a general class of nonlinear system of fractional partial differential equations using hybrid functions. Engineering With Computers, 2023, 39, 2401-2431.	6.1	2
5	A discrete polynomials approach for optimal control of fractional Volterra integro-differential equations. JVC/Journal of Vibration and Control, 2022, 28, 72-82.	2.6	5
6	A review of structural health monitoring of bonded structures using electromechanical impedance spectroscopy. Structural Health Monitoring, 2022, 21, 228-249.	7.5	33
7	Hypergeometric fractional derivatives formula of shifted Chebyshev polynomials: tau algorithm for a type of fractional delay differential equations. International Journal of Nonlinear Sciences and Numerical Simulation, 2022, 23, 1253-1268.	1.0	24
8	Structural health monitoring of adhesive joints using Lamb waves: A review. Structural Control and Health Monitoring, 2022, 29, e2849.	4.0	25
9	Analysis of dual Bernstein operators in the solution of the fractional convectionâ€“diffusion equation arising in underground water pollution. Journal of Computational and Applied Mathematics, 2022, 399, 113729.	2.0	7
10	Fractional-order shifted Legendre collocation method for solving non-linear variable-order fractional Fredholm integro-differential equations. Computational and Applied Mathematics, 2022, 41, 1.	2.2	10
11	Analytical stability analysis of the fractional-order particle swarm optimization algorithm. Chaos, Solitons and Fractals, 2022, 155, 111658.	5.1	16
12	Trends, directions for further research, and some open problems of fractional calculus. Nonlinear Dynamics, 2022, 107, 3245-3270.	5.2	52
13	State-of-Charge Estimation of Lithium-Ion Batteries Based on Fractional-Order Square-Root Unscented Kalman Filter. Fractal and Fractional, 2022, 6, 52.	3.3	10
14	Modified SIQR model for the COVIDâ€19 outbreak in several countries. Mathematical Methods in the Applied Sciences, 2022, , .	2.3	4
15	Command-filtered compound FAT learning control of fractional-order nonlinear systems with input delay and external disturbances. Nonlinear Dynamics, 2022, 108, 293-313.	5.2	9
16	In memory of Professor JosÃ© AntÃ³nio Tenreiro Machado (1957â€“2021). Nonlinear Dynamics, 2022, 107, 1791-1800.	5.2	1
17	A computational view of electrophysiological properties under different atrial fibrosis conditions. Applied Mathematical Modelling, 2022, 105, 534-550.	4.2	1
18	Numerical treatment of microscale heat transfer processes arising in thin films of metals. International Communications in Heat and Mass Transfer, 2022, 132, 105892.	5.6	15

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19	How Many Fractional Derivatives Are There?. Mathematics, 2022, 10, 737.	2.2	22
20	Optimal solution of the fractional-order smoking model and its public health implications. Nonlinear Dynamics, 2022, 108, 2815-2831.	5.2	3
21	Multidimensional scaling and visualization of patterns in global large-scale accidents. Chaos, Solitons and Fractals, 2022, 157, 111951.	5.1	3
22	Multidimensional Analysis of Near-Earth Asteroids. SN Computer Science, 2022, 3, 1.	3.6	1
23	Fractional generalization of entropy improves the characterization of rotors in simulated atrial fibrillation. Applied Mathematics and Computation, 2022, 425, 127077.	2.2	4
24	Shifted Fractional-Order Jacobi Collocation Method for Solving Variable-Order Fractional Integro-Differential Equation with Weakly Singular Kernel. Fractal and Fractional, 2022, 6, 19.	3.3	7
25	Adaptive state-of-charge estimation of lithium-ion batteries based on square-root unscented Kalman filter. Energy, 2022, 252, 123972.	8.8	38
26	Feature extraction and visualization for damage detection on adhesive joints, utilizing lamb waves and supervised machine learning algorithms. Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science, 2022, 236, 8842-8855.	2.1	5
27	Guaranteed cost-based feedback control design for fractional-order neutral systems with input-delayed and nonlinear perturbations. ISA Transactions, 2022, 131, 95-107.	5.7	10
28	Revisiting the Formula for the Ramanujan Constant of a Series. Mathematics, 2022, 10, 1539.	2.2	2
29	The 21st Century Systems: An Updated Vision of Continuous-Time Fractional Models. IEEE Circuits and Systems Magazine, 2022, 22, 36-56.	2.3	15
30	A pseudo-spectral scheme for variable order fractional stochastic Volterra integro-differential equations. AIMS Mathematics, 2022, 7, 15453-15470.	1.6	0
31	Damage Classification Methodology Utilizing Lamb Waves and Artificial Neural Networks. Journal of Testing and Evaluation, 2022, 50, 2326-2344.	0.7	1
32	Numerical analysis of time-fractional Sobolev equation for fluid-driven processes in impermeable rocks. , 2022, 2022, .		4
33	Numerical Approximation of the Fractional Rayleighâ€“Stokes Problem Arising in a Generalised Maxwell Fluid. Fractal and Fractional, 2022, 6, 377.	3.3	5
34	Cluster analysis of the large natural satellites in the solar system. Applied Mathematical Modelling, 2021, 89, 1268-1278.	4.2	4
35	Complex-order particle swarm optimization. Communications in Nonlinear Science and Numerical Simulation, 2021, 92, 105448.	3.3	25
36	Numerical solution of time-fractional fourth-order reaction-diffusion model arising in composite environments. Applied Mathematical Modelling, 2021, 89, 819-836.	4.2	37

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37	An integro quadratic spline-based scheme for solving nonlinear fractional stochastic differential equations with constant time delay. Communications in Nonlinear Science and Numerical Simulation, 2021, 92, 105475.	3.3	20
38	A new hybrid method for two dimensional nonlinear variable order fractional optimal control problems. Asian Journal of Control, 2021, 23, 2004-2018.	3.0	2
39	The recovery of global stock markets indices after impacts due to pandemics. Research in International Business and Finance, 2021, 55, 101335.	5.9	42
40	On multistep tumor growth models of fractional variable-order. BioSystems, 2021, 199, 104294.	2.0	22
41	Multidimensional scaling analysis of generalized mean discrete-time fractional order controllers. Communications in Nonlinear Science and Numerical Simulation, 2021, 95, 105657.	3.3	10
42	Spontaneous activation under atrial fibrosis: A model using complex order derivatives. Communications in Nonlinear Science and Numerical Simulation, 2021, 95, 105618.	3.3	5
43	Modeling and visualizing competitiveness in soccer leagues. Applied Mathematical Modelling, 2021, 92, 136-148.	4.2	2
44	Robust stability of uncertain fractional order systems of neutral type with distributed delays and control input saturation. ISA Transactions, 2021, 111, 144-155.	5.7	20
45	An efficient local meshless approach for solving nonlinear time-fractional fourth-order diffusion model. Journal of King Saud University - Science, 2021, 33, 101243.	3.5	33
46	Numerical evaluation of the fractional Kleinâ€“Kramers model arising in molecular dynamics. Journal of Computational Physics, 2021, 428, 109983.	3.8	23
47	Optimal control of variable-order fractional model for delay cancer treatments. Applied Mathematical Modelling, 2021, 89, 1557-1574.	4.2	37
48	Robust stability analysis of uncertain fractional order neutral-type delay nonlinear systems with actuator saturation. Applied Mathematical Modelling, 2021, 90, 1035-1048.	4.2	20
49	Design of fractional evolutionary processing for reactive power planning with FACTS devices. Scientific Reports, 2021, 11, 593.	3.3	26
50	On distinctive solitons type solutions for some important nonlinear SchrÃ¶dinger equations. Optical and Quantum Electronics, 2021, 53, 1.	3.3	19
51	Observerâ€based control approach for fractionalâ€order delay systems of neutral type with saturating actuator. Mathematical Methods in the Applied Sciences, 2021, 44, 8554-8564.	2.3	11
52	A Clustering Perspective of the Collatz Conjecture. Mathematics, 2021, 9, 314.	2.2	11
53	A Chebyshev Wavelet Collocation Method for Some Types of Differential Problems. Symmetry, 2021, 13, 536.	2.2	23
54	Numerical solution of nonlinear fractional optimal control problems using generalized Bernoulli polynomials. Optimal Control Applications and Methods, 2021, 42, 1045-1063.	2.1	6

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55	Relation Between New Rooted Trees and Derivatives of Differential Equations. Iranian Journal of Science and Technology, Transaction A: Science, 2021, 45, 1025-1036.	1.5	0
56	Efficient fractional-order modified Harris hawks optimizer for proton exchange membrane fuel cell modeling. Engineering Applications of Artificial Intelligence, 2021, 100, 104193.	8.1	35
57	Substantial, tempered, and shifted fractional derivatives: Three faces of a tetrahedron. Mathematical Methods in the Applied Sciences, 2021, 44, 9191-9209.	2.3	19
58	Dynamical Analysis of the Dow Jones Index Using Dimensionality Reduction and Visualization. Entropy, 2021, 23, 600.	2.2	3
59	LMI-based stability analysis of fractional order systems of neutral type with time varying delays under actuator saturation. Computational and Applied Mathematics, 2021, 40, 1.	2.2	12
60	Design of multi innovation fractional LMS algorithm for parameter estimation of input nonlinear control autoregressive systems. Applied Mathematical Modelling, 2021, 93, 412-425.	4.2	62
61	Adomian Decomposition and Fractional Power Series Solution of a Class of Nonlinear Fractional Differential Equations. Mathematics, 2021, 9, 1070.	2.2	22
62	Entropy analysis of human death uncertainty. Nonlinear Dynamics, 2021, 104, 3897-3911.	5.2	4
63	Closed-form Solution for The Finite-horizon Linear-quadratic Control Problem of Linear Fractional-order Systems. , 2021, , .		3
64	Consensus of Incommensurate-order Fractional Multiagent Systems with a Fixed-length Memory. , 2021, , .		2
65	An optimization technique for solving a class of nonlinear fractional optimal control problems: Application in cancer treatment. Applied Mathematical Modelling, 2021, 93, 868-884.	4.2	25
66	Uniform Manifold Approximation and Projection Analysis of Soccer Players. Entropy, 2021, 23, 793.	2.2	6
67	In memory of the honorary founding editors behind the FCAA success story. Fractional Calculus and Applied Analysis, 2021, 24, 641-666.	2.2	0
68	Assessing the Effect of Laboratory Activities on Core Curricular Units of an Engineering Masterâ€™s Program: A Multivariate Analysis. Mathematical Problems in Engineering, 2021, 2021, 1-13.	1.1	3
69	Numerical study of the nonlinear anomalous reactionâ€“subdiffusion process arising in the electroanalytical chemistry. Journal of Computational Science, 2021, 53, 101394.	2.9	39
70	The Bouncing Ball and the GrÃ¼nwald-Letnikov Definition of Fractional Derivative. Fractional Calculus and Applied Analysis, 2021, 24, 1003-1014.	2.2	12
71	Optimal solution of the fractional order breast cancer competition model. Scientific Reports, 2021, 11, 15622.	3.3	11
72	Advances in the computational analysis of SARS-COV2 genome. Nonlinear Dynamics, 2021, 106, 1525-1555.	5.2	6

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73	Numerical approximation of the nonlinear time-fractional telegraph equation arising in neutron transport. Communications in Nonlinear Science and Numerical Simulation, 2021, 99, 105755.	3.3	50
74	Stability analysis of uncertain fractional-order neutral-type delay systems with actuator saturation. Frontiers of Information Technology and Electronic Engineering, 2021, 22, 1402-1412.	2.6	6
75	Convergence boundaries of complex-order particle swarm optimization algorithm with weak stagnation: dynamical analysis. Nonlinear Dynamics, 2021, 106, 725-743.	5.2	5
76	Fractional and fractal processes applied to cryptocurrencies price series. Journal of Advanced Research, 2021, 32, 85-98.	9.5	14
77	Double color image encryption based on fractional order discrete improved Henon map and Rubikâ€™s cube transform. Signal Processing: Image Communication, 2021, 97, 116363.	3.2	25
78	A local stabilized approach for approximating the modified time-fractional diffusion problem arising in heat and mass transfer. Journal of Advanced Research, 2021, 32, 45-60.	9.5	42
79	Numerical simulation of a degenerate parabolic problem occurring in the spatial diffusion of biological population. Chaos, Solitons and Fractals, 2021, 151, 111220.	5.1	11
80	Particle swarm optimization algorithm using complex-order derivative concept: A comprehensive study. Applied Soft Computing Journal, 2021, 111, 107641.	7.2	8
81	Multidimensional scaling and visualization of patterns in distribution of nontrivial zeros of the zeta-function. Communications in Nonlinear Science and Numerical Simulation, 2021, 102, 105924.	3.3	5
82	Dynamics and bifurcations of a discrete-time prey-predator model with Allee effect on the prey population. Ecological Complexity, 2021, 48, 100962.	2.9	19
83	Numerical approach for modeling fractional heat conduction in porous medium with the generalized Cattaneo model. Applied Mathematical Modelling, 2021, 100, 107-124.	4.2	45
84	Fractional LMS and NLMS Algorithms for Line Echo Cancellation. Arabian Journal for Science and Engineering, 2021, 46, 9385-9398.	3.0	13
85	Delay-Dependent and Order-Dependent Guaranteed Cost Control for Uncertain Fractional-Order Delayed Linear Systems. Mathematics, 2021, 9, 41.	2.2	7
86	Discretization of Fractional Operators: Analysis by Means of Advanced Computational Techniques. Mathematics, 2021, 9, 2429.	2.2	0
87	On the Calculation of the Mooreâ€“Penrose and Drazin Inverses: Application to Fractional Calculus. Mathematics, 2021, 9, 2501.	2.2	6
88	Fractional-Order Sensing and Control: Embedding the Nonlinear Dynamics of Robot Manipulators into the Multidimensional Scaling Method. Sensors, 2021, 21, 7736.	3.8	5
89	Overview in Summabilities: Summation Methods for Divergent Series, Ramanujan Summation and Fractional Finite Sums. Mathematics, 2021, 9, 2963.	2.2	1
90	Integral Inequalities for Generalized Harmonically Convex Functions in Fuzzy-Interval-Valued Settings. Symmetry, 2021, 13, 2352.	2.2	11

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91	Sufficient conditions for existence and uniqueness of fractional stochastic delay differential equations. Stochastics, 2020, 92, 379-396.	1.1	23
92	A computational approach for the non-smooth solution of non-linear weakly singular Volterra integral equation with proportional delay. Numerical Algorithms, 2020, 83, 987-1006.	1.9	25
93	Numerical approach for solving variable-order spaceâ€“time fractional telegraph equation using transcendental Bernstein series. Engineering With Computers, 2020, 36, 867-878.	6.1	43
94	Numerical solution of variable-order fractional integro-partial differential equations via Sinc collocation method based on single and double exponential transformations. Communications in Nonlinear Science and Numerical Simulation, 2020, 82, 104985.	3.3	54
95	On the properties of some operators under the perspective of fractional system theory. Communications in Nonlinear Science and Numerical Simulation, 2020, 82, 105022.	3.3	10
96	Electrochemical impedance spectroscopy characterization of beverages. Food Chemistry, 2020, 302, 125345.	8.2	25
97	Multi-dimensional spectral tau methods for distributed-order fractional diffusion equations. Computers and Mathematics With Applications, 2020, 79, 476-488.	2.7	45
98	Property of Self-Similarity Between Baseband and Modulated Signals. Mobile Networks and Applications, 2020, 25, 1537-1547.	3.3	54
99	Application of the Euler and Rungeâ€“Kutta Generalized Methods for FDE and Symbolic Packages in the Analysis of Some Fractional Attractors. International Journal of Nonlinear Sciences and Numerical Simulation, 2020, 21, 159-170.	1.0	19
100	Numerical approach for modeling fractal mobile/immobile transport model in porous and fractured media. International Communications in Heat and Mass Transfer, 2020, 111, 104443.	5.6	40
101	A combined measure to differentiate EEG signals using fractal dimension and MFDFA-Hurst. Communications in Nonlinear Science and Numerical Simulation, 2020, 84, 105170.	3.3	25
102	Numerical solution of the fractional Rayleighâ€“Stokes model arising in a heated generalized second-grade fluid. Engineering With Computers, 2020, 37, 1751.	6.1	28
103	Multidimensional scaling and visualization of patterns in prime numbers. Communications in Nonlinear Science and Numerical Simulation, 2020, 83, 105128.	3.3	17
104	Measuring the Brazilian ethanol and gasoline market efficiency using DFA-Hurst and fractal dimension. Energy Economics, 2020, 85, 104614.	12.1	27
105	Time-fractional dependence of the shear force in some beam type problems with negative Young modulus. Applied Mathematical Modelling, 2020, 80, 668-682.	4.2	8
106	The $$psi $$-Hilfer fractional calculus of variable order and its applications. Computational and Applied Mathematics, 2020, 39, 1.	2.2	19
107	Dynamics and optimal control of multibody systems using fractional generalized divide-and-conquer algorithm. Nonlinear Dynamics, 2020, 102, 1611-1626.	5.2	1
108	Stability analysis of fractional order neutralâ€type systems considering time varying delays, nonlinear perturbations, and input saturation. Mathematical Methods in the Applied Sciences, 2020, 43, 10332-10345.	2.3	12

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109	Generalized Newtonian fractional model for the vertical motion of a particle. Applied Mathematical Modelling, 2020, 88, 652-660.	4.2	9
110	Improved Decentralized Fractional PD Control of Structure Vibrations. Mathematics, 2020, 8, 326.	2.2	24
111	Output-feedback-guaranteed cost control of fractional-order uncertain linear delayed systems. Computational and Applied Mathematics, 2020, 39, 1.	2.2	15
112	On dual Bernstein polynomials and stochastic fractional integroâ€differential equations. Mathematical Methods in the Applied Sciences, 2020, 43, 9928-9947.	2.3	9
113	Analysis of a rectangular prism n-units RLC fractional-order circuit network. AEJ - Alexandria Engineering Journal, 2020, 59, 3091-3104.	6.4	8
114	Numerical investigation of fractional nonlinear sine-Gordon and Klein-Gordon models arising in relativistic quantum mechanics. Engineering Analysis With Boundary Elements, 2020, 120, 223-237.	3.7	31
115	Solving nonlinear systems of fractional-order partial differential equations using an optimization technique based on generalized polynomials. Computational and Applied Mathematics, 2020, 39, 1.	2.2	4
116	Nonlinear dynamics of COVID-19 pandemic: modeling, control, and future perspectives. Nonlinear Dynamics, 2020, 101, 1525-1526.	5.2	15
117	Revisiting the 1D and 2D Laplace Transforms. Mathematics, 2020, 8, 1330.	2.2	18
118	Solitary Wave Solutions of the Generalized Rosenau-KdV-RLW Equation. Mathematics, 2020, 8, 1601.	2.2	28
119	Variable coefficient fractionalâ€order PID controller and its application to a SEPIC device. IET Control Theory and Applications, 2020, 14, 900-908.	2.1	15
120	Computer Analysis of Human Belligerency. Mathematics, 2020, 8, 1201.	2.2	3
121	Understanding COVID-19 nonlinear multi-scale dynamic spreading in Italy. Nonlinear Dynamics, 2020, 101, 1583-1619.	5.2	23
122	Utilizing Macro Fiber Composite to Control Rotating Blade Vibrations. Symmetry, 2020, 12, 1984.	2.2	10
123	A Review of Fractional Order Entropies. Entropy, 2020, 22, 1374.	2.2	23
124	A Review of Sample and Hold Systems and Design of a New Fractional Algorithm. Applied Sciences (Switzerland), 2020, 10, 7360.	2.5	4
125	Fractal and Entropy Analysis of the Dow Jones Index Using Multidimensional Scaling. Entropy, 2020, 22, 1138.	2.2	5
126	Fractional-order modelling of epoxy resin. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2020, 378, 20190292.	3.4	14

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127	Rare and extreme events: the case of COVID-19 pandemic. Nonlinear Dynamics, 2020, 100, 2953-2972.	5.2	52
128	Commensurate and Non-Commensurate Fractional-Order Discrete Models of an Electric Individual-Wheel Drive on an Autonomous Platform. Entropy, 2020, 22, 300.	2.2	3
129	Fuzzy logic embedding of fractional order sliding mode and state feedback controllers for synchronization of uncertain fractional chaotic systems. Computational and Applied Mathematics, 2020, 39, 1.	2.2	13
130	Ball Comparison between Three Sixth Order Methods for Banach Space Valued Operators. Mathematics, 2020, 8, 667.	2.2	3
131	An Evolutionary Perspective of Virus Propagation. Mathematics, 2020, 8, 779.	2.2	5
132	Chebyshev spectral methods for multi-order fractional neutral pantograph equations. Nonlinear Dynamics, 2020, 100, 3785-3797.	5.2	46
133	Shifted fractional Jacobi collocation method for solving fractional functional differential equations of variable order. Chaos, Solitons and Fractals, 2020, 134, 109721.	5.1	25
134	Fractional Dynamics in Soccer Leagues. Symmetry, 2020, 12, 356.	2.2	3
135	Existence of Bounded Solutions to a Modified Version of the Bagleyâ€“Torvik Equation. Mathematics, 2020, 8, 289.	2.2	0
136	Symmetry in Complex Systems. Symmetry, 2020, 12, 982.	2.2	1
137	A novel color image encryption algorithm based on a fractional-order discrete chaotic neural network and DNA sequence operations. Frontiers of Information Technology and Electronic Engineering, 2020, 21, 866-879.	2.6	53
138	Abundant structures of waves in plasma transitional layer sheath. Chinese Journal of Physics, 2020, 67, 147-154.	3.9	3
139	Numerical evaluation of fractional Tricomi-type model arising from physical problems of gas dynamics. Journal of Advanced Research, 2020, 25, 205-216.	9.5	33
140	Computational analysis of the SARS-CoV-2 and other viruses based on the Kolmogorovâ€™s complexity and Shannonâ€™s information theories. Nonlinear Dynamics, 2020, 101, 1731-1750.	5.2	17
141	Analysis and implementation of fractional-order chaotic system with standard components. Journal of Advanced Research, 2020, 25, 97-109.	9.5	20
142	New discrete-time fractional derivatives based on the bilinear transformation: Definitions and properties. Journal of Advanced Research, 2020, 25, 1-10.	9.5	16
143	Fractional Dynamics and Pseudo-Phase Space of Country Economic Processes. Mathematics, 2020, 8, 81.	2.2	10
144	Highly accurate technique for solving distributed-order time-fractional-sub-diffusion equations of fourth order. Computational and Applied Mathematics, 2020, 39, 1.	2.2	10

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145	Generalized shifted Chebyshev polynomials: Solving a general class of nonlinear variable order fractional PDE. Communications in Nonlinear Science and Numerical Simulation, 2020, 85, 105229.	3.3	22
146	Lyapunov method for the stability analysis of uncertain fractional-order systems under input saturation. Applied Mathematical Modelling, 2020, 81, 663-672.	4.2	42
147	Multidimensional scaling locus of memristor and fractional order elements. Journal of Advanced Research, 2020, 25, 147-157.	9.5	19
148	Re-Evaluating the Classical Falling Body Problem. Mathematics, 2020, 8, 553.	2.2	3
149	Generalized Bernoulli Polynomials: Solving Nonlinear 2D Fractional Optimal Control Problems. Journal of Scientific Computing, 2020, 83, 1.	2.3	10
150	An innovative fractional order LMS algorithm for power signal parameter estimation. Applied Mathematical Modelling, 2020, 83, 703-718.	4.2	43
151	An efficient numerical technique for variable order time fractional nonlinear Klein-Gordon equation. Applied Numerical Mathematics, 2020, 154, 260-272.	2.1	14
152	Traveling wave solutions to nonlinear directional couplers by modified Kudryashov method. Physica Scripta, 2020, 95, 075217.	2.5	130
153	Absolutely stable difference scheme for a general class of singular perturbation problems. Advances in Difference Equations, 2020, 2020, .	3.5	1
154	A Linear B-Spline Approximation for a Class of Nonlinear Time and Space Fractional Partial Differential Equations. Advances in Dynamics, Patterns, Cognition, 2020, , 67-85.	0.3	0
155	Fractional Fractals. Fractional Calculus and Applied Analysis, 2020, 23, 1329-1348.	2.2	2
156	Exact Travelling Wave Solutions for Local Fractional Partial Differential Equations in Mathematical Physics. Advances in Dynamics, Patterns, Cognition, 2019, , 175-191.	0.3	18
157	A fractional perspective to the modelling of Lisbonâ€™s public transportation network. Transportation, 2019, 46, 1893-1913.	4.0	6
158	On the fractional Cornu spirals. Communications in Nonlinear Science and Numerical Simulation, 2019, 67, 100-107.	3.3	4
159	Complexity Analysis of Escherâ€™s Art. Entropy, 2019, 21, 553.	2.2	4
160	Numerical investigation of the nonlinear modified anomalous diffusion process. Nonlinear Dynamics, 2019, 97, 2757-2775.	5.2	28
161	On the Complexity Analysis and Visualization of Musical Information. Entropy, 2019, 21, 669.	2.2	4
162	Delay-dependent criterion for asymptotic stability of a class of fractional-order memristive neural networks with time-varying delays. Neural Networks, 2019, 118, 289-299.	5.9	72

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163	An Entropy Formulation Based on the Generalized Liouville Fractional Derivative. Entropy, 2019, 21, 638.	2.2	14
164	An Algorithm for the Approximate Solution of the Fractional Riccati Differential Equation. International Journal of Nonlinear Sciences and Numerical Simulation, 2019, 20, 661-674.	1.0	7
165	Analysis of the two-dimensional fractional projectile motion in view of the experimental data. Nonlinear Dynamics, 2019, 97, 1711-1720.	5.2	20
166	An effective numerical method for solving nonlinear variable-order fractional functional boundary value problems through optimization technique. Nonlinear Dynamics, 2019, 97, 2041-2054.	5.2	22
167	Fractional derivatives and negative probabilities. Communications in Nonlinear Science and Numerical Simulation, 2019, 79, 104913.	3.3	6
168	Multidimensional scaling analysis of the solar system objects. Communications in Nonlinear Science and Numerical Simulation, 2019, 79, 104923.	3.3	6
169	Information analysis of the human DNA. Nonlinear Dynamics, 2019, 98, 3169-3186.	5.2	2
170	Efficient Three-Step Class of Eighth-Order Multiple Root Solvers and Their Dynamics. Symmetry, 2019, 11, 837.	2.2	4
171	Ethanol Prices and Agricultural Commodities: An Investigation of Their Relationship. Mathematics, 2019, 7, 774.	2.2	6
172	On the Numerical Computation of the Mittagâ€“Leffler Function. International Journal of Nonlinear Sciences and Numerical Simulation, 2019, 20, 725-736.	1.0	11
173	A new fractal nonlinear Burgers' equation arising in the acoustic signals propagation. Mathematical Methods in the Applied Sciences, 2019, 42, 7539-7544.	2.3	99
174	Design of momentum fractional LMS for Hammerstein nonlinear system identification with application to electrically stimulated muscle model. European Physical Journal Plus, 2019, 134, 1.	2.6	26
175	Dynamic Shannon Performance in a Multiobjective Particle Swarm Optimization. Entropy, 2019, 21, 827.	2.2	3
176	Optimal control of nonlinear fed-batch process using direct transcription method. Computers and Chemical Engineering, 2019, 130, 106561.	3.8	9
177	Entropy in Dynamic Systems. Entropy, 2019, 21, 896.	2.2	1
178	The failure of certain fractional calculus operators in two physical models. Fractional Calculus and Applied Analysis, 2019, 22, 255-270.	2.2	27
179	A computational perspective of the periodic table of elements. Communications in Nonlinear Science and Numerical Simulation, 2019, 78, 104883.	3.3	5
180	Computational scheme for solving nonlinear fractional stochastic differential equations with delay. Stochastic Analysis and Applications, 2019, 37, 893-908.	1.5	34

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181	Delay-dependent stability analysis of the QUAD vector field fractional order quaternion-valued memristive uncertain neutral type leaky integrator echo state neural networks. Neural Networks, 2019, 117, 307-327.	5.9	45
182	The Lorentz transformations and one observation in the perspective of fractional calculus. Communications in Nonlinear Science and Numerical Simulation, 2019, 78, 104855.	3.3	2
183	Fractional RÃ©nyi entropyâ€†. European Physical Journal Plus, 2019, 134, 1.	2.6	14
184	A piecewise spectral-collocation method for solving fractional Riccati differential equation in large domains. Computational and Applied Mathematics, 2019, 38, 1.	2.2	14
185	Delay independent robust stability analysis of delayed fractional quaternion-valued leaky integrator echo state neural networks with QUAD condition. Applied Mathematics and Computation, 2019, 359, 278-293.	2.2	27
186	Derivative Free Fourth Order Solvers of Equations with Applications in Applied Disciplines. Symmetry, 2019, 11, 586.	2.2	1
187	A review of definitions of fractional derivatives and other operators. Journal of Computational Physics, 2019, 388, 195-208.	3.8	277
188	Numerical solution of mixed-type fractional functional differential equations using modified Lucas polynomials. Computational and Applied Mathematics, 2019, 38, 1.	2.2	24
189	Solving Two-Dimensional Variable-Order Fractional Optimal Control Problems With Transcendental Bernstein Series. Journal of Computational and Nonlinear Dynamics, 2019, 14, .	1.2	23
190	Mathematical and computational modeling of political systems. Nonlinear Dynamics, 2019, 96, 1471-1490.	5.2	2
191	Generalized shifted Chebyshev polynomials for fractional optimal control problems. Communications in Nonlinear Science and Numerical Simulation, 2019, 75, 50-61.	3.3	45
192	Ranking the Scientific Output of Researchers in Fractional Calculus. Fractional Calculus and Applied Analysis, 2019, 22, 11-26.	2.2	8
193	Local Convergence of a Family of Weighted-Newton Methods. Symmetry, 2019, 11, 103.	2.2	1
194	Numerical solution of fractional variational problems depending on indefinite integrals using transcendental Bernstein series. JVC/Journal of Vibration and Control, 2019, 25, 1930-1944.	2.6	2
195	Shifted fractional Jacobi spectral algorithm for solving distributed order time-fractional reactionâ€“diffusion equations. Computational and Applied Mathematics, 2019, 38, 1.	2.2	20
196	Fractional fixed-structure <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" overflow="scroll" id="d1e837" altimg="si2.gif"><mml:msub><mml:mrow><mml:mi>H</mml:mi></mml:mrow><mml:mrow><mml:mi>âˆž</mml:mi></mml:mrow></mml:msub></mml:math> controller design using Augmented Lagrangian Particle Swarm Optimization with Fractional Order Velocity. Applied Soft Computing Journal, 2019, 77, 688-695.	7.2	46
197	Entropy Analysis of Soccer Dynamics. Entropy, 2019, 21, 187.	2.2	20
198	Fractional Derivatives: The Perspective of System Theory. Mathematics, 2019, 7, 150.	2.2	44

#	Article	IF	Citations
199	Strength prediction of similar materials to ionic rare earth ores based on orthogonal test and back propagation neural network. Soft Computing, 2019, 23, 9429-9437.	3.6	6
200	Quantifying the Predictability and Efficiency of the Cointegrated Ethanol and Agricultural Commodities Price Series. Applied Sciences (Switzerland), 2019, 9, 5303.	2.5	6
201	Recent history of the fractional calculus: data and statistics. , 2019, , 1-22.		16
202	Continuous-time fractional linear systems: steady-state responses. , 2019, , 149-174.		3
203	A survey on fractional asymptotic expansion method: A forgotten theory. Fractional Calculus and Applied Analysis, 2019, 22, 1165-1176.	2.2	2
204	Model Order Reduction: A Comparison between Integer and Non-Integer Order Systems Approaches. Entropy, 2019, 21, 876.	2.2	13
205	A New Generalized Taylor-Like Explicit Method for Stiff Ordinary Differential Equations. Mathematics, 2019, 7, 1154.	2.2	5
206	The Fractional View of Complexity. Entropy, 2019, 21, 1217.	2.2	2
207	Continuous-time fractional linear systems: transient responses. , 2019, , 119-148.		0
208	Artistic painting: A fractional calculus perspective. Applied Mathematical Modelling, 2019, 65, 614-626.	4.2	19
209	A new non-standard finite difference method for analyzing the fractional Navierâ€“Stokes equations. Computers and Mathematics With Applications, 2019, 78, 1681-1694.	2.7	15
210	A critical analysis of the conformable derivative. Nonlinear Dynamics, 2019, 95, 3063-3073.	5.2	60
211	Fractional-order modeling of a diode. Communications in Nonlinear Science and Numerical Simulation, 2019, 70, 343-353.	3.3	24
212	Stability analysis of fractional Quaternion-Valued Leaky Integrator Echo State Neural Networks with multiple time-varying delays. Neurocomputing, 2019, 331, 388-402.	5.9	30
213	New complex waves in nonlinear optics based on the complex Ginzburg-Landau equation with Kerr law nonlinearity. European Physical Journal Plus, 2019, 134, 1.	2.6	88
214	Shifted Jacobiâ€“Gauss-collocation with convergence analysis for fractional integro-differential equations. Communications in Nonlinear Science and Numerical Simulation, 2019, 72, 342-359.	3.3	42
215	Numerical approach for a class of distributed order time fractional partial differential equations. Applied Numerical Mathematics, 2019, 136, 152-162.	2.1	39
216	Introduction to Fractional Differential Equations. Advances in Dynamics, Patterns, Cognition, 2019, , .	0.3	46

#	Article	IF	Citations
217	Variable order fractional systems. Communications in Nonlinear Science and Numerical Simulation, 2019, 71, 231-243.	3.3	75
218	The generalized Kudryashov method for nonlinear spaceâ€“time fractional partial differential equations of Burgers type. Nonlinear Dynamics, 2019, 95, 361-368.	5.2	75
219	Computational Comparison and Visualization of Viruses in the Perspective of Clinical Information. Interdisciplinary Sciences, Computational Life Sciences, 2019, 11, 86-94.	3.6	4
220	The dynamical behavior of mixed-type soliton solutions described by (2+1)-dimensional Bogoyavlenskyâ€“Konopelchenko equation with variable coefficients. Journal of Electromagnetic Waves and Applications, 2018, 32, 1457-1464.	1.6	69
221	Optimal variable-order fractional PID controllers for dynamical systems. Journal of Computational and Applied Mathematics, 2018, 339, 40-48.	2.0	120
222	A new glance on the Leibniz rule for fractional derivatives. Communications in Nonlinear Science and Numerical Simulation, 2018, 62, 244-249.	3.3	7
223	Kolmogorov complexity as a data similarity metric: application in mitochondrial DNA. Nonlinear Dynamics, 2018, 93, 1059-1071.	5.2	14
224	On nonautonomous complex wave solutions described by the coupled SchrÃ¶dingerâ€“Boussinesq equation with variable-coefficients. Optical and Quantum Electronics, 2018, 50, 1.	3.3	61
225	Stability analysis of a class of nonlinear fractionalâ€order systems under control input saturation. International Journal of Robust and Nonlinear Control, 2018, 28, 2887-2905.	3.7	40
226	Fractional dynamic behavior in ethanol prices series. Journal of Computational and Applied Mathematics, 2018, 339, 85-93.	2.0	27
227	On spectral methods for solving variable-order fractional integro-differential equations. Computational and Applied Mathematics, 2018, 37, 3937-3950.	1.3	26
228	New nonautonomous combined multi-wave solutions for ($$varvec{2+1}$$ 2 + 1)-dimensional variable coefficients KdV equation. Nonlinear Dynamics, 2018, 93, 733-740.	5.2	67
229	A Robust Algorithm for Nonlinear Variable-Order Fractional Control Systems with Delay. International Journal of Nonlinear Sciences and Numerical Simulation, 2018, 19, 231-238.	1.0	30
230	Robust stability and stabilization of uncertain fractional order systems subject to input saturation. JVC/Journal of Vibration and Control, 2018, 24, 3676-3683.	2.6	24
231	A fractional calculus perspective of distributed propeller design. Communications in Nonlinear Science and Numerical Simulation, 2018, 55, 174-182.	3.3	11
232	Milk Characterization Using Electrical Impedance Spectroscopy and Fractional Models. Food Analytical Methods, 2018, 11, 901-912.	2.6	34
233	Stabilization of Uncertain Multiâ€Order Fractional Systems Based on the Extended State Observer. Asian Journal of Control, 2018, 20, 1263-1273.	3.0	22
234	A new operational approach for solving fractional variational problems depending on indefinite integrals. Communications in Nonlinear Science and Numerical Simulation, 2018, 57, 246-263.	3.3	19

#	Article	IF	Citations
235	Fractional electronic circuit simulation of a nonlinear macroeconomic model. AEU - International Journal of Electronics and Communications, 2018, 84, 210-220.	2.9	17
236	A critical analysis of the Caputoâ€“Fabrizio operator. Communications in Nonlinear Science and Numerical Simulation, 2018, 59, 608-611.	3.3	71
237	A computationally efficient method for tempered fractional differential equations with application. Computational and Applied Mathematics, 2018, 37, 3657-3671.	1.3	35
238	Fractional calculusâ€™s adventures in Wonderland (Round table held at ICFDA 2018). Fractional Calculus and Applied Analysis, 2018, 21, 1151-1155.	2.2	1
239	Discrete-time generalized mean fractional order controllers. IFAC-PapersOnLine, 2018, 51, 43-47.	0.9	9
240	Power Law Behaviour in Complex Systems. Entropy, 2018, 20, 671.	2.2	4
241	Atrial Rotor Dynamics Under Complex Fractional Order Diffusion. Frontiers in Physiology, 2018, 9, 975.	2.8	19
242	An accurate and cost-efficient numerical approach to analyze the initial and boundary value problems of fractional multi-order. Computational and Applied Mathematics, 2018, 37, 6582-6600.	1.3	2
243	A spectral framework for fractional variational problems based on fractional Jacobi functions. Applied Numerical Mathematics, 2018, 132, 51-72.	2.1	52
244	Synchronization of Chemical Synaptic Coupling of the Chay Neuron System under Time Delay. Applied Sciences (Switzerland), 2018, 8, 927.	2.5	11
245	Complexity Analysis of Global Temperature Time Series. Entropy, 2018, 20, 437.	2.2	8
246	Complex Systems and Fractional Dynamics. Entropy, 2018, 20, 507.	2.2	2
247	A Spectral Numerical Method for Solving Distributed-Order Fractional Initial Value Problems. Journal of Computational and Nonlinear Dynamics, 2018, 13, .	1.2	19
248	A spaceâ€“time spectral approximation for solving nonlinear variable-order fractional sine and Kleinâ€“Gordon differential equations. Computational and Applied Mathematics, 2018, 37, 6212-6229.	1.3	14
249	Robust asymptotic stability of interval fractional-order nonlinear systems with time-delay. Journal of the Franklin Institute, 2018, 355, 7749-7763.	3.4	26
250	Dynamical analysis of the global business-cycle synchronization. PLoS ONE, 2018, 13, e0191491.	2.5	6
251	Stability of multidimensional systems using bio-inspired meta-heuristics. International Journal of Control, 2018, 91, 2646-2656.	1.9	0
252	Limit cycle prediction of systems with fractional controllers and backlash. JVC/Journal of Vibration and Control, 2017, 23, 587-603.	2.6	10

#	Article	IF	Citations
253	Numerical Solution of the Two-Sided Spaceâ€“Time Fractional Telegraph Equation Via Chebyshev Tau Approximation. Journal of Optimization Theory and Applications, 2017, 174, 321-341.	1.5	46
254	Dynamics of theN-link pendulum: a fractional perspective. International Journal of Control, 2017, 90, 1192-1200.	1.9	11
255	Fractional derivatives and periodic functions. International Journal of Dynamics and Control, 2017, 5, 72-78.	2.5	23
256	Editorial special issue: â€œDynamics and Control of Fractional Order Systemsâ€•International Journal of Dynamics and Control. International Journal of Dynamics and Control, 2017, 5, 1-3.	2.5	3
257	Generalized two-port elements. Communications in Nonlinear Science and Numerical Simulation, 2017, 42, 451-455.	3.3	9
258	A new insight into complexity from the local fractional calculus view point: modelling growths of populations. Mathematical Methods in the Applied Sciences, 2017, 40, 6070-6075.	2.3	26
259	Multidimensional scaling analysis of soccer dynamics. Applied Mathematical Modelling, 2017, 45, 642-652.	4.2	16
260	Stabilization of Fractional-Order Systems Subject to Saturation Element Using Fractional Dynamic Output Feedback Sliding Mode Control. Journal of Computational and Nonlinear Dynamics, 2017, 12, .	1.2	23
261	Multi-objective Dynamic Analysis Using Fractional Entropy. Advances in Intelligent Systems and Computing, 2017, , 448-456.	0.6	0
262	Computational Analysis of the U.S. Forest Fires. Journal of Computational and Nonlinear Dynamics, 2017, 12, .	1.2	2
263	An integro quadratic spline approach for a class of variable-order fractional initial value problems. Chaos, Solitons and Fractals, 2017, 102, 354-360.	5.1	43
264	The role of fractional calculus in modeling biological phenomena: A review. Communications in Nonlinear Science and Numerical Simulation, 2017, 51, 141-159.	3.3	448
265	A new fractional operator of variable order: Application in the description of anomalous diffusion. Physica A: Statistical Mechanics and Its Applications, 2017, 481, 276-283.	2.6	196
266	Fractional-Order Devices. SpringerBriefs in Applied Sciences and Technology, 2017, , .	0.4	42
267	On the computation of the multidimensional Mittag-Leffler function. Communications in Nonlinear Science and Numerical Simulation, 2017, 53, 278-287.	3.3	8
268	Computational comparison and pattern visualization of forest fires. Chaos, Solitons and Fractals, 2017, 102, 407-413.	5.1	0
269	On the formulation and numerical simulation of distributed-order fractional optimal control problems. Communications in Nonlinear Science and Numerical Simulation, 2017, 52, 177-189.	3.3	142
270	On the mathematical modeling of soccer dynamics. Communications in Nonlinear Science and Numerical Simulation, 2017, 53, 142-153.	3.3	8

#	Article	IF	Citations
271	A fractional perspective on the trajectory control of redundant and hyper-redundant robot manipulators. Applied Mathematical Modelling, 2017, 46, 716-726.	4.2	28
272	EXACT TRAVELING-WAVE SOLUTION FOR LOCAL FRACTIONAL BOUSSINESQ EQUATION IN FRACTAL DOMAIN. Fractals, 2017, 25, 1740006.	3.7	165
273	Introduction to Fractional-Order Elements and Devices. SpringerBriefs in Applied Sciences and Technology, 2017, , 1-20.	0.4	3
274	Devices. SpringerBriefs in Applied Sciences and Technology, 2017, , 21-53.	0.4	2
275	Demonstrations and Applications of Fractional-Order Devices. SpringerBriefs in Applied Sciences and Technology, 2017, , 55-72.	0.4	0
276	Fractional-Order Models of Vegetable Tissues. SpringerBriefs in Applied Sciences and Technology, 2017, , 73-92.	0.4	2
277	The Chronicles of Fractional Calculus. Fractional Calculus and Applied Analysis, 2017, 20, 307-336.	2.2	112
278	Jacobi Collocation Approximation for Solving Multi-dimensional Volterra Integral Equations. International Journal of Nonlinear Sciences and Numerical Simulation, 2017, 18, 411-425.	1.0	30
279	SM-Algorithms for Approximating the Variable-Order Fractional Derivative of High Order. Fundamenta Informaticae, 2017, 151, 293-311.	0.4	29
280	Dynamics of Commodities Prices: Integer and Fractional Models. Fundamenta Informaticae, 2017, 151, 389-408.	0.4	16
281	A New Family of the Local Fractional PDEs. Fundamenta Informaticae, 2017, 151, 63-75.	0.4	56
282	Extended Algorithms for Approximating Variable Order Fractional Derivatives with Applications. Journal of Scientific Computing, 2017, 71, 1351-1374.	2.3	67
283	Advances in fractional differential equations (IV): Time-fractional PDEs. Computers and Mathematics With Applications, 2017, 73, 873.	2.7	1
284	Bond graph and memristor approach to DNA analysis. Nonlinear Dynamics, 2017, 88, 1051-1057.	5.2	7
285	Nonlinear phenomena in mechanical robots and multibody mechanical systems. Advances in Mechanical Engineering, 2017, 9, 168781401771734.	1.6	0
286	Complex systems in mechanical engineering. Advances in Mechanical Engineering, 2017, 9, 168781401771912.	1.6	0
287	Temperature time series: Pattern analysis and forecasting. , 2017, , .		2
288	A computational approach for the solution of a class of variable-order fractional integro-differential equations with weakly singular kernels. Fractional Calculus and Applied Analysis, 2017, 20, 1023-1042.	2.2	54

#	Article	IF	Citations
289	Uniform stability of Fractional Order Leaky Integrator Echo State Neural Network with multiple time delays. Information Sciences, 2017, 418-419, 703-716.	6.9	40
290	Generation of a family of fractional order hyper-chaotic multi-scroll attractors. Chaos, Solitons and Fractals, 2017, 105, 244-255.	5.1	23
291	Approximation of data using non-integer harmonics series. Nonlinear Dynamics, 2017, 89, 2845-2854.	5.2	2
292	Chaos suppression in fractional systems using adaptive fractional state feedback control. Chaos, Solitons and Fractals, 2017, 103, 488-503.	5.1	31
293	Stability and synchronization of fractional-order memristive neural networks with multiple delays. Neural Networks, 2017, 94, 76-85.	5.9	91
294	On the fractional-order modeling of wine. European Food Research and Technology, 2017, 243, 921-929.	3.3	18
295	A stable three-level explicit spline finite difference scheme for a class of nonlinear time variable order fractional partial differential equations. Computers and Mathematics With Applications, 2017, 73, 1262-1269.	2.7	68
296	Dynamic stability analysis of fractional order leaky integrator echo state neural networks. Communications in Nonlinear Science and Numerical Simulation, 2017, 47, 328-337.	3.3	41
297	On a fractal LC-electric circuit modeled by local fractional calculus. Communications in Nonlinear Science and Numerical Simulation, 2017, 47, 200-206.	3.3	133
298	A new fractional derivative involving the normalized sinc function without singular kernel. European Physical Journal: Special Topics, 2017, 226, 3567-3575.	2.6	100
299	Time analysis of forced variable-order fractional Van der Pol oscillator. European Physical Journal: Special Topics, 2017, 226, 3803-3810.	2.6	23
300	Computational Complexity. Entropy, 2017, 19, 61.	2.2	1
301	Complex and Fractional Dynamics. Entropy, 2017, 19, 62.	2.2	7
302	Fractional Jensenâ€“Shannon Analysis of the Scientific Output of Researchers in Fractional Calculus. Entropy, 2017, 19, 127.	2.2	21
303	Entropy Analysis of Monetary Unions. Entropy, 2017, 19, 245.	2.2	12
304	Which Derivative?. Fractal and Fractional, 2017, 1, 3.	3.3	58
305	Tidal Analysis Using Timeâ€“Frequency Signal Processing and Information Clustering. Entropy, 2017, 19, 390.	2.2	6
306	Design of fractional-order hyper-chaotic multi-scroll systems based on hysteresis series. European Physical Journal: Special Topics, 2017, 226, 3775-3789.	2.6	10

#	Article	IF	Citations
307	Fractional Definite Integral. Fractal and Fractional, 2017, 1, 2.	3.3	13
308	Theory and Applications of Fractional Order Systems 2016. Mathematical Problems in Engineering, 2016, 2016, 1-2.	1.1	4
309	Empirical Laws and Foreseeing the Future of Technological Progress. Entropy, 2016, 18, 217.	2.2	8
310	Entropy Analysis of a Railway Networkâ€™s Complexity. Entropy, 2016, 18, 388.	2.2	16
311	Fractional Calculus: Dâ€™oÃ¹ venons-nous? Que sommes-nous? OÃ¹ allons-nous?. Fractional Calculus and Applied Analysis, 2016, 19, 1074-1104.	2.2	28
312	On exact traveling-wave solutions for local fractional Korteweg-de Vries equation. Chaos, 2016, 26, 084312.	2.5	165
313	Design and implementation of grid multi-scroll fractional-order chaotic attractors. Chaos, 2016, 26, 084303.	2.5	40
314	Application of Fractional Techniques in the Analysis of Forest Fires. International Journal of Nonlinear Sciences and Numerical Simulation, 2016, 17, 381-390.	1.0	3
315	An Efficient Operational Matrix Technique for Multidimensional Variable-Order Time Fractional Diffusion Equations. Journal of Computational and Nonlinear Dynamics, 2016, 11, .	1.2	32
316	Forecasting of random sequences and Prony decomposition of finance data. Analysis (Germany), 2016, 36, .	0.4	2
317	Analysis of global terrorism dynamics by means of entropy and state space portrait. Nonlinear Dynamics, 2016, 85, 1547-1560.	5.2	20
318	Multidimensional scaling analysis of virus diseases. Computer Methods and Programs in Biomedicine, 2016, 131, 97-110.	4.7	21
319	Relative fractional dynamics of stock markets. Nonlinear Dynamics, 2016, 86, 1613-1619.	5.2	46
320	A motion tracking solution for indoor localization using smartphones. , 2016, , .		16
321	Fractional PID controller in an active image stabilization system for mitigating vibration effects in agricultural tractors. Computers and Electronics in Agriculture, 2016, 131, 1-9.	7.7	21
322	Challenges in fractional dynamics and control theory. JVC/Journal of Vibration and Control, 2016, 22, 2151-2152.	2.6	32
323	Condition-based diagnosis of mechatronic systems using a fractional calculus approach. International Journal of Systems Science, 2016, 47, 2169-2177.	5.5	19
324	Efficient Legendre spectral tau algorithm for solving the two-sided spaceâ€“time Caputo fractional advectionâ€“dispersion equation. JVC/Journal of Vibration and Control, 2016, 22, 2053-2068.	2.6	41

#	Article	IF	Citations
325	State space analysis of forest fires. JVC/Journal of Vibration and Control, 2016, 22, 2153-2164.	2.6	7
326	Entropy Analysis of Industrial Accident Data Series. Journal of Computational and Nonlinear Dynamics, 2016, 11, .	1.2	5
327	An Extended Predictorâ€“Corrector Algorithm for Variable-Order Fractional Delay Differential Equations. Journal of Computational and Nonlinear Dynamics, 2016, 11, .	1.2	50
328	Partial chaos suppression in a fractional order macroeconomic model. Mathematics and Computers in Simulation, 2016, 122, 55-68.	4.4	36
329	A new numerical technique for solving the local fractional diffusion equation: Two-dimensional extended differential transform approach. Applied Mathematics and Computation, 2016, 274, 143-151.	2.2	106
330	Entropy analysis of systems exhibiting negative probabilities. Communications in Nonlinear Science and Numerical Simulation, 2016, 36, 58-64.	3.3	7
331	Integer and fractional-order entropy analysis of earthquake data series. Nonlinear Dynamics, 2016, 84, 79-90.	5.2	40
332	The N -link pendulum: Embedding nonlinear dynamics into the multidimensional scaling method. Chaos, Solitons and Fractals, 2016, 89, 130-138.	5.1	2
333	Fractional dynamics in the Rayleighâ€™s piston. Communications in Nonlinear Science and Numerical Simulation, 2016, 31, 76-82.	3.3	11
334	Modeling vegetable fractals by means of fractional-order equations. JVC/Journal of Vibration and Control, 2016, 22, 2100-2108.	2.6	30
335	Analytical Solution of Fractional Order Diffusivity Equation With Wellbore Storage and Skin Effects. Journal of Computational and Nonlinear Dynamics, 2016, 11, .	1.2	12
336	Nonlinear dynamics for local fractional Burgersâ€™ equation arising in fractal flow. Nonlinear Dynamics, 2016, 84, 3-7.	5.2	70
337	A new numerical technique for local fractional diffusion equation in fractal heat transfer. Journal of Nonlinear Science and Applications, 2016, 09, 5621-5628.	1.0	28
338	A new fractional derivative without singular kernel: Application to the modelling of the steady heat flow. Thermal Science, 2016, 20, 753-756.	1.1	197
339	On local fractional operators View of computational complexity: Diffusion and relaxation defined on cantor sets. Thermal Science, 2016, 20, 755-767.	1.1	12
340	Numerical Solutions for ODEs with Local Fractional Derivative. , 2015, , 258-271.		0
341	An Efficient Numerical Scheme for Solving Multiâ€Dimensional Fractional Optimal Control Problems With a Quadratic Performance Index. Asian Journal of Control, 2015, 17, 2389-2402.	3.0	52
342	Temporal Patterns in Earthquake Data-series. , 2015, , 50-60.		0

#	Article	IF	Citations
343	Approximate Methods for Local Fractional Differential Equations. , 2015, , 243-257.		0
344	Fractional State Space Analysis of Economic Systems. Entropy, 2015, 17, 5402-5421.	2.2	77
345	Analysis of World Economic Variables Using Multidimensional Scaling. PLoS ONE, 2015, 10, e0121277.	2.5	13
346	New Challenges in Fractional Systems 2014. Mathematical Problems in Engineering, 2015, 2015, 1-3.	1.1	5
347	Fractional Calculus: Quo Vadimus? (Where are we Going?). Fractional Calculus and Applied Analysis, 2015, 18, 495-526.	2.2	57
348	Meta-heuristics in multidimensional systems stability study. , 2015, , .		0
349	Fractional State Space Analysis of Temperature Time Series. Fractional Calculus and Applied Analysis, 2015, 18, 1518-1536.	2.2	20
350	Visualizing control systems performance: A fractional perspective. Advances in Mechanical Engineering, 2015, 7, 168781401561983.	1.6	3
351	Analysis and visualization of complex phenomena. , 2015, , .		0
352	Multidimensional Scaling Visualization Using Parametric Entropy. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2015, 25, 1540017.	1.7	10
353	Matrix fractional systems. Communications in Nonlinear Science and Numerical Simulation, 2015, 25, 10-18.	3.3	17
354	Power Law Behavior and Self-Similarity in Modern Industrial Accidents. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2015, 25, 1550004.	1.7	5
355	Integer/fractional decomposition of the impulse response of fractional linear systems. Signal Processing, 2015, 114, 85-88.	3.7	16
356	Multidimensional Scaling Visualization Using Parametric Similarity Indices. Entropy, 2015, 17, 1775-1794.	2.2	41
357	A review of operational matrices and spectral techniques for fractional calculus. Nonlinear Dynamics, 2015, 81, 1023-1052.	5.2	154
358	The Persistence of Memory. Nonlinear Dynamics, 2015, 79, 63-82.	5.2	42
359	Fractional dynamics and its applications. Nonlinear Dynamics, 2015, 80, 1661-1664.	5.2	50
360	Employeesâ€™ skills, manufacturing flexibility and performance: a structural equation modelling applied to the automotive industry. International Journal of Production Research, 2015, 53, 4087-4101.	7.5	48

#	Article	IF	Citations
361	An extension of estimation of domain of attraction for fractional order linear system subject to saturation control. Applied Mathematics Letters, 2015, 47, 26-34.	2.7	43
362	Analysis of Natural and Artificial Phenomena Using Signal Processing and Fractional Calculus. Fractional Calculus and Applied Analysis, 2015, 18, 459-478.	2.2	41
363	Fractional order description of DNA. Applied Mathematical Modelling, 2015, 39, 4095-4102.	4.2	28
364	Discrete fractional order system vibrations. International Journal of Non-Linear Mechanics, 2015, 73, 2-11.	2.6	13
365	Pseudo Phase Plane and Fractional Calculus modeling of western global economic downturn. Communications in Nonlinear Science and Numerical Simulation, 2015, 22, 396-406.	3.3	84
366	Fractional order junctions. Communications in Nonlinear Science and Numerical Simulation, 2015, 20, 1-8.	3.3	11
367	Application of continuous wavelet transform to the analysis of the modulus of the fractional Fourier transform bands for resolving two component mixture. Signal, Image and Video Processing, 2015, 9, 801-807.	2.7	3
368	Analysis of UV spectral bands using multidimensional scaling. Signal, Image and Video Processing, 2015, 9, 573-580.	2.7	5
369	A review on the characterization of signals and systems by power law distributions. Signal Processing, 2015, 107, 246-253.	3.7	17
370	Numerical calculation of the left and right fractional derivatives. Journal of Computational Physics, 2015, 293, 96-103.	3.8	11
371	Fractional order describing functions. Signal Processing, 2015, 107, 389-394.	3.7	18
372	Generalized convolution. Applied Mathematics and Computation, 2015, 257, 34-39.	2.2	5
373	Nonlinear dynamics of the patientâ€™s response to drug effect during general anesthesia. Communications in Nonlinear Science and Numerical Simulation, 2015, 20, 914-926.	3.3	54
374	What is a fractional derivative?. Journal of Computational Physics, 2015, 293, 4-13.	3.8	328
375	A fractional perspective to the bond graph modelling of world economies. Nonlinear Dynamics, 2015, 80, 1839-1852.	5.2	41
376	Dynamical Analysis and Visualization of Tornadoes Time Series. PLoS ONE, 2015, 10, e0120260.	2.5	3
377	Analysis of a Fractional-Order Nonlinear System with Hysteresis Nonlinearity via Describing Function. Journal of Applied Nonlinear Dynamics, 2015, 4, 81-89.	0.3	0
378	Fractional Dynamics and Systems with Power-Law Memory. Discontinuity, Nonlinearity, and Complexity, 2015, 4, 381-382.	0.2	0

#	Article	IF	Citations
379	Fractional Calculus: Models, Algorithms, Technology. Discontinuity, Nonlinearity, and Complexity, 2015, 4, 383-389.	0.2	0
380	Analysis of Terrorism Data-series by means of Power Law and Pseudo Phase Plane. Discontinuity, Nonlinearity, and Complexity, 2015, 4, 403-411.	0.2	0
381	Dynamic Analysis and Pattern Visualization of Forest Fires. PLoS ONE, 2014, 9, e105465.	2.5	8
382	Local Fractional Variational Iteration and Decomposition Methods for Wave Equation on Cantor Sets within Local Fractional Operators. Abstract and Applied Analysis, 2014, 2014, 1-6.	0.7	53
383	Theory and Applications of Fractional Order Systems. Mathematical Problems in Engineering, 2014, 2014, 1-2.	1.1	5
384	Diversity study of multi-objective genetic algorithm based on Shannon entropy. , 2014, , .		2
385	Detection of quasi-periodic processes in complex systems: how do we quantitatively describe their properties?. Physica Scripta, 2014, 89, 015201.	2.5	23
386	Local Fractional Variational Iteration Method for Local Fractional Poisson Equations in Two Independent Variables. Abstract and Applied Analysis, 2014, 2014, 1-7.	0.7	6
387	Dynamical Stability and Predictability of Football Players: The Study of One Match. Entropy, 2014, 16, 645-674.	2.2	40
388	Fractional Dynamics of Computer Virus Propagation. Mathematical Problems in Engineering, 2014, 2014, 1-7.	1.1	16
389	Fractional Order Generalized Information. Entropy, 2014, 16, 2350-2361.	2.2	118
390	Analysis of Forest Fires by means of Pseudo Phase Plane and Multidimensional Scaling Methods. Mathematical Problems in Engineering, 2014, 2014, 1-8.	1.1	6
391	Advanced Topics in Dynamics of Complex Systems. Mathematical Problems in Engineering, 2014, 2014, 1-1.	1.1	1
392	A Review of Definitions for Fractional Derivatives and Integral. Mathematical Problems in Engineering, 2014, 2014, 1-6.	1.1	307
393	Multidimensional scaling visualization of earthquake phenomena. Journal of Seismology, 2014, 18, 163-179.	1.3	11
394	Reply to: Comments on â€œParticle Swarm Optimization with Fractional-Order Velocityâ€• Nonlinear Dynamics, 2014, 77, 435-436.	5.2	3
395	Relativistic time effects in financial dynamics. Nonlinear Dynamics, 2014, 75, 735-744.	5.2	33
396	Some pioneers of the applications of fractional calculus. Fractional Calculus and Applied Analysis, 2014, 17, 552-578.	2.2	128

#	Article	IF	Citations
397	Fractional order models of leaves. JVC/Journal of Vibration and Control, 2014, 20, 998-1008.	2.6	46
398	New trends in fractional dynamics. JVC/Journal of Vibration and Control, 2014, 20, 963-963.	2.6	19
399	Rhapsody in fractional. Fractional Calculus and Applied Analysis, 2014, 17, 1188-1214.	2.2	32
400	Riesz potential versus fractional Laplacian. Journal of Statistical Mechanics: Theory and Experiment, 2014, 2014, P09032.	2.3	7
401	A fractional perspective to financial indices. Optimization, 2014, 63, 1167-1179.	1.7	2
402	Numerical analysis of the initial conditions in fractional systems. Communications in Nonlinear Science and Numerical Simulation, 2014, 19, 2935-2941.	3.3	12
403	Double power laws, fractals and self-similarity. Applied Mathematical Modelling, 2014, 38, 4019-4026.	4.2	19
404	Analysis of diffusion process in fractured reservoirs using fractional derivative approach. Communications in Nonlinear Science and Numerical Simulation, 2014, 19, 3161-3170.	3.3	33
405	Analysis of temperature time-series: Embedding dynamics into the MDS method. Communications in Nonlinear Science and Numerical Simulation, 2014, 19, 851-871.	3.3	53
406	On the numerical computation of the Mittag-Leffler function. Communications in Nonlinear Science and Numerical Simulation, 2014, 19, 3419-3424.	3.3	21
407	On development of fractional calculus during the last fifty years. Scientometrics, 2014, 98, 577-582.	3.0	127
408	Fractional Particle Swarm Optimization. , 2014, , 47-56.		7
409	Analysis of Electricity Market Prices Using Multidimensional Scaling. , 2014, , 305-313.		0
410	Comparison and Visualization of the DNA of Six Primates. Topics in Intelligent Engineering and Informatics, 2014, , 295-309.	0.4	0
411	A Statistical Approach for Tuning the Windowed Fourier Transform. , 2014, , 269-281.		0
412	Mathematical aspects of the Heisenberg uncertainty principle within local fractional Fourier analysis. Boundary Value Problems, 2013, 2013, .	0.7	44
413	Controllability results for impulsive mixed-type functional integro-differential evolution equations with nonlocal conditions. Fixed Point Theory and Applications, 2013, 2013, .	1.1	32
414	Optimal Controllers with Complex Order Derivatives. Journal of Optimization Theory and Applications, 2013, 156, 2-12.	1.5	40

#	Article	IF	Citations
415	Complex dynamics of financial indices. Nonlinear Dynamics, 2013, 74, 287-296.	5.2	31
416	Symbolic Fractional Dynamics. IEEE Journal on Emerging and Selected Topics in Circuits and Systems, 2013, 3, 468-474.	3.6	3
417	Fractional order modelling of dynamic backlash. Mechatronics, 2013, 23, 741-745.	3.3	28
418	Self-similarity principle: the reduced description of randomness. Open Physics, 2013, 11, .	1.7	8
419	Dynamics of a backlash chain. Open Physics, 2013, 11, .	1.7	2
420	Complex evolution of a multi-particle system. Applied Mathematical Modelling, 2013, 37, 9203-9214.	4.2	7
421	Analysis of the Respiratory Dynamics During Normal Breathing by Means of Pseudophase Plots and Pressureâ€“Volume Loops. IEEE Transactions on Systems, Man, and Cybernetics: Systems, 2013, 43, 53-62.	9.3	7
422	Fractional calculus: A survey of useful formulas. European Physical Journal: Special Topics, 2013, 222, 1827-1846.	2.6	193
423	A fractional approach to the Fermi-Pasta-Ulam problem. European Physical Journal: Special Topics, 2013, 222, 1795-1803.	2.6	10
424	Dynamic analysis of earthquake phenomena by means of pseudo phase plane. Nonlinear Dynamics, 2013, 74, 1191-1202.	5.2	11
425	Fractional order modelling of zero length column desorption response for adsorbents with variable particle sizes. Open Physics, 2013, 11, .	1.7	1
426	Fractional dynamics and MDS visualization of earthquake phenomena. Computers and Mathematics With Applications, 2013, 66, 647-658.	2.7	52
427	Fractional model for malaria transmission under control strategies. Computers and Mathematics With Applications, 2013, 66, 908-916.	2.7	87
428	Science metrics on fractional calculus development since 1966. Fractional Calculus and Applied Analysis, 2013, 16, 479-500.	2.2	73
429	Fractional generalization of memristor and higher order elements. Communications in Nonlinear Science and Numerical Simulation, 2013, 18, 264-275.	3.3	70
430	Delay Approximation of Fractional Integrals. Asian Journal of Control, 2013, 15, 713-722.	3.0	2
431	Fractional Model for Malaria Disease. , 2013, , .		2
432	A Gallery of Root Locus of Fractional Systems. , 2013, , .		0

#	Article	IF	Citations
433	Some Pioneers of the Application of Fractional Calculus. , 2013, , .		8
434	Multidimensional Scaling for Orthodontic Root Resorption. Mathematical Problems in Engineering, 2013, 2013, 1-6.	1.1	1
435	On Local Fractional Continuous Wavelet Transform. Abstract and Applied Analysis, 2013, 2013, 1-5.	0.7	19
436	Fractional Dynamics of Genetic Algorithms Using Hexagonal Space Tessellation. Abstract and Applied Analysis, 2013, 2013, 1-7.	0.7	0
437	Systems of Navier-Stokes Equations on Cantor Sets. Mathematical Problems in Engineering, 2013, 2013, 1-8.	1.1	39
438	Root Locus Practical Sketching Rules for Fractional-Order Systems. Abstract and Applied Analysis, 2013, 2013, 1-14.	0.7	9
439	Power Law and Entropy Analysis of Catastrophic Phenomena. Mathematical Problems in Engineering, 2013, 2013, 1-10.	1.1	10
440	On a Generalized Laguerre Operational Matrix of Fractional Integration. Mathematical Problems in Engineering, 2013, 2013, 1-7.	1.1	5
441	New Challenges in Fractional Systems. Mathematical Problems in Engineering, 2013, 2013, 1-2.	1.1	5
442	Entropy Diversity in Multi-Objective Particle Swarm Optimization. Entropy, 2013, 15, 5475-5491.	2.2	25
443	Stability of Fractional Order Systems. Mathematical Problems in Engineering, 2013, 2013, 1-14.	1.1	95
444	Analysis and Visualization of Seismic Data Using Mutual Information. Entropy, 2013, 15, 3892-3909.	2.2	39
445	Observability of Nonlinear Fractional Dynamical Systems. Abstract and Applied Analysis, 2013, 2013, 1-7.	0.7	8
446	Fractional Coins and Fractional Derivatives. Abstract and Applied Analysis, 2013, 2013, 1-5.	0.7	9
447	Multidimensional Scaling Analysis of Electricity Market Prices. Intelligent Systems, Control and Automation: Science and Engineering, 2013, , 345-354.	0.5	0
448	Visualizing Non-Linear Control System Performance by Means of Multidimensional Scaling. Journal of Computational and Nonlinear Dynamics, 2013, 8, .	1.2	7
449	Fractional-Order Fourier Analysis of the DNA. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2013, 46, 248-253.	0.4	1
450	Multidimensional Scaling Analysis of the Dynamics of a Country Economy. Scientific World Journal, The, 2013, 2013, 1-15.	2.1	5

#	Article	IF	Citations
451	Can Power Laws Help Us Understand Gene and Proteome Information?. Advances in Mathematical Physics, 2013, 2013, 1-10.	0.8	5
452	Advanced Topics in Fractional Dynamics. Advances in Mathematical Physics, 2013, 2013, 1-1.	0.8	8
453	Fractional Calculus: Application in Modeling and Control. , 2013, , 279-295.		6
454	Application of Integer and Fractional Models in Electrochemical Systems. Mathematical Problems in Engineering, 2012, 2012, 1-17.	1.1	30
455	A Multidimensional Scaling Analysis of Musical Sounds Based on Pseudo Phase Plane. Abstract and Applied Analysis, 2012, 2012, 1-14.	0.7	7
456	Power Law Analysis of Financial Index Dynamics. Discrete Dynamics in Nature and Society, 2012, 2012, 1-12.	0.9	3
457	Multidimensional Scaling Applied to Histogram-Based DNA Analysis. Comparative and Functional Genomics, 2012, 2012, 1-11.	2.0	0
458	Shannon Information and Power Law Analysis of the Chromosome Code. Abstract and Applied Analysis, 2012, 2012, 1-13.	0.7	5
459	ON THE DNA OF ELEVEN MAMMALS. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2012, 22, 1250074.	1.7	3
460	A literature review on the optimization of legged robots. JVC/Journal of Vibration and Control, 2012, 18, 1753-1767.	2.6	66
461	Shannon Entropy Analysis of the Genome Code. Mathematical Problems in Engineering, 2012, 2012, 1-12.	1.1	23
462	Analysis of Stock Market Indices with Multidimensional Scaling and Wavelets. Mathematical Problems in Engineering, 2012, 2012, 1-14.	1.1	4
463	Dynamical Analysis of the Global Warming. Mathematical Problems in Engineering, 2012, 2012, 1-12.	1.1	10
464	Self-Similarity in World Economy. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2012, 45, 583-586.	0.4	0
465	Fractional-Order Fourier Analysis of Human DNA. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2012, 45, 560-564.	0.4	0
466	FRACTIONAL DYNAMICS IN FINANCIAL INDICES. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2012, 22, 1250249.	1.7	32
467	Entropy analysis of the genetic sequence of six species. , 2012, , .		0
468	Complex-order forced van der Pol oscillator. JVC/Journal of Vibration and Control, 2012, 18, 2201-2209.	2.6	29

#	Article	IF	Citations
469	Analysis of electricity markets using multidimensional scaling. , 2012, , .		1
470	Sensor Classification Methods Applied to Robotics. Lecture Notes in Computer Science, 2012, , 23-31.	1.3	0
471	Analysis and visualization of chromosome information. Gene, 2012, 491, 81-87.	2.2	5
472	The effect of fractional order in variable structure control. Computers and Mathematics With Applications, 2012, 64, 3340-3350.	2.7	18
473	Multidimensional scaling analysis of fractional systems. Computers and Mathematics With Applications, 2012, 64, 2966-2972.	2.7	11
474	A fuzzified systematic adjustment of the robotic Darwinian PSO. Robotics and Autonomous Systems, 2012, 60, 1625-1639.	5.1	37
475	Introducing the fractional-order Darwinian PSO. Signal, Image and Video Processing, 2012, 6, 343-350.	2.7	118
476	Analysis of financial indices by means of the windowed Fourier transform. Signal, Image and Video Processing, 2012, 6, 487-494.	2.7	4
477	Fractional order modelling of fractional-order holds. Nonlinear Dynamics, 2012, 70, 789-796.	5.2	24
478	Fractional order inductive phenomena based on the skin effect. Nonlinear Dynamics, 2012, 68, 107-115.	5.2	97
479	Dynamical behaviour of multi-particle large-scale systems. Nonlinear Dynamics, 2012, 69, 913-925.	5.2	7
480	A multi-objective approach for the motion planning of redundant manipulators. Applied Soft Computing Journal, 2012, 12, 589-599.	7.2	61
481	Hybrid adaptive control of a dragonfly model. Communications in Nonlinear Science and Numerical Simulation, 2012, 17, 893-903.	3.3	13
482	Accessing complexity from genome information. Communications in Nonlinear Science and Numerical Simulation, 2012, 17, 2237-2243.	3.3	13
483	A review of power laws in real life phenomena. Communications in Nonlinear Science and Numerical Simulation, 2012, 17, 3558-3578.	3.3	119
484	Exploiting sensor redundancy for the calculation of fractional derivatives in the presence of noise. Signal Processing, 2012, 92, 204-209.	3.7	12
485	Entropy Analysis of Fractional Derivatives and Their Approximation. Journal of Applied Nonlinear Dynamics, 2012, 1, 109-112.	0.3	19
486	Application of Fractional Calculus in Engineering. Springer Proceedings in Mathematics, 2011, , 619-629.	0.5	6

#	Article	IF	Citations
487	Application of Fractional Controllers for Quad Rotor. , 2011, , 303-309.		5
488	COMPLEX ORDER BIPED RHYTHMS. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2011, 21, 3053-3061.	1.7	16
489	Nonlinear and Complex Dynamics. , 2011, , .		5
490	Realization of Fractional-Order Controllers: Analysis, Synthesis and Application to the Velocity Control of a Servo System. Nonlinear Physical Science, 2011, , 43-82.	0.2	1
491	Wavelet analysis of human DNA. Genomics, 2011, 98, 155-163.	2.9	35
492	Experimental backlash study in mechanical manipulators. Robotica, 2011, 29, 211-219.	1.9	10
493	Modeling of the Lung Impedance Using a Fractional-Order Ladder Network With Constant Phase Elements. IEEE Transactions on Biomedical Circuits and Systems, 2011, 5, 83-89.	4.0	113
494	Analysis of the Nano-Surface of a Modified Glassy Carbon Electrode by Pseudo Phase Plane Method. Journal of Computational and Theoretical Nanoscience, 2011, 8, 1986-1992.	0.4	0
495	Optimization of the Workpiece Location in a Machining Robotic Cell. International Journal of Advanced Robotic Systems, 2011, 8, 73.	2.1	17
496	Shannon, RÃ©nyie and Tsallis entropy analysis of DNA using phase plane. Nonlinear Analysis: Real World Applications, 2011, 12, 3135-3144.	1.7	29
497	Is multidimensional scaling suitable for mapping the input respiratory impedance in subjects and patients?. Computer Methods and Programs in Biomedicine, 2011, 104, e189-e200.	4.7	11
498	Characterization Approach to Modified Glassy Carbon Electrode-Nanofilm System Within Multidimensional Scaling. Journal of Computational and Theoretical Nanoscience, 2011, 8, 268-273.	0.4	4
499	And I say to myself: â€œWhat a fractional world!â€• Fractional Calculus and Applied Analysis, 2011, 14, 635-654.	2.2	86
500	Identifying economic periods and crisis withÂtheÂmultidimensional scaling. Nonlinear Dynamics, 2011, 63, 611-622.	5.2	46
501	Analysis of financial data series using fractional Fourier transform and multidimensional scaling. Nonlinear Dynamics, 2011, 65, 235-245.	5.2	46
502	Complex order van der Pol oscillator. Nonlinear Dynamics, 2011, 65, 247-254.	5.2	57
503	Dynamical analysis of compositions. Nonlinear Dynamics, 2011, 65, 399-412.	5.2	15
504	Representation of robotic fractional dynamics in the pseudo phase plane. Acta Mechanica Sinica/Lixue Xuebao, 2011, 27, 28-35.	3.4	3

#	Article	IF	Citations
505	Recent history of fractional calculus. Communications in Nonlinear Science and Numerical Simulation, 2011, 16, 1140-1153.	3.3	1,191
506	Entropy analysis of the DNA code dynamics in human chromosomes. Computers and Mathematics With Applications, 2011, 62, 1612-1617.	2.7	23
507	Fractional-order impulse response of the respiratory system. Computers and Mathematics With Applications, 2011, 62, 845-854.	2.7	38
508	Fractional dynamics in DNA. Communications in Nonlinear Science and Numerical Simulation, 2011, 16, 2963-2969.	3.3	58
509	Fractional dynamics of a system with particles subjected to impacts. Communications in Nonlinear Science and Numerical Simulation, 2011, 16, 4596-4601.	3.3	19
510	Root locus of fractional linear systems. Communications in Nonlinear Science and Numerical Simulation, 2011, 16, 3855-3862.	3.3	25
511	Analysis of stock market indices through multidimensional scaling. Communications in Nonlinear Science and Numerical Simulation, 2011, 16, 4610-4618.	3.3	43
512	A fractional approach for the motion planning of redundant and hyper-redundant manipulators. Signal Processing, 2011, 91, 562-570.	3.7	19
513	Histogram-based DNA analysis for the visualization of chromosome, genome and species information. Bioinformatics, 2011, 27, 1207-1214.	4.1	22
514	Time-Delay and Fractional Derivatives. Advances in Difference Equations, 2011, 2011, 1-12.	3.5	19
515	Fractional Control With a Smith Predictor. Journal of Computational and Nonlinear Dynamics, 2011, 6, .	1.2	13
516	Fractional Variable Structure Control. , 2011, , .		1
517	Multidimensional Scaling Analysis of Stock Market Indexes. , 2011, , 307-321.		6
518	Music and Evolutionary Computation. , 2011, , 329-336.		1
519	Visualizing Fractional Control System Approximations by Means of Multidimensional Scaling. , 2011, , .		1
520	Application of Genetic Algorithms inÂtheÂDesign ofÂanÂElectrical Potential ofÂFractional Order. , 2011, , 273-280.		0
521	Intrinsic Fractal Dynamics in the Respiratory System by Means of Pressureâ€“Volume Loops. , 2011, , 217-227.		0
522	Application of Computational Intelligence toÂEngineering. , 2011, , 337-345.		0

#	Article	IF	Citations
523	Evolutionary Trajectory Optimization forÂRedundant Robots. , 2011, , 347-353.		0
524	Fitness Function Evaluation Through Fractional Algorithms. Springer Proceedings in Mathematics, 2011, , 607-610.	0.5	0
525	Visualizing Non-Linear Control System Performance by Means of Multidimensional Scaling. , 2011, , .		0
526	Fractional Control of Dynamic Systems. Springer Proceedings in Mathematics, 2011, , 155-159.	0.5	0
527	Fractional dynamics in liquid manipulation. Bulletin of the Polish Academy of Sciences: Technical Sciences, 2010, 58, 555-560.	0.8	0
528	New Noninvasive Methods for â€˜Readingâ€™ of Random Sequences and Their Applications in Nanotechnology. , 2010, , 43-56.		5
529	An evolutionary approach for the motion planning ofÂredundant and hyper-redundant manipulators. Nonlinear Dynamics, 2010, 60, 115-129.	5.2	34
530	Mechanical properties and impedance model forÂtheÂbranching network of the sappingÂsystem inÂtheÂleafÂofÂHydrangea Macrophylla. Nonlinear Dynamics, 2010, 60, 207-216.	5.2	14
531	Particle swarm optimization with fractional-order velocity. Nonlinear Dynamics, 2010, 61, 295-301.	5.2	196
532	Dynamics of the Dow Jones and the NASDAQ stock indexes. Nonlinear Dynamics, 2010, 61, 691-705.	5.2	52
533	Fractional central pattern generators for bipedal locomotion. Nonlinear Dynamics, 2010, 62, 27-37.	5.2	22
534	Entropy analysis of integer andÂfractional dynamical systems. Nonlinear Dynamics, 2010, 62, 371-378.	5.2	87
535	Optimal tuning of fractional controllers using genetic algorithms. Nonlinear Dynamics, 2010, 62, 447-452.	5.2	47
536	A Theoretical Study on Modeling the Respiratory Tract With Ladder Networks by Means of Intrinsic Fractal Geometry. IEEE Transactions on Biomedical Engineering, 2010, 57, 246-253.	4.2	53
537	Automated design of microwave discrete tuning differential capacitance circuits in Siâ€integrated technologies. Microwave and Optical Technology Letters, 2010, 52, 629-634.	1.4	0
538	Optimal approximation of fractional derivatives through discrete-time fractions using genetic algorithms. Communications in Nonlinear Science and Numerical Simulation, 2010, 15, 482-490.	3.3	26
539	Application of fractional algorithms in the control of a robotic bird. Communications in Nonlinear Science and Numerical Simulation, 2010, 15, 895-910.	3.3	35
540	Effect of fractional orders in the velocity control of a servo system. Computers and Mathematics With Applications, 2010, 59, 1679-1686.	2.7	57

#	Article	IF	Citations
541	Control of a heat diffusion system through a fractional order nonlinear algorithm. Computers and Mathematics With Applications, 2010, 59, 1687-1694.	2.7	30
542	Modeling and Control of a Dragonfly-Like Robot. Journal of Control Science and Engineering, 2010, 2010, 1-10.	1.0	8
543	Decentralized CRONE Control of mxn Multivariable System with Time-Delay. , 2010, , 377-391.		8
544	Controllability and Minimum Energy Control Problem of Fractional Discrete-Time Systems. , 2010, , 503-509.		64
545	Optimization of Parallel Manipulators Using Evolutionary Algorithms. Advances in Intelligent and Soft Computing, 2010, , 79-86.	0.2	8
546	Interactive Evolutionary Computation in music. , 2010, , .		16
547	Some Applications of Fractional Calculus in Engineering. Mathematical Problems in Engineering, 2010, 2010, 1-34.	1.1	162
548	Fractional Order Calculus: Basic Concepts and Engineering Applications. Mathematical Problems in Engineering, 2010, 2010, 1-19.	1.1	200
549	Fractional Order Sliding Mode Controller Design for Fractional Order Dynamic Systems. , 2010, , 463-470.		30
550	Synchronization of Chaotic Nonlinear Gyros Using Fractional Order Controller. , 2010, , 479-485.		5
551	Fractional Order Adaptive Control for Cogging Effect Compensation. , 2010, , 393-409.		2
552	Stability Analysis of Fractional Order Universal Adaptive Stabilization. , 2010, , 357-368.		4
553	Synchronization of Fractional-Order Chaotic System via Adaptive PID Controller. , 2010, , 445-452.		5
554	Generalized Hankel Transform and Fractional Integrals on the Spaces of Generalized Functions. , 2010, , 203-212.		0
555	Air-Fuel Ratio Control of an Internal Combustion Engine Using CRONE Control Extended to LPV Systems. , 2010, , 71-86.		1
556	Maximin spreading algorithm. , 2010, , .		0
557	Comparative analysis of a traditional and a novel approach to Model Reference Adaptive Control. , 2010, , .		8
558	Analysis of financial indexes with computational techniques. , 2010, , .		0

#	Article	IF	Citations
559	Telemedicine as a Tool for Europe-Africa Cooperation: A Practical Experience. Lecture Notes of the Institute for Computer Sciences, Social-Informatics and Telecommunications Engineering, 2010, , 86-94.	0.3	1
560	A New Approach for Stability Analysis of Linear Discrete-Time Fractional-Order Systems. , 2010, , 151-162.		27
561	Hybrid Single Walled Carbon Nanotube FETs for High Fidelity DNA Detection. , 2010, , 17-24.		1
562	Fractional Order Model of Beam Heating Process and Its Experimental Verification. , 2010, , 287-294.		30
563	On Observability of Nonlinear Discrete-Time Fractional-Order Control Systems. , 2010, , 305-312.		11
564	Chaotic Fractional Order Delayed Cellular Neural Network. , 2010, , 313-320.		13
565	Fractional Wavelet Transform for the Quantitative Spectral Analysis of Two-Component System. , 2010, , 321-331.		4
566	Fractional Wavelet Transform and Chemometric Calibrations for the Simultaneous Determination of Amlodipine and Valsartan in Their Complex Mixture. , 2010, , 333-340.		3
567	Towards Integrated Nanoelectronic and Photonic Devices. , 2010, , 25-41.		1
568	Analytical Impulse Response of Third Generation CRONE Control. , 2010, , 343-356.		5
569	A Fractional Order Adaptation Law for Integer Order Sliding Mode Control of a 2DOF Robot. , 2010, , 471-478.		3
570	Nyquist Envelope of Fractional Order Transfer Functions with Parametric Uncertainty. , 2010, , 487-494.		3
571	Non Integer Order Operators Implementation via Switched Capacitors Technology. , 2010, , 87-96.		3
572	Analysis of the Fractional Dynamics of an Ultracapacitor and Its Application to a Buck-Boost Converter. , 2010, , 97-105.		4
573	Approximation of a Fractance by a Network of Four Identical RC Cells Arranged in Gamma and a Purely Capacitive Cell. , 2010, , 107-120.		2
574	Comparing Numerical Methods for Solving Nonlinear Fractional Order Differential Equations. , 2010, , 171-179.		0
575	Fractional-Order Backward-Difference Definition Formula Analysis. , 2010, , 181-191.		0
576	Synchronization Analysis of Two Networks. , 2010, , 243-253.		1

#	Article	IF	Citations
577	Novel Molecular Diodes Developed by Chemical Conjugation of Carbon Nanotubes with Peptide Nucleic Acid. , 2010, , 3-15.		0
578	Frequency Response Based CACSD for Fractional Order Systems. , 2010, , 419-427.		0
579	Quantum Confinement in Nanometric Structures. , 2010, , 57-67.		4
580	Fractional Derivatives with Fuzzy Exponent. , 2010, , 221-231.		0
581	Position and Velocity Control of a Servo by Using GPC of Arbitrary Real Order. , 2010, , 369-376.		1
582	On the Implementation of a Limited Frequency Band Integrator and Application to Energetic Material Ignition Prediction. , 2010, , 273-285.		0
583	Stability of Fractional-Delay Systems: A Practical Approach. , 2010, , 163-170.		1
584	Game Problems for Fractional-Order Systems. , 2010, , 233-241.		2
585	Multi-criteria Manipulator Trajectory Optimization Based on Evolutionary Algorithms. Advances in Intelligent and Soft Computing, 2010, , 87-94.	0.2	0
586	Adaptive Tackling of the Swinging Problem for a 2 DOF Crane â€“ Payload System. Studies in Computational Intelligence, 2010, , 103-114.	0.9	3
587	On Fractional Control Strategy for Four-Wheel-Steering Vehicle. , 2010, , 453-462.		2
588	Optimization of Hexapod Locomotion using Genetic Algorithms. , 2010, , .		1
589	Electric Vehicle Drive System with Adaptive PID Control. , 2010, , .		0
590	Fractional Differentiation and its Applications (FDA08). Physica Scripta, 2009, T136, 011001.	2.5	8
591	Particle Swarm Optimization: Dynamical Analysis through Fractional Calculus. , 2009, , .		1
592	Fractional-Order Control of a Robotic Bird. , 2009, , .		2
593	Adaptive controller for systems of fractional dynamics based on robust fixed point transformations. , 2009, , .		6
594	Dynamic modeling of a Stewart platform using the generalized momentum approach. Communications in Nonlinear Science and Numerical Simulation, 2009, 14, 3389-3401.	3.3	49

#	Article	IF	Citations
595	Development of fractional order capacitors based onÂelectrolyte processes. Nonlinear Dynamics, 2009, 56, 45-55.	5.2	224
596	Fractional describing function of systems with Coulomb friction. Nonlinear Dynamics, 2009, 56, 381-387.	5.2	24
597	Approximating fractional derivatives in the perspective ofÂsystem control. Nonlinear Dynamics, 2009, 56, 401-407.	5.2	33
598	Describing function of two masses with backlash. Nonlinear Dynamics, 2009, 56, 409-413.	5.2	31
599	Calculation of fractional derivatives of noisy data withÂgenetic algorithms. Nonlinear Dynamics, 2009, 57, 253-260.	5.2	37
600	Filtering method in backlash phenomena analysis. Mathematical and Computer Modelling, 2009, 49, 1494-1503.	2.0	5
601	Implementation of fractional-order electromagnetic potential through a genetic algorithm. Communications in Nonlinear Science and Numerical Simulation, 2009, 14, 1838-1843.	3.3	30
602	Trajectory planning of redundant manipulators using genetic algorithms. Communications in Nonlinear Science and Numerical Simulation, 2009, 14, 2858-2869.	3.3	59
603	Fractional derivatives: Probability interpretation and frequency response of rational approximations. Communications in Nonlinear Science and Numerical Simulation, 2009, 14, 3492-3497.	3.3	81
604	Approximating fractional derivatives through the generalized mean. Communications in Nonlinear Science and Numerical Simulation, 2009, 14, 3723-3730.	3.3	28
605	On the Fractional Order Control of Heat Systems. , 2009, , 375-385.		6
606	Control and Dynamics of Fractional Order Systems. Studies in Computational Intelligence, 2009, , 235-251.	0.9	2
607	Biological Inspired Flying Robot. , 2009, , .		1
608	Simple adaptive dynamical control of vehicles driven by omnidirectional wheels. , 2009, , .		4
609	Adaptive VS/SM controller based on robust fixed point transformations. , 2009, , .		2
610	Evasion of instabilities caused by neglected subsystems and saturations in the control of a cart of asynchronous electric drives. , 2009, , .		0
611	Tuning and Application of Integer and Fractional Order PID Controllers. , 2009, , 245-255.		14
612	Fractional Describing Function of Systems with Nonlinear Friction. , 2009, , 257-266.		4

#	Article	IF	Citations
613	Smith Predictor Embedded With Fractional Algorithms for the Control of a Heat Diffusion System. , 2009, , .		1
614	Two Cooperating Manipulators with Fractional Controllers. International Journal of Advanced Robotic Systems, 2009, 6, 31.	2.1	5
615	Design Optimization of Radio Frequency Discrete Tuning Varactors. Lecture Notes in Computer Science, 2009, , 343-352.	1.3	0
616	Fixed Point Transformations in the Adaptive Control of Fractional-order MIMO Systems. Lecture Notes in Control and Information Sciences, 2009, , 103-112.	1.0	1
617	Application of Robust Fixed Point Transformations for Technological Operation of Robots. Lecture Notes in Control and Information Sciences, 2009, , 93-101.	1.0	1
618	Design of Radio-Frequency Integrated CMOS Discrete Tuning Varactors Using the Particle Swarm Optimization Algorithm. Lecture Notes in Computer Science, 2009, , 1231-1239.	1.3	0
619	Fractional control of heat diffusion systems. Nonlinear Dynamics, 2008, 54, 263-282.	5.2	161
620	Fractional dynamics in the trajectory control of redundant manipulators. Communications in Nonlinear Science and Numerical Simulation, 2008, 13, 1836-1844.	3.3	50
621	Fractional Control of Two Cooperating Manipulators. , 2008, , .		3
622	A Survey of Technologies for Climbing Robots Adhesion to Surfaces. , 2008, , .		37
623	Possible adaptive control by tangent hyperbolic fixed point transformations used for controlling the -6-type van der pol oscillator. , 2008, , .		26
624	Fractional Electrical Impedances in Botanical Elements. JVC/Journal of Vibration and Control, 2008, 14, 1389-1402.	2.6	136
625	Discretization of Complex-order Algorithms for Control Applications. JVC/Journal of Vibration and Control, 2008, 14, 1349-1361.	2.6	12
626	Application of Fractional Calculus in Engineering Sciences. , 2008, , .		8
627	Kinematic and dynamic performance analysis of artificial legged systems. Robotica, 2008, 26, 19-39.	1.9	28
628	Fractional Dynamics: A Statistical Perspective. Journal of Computational and Nonlinear Dynamics, 2008, 3, .	1.2	28
629	Introduction to the Special Issue on â€œFractional Differentiation and its Applicationsâ€• JVC/Journal of Vibration and Control, 2008, 14, 1253-1253.	2.6	3
630	Using Fractional Derivatives in Joint Control of Hexapod Robots. JVC/Journal of Vibration and Control, 2008, 14, 1473-1485.	2.6	12

#	Article	IF	Citations
631	Single-objective front optimization. , 2008, , .		1
632	Automated synthesis procedure of RF discrete tuning differential capacitance circuits. , 2008, , .		0
633	Preliminary sketch of possible Fixed Point transformations for use in adaptive control. , 2008, , .		2
634	Special Issue on â€œDiscontinuous and Fractional Dynamical Systemsâ€• Journal of Computational and Nonlinear Dynamics, 2008, 3, .	1.2	6
635	Fractional Dynamics in Mechanical Manipulation. Journal of Computational and Nonlinear Dynamics, 2008, 3, .	1.2	8
636	On the Fractional PID Control of a Laboratory Servo System. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2008, 41, 15273-15278.	0.4	18
637	Pseudo phase plane, delay and fractional dynamics. Journal Europeen Des Systemes Automatises, 2008, 42, 1037-1051.	0.4	7
638	CLIMBING ROBOTS: A SURVEY OF TECHNOLOGIES AND APPLICATIONS. , 2008, , .		3
639	Analysis of the Van der Pol Oscillator Containing Derivatives of Fractional Order. JVC/Journal of Vibration and Control, 2007, 13, 1291-1301.	2.6	139
640	Linear Differential Equations of Fractional Order. , 2007, , 77-91.		13
641	Towards the PIDß Control of Heat Diffusion Systems. , 2007, , .		2
642	Implementation of Fractional-order Operators on Field Programmable Gate Arrays. , 2007, , 333-346.		25
643	Evolutionary computation in the design of logic circuits. , 2007, , .		2
644	Fractional Order Dynamics in a Particle Swarm Optimization Algorithm. , 2007, , .		3
645	Fractional dynamics in particle swarm optimization. , 2007, , .		3
646	Flatness Control of a Fractional Thermal System. , 2007, , 493-509.		5
647	Control of a 6-DOF Parallel Manipulator through a Mechatronic Approach. JVC/Journal of Vibration and Control, 2007, 13, 1431-1446.	2.6	5
648	Suboptimum H2 Pseudo-rational Approximations to Fractional-order Linear Time Invariant Systems. , 2007, , 61-75.		11

#	Article	IF	Citations
649	Frequency Band-Limited Fractional Differentiator Prefilter in Path Tracking Design. , 2007, , 477-492.		4
650	On Fractional Variational Principles. , 2007, , 115-126.		7
651	Advances in Fractional Calculus. , 2007, , .		1,008
652	Robustness Comparison of Smith Predictor-based Control and Fractional-Order Control. , 2007, , 511-526.		3
653	Performance of Fractional PID Algorithms Controlling Nonlinear Systems with Saturation and Backlash Phenomena. JVC/Journal of Vibration and Control, 2007, 13, 1407-1418.	2.6	47
654	A Historical Perspective of Legged Robots. JVC/Journal of Vibration and Control, 2007, 13, 1447-1486.	2.6	66
655	Towards a Sensor Classification Scheme for Robotic Manipulators. , 2007, , .		1
656	Comparison of Five Numerical Schemes for Fractional Differential Equations. , 2007, , 43-60.		20
657	LMI Characterization of Fractional Systems Stability. , 2007, , 419-434.		21
658	Modelling and Identification of Diffusive Systems using Fractional Models. , 2007, , 213-225.		5
659	Fractional-order Control of a Flexible Manipulator. , 2007, , 449-462.		4
660	Robustness of Fractional-order Boundary Control of Time Fractional Wave Equations with Delayed Boundary Measurement Using the Simple Predictor. , 2007, , 543-552.		0
661	A General Discretization Scheme for the Design of IIR Fractional Filters. , 2007, , .		5
662	Manipulator trajectory planning using a MOEA. Applied Soft Computing Journal, 2007, 7, 659-667.	7.2	60
663	Analytical Modelling and Experimental Identification of Viscoelastic Mechanical Systems. , 2007, , 403-416.		10
664	Special issue on modelling and control of intelligent transportation systems (ITS). Nonlinear Dynamics, 2007, 49, 443-444.	5.2	9
665	Simulation and dynamics of freeway traffic. Nonlinear Dynamics, 2007, 49, 567-577.	5.2	2
666	Mesoscopic Fractional Kinetic Equations versus a Riemannâ€“Liouville Integral Type. , 2007, , 155-167.		4

#	Article	IF	Citations
667	Fractional Advective-Dispersive Equation as a Model of Solute Transport in Porous Media. , 2007, , 199-212.		4
668	Identification of Fractional Models from Frequency Data. , 2007, , 229-242.		15
669	A Direct Approximation of Fractional Coleâ€“Cole Systems by Ordinary First-order Processes. , 2007, , 257-270.		2
670	Fractional Multimodels of the Gastrocnemius Muscle for Tetanus Pattern. , 2007, , 271-285.		9
671	Enumeration of the Real Zeros of the Mittag-Leffler Function EÎ±(z), 1 <Î±< 2. , 2007, , 15-26.		12
672	Limited-Bandwidth Fractional Differentiator: Synthesis and Application in Vibration Isolation. , 2007, , 287-302.		5
673	Electrical Skin Phenomena: A Fractional Calculus Analysis. , 2007, , 323-332.		6
674	Complex Order-Distributions Using Conjugated order Differintegrals. , 2007, , 347-360.		5
675	Fractional Derivative Consideration on Nonlinear Viscoelastic Statical and Dynamical Behavior under Large Pre-Displacement. , 2007, , 363-376.		6
676	Fractional Damping: Stochastic Origin and Finite Approximations. , 2007, , 389-402.		3
677	The Caputo Fractional Derivative: Initialization Issues Relative to Fractional Differential Equation. , 2007, , 27-42.		9
678	Tuning Rules for Fractional PIDs. , 2007, , 463-476.		12
679	Robust Design of an Anti-windup Compensated 3rd-Generation Crone Controller. , 2007, , 527-542.		3
680	A General Discretization Scheme for the Design of IIR Fractional Filters. , 2007, , .		1
681	Fractional Dynamics in Mechanical Manipulation. , 2007, , .		3
682	Experimental Signal Analysis of Robot Impacts in a Fractional Calculus Perspective. Journal of Advanced Computational Intelligence and Intelligent Informatics, 2007, 11, 1079-1085.	0.9	44
683	Application of Fractional Calculus in the Control of Heat Systems. Journal of Advanced Computational Intelligence and Intelligent Informatics, 2007, 11, 1086-1091.	0.9	20
684	Three Classes of FDEs Amenable to Approximation Using a Galerkin Technique. , 2007, , 3-14.		0

#	Article	IF	Citations
685	Fractional Dynamics: A Statistical Perspective. , 2007, , .		2
686	Enhanced Tracer Diffusion in Porous Media with an Impermeable Boundary. , 2007, , 171-184.		0
687	Riesz Potentials as Centred Derivatives. , 2007, , 93-112.		0
688	A Fractional Calculus Perspective in the Evolutionary Design of Combinational Circuits. , 2007, , 305-322.		0
689	Fractional Kinetics in Pseudochaotic Systems and Its Applications. , 2007, , 127-138.		1
690	Dynamic Response of the Fractional Relaxorâ€“Oscillator to a Harmonic Driving Force. , 2007, , 243-256.		2
691	Active Wave Control for Flexible Structures Using Fractional Calculus. , 2007, , 435-448.		2
692	Semi-integrals and Semi-derivatives in Particle Physics. , 2007, , 139-154.		1
693	Quasi-Fractals: New Possibilities in Description of Disordered Media. , 2007, , 377-388.		0
694	Fractional Control of Coordinated Manipulators. Journal of Advanced Computational Intelligence and Intelligent Informatics, 2007, 11, 1072-1078.	0.9	1
695	Towards the PIDß Control of Heat Diffusion Systems. , 2007, , .		1
696	Fractional Order Dynamics in a Particle Swarm Optimization Algorithm. , 2007, , .		0
697	Windowed Fourier Transform of Experimental Robotic Signals with Fractional Behavior. , 2006, , .		5
698	Introduction to the Special Issue on Modeling and Control of Artificial Locomotion Systems. JVC/Journal of Vibration and Control, 2006, 12, 1291-1291.	2.6	1
699	Fractional order electromagnetics. Signal Processing, 2006, 86, 2637-2644.	3.7	91
700	Strategies for the Control of Heat Diffusion Systems Based on Fractional Calculus. , 2006, , .		15
701	Circuit Synthesis Using Particle Swarm Optimization. , 2006, , .		4
702	FRACTIONAL-ORDER HARMONICS IN THE TRAJECTORY CONTROL OF REDUNDANT MANIPULATORS. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2006, 39, 155-160.	0.4	0

#	Article	IF	Citations
703	FRACTIONAL CONTROL OF TWO ARMS WORKING IN COOPERATION. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2006, 39, 355-360.	0.4	0
704	FRACTIONAL-ORDER EVOLUTIONARY DESIGN OF DIGITAL CIRCUITS. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2006, 39, 420-425.	0.4	1
705	DISCRETIZATION OF COMPLEX-ORDER DIFFERINTEGRALS. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2006, 39, 274-279.	0.4	2
706	FRACTIONAL DYNAMICS IN THE DESCRIBING FUNCTION ANALYSIS OF NONLINEAR FRICTION. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2006, 39, 218-223.	0.4	5
707	FRACTIONAL ELECTRICAL DYNAMICS IN FRUITS AND VEGETABLES. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2006, 39, 308-313.	0.4	9
708	FRACTIONAL ORDER FOURIER SPECTRA IN ROBOTIC MANIPULATORS WITH VIBRATIONS. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2006, 39, 361-366.	0.4	3
709	COMPARISON OF DIFFERENT ORDERS PADÃ‰ FRACTIONAL ORDER PD05 CONTROL ALGORITHM IMPLEMENTATIONS. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2006, 39, 373-378.	0.4	3
710	FRACTIONAL DYNAMICS IN GENETIC ALGORITHMS. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2006, 39, 414-419.	0.4	9
711	FRACTIONAL PDÎ± CONTROL OF AN HEXAPOD ROBOT. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2006, 39, 370-375.	0.4	1
712	ANALYSIS OF FRACTIONAL - ORDER ROBOT AXIS DYNAMICS. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2006, 39, 367-372.	0.4	10
713	Time domain design of fractional differintegrators using least-squares. Signal Processing, 2006, 86, 2567-2581.	3.7	148
714	Dynamical modelling of a genetic algorithm. Signal Processing, 2006, 86, 2760-2770.	3.7	16
715	Complex-order dynamics in hexapod locomotion. Signal Processing, 2006, 86, 2785-2793.	3.7	31
716	The Cooperation of Two Manipulators with Fractional Controllers. , 2006, , .		0
717	Fractional Order PDÎ±Joint Control of Legged Robots. JVC/Journal of Vibration and Control, 2006, 12, 1483-1501.	2.6	51
718	Complex dynamics in the trajectory control of redundant manipulators. , 2006, , .		8
719	POLE-ZERO APPROXIMATIONS OF DIGITAL FRACTIONAL-ORDER INTEGRATORS AND DIFFERENTIATORS USING SIGNAL MODELING TECHNIQUES. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2005, 38, 309-314.	0.4	9
720	A Fractional Calculus Perspective in Electromagnetics. , 2005, , 1573.		5

#	Article	IF	Citations
721	Which differintegration?. IET Computer Vision, 2005, 152, 846.	1.3	27
722	Fractional dynamic fitness functions for GA-based circuit design. , 2005, , .		0
723	Multi-objective MaxiMin Sorting Scheme. Lecture Notes in Computer Science, 2005, , 165-175.	1.3	25
724	Modelling and simulation of artificial locomotion systems. Robotica, 2005, 23, 595-606.	1.9	37
725	Fractional-Order Position/Force Robot Control. Journal of Advanced Computational Intelligence and Intelligent Informatics, 2005, 9, 379-386.	0.9	3
726	Assessing software complexity from UML using fractal complexity measure. , 2004, , .		2
727	Human intent driven modeling of products by environment adaptive model objects. , 2004, , .		0
728	Neural network for error correction of pressure force sensor based on elastomagnetic phenomena. , 2004, , .		0
729	Tuning of PID Controllers Based on Bode?s Ideal Transfer Function. Nonlinear Dynamics, 2004, 38, 305-321.	5.2	265
730	Fractional Order Control of a Hexapod Robot. Nonlinear Dynamics, 2004, 38, 417-433.	5.2	101
731	Bond graphs for robust modelling of manufacturing systems. , 2004, , .		4
732	An island-based evolution algorithm for discrete-continuous scheduling with continuous resource discretisation. , 2004, , .		3
733	MSF-MUD and BA-MUD receivers: principles and comparison. , 2004, , .		0
734	Dynamical Analysis of Freeway Traffic. IEEE Transactions on Intelligent Transportation Systems, 2004, 5, 259-266.	8.0	18
735	Performance prediction for association rule mining algorithms. , 2004, , .		2
736	Fractional order adaptive active vibration damping designed on the basis of simple finematic considerations. , 2004, , .		3
737	Simple stereo vision system for real-time object recognition for an autonomous mobile robot. , 2004, , .		10
738	Evolutionary Design of Combinational Logic Circuits. Journal of Advanced Computational Intelligence and Intelligent Informatics, 2004, 8, 507-513.	0.9	11

#	Article	IF	Citations
739	Fractional signal processing and applications. Signal Processing, 2003, 83, 2285-2286.	3.7	139
740	Fractional order dynamics in a GA planner. Signal Processing, 2003, 83, 2377-2386.	3.7	32
741	Fractional Order Dynamics in the Trajectory Planning of Redundant and Hyper-Redundant Manipulators. , 2003, , 703.		0
742	Comparison of Fractional and Integer Order Control of an Hexapod Robot. , 2003, , 667.		16
743	Describing Function Analysis of Mechanical Systems with Nonlinear Friction and Backlash Phenomena. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2003, 36, 269-274.	0.4	5
744	A Fractional Calculus Perspective of PID Tuning. , 2003, , 651.		20
745	Fractional Order Dynamical Phenomena in a GA. Lecture Notes in Computer Science, 2003, , 510-511.	1.3	1
746	Describing Function Analysis of Systems with Impacts and Backlash. Nonlinear Dynamics, 2002, 29, 235-250.	5.2	40
747	Chaotic Phenomena and Fractional-Order Dynamics in the Trajectory Control of Redundant Manipulators. Nonlinear Dynamics, 2002, 29, 315-342.	5.2	108
748	ROBLIB: An Educational Program for Robotics. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2000, 33, 563-568.	0.4	7
749	On the statistical and Fourier modelling of robot motion. , 2000, , .		0
750	Motion chaos in the pseudoinverse control of redundant robots. , 2000, , .		3
751	Controllability analysis of biped walking robots. , 2000, , .		1
752	Kinematic analysis and modelling of biped locomotion systems. Revista Brasileira De Ciencias Mecanicas/Journal of the Brazilian Society of Mechanical Sciences, 1999, 21, 402-413.	0.1	3
753	Dynamic Efficiency During Bipedal Walking. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 1998, 31, 195-200.	0.4	1
754	Variable Structure Position/Force Hybrid Control of Manipulators. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 1997, 30, 337-342.	0.4	3
755	Winrob: An Educational Program for Robotics. International Journal of Electrical Engineering and Education, 1997, 34, 37-47.	0.8	3
756	Kinematic study of biped locomotion systems. , 1997, , 163-176.		0

#	Article	IF	Citations
757	Benchmarking computer systems for robot control. IEEE Transactions on Education, 1995, 38, 205-210.	2.4	6
758	A program for teaching the fundamentals of robot modelling and control. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 1994, 27, 271-276.	0.4	1
759	Analysis of robot dynamics and compensation using classical and computed torque techniques. IEEE Transactions on Education, 1993, 36, 372-379.	2.4	19
760	Microprocessor-Based Controllers for Robotic Manipulators. , 1991, , 103-129.		2
761	On the statistical modelling of robot manipulators. , 1990, , .		0
762	Engineering design of a multirate nonlinear controller for robot manipulators. Journal of Field Robotics, 1989, 6, 1-17.	0.7	10
763	A real-time system for robot manipulator inverse dynamics computation. Annual Review in Automatic Programming, 1988, 14, 63-68.	0.2	2
764	Robot Manipulator Dynamics â€" Towards Better Computational Algorithms. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 1988, 21, 69-74.	0.4	6
765	On the dynamics analysis of freeway traffic. , 0, , .		2
766	Simulation and dynamical analysis of freeway traffic. , 0, , .		1
767	Control of robots with nonlinear phenomena in the joints. , 0, , .		0
768	Performance analysis of multi-legged systems. , 0, , .		6
769	The statistical study of biomechanical arms. , 0, , .		4
770	Statistical Modelling of Robot Manipulators. , 0, , .		7
771	The statistical study of robot manipulators. , 0, , .		8
772	Microcomputer evaluation in robot control. , 0, , .		0
773	Towards the statistical modelling of robotic manipulators. , 0, , .		0
774	On the evaluation of computer systems for robot control. , 0, , .		1

#	Article	IF	Citations
775	Statistical analysis of muscle-actuated manipulators. , 0, , .		4
776	Customized direct dynamics of robot manipulators. , 0, , .		0
777	Variable structure control of robots with nonlinear friction and backlash at the joints. , 0, , .		26
778	Kinematic aspects of robotic biped locomotion systems. , 0, , .		9
779	Kinematic evaluation of robotic biped locomotion systems. , 0, , .		1
780	Dynamic analysis in variable structure position/force hybrid control of manipulators. , 0, , .		5
781	A statistical and harmonic model for robot manipulators. , 0, , .		10
782	Embedding statistics and Fourier transform towards the harmonic modelling of robot manipulators. , 0, , .		3
783	Biped locomotion systems: a kinematic point of view. , 0, , .		0
784	Kinematic analysis of artificial biped locomotion systems. , 0, , .		2
785	Stability analysis in variable structure position/force hybrid control of manipulators. , 0, , .		1
786	A novel method for the modelling of mechanical manipulators. , 0, , .		0
787	Dynamic performance of hybrid robot controllers near singularities. , 0, , .		2
788	Kinematic optimization of redundant and hyper-redundant robot trajectories. , 0, , .		3
789	Man-machine processes in modeling based engineering activities. , 0, , .		0
790	Redundancy optimization for mechanical manipulators. , 0, , .		6
791	Position/force fractional control of mechanical manipulators. , 0, , .		1
792	Dynamic performance of biped locomotion systems. , 0, , .		5

#	Article	IF	Citations
793	Fractional-order hybrid control of robot manipulators. , 0, , .		33
794	Towards efficient biped robots. , 0, , .		6
795	Signal analysis in robotic systems. , 0, , .		0
796	Application of part manufacturing process model in virtual manufacturing. , 0, , .		2
797	Energy analysis during biped walking. , 0, , .		56
798	Fourier analysis of robot trajectories in random tasks. , 0, , .		1
799	Position/force control of biped walking robots. , 0, , .		9
800	A GA perspective of the energy requirements for manipulators maneuvering in a workspace with obstacles. , 0, , .		4
801	Chaos dynamics in the trajectory control of redundant manipulators. , 0, , .		7
802	Towards the development of intelligent transportation systems. , 0, , .		226
803	Goal-oriented biped walking based on force interaction control. , 0, , .		8
804	Performance analysis of multi-legged systems. , 0, , .		1
805	A Fourier perspective in multi-legged systems. , 0, , .		0
806	Pseudoinverse trajectory control of redundant manipulators: a fractional calculus perspective. , 0, , .		11
807	A program for analysis and control of petri nets'. , 0, , .		4
808	About fractional calculus of singular Lagrangians. , 0, , .		2
809	A comparison of formalisms for electronic commerce systems. , 0, , .		5
810	Improved lsi-based natural language call routing using speech recognition confidence scores. , 0, , .		4

#	Article	IF	Citations
811	Multi-sensor, multi-source information fusion: architecture, algorithms, and applications - a panoramic overview. , 0, , .		6
812	Distributed intelligent systems: technologies and applications. , 0, , .		4
813	Method for atypical opinion extraction from answers in open-ended questions. , 0, , .		3
814	Dynamic path planning by fractional potential. , 0, , .		10
815	Proposal and simulation for high quality local positioning and posturing system (LPPS). , 0, , .		1
816	New genetic-based design of a Pi-like fuzzy logic speed controlter for an induction motor. , 0, , .		4
817	Gait selection for quadruped and hexapod walking systems. , 0, , .		2
818	Reliability analysis for computer manufacture process. , 0, , .		0
819	A biologically inspired system for the detection of partially occluded objects. , 0, , .		0
820	Semi-supervised learning techniques: k-means clustering in OODB fragmentation. , 0, , .		8
821	Concept-based interactive evolutionary computation for multi-objective path planning. , 0, , .		7
822	Logic testing of CMOS structures. , 0, , .		0
823	Operators matching in dynamic data flow architectures. , 0, , .		2
824	Natural language question processing for hungarian deep web searcher. , 0, , .		6
825	An introduction to a vision system used for a MiroSOT robot soccer system. , 0, , .		8
826	Fractional-order position/force robot control. , 0, , .		7
827	Model-based development of robotic control systems. , 0, , .		1
828	Designing the fuzzy adaptive cache swapper for MDVM system. , 0, , .		0

#	Article	IF	Citations
829	Left ventricle wall motion analysis using MRI tagging. , 0, , .		0
830	Corner detection in digital images using fuzzy reasoning. , 0, , .		7
831	Monitoring data types in distributed real-time systems. , 0, , .		2
832	An extensible transport framework for CORBA with emphasis on real-time capabilities. , 0, , .		1
833	Joint segmentation of a set of piecewise stationary processes. , 0, , .		1
834	Considerations about the choice of a differintegrator. , 0, , .		0
835	Alternative measurement of software artifacts. , 0, , .		1
836	Principles and challenges in network defense. , 0, , .		0
837	Hardware prototyping of boolean function classification schemes for lossless data compression. , 0, , .		5
838	On the performance of learning machines for bankruptcy detection. , 0, , .		9
839	Genetic - PID control for a fire tube boiler. , 0, , .		2
840	Population size and processing time in a genetic algorithm. , 0, , .		0
841	Simulation-based development of embedded sensor fusion applications. , 0, , .		0
842	Customer analysis of monthly-charged mobile content aiming at prolonging subscription period. , 0, , .		4
843	Solutions for competition cases in C-language defined application specific hardware. , 0, , .		0
844	Contribution to segmentation of digital images based on clustering. , 0, , .		2
845	Tree-matching object concept assignment to support program comprehension. , 0, , .		0
846	Formalizing UML collaborations by using description logics. , 0, , .		0

#	Article	IF	Citations
847	Wavelets filter banks based on continuous-time asymptotic filters. , 0, , .		0
848	Roby-go, a prototype for several MiroSOT soccer playing robots. , 0, , .		6
849	Open source software and open data standards in public administration. , 0, , .		4
850	A view of enterprise information systems based on contextual ontologies. , 0, , .		0
851	Dynamics of the fractional-order Van der Pol oscillator. , 0, , .		7
852	An agentbased modelling methodology for the investigation of complex adaptive production networks. , 0, , .		0
853	Stability of linear time invariant systems with interval fractional orders and interval coefficients. , 0, , .		21
854	How the database update must affect the responses being produced by the active continuous queries. , 0, , .		0
855	The fractional order lead compensator. , 0, , .		30
856	Security in a PKI-based networking environment: a multi-agent architecture for distributed security management system & control. , 0, , .		2
857	A unified framework for dynamics and Lyapunov stability of holonomically constrained rigid bodies. , 0, , .		6
858	Predictive direct stator flux control algorithm of AC induction motor in field weakening region. , 0, , .		0
859	A system approach to the analysis of traffic dynamics. , 0, , .		0
860	Towards force interaction control of biped walking robots. , 0, , .		6
861	Composable embedded systems. , 0, , .		0
862	Dynamics of freeway traffic. , 0, , .		0
863	Scicos based investigation of an adaptive vibration damping technique using fractional order derivatives. , 0, , .		0
864	Centralized and decentralized applications of a novel adaptive control. , 0, , .		3

#	Article	IF	Citations
865	Shifted fractional Legendre spectral collocation technique for solving fractional stochastic Volterra integro-differential equations. Engineering With Computers, 0, , 1.	6.1	5
866	On the Coleâ€“Hopf transformation and integration by parts formulae in computational methods within fractional differential equations and fractional optimal control theory. JVC/Journal of Vibration and Control, 0, , 107754632110310.	2.6	0
867	Numerical approximation of the time fractional cable model arising in neuronal dynamics. Engineering With Computers, 0, , 1.	6.1	23
868	Application of Genetic Algorithms to the Implementation of Fractional Electromagnetic Potentials. , 0, , .		3
869	Optimal Location of the Workpiece in a PKM-based Machining Robotic Cell. , 0, , 223-236.		0
870	Localized kernelâ€based meshless method for pricing financial options underlying fractal transmission system. Mathematical Methods in the Applied Sciences, 0, , .	2.3	14
871	Twoâ€parameter bifurcation analysis of the discrete Lorenz model. Mathematical Methods in the Applied Sciences, 0, , .	2.3	2