Jose Tenreiro Machado

List of Publications by Year
in descending order

871 papers	21,462 citations	19608 61 h-index	27345 106 g-index
916 all docs	916 docs citations	916 times ranked	8373 citing authors

#	Article	IF	Citations
1	Recent history of fractional calculus. Communications in Nonlinear Science and Numerical Simulation, 2011, 16, 1140-1153.	1.7	1,191
2	Advances in Fractional Calculus. , 2007, , .		1,008
3	The role of fractional calculus in modeling biological phenomena: A review. Communications in Nonlinear Science and Numerical Simulation, 2017, 51, 141-159.	1.7	448
4	What is a fractional derivative?. Journal of Computational Physics, 2015, 293, 4-13.	1.9	328
5	A Review of Definitions for Fractional Derivatives and Integral. Mathematical Problems in Engineering, 2014, 2014, 1-6.	0.6	307
6	A review of definitions of fractional derivatives and other operators. Journal of Computational Physics, 2019, 388, 195-208.	1.9	277
7	Tuning of PID Controllers Based on Bode?s Ideal Transfer Function. Nonlinear Dynamics, 2004, 38, 305-321.	2.7	265
8	Towards the development of intelligent transportation systems. , 0, , .		226
9	Development of fractional order capacitors based onÂelectrolyte processes. Nonlinear Dynamics, 2009, 56, 45-55.	2.7	224
10	Fractional Order Calculus: Basic Concepts and Engineering Applications. Mathematical Problems in Engineering, 2010, 2010, 1-19.	0.6	200
11	A new fractional derivative without singular kernel: Application to the modelling of the steady heat flow. Thermal Science, 2016, 20, 753-756.	0.5	197
12	Particle swarm optimization with fractional-order velocity. Nonlinear Dynamics, 2010, 61, 295-301.	2.7	196
13	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.	1.2	196
14	Fractional calculus: A survey of useful formulas. European Physical Journal: Special Topics, 2013, 222, 1827-1846.	1.2	193
15	On exact traveling-wave solutions for local fractional Korteweg-de Vries equation. Chaos, 2016, 26, 084312.	1.0	165
16	EXACT TRAVELING-WAVE SOLUTION FOR LOCAL FRACTIONAL BOUSSINESQ EQUATION IN FRACTAL DOMAIN. Fractals, 2017, 25, 1740006.	1.8	165
17	Some Applications of Fractional Calculus in Engineering. Mathematical Problems in Engineering, 2010, 2010, 1-34.	0.6	162
18	Fractional control of heat diffusion systems. Nonlinear Dynamics, 2008, 54, 263-282.	2.7	161

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19	A review of operational matrices and spectral techniques for fractional calculus. Nonlinear Dynamics, 2015, 81, 1023-1052.	2.7	154
20	Time domain design of fractional differintegrators using least-squares. Signal Processing, 2006, 86, 2567-2581.	2.1	148
21	On the formulation and numerical simulation of distributed-order fractional optimal control problems. Communications in Nonlinear Science and Numerical Simulation, 2017, 52, 177-189.	1.7	142
22	Fractional signal processing and applications. Signal Processing, 2003, 83, 2285-2286.	2.1	139
23	Analysis of the Van der Pol Oscillator Containing Derivatives of Fractional Order. JVC/Journal of Vibration and Control, 2007, 13, 1291-1301.	1.5	139
24	Fractional Electrical Impedances in Botanical Elements. JVC/Journal of Vibration and Control, 2008, 14, 1389-1402.	1.5	136
25	On a fractal LC-electric circuit modeled by local fractional calculus. Communications in Nonlinear Science and Numerical Simulation, 2017, 47, 200-206.	1.7	133
26	Traveling wave solutions to nonlinear directional couplers by modified Kudryashov method. Physica Scripta, 2020, 95, 075217.	1.2	130
27	Some pioneers of the applications of fractional calculus. Fractional Calculus and Applied Analysis, 2014, 17, 552-578.	1.2	128
28	On development of fractional calculus during the last fifty years. Scientometrics, 2014, 98, 577-582.	1.6	127
29	Optimal variable-order fractional PID controllers for dynamical systems. Journal of Computational and Applied Mathematics, 2018, 339, 40-48.	1.1	120
30	A review of power laws in real life phenomena. Communications in Nonlinear Science and Numerical Simulation, 2012, 17, 3558-3578.	1.7	119
31	Introducing the fractional-order Darwinian PSO. Signal, Image and Video Processing, 2012, 6, 343-350.	1.7	118
32	Fractional Order Generalized Information. Entropy, 2014, 16, 2350-2361.	1.1	118
33	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.	2.7	113
34	The Chronicles of Fractional Calculus. Fractional Calculus and Applied Analysis, 2017, 20, 307-336.	1.2	112
35	Chaotic Phenomena and Fractional-Order Dynamics in the Trajectory Control of Redundant Manipulators. Nonlinear Dynamics, 2002, 29, 315-342.	2.7	108
36	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.	1.4	106

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37	Fractional Order Control of a Hexapod Robot. Nonlinear Dynamics, 2004, 38, 417-433.	2.7	101
38	A new fractional derivative involving the normalized sinc function without singular kernel. European Physical Journal: Special Topics, 2017, 226, 3567-3575.	1.2	100
39	A new fractal nonlinear Burgers' equation arising in the acoustic signals propagation. Mathematical Methods in the Applied Sciences, 2019, 42, 7539-7544.	1.2	99
40	Fractional order inductive phenomena based on the skin effect. Nonlinear Dynamics, 2012, 68, 107-115.	2.7	97
41	Stability of Fractional Order Systems. Mathematical Problems in Engineering, 2013, 2013, 1-14.	0.6	95
42	Fractional order electromagnetics. Signal Processing, 2006, 86, 2637-2644.	2.1	91
43	Stability and synchronization of fractional-order memristive neural networks with multiple delays. Neural Networks, 2017, 94, 76-85.	3.3	91
44	New complex waves in nonlinear optics based on the complex Ginzburg-Landau equation with Kerr law nonlinearity. European Physical Journal Plus, 2019, 134, 1.	1.2	88
45	Entropy analysis of integer andÂfractional dynamical systems. Nonlinear Dynamics, 2010, 62, 371-378.	2.7	87
46	Fractional model for malaria transmission under control strategies. Computers and Mathematics With Applications, 2013, 66, 908-916.	1.4	87
47	And I say to myself: â€œWhat a fractional world!â€• Fractional Calculus and Applied Analysis, 2011, 14, 635-654.	1.2	86
48	Pseudo Phase Plane and Fractional Calculus modeling of western global economic downturn. Communications in Nonlinear Science and Numerical Simulation, 2015, 22, 396-406.	1.7	84
49	Fractional derivatives: Probability interpretation and frequency response of rational approximations. Communications in Nonlinear Science and Numerical Simulation, 2009, 14, 3492-3497.	1.7	81
50	Fractional State Space Analysis of Economic Systems. Entropy, 2015, 17, 5402-5421.	1.1	77
51	Variable order fractional systems. Communications in Nonlinear Science and Numerical Simulation, 2019, 71, 231-243.	1.7	75
52	The generalized Kudryashov method for nonlinear spaceâ€"time fractional partial differential equations of Burgers type. Nonlinear Dynamics, 2019, 95, 361-368.	2.7	75
53	Science metrics on fractional calculus development since 1966. Fractional Calculus and Applied Analysis, 2013, 16, 479-500.	1.2	73
54	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.	3.3	72

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55	A critical analysis of the Caputo–Fabrizio operator. Communications in Nonlinear Science and Numerical Simulation, 2018, 59, 608-611.	1.7	71
56	Fractional generalization of memristor and higher order elements. Communications in Nonlinear Science and Numerical Simulation, 2013, 18, 264-275.	1.7	70
57	Nonlinear dynamics for local fractional Burgers' equation arising in fractal flow. Nonlinear Dynamics, 2016, 84, 3-7.	2.7	70
58	The dynamical behavior of mixed-type soliton solutions described by (2+1)-dimensional Bogoyavlensky–Konopelchenko equation with variable coefficients. Journal of Electromagnetic Waves and Applications, 2018, 32, 1457-1464.	1.0	69
59	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.	1.4	68
60	Extended Algorithms for Approximating Variable Order Fractional Derivatives with Applications. Journal of Scientific Computing, 2017, 71, 1351-1374.	1.1	67
61	New nonautonomous combined multi-wave solutions for ($\varvec{2+1}$ $2 + 1$)-dimensional variable coefficients KdV equation. Nonlinear Dynamics, 2018, 93, 733-740.	2.7	67
62	A Historical Perspective of Legged Robots. JVC/Journal of Vibration and Control, 2007, 13, 1447-1486.	1.5	66
63	A literature review on the optimization of legged robots. JVC/Journal of Vibration and Control, 2012, 18, 1753-1767.	1.5	66
64	Controllability and Minimum Energy Control Problem of Fractional Discrete-Time Systems. , 2010, , 503-509.		64
65	Design of multi innovation fractional LMS algorithm for parameter estimation of input nonlinear control autoregressive systems. Applied Mathematical Modelling, 2021, 93, 412-425.	2.2	62
66	A multi-objective approach for the motion planning of redundant manipulators. Applied Soft Computing Journal, 2012, 12, 589-599.	4.1	61
67	On nonautonomous complex wave solutions described by the coupled Schrödinger–Boussinesq equation with variable-coefficients. Optical and Quantum Electronics, 2018, 50, 1.	1.5	61
68	Manipulator trajectory planning using a MOEA. Applied Soft Computing Journal, 2007, 7, 659-667.	4.1	60
69	A critical analysis of the conformable derivative. Nonlinear Dynamics, 2019, 95, 3063-3073.	2.7	60
70	Trajectory planning of redundant manipulators using genetic algorithms. Communications in Nonlinear Science and Numerical Simulation, 2009, 14, 2858-2869.	1.7	59
71	Fractional dynamics in DNA. Communications in Nonlinear Science and Numerical Simulation, 2011, 16, 2963-2969.	1.7	58
72	Which Derivative?. Fractal and Fractional, 2017, 1, 3.	1.6	58

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73	Effect of fractional orders in the velocity control of a servo system. Computers and Mathematics With Applications, 2010, 59, 1679-1686.	1.4	57
74	Complex order van der Pol oscillator. Nonlinear Dynamics, 2011, 65, 247-254.	2.7	57
75	Fractional Calculus: Quo Vadimus? (Where are we Going?). Fractional Calculus and Applied Analysis, 2015, 18, 495-526.	1.2	57
76	Energy analysis during biped walking. , 0, , .		56
77	A New Family of the Local Fractional PDEs. Fundamenta Informaticae, 2017, 151, 63-75.	0.3	56
78	Nonlinear dynamics of the patient's response to drug effect during general anesthesia. Communications in Nonlinear Science and Numerical Simulation, 2015, 20, 914-926.	1.7	54
79	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.	1.2	54
80	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.	1.7	54
81	Property of Self-Similarity Between Baseband and Modulated Signals. Mobile Networks and Applications, 2020, 25, 1537-1547.	2.2	54
82	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.	2.5	53
83	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.	0.3	53
84	Analysis of temperature time-series: Embedding dynamics into the MDS method. Communications in Nonlinear Science and Numerical Simulation, 2014, 19, 851-871.	1.7	53
85	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.	1.5	53
86	Dynamics of the Dow Jones and the NASDAQ stock indexes. Nonlinear Dynamics, 2010, 61, 691-705.	2.7	52
87	Fractional dynamics and MDS visualization of earthquake phenomena. Computers and Mathematics With Applications, 2013, 66, 647-658.	1.4	52
88	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.	1.9	52
89	A spectral framework for fractional variational problems based on fractional Jacobi functions. Applied Numerical Mathematics, 2018, 132, 51-72.	1.2	52
90	Rare and extreme events: the case of COVID-19 pandemic. Nonlinear Dynamics, 2020, 100, 2953-2972.	2.7	52

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91	Trends, directions for further research, and some open problems of fractional calculus. Nonlinear Dynamics, 2022, 107, 3245-3270.	2.7	52
92	Fractional Order PDÎ±Joint Control of Legged Robots. JVC/Journal of Vibration and Control, 2006, 12, 1483-1501.	1.5	51
93	Fractional dynamics in the trajectory control of redundant manipulators. Communications in Nonlinear Science and Numerical Simulation, 2008, 13, 1836-1844.	1.7	50
94	Fractional dynamics and its applications. Nonlinear Dynamics, 2015, 80, 1661-1664.	2.7	50
95	An Extended Predictorâ€"Corrector Algorithm for Variable-Order Fractional Delay Differential Equations. Journal of Computational and Nonlinear Dynamics, 2016, 11, .	0.7	50
96	Numerical approximation of the nonlinear time-fractional telegraph equation arising in neutron transport. Communications in Nonlinear Science and Numerical Simulation, 2021, 99, 105755.	1.7	50
97	Dynamic modeling of a Stewart platform using the generalized momentum approach. Communications in Nonlinear Science and Numerical Simulation, 2009, 14, 3389-3401.	1.7	49
98	Employeesâ€™ skills, manufacturing flexibility and performance: a structural equation modelling applied to the automotive industry. International Journal of Production Research, 2015, 53, 4087-4101.	4.9	48
99	Performance of Fractional PID Algorithms Controlling Nonlinear Systems with Saturation and Backlash Phenomena. JVC/Journal of Vibration and Control, 2007, 13, 1407-1418.	1.5	47
100	Optimal tuning of fractional controllers using genetic algorithms. Nonlinear Dynamics, 2010, 62, 447-452.	2.7	47
101	Identifying economic periods and crisis withÂtheÂmultidimensional scaling. Nonlinear Dynamics, 2011, 63, 611-622.	2.7	46
102	Analysis of financial data series using fractional Fourier transform and multidimensional scaling. Nonlinear Dynamics, 2011, 65, 235-245.	2.7	46
103	Fractional order models of leaves. JVC/Journal of Vibration and Control, 2014, 20, 998-1008.	1.5	46
104	Relative fractional dynamics of stock markets. Nonlinear Dynamics, 2016, 86, 1613-1619.	2.7	46
105	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.	0.8	46
106	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>â^ž</mml:mi></mml:mrow></mm controller design using Augmented Lagrangian Particle Swarm Optimization with Fractional Order Velocity. Applied Soft Computing Journal, 2019, 77, 688-695.	4.1	46
107	Introduction to Fractional Differential Equations. Advances in Dynamics, Patterns, Cognition, 2019, , .	0.2	46
108	Chebyshev spectral methods for multi-order fractional neutral pantograph equations. Nonlinear Dynamics, 2020, 100, 3785-3797.	2.7	46

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109	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.	3.3	45
110	Generalized shifted Chebyshev polynomials for fractional optimal control problems. Communications in Nonlinear Science and Numerical Simulation, 2019, 75, 50-61.	1.7	45
111	Multi-dimensional spectral tau methods for distributed-order fractional diffusion equations. Computers and Mathematics With Applications, 2020, 79, 476-488.	1.4	45
112	Numerical approach for modeling fractional heat conduction in porous medium with the generalized Cattaneo model. Applied Mathematical Modelling, 2021, 100, 107-124.	2.2	45
113	Mathematical aspects of the Heisenberg uncertainty principle within local fractional Fourier analysis. Boundary Value Problems, 2013, 2013, .	0.3	44
114	Fractional Derivatives: The Perspective of System Theory. Mathematics, 2019, 7, 150.	1.1	44
115	Experimental Signal Analysis of Robot Impacts in a Fractional Calculus Perspective. Journal of Advanced Computational Intelligence and Intelligent Informatics, 2007, 11, 1079-1085.	0.5	44
116	Analysis of stock market indices through multidimensional scaling. Communications in Nonlinear Science and Numerical Simulation, 2011, 16, 4610-4618.	1.7	43
117	An extension of estimation of domain of attraction for fractional order linear system subject to saturation control. Applied Mathematics Letters, 2015, 47, 26-34.	1.5	43
118	An integro quadratic spline approach for a class of variable-order fractional initial value problems. Chaos, Solitons and Fractals, 2017, 102, 354-360.	2.5	43
119	Numerical approach for solving variable-order space–time fractional telegraph equation using transcendental Bernstein series. Engineering With Computers, 2020, 36, 867-878.	3.5	43
120	An innovative fractional order LMS algorithm for power signal parameter estimation. Applied Mathematical Modelling, 2020, 83, 703-718.	2.2	43
121	The Persistence of Memory. Nonlinear Dynamics, 2015, 79, 63-82.	2.7	42
122	Fractional-Order Devices. SpringerBriefs in Applied Sciences and Technology, 2017, , .	0.2	42
123	Shifted Jacobi–Gauss-collocation with convergence analysis for fractional integro-differential equations. Communications in Nonlinear Science and Numerical Simulation, 2019, 72, 342-359.	1.7	42
124	Lyapunov method for the stability analysis of uncertain fractional-order systems under input saturation. Applied Mathematical Modelling, 2020, 81, 663-672.	2.2	42
125	The recovery of global stock markets indices after impacts due to pandemics. Research in International Business and Finance, 2021, 55, 101335.	3.1	42
126	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.	4.4	42

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127	Multidimensional Scaling Visualization Using Parametric Similarity Indices. Entropy, 2015, 17, 1775-1794.	1.1	41
128	Analysis of Natural and Artificial Phenomena Using Signal Processing and Fractional Calculus. Fractional Calculus and Applied Analysis, 2015, 18, 459-478.	1.2	41
129	A fractional perspective to the bond graph modelling of world economies. Nonlinear Dynamics, 2015, 80, 1839-1852.	2.7	41
130	Efficient Legendre spectral tau algorithm for solving the two-sided space–time Caputo fractional advection–dispersion equation. JVC/Journal of Vibration and Control, 2016, 22, 2053-2068.	1.5	41
131	Dynamic stability analysis of fractional order leaky integrator echo state neural networks. Communications in Nonlinear Science and Numerical Simulation, 2017, 47, 328-337.	1.7	41
132	Describing Function Analysis of Systems with Impacts and Backlash. Nonlinear Dynamics, 2002, 29, 235-250.	2.7	40
133	Optimal Controllers with Complex Order Derivatives. Journal of Optimization Theory and Applications, 2013, 156, 2-12.	0.8	40
134	Dynamical Stability and Predictability of Football Players: The Study of One Match. Entropy, 2014, 16, 645-674.	1.1	40
135	Design and implementation of grid multi-scroll fractional-order chaotic attractors. Chaos, 2016, 26, 084303.	1.0	40
136	Integer and fractional-order entropy analysis of earthquake data series. Nonlinear Dynamics, 2016, 84, 79-90.	2.7	40
137	Uniform stability of Fractional Order Leaky Integrator Echo State Neural Network with multiple time delays. Information Sciences, 2017, 418-419, 703-716.	4.0	40
138	Stability analysis of a class of nonlinear fractional–order systems under control input saturation. International Journal of Robust and Nonlinear Control, 2018, 28, 2887-2905.	2.1	40
139	Numerical approach for modeling fractal mobile/immobile transport model in porous and fractured media. International Communications in Heat and Mass Transfer, 2020, 111, 104443.	2.9	40
140	Systems of Navier-Stokes Equations on Cantor Sets. Mathematical Problems in Engineering, 2013, 2013, 1-8.	0.6	39
141	Analysis and Visualization of Seismic Data Using Mutual Information. Entropy, 2013, 15, 3892-3909.	1.1	39
142	Numerical approach for a class of distributed order time fractional partial differential equations. Applied Numerical Mathematics, 2019, 136, 152-162.	1.2	39
143	Numerical study of the nonlinear anomalous reaction–subdiffusion process arising in the electroanalytical chemistry. Journal of Computational Science, 2021, 53, 101394.	1.5	39
144	Fractional-order impulse response of the respiratory system. Computers and Mathematics With Applications, 2011, 62, 845-854.	1.4	38

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145	Adaptive state-of-charge estimation of lithium-ion batteries based on square-root unscented Kalman filter. Energy, 2022, 252, 123972.	4.5	38
146	Modelling and simulation of artificial locomotion systems. Robotica, 2005, 23, 595-606.	1.3	37
147	A Survey of Technologies for Climbing Robots Adhesion to Surfaces. , 2008, , .		37
148	Calculation of fractional derivatives of noisy data withÂgenetic algorithms. Nonlinear Dynamics, 2009, 57, 253-260.	2.7	37
149	A fuzzified systematic adjustment of the robotic Darwinian PSO. Robotics and Autonomous Systems, 2012, 60, 1625-1639.	3.0	37
150	Numerical solution of time-fractional fourth-order reaction-diffusion model arising in composite environments. Applied Mathematical Modelling, 2021, 89, 819-836.	2.2	37
151	Optimal control of variable-order fractional model for delay cancer treatments. Applied Mathematical Modelling, 2021, 89, 1557-1574.	2.2	37
152	Partial chaos suppression in a fractional order macroeconomic model. Mathematics and Computers in Simulation, 2016, 122, 55-68.	2.4	36
153	Application of fractional algorithms in the control of a robotic bird. Communications in Nonlinear Science and Numerical Simulation, 2010, 15, 895-910.	1.7	35
154	Wavelet analysis of human DNA. Genomics, 2011, 98, 155-163.	1.3	35
155	A computationally efficient method for tempered fractional differential equations with application. Computational and Applied Mathematics, 2018, 37, 3657-3671.	1.3	35
156	Efficient fractional-order modified Harris hawks optimizer for proton exchange membrane fuel cell modeling. Engineering Applications of Artificial Intelligence, 2021, 100, 104193.	4.3	35
157	An evolutionary approach for the motion planning ofÂredundant and hyper-redundant manipulators. Nonlinear Dynamics, 2010, 60, 115-129.	2.7	34
158	Milk Characterization Using Electrical Impedance Spectroscopy and Fractional Models. Food Analytical Methods, 2018, 11, 901-912.	1.3	34
159	Computational scheme for solving nonlinear fractional stochastic differential equations with delay. Stochastic Analysis and Applications, 2019, 37, 893-908.	0.9	34
160	Fractional-order hybrid control of robot manipulators. , 0, , .		33
161	Approximating fractional derivatives in the perspective ofÂsystem control. Nonlinear Dynamics, 2009, 56, 401-407.	2.7	33
162	Relativistic time effects in financial dynamics. Nonlinear Dynamics, 2014, 75, 735-744.	2.7	33

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163	Analysis of diffusion process in fractured reservoirs using fractional derivative approach. Communications in Nonlinear Science and Numerical Simulation, 2014, 19, 3161-3170.	1.7	33
164	Numerical evaluation of fractional Tricomi-type model arising from physical problems of gas dynamics. Journal of Advanced Research, 2020, 25, 205-216.	4.4	33
165	An efficient local meshless approach for solving nonlinear time-fractional fourth-order diffusion model. Journal of King Saud University - Science, 2021, 33, 101243.	1.6	33
166	A review of structural health monitoring of bonded structures using electromechanical impedance spectroscopy. Structural Health Monitoring, 2022, 21, 228-249.	4.3	33
167	Fractional order dynamics in a GA planner. Signal Processing, 2003, 83, 2377-2386.	2.1	32
168	FRACTIONAL DYNAMICS IN FINANCIAL INDICES. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2012, 22, 1250249.	0.7	32
169	Controllability results for impulsive mixed-type functional integro-differential evolution equations with nonlocal conditions. Fixed Point Theory and Applications, 2013, 2013, .	1.1	32
170	Rhapsody in fractional. Fractional Calculus and Applied Analysis, 2014, 17, 1188-1214.	1.2	32
171	An Efficient Operational Matrix Technique for Multidimensional Variable-Order Time Fractional Diffusion Equations. Journal of Computational and Nonlinear Dynamics, 2016, 11, .	0.7	32
172	Challenges in fractional dynamics and control theory. JVC/Journal of Vibration and Control, 2016, 22, 2151-2152.	1.5	32
173	Complex-order dynamics in hexapod locomotion. Signal Processing, 2006, 86, 2785-2793.	2.1	31
174	Describing function of two masses with backlash. Nonlinear Dynamics, 2009, 56, 409-413.	2.7	31
175	Complex dynamics of financial indices. Nonlinear Dynamics, 2013, 74, 287-296.	2.7	31
176	Chaos suppression in fractional systems using adaptive fractional state feedback control. Chaos, Solitons and Fractals, 2017, 103, 488-503.	2.5	31
177	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.	2.0	31
178	The fractional order lead compensator. , 0, , .		30
179	Implementation of fractional-order electromagnetic potential through a genetic algorithm. Communications in Nonlinear Science and Numerical Simulation, 2009, 14, 1838-1843.	1.7	30
180	Control of a heat diffusion system through a fractional order nonlinear algorithm. Computers and Mathematics With Applications, 2010, 59, 1687-1694.	1.4	30

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181	Fractional Order Sliding Mode Controller Design for Fractional Order Dynamic Systems. , 2010, , 463-470.		30
182	Application of Integer and Fractional Models in Electrochemical Systems. Mathematical Problems in Engineering, 2012, 2012, 1-17.	0.6	30
183	Modeling vegetable fractals by means of fractional-order equations. JVC/Journal of Vibration and Control, 2016, 22, 2100-2108.	1.5	30
184	Jacobi Collocation Approximation for Solving Multi-dimensional Volterra Integral Equations. International Journal of Nonlinear Sciences and Numerical Simulation, 2017, 18, 411-425.	0.4	30
185	A Robust Algorithm for Nonlinear Variable-Order Fractional Control Systems with Delay. International Journal of Nonlinear Sciences and Numerical Simulation, 2018, 19, 231-238.	0.4	30
186	Stability analysis of fractional Quaternion-Valued Leaky Integrator Echo State Neural Networks with multiple time-varying delays. Neurocomputing, 2019, 331, 388-402.	3.5	30
187	Fractional Order Model of Beam Heating Process and Its Experimental Verification. , 2010, , 287-294.		30
188	Shannon, Rényie and Tsallis entropy analysis of DNA using phase plane. Nonlinear Analysis: Real World Applications, 2011, 12, 3135-3144.	0.9	29
189	Complex-order forced van der Pol oscillator. JVC/Journal of Vibration and Control, 2012, 18, 2201-2209.	1.5	29
190	SM-Algorithms for Approximating the Variable-Order Fractional Derivative of High Order. Fundamenta Informaticae, 2017, 151, 293-311.	0.3	29
191	Kinematic and dynamic performance analysis of artificial legged systems. Robotica, 2008, 26, 19-39.	1.3	28
192	Fractional Dynamics: A Statistical Perspective. Journal of Computational and Nonlinear Dynamics, 2008, 3, .	0.7	28
193	Approximating fractional derivatives through the generalized mean. Communications in Nonlinear Science and Numerical Simulation, 2009, 14, 3723-3730.	1.7	28
194	Fractional order modelling of dynamic backlash. Mechatronics, 2013, 23, 741-745.	2.0	28
195	Fractional order description of DNA. Applied Mathematical Modelling, 2015, 39, 4095-4102.	2.2	28
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