Jose Tenreiro Machado

List of Publications by Year in Descending Order

765 papers	**15,352** citations	**55** h-index	**96** g-index
916 ext. papers	**18,507** ext. citations	**3.1** avg, IF	**7.82** L-index

#	Paper	IF	Citations
765	Trends, directions for further research, and some open problems of fractional calculus. *Nonlinear Dynamics*, **2022**, 107, 3245	5	4
764	State-of-Charge Estimation of Lithium-Ion Batteries Based on Fractional-Order Square-Root Unscented Kalman Filter. *Fractal and Fractional*, **2022**, 6, 52	3	1
763	Command-filtered compound FAT learning control of fractional-order nonlinear systems with input delay and external disturbances. *Nonlinear Dynamics*, **2022**, 108, 293	5	2
762	A computational view of electrophysiological properties under different atrial fibrosis conditions. *Applied Mathematical Modelling*, **2022**, 105, 534-550	4.5	
761	Numerical treatment of microscale heat transfer processes arising in thin films of metals. *International Communications in Heat and Mass Transfer*, **2022**, 132, 105892	5.8	0
760	Fractional-order shifted Legendre collocation method for solving non-linear variable-order fractional Fredholm integro-differential equations. *Computational and Applied Mathematics*, **2022**, 41, 1	2.4	0
759	Analytical stability analysis of the fractional-order particle swarm optimization algorithm. *Chaos, Solitons and Fractals*, **2022**, 155, 111658	9.3	3
758	Analysis of dual Bernstein operators in the solution of the fractional convection–diffusion equation arising in underground water pollution. *Journal of Computational and Applied Mathematics*, **2022**, 399, 113729	2.4	0
757	How Many Fractional Derivatives Are There?. *Mathematics*, **2022**, 10, 737	2.3	7
756	Multidimensional scaling and visualization of patterns in global large-scale accidents. *Chaos, Solitons and Fractals*, **2022**, 157, 111951	9.3	1
755	Multidimensional Analysis of Near-Earth Asteroids. *SN Computer Science*, **2022**, 3, 1	2	0
754	Fractional generalization of entropy improves the characterization of rotors in simulated atrial fibrillation. *Applied Mathematics and Computation*, **2022**, 425, 127077	2.7	0
753	Shannon Information Analysis of the Chromosome Code. *Advances in Dynamics, Patterns, Cognition*, **2022**, 1-12	0.7	
752	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	2
751	Adaptive state-of-charge estimation of lithium-ion batteries based on square-root unscented Kalman filter. *Energy*, **2022**, 123972	7.9	0
750	Revisiting the Formula for the Ramanujan Constant of a Series. *Mathematics*, **2022**, 10, 1539	2.3	0
749	The 21st Century Systems: An Updated Vision of Continuous-Time Fractional Models. *IEEE Circuits and Systems Magazine*, **2022**, 22, 36-56	3.2	1

748	An Efficient Operational Matrix Technique for Variable-Order Fractional Optimal Control Problems. *Nonlinear Physical Science*, **2022**, 131-146	0.1	
747	Solving Nonlinear Variable-Order Time Fractional Convection-Diffusion Equation with Generalized Polynomials. *Nonlinear Physical Science*, **2022**, 147-161	0.1	
746	Integral Inequalities for Generalized Harmonically Convex Functions in Fuzzy-Interval-Valued Settings. *Symmetry*, **2021**, 13, 2352	2.7	9
745	Fractional-Order Sensing and Control: Embedding the Nonlinear Dynamics of Robot Manipulators into the Multidimensional Scaling Method. *Sensors*, **2021**, 21,	3.8	2
744	Overview in Summabilities: Summation Methods for Divergent Series, Ramanujan Summation and Fractional Finite Sums. *Mathematics*, **2021**, 9, 2963	2.3	1
743	Delay-Dependent and Order-Dependent Guaranteed Cost Control for Uncertain Fractional-Order Delayed Linear Systems. *Mathematics*, **2021**, 9, 41	2.3	4
742	Discretization of Fractional Operators: Analysis by Means of Advanced Computational Techniques. *Mathematics*, **2021**, 9, 2429	2.3	
741	On the Calculation of the Moore–Penrose and Drazin Inverses: Application to Fractional Calculus. *Mathematics*, **2021**, 9, 2501	2.3	2
740	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*, **2021**,	1.8	13
739	A Chebyshev Wavelet Collocation Method for Some Types of Differential Problems. *Symmetry*, **2021**, 13, 536	2.7	12
738	Numerical solution of nonlinear fractional optimal control problems using generalized Bernoulli polynomials. *Optimal Control Applications and Methods*, **2021**, 42, 1045-1063	1.7	2
737	Relation Between New Rooted Trees and Derivatives of Differential Equations **2021**, 45, 1025-1036		
736	Efficient fractional-order modified Harris hawks optimizer for proton exchange membrane fuel cell modeling. *Engineering Applications of Artificial Intelligence*, **2021**, 100, 104193	7.2	15
735	Substantial, tempered, and shifted fractional derivatives: Three faces of a tetrahedron. *Mathematical Methods in the Applied Sciences*, **2021**, 44, 9191-9209	2.3	8
734	Dynamical Analysis of the Dow Jones Index Using Dimensionality Reduction and Visualization. *Entropy*, **2021**, 23,	2.8	2
733	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	2.4	1
732	Design of multi innovation fractional LMS algorithm for parameter estimation of input nonlinear control autoregressive systems. *Applied Mathematical Modelling*, **2021**, 93, 412-425	4.5	19
731	Adomian Decomposition and Fractional Power Series Solution of a Class of Nonlinear Fractional Differential Equations. *Mathematics*, **2021**, 9, 1070	2.3	9

730	Entropy analysis of human death uncertainty. *Nonlinear Dynamics*, **2021**, 104, 1-15	5	0
729	An optimization technique for solving a class of nonlinear fractional optimal control problems: Application in cancer treatment. *Applied Mathematical Modelling*, **2021**, 93, 868-884	4.5	9
728	Uniform Manifold Approximation and Projection Analysis of Soccer Players. *Entropy*, **2021**, 23,	2.8	2
727	In memory of the honorary founding editors behind the FCAA success story. *Fractional Calculus and Applied Analysis*, **2021**, 24, 641-666	2.7	
726	Assessing the Effect of Laboratory Activities on Core Curricular Units of an Engineering Master's Program: A Multivariate Analysis. *Mathematical Problems in Engineering*, **2021**, 2021, 1-13	1.1	1
725	Numerical study of the nonlinear anomalous reaction–subdiffusion process arising in the electroanalytical chemistry. *Journal of Computational Science*, **2021**, 53, 101394	3.4	16
724	Cluster analysis of the large natural satellites in the solar system. *Applied Mathematical Modelling*, **2021**, 89, 1268-1278	4.5	2
723	Complex-order particle swarm optimization. *Communications in Nonlinear Science and Numerical Simulation*, **2021**, 92, 105448	3.7	16
722	Numerical solution of time-fractional fourth-order reaction-diffusion model arising in composite environments. *Applied Mathematical Modelling*, **2021**, 89, 819-836	4.5	25
721	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	3.7	9
720	A new hybrid method for two dimensional nonlinear variable order fractional optimal control problems. *Asian Journal of Control*, **2021**, 23, 2004-2018	1.7	0
719	The recovery of global stock markets indices after impacts due to pandemics. *Research in International Business and Finance*, **2021**, 55, 101335	4.8	23
718	On multistep tumor growth models of fractional variable-order. *BioSystems*, **2021**, 199, 104294	1.9	11
717	Multidimensional scaling analysis of generalized mean discrete-time fractional order controllers. *Communications in Nonlinear Science and Numerical Simulation*, **2021**, 95, 105657	3.7	5
716	Spontaneous activation under atrial fibrosis: A model using complex order derivatives. *Communications in Nonlinear Science and Numerical Simulation*, **2021**, 95, 105618	3.7	3
715	Modeling and visualizing competitiveness in soccer leagues. *Applied Mathematical Modelling*, **2021**, 92, 136-148	4.5	1
714	Robust stability of uncertain fractional order systems of neutral type with distributed delays and control input saturation. *ISA Transactions*, **2021**, 111, 144-155	5.5	4
713	An efficient local meshless approach for solving nonlinear time-fractional fourth-order diffusion model. *Journal of King Saud University - Science*, **2021**, 33, 101243	3.6	15

712	Numerical evaluation of the fractional Klein-Kramers model arising in molecular dynamics. *Journal of Computational Physics*, **2021**, 428, 109983	4.1	19
711	Optimal control of variable-order fractional model for delay cancer treatments. *Applied Mathematical Modelling*, **2021**, 89, 1557-1574	4.5	17
710	Robust stability analysis of uncertain fractional order neutral-type delay nonlinear systems with actuator saturation. *Applied Mathematical Modelling*, **2021**, 90, 1035-1048	4.5	7
709	Design of fractional evolutionary processing for reactive power planning with FACTS devices. *Scientific Reports*, **2021**, 11, 593	4.9	15
708	On distinctive solitons type solutions for some important nonlinear Schrödinger equations. *Optical and Quantum Electronics*, **2021**, 53, 1	2.4	6
707	Observer-based control approach for fractional-order delay systems of neutral type with saturating actuator. *Mathematical Methods in the Applied Sciences*, **2021**, 44, 8554-8564	2.3	2
706	A Clustering Perspective of the Collatz Conjecture. *Mathematics*, **2021**, 9, 314	2.3	6
705	The bouncing ball and the Grünwald-Letnikov definition of fractional derivative. *Fractional Calculus and Applied Analysis*, **2021**, 24, 1003-1014	2.7	4
704	Optimal solution of the fractional order breast cancer competition model. *Scientific Reports*, **2021**, 11, 15622	4.9	1
703	Advances in the computational analysis of SARS-COV2 genome. *Nonlinear Dynamics*, **2021**, 106, 1-31	5	1
702	Numerical approximation of the nonlinear time-fractional telegraph equation arising in neutron transport. *Communications in Nonlinear Science and Numerical Simulation*, **2021**, 99, 105755	3.7	28
701	Convergence boundaries of complex-order particle swarm optimization algorithm with weak stagnation: dynamical analysis. *Nonlinear Dynamics*, **2021**, 106, 725-743	5	1
700	Fractional and fractal processes applied to cryptocurrencies price series. *Journal of Advanced Research*, **2021**, 32, 85-98	13	5
699	Double color image encryption based on fractional order discrete improved Henon map and Rubik's cube transform. *Signal Processing: Image Communication*, **2021**, 97, 116363	2.8	3
698	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	13	18
697	Numerical simulation of a degenerate parabolic problem occurring in the spatial diffusion of biological population. *Chaos, Solitons and Fractals*, **2021**, 151, 111220	9.3	4
696	Particle swarm optimization algorithm using complex-order derivative concept: A comprehensive study. *Applied Soft Computing Journal*, **2021**, 111, 107641	7.5	5
695	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	3.7	4

694	Dynamics and bifurcations of a discrete-time prey-predator model with Allee effect on the prey population. *Ecological Complexity*, **2021**, 48, 100962	2.6	3
693	Numerical approach for modeling fractional heat conduction in porous medium with the generalized Cattaneo model. *Applied Mathematical Modelling*, **2021**, 100, 107-124	4.5	2
692	Fractional LMS and NLMS Algorithms for Line Echo Cancellation. *Arabian Journal for Science and Engineering*, **2021**, 46, 9385-9398	2.5	4
691	Utilizing Macro Fiber Composite to Control Rotating Blade Vibrations. *Symmetry*, **2020**, 12, 1984	2.7	4
690	A Review of Fractional Order Entropies. *Entropy*, **2020**, 22,	2.8	9
689	A Review of Sample and Hold Systems and Design of a New Fractional Algorithm. *Applied Sciences (Switzerland)*, **2020**, 10, 7360	2.6	3
688	Fractal and Entropy Analysis of the Dow Jones Index Using Multidimensional Scaling. *Entropy*, **2020**, 22,	2.8	3
687	Fractional-order modelling of epoxy resin. *Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences*, **2020**, 378, 20190292	3	8
686	Rare and extreme events: the case of COVID-19 pandemic. *Nonlinear Dynamics*, **2020**, 100, 1-20	5	33
685	Commensurate and Non-Commensurate Fractional-Order Discrete Models of an Electric Individual-Wheel Drive on an Autonomous Platform. *Entropy*, **2020**, 22,	2.8	2
684	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	2.4	4
683	Ball Comparison between Three Sixth Order Methods for Banach Space Valued Operators. *Mathematics*, **2020**, 8, 667	2.3	1
682	An Evolutionary Perspective of Virus Propagation. *Mathematics*, **2020**, 8, 779	2.3	4
681	Chebyshev spectral methods for multi-order fractional neutral pantograph equations. *Nonlinear Dynamics*, **2020**, 100, 3785-3797	5	29
680	Shifted fractional Jacobi collocation method for solving fractional functional differential equations of variable order. *Chaos, Solitons and Fractals*, **2020**, 134, 109721	9.3	17
679	Fractional Dynamics in Soccer Leagues. *Symmetry*, **2020**, 12, 356	2.7	3
678	Existence of Bounded Solutions to a Modified Version of the Bagley–Torvik Equation. *Mathematics*, **2020**, 8, 289	2.3	
677	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	2.2	24

676	Abundant structures of waves in plasma transitional layer sheath. *Chinese Journal of Physics*, **2020**, 67, 147-154	3.5	3
675	Numerical evaluation of fractional Tricomi-type model arising from physical problems of gas dynamics. *Journal of Advanced Research*, **2020**, 25, 205-216	13	23
674	Computational analysis of the SARS-CoV-2 and other viruses based on the Kolmogorov's complexity and Shannon's information theories. *Nonlinear Dynamics*, **2020**, 101, 1-20	5	10
673	Analysis and implementation of fractional-order chaotic system with standard components. *Journal of Advanced Research*, **2020**, 25, 97-109	13	8
672	New discrete-time fractional derivatives based on the bilinear transformation: Definitions and properties. *Journal of Advanced Research*, **2020**, 25, 1-10	13	11
671	Fractional Dynamics and Pseudo-Phase Space of Country Economic Processes. *Mathematics*, **2020**, 8, 81	2.3	5
670	Highly accurate technique for solving distributed-order time-fractional-sub-diffusion equations of fourth order. *Computational and Applied Mathematics*, **2020**, 39, 1	2.4	4
669	Generalized shifted Chebyshev polynomials: Solving a general class of nonlinear variable order fractional PDE. *Communications in Nonlinear Science and Numerical Simulation*, **2020**, 85, 105229	3.7	14
668	Lyapunov method for the stability analysis of uncertain fractional-order systems under input saturation. *Applied Mathematical Modelling*, **2020**, 81, 663-672	4.5	21
667	Multidimensional scaling locus of memristor and fractional order elements. *Journal of Advanced Research*, **2020**, 25, 147-157	13	16
666	Re-Evaluating the Classical Falling Body Problem. *Mathematics*, **2020**, 8, 553	2.3	2
665	Generalized Bernoulli Polynomials: Solving Nonlinear 2D Fractional Optimal Control Problems. *Journal of Scientific Computing*, **2020**, 83, 1	2.3	5
664	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	0.7	
663	Fractional fractals. *Fractional Calculus and Applied Analysis*, **2020**, 23, 1329-1348	2.7	0
662	Traveling wave solutions to nonlinear directional couplers by modified Kudryashov method. *Physica Scripta*, **2020**, 95, 075217	2.6	69
661	Application of the Euler and Runge-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	1.8	15
660	Numerical approach for modeling fractal mobile/immobile transport model in porous and fractured media. *International Communications in Heat and Mass Transfer*, **2020**, 111, 104443	5.8	27
659	A combined measure to differentiate EEG signals using fractal dimension and MFDFA-Hurst. *Communications in Nonlinear Science and Numerical Simulation*, **2020**, 84, 105170	3.7	12

658	Numerical solution of the fractional Rayleigh–Stokes model arising in a heated generalized second-grade fluid. *Engineering With Computers*, **2020**, 37, 1751	4.5	22
657	Multidimensional scaling and visualization of patterns in prime numbers. *Communications in Nonlinear Science and Numerical Simulation*, **2020**, 83, 105128	3.7	14
656	Measuring the Brazilian ethanol and gasoline market efficiency using DFA-Hurst and fractal dimension. *Energy Economics*, **2020**, 85, 104614	8.3	11
655	Time-fractional dependence of the shear force in some beam type problems with negative Young modulus. *Applied Mathematical Modelling*, **2020**, 80, 668-682	4.5	5
654	The (psi)-Hilfer fractional calculus of variable order and its applications. *Computational and Applied Mathematics*, **2020**, 39, 1	2.4	8
653	Dynamics and optimal control of multibody systems using fractional generalized divide-and-conquer algorithm. *Nonlinear Dynamics*, **2020**, 102, 1611-1626	5	0
652	Stability analysis of fractional order neutral-type systems considering time varying delays, nonlinear perturbations, and input saturation. *Mathematical Methods in the Applied Sciences*, **2020**, 43, 10332-10345	2.3	7
651	Generalized Newtonian fractional model for the vertical motion of a particle. *Applied Mathematical Modelling*, **2020**, 88, 652-660	4.5	3
650	Improved Decentralized Fractional PD Control of Structure Vibrations. *Mathematics*, **2020**, 8, 326	2.3	16
649	Output-feedback-guaranteed cost control of fractional-order uncertain linear delayed systems. *Computational and Applied Mathematics*, **2020**, 39, 1	2.4	7
648	A discrete polynomials approach for optimal control of fractional Volterra integro-differential equations. *JVC/Journal of Vibration and Control*, **2020**, 107754632097115	2	3
647	On dual Bernstein polynomials and stochastic fractional integro-differential equations. *Mathematical Methods in the Applied Sciences*, **2020**, 43, 9928-9947	2.3	3
646	Analysis of a rectangular prism n-units RLC fractional-order circuit network. *AEJ - Alexandria Engineering Journal*, **2020**, 59, 3091-3104	6.1	3
645	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	2.6	22
644	Solving nonlinear systems of fractional-order partial differential equations using an optimization technique based on generalized polynomials. *Computational and Applied Mathematics*, **2020**, 39, 1	2.4	3
643	Revisiting the 1D and 2D Laplace Transforms. *Mathematics*, **2020**, 8, 1330	2.3	9
642	Solitary Wave Solutions of the Generalized Rosenau-KdV-RLW Equation. *Mathematics*, **2020**, 8, 1601	2.3	9
641	Variable coefficient fractional-order PID controller and its application to a SEPIC device. *IET Control Theory and Applications*, **2020**, 14, 900-908	2.5	8

640	Computer Analysis of Human Belligerency. *Mathematics*, **2020**, 8, 1201	2.3	1
639	Understanding COVID-19 nonlinear multi-scale dynamic spreading in Italy. *Nonlinear Dynamics*, **2020**, 101, 1-37	5	14
638	Sufficient conditions for existence and uniqueness of fractional stochastic delay differential equations. *Stochastics*, **2020**, 92, 379-396	0.6	12
637	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	2.1	9
636	Numerical approach for solving variable-order space-time fractional telegraph equation using transcendental Bernstein series. *Engineering With Computers*, **2020**, 36, 867-878	4.5	29
635	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	3.7	44
634	On the properties of some operators under the perspective of fractional system theory. *Communications in Nonlinear Science and Numerical Simulation*, **2020**, 82, 105022	3.7	9
633	Electrochemical impedance spectroscopy characterization of beverages. *Food Chemistry*, **2020**, 302, 125345	8.5	10
632	Multi-dimensional spectral tau methods for distributed-order fractional diffusion equations. *Computers and Mathematics With Applications*, **2020**, 79, 476-488	2.7	23
631	Property of Self-Similarity Between Baseband and Modulated Signals. *Mobile Networks and Applications*, **2020**, 25, 1537-1547	2.9	19
630	An innovative fractional order LMS algorithm for power signal parameter estimation. *Applied Mathematical Modelling*, **2020**, 83, 703-718	4.5	24
629	An efficient numerical technique for variable order time fractional nonlinear Klein-Gordon equation. *Applied Numerical Mathematics*, **2020**, 154, 260-272	2.5	8
628	A new fractal nonlinear Burgers' equation arising in the acoustic signals propagation. *Mathematical Methods in the Applied Sciences*, **2019**, 42, 7539-7544	2.3	68
627	Design of momentum fractional LMS for Hammerstein nonlinear system identification with application to electrically stimulated muscle model. *European Physical Journal Plus*, **2019**, 134, 1	3.1	21
626	Dynamic Shannon Performance in a Multiobjective Particle Swarm Optimization. *Entropy*, **2019**, 21, 827	2.8	2
625	Optimal control of nonlinear fed-batch process using direct transcription method. *Computers and Chemical Engineering*, **2019**, 130, 106561	4	7
624	The failure of certain fractional calculus operators in two physical models. *Fractional Calculus and Applied Analysis*, **2019**, 22, 255-270	2.7	23
623	A computational perspective of the periodic table of elements. *Communications in Nonlinear Science and Numerical Simulation*, **2019**, 78, 104883	3.7	4

622	Computational scheme for solving nonlinear fractional stochastic differential equations with delay. *Stochastic Analysis and Applications*, **2019**, 37, 893-908	1.1	22
621	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	9.1	27
620	The Lorentz transformations and one observation in the perspective of fractional calculus. *Communications in Nonlinear Science and Numerical Simulation*, **2019**, 78, 104855	3.7	2
619	Fractional Rényi entropy?. *European Physical Journal Plus*, **2019**, 134, 1	3.1	11
618	A piecewise spectral-collocation method for solving fractional Riccati differential equation in large domains. *Computational and Applied Mathematics*, **2019**, 38, 1	2.4	9
617	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	2.7	22
616	Derivative Free Fourth Order Solvers of Equations with Applications in Applied Disciplines. *Symmetry*, **2019**, 11, 586	2.7	0
615	A review of definitions of fractional derivatives and other operators. *Journal of Computational Physics*, **2019**, 388, 195-208	4.1	141
614	Numerical solution of mixed-type fractional functional differential equations using modified Lucas polynomials. *Computational and Applied Mathematics*, **2019**, 38, 1	2.4	18
613	Solving Two-Dimensional Variable-Order Fractional Optimal Control Problems With Transcendental Bernstein Series. *Journal of Computational and Nonlinear Dynamics*, **2019**, 14,	1.4	19
612	Mathematical and computational modeling of political systems. *Nonlinear Dynamics*, **2019**, 96, 1471-1490	3	1
611	Generalized shifted Chebyshev polynomials for fractional optimal control problems. *Communications in Nonlinear Science and Numerical Simulation*, **2019**, 75, 50-61	3.7	33
610	Ranking the scientific output of researchers in fractional calculus. *Fractional Calculus and Applied Analysis*, **2019**, 22, 11-26	2.7	6
609	Local Convergence of a Family of Weighted-Newton Methods. *Symmetry*, **2019**, 11, 103	2.7	1
608	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	2
607	Shifted fractional Jacobi spectral algorithm for solving distributed order time-fractional reaction-diffusion equations. *Computational and Applied Mathematics*, **2019**, 38, 1	2.4	12
606	Fractional fixed-structure H∞ controller design using Augmented Lagrangian Particle Swarm Optimization with Fractional Order Velocity. *Applied Soft Computing Journal*, **2019**, 77, 688-695	7.5	33
605	Entropy Analysis of Soccer Dynamics. *Entropy*, **2019**, 21,	2.8	16

604	Exact Travelling Wave Solutions for Local Fractional Partial Differential Equations in Mathematical Physics. *Advances in Dynamics, Patterns, Cognition*, **2019**, 175-191	0.7	16
603	A fractional perspective to the modelling of Lisbon public transportation network. *Transportation*, **2019**, 46, 1893-1913	4	5
602	On the fractional Cornu spirals. *Communications in Nonlinear Science and Numerical Simulation*, **2019**, 67, 100-107	3.7	1
601	Complexity Analysis of Escher's Art. *Entropy*, **2019**, 21,	2.8	1
600	Numerical investigation of the nonlinear modified anomalous diffusion process. *Nonlinear Dynamics*, **2019**, 97, 2757-2775	5	22
599	On the Complexity Analysis and Visualization of Musical Information. *Entropy*, **2019**, 21,	2.8	3
598	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	9.1	37
597	An Entropy Formulation Based on the Generalized Liouville Fractional Derivative. *Entropy*, **2019**, 21,	2.8	9
596	An Algorithm for the Approximate Solution of the Fractional Riccati Differential Equation. *International Journal of Nonlinear Sciences and Numerical Simulation*, **2019**, 20, 661-674	1.8	4
595	Analysis of the two-dimensional fractional projectile motion in view of the experimental data. *Nonlinear Dynamics*, **2019**, 97, 1711-1720	5	8
594	An effective numerical method for solving nonlinear variable-order fractional functional boundary value problems through optimization technique. *Nonlinear Dynamics*, **2019**, 97, 2041-2054	5	12
593	Fractional derivatives and negative probabilities. *Communications in Nonlinear Science and Numerical Simulation*, **2019**, 79, 104913	3.7	6
592	Multidimensional scaling analysis of the solar system objects. *Communications in Nonlinear Science and Numerical Simulation*, **2019**, 79, 104923	3.7	5
591	Information analysis of the human DNA. *Nonlinear Dynamics*, **2019**, 98, 3169-3186	5	2
590	Efficient Three-Step Class of Eighth-Order Multiple Root Solvers and Their Dynamics. *Symmetry*, **2019**, 11, 837	2.7	1
589	Ethanol Prices and Agricultural Commodities: An Investigation of Their Relationship. *Mathematics*, **2019**, 7, 774	2.3	4
588	On the Numerical Computation of the Mittag Leffler Function. *International Journal of Nonlinear Sciences and Numerical Simulation*, **2019**, 20, 725-736	1.8	6
587	Fractional Derivatives: The Perspective of System Theory. *Mathematics*, **2019**, 7, 150	2.3	33

586	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	3.5	5
585	Quantifying the Predictability and Efficiency of the Cointegrated Ethanol and Agricultural Commodities Price Series. *Applied Sciences (Switzerland)*, **2019**, 9, 5303	2.6	2
584	Recent history of the fractional calculus: data and statistics **2019**, 1-22		10
583	Continuous-time fractional linear systems: steady-state responses **2019**, 149-174		3
582	A survey on fractional asymptotic expansion method: A forgotten theory. *Fractional Calculus and Applied Analysis*, **2019**, 22, 1165-1176	2.7	1
581	Model Order Reduction: A Comparison between Integer and Non-Integer Order Systems Approaches. *Entropy*, **2019**, 21, 876	2.8	7
580	A New Generalized Taylor-Like Explicit Method for Stiff Ordinary Differential Equations. *Mathematics*, **2019**, 7, 1154	2.3	2
579	Continuous-time fractional linear systems: transient responses **2019**, 119-148		
578	Artistic painting: A fractional calculus perspective. *Applied Mathematical Modelling*, **2019**, 65, 614-626	4.5	17
577	A new non-standard finite difference method for analyzing the fractional NavierStokes equations. *Computers and Mathematics With Applications*, **2019**, 78, 1681-1694	2.7	13
576	A critical analysis of the conformable derivative. *Nonlinear Dynamics*, **2019**, 95, 3063-3073	5	26
575	Fractional-order modeling of a diode. *Communications in Nonlinear Science and Numerical Simulation* , **2019**, 70, 343-353	3.7	21
574	Stability analysis of fractional Quaternion-Valued Leaky Integrator Echo State Neural Networks with multiple time-varying delays. *Neurocomputing*, **2019**, 331, 388-402	5.4	19
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