Jose Tenreiro Machado

List of Publications by Citations

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	Recent history of fractional calculus. *Communications in Nonlinear Science and Numerical Simulation*, **2011**, 16, 1140-1153	3.7	899
764	Advances in Fractional Calculus **2007**,		744
763	The role of fractional calculus in modeling biological phenomena: A review. *Communications in Nonlinear Science and Numerical Simulation*, **2017**, 51, 141-159	3.7	290
762	What is a fractional derivative?. *Journal of Computational Physics*, **2015**, 293, 4-13	4.1	236
761	Tuning of PID Controllers Based on Bode's Ideal Transfer Function. *Nonlinear Dynamics*, **2004**, 38, 305-321	5	207
760	A Review of Definitions for Fractional Derivatives and Integral. *Mathematical Problems in Engineering*, **2014**, 2014, 1-6	1.1	190
759	Development of fractional order capacitors based on electrolyte processes. *Nonlinear Dynamics*, **2009**, 56, 45-55	5	177
758	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	3.3	167
757	A new fractional derivative without singular kernel: Application to the modelling of the steady heat flow. *Thermal Science*, **2016**, 20, 753-756	1.2	155
756	Fractional calculus: A survey of useful formulas. *European Physical Journal: Special Topics*, **2013**, 222, 1827-1846	2.3	153
755	Particle swarm optimization with fractional-order velocity. *Nonlinear Dynamics*, **2010**, 61, 295-301	5	144
754	A review of definitions of fractional derivatives and other operators. *Journal of Computational Physics*, **2019**, 388, 195-208	4.1	141
753	Towards the development of intelligent transportation systems		137
752	A review of operational matrices and spectral techniques for fractional calculus. *Nonlinear Dynamics*, **2015**, 81, 1023-1052	5	135
751	EXACT TRAVELING-WAVE SOLUTION FOR LOCAL FRACTIONAL BOUSSINESQ EQUATION IN FRACTAL DOMAIN. *Fractals*, **2017**, 25, 1740006	3.2	134
750	Fractional control of heat diffusion systems. *Nonlinear Dynamics*, **2008**, 54, 263-282	5	134
749	Fractional Order Calculus: Basic Concepts and Engineering Applications. *Mathematical Problems in Engineering*, **2010**, 2010, 1-19	1.1	131

748	Fractional signal processing and applications. *Signal Processing*, **2003**, 83, 2285-2286	4.4	125
747	Analysis of the Van der Pol Oscillator Containing Derivatives of Fractional Order. *JVC/Journal of Vibration and Control*, **2007**, 13, 1291-1301	2	122
746	Time domain design of fractional differintegrators using least-squares. *Signal Processing*, **2006**, 86, 2567-2581	4.4	122
745	On exact traveling-wave solutions for local fractional Korteweg-de Vries equation. *Chaos*, **2016**, 26, 084312	3.3	120
744	Fractional Electrical Impedances in Botanical Elements. *JVC/Journal of Vibration and Control*, **2008**, 14, 1389-1402	2	119
743	Some Applications of Fractional Calculus in Engineering. *Mathematical Problems in Engineering*, **2010**, 2010, 1-34	1.1	116
742	On development of fractional calculus during the last fifty years. *Scientometrics*, **2014**, 98, 577-582	3	100
741	Fractional Order Generalized Information. *Entropy*, **2014**, 16, 2350-2361	2.8	100
740	On the formulation and numerical simulation of distributed-order fractional optimal control problems. *Communications in Nonlinear Science and Numerical Simulation*, **2017**, 52, 177-189	3.7	98
739	Optimal variable-order fractional PID controllers for dynamical systems. *Journal of Computational and Applied Mathematics*, **2018**, 339, 40-48	2.4	96
738	A review of power laws in real life phenomena. *Communications in Nonlinear Science and Numerical Simulation*, **2012**, 17, 3558-3578	3.7	96
737	On a fractal LC-electric circuit modeled by local fractional calculus. *Communications in Nonlinear Science and Numerical Simulation*, **2017**, 47, 200-206	3.7	93
736	Modeling of the lung impedance using a fractional-order ladder network with constant phase elements. *IEEE Transactions on Biomedical Circuits and Systems*, **2011**, 5, 83-9	5.1	93
735	Introducing the fractional-order Darwinian PSO. *Signal, Image and Video Processing*, **2012**, 6, 343-350	1.6	87
734	Some pioneers of the applications of fractional calculus. *Fractional Calculus and Applied Analysis*, **2014**, 17,	2.7	84
733	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	2.7	83
732	Fractional Order Control of a Hexapod Robot. *Nonlinear Dynamics*, **2004**, 38, 417-433	5	82
731	A new fractional derivative involving the normalized sinc function without singular kernel. *European Physical Journal: Special Topics*, **2017**, 226, 3567-3575	2.3	80

730	Fractional order inductive phenomena based on the skin effect. *Nonlinear Dynamics*, **2012**, 68, 107-115	5	80
729	Chaotic Phenomena and Fractional-Order Dynamics in the Trajectory Control of Redundant Manipulators. *Nonlinear Dynamics*, **2002**, 29, 315-342	5	76
728	Fractional model for malaria transmission under control strategies. *Computers and Mathematics With Applications*, **2013**, 66, 908-916	2.7	74
727	Entropy analysis of integer and fractional dynamical systems. *Nonlinear Dynamics*, **2010**, 62, 371-378	5	74
726	The Chronicles of Fractional Calculus. *Fractional Calculus and Applied Analysis*, **2017**, 20, 307-336	2.7	72
725	Stability of Fractional Order Systems. *Mathematical Problems in Engineering*, **2013**, 2013, 1-14	1.1	71
724	Fractional order electromagnetics. *Signal Processing*, **2006**, 86, 2637-2644	4.4	71
723	New complex waves in nonlinear optics based on the complex Ginzburg-Landau equation with Kerr law nonlinearity. *European Physical Journal Plus*, **2019**, 134, 1	3.1	71
722	Pseudo Phase Plane and Fractional Calculus modeling of western global economic downturn. *Communications in Nonlinear Science and Numerical Simulation*, **2015**, 22, 396-406	3.7	70
721	Fractional derivatives: Probability interpretation and frequency response of rational approximations. *Communications in Nonlinear Science and Numerical Simulation*, **2009**, 14, 3492-3497	3.7	70
720	Traveling wave solutions to nonlinear directional couplers by modified Kudryashov method. *Physica Scripta*, **2020**, 95, 075217	2.6	69
719	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
718	Stability and synchronization of fractional-order memristive neural networks with multiple delays. *Neural Networks*, **2017**, 94, 76-85	9.1	68
717	Fractional State Space Analysis of Economic Systems. *Entropy*, **2015**, 17, 5402-5421	2.8	67
716	And I say to myself: What a fractional world! *Fractional Calculus and Applied Analysis*, **2011**, 14,	2.7	67
715	Fractional generalization of memristor and higher order elements. *Communications in Nonlinear Science and Numerical Simulation*, **2013**, 18, 264-275	3.7	59
714	A critical analysis of the Caputo–Fabrizio operator. *Communications in Nonlinear Science and Numerical Simulation*, **2018**, 59, 608-611	3.7	59
713	New nonautonomous combined multi-wave solutions for ((varvec{2+1}))-dimensional variable coefficients KdV equation. *Nonlinear Dynamics*, **2018**, 93, 733-740	5	56

712	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	1.3	55
711	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	55
710	Science metrics on fractional calculus development since 1966. *Fractional Calculus and Applied Analysis*, **2013**, 16,	2.7	53
709	Extended Algorithms for Approximating Variable Order Fractional Derivatives with Applications. *Journal of Scientific Computing*, **2017**, 71, 1351-1374	2.3	52
708	Fractional dynamics in DNA. *Communications in Nonlinear Science and Numerical Simulation*, **2011**, 16, 2963-2969	3.7	52
707	Nonlinear dynamics for local fractional Burgers' equation arising in fractal flow. *Nonlinear Dynamics*, **2016**, 84, 3-7	5	50
706	Complex order van der Pol oscillator. *Nonlinear Dynamics*, **2011**, 65, 247-254	5	50
705	On nonautonomous complex wave solutions described by the coupled Schrödinger–Boussinesq equation with variable-coefficients. *Optical and Quantum Electronics*, **2018**, 50, 1	2.4	49
704	Fractional Calculus: Quo Vadimus? (Where are we Going?). *Fractional Calculus and Applied Analysis*, **2015**, 18, 495-526	2.7	49
703	Analysis of temperature time-series: Embedding dynamics into the MDS method. *Communications in Nonlinear Science and Numerical Simulation*, **2014**, 19, 851-871	3.7	48
702	A theoretical study on modeling the respiratory tract with ladder networks by means of intrinsic fractal geometry. *IEEE Transactions on Biomedical Engineering*, **2010**, 57, 246-53	5	48
701	Manipulator trajectory planning using a MOEA. *Applied Soft Computing Journal*, **2007**, 7, 659-667	7.5	48
700	Variable order fractional systems. *Communications in Nonlinear Science and Numerical Simulation*, **2019**, 71, 231-243	3.7	48
699	Effect of fractional orders in the velocity control of a servo system. *Computers and Mathematics With Applications*, **2010**, 59, 1679-1686	2.7	47
698	Optimal tuning of fractional controllers using genetic algorithms. *Nonlinear Dynamics*, **2010**, 62, 447-452	5	46
697	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	2.7	45
696	Which Derivative?. *Fractal and Fractional*, **2017**, 1, 3	3	45
695	An Efficient Numerical Scheme for Solving Multi-Dimensional Fractional Optimal Control Problems With a Quadratic Performance Index. *Asian Journal of Control*, **2015**, 17, 2389-2402	1.7	44

694	A multi-objective approach for the motion planning of redundant manipulators. *Applied Soft Computing Journal*, **2012**, 12, 589-599	7.5	44
693	A Historical Perspective of Legged Robots. *JVC/Journal of Vibration and Control*, **2007**, 13, 1447-1486	2	44
692	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
691	Nonlinear dynamics of the patient's response to drug effect during general anesthesia. *Communications in Nonlinear Science and Numerical Simulation*, **2015**, 20, 914-926	3.7	43
690	Fractional dynamics and MDS visualization of earthquake phenomena. *Computers and Mathematics With Applications*, **2013**, 66, 647-658	2.7	43
689	Trajectory planning of redundant manipulators using genetic algorithms. *Communications in Nonlinear Science and Numerical Simulation*, **2009**, 14, 2858-2869	3.7	43
688	A New Family of the Local Fractional PDEs. *Fundamenta Informaticae*, **2017**, 151, 63-75	1	42
687	Employees' skills, manufacturing flexibility and performance: a structural equation modelling applied to the automotive industry. *International Journal of Production Research*, **2015**, 53, 4087-4101	7.8	42
686	Dynamics of the Dow Jones and the NASDAQ stock indexes. *Nonlinear Dynamics*, **2010**, 61, 691-705	5	42
685	An Extended Predictor–Corrector Algorithm for Variable-Order Fractional Delay Differential Equations. *Journal of Computational and Nonlinear Dynamics*, **2016**, 11,	1.4	41
684	Dynamic modeling of a Stewart platform using the generalized momentum approach. *Communications in Nonlinear Science and Numerical Simulation*, **2009**, 14, 3389-3401	3.7	41
683	Fractional order models of leaves. *JVC/Journal of Vibration and Control*, **2014**, 20, 998-1008	2	40
682	Identifying economic periods and crisis with the multidimensional scaling. *Nonlinear Dynamics*, **2011** , 63, 611-622	5	40
681	Analysis of financial data series using fractional Fourier transform and multidimensional scaling. *Nonlinear Dynamics*, **2011**, 65, 235-245	5	40
680	Controllability and Minimum Energy Control Problem of Fractional Discrete-Time Systems **2010**, 503-509		40
679	Performance of Fractional PID Algorithms Controlling Nonlinear Systems with Saturation and Backlash Phenomena. *JVC/Journal of Vibration and Control*, **2007**, 13, 1407-1418	2	40
678	Numerical Solution of the Two-Sided Space–Time Fractional Telegraph Equation Via Chebyshev Tau Approximation. *Journal of Optimization Theory and Applications*, **2017**, 174, 321-341	1.6	39
677	An integro quadratic spline approach for a class of variable-order fractional initial value problems. *Chaos, Solitons and Fractals*, **2017**, 102, 354-360	9.3	39

676	Analysis of stock market indices through multidimensional scaling. *Communications in Nonlinear Science and Numerical Simulation*, **2011**, 16, 4610-4618	3.7	39
675	Fractional Order PD□oint Control of Legged Robots. *JVC/Journal of Vibration and Control*, **2006**, 12, 1483-1501	2	39
674	The generalized Kudryashov method for nonlinear space□ime fractional partial differential equations of Burgers type. *Nonlinear Dynamics*, **2019**, 95, 361-368	5	39
673	A spectral framework for fractional variational problems based on fractional Jacobi functions. *Applied Numerical Mathematics*, **2018**, 132, 51-72	2.5	38
672	The Persistence of Memory. *Nonlinear Dynamics*, **2015**, 79, 63-82	5	37
671	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
670	Analysis and Visualization of Seismic Data Using Mutual Information. *Entropy*, **2013**, 15, 3892-3909	2.8	37
669	Fractional dynamics in the trajectory control of redundant manipulators. *Communications in Nonlinear Science and Numerical Simulation*, **2008**, 13, 1836-1844	3.7	37
668	Relative fractional dynamics of stock markets. *Nonlinear Dynamics*, **2016**, 86, 1613-1619	5	37
667	A literature review on the optimization of legged robots. *JVC/Journal of Vibration and Control*, **2012**, 18, 1753-1767	2	36
666	Multidimensional Scaling Visualization Using Parametric Similarity Indices. *Entropy*, **2015**, 17, 1775-1794	2.8	35
665	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	35
664	Energy analysis during biped walking		35
663	A fractional perspective to the bond graph modelling of world economies. *Nonlinear Dynamics*, **2015**, 80, 1839-1852	5	34
662	Dynamical Stability and Predictability of Football Players: The Study of One Match. *Entropy*, **2014**, 16, 645-674	2.8	34
661	Modelling and simulation of artificial locomotion systems. *Robotica*, **2005**, 23, 595-606	2.1	34
660	Generalized shifted Chebyshev polynomials for fractional optimal control problems. *Communications in Nonlinear Science and Numerical Simulation*, **2019**, 75, 50-61	3.7	33
659	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

658	An extension of estimation of domain of attraction for fractional order linear system subject to saturation control. *Applied Mathematics Letters*, **2015**, 47, 26-34	3.5	33
657	Rare and extreme events: the case of COVID-19 pandemic. *Nonlinear Dynamics*, **2020**, 100, 1-20	5	33
656	Integer and fractional-order entropy analysis of earthquake data series. *Nonlinear Dynamics*, **2016**, 84, 79-90	5	33
655	Fractional Derivatives: The Perspective of System Theory. *Mathematics*, **2019**, 7, 150	2.3	33
654	Analysis of Natural and Artificial Phenomena Using Signal Processing and Fractional Calculus. *Fractional Calculus and Applied Analysis*, **2015**, 18, 459-478	2.7	32
653	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	2	32
652	Dynamic stability analysis of fractional order leaky integrator echo state neural networks. *Communications in Nonlinear Science and Numerical Simulation*, **2017**, 47, 328-337	3.7	32
651	Calculation of fractional derivatives of noisy data with genetic algorithms. *Nonlinear Dynamics*, **2009**, 57, 253-260	5	32
650	Fractional-order impulse response of the respiratory system. *Computers and Mathematics With Applications*, **2011**, 62, 845-854	2.7	32
649	Describing Function Analysis of Systems with Impacts and Backlash. *Nonlinear Dynamics*, **2002**, 29, 235-250	5	32
648	Relativistic time effects in financial dynamics. *Nonlinear Dynamics*, **2014**, 75, 735-744	5	31
647	Analysis of diffusion process in fractured reservoirs using fractional derivative approach. *Communications in Nonlinear Science and Numerical Simulation*, **2014**, 19, 3161-3170	3.7	31
646	Mathematical aspects of the Heisenberg uncertainty principle within local fractional Fourier analysis. *Boundary Value Problems*, **2013**, 2013,	2.1	31
645	A fuzzified systematic adjustment of the robotic Darwinian PSO. *Robotics and Autonomous Systems*, **2012**, 60, 1625-1639	3.5	31
644	Partial chaos suppression in a fractional order macroeconomic model. *Mathematics and Computers in Simulation*, **2016**, 122, 55-68	3.3	30
643	Optimal Controllers with Complex Order Derivatives. *Journal of Optimization Theory and Applications*, **2013**, 156, 2-12	1.6	30
642	Uniform stability of Fractional Order Leaky Integrator Echo State Neural Network with multiple time delays. *Information Sciences*, **2017**, 418-419, 703-716	7.7	30
641	Approximating fractional derivatives in the perspective of system control. *Nonlinear Dynamics*, **2009**, 56, 401-407	5	30

640	Shifted Jacobi Gauss-collocation with convergence analysis for fractional integro-differential equations. *Communications in Nonlinear Science and Numerical Simulation*, **2019**, 72, 342-359	3.7	30
639	Numerical approach for a class of distributed order time fractional partial differential equations. *Applied Numerical Mathematics*, **2019**, 136, 152-162	2.5	30
638	Chebyshev spectral methods for multi-order fractional neutral pantograph equations. *Nonlinear Dynamics*, **2020**, 100, 3785-3797	5	29
637	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	3.6	29
636	Complex dynamics of financial indices. *Nonlinear Dynamics*, **2013**, 74, 287-296	5	29
635	Wavelet analysis of human DNA. *Genomics*, **2011**, 98, 155-63	4.3	29
634	Application of fractional algorithms in the control of a robotic bird. *Communications in Nonlinear Science and Numerical Simulation*, **2010**, 15, 895-910	3.7	29
633	Design and implementation of grid multi-scroll fractional-order chaotic attractors. *Chaos*, **2016**, 26, 084303	3	29
632	An Efficient Operational Matrix Technique for Multidimensional Variable-Order Time Fractional Diffusion Equations. *Journal of Computational and Nonlinear Dynamics*, **2016**, 11,	1.4	29
631	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
630	Rhapsody in fractional. *Fractional Calculus and Applied Analysis*, **2014**, 17, 1188-1214	2.7	28
629	Complex-order forced van der Pol oscillator. *JVC/Journal of Vibration and Control*, **2012**, 18, 2201-2209	2	28
628	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
627	Fractional-Order Devices. *SpringerBriefs in Applied Sciences and Technology*, **2017**,	0.4	27
626	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
625	FRACTIONAL DYNAMICS IN FINANCIAL INDICES. *International Journal of Bifurcation and Chaos in Applied Sciences and Engineering*, **2012**, 22, 1250249	2	27
624	An evolutionary approach for the motion planning of redundant and hyper-redundant manipulators. *Nonlinear Dynamics*, **2010**, 60, 115-129	5	27
623	Fractional Dynamics: A Statistical Perspective. *Journal of Computational and Nonlinear Dynamics*, **2008**, 3,	1.4	27

622	Fractional order dynamics in a GA planner. *Signal Processing*, **2003**, 83, 2377-2386	4.4	27
621	Experimental Signal Analysis of Robot Impacts in a Fractional Calculus Perspective. *Journal of Advanced Computational Intelligence and Intelligent Informatics*, **2007**, 11, 1079-1085	0.4	27
620	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
619	A computationally efficient method for tempered fractional differential equations with application. *Computational and Applied Mathematics*, **2018**, 37, 3657-3671		27
618	Modeling vegetable fractals by means of fractional-order equations. *JVC/Journal of Vibration and Control*, **2016**, 22, 2100-2108	2	26
617	SM-Algorithms for Approximating the Variable-Order Fractional Derivative of High Order. *Fundamenta Informaticae*, **2017**, 151, 293-311	1	26
616	Control of a heat diffusion system through a fractional order nonlinear algorithm. *Computers and Mathematics With Applications*, **2010**, 59, 1687-1694	2.7	26
615	A Survey of Technologies for Climbing Robots Adhesion to Surfaces **2008**,		26
614	Which differintegration?. *IET Computer Vision*, **2005**, 152, 846		26
613	A critical analysis of the conformable derivative. *Nonlinear Dynamics*, **2019**, 95, 3063-3073	5	26
612	Fractional order description of DNA. *Applied Mathematical Modelling*, **2015**, 39, 4095-4102	4.5	25
611	Describing function of two masses with backlash. *Nonlinear Dynamics*, **2009**, 56, 409-413	5	25
610	Approximating fractional derivatives through the generalized mean. *Communications in Nonlinear Science and Numerical Simulation*, **2009**, 14, 3723-3730	3.7	25
609	Numerical solution of time-fractional fourth-order reaction-diffusion model arising in composite environments. *Applied Mathematical Modelling*, **2021**, 89, 819-836	4.5	25
608	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
607	Fractional Order Sliding Mode Controller Design for Fractional Order Dynamic Systems **2010**, 463-470		24
606	Implementation of fractional-order electromagnetic potential through a genetic algorithm. *Communications in Nonlinear Science and Numerical Simulation*, **2009**, 14, 1838-1843	3.7	24
605	Optimal approximation of fractional derivatives through discrete-time fractions using genetic algorithms. *Communications in Nonlinear Science and Numerical Simulation*, **2010**, 15, 482-490	3.7	24

604	Complex-order dynamics in hexapod locomotion. *Signal Processing*, **2006**, 86, 2785-2793	4.4	24
603	A new numerical technique for local fractional diffusion equation in fractal heat transfer. *Journal of Nonlinear Science and Applications*, **2016**, 09, 5621-5628	1.9	24
602	An innovative fractional order LMS algorithm for power signal parameter estimation. *Applied Mathematical Modelling*, **2020**, 83, 703-718	4.5	24
601	The failure of certain fractional calculus operators in two physical models. *Fractional Calculus and Applied Analysis*, **2019**, 22, 255-270	2.7	23
600	Numerical evaluation of fractional Tricomi-type model arising from physical problems of gas dynamics. *Journal of Advanced Research*, **2020**, 25, 205-216	13	23
599	A Robust Algorithm for Nonlinear Variable-Order Fractional Control Systems with Delay. *International Journal of Nonlinear Sciences and Numerical Simulation*, **2018**, 19, 231-238	1.8	23
598	Shannon, R□yie and Tsallis entropy analysis of DNA using phase plane. *Nonlinear Analysis: Real World Applications*, **2011**, 12, 3135-3144	2.1	23
597	Introduction to Fractional Differential Equations. *Advances in Dynamics, Patterns, Cognition*, **2019**,	0.7	23
596	Multi-dimensional spectral tau methods for distributed-order fractional diffusion equations. *Computers and Mathematics With Applications*, **2020**, 79, 476-488	2.7	23
595	The recovery of global stock markets indices after impacts due to pandemics. *Research in International Business and Finance*, **2021**, 55, 101335	4.8	23
594	Computational scheme for solving nonlinear fractional stochastic differential equations with delay. *Stochastic Analysis and Applications*, **2019**, 37, 893-908	1.1	22
593	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
592	Numerical investigation of the nonlinear modified anomalous diffusion process. *Nonlinear Dynamics* , **2019**, 97, 2757-2775	5	22
591	Systems of Navier-Stokes Equations on Cantor Sets. *Mathematical Problems in Engineering*, **2013**, 2013, 1-8	1.1	22
590	Entropy Diversity in Multi-Objective Particle Swarm Optimization. *Entropy*, **2013**, 15, 5475-5491	2.8	22
589	Entropy analysis of the DNA code dynamics in human chromosomes. *Computers and Mathematics With Applications*, **2011**, 62, 1612-1617	2.7	22
588	Kinematic and dynamic performance analysis of artificial legged systems. *Robotica*, **2008**, 26, 19-39	2.1	22
587	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

586	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
585	Fractional Calculus: D□□venons-nous? Que sommes-nous? O□allons-nous?. *Fractional Calculus and Applied Analysis*, **2016**, 19, 1074-1104	2.7	22
584	Jacobi Collocation Approximation for Solving Multi-dimensional Volterra Integral Equations. *International Journal of Nonlinear Sciences and Numerical Simulation*, **2017**, 18, 411-425	1.8	21
583	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
582	Lyapunov method for the stability analysis of uncertain fractional-order systems under input saturation. *Applied Mathematical Modelling*, **2020**, 81, 663-672	4.5	21
581	Fractional dynamic behavior in ethanol prices series. *Journal of Computational and Applied Mathematics*, **2018**, 339, 85-93	2.4	21
580	Fractional order modelling of dynamic backlash. *Mechatronics*, **2013**, 23, 741-745	3	21
579	Chaos suppression in fractional systems using adaptive fractional state feedback control. *Chaos, Solitons and Fractals*, **2017**, 103, 488-503	9.3	21
578	Fractional describing function of systems with Coulomb friction. *Nonlinear Dynamics*, **2009**, 56, 381-387	5	21
577	Fractional central pattern generators for bipedal locomotion. *Nonlinear Dynamics*, **2010**, 62, 27-37	5	21
576	Fractional-order modeling of a diode. *Communications in Nonlinear Science and Numerical Simulation* , **2019**, 70, 343-353	3.7	21
575	Milk Characterization Using Electrical Impedance Spectroscopy and Fractional Models. *Food Analytical Methods*, **2018**, 11, 901-912	3.4	20
574	Controllability results for impulsive mixed-type functional integro-differential evolution equations with nonlocal conditions. *Fixed Point Theory and Applications*, **2013**, 2013,	1.4	20
573	Implementation of Fractional-order Operators on Field Programmable Gate Arrays **2007**, 333-346		20
572	Multi-objective MaxiMin Sorting Scheme. *Lecture Notes in Computer Science*, **2005**, 165-175	0.9	20
571	Fractional Order Model of Beam Heating Process and Its Experimental Verification **2010**, 287-294		20
570	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,	1.4	19
569	A fractional perspective on the trajectory control of redundant and hyper-redundant robot manipulators. *Applied Mathematical Modelling*, **2017**, 46, 716-726	4.5	19

568	Solving Two-Dimensional Variable-Order Fractional Optimal Control Problems With Transcendental Bernstein Series. *Journal of Computational and Nonlinear Dynamics*, **2019**, 14,	1.4	19
567	Robust asymptotic stability of interval fractional-order nonlinear systems with time-delay. *Journal of the Franklin Institute*, **2018**, 355, 7749-7763	4	19
566	Generation of a family of fractional order hyper-chaotic multi-scroll attractors. *Chaos, Solitons and Fractals*, **2017**, 105, 244-255	9.3	19
565	Fractional dynamics of a system with particles subjected to impacts. *Communications in Nonlinear Science and Numerical Simulation*, **2011**, 16, 4596-4601	3.7	19
564	Root locus of fractional linear systems. *Communications in Nonlinear Science and Numerical Simulation*, **2011**, 16, 3855-3862	3.7	19
563	Histogram-based DNA analysis for the visualization of chromosome, genome and species information. *Bioinformatics*, **2011**, 27, 1207-14	7.2	19
562	Application of Integer and Fractional Models in Electrochemical Systems. *Mathematical Problems in Engineering*, **2012**, 2012, 1-17	1.1	19
561	Entropy Analysis of Fractional Derivatives and Their Approximation. *Journal of Applied Nonlinear Dynamics*, **2012**, 1, 109-112	2	19
560	A New Approach for Stability Analysis of Linear Discrete-Time Fractional-Order Systems **2010**, 151-162		19
559	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
558	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
557	Property of Self-Similarity Between Baseband and Modulated Signals. *Mobile Networks and Applications*, **2020**, 25, 1537-1547	2.9	19
556	Numerical evaluation of the fractional KleinKramers model arising in molecular dynamics. *Journal of Computational Physics*, **2021**, 428, 109983	4.1	19
555	Numerical solution of mixed-type fractional functional differential equations using modified Lucas polynomials. *Computational and Applied Mathematics*, **2019**, 38, 1	2.4	18
554	Robust stability and stabilization of uncertain fractional order systems subject to input saturation. *JVC/Journal of Vibration and Control*, **2018**, 24, 3676-3683	2	18
553	Fractional JensenShannon Analysis of the Scientific Output of Researchers in Fractional Calculus. *Entropy*, **2017**, 19, 127	2.8	18
552	Fractional order modelling of fractional-order holds. *Nonlinear Dynamics*, **2012**, 70, 789-796	5	18
551	The fractional order lead compensator		18

550	Application of Fractional Calculus in the Control of Heat Systems. *Journal of Advanced Computational Intelligence and Intelligent Informatics*, **2007**, 11, 1086-1091	0.4	18
549	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
548	Fractional derivatives and periodic functions. *International Journal of Dynamics and Control*, **2017**, 5, 72-78	2.7	17
547	Shifted fractional Jacobi collocation method for solving fractional functional differential equations of variable order. *Chaos, Solitons and Fractals*, **2020**, 134, 109721	9.3	17
546	Stabilization of Uncertain Multi-Order Fractional Systems Based on the Extended State Observer. *Asian Journal of Control*, **2018**, 20, 1263-1273	1.7	17
545	On the numerical computation of the Mittag-Leffler function. *Communications in Nonlinear Science and Numerical Simulation*, **2014**, 19, 3419-3424	3.7	17
544	Detection of quasi-periodic processes in complex systems: how do we quantitatively describe their properties?. *Physica Scripta*, **2014**, 89, 015201	2.6	17
543	Multidimensional scaling analysis of virus diseases. *Computer Methods and Programs in Biomedicine*, **2016**, 131, 97-110	6.9	17
542	Artistic painting: A fractional calculus perspective. *Applied Mathematical Modelling*, **2019**, 65, 614-626	4.5	17
541	Optimal control of variable-order fractional model for delay cancer treatments. *Applied Mathematical Modelling*, **2021**, 89, 1557-1574	4.5	17
540	A review of structural health monitoring of bonded structures using electromechanical impedance spectroscopy. *Structural Health Monitoring*,147592172199341	4.4	17
539	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	16
538	Entropy Analysis of Soccer Dynamics. *Entropy*, **2019**, 21,	2.8	16
537	Matrix fractional systems. *Communications in Nonlinear Science and Numerical Simulation*, **2015**, 25, 10-18	3.7	16
536	Multidimensional scaling locus of memristor and fractional order elements. *Journal of Advanced Research*, **2020**, 25, 147-157	13	16
535	Exact Travelling Wave Solutions for Local Fractional Partial Differential Equations in Mathematical Physics. *Advances in Dynamics, Patterns, Cognition*, **2019**, 175-191	0.7	16
534	Time analysis of forced variable-order fractional Van der Pol oscillator. *European Physical Journal: Special Topics*, **2017**, 226, 3803-3810	2.3	16
533	Fractional State Space Analysis of Temperature Time Series. *Fractional Calculus and Applied Analysis* , **2015**, 18, 1518-1536	2.7	16

532	Variable structure control of robots with nonlinear friction and backlash at the joints		16
531	Possible adaptive control by tangent hyperbolic fixed point transformations used for controlling the -6-type van der pol oscillator **2008**,		16
530	. *IEEE Transactions on Education*, **1993**, 36, 372-379	2.1	16
529	Improved Decentralized Fractional PD Control of Structure Vibrations. *Mathematics*, **2020**, 8, 326	2.3	16
528	Numerical study of the nonlinear anomalous reaction□subdiffusion process arising in the electroanalytical chemistry. *Journal of Computational Science*, **2021**, 53, 101394	3.4	16
527	Complex-order particle swarm optimization. *Communications in Nonlinear Science and Numerical Simulation*, **2021**, 92, 105448	3.7	16
526	A review on the characterization of signals and systems by power law distributions. *Signal Processing*, **2015**, 107, 246-253	4.4	15
525	Fractional order describing functions. *Signal Processing*, **2015**, 107, 389-394	4.4	15
524	A Spectral Numerical Method for Solving Distributed-Order Fractional Initial Value Problems. *Journal of Computational and Nonlinear Dynamics*, **2018**, 13,	1.4	15
523	Time-Delay and Fractional Derivatives. *Advances in Difference Equations*, **2011**, 2011, 1-12	3.6	15
522	Shannon Entropy Analysis of the Genome Code. *Mathematical Problems in Engineering*, **2012**, 2012, 1-12	1.1	15
521	Dynamical modelling of a genetic algorithm. *Signal Processing*, **2006**, 86, 2760-2770	4.4	15
520	Robot Trajectory Planning Using Multi-objective Genetic Algorithm Optimization. *Lecture Notes in Computer Science*, **2004**, 615-626	0.9	15
519	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
518	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
517	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
516	Design of fractional evolutionary processing for reactive power planning with FACTS devices. *Scientific Reports*, **2021**, 11, 593	4.9	15
515	Multidimensional scaling analysis of soccer dynamics. *Applied Mathematical Modelling*, **2017**, 45, 642-652	4.5	14

514	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
513	On spectral methods for solving variable-order fractional integro-differential equations. *Computational and Applied Mathematics*, **2018**, 37, 3937-3950		14
512	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	6.5	14
511	Condition-based diagnosis of mechatronic systems using a fractional calculus approach. *International Journal of Systems Science*, **2016**, 47, 2169-2177	2.3	14
510	Multidimensional scaling and visualization of patterns in prime numbers. *Communications in Nonlinear Science and Numerical Simulation*, **2020**, 83, 105128	3.7	14
509	Understanding COVID-19 nonlinear multi-scale dynamic spreading in Italy. *Nonlinear Dynamics*, **2020**, 101, 1-37	5	14
508	Analysis of global terrorism dynamics by means of entropy and state space portrait. *Nonlinear Dynamics*, **2016**, 85, 1547-1560	5	14
507	Double power laws, fractals and self-similarity. *Applied Mathematical Modelling*, **2014**, 38, 4019-4026	4.5	13
506	The effect of fractional order in variable structure control. *Computers and Mathematics With Applications*, **2012**, 64, 3340-3350	2.7	13
505	COMPLEX ORDER BIPED RHYTHMS. *International Journal of Bifurcation and Chaos in Applied Sciences and Engineering*, **2011**, 21, 3053-3061	2	13
504	Optimization of the Workpiece Location in a Machining Robotic Cell. *International Journal of Advanced Robotic Systems*, **2011**, 8, 73	1.4	13
503	Dynamical analysis of compositions. *Nonlinear Dynamics*, **2011**, 65, 399-412	5	13
502	A fractional approach for the motion planning of redundant and hyper-redundant manipulators. *Signal Processing*, **2011**, 91, 562-570	4.4	13
501	Fractional Control With a Smith Predictor. *Journal of Computational and Nonlinear Dynamics*, **2011**, 6,	1.4	13
500	LMI Characterization of Fractional Systems Stability **2007**, 419-434		13
499	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
498	A new non-standard finite difference method for analyzing the fractional Navier‐Stokes equations. *Computers and Mathematics With Applications*, **2019**, 78, 1681-1694	2.7	13
497	Fractional electronic circuit simulation of a nonlinear macroeconomic model. *AEU - International Journal of Electronics and Communications*, **2018**, 84, 210-220	2.8	13

496	Shifted fractional Jacobi spectral algorithm for solving distributed order time-fractional reaction□diffusion equations. *Computational and Applied Mathematics*, **2019**, 38, 1	2.4	12
495	Integer/fractional decomposition of the impulse response of fractional linear systems. *Signal Processing*, **2015**, 114, 85-88	4.4	12
494	Kolmogorov complexity as a data similarity metric: application in mitochondrial DNA. *Nonlinear Dynamics*, **2018**, 93, 1059-1071	5	12
493	A new operational approach for solving fractional variational problems depending on indefinite integrals. *Communications in Nonlinear Science and Numerical Simulation*, **2018**, 57, 246-263	3.7	12
492	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
491	On the fractional-order modeling of wine. *European Food Research and Technology*, **2017**, 243, 921-929	3.4	12
490	Hybrid adaptive control of a dragonfly model. *Communications in Nonlinear Science and Numerical Simulation*, **2012**, 17, 893-903	3.7	12
489	Mechanical properties and impedance model for the branching network of the sapping system in the leaf of Hydrangea Macrophylla. *Nonlinear Dynamics*, **2010**, 60, 207-216	5	12
488	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
487	A Chebyshev Wavelet Collocation Method for Some Types of Differential Problems. *Symmetry*, **2021**, 13, 536	2.7	12
486	Sufficient conditions for existence and uniqueness of fractional stochastic delay differential equations. *Stochastics*, **2020**, 92, 379-396	0.6	12
485	Fractional R□yi entropy?. *European Physical Journal Plus*, **2019**, 134, 1	3.1	11
484	New discrete-time fractional derivatives based on the bilinear transformation: Definitions and properties. *Journal of Advanced Research*, **2020**, 25, 1-10	13	11
483	A motion tracking solution for indoor localization using smartphones **2016**,		11
482	Fractional dynamics in the Rayleigh□ piston. *Communications in Nonlinear Science and Numerical Simulation*, **2016**, 31, 76-82	3.7	11
481	A space□time spectral approximation for solving nonlinear variable-order fractional sine and Klein□Gordon differential equations. *Computational and Applied Mathematics*, **2018**, 37, 6212-6229		11
480	Exploiting sensor redundancy for the calculation of fractional derivatives in the presence of noise. *Signal Processing*, **2012**, 92, 204-209	4.4	11
479	On Local Fractional Continuous Wavelet Transform. *Abstract and Applied Analysis*, **2013**, 2013, 1-5	0.7	11

478	Interactive Evolutionary Computation in music **2010**,		11
477	Strategies for the Control of Heat Diffusion Systems Based on Fractional Calculus **2006**,		11
476	Comparison of Fractional and Integer Order Control of an Hexapod Robot **2003**, 667		11
475	Dynamical analysis of freeway traffic. *IEEE Transactions on Intelligent Transportation Systems*, **2004**, 5, 259-266	6.1	11
474	Stability of linear time invariant systems with interval fractional orders and interval coefficients		11
473	Numerical approximation of the time fractional cable model arising in neuronal dynamics. *Engineering With Computers*,1	4.5	11
472	Measuring the Brazilian ethanol and gasoline market efficiency using DFA-Hurst and fractal dimension. *Energy Economics*, **2020**, 85, 104614	8.3	11
471	On multistep tumor growth models of fractional variable-order. *BioSystems*, **2021**, 199, 104294	1.9	11
470	Identification of Fractional Models from Frequency Data **2007**, 229-242		11
469	Analytical Solution of Fractional Order Diffusivity Equation With Wellbore Storage and Skin Effects. *Journal of Computational and Nonlinear Dynamics*, **2016**, 11,	1.4	10
468	Dynamics of Commodities Prices: Integer and Fractional Models. *Fundamenta Informaticae*, **2017**, 151, 389-408	1	10
467	Fractional order junctions. *Communications in Nonlinear Science and Numerical Simulation*, **2015**, 20, 1-8	3.7	10
466	Numerical calculation of the left and right fractional derivatives. *Journal of Computational Physics*, **2015**, 293, 96-103	4.1	10
465	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
464	A fractional calculus perspective of distributed propeller design. *Communications in Nonlinear Science and Numerical Simulation*, **2018**, 55, 174-182	3.7	10
463	Numerical analysis of the initial conditions in fractional systems. *Communications in Nonlinear Science and Numerical Simulation*, **2014**, 19, 2935-2941	3.7	10
462	Dynamic analysis of earthquake phenomena by means of pseudo phase plane. *Nonlinear Dynamics*, **2013**, 74, 1191-1202	5	10
461	Entropy Analysis of Monetary Unions. *Entropy*, **2017**, 19, 245	2.8	10

460	Analysis of world economic variables using multidimensional scaling. *PLoS ONE*, **2015**, 10, e0121277	3.7	10
459	Multidimensional Scaling Visualization Using Parametric Entropy. *International Journal of Bifurcation and Chaos in Applied Sciences and Engineering*, **2015**, 25, 1540017	2	10
458	Multidimensional scaling analysis of fractional systems. *Computers and Mathematics With Applications*, **2012**, 64, 2966-2972	2.7	10
457	Accessing complexity from genome information. *Communications in Nonlinear Science and Numerical Simulation*, **2012**, 17, 2237-2243	3.7	10
456	Modeling Ultracapacitors as Fractional-Order Systems **2010**, 257-262		10
455	Discretization of Complex-order Algorithms for Control Applications. *JVC/Journal of Vibration and Control*, **2008**, 14, 1349-1361	2	10
454	Comparison of Five Numerical Schemes for Fractional Differential Equations **2007**, 43-60		10
453	On Observability of Nonlinear Discrete-Time Fractional-Order Control Systems **2010**, 305-312		10
452	Recent history of the fractional calculus: data and statistics **2019**, 1-22		10
451	Electrochemical impedance spectroscopy characterization of beverages. *Food Chemistry*, **2020**, 302, 125345	5	10
450	Atrial Rotor Dynamics Under Complex Fractional Order Diffusion. *Frontiers in Physiology*, **2018**, 9, 975	4.6	10
449	A piecewise spectral-collocation method for solving fractional Riccati differential equation in large domains. *Computational and Applied Mathematics*, **2019**, 38, 1	2.4	9
448	A Review of Fractional Order Entropies. *Entropy*, **2020**, 22,	2.8	9
447	Fractional Definite Integral. *Fractal and Fractional*, **2017**, 1, 2	3	9
446	An Entropy Formulation Based on the Generalized Liouville Fractional Derivative. *Entropy*, **2019**, 21,	2.8	9
445	Is multidimensional scaling suitable for mapping the input respiratory impedance in subjects and patients?. *Computer Methods and Programs in Biomedicine*, **2011**, 104, e189-200	6.9	9
444	Using Fractional Derivatives in Joint Control of Hexapod Robots. *JVC/Journal of Vibration and Control*, **2008**, 14, 1473-1485	2	9
443	On the Fractional PID Control of a Laboratory Servo System. *IFAC Postprint Volumes IPPV / International Federation of Automatic Control*, **2008**, 41, 15273-15278		9

442	Linear Differential Equations of Fractional Order **2007**, 77-91		9
441	A Fractional Calculus Perspective of PID Tuning **2003**, 651		9
440	Integral Inequalities for Generalized Harmonically Convex Functions in Fuzzy-Interval-Valued Settings. *Symmetry*, **2021**, 13, 2352	2.7	9
439	Multi-objective Genetic Manipulator Trajectory Planner. *Lecture Notes in Computer Science*, **2004**, 219-229	0.9	9
438	Chaotic Fractional Order Delayed Cellular Neural Network **2010**, 313-320		9
437	Revisiting the 1D and 2D Laplace Transforms. *Mathematics*, **2020**, 8, 1330	2.3	9
436	Solitary Wave Solutions of the Generalized Rosenau-KdV-RLW Equation. *Mathematics*, **2020**, 8, 1601	2.3	9
435	Adomian Decomposition and Fractional Power Series Solution of a Class of Nonlinear Fractional Differential Equations. *Mathematics*, **2021**, 9, 1070	2.3	9
434	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
433	Entropy Analysis of a Railway Network Complexity. *Entropy*, **2016**, 18, 388	2.8	9
432	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
431	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
430	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
429	Enumeration of the Real Zeros of the Mittag-Leffler Function E(z), 1 **2007**, 15-26		9
428	Generalized two-port elements. *Communications in Nonlinear Science and Numerical Simulation*, **2017**, 42, 451-455	3.7	8
427	Discrete fractional order system vibrations. *International Journal of Non-Linear Mechanics*, **2015**, 73, 2-11	2.8	8
426	Fractional-order modelling of epoxy resin. *Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences*, **2020**, 378, 20190292	3	8
425	Analysis and implementation of fractional-order chaotic system with standard components. *Journal of Advanced Research*, **2020**, 25, 97-109	13	8

424	Analysis of the two-dimensional fractional projectile motion in view of the experimental data. *Nonlinear Dynamics*, **2019**, 97, 1711-1720	5	8
423	Root Locus Practical Sketching Rules for Fractional-Order Systems. *Abstract and Applied Analysis*, **2013**, 2013, 1-14	0.7	8
422	Experimental backlash study in mechanical manipulators. *Robotica*, **2011**, 29, 211-219	2.1	8
421	Modeling and Control of a Dragonfly-Like Robot. *Journal of Control Science and Engineering*, **2010**, 2010, 1-10	1.2	8
420	Control of Chaos via Fractional-Order State Feedback Controller **2010**, 511-519		8
419	Dynamical Analysis of the Global Warming. *Mathematical Problems in Engineering*, **2012**, 2012, 1-12	1.1	8
418	Suboptimum H2 Pseudo-rational Approximations to Fractional-order Linear Time Invariant Systems **2007**, 61-75		8
417	On the performance of learning machines for bankruptcy detection		8
416	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		8
415	On local fractional operators View of computational complexity: Diffusion and relaxation defined on cantor sets. *Thermal Science*, **2016**, 20, 755-767	1.2	8
414	The (psi)-Hilfer fractional calculus of variable order and its applications. *Computational and Applied Mathematics*, **2020**, 39, 1	2.4	8
413	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
412	Substantial, tempered, and shifted fractional derivatives: Three faces of a tetrahedron. *Mathematical Methods in the Applied Sciences*, **2021**, 44, 9191-9209	2.3	8
411	An efficient numerical technique for variable order time fractional nonlinear Klein-Gordon equation. *Applied Numerical Mathematics*, **2020**, 154, 260-272	2.5	8
410	Structural health monitoring of adhesive joints using Lamb waves: A review. *Structural Control and Health Monitoring*,e2849	4.5	8
409	Tuning and Application of Integer and Fractional Order PID Controllers **2009**, 245-255		8
408	Limit cycle prediction of systems with fractional controllers and backlash. *JVC/Journal of Vibration and Control*, **2017**, 23, 587-603	2	7
407	On the mathematical modeling of soccer dynamics. *Communications in Nonlinear Science and Numerical Simulation*, **2017**, 53, 142-153	3.7	7

406	Optimal control of nonlinear fed-batch process using direct transcription method. *Computers and Chemical Engineering*, **2019**, 130, 106561	4	7
405	Design of fractional-order hyper-chaotic multi-scroll systems based on hysteresis series. *European Physical Journal: Special Topics*, **2017**, 226, 3775-3789	2.3	7
404	Entropy analysis of systems exhibiting negative probabilities. *Communications in Nonlinear Science and Numerical Simulation*, **2016**, 36, 58-64	3.7	7
403	Synchronization of Chemical Synaptic Coupling of the Chay Neuron System under Time Delay. *Applied Sciences (Switzerland)*, **2018**, 8, 927	2.6	7
402	Self-similarity principle: the reduced description of randomness. *Open Physics*, **2013**, 11,	1.3	7
401	A fractional approach to the Fermi-Pasta-Ulam problem. *European Physical Journal: Special Topics*, **2013**, 222, 1795-1803	2.3	7
400	Fractional Dynamics of Computer Virus Propagation. *Mathematical Problems in Engineering*, **2014**, 2014, 1-7	1.1	7
399	Multidimensional scaling visualization of earthquake phenomena. *Journal of Seismology*, **2014**, 18, 163-179	1.3	7
398	Power Law and Entropy Analysis of Catastrophic Phenomena. *Mathematical Problems in Engineering* , **2013**, 2013, 1-10	1.1	7
397	Advanced Topics in Fractional Dynamics. *Advances in Mathematical Physics*, **2013**, 2013, 1-1	1.1	7
396	Optimization of Parallel Manipulators Using Evolutionary Algorithms. *Advances in Intelligent and Soft Computing*, **2010**, 79-86		7
395	A Multidimensional Scaling Analysis of Musical Sounds Based on Pseudo Phase Plane. *Abstract and Applied Analysis*, **2012**, 2012, 1-14	0.7	7
394	Kinematic aspects of robotic biped locomotion systems		7
393	FRACTIONAL ELECTRICAL DYNAMICS IN FRUITS AND VEGETABLES. *IFAC Postprint Volumes IPPV / International Federation of Automatic Control*, **2006**, 39, 308-313		7
392	Complex dynamics in the trajectory control of redundant manipulators **2006**,		7
391	Evolutionary Design of Combinational Logic Circuits. *Journal of Advanced Computational Intelligence and Intelligent Informatics*, **2004**, 8, 507-513	0.4	7
390	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
389	Output-feedback-guaranteed cost control of fractional-order uncertain linear delayed systems. *Computational and Applied Mathematics*, **2020**, 39, 1	2.4	7

388	Empirical Laws and Foreseeing the Future of Technological Progress. *Entropy*, **2016**, 18, 217	2.8	7
387	Model Order Reduction: A Comparison between Integer and Non-Integer Order Systems Approaches. *Entropy*, **2019**, 21, 876	2.8	7
386	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
385	How Many Fractional Derivatives Are There?. *Mathematics*, **2022**, 10, 737	2.3	7
384	Bond graph and memristor approach to DNA analysis. *Nonlinear Dynamics*, **2017**, 88, 1051-1057	5	6
383	Ranking the scientific output of researchers in fractional calculus. *Fractional Calculus and Applied Analysis*, **2019**, 22, 11-26	2.7	6
382	A new glance on the Leibniz rule for fractional derivatives. *Communications in Nonlinear Science and Numerical Simulation*, **2018**, 62, 244-249	3.7	6
381	State space analysis of forest fires. *JVC/Journal of Vibration and Control*, **2016**, 22, 2153-2164	2	6
380	Complexity Analysis of Global Temperature Time Series. *Entropy*, **2018**, 20,	2.8	6
379	Fractional derivatives and negative probabilities. *Communications in Nonlinear Science and Numerical Simulation*, **2019**, 79, 104913	3.7	6
378	On the Numerical Computation of the Mittag□effler Function. *International Journal of Nonlinear Sciences and Numerical Simulation*, **2019**, 20, 725-736	1.8	6
377	Riesz potential versus fractional Laplacian. *Journal of Statistical Mechanics: Theory and Experiment*, **2014**, 2014, P09032	1.9	6
376	Analysis of the Respiratory Dynamics During Normal Breathing by Means of Pseudophase Plots and Pressure□olume Loops. *IEEE Transactions on Systems, Man, and Cybernetics: Systems*, **2013**, 43, 53-62	7.3	6
375	Dynamical behaviour of multi-particle large-scale systems. *Nonlinear Dynamics*, **2012**, 69, 913-925	5	6
374	Fractional Coins and Fractional Derivatives. *Abstract and Applied Analysis*, **2013**, 2013, 1-5	0.7	6
373	Visualizing Non-Linear Control System Performance by Means of Multidimensional Scaling. *Journal of Computational and Nonlinear Dynamics*, **2013**, 8,	1.4	6
372	Synchronization of Gyro Systems via Fractional-Order Adaptive Controller **2010**, 495-502		6
371	Fractional Dynamics in Mechanical Manipulation. *Journal of Computational and Nonlinear Dynamics*, **2008**, 3,	1.4	6

370	Fractional Differentiation and its Applications (FDA08). *Physica Scripta*, **2009**, T136, 011001	2.6	6
369	On Fractional Variational Principles **2007**, 115-126		6
368	Dynamic path planning by fractional potential		6
367	Concept-based interactive evolutionary computation for multi-objective path planning		6
366	Position/force control of biped walking robots		6
365	Engineering design of a multirate nonlinear controller for robot manipulators. *Journal of Field Robotics*, **1989**, 6, 1-17		6
364	On distinctive solitons type solutions for some important nonlinear Schr□inger equations. *Optical and Quantum Electronics*, **2021**, 53, 1	2.4	6
363	A Clustering Perspective of the Collatz Conjecture. *Mathematics*, **2021**, 9, 314	2.3	6
362	The Caputo Fractional Derivative: Initialization Issues Relative to Fractional Differential Equation **2007**, 27-42		6
361	Analysis of UV spectral bands using multidimensional scaling. *Signal, Image and Video Processing*, **2015**, 9, 573-580	1.6	5
360	Fractional Dynamics and Pseudo-Phase Space of Country Economic Processes. *Mathematics*, **2020**, 8, 81	2.3	5
359	Generalized Bernoulli Polynomials: Solving Nonlinear 2D Fractional Optimal Control Problems. *Journal of Scientific Computing*, **2020**, 83, 1	2.3	5
358	Fractional Calculus: Fundamentals and Applications. *Springer Proceedings in Physics*, **2018**, 3-11	0.2	5
357	A fractional perspective to the modelling of Lisbon□ public transportation network. *Transportation*, **2019**, 46, 1893-1913	4	5
356	Multidimensional scaling analysis of the solar system objects. *Communications in Nonlinear Science and Numerical Simulation*, **2019**, 79, 104923	3.7	5
355	New Challenges in Fractional Systems 2014. *Mathematical Problems in Engineering*, **2015**, 2015, 1-3	1.1	5
354	On a Generalized Laguerre Operational Matrix of Fractional Integration. *Mathematical Problems in Engineering*, **2013**, 2013, 1-7	1.1	5
353	Shannon Information and Power Law Analysis of the Chromosome Code. *Abstract and Applied Analysis*, **2012**, 2012, 1-13	0.7	5

352	Modelling and Identification of Diffusive Systems using Fractional Models **2007**, 213-225		5
351	Control of a 6-DOF Parallel Manipulator through a Mechatronic Approach. *JVC/Journal of Vibration and Control*, **2007**, 13, 1431-1446	2	5
350	ANALYSIS OF FRACTIONAL - ORDER ROBOT AXIS DYNAMICS. *IFAC Postprint Volumes IPPV / International Federation of Automatic Control*, **2006**, 39, 367-372		5
349	Corner detection in digital images using fuzzy reasoning		5
348	Dynamics of the fractional-order Van der Pol oscillator		5
347	Simple stereo vision system for real-time object recognition for an autonomous mobile robot **2004**,		5
346	Fractional-order hybrid control of robot manipulators		5
345	. *IEEE Transactions on Education*, **1995**, 38, 205-210	2.1	5
344	Emerging Tools for Quantifying Unconscious Analgesia: Fractional-Order Impedance Models. *Advances in Dynamics, Patterns, Cognition*, **2014**, 135-149	0.7	5
343	Analytical Impulse Response of Third Generation CRONE Control **2010**, 343-356		5
342	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
341	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
340	Multidimensional scaling analysis of generalized mean discrete-time fractional order controllers. *Communications in Nonlinear Science and Numerical Simulation*, **2021**, 95, 105657	3.7	5
339	Fractional and fractal processes applied to cryptocurrencies price series. *Journal of Advanced Research*, **2021**, 32, 85-98	13	5
338	Particle swarm optimization algorithm using complex-order derivative concept: A comprehensive study. *Applied Soft Computing Journal*, **2021**, 111, 107641	7.5	5
337	Fractional Multimodels of the Gastrocnemius Muscle for Tetanus Pattern **2007**, 271-285		5
336	Electrical Skin Phenomena: A Fractional Calculus Analysis **2007**, 323-332		5
335	Complex Order-Distributions Using Conjugated order Differintegrals **2007**, 347-360		5

334	Tuning Rules for Fractional PIDs **2007**, 463-476		5
333	On the computation of the multidimensional Mittag-Leffler function. *Communications in Nonlinear Science and Numerical Simulation*, **2017**, 53, 278-287	3.7	4
332	A computational perspective of the periodic table of elements. *Communications in Nonlinear Science and Numerical Simulation*, **2019**, 78, 104883	3.7	4
331	Power Law Behavior and Self-Similarity in Modern Industrial Accidents. *International Journal of Bifurcation and Chaos in Applied Sciences and Engineering*, **2015**, 25, 1550004	2	4
330	Generalized convolution. *Applied Mathematics and Computation*, **2015**, 257, 34-39	2.7	4
329	Utilizing Macro Fiber Composite to Control Rotating Blade Vibrations. *Symmetry*, **2020**, 12, 1984	2.7	4
328	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
327	An Evolutionary Perspective of Virus Propagation. *Mathematics*, **2020**, 8, 779	2.3	4
326	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
325	Dynamical analysis of the global business-cycle synchronization. *PLoS ONE*, **2018**, 13, e0191491	3.7	4
324	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
323	Ethanol Prices and Agricultural Commodities: An Investigation of Their Relationship. *Mathematics*, **2019**, 7, 774	2.3	4
322	Complex evolution of a multi-particle system. *Applied Mathematical Modelling*, **2013**, 37, 9203-9214	4.5	4
321	Dynamic analysis and pattern visualization of forest fires. *PLoS ONE*, **2014**, 9, e105465	3.7	4
320	Analysis and visualization of chromosome information. *Gene*, **2012**, 491, 81-7	3.8	4
319	Observability of Nonlinear Fractional Dynamical Systems. *Abstract and Applied Analysis*, **2013**, 2013, 1-7	0.7	4
318	Multidimensional scaling analysis of the dynamics of a country economy. *Scientific World Journal, The*, **2013**, 2013, 594587	2.2	4
317	Can Power Laws Help Us Understand Gene and Proteome Information?. *Advances in Mathematical Physics*, **2013**, 2013, 1-10	1.1	4

316	Application of Fractional Controllers for Quad Rotor **2011**, 303-309		4
315	Nonlinear and Complex Dynamics **2011**,		4
314	Synchronization of Chaotic Nonlinear Gyros Using Fractional Order Controller **2010**, 479-485		4
313	Stability Analysis of Fractional Order Universal Adaptive Stabilization **2010**, 357-368		4
312	Comparative analysis of a traditional and a novel approach to Model Reference Adaptive Control **2010**,		4
311	Filtering method in backlash phenomena analysis. *Mathematical and Computer Modelling*, **2009**, 49, 1494-1503		4
310	Analysis of Stock Market Indices with Multidimensional Scaling and Wavelets. *Mathematical Problems in Engineering*, **2012**, 2012, 1-14	1.1	4
309	Simple adaptive dynamical control of vehicles driven by omnidirectional wheels **2009**,		4
308	Application of Fractional Calculus in Engineering Sciences **2008**,		4
307	Analytical Modelling and Experimental Identification of Viscoelastic Mechanical Systems **2007**, 403-416		4
306	Flatness Control of a Fractional Thermal System **2007**, 493-509		4
305	FRACTIONAL DYNAMICS IN GENETIC ALGORITHMS. *IFAC Postprint Volumes IPPV / International Federation of Automatic Control*, **2006**, 39, 414-419		4
304	A unified framework for dynamics and Lyapunov stability of holonomically constrained rigid bodies		4
303	Pseudoinverse trajectory control of redundant manipulators: a fractional calculus perspective		4
302	ROBLIB: An Educational Program for Robotics. *IFAC Postprint Volumes IPPV / International Federation of Automatic Control*, **2000**, 33, 563-568		4
301	Chaos dynamics in the trajectory control of redundant manipulators		4
300	Goal-oriented biped walking based on force interaction control		4
299	Dynamic performance of biped locomotion systems		4

298	Trends, directions for further research, and some open problems of fractional calculus. *Nonlinear Dynamics*, **2022**, 107, 3245	5	4
297	Pseudo phase plane, delay and fractional dynamics. *Journal Europeen Des Systemes Automatises*, **2008**, 42, 1037-1051	1.8	4
296	Delay-Dependent and Order-Dependent Guaranteed Cost Control for Uncertain Fractional-Order Delayed Linear Systems. *Mathematics*, **2021**, 9, 41	2.3	4
295	Analysis of the Fractional Dynamics of an Ultracapacitor and Its Application to a Buck-Boost Converter **2010**, 97-105		4
294	Theory and Applications of Fractional Order Systems 2016. *Mathematical Problems in Engineering*, **2016**, 2016, 1-2	1.1	4
293	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
292	Discrete-time generalized mean fractional order controllers. *IFAC-PapersOnLine*, **2018**, 51, 43-47	0.7	4
291	The bouncing ball and the Grünwald-Letnikov definition of fractional derivative. *Fractional Calculus and Applied Analysis*, **2021**, 24, 1003-1014	2.7	4
290	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
289	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
288	Fractional LMS and NLMS Algorithms for Line Echo Cancellation. *Arabian Journal for Science and Engineering*, **2021**, 46, 9385-9398	2.5	4
287	Energy Efficiency of Quadruped Gaits **2006**, 735-742		4
286	Mesoscopic Fractional Kinetic Equations versus a Riemann□iouville Integral Type **2007**, 155-167		4
285	Multidimensional Scaling Analysis of Stock Market Indexes **2011**, 307-321		4
284	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	1.6	3
283	A Review of Sample and Hold Systems and Design of a New Fractional Algorithm. *Applied Sciences (Switzerland)*, **2020**, 10, 7360	2.6	3
282	Fractal and Entropy Analysis of the Dow Jones Index Using Multidimensional Scaling. *Entropy*, **2020**, 22,	2.8	3
281	Fractional Dynamics in Soccer Leagues. *Symmetry*, **2020**, 12, 356	2.7	3

280	Abundant structures of waves in plasma transitional layer sheath. *Chinese Journal of Physics*, **2020**, 67, 147-154	3.5	3
279	Tidal Analysis Using Time–Frequency Signal Processing and Information Clustering. *Entropy*, **2017**, 19, 390	2.8	3
278	Entropy Analysis of Industrial Accident Data Series. *Journal of Computational and Nonlinear Dynamics*, **2016**, 11,	1.4	3
277	On the Complexity Analysis and Visualization of Musical Information. *Entropy*, **2019**, 21,	2.8	3
276	Reply to: Comments on "Particle Swarm Optimization with Fractional-Order Velocity" *Nonlinear Dynamics*, **2014**, 77, 435-436	5	3
275	Visualizing control systems performance: A fractional perspective. *Advances in Mechanical Engineering*, **2015**, 7, 168781401561983	1.2	3
274	Theory and Applications of Fractional Order Systems. *Mathematical Problems in Engineering*, **2014**, 2014, 1-2	1.1	3
273	Analysis of financial indices by means of the windowed Fourier transform. *Signal, Image and Video Processing*, **2012**, 6, 487-494	1.6	3
272	New Challenges in Fractional Systems. *Mathematical Problems in Engineering*, **2013**, 2013, 1-2	1.1	3
271	Application of Fractional Calculus in Engineering. *Springer Proceedings in Mathematics*, **2011**, 619-629		3
270	Representation of robotic fractional dynamics in the pseudo phase plane. *Acta Mechanica Sinica/Lixue Xuebao*, **2011**, 27, 28-35	2	3
269	Decentralized CRONE Control of mxn Multivariable System with Time-Delay **2010**, 377-391		3
268	Generalized Predictive Control of Arbitrary Real Order **2010**, 411-418		3
267	Synchronization of Fractional-Order Chaotic System via Adaptive PID Controller **2010**, 445-452		3
266	Power Law Analysis of Financial Index Dynamics. *Discrete Dynamics in Nature and Society*, **2012**, 2012, 1-12	1.1	3
265	ON THE DNA OF ELEVEN MAMMALS. *International Journal of Bifurcation and Chaos in Applied Sciences and Engineering*, **2012**, 22, 1250074	2	3
264	New Noninvasive Methods for "Reading" of Random Sequences and Their Applications in Nanotechnology **2010**, 43-56		3
263	Dynamic analysis in variable structure position/force hybrid control of manipulators		3

262	A statistical and harmonic model for robot manipulators		3
261	Winrob: An Educational Program for Robotics. *International Journal of Electrical Engineering and Education*, **1997**, 34, 37-47	0.6	3
260	FRACTIONAL DYNAMICS IN THE DESCRIBING FUNCTION ANALYSIS OF NONLINEAR FRICTION. *IFAC Postprint Volumes IPPV / International Federation of Automatic Control*, **2006**, 39, 218-223		3
259	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		3
258	A program for analysis and control of petri nets'		3
257	Improved lsi-based natural language call routing using speech recognition confidence scores		3
256	Distributed intelligent systems: technologies and applications		3
255	New genetic-based design of a Pi-like fuzzy logic speed controlter for an induction motor		3
254	Natural language question processing for hungarian deep web searcher		3
253	Bond graphs for robust modelling of manufacturing systems **2004**,		3
252	An island-based evolution algorithm for discrete-continuous scheduling with continuous resource discretisation **2004**,		3
251	Customer analysis of monthly-charged mobile content aiming at prolonging subscription period		3
250	Towards force interaction control of biped walking robots		3
249	A Fractional Calculus Perspective in Electromagnetics **2005**, 1573		3
248	Analytical stability analysis of the fractional-order particle swarm optimization algorithm. *Chaos, Solitons and Fractals*, **2022**, 155, 111658	9.3	3
247	Fractional-Order Position/Force Robot Control. *Journal of Advanced Computational Intelligence and Intelligent Informatics*, **2005**, 9, 379-386	0.4	3
246	Application of Genetic Algorithms to the Implementation of Fractional Electromagnetic Potentials		3
245	Fractional Control of Legged Robots. *Springer Proceedings in Mathematics*, **2011**, 647-650		3

244	On Deterministic Fractional Models **2010**, 123-150		3
243	IPMC Actuators Non Integer Order Models **2010**, 263-272		3
242	Fractional Wavelet Transform for the Quantitative Spectral Analysis of Two-Component System **2010**, 321-331		3
241	Nyquist Envelope of Fractional Order Transfer Functions with Parametric Uncertainty **2010**, 487-494		3
240	Non Integer Order Operators Implementation via Switched Capacitors Technology **2010**, 87-96		3
239	Performance analysis of multi-legged systems		3
238	Quantum Confinement in Nanometric Structures **2010**, 57-67		3
237	Adaptive Tackling of the Swinging Problem for a 2 DOF Crane Payload System. *Studies in Computational Intelligence*, **2010**, 103-114	0.8	3
236	Generalized Newtonian fractional model for the vertical motion of a particle. *Applied Mathematical Modelling*, **2020**, 88, 652-660	4.5	3
235	A discrete polynomials approach for optimal control of fractional Volterra integro-differential equations. *JVC/Journal of Vibration and Control*, **2020**, 107754632097115	2	3
234	On dual Bernstein polynomials and stochastic fractional integro-differential equations. *Mathematical Methods in the Applied Sciences*, **2020**, 43, 9928-9947	2.3	3
233	Analysis of a rectangular prism n-units RLC fractional-order circuit network. *AEJ - Alexandria Engineering Journal*, **2020**, 59, 3091-3104	6.1	3
232	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
231	Application of Fractional Techniques in the Analysis of Forest Fires. *International Journal of Nonlinear Sciences and Numerical Simulation*, **2016**, 17, 381-390	1.8	3
230	Continuous-time fractional linear systems: steady-state responses **2019**, 149-174		3
229	Computational Comparison and Visualization of Viruses in the Perspective of Clinical Information. *Interdisciplinary Sciences, Computational Life Sciences*, **2019**, 11, 86-94	3.5	3
228	Spontaneous activation under atrial fibrosis: A model using complex order derivatives. *Communications in Nonlinear Science and Numerical Simulation*, **2021**, 95, 105618	3.7	3
227	Double color image encryption based on fractional order discrete improved Henon map and Rubik cube transform. *Signal Processing: Image Communication*, **2021**, 97, 116363	2.8	3

226	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
225	Fractional Advective-Dispersive Equation as a Model of Solute Transport in Porous Media **2007**, 199-212		3
224	Limited-Bandwidth Fractional Differentiator: Synthesis and Application in Vibration Isolation **2007**, 287-302		3
223	Fractional Derivative Consideration on Nonlinear Viscoelastic Statical and Dynamical Behavior under Large Pre-Displacement **2007**, 363-376		3
222	Robust Design of an Anti-windup Compensated 3rd-Generation Crone Controller **2007**, 527-542		3
221	Fractional Describing Function of Systems with Nonlinear Friction **2009**, 257-266		3
220	Dynamics of the N-link pendulum: a fractional perspective. *International Journal of Control*, **2017**, 90, 1192-1200	1.5	2
219	Editorial special issue: Dynamics and Control of Fractional Order Systems International Journal of Dynamics and Control. *International Journal of Dynamics and Control*, **2017**, 5, 1-3	1.7	2
218	Computational Analysis of the U.S. Forest Fires. *Journal of Computational and Nonlinear Dynamics*, **2017**, 12,	1.4	2
217	Introduction to Fractional-Order Elements and Devices. *SpringerBriefs in Applied Sciences and Technology*, **2017**, 1-20	0.4	2
216	Devices. *SpringerBriefs in Applied Sciences and Technology*, **2017**, 21-53	0.4	2
215	Fractional-Order Models of Vegetable Tissues. *SpringerBriefs in Applied Sciences and Technology*, **2017**, 73-92	0.4	2
214	Dynamic Shannon Performance in a Multiobjective Particle Swarm Optimization. *Entropy*, **2019**, 21, 827	2.8	2
213	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
212	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
211	Commensurate and Non-Commensurate Fractional-Order Discrete Models of an Electric Individual-Wheel Drive on an Autonomous Platform. *Entropy*, **2020**, 22,	2.8	2
210	Re-Evaluating the Classical Falling Body Problem. *Mathematics*, **2020**, 8, 553	2.3	2
209	The N -link pendulum: Embedding nonlinear dynamics into the multidimensional scaling method. *Chaos, Solitons and Fractals*, **2016**, 89, 130-138	9.3	2

208	Information analysis of the human DNA. *Nonlinear Dynamics*, **2019**, 98, 3169-3186	5	2
207	Symbolic Fractional Dynamics. *IEEE Journal on Emerging and Selected Topics in Circuits and Systems*, **2013**, 3, 468-474	5.2	2
206	Dynamics of a backlash chain. *Open Physics*, **2013**, 11,	1.3	2
205	Temperature time series: Pattern analysis and forecasting **2017**,		2
204	Diversity study of multi-objective genetic algorithm based on Shannon entropy **2014**,		2
203	Local Fractional Variational Iteration Method for Local Fractional Poisson Equations in Two Independent Variables. *Abstract and Applied Analysis*, **2014**, 2014, 1-7	0.7	2
202	Analysis of Forest Fires by means of Pseudo Phase Plane and Multidimensional Scaling Methods. *Mathematical Problems in Engineering*, **2014**, 2014, 1-8	1.1	2
201	Fractional Model for Malaria Disease **2013**,		2
200	Characterization Approach to Modified Glassy Carbon Electrode-Nanofilm System Within Multidimensional Scaling. *Journal of Computational and Theoretical Nanoscience*, **2011**, 8, 268-273	0.3	2
199	Fractional Order Adaptive Control for Cogging Effect Compensation **2010**, 393-409		2
198	Analytical Design Method for Fractional Order Controller Using Fractional Reference Model **2010**, 295-303		2
197	Adaptive controller for systems of fractional dynamics based on robust fixed point transformations **2009**,		2
196	On the Fractional Order Control of Heat Systems **2009**, 375-385		2
195	Control and Dynamics of Fractional Order Systems. *Studies in Computational Intelligence*, **2009**, 235-251	0.8	2
194	Kinematic analysis of artificial biped locomotion systems		2
193	Fractional Control of Two Cooperating Manipulators **2008**,		2
192	Preliminary sketch of possible Fixed Point transformations for use in adaptive control **2008**,		2
191	Fractional-order Control of a Flexible Manipulator **2007**, 449-462		2

190	Simulation and dynamics of freeway traffic. *Nonlinear Dynamics*, **2007**, 49, 567-577	5	2
189	Fractional Order Dynamics in a Particle Swarm Optimization Algorithm **2007**,		2
188	Fractional dynamics in particle swarm optimization **2007**,		2
187	Frequency Band-Limited Fractional Differentiator Prefilter in Path Tracking Design **2007**, 477-492		2
186	Windowed Fourier Transform of Experimental Robotic Signals with Fractional Behavior **2006**,		2
185	Circuit Synthesis Using Particle Swarm Optimization **2006**,		2
184	DISCRETIZATION OF COMPLEX-ORDER DIFFERINTEGRALS. *IFAC Postprint Volumes IPPV / International Federation of Automatic Control*, **2006**, 39, 274-279		2
183	FRACTIONAL ORDER FOURIER SPECTRA IN ROBOTIC MANIPULATORS WITH VIBRATIONS. *IFAC Postprint Volumes IPPV / International Federation of Automatic Control*, **2006**, 39, 361-366		2
182	COMPARISON OF DIFFERENT ORDERS PAD FRACTIONAL ORDER PD05 CONTROL ALGORITHM IMPLEMENTATIONS. *IFAC Postprint Volumes IPPV / International Federation of Automatic Control*, **2006**, 39, 373-378		2
181	About fractional calculus of singular Lagrangians		2
180	A comparison of formalisms for electronic commerce systems		2
179	Gait selection for quadruped and hexapod walking systems		2
178	Semi-supervised learning techniques: k-means clustering in OODB fragmentation		2
177	An introduction to a vision system used for a MiroSOT robot soccer system		2
176	Motion chaos in the pseudoinverse control of redundant robots **2000**,		2
175			2
174	Command-filtered compound FAT learning control of fractional-order nonlinear systems with input delay and external disturbances. *Nonlinear Dynamics*, **2022**, 108, 293	5	2
173	Fractional Dynamics in Mechanical Manipulation **2007**,		2

172	Dynamical analysis and visualization of tornadoes time series. *PLoS ONE*, **2015**, 10, e0120260	3.7	2
171	Fractional-Order Sensing and Control: Embedding the Nonlinear Dynamics of Robot Manipulators into the Multidimensional Scaling Method. *Sensors*, **2021**, 21,	3.8	2
170	Two Cooperating Manipulators with Fractional Controllers. *International Journal of Advanced Robotic Systems*, **2009**, 6, 31	1.4	2
169	On the Calculation of the Moore–Penrose and Drazin Inverses: Application to Fractional Calculus. *Mathematics*, **2021**, 9, 2501	2.3	2
168	Fractional Wavelet Transform and Chemometric Calibrations for the Simultaneous Determination of Amlodipine and Valsartan in Their Complex Mixture **2010**, 333-340		2
167	Resonance and Stability Conditions for Fractional Transfer Functions of the Second Kind **2010**, 429-444		2
166	A Fractional Order Adaptation Law for Integer Order Sliding Mode Control of a 2DOF Robot **2010**, 471-478		2
165	Approximation of a Fractance by a Network of Four Identical RC Cells Arranged in Gamma and a Purely Capacitive Cell **2010**, 107-120		2
164	Fractional Particle Swarm Optimization **2014**, 47-56		2
163	CLIMBING ROBOTS: A SURVEY OF TECHNOLOGIES AND APPLICATIONS **2008**,		2
162	Numerical solution of nonlinear fractional optimal control problems using generalized Bernoulli polynomials. *Optimal Control Applications and Methods*, **2021**, 42, 1045-1063	1.7	2
161	Dynamical Analysis of the Dow Jones Index Using Dimensionality Reduction and Visualization. *Entropy*, **2021**, 23,	2.8	2
160	Uniform Manifold Approximation and Projection Analysis of Soccer Players. *Entropy*, **2021**, 23,	2.8	2
159	Quantifying the Predictability and Efficiency of the Cointegrated Ethanol and Agricultural Commodities Price Series. *Applied Sciences (Switzerland)*, **2019**, 9, 5303	2.6	2
158	A New Generalized Taylor-Like Explicit Method for Stiff Ordinary Differential Equations. *Mathematics*, **2019**, 7, 1154	2.3	2
157	Cluster analysis of the large natural satellites in the solar system. *Applied Mathematical Modelling*, **2021**, 89, 1268-1278	4.5	2
156	Shifted fractional Legendre spectral collocation technique for solving fractional stochastic Volterra integro-differential equations. *Engineering With Computers*,1	4.5	2
155	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

154	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		2
153	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
152	A Direct Approximation of Fractional Cole Cole Systems by Ordinary First-order Processes **2007**, 257-270		2
151	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
150	Mathematical and computational modeling of political systems. *Nonlinear Dynamics*, **2019**, 96, 1471-1490	5	1
149	Local Convergence of a Family of Weighted-Newton Methods. *Symmetry*, **2019**, 11, 103	2.7	1
148	Ball Comparison between Three Sixth Order Methods for Banach Space Valued Operators. *Mathematics*, **2020**, 8, 667	2.3	1
147	On the fractional Cornu spirals. *Communications in Nonlinear Science and Numerical Simulation*, **2019**, 67, 100-107	3.7	1
146	Complexity Analysis of Escher's Art. *Entropy*, **2019**, 21,	2.8	1
145	Efficient Three-Step Class of Eighth-Order Multiple Root Solvers and Their Dynamics. *Symmetry*, **2019**, 11, 837	2.7	1
144	A fractional perspective to financial indices. *Optimization*, **2014**, 63, 1167-1179	1.2	1
143	Approximation of data using non-integer harmonics series. *Nonlinear Dynamics*, **2017**, 89, 2845-2854	5	1
142	Advanced Topics in Dynamics of Complex Systems. *Mathematical Problems in Engineering*, **2014**, 2014, 1-1	1.1	1
141	Fractional order modelling of zero length column desorption response for adsorbents with variable particle sizes. *Open Physics*, **2013**, 11,	1.3	1
140	Delay Approximation of Fractional Integrals. *Asian Journal of Control*, **2013**, 15, 713-722	1.7	1
139	Multidimensional Scaling for Orthodontic Root Resorption. *Mathematical Problems in Engineering*, **2013**, 2013, 1-6	1.1	1
138	Realization of Fractional-Order Controllers: Analysis, Synthesis and Application to the Velocity Control of a Servo System. *Nonlinear Physical Science*, **2011**, 43-82	0.1	1
137	Air-Fuel Ratio Control of an Internal Combustion Engine Using CRONE Control Extended to LPV Systems **2010**, 71-86		1

136	Particle Swarm Optimization: Dynamical Analysis through Fractional Calculus **2009**,		1
135	Fractional Variable Structure Control **2011**,		1
134	Towards the PID Control of Heat Diffusion Systems **2007**,		1
133	Evolutionary computation in the design of logic circuits **2007**,		1
132	Robustness Comparison of Smith Predictor-based Control and Fractional-Order Control **2007**, 511-526		1
131	Integer vs. Fractional Order Control of a Hexapod Robot **2005**, 73-83		1
130	Introduction to the Special Issue on Modeling and Control of Artificial Locomotion Systems. *JVC/Journal of Vibration and Control*, **2006**, 12, 1291-1291	2	1
129	FRACTIONAL-ORDER EVOLUTIONARY DESIGN OF DIGITAL CIRCUITS. *IFAC Postprint Volumes IPPV / International Federation of Automatic Control*, **2006**, 39, 420-425		1
128	FRACTIONAL PD CONTROL OF AN HEXAPOD ROBOT. *IFAC Postprint Volumes IPPV / International Federation of Automatic Control*, **2006**, 39, 370-375		1
127	Fractional-order position/force robot control		1
126	Monitoring data types in distributed real-time systems		1
125	An extensible transport framework for CORBA with emphasis on real-time capabilities		1
124	Performance prediction for association rule mining algorithms **2004**,		1
123			1
122	A GA perspective of the energy requirements for manipulators maneuvering in a workspace with obstacles		1
121	Dynamic Efficiency During Bipedal Walking. *IFAC Postprint Volumes IPPV / International Federation of Automatic Control*, **1998**, 31, 195-200		1
120	A real-time system for robot manipulator inverse dynamics computation. *Annual Review in Automatic Programming*, **1988**, 14, 63-68		1
119	Robot Manipulator Dynamics Towards Better Computational Algorithms. *IFAC Postprint Volumes IPPV / International Federation of Automatic Control*, **1988**, 21, 69-74		1

118	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
117	A General Discretization Scheme for the Design of IIR Fractional Filters		1
116	Overview in Summabilities: Summation Methods for Divergent Series, Ramanujan Summation and Fractional Finite Sums. *Mathematics*, **2021**, 9, 2963	2.3	1
115	Active Wave Control for Flexible Structures Using Fractional Calculus **2007**, 435-448		1
114	Fractional Control of Coordinated Manipulators. *Journal of Advanced Computational Intelligence and Intelligent Informatics*, **2007**, 11, 1072-1078	0.4	1
113	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	0.2	1
112	Application of Fractional Order Concepts in the Study of Electrical Potential. *Springer Proceedings in Mathematics*, **2011**, 467-470		1
111	Fractional Differential Equations on Algebroids and Fractional Algebroids **2010**, 193-201		1
110	Hybrid Single Walled Carbon Nanotube FETs for High Fidelity DNA Detection **2010**, 17-24		1
109	Towards Integrated Nanoelectronic and Photonic Devices **2010**, 25-41		1
108	Music and Evolutionary Computation **2011**, 329-336		1
107	On the dynamics analysis of freeway traffic		1
106	Microprocessor-Based Controllers for Robotic Manipulators **1991**, 103-129		1
105	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		1
104	Fixed Point Transformations in the Adaptive Control of Fractional-order MIMO Systems. *Lecture Notes in Control and Information Sciences*, **2009**, 103-112	0.5	1
103	Synchronization Analysis of Two Networks **2010**, 243-253		1
102	Fractional Calculus: Application in Modeling and Control **2013**, 279-295		1
101	Computer Analysis of Human Belligerency. *Mathematics*, **2020**, 8, 1201	2.3	1

100	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
99	Assessing the Effect of Laboratory Activities on Core Curricular Units of an Engineering Master Program: A Multivariate Analysis. *Mathematical Problems in Engineering*, **2021**, 2021, 1-13	1.1	1
98	Forecasting of random sequences and Prony decomposition of finance data. *Analysis (Germany)*, **2016**, 36,	0.4	1
97	A survey on fractional asymptotic expansion method: A forgotten theory. *Fractional Calculus and Applied Analysis*, **2019**, 22, 1165-1176	2.7	1
96	Modeling and visualizing competitiveness in soccer leagues. *Applied Mathematical Modelling*, **2021**, 92, 136-148	4.5	1
95	Fractional calculus adventures in Wonderland (Round table held at ICFDA 2018). *Fractional Calculus and Applied Analysis*, **2018**, 21, 1151-1155	2.7	1
94	Optimal solution of the fractional order breast cancer competition model. *Scientific Reports*, **2021**, 11, 15622	4.9	1
93	Advances in the computational analysis of SARS-COV2 genome. *Nonlinear Dynamics*, **2021**, 106, 1-31	5	1
92	Stability analysis of uncertain fractional-order neutral-type delay systems with actuator saturation. *Frontiers of Information Technology and Electronic Engineering*,1	2.2	1
91	Convergence boundaries of complex-order particle swarm optimization algorithm with weak stagnation: dynamical analysis. *Nonlinear Dynamics*, **2021**, 106, 725-743	5	1
90	Fractional Damping: Stochastic Origin and Finite Approximations **2007**, 389-402		1
89	An accurate localized meshfree collocation technique for the telegraph equation in propagation of electrical signals. *Engineering With Computers*,1	4.5	1
88	Multidimensional scaling and visualization of patterns in global large-scale accidents. *Chaos, Solitons and Fractals*, **2022**, 157, 111951	9.3	1
87	Two-parameter bifurcation analysis of the discrete Lorenz model. *Mathematical Methods in the Applied Sciences*,	2.3	1
86	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*,095440622210864	1.3	1
85	The 21st Century Systems: An Updated Vision of Continuous-Time Fractional Models. *IEEE Circuits and Systems Magazine*, **2022**, 22, 36-56	3.2	1
84	Derivative Free Fourth Order Solvers of Equations with Applications in Applied Disciplines. *Symmetry*, **2019**, 11, 586	2.7	0
83	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

82	Fractional fractals. *Fractional Calculus and Applied Analysis*, **2020**, 23, 1329-1348	2.7	0
81	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
80	Fractional Kinetics in Pseudochaotic Systems and Its Applications **2007**, 127-138		0
79	Semi-integrals and Semi-derivatives in Particle Physics **2007**, 139-154		0
78	Application of Robust Fixed Point Transformations for Technological Operation of Robots. *Lecture Notes in Control and Information Sciences*, **2009**, 93-101	0.5	0
77	Position and Velocity Control of a Servo by Using GPC of Arbitrary Real Order **2010**, 369-376		0
76	Dynamics and optimal control of multibody systems using fractional generalized divide-and-conquer algorithm. *Nonlinear Dynamics*, **2020**, 102, 1611-1626	5	0
75	Entropy analysis of human death uncertainty. *Nonlinear Dynamics*, **2021**, 104, 1-15	5	0
74	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
73	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
72	Optimal solution of the fractional-order smoking model and its public health implications. *Nonlinear Dynamics*,1	5	0
71	Multidimensional Analysis of Near-Earth Asteroids. *SN Computer Science*, **2022**, 3, 1	2	0
70	Fractional generalization of entropy improves the characterization of rotors in simulated atrial fibrillation. *Applied Mathematics and Computation*, **2022**, 425, 127077	2.7	0
69	Adaptive state-of-charge estimation of lithium-ion batteries based on square-root unscented Kalman filter. *Energy*, **2022**, 123972	7.9	0
68	Revisiting the Formula for the Ramanujan Constant of a Series. *Mathematics*, **2022**, 10, 1539	2.3	0
67	Multi-objective Dynamic Analysis Using Fractional Entropy. *Advances in Intelligent Systems and Computing*, **2017**, 448-456	0.4	
66	Computational comparison and pattern visualization of forest fires. *Chaos, Solitons and Fractals*, **2017**, 102, 407-413	9.3	
65	Demonstrations and Applications of Fractional-Order Devices. *SpringerBriefs in Applied Sciences and Technology*, **2017**, 55-72	0.4	

64	Existence of Bounded Solutions to a Modified Version of the Bagley–Torvik Equation. *Mathematics*, **2020**, 8, 289	2.3
63	Stability of multidimensional systems using bio-inspired meta-heuristics. *International Journal of Control*, **2018**, 91, 2646-2656	1.5
62	Temporal Patterns in Earthquake Data-series **2015**, 50-60	
61	Approximate Methods for Local Fractional Differential Equations **2015**, 243-257	
60	Sensor Classification Methods Applied to Robotics. *Lecture Notes in Computer Science*, **2012**, 23-31	0.9
59	Fractional Dynamics of Genetic Algorithms Using Hexagonal Space Tessellation. *Abstract and Applied Analysis*, **2013**, 2013, 1-7	0.7
58	Multidimensional Scaling Analysis of Electricity Market Prices. *Intelligent Systems, Control and Automation: Science and Engineering*, **2013**, 345-354	0.6
57	Fractional-Order Fourier Analysis of the DNA. *IFAC Postprint Volumes IPPV / International Federation of Automatic Control*, **2013**, 46, 248-253	
56	Generalized Hankel Transform and Fractional Integrals on the Spaces of Generalized Functions **2010**, 203-212	
55	Multidimensional scaling applied to histogram-based DNA analysis. *Comparative and Functional Genomics*, **2012**, 2012, 289694	
54	Self-Similarity in World Economy. *IFAC Postprint Volumes IPPV / International Federation of Automatic Control*, **2012**, 45, 583-586	
53	Fractional-Order Fourier Analysis of Human DNA. *IFAC Postprint Volumes IPPV / International Federation of Automatic Control*, **2012**, 45, 560-564	
52	Fractional dynamics in liquid manipulation. *Bulletin of the Polish Academy of Sciences: Technical Sciences*, **2010**, 58, 555-560	
51	Automated design of microwave discrete tuning differential capacitance circuits in Si-integrated technologies. *Microwave and Optical Technology Letters*, **2010**, 52, 629-634	1.2
50	Variable Structure Position/Force Hybrid Control of Manipulators. *IFAC Postprint Volumes IPPV / International Federation of Automatic Control*, **1997**, 30, 337-342	
49	Robustness of Fractional-order Boundary Control of Time Fractional Wave Equations with Delayed Boundary Measurement Using the Simple Predictor **2007**, 543-552	
48	FRACTIONAL-ORDER HARMONICS IN THE TRAJECTORY CONTROL OF REDUNDANT MANIPULATORS. *IFAC Postprint Volumes IPPV / International Federation of Automatic Control*, **2006**, 39, 155-160	
47	FRACTIONAL CONTROL OF TWO ARMS WORKING IN COOPERATION. *IFAC Postprint Volumes IPPV / International Federation of Automatic Control*, **2006**, 39, 355-360	

46	Fractional Order Dynamics in the Trajectory Planning of Redundant and Hyper-Redundant Manipulators **2003**, 703	
45	A program for teaching the fundamentals of robot modelling and control. *IFAC Postprint Volumes IPPV / International Federation of Automatic Control*, **1994**, 27, 271-276	
44	A computational view of electrophysiological properties under different atrial fibrosis conditions. *Applied Mathematical Modelling*, **2022**, 105, 534-550	4.5
43	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
42	Optimal Location of the Workpiece in a PKM-based Machining Robotic Cell223-236	
41	Discretization of Fractional Operators: Analysis by Means of Advanced Computational Techniques. *Mathematics*, **2021**, 9, 2429	2.3
40	Three Classes of FDEs Amenable to Approximation Using a Galerkin Technique **2007**, 3-14	
39	Solute Spreading in Heterogeneous Aggregated Porous Media **2007**, 185-197	
38	Enhanced Tracer Diffusion in Porous Media with an Impermeable Boundary **2007**, 171-184	
37	Riesz Potentials as Centred Derivatives **2007**, 93-112	
36	A Fractional Calculus Perspective in the Evolutionary Design of Combinational Circuits **2007**, 305-322	
35	Dynamic Response of the Fractional Relaxor Oscillator to a Harmonic Driving Force **2007**, 243-256	
34	Quasi-Fractals: New Possibilities in Description of Disordered Media **2007**, 377-388	
33	Kinematic study of biped locomotion systems **1997**, 163-176	
32	Design Optimization of Radio Frequency Discrete Tuning Varactors. *Lecture Notes in Computer Science*, **2009**, 343-352	0.9
31	Design of Radio-Frequency Integrated CMOS Discrete Tuning Varactors Using the Particle Swarm Optimization Algorithm. *Lecture Notes in Computer Science*, **2009**, 1231-1239	0.9
30	Some Bounds on Maximum Number of Frequencies Existing in Oscillations Produced by Linear Fractional Order Systems **2010**, 213-220	
29	Comparing Numerical Methods for Solving Nonlinear Fractional Order Differential Equations **2010**, 171-179	

28 Fractional-Order Backward-Difference Definition Formula Analysis **2010**, 181-191

27 Novel Molecular Diodes Developed by Chemical Conjugation of Carbon Nanotubes with Peptide Nucleic Acid **2010**, 3-15

26 Frequency Response Based CACSD for Fractional Order Systems **2010**, 419-427

25 Fractional Derivatives with Fuzzy Exponent **2010**, 221-231

24 On the Implementation of a Limited Frequency Band Integrator and Application to Energetic Material Ignition Prediction **2010**, 273-285

23 Stability of Fractional-Delay Systems: A Practical Approach **2010**, 163-170

22 Game Problems for Fractional-Order Systems **2010**, 233-241

21 Multi-criteria Manipulator Trajectory Optimization Based on Evolutionary Algorithms. *Advances in Intelligent and Soft Computing*, **2010**, 87-94

20 On Fractional Control Strategy for Four-Wheel-Steering Vehicle **2010**, 453-462

19 Application of Genetic Algorithms in the Design of an Electrical Potential of Fractional Order **2011**, 273-280

18 Fractional Analysis of Traffic Dynamics. *Springer Proceedings in Mathematics*, **2011**, 353-357

17 Intrinsic Fractal Dynamics in the Respiratory System by Means of Pressure Volume Loops **2011**, 217-227

16 Application of Computational Intelligence to Engineering **2011**, 337-345

15 Evolutionary Trajectory Optimization for Redundant Robots **2011**, 347-353

14 Fitness Function Evaluation Through Fractional Algorithms. *Springer Proceedings in Mathematics*, **2011**, 607-610

13 Fractional Control of Dynamic Systems. *Springer Proceedings in Mathematics*, **2011**, 155-159

12 Casualties Distribution in Human and Natural Hazards **2014**, 173-180

11 Analysis of Electricity Market Prices Using Multidimensional Scaling **2014**, 305-313

10	Comparison and Visualization of the DNA of Six Primates. *Topics in Intelligent Engineering and Informatics*, **2014**, 295-309	0.4
9	A Statistical Approach for Tuning the Windowed Fourier Transform **2014**, 269-281	
8	Relation Between New Rooted Trees and Derivatives of Differential Equations **2021**, 45, 1025-1036	
7	In memory of the honorary founding editors behind the FCAA success story. *Fractional Calculus and Applied Analysis*, **2021**, 24, 641-666	2.7
6	On the Cole□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*,107754632110310	2
5	Continuous-time fractional linear systems: transient responses **2019**, 119-148	
4	Optimal solution of a general class of nonlinear system of fractional partial differential equations using hybrid functions. *Engineering With Computers*,1	4.5
3	Shannon Information Analysis of the Chromosome Code. *Advances in Dynamics, Patterns, Cognition*, **2022**, 1-12	0.7
2	An Efficient Operational Matrix Technique for Variable-Order Fractional Optimal Control Problems. *Nonlinear Physical Science*, **2022**, 131-146	0.1
1	Solving Nonlinear Variable-Order Time Fractional Convection-Diffusion Equation with Generalized Polynomials. *Nonlinear Physical Science*, **2022**, 147-161	0.1