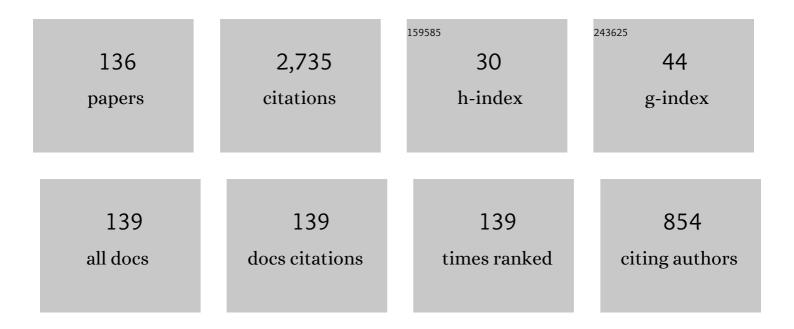
List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/452661/publications.pdf Version: 2024-02-01



#	Article	IF	CITATIONS
1	An approximation algorithm for the solution of the nonlinear Lane–Emden type equations arising in astrophysics using Hermite functions collocation method. Computer Physics Communications, 2010, 181, 1096-1108.	7.5	181
2	Rational Legendre pseudospectral approach for solving nonlinear differential equations of Lane–Emden type. Journal of Computational Physics, 2009, 228, 8830-8840.	3.8	129
3	Rational Legendre Approximation for Solving some Physical Problems on Semi-Infinite Intervals. Physica Scripta, 2004, 69, 353-357.	2.5	90
4	Numerical solution of nonlinear Volterra–Fredholm–Hammerstein integral equations via collocation method based on radial basis functions. Applied Mathematics and Computation, 2012, 218, 5292-5309.	2.2	90
5	Rational Chebyshev tau method for solving higher-order ordinary differential equations. International Journal of Computer Mathematics, 2004, 81, 73-80.	1.8	74
6	Pricing European and American options by radial basis point interpolation. Applied Mathematics and Computation, 2015, 251, 363-377.	2.2	65
7	Rational Chebyshev tau method for solving Volterra's population model. Applied Mathematics and Computation, 2004, 149, 893-900.	2.2	63
8	Sinc-Collocation method for solving astrophysics equations. New Astronomy, 2010, 15, 533-537.	1.8	56
9	A novel application of radial basis functions for solving a model of first-order integro-ordinary differential equation. Communications in Nonlinear Science and Numerical Simulation, 2011, 16, 4250-4258.	3.3	54
10	Numerical solution of fractional differential equations with a Tau method based on Legendre and Bernstein polynomials. Mathematical Methods in the Applied Sciences, 2014, 37, 329-342.	2.3	53
11	Accurate solution of the Thomas–Fermi equation using the fractional order of rational Chebyshev functions. Journal of Computational and Applied Mathematics, 2017, 317, 624-642.	2.0	52
12	Local weak form meshless techniques based on the radial point interpolation (RPI) method and local boundary integral equation (LBIE) method to evaluate European and American options. Communications in Nonlinear Science and Numerical Simulation, 2015, 22, 1178-1200.	3.3	48
13	Sinc-collocation method for solving the Blasius equation. Physics Letters, Section A: General, Atomic and Solid State Physics, 2009, 373, 4060-4065.	2.1	47
14	Rational Chebyshev pseudospectral approach for solving Thomas–Fermi equation. Physics Letters, Section A: General, Atomic and Solid State Physics, 2009, 373, 210-213.	2.1	44
15	Lagrangian method for solving Lane–Emden type equation arising in astrophysics on semi-infinite domains. Acta Astronautica, 2010, 67, 673-680.	3.2	43
16	The Sinc-collocation method for solving the Thomas–Fermi equation. Journal of Computational and Applied Mathematics, 2013, 237, 244-252.	2.0	43
17	A single layer fractional orthogonal neural network for solving various types of Lane–Emden equation. New Astronomy, 2020, 75, 101307.	1.8	43
18	Radial basis functions methods for solving Fokker–Planck equation. Engineering Analysis With Boundary Elements, 2012, 36, 181-189.	3.7	41

#	Article	IF	CITATIONS
19	An improved numerical method for a class of astrophysics problems based on radial basis functions. Physica Scripta, 2011, 83, 015011.	2.5	40
20	Collocation method using sinc and Rational Legendre functions for solving Volterra's population model. Communications in Nonlinear Science and Numerical Simulation, 2011, 16, 1811-1819.	3.3	38
21	Application of Bessel functions for solving differential and integro-differential equations of the fractional order. Applied Mathematical Modelling, 2014, 38, 4137-4147.	4.2	38
22	Rational scaled generalized Laguerre function collocation method for solving the Blasius equation. Journal of Computational and Applied Mathematics, 2009, 233, 980-989.	2.0	37
23	Solution of a laminar boundary layer flow via a numerical method. Communications in Nonlinear Science and Numerical Simulation, 2010, 15, 360-367.	3.3	36
24	Solving Volterra's population growth model of arbitrary order using the generalized fractional order of the Chebyshev functions. Ricerche Di Matematica, 2016, 65, 307-328.	1.0	35
25	Numerical approximations for population growth model by rational Chebyshev and Hermite functions collocation approach: A comparison. Mathematical Methods in the Applied Sciences, 2010, 33, 2076-2086.	2.3	34
26	Modified generalized Laguerre function Tau method for solving laminar viscous flow. International Journal of Numerical Methods for Heat and Fluid Flow, 2010, 20, 728-743.	2.8	33
27	Optimal control of a parabolic distributed parameter system via radial basis functions. Communications in Nonlinear Science and Numerical Simulation, 2014, 19, 2559-2567.	3.3	33
28	Numerical Study of Astrophysics Equations by Meshless Collocation Method Based on Compactly Supported Radial Basis Function. International Journal of Applied and Computational Mathematics, 2017, 3, 1053-1075.	1.6	33
29	Comparison between two common collocation approaches based on radial basis functions for the case of heat transfer equations arising in porous medium. Communications in Nonlinear Science and Numerical Simulation, 2011, 16, 1396-1407.	3.3	32
30	Solving a laminar boundary layer equation with the rational Gegenbauer functions. Applied Mathematical Modelling, 2013, 37, 851-863.	4.2	32
31	A New Method for Solving Steady Flow of a Third-Grade Fluid in a Porous Half Space Based on Radial Basis Functions. Zeitschrift Fur Naturforschung - Section A Journal of Physical Sciences, 2011, 66, 591-598.	1.5	31
32	Exp-function method for some nonlinear PDE's and a nonlinear ODE's. Journal of King Saud University - Science, 2012, 24, 1-10.	3.5	31
33	An approximate solution of the MHD Falkner–Skan flow by Hermite functions pseudospectral method. Communications in Nonlinear Science and Numerical Simulation, 2011, 16, 274-283.	3.3	29
34	Solving non-linear Lane–Emden type equations using Bessel orthogonal functions collocation method. Celestial Mechanics and Dynamical Astronomy, 2013, 116, 97-107.	1.4	29
35	A meshless method on non-Fickian flows with mixing length growth in porous media based on radial basis functions: A comparative study. Computers and Mathematics With Applications, 2012, 64, 399-412.	2.7	28
36	A numerical solution of the nonlinear controlled Duffing oscillator by radial basis functions. Computers and Mathematics With Applications, 2012, 64, 2049-2065.	2.7	27

#	Article	IF	CITATIONS
37	Operation matrix method based on Bernstein polynomials for the Riccati differential equation and Volterra population model. Applied Mathematical Modelling, 2016, 40, 993-1011.	4.2	27
38	The numerical study on the unsteady flow of gas in a semi-infinite porous medium using an RBF collocation method. International Journal of Computer Mathematics, 2012, 89, 2240-2258.	1.8	25
39	Fractional order of rational Jacobi functions for solving the non-linear singular Thomas-Fermi equation. European Physical Journal Plus, 2017, 132, 1.	2.6	25
40	Simulation of nonlinear fractional dynamics arising in the modeling of cognitive decision making using a new fractional neural network. Mathematical Methods in the Applied Sciences, 2020, 43, 1437-1466.	2.3	25
41	Application of meshfree methods for solving the inverse one-dimensional Stefan problem. Engineering Analysis With Boundary Elements, 2014, 40, 1-21.	3.7	24
42	A novel numerical technique to obtain an accurate solution to the Thomas-Fermi equation. European Physical Journal Plus, 2016, 131, 1.	2.6	22
43	Numerical pricing of American options under two stochastic factor models with jumps using a meshless local Petrov–Galerkin method. Applied Numerical Mathematics, 2017, 115, 252-274.	2.1	22
44	The rational Chebyshev of second kind collocation method for solving a class of astrophysics problems. European Physical Journal Plus, 2016, 131, 1.	2.6	21
45	Novel orthogonal functions for solving differential equations of arbitrary order. Tbilisi Mathematical Journal, 2017, 10, .	0.3	21
46	An iterative reproducing kernel method in Hilbert space for the multi-point boundary value problems. Journal of Computational and Applied Mathematics, 2018, 328, 151-163.	2.0	21
47	Generalized pseudospectral method: Theory and applications. Journal of Computational Science, 2019, 34, 11-32.	2.9	21
48	A new approach to the numerical solution of Fredholm integral equations using least squares-support vector regression. Mathematics and Computers in Simulation, 2021, 180, 114-128.	4.4	21
49	Rational and Exponential Legendre Tau Method on Steady Flow of a Third Grade Fluid in a Porous Half Space. International Journal of Applied and Computational Mathematics, 2016, 2, 679-698.	1.6	19
50	Pricing European and American Options Using a Very Fast and Accurate Scheme: The Meshless Local Petrov–Galerkin Method. Proceedings of the National Academy of Sciences India Section A - Physical Sciences, 2015, 85, 337-351.	1.2	18
51	Numerical simulation of reaction–diffusion neural dynamics models and their synchronization/desynchronization: Application to epileptic seizures. Computers and Mathematics With Applications, 2019, 78, 3644-3677.	2.7	18
52	Kansa method for the solution of a parabolic equation with an unknown spacewise-dependent coefficient subject to an extra measurement. Computer Physics Communications, 2013, 184, 582-595.	7.5	17
53	An Efficient Numerical Solution of Nonlinear Hunter–Saxton Equation. Communications in Theoretical Physics, 2017, 67, 483.	2.5	17
54	A numerical investigation of the boundary layer flow of an Eyring-Powell fluid over a stretching sheet via rational Chebyshev functions. European Physical Journal Plus, 2017, 132, 1.	2.6	17

#	Article	IF	CITATIONS
55	RBF-DQ method for solving non-linear differential equations of Lane-Emden type. Ain Shams Engineering Journal, 2018, 9, 615-629.	6.1	17
56	An iterative kernel based method for fourth order nonlinear equation with nonlinear boundary condition. Communications in Nonlinear Science and Numerical Simulation, 2018, 59, 544-552.	3.3	17
57	The use of Sincâ€collocation method for solving Falkner–Skan boundaryâ€layer equation. International Journal for Numerical Methods in Fluids, 2012, 68, 36-47.	1.6	16
58	Solving the nonlinear Schlomilch's integral equation arising in ionospheric problems. Afrika Matematika, 2017, 28, 459-480.	0.8	16
59	New numerical solutions for solving Kidder equation by using the rational Jacobi functions. SeMA Journal, 2017, 74, 569-583.	2.0	15
60	Collocation method to solve inequality-constrained optimal control problems of arbitrary order. Engineering With Computers, 2020, 36, 115-125.	6.1	15
61	Solving Volterra's Population Model Using New Second Derivative Multistep Methods. American Journal of Applied Sciences, 2008, 5, 1019-1022.	0.2	14
62	A new Reliable Numerical Algorithm Based on the First Kind of Bessel Functions to Solve Prandtl–Blasius Laminar Viscous Flow over a Semi-Infinite Flat Plate. Zeitschrift Fur Naturforschung - Section A Journal of Physical Sciences, 2012, 67, 665-673.	1.5	13
63	The meshfree strong form methods for solving one dimensional inverse Cauchy-Stefan problem. Engineering With Computers, 2017, 33, 547-571.	6.1	13
64	Systems of nonlinear Volterra integro-differential equations of arbitrary order. Boletim Da Sociedade Paranaense De Matematica, 2018, 36, 33-54.	0.4	13
65	Parallel LS-SVM for the numerical simulation of fractional Volterra's population model. AEJ - Alexandria Engineering Journal, 2021, 60, 5637-5647.	6.4	13
66	Dynamical behavior of reaction–diffusion neural networks and their synchronization arising in modeling epileptic seizure: A numerical simulation study. Computers and Mathematics With Applications, 2020, 80, 1887-1927.	2.7	12
67	Novel solution for heat and mass transfer of a MHD micropolar fluid flow on a moving plate with suction and injection. Engineering With Computers, 2022, 38, 13-30.	6.1	12
68	Learning nonlinear dynamics with behavior ordinary/partial/system of the differential equations: looking through the lens of orthogonal neural networks. Engineering With Computers, 2022, 38, 1635-1654.	6.1	12
69	An accurate numerical analysis of the laminar two-dimensional flow of an incompressible Eyring-Powell fluid over a linear stretching sheet. European Physical Journal Plus, 2017, 132, 1.	2.6	11
70	Generalized Lagrangian Jacobi Gauss collocation method for solving unsteady isothermal gas through a micro-nano porous medium. European Physical Journal Plus, 2018, 133, 1.	2.6	11
71	A hybrid numerical method to solve nonlinear parabolic partial differential equations of time-arbitrary order. Computational and Applied Mathematics, 2019, 38, 1.	2.2	11
72	Numerical Study on Gas Flow Through a Micro-Nano Porous Media Based on Special Functions. Journal of Computational and Theoretical Nanoscience, 2011, 8, 282-288.	0.4	10

#	Article	IF	CITATIONS
73	Radial basis functions approach on optimal control problems: a numerical investigation. JVC/Journal of Vibration and Control, 2014, 20, 1394-1416.	2.6	10
74	Pricing American options under jump-diffusion models using local weak form meshless techniques. International Journal of Computer Mathematics, 2017, 94, 1694-1718.	1.8	10
75	Fractional Chebyshev deep neural network (FCDNN) for solving differential models. Chaos, Solitons and Fractals, 2021, 153, 111530.	5.1	10
76	Application of Meshfree Method Based on Compactly Supported Radial Basis Function for Solving Unsteady Isothermal Gas Through a Micro–Nano Porous Medium. Iranian Journal of Science and Technology, Transaction A: Science, 2017, 41, 677-684.	1.5	9
77	Using modified generalized Laguerre functions, QLM and collocation method for solving an Eyring–Powell problem. Journal of the Brazilian Society of Mechanical Sciences and Engineering, 2018, 40, 1.	1.6	9
78	Quasilinearization-Lagrangian method to solve the HIV infection model of CD4 \$\$^+\$\$ + T cells. SeMA Journal, 2018, 75, 271-283.	2.0	9
79	Generalized Lagrange Jacobi Gauss-Lobatto (GLJGL) Collocation Method for Solving Linear and Nonlinear Fokker-Planck Equations. Communications in Theoretical Physics, 2018, 69, 519.	2.5	9
80	Numerical and Analytical Solution of Gas Flow Through a Micro-Nano Porous Media: A Comparison. Journal of Computational and Theoretical Nanoscience, 2011, 8, 2033-2041.	0.4	8
81	Analytical solution of the transpiration on the boundary layer flow and heat transfer over a vertical slender cylinder. Quaestiones Mathematicae, 2013, 36, 353-380.	0.6	8
82	A new computational method based on fractional Lagrange functions to solve multi-term fractional differential equations. Numerical Algorithms, 2021, 88, 729-766.	1.9	8
83	Efficient image denoising technique using the meshless method: Investigation of operator splitting RBF collocation method for two anisotropic diffusion-based PDEs. Computers and Mathematics With Applications, 2022, 113, 315-331.	2.7	8
84	A new numerical algorithm based on the first kind of modified Bessel function to solve population growth in a closed system. International Journal of Computer Mathematics, 2014, 91, 1239-1254.	1.8	7
85	The generalized fractional order of the Chebyshev functions on nonlinear boundary value problems in the semi-infinite domain. Nonlinear Engineering, 2017, 6, .	2.7	7
86	A numerical method to solve the 1D and the 2D reaction diffusion equation based on Bessel functions and Jacobian free Newton-Krylov subspace methods. European Physical Journal Plus, 2017, 132, 1.	2.6	7
87	Multiplicity results by shooting reproducing kernel Hilbert space method for the catalytic reaction in a flat particle. Journal of Theoretical and Computational Chemistry, 2018, 17, 1850020.	1.8	7
88	Least squares support vector regression for solving Volterra integral equations. Engineering With Computers, 2022, 38, 789-796.	6.1	7
89	Least squares support vector regression for differential equations on unbounded domains. Chaos, Solitons and Fractals, 2021, 151, 111232.	5.1	7
90	Solving the Unsteady Isothermal Gas Through a Micro-Nano Porous Medium via Bessel Function Collocation Method. Journal of Computational and Theoretical Nanoscience, 2014, 11, 131-136.	0.4	6

#	Article	IF	CITATIONS
91	Solving Steady Flow of a Third-Grade Fluid in a Porous Half Space via Normal and Modified Rational Christov Functions Collocation Method. Zeitschrift Fur Naturforschung - Section A Journal of Physical Sciences, 2014, 69, 188-194.	1.5	6
92	An Accurate Numerical Method for Solving Unsteady Isothermal Flow of a Gas Through a Semi-Infinite Porous Medium. Journal of Computational and Nonlinear Dynamics, 2018, 13, .	1.2	6
93	Numerical study of a multidimensional dynamic quantum model arising in cognitive psychology especially in decision making. European Physical Journal Plus, 2019, 134, 1.	2.6	6
94	New numerical method based on Generalized Bessel function to solve nonlinear Abel fractional differential equation of the first kind. Nonlinear Engineering, 2019, 8, 438-448.	2.7	6
95	Two Efficient Computational Algorithms to Solve the Nonlinear Singular Lane-Emden Equations. Astrophysics, 2020, 63, 133-150.	0.5	6
96	Numerical learning approximation of time-fractional sub diffusion model on a semi-infinite domain. Chaos, Solitons and Fractals, 2021, 142, 110435.	5.1	6
97	Application Of The Exact Operational Matrices Based On The Bernstein Polynomials. Journal of Mathematics and Computer Science, 2013, 06, 36-59.	1.0	6
98	FPGA-orthopoly: a hardware implementation of orthogonal polynomials. Engineering With Computers, 2023, 39, 2257-2276.	6.1	6
99	AN EFFECTIVE NUMERICAL METHOD FOR SOLVING THE NONLINEAR SINGULAR LANE-EMDEN TYPE EQUATIONS OF VARIOUS ORDERS. Jurnal Teknologi (Sciences and Engineering), 2016, 79, .	0.4	5
100	Two Meshfree Numerical Approaches for Solving High-Order Singular Emden–Fowler Type Equations. International Journal of Applied and Computational Mathematics, 2017, 3, 521-546.	1.6	5
101	Solving the Boundary Layer Flow of Eyring–Powell Fluid Problem via Quasilinearization–Collocation Method Based on Hermite Functions. INAE Letters, 2018, 3, 11-19.	1.0	5
102	Shifted Lagrangian Jacobi collocation scheme for numerical solution of a model of HIV infection. SeMA Journal, 2018, 75, 379-398.	2.0	5
103	A numerical method based on rational Gegenbauer functions for solving boundary layer flow of a Powell–Eyring non-Newtonian fluid. Computational and Applied Mathematics, 2018, 37, 6053-6075.	1.3	5
104	Application of Bessel functions and Jacobian free Newton method to solve time-fractional Burger equation. Nonlinear Engineering, 2019, 8, 688-694.	2.7	5
105	A new numerical learning approach to solve general Falkner–Skan model. Engineering With Computers, 2022, 38, 121-137.	6.1	5
106	An efficient space-splitting method for simulating brain neurons by neuronal synchronization to control epileptic activity. Engineering With Computers, 2022, 38, 819-846.	6.1	5
107	Desynchronization of stochastically synchronized neural populations through phase distribution control: a numerical simulation approach. Nonlinear Dynamics, 2021, 104, 2363-2388.	5.2	5
108	Numerical approach of flow and mass transfer on nonlinear stretching sheet with chemically reactive species using rational Jacobi collocation method. International Journal of Numerical Methods for Heat and Fluid Flow, 2013, 23, 772-789.	2.8	4

#	Article	IF	CITATIONS
109	Shifted Boubaker Lagrangian approach for solving biological systems. International Journal of Biomathematics, 2018, 11, 1850039.	2.9	4
110	A rational approximation to the boundary layer flow of a non-Newtonian fluid. Journal of the Brazilian Society of Mechanical Sciences and Engineering, 2019, 41, 1.	1.6	4
111	Numerical study of temperature distribution in an inverse moving boundary problem using a meshless method. Engineering With Computers, 2021, 37, 461-475.	6.1	4
112	An efficient numerical method for solving nonlinear Thomas-Fermi equation. Acta Universitatis Sapientiae, Mathematica, 2018, 10, 134-151.	0.2	4
113	A comparison of numerical and semi-analytical methods for the case of heat transfer equations arising in porous medium. European Physical Journal Plus, 2016, 131, 1.	2.6	3
114	An efficient numerical method for solving nonlinear foam drainage equation. Indian Journal of Physics, 2018, 92, 231-243.	1.8	3
115	An efficient numerical method to solve the Falkner-Skan problem over an isothermal moving wedge. International Journal of Numerical Methods for Heat and Fluid Flow, 2018, 28, 2132-2157.	2.8	3
116	Application of QLM-Rational Legendre collocation method towards Eyring-Powell fluid model. Nonlinear Engineering, 2019, 8, 216-223.	2.7	3
117	The novel learning solutions to nonlinear differential models on a semi-infinite domain. Engineering With Computers, 0, , 1.	6.1	3
118	Numerical investigation on nano boundary layer equation with Navier boundary condition. Mathematical Methods in the Applied Sciences, 2012, 35, 976-992.	2.3	2
119	Operational matrices to solve nonlinear Riccati differential equations of arbitrary order. St Petersburg Polytechnical University Journal Physics and Mathematics, 2017, 3, 242-254.	0.3	2
120	An efficient analytic approach for solving Hiemenz flow through a porous medium of a non-Newtonian Rivlin-Ericksen fluid with heat transfer. Nonlinear Engineering, 2018, 7, 287-301.	2.7	2
121	A Novel Method to Solve Nonlinear Klein-Gordon Equation Arising in Quantum Field Theory Based on Bessel Functions and Jacobian Free Newton-Krylov Sub-Space Methods. Communications in Theoretical Physics, 2018, 69, 637.	2.5	2
122	A comparison of Newton–Raphson method with Newton–Krylov generalized minimal residual (GMRes) method for solving one and two dimensional nonlinear Fredholm integral equations. SeMA Journal, 2019, 76, 615-624.	2.0	2
123	Imposing various boundary conditions on positive definite kernels. Applied Mathematics and Computation, 2019, 361, 453-465.	2.2	2
124	Solving two-dimensional integral equations of the second kind on non-rectangular domains with error estimate. Engineering With Computers, 2020, 36, 725-739.	6.1	2
125	Recovering a moving boundary from Cauchy data in an inverse problem which arises in modeling brain tumor treatment: the (quasi)linearization idea combined with radial basis functions (RBFs) approximation. Engineering With Computers, 2021, 37, 1735.	6.1	2
126	Numerical simulation of Volterra–Fredholm integral equations using least squares support vector regression. Computational and Applied Mathematics, 2021, 40, 1.	2.2	2

#	Article	IF	CITATIONS
127	Anti-aliasing of gray-scale/color/outline images: Looking through the lens of numerical approaches for PDE-based models. Computers and Mathematics With Applications, 2022, 113, 130-147.	2.7	2
128	A numerical approach based on B-spline basis functions to solve boundary layer flow model of a non-Newtonian fluid. Journal of the Brazilian Society of Mechanical Sciences and Engineering, 2018, 40, 1.	1.6	1
129	The Legendre wavelet method for solving the steady flow of a third-grade fluid in a porous half space. SeMA Journal, 2019, 76, 495-503.	2.0	1
130	Unsteady flow of gas in a semi-infinite porous medium: a numerical investigation by using RBF-DQM. Indian Journal of Physics, 2020, 95, 2107.	1.8	1
131	Numerical Simulation of Flow over Non-Linearly Stretching Sheet Considering Chemical Reaction and Magnetic Field. Mathematics, 2020, 8, 1496.	2.2	1
132	NUMERICAL SOLUTION OF AN INTEGRO-DIFFERENTIAL EQUATION ARISING IN OSCILLATING MAGNETIC FIELDS. Journal of the Korean Society for Industrial and Applied Mathematics, 2016, 20, 261-275.	0.0	1
133	Numerical techniques for behavior of incompressible flow in steady two-dimensional motion due to a linearly stretching of porous sheet based on radial basis functions. Nonlinear Engineering, 2019, 8, 80-93.	2.7	0
134	Exponential Solution for the Natural Convection of a Darcian Fluid About a Full Cone in a Porous Medium. International Journal of Applied and Computational Mathematics, 2019, 5, 1.	1.6	0
135	Generalized Lagrange–Jacobi–Gauss–Radau collocation method for solving a nonlinear optimal control problem with the classical diffusion equation. European Physical Journal Plus, 2020, 135, 1.	2.6	0
136	Chebyshev wavelet method for solving radiative transfer equation in a slab medium. Tbilisi Mathematical Journal, 2019, 12, .	0.3	0