Eid H Doha

List of Publications by Year
in descending order

109 papers	3,738 citations	117625 34 h-index	144013 57 g-index
111 all docs	111 docs citations	111 times ranked	1143 citing authors

#	Article	IF	Citations
1	A Chebyshev spectral method based on operational matrix for initial and boundary value problems of fractional order. Computers and Mathematics With Applications, 2011, 62, 2364-2373.	2.7	261
2	A new Jacobi operational matrix: An application for solving fractional differential equations. Applied Mathematical Modelling, 2012, 36, 4931-4943.	4.2	252
3	Efficient Chebyshev spectral methods for solving multi-term fractional orders differential equations. Applied Mathematical Modelling, 2011, 35, 5662-5672.	4.2	207
4	A spectral tau algorithm based on Jacobi operational matrix for numerical solution of time fractional diffusion-wave equations. Journal of Computational Physics, 2015, 293, 142-156.	3.8	176
5	Efficient spectral-Galerkin algorithms for direct solution of fourth-order differential equations using Jacobi polynomials. Applied Numerical Mathematics, 2008, 58, 1224-1244.	2.1	95
6	Integrals of Bernstein polynomials: An application for the solution of high even-order differential equations. Applied Mathematics Letters, 2011, 24, 559-565.	2.7	92
7	A new Jacobi rationalâ€“Gauss collocation method for numerical solution of generalized pantograph equations. Applied Numerical Mathematics, 2014, 77, 43-54.	2.1	86
8	On the construction of recurrence relations for the expansion and connection coefficients in series of Jacobi polynomials. Journal of Physics A, 2004, 37, 657-675.	1.6	85
9	A numerical technique based on the shifted Legendre polynomials for solving the time-fractional coupled KdV equations. Calcolo, 2016, 53, 1-17.	1.1	78
10	Second kind Chebyshev operational matrix algorithm for solving differential equations of Laneâ€“Emden type. New Astronomy, 2013, 23-24, 113-117.	1.8	76
11	Jacobiâ€“Gaussâ€–Lobatto collocation method for the numerical solution of nonlinear SchrÃ¶dinger equations. Journal of Computational Physics, 2014, 261, 244-255.	3.8	72
12	On shifted Jacobi spectral approximations for solving fractional differential equations. Applied Mathematics and Computation, 2013, 219, 8042-8056.	2.2	67
13	Efficient Spectral-Galerkin Algorithms for Direct Solution of Second-Order Equations Using Ultraspherical Polynomials. SIAM Journal of Scientific Computing, 2002, 24, 548-571.	2.8	63
14	The coefficients of differentiated expansions and derivatives of ultraspherical polynomials. Computers and Mathematics With Applications, 1991, 21, 115-122.	2.7	61
15	A numerical approach based on Legendre orthonormal polynomials for numerical solutions of fractional optimal control problems. JVC/Journal of Vibration and Control, 2017, 23, 16-30.	2.6	60
16	On shifted Jacobi spectral method for high-order multi-point boundary value problems. Communications in Nonlinear Science and Numerical Simulation, 2012, 17, 3802-3810.	3.3	56
17	A Jacobiâ€“Jacobi dual-Petrovâ€–Galerkin method for third- and fifth-order differential equations. Mathematical and Computer Modelling, 2011, 53, 1820-1832.	2.0	55
18	New algorithms for solving high even-order differential equations using third and fourth Chebyshevâ€–Galerkin methods. Journal of Computational Physics, 2013, 236, 563-579.	3.8	52

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19	An Efficient Numerical Scheme for Solving Multiâ€Dimensional Fractional Optimal Control Problems With a Quadratic Performance Index. Asian Journal of Control, 2015, 17, 2389-2402.	3.0	52
20	A spectral framework for fractional variational problems based on fractional Jacobi functions. Applied Numerical Mathematics, 2018, 132, 51-72.	2.1	52
21	Spectral technique for solving variableâ€order fractional Volterra integroâ€differential equations. Numerical Methods for Partial Differential Equations, 2018, 34, 1659-1677.	3.6	51
22	An efficient direct solver for multidimensional elliptic Robin boundary value problems using a Legendre spectral-Galerkin method. Computers and Mathematics With Applications, 2012, 64, 558-571.	2.7	50
23	A Jacobi spectral Galerkin method for the integrated forms of fourthâ€order elliptic differential equations. Numerical Methods for Partial Differential Equations, 2009, 25, 712-739.	3.6	49
24	An efficient numerical scheme based on the shifted orthonormal Jacobi polynomials for solving fractional optimal control problems. Advances in Difference Equations, 2015, 2015, .	3.5	47
25	Efficient spectral-Petrov-Galerkin methods for third- and fifth-order differential equations using general parameters generalized Jacobi polynomials. Quaestiones Mathematicae, 2013, 36, 15-38.	0.6	46
26	A new Jacobi spectral collocation method for solving 1+1 fractional SchrÃ¶dinger equations and fractional coupled SchrÃ¶dinger systems. European Physical Journal Plus, 2014, 129, 1.	2.6	46
27	Efficient spectral-Galerkin algorithms for direct solution for second-order differential equations using Jacobi polynomials. Numerical Algorithms, 2006, 42, 137-164.	1.9	45
28	On the coefficients of differentiated expansions and derivatives of Jacobi polynomials. Journal of Physics A, 2002, 35, 3467-3478.	1.6	44
29	Modified Galerkin algorithm for solving multitype fractional differential equations. Mathematical Methods in the Applied Sciences, 2019, 42, 1389-1412.	2.3	44
30	Solving fractional optimal control problems within a Chebyshevâ€“Legendre operational technique. International Journal of Control, 2017, 90, 1230-1244.	1.9	42
31	Shifted Jacobiâ€“Gauss-collocation with convergence analysis for fractional integro-differential equations. Communications in Nonlinear Science and Numerical Simulation, 2019, 72, 342-359.	3.3	42
32	The first and second kind chebyshev coefficients of the moments for the general order derivative on an infinitely differentiable function. International Journal of Computer Mathematics, 1994, 51, 21-35.	1.8	38
33	Efficient spectral ultraspherical-Galerkin algorithms for the direct solution of 2nth-order linear differential equations. Applied Mathematical Modelling, 2009, 33, 1982-1996.	4.2	38
34	On the Derivatives of Bernstein Polynomials: An Application for the Solution of High Even-Order Differential Equations. Boundary Value Problems, 2011, 2011, 1-16.	0.7	38
35	Efficient spectral ultraspherical-dual-Petrovâ€“Galerkin algorithms for the direct solution of (2n+1)th-order linear differential equations. Mathematics and Computers in Simulation, 2009, 79, 3221-3242.	4.4	35
36	An Efficient Legendre Spectral Tau Matrix Formulation for Solving Fractional Subdiffusion and Reaction Subdiffusion Equations. Journal of Computational and Nonlinear Dynamics, 2015, 10, .	1.2	35

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37	On the coefficients of differentiated expansions and derivatives of chebyshev polynomials of the third and fourth kinds. Acta Mathematica Scientia, 2015, 35, 326-338.	1.0	35
38	Shifted Jacobi spectral-Galerkin method for solving hyperbolic partial differential equations. Computers and Mathematics With Applications, 2019, 78, 889-904.	2.7	34
39	New Tchebyshevâ€Galerkin operational matrix method for solving linear and nonlinear hyperbolic telegraph type equations. Numerical Methods for Partial Differential Equations, 2016, 32, 1553-1571.	3.6	33
40	An Efficient Operational Matrix Technique for Multidimensional Variable-Order Time Fractional Diffusion Equations. Journal of Computational and Nonlinear Dynamics, 2016, 11, .	1.2	32
41	Jacobi spectral Galerkin method for elliptic Neumann problems. Numerical Algorithms, 2009, 50, 67-91.	1.9	31
42	Spectral Galerkin schemes for a class of multi-order fractional pantograph equations. Journal of Computational and Applied Mathematics, 2021, 384, 113157.	2.0	31
43	The operational matrix formulation of the Jacobi tau approximation for space fractional diffusion equation. Advances in Difference Equations, 2014, 2014, .	3.5	30
44	A Chebyshev-Gauss-Radau Scheme For Nonlinear Hyperbolic System Of First Order. Applied Mathematics and Information Sciences, 2014, 8, 535-544.	0.5	30
45	An accurate solution of parabolic equations by expansion in ultraspherical polynomials. Computers and Mathematics With Applications, 1990, 19, 75-88.	2.7	28
46	On the coefficients of integrated expansions and integrals of ultraspherical polynomials and their applications for solving differential equations. Journal of Computational and Applied Mathematics, 2002, 139, 275-298.	2.0	27
47	On the connection coefficients and recurrence relations arising from expansions in series of Laguerre polynomials. Journal of Physics A, 2003, 36, 5449-5462.	1.6	27
48	Accurate spectral solutions for the parabolic and elliptic partial differential equations by the ultraspherical tau method. Journal of Computational and Applied Mathematics, 2005, 181, 24-45.	2.0	27
49	New spectral-Galerkin algorithms for direct solution of high even-order differential equations using symmetric generalized Jacobi polynomials. Collectanea Mathematica, 2013, 64, 373-394.	0.9	27
50	The ultraspherical coefficients of the moments of a general-order derivative of an infinitely differentiable function. Journal of Computational and Applied Mathematics, 1998, 89, 53-72.	2.0	26
51	Numerical Treatments for Volterra Delay Integro-differential Equations. Computational Methods in Applied Mathematics, 2009, 9, 292-318.	0.8	26
52	New Wavelets Collocation Method for Solving Second-Order Multipoint Boundary Value Problems Using Chebyshev Polynomials of Third and Fourth Kinds. Abstract and Applied Analysis, 2013, 2013, 1-9.	0.7	23
53	Efficient spectral-Petrovâ€“Galerkin methods for the integrated forms of third- and fifth-order elliptic differential equations using general parameters generalized Jacobi polynomials. Applied Mathematics and Computation, 2012, 218, 7727-7740.	2.2	22
54	New ultraspherical wavelets collocation method for solving 2nth-order initial and boundary value problems. Journal of the Egyptian Mathematical Society, 2016, 24, 319-327.	1.2	21

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55	Fully Legendre Spectral Galerkin Algorithm for Solving Linear One-Dimensional Telegraph Type Equation. International Journal of Computational Methods, 2019, 16, 1850118.	1.3	21
56	Recurrences and explicit formulae for the expansion and connection coefficients in series of Bessel polynomials. Journal of Physics A, 2004, 37, 8045-8063.	1.6	20
57	New Spectral Second Kind Chebyshev Wavelets Algorithm for Solving Linear and Nonlinear Second-Order Differential Equations Involving Singular and Bratu Type Equations. Abstract and Applied Analysis, 2013, 2013, 1-9.	0.7	20
58	Explicit Formulae for the Coefficients of Integrated Expansions of Jacobi Polynomials and Their Integrals. Integral Transforms and Special Functions, 2003, 14, 69-86.	1.2	19
59	On the connection coefficients and recurrence relations arising from expansions in series of hermite polynomials. Integral Transforms and Special Functions, 2004, 15, 13-29.	1.2	19
60	A Jacobi Dual-Petrov-Galerkin Method for Solving Some Odd-Order Ordinary Differential Equations. Abstract and Applied Analysis, 2011, 2011, 1-21.	0.7	19
61	A Jacobi rational pseudospectral method for Laneâ€“Emden initial value problems arising in astrophysics on a semi-infinite interval. Computational and Applied Mathematics, 2014, 33, 607-619.	1.3	19
62	A new operational approach for solving fractional variational problems depending on indefinite integrals. Communications in Nonlinear Science and Numerical Simulation, 2018, 57, 246-263.	3.3	19
63	Integral spectral Tchebyshev approach for solving space Riemann-Liouville and Riesz fractional advection-dispersion problems. Advances in Difference Equations, 2017, 2017, .	3.5	18
64	Shifted Jacobi spectral collocation method with convergence analysis for solving integro-differential equations and system of integro-differential equations. Nonlinear Analysis: Modelling and Control, 2019, 24, 332-352.	1.6	18
65	Numerical approximations for fractional diffusion equations via a Chebyshev spectral-tau method. Open Physics, 2013, 11, .	1.7	17
66	A highly accurate Jacobi collocation algorithm for systems of highâ€order linear differentialâ€“difference equations with mixed initial conditions. Mathematical Methods in the Applied Sciences, 2015, 38, 3022-3032.	2.3	15
67	Exponential Jacobi-Galerkin method and its applications to multidimensional problems in unbounded domains. Applied Numerical Mathematics, 2020, 157, 88-109.	2.1	15
68	A unified spectral collocation method for nonlinear systems of multi-dimensional integral equations with convergence analysis. Applied Numerical Mathematics, 2021, 161, 27-45.	2.1	15
69	On using third and fourth kinds Chebyshev polynomials for solving the integrated forms of high odd-order linear boundary value problems. Journal of the Egyptian Mathematical Society, 2015, 23, 397-405.	1.2	14
70	Explicit formulae for the coefficients of integrated expansions of Laguerre and Hermite polynomials and their integrals. Integral Transforms and Special Functions, 2009, 20, 491-503.	1.2	13
71	Efficient Solutions of Multidimensional Sixth-Order Boundary Value Problems Using Symmetric Generalized Jacobi-Galerkin Method. Abstract and Applied Analysis, 2012, 2012, 1-19.	0.7	12
72	Efficient Jacobi-Gauss collocation method for solving initial value problems of Bratu type. Computational Mathematics and Mathematical Physics, 2013, 53, 1292-1302.	0.8	12

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73	An Accurate Jacobi Pseudospectral Algorithm for Parabolic Partial Differential Equations With Nonlocal Boundary Conditions. Journal of Computational and Nonlinear Dynamics, 2015, 10, .	1.2	12
74	Numerical algorithm for solving multi-pantograph delay equations on the half-line using Jacobi rational functions with convergence analysis. Acta Mathematicae Applicatae Sinica, 2017, 33, 297-310.	0.7	12
75	On the rate of convergence of the Legendre spectral collocation method for multi-dimensional nonlinear Volterraâ€“Fredholm integral equations. Communications in Theoretical Physics, 2021, 73, 025002.	2.5	12
76	New algorithms for solving third- and fifth-order two point boundary value problems based on nonsymmetric generalized Jacobi Petrovâ€“Galerkin method. Journal of Advanced Research, 2015, 6, 673-686.	9.5	11
77	Jacobiâ€“Gaussâ€“Lobatto collocation method for solving nonlinear reactionâ€“diffusion equations subject to Dirichlet boundary conditions. Applied Mathematical Modelling, 2016, 40, 1703-1716.	4.2	11
78	On the connection coefficients and recurrence relations arising from expansions in series of modified generalized Laguerre polynomials: Applications on a semi-infinite domain. Nonlinear Engineering, 2019, 8, 318-327.	2.7	11
79	On Romanovskiâ€“Jacobi polynomials and their related approximation results. Numerical Methods for Partial Differential Equations, 2020, 36, 1982-2017.	3.6	11
80	Galerkin operational approach for multi-dimensions fractional differential equations. Communications in Nonlinear Science and Numerical Simulation, 2022, 114, 106608.	3.3	11
81	Linearization formulae for certain Jacobi polynomials. Ramanujan Journal, 2016, 39, 155-168.	0.7	10
82	A numerical treatment of the two-dimensional multi-term time-fractional mixed sub-diffusion and diffusion-wave equation. Communications in Nonlinear Science and Numerical Simulation, 2020, 91, 105445.	3.3	10
83	On the legendre coefficients of the moments of the general order derivative of an infinitely differentiable function. International Journal of Computer Mathematics, 1995, 56, 107-122.	1.8	9
84	An efficient collocation algorithm for multidimensional wave type equations with nonlocal conservation conditions. Applied Mathematical Modelling, 2015, 39, 5616-5635.	4.2	8
85	A spaceâ€“time spectral collocation algorithm for the variable order fractional wave equation. SpringerPlus, 2016, 5, 1220.	1.2	8
86	A Jacobi Collocation Method for Solving Nonlinear Burgers-Type Equations. Abstract and Applied Analysis, 2013, 2013, 1-12.	0.7	7
87	Two Legendre-Dual-Petrov-Galerkin Algorithms for Solving the Integrated Forms of High Odd-Order Boundary Value Problems. Scientific World Journal, The, 2014, 2014, 1-11.	2.1	7
88	A Jacobi collocation approximation for nonlinear coupled viscous Burgersâ€™ equation. Open Physics, 2014, 12, .	1.7	7
89	New linearization formulae for the products of Chebyshev polynomials of third and fourth kinds. Rocky Mountain Journal of Mathematics, 2016, 46, .	0.4	7
90	Jacobi rationalâ€“Gauss collocation method for Laneâ€“Emden equations of astrophysical significance. Nonlinear Analysis: Modelling and Control, 2014, 19, 537-550.	1.6	7

#	Article	IF	Citations
91	Recurrences and explicit formulae for the expansion and connection coefficients in series of classical discrete orthogonal polynomials. Integral Transforms and Special Functions, 2006, 17, 329-353.	1.2	6
92	Integrals of Chebyshev polynomials of third and fourth kinds: An application to solution of boundary value problems with polynomial coefficients. Journal of Contemporary Mathematical Analysis, 2014, 49, 296-308.	0.4	5
93	Modified Jacobiâ€“Bernstein basis transformation and its application to multi-degree reduction of BÃ©zier curves. Journal of Computational and Applied Mathematics, 2016, 302, 369-384.	2.0	5
94	Computational aspects of fractional Romanovskiâ€“Bessel functions. Computational and Applied Mathematics, 2021, 40, 1.	2.2	5
95	Efficient algorithms for construction of recurrence relations for the expansion and connection coefficients in series of Al-Salamâ€“Carlitz I polynomials. Journal of Physics A, 2005, 38, 10107-10121.	1.6	4
96	Fractional Jacobi Galerkin spectral schemes for multi-dimensional time fractional advectionâ€“diffusionâ€“reaction equations. Engineering With Computers, 2020, , 1.	6.1	4
97	On a discrete fractional stochastic GrÃ¶nwall inequality and its application in the numerical analysis of stochastic FDEs involving a martingale. International Journal of Nonlinear Sciences and Numerical Simulation, 2021, .	1.0	4
98	Title is missing!. Analysis in Theory and Applications, 2001, 17, 69-84.	0.0	3
99	Recurrence relation approach for expansion and connection coefficients in series of Hahn polynomials. Integral Transforms and Special Functions, 2006, 17, 785-801.	1.2	3
100	On the coefficients of integrated expansions of Bessel polynomials. Journal of Computational and Applied Mathematics, 2006, 187, 58-71.	2.0	3
101	A Pseudospectral Algorithm for Solving Multipantograph Delay Systems on a Semi-Infinite Interval Using Legendre Rational Functions. Abstract and Applied Analysis, 2014, 2014, 1-9.	0.7	3
102	On Generalized Jacobiâ€“Bernstein Basis Transformation: Application of Multidegree Reduction of BÃ©zier Curves and Surfaces. Journal of Computing and Information Science in Engineering, 2014, 14, .	2.7	3
103	Numerical solution of initial-boundary system of nonlinear hyperbolic equations. Indian Journal of Pure and Applied Mathematics, 2015, 46, 647-668.	0.5	3
104	Computational and theoretical aspects of Romanovski-Bessel polynomials and their applications in spectral approximations. Numerical Algorithms, 0, , 1.	1.9	3
105	Efficient algorithms for construction of recurrence relations for the expansion and connection coefficients in series of quantum classical orthogonal polynomials. Journal of Advanced Research, 2010, 1, 193-207.	9.5	2
106	A shifted Jacobi collocation algorithm for wave type equations with non-local conservation conditions. Open Physics, 2014, 12, .	1.7	2
107	Numerical solutions for variable-order fractional Grossâ€“Pitaevskii equation with two spectral collocation approaches. International Journal of Nonlinear Sciences and Numerical Simulation, 2023, 24, 421-435.	1.0	2
108	Recursive differentiation method: application to the analysis of beams on two parameter foundations. Journal of Theoretical and Applied Mechanics, 0, , 15.	0.5	2

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109	Pseudospectral methods for the Riesz space-fractional SchrÃ¶dinger equation. , 2022, , 323-353.		1