Emran Tohidi

List of Publications by Year
in descending order

61 papers	1,081 citations	430874 18 h-index	477307 29 g-index
61 all docs	61 docs citations	61 times ranked	570 citing authors

#	Article	IF	Citations
1	A collocation method based on Bernoulli operational matrix for numerical solution of generalized pantograph equation. Applied Mathematical Modelling, 2013, 37, 4283-4294.	4.2	159
2	A Bessel collocation method for solving fractional optimal control problems. Applied Mathematical Modelling, 2015, 39, 455-465.	4.2	68
3	Müntz–Legendre spectral collocation method for solving delay fractional optimal control problems. Journal of Computational and Applied Mathematics, 2019, 351, 344-363.	2.0	50
4	A new Bernoulli matrix method for solving second order linear partial differential equations with the convergence analysis. Applied Mathematics and Computation, 2013, 223, 298-310.	2.2	47
5	The spectral method for solving systems of Volterra integral equations. Journal of Applied Mathematics and Computing, 2012, 40, 477-497.	2.5	34
6	Legendre spectral method for the fractional Bratu problem. Mathematical Methods in the Applied Sciences, 2020, 43, 5941-5952.	2.3	32
7	A fourth-order least-squares based reproducing kernel method for one-dimensional elliptic interface problems. Applied Numerical Mathematics, 2021, 162, 124-136.	2.1	31
8	Numerical solution of nonlinear weakly singular partial integro-differential equation via operational matrices. Applied Mathematics and Computation, 2017, 298, 310-321.	2.2	30
9	A Collocation Method Based on the Bernoulli Operational Matrix for Solving High-Order Linear Complex Differential Equations in a Rectangular Domain. Abstract and Applied Analysis, 2013, 2013, 1-12.	0.7	27
10	A Collocation Method Based on the Bernoulli Operational Matrix for Solving Nonlinear BVPs Which Arise from the Problems in Calculus of Variation. Mathematical Problems in Engineering, 2013, 2013, 1-9.	1.1	27
11	A parameterized multi-step Newton method for solving systems of nonlinear equations. Numerical Algorithms, 2016, 71, 631-653.	1.9	27
12	Convergence analysis of Bernoulli matrix approach for one-dimensional matrix hyperbolic equations of the first order. Computers and Mathematics With Applications, 2014, 68, 1-12.	2.7	24
13	Application of Bernoulli matrix method for solving two-dimensional hyperbolic telegraph equations with Dirichlet boundary conditions. Computers and Mathematics With Applications, 2018, 75, 2280-2294.	2.7	23
14	Application of Chebyshev collocation method for solving two classes of non-classical parabolic PDEs. Ain Shams Engineering Journal, 2015, 6, 373-379.	6.1	22
15	Higher order multi-step Jarratt-like method for solving systems of nonlinear equations: Application to PDEs and ODEs. Computers and Mathematics With Applications, 2015, 70, 624-636.	2.7	22
16	A Legendre-Gauss collocation method for neutral functional-differential equations with proportional delays. Advances in Difference Equations, 2013, 2013, .	3.5	20
17	Numerical Solution of Nonlinear Fractional Volterra Integro-Differential Equations via Bernoulli Polynomials. Abstract and Applied Analysis, 2014, 2014, 1-7.	0.7	20
18	A New Matrix Approach For Solving Second-Order Linear Matrix Partial Differential Equations. Mediterranean Journal of Mathematics, 2016, 13, 1353-1376.	0.8	20

#	Article	IF	Citations
19	A new matrix method for solving two-dimensional time-dependent diffusion equations with Dirichlet boundary conditions. Applied Mathematics and Computation, 2016, 291, 1-13.	2.2	19
20	Two Dimensional Wavelets Collocation Scheme for Linear and Nonlinear Volterra Weakly Singular Partial Integro-Differential Equations. International Journal of Applied and Computational Mathematics, 2018, 4, 1.	1.6	18
21	Legendre Approximation for Solving Linear HPDEs and Comparison with Taylor and Bernoulli Matrix Methods. Applied Mathematics, 2012, 03, 410-416.	0.4	18
22	A New Tau Method for Solving Nonlinear Lane-Emden Type Equations via Bernoulli Operational Matrix of Differentiation. Journal of Applied Mathematics, 2013, 2013, 1-9.	0.9	17
23	A New Approach for Solving a Class of Delay Fractional Partial Differential Equations. Mediterranean Journal of Mathematics, 2018, 15, 1.	0.8	17
24	Fourier Operational Matrices of Differentiation and Transmission: Introduction and Applications. Abstract and Applied Analysis, 2013, 2013, 1-11.	0.7	16
25	Numerical solution of multi-Pantograph delay boundary value problems via an efficient approach with the convergence analysis. Computational and Applied Mathematics, 2019, 38, 1.	2.2	16
26	Robustness of Operational Matrices of Differentiation for Solving State-Space Analysis and Optimal Control Problems. Abstract and Applied Analysis, 2013, 2013, 1-9.	0.7	15
27	Convergence analysis of space-time Jacobi spectral collocation method for solving time-fractional Schrödinger equations. Applied Mathematics and Computation, 2020, 387, 124489.	2.2	15
28	Taylor matrix method for solving linear two-dimensional Fredholm integral equations with Piecewise Intervals. Computational and Applied Mathematics, 2015, 34, 1117-1130.	1.3	13
29	Space–time Chebyshev spectral collocation method for nonlinear time‐fractional Burgers equations based on efficient basis functions. Mathematical Methods in the Applied Sciences, 2021, 44, 4117-4136.	2.3	13
30	A high accurate scheme for numerical simulation of two-dimensional mass transfer processes in food engineering. AEJ - Alexandria Engineering Journal, 2021, 60, 2629-2639.	6.4	13
31	An Accurate Space–Time Pseudospectral Method for Solving Nonlinear Multi-Dimensional Heat Transfer Problems. Mediterranean Journal of Mathematics, 2017, 14, 1.	0.8	12
32	A computational method to price with transaction costs under the nonlinear Black–Scholes model. Chaos, Solitons and Fractals, 2019, 127, 291-301.	5.1	12
33	Rigorous convergence analysis of Jacobi spectral Galerkin methods for Volterra integral equations with noncompact kernels. Journal of Computational and Applied Mathematics, 2020, 366, 112403.	2.0	11
34	High accurate pseudo-spectral Galerkin scheme for pantograph type Volterra integro-differential equations with singular kernels. Applied Mathematics and Computation, 2021, 396, 125866.	2.2	11
35	Modal Hermite spectral collocation method for solving multi-dimensional hyperbolic telegraph equations. Computers and Mathematics With Applications, 2018, 75, 3571-3588.	2.7	10
36	An efficient matrix approach for two-dimensional diffusion and telegraph equations with Dirichlet boundary conditions. Physica A: Statistical Mechanics and Its Applications, 2020, 545, 123784.	2.6	10

#	Article	IF	Citations
37	A new least‐squares‐based reproducing kernel method for solving regular and weakly singular Volterra‐Fredholm integral equations with smooth and nonsmooth solutions. Mathematical Methods in the Applied Sciences, 2021, 44, 10772-10784.	2.3	10
38	An Efficient Legendre Pseudospectral Method for Solving Nonlinear Quasi Bang-Bang Optimal Control Problems. Journal of Applied Mathematics, Statistics and Informatics, 2012, 8, 73-85.	0.2	9
39	Legendre Approximation for Solving a Class of Nonlinear Optimal Control Problems. Journal of Mathematical Finance, 2011, 01, 8-13.	0.3	9
40	Numerical solution of time-dependent diffusion equations with nonlocal boundary conditions via a fast matrix approach. Journal of the Egyptian Mathematical Society, 2016, 24, 86-91.	1.2	8
41	A radial basis function â€" Hermite finite difference approach to tackle cash-or-nothing and asset-or-nothing options. Journal of Computational and Applied Mathematics, 2020, 368, 112523.	2.0	8
42	Numerical Solution of a Class of Nonlinear Optimal Control Problems Using Linearization and Discretization. Applied Mathematics, 2011, 02, 646-652.	0.4	8
43	Bernoulli Collocation Method for Solving Linear Multidimensional Diffusion and Wave Equations with Dirichlet Boundary Conditions. Advances in Mathematical Physics, 2017, 2017, 1-15.	0.8	7
44	Generalized mapped nodal Laguerre spectral collocation method for Volterra delay integro-differential equations with noncompact kernels. Computational and Applied Mathematics, 2020, 39, 1.	2.2	7
45	A new high accurate approximate approach to solve optimal control problems of fractional order via efficient basis functions. AEJ - Alexandria Engineering Journal, 2022, 61, 5805-5818.	6.4	7
46	Legendre spectral collocation method for approximating the solution of shortest path problems. Systems Science and Control Engineering, 2015, 3, 62-68.	3.1	6
47	A new spectral integral equation method for solving two-dimensional unsteady advection-diffusion equations via Chebyshev polynomials. Engineering Computations, 2019, 36, 2327-2368.	1.4	6
48	A new WENO based Chebyshev Spectral Volume method for solving one- and two-dimensional conservation laws. Journal of Computational Physics, 2020, 403, 109055.	3.8	6
49	A Legendre reproducing kernel method with higher convergence order for a class of singular two-point boundary value problems. Journal of Applied Mathematics and Computing, 2021, 67, 405-421.	2.5	6
50	A new reproducing kernel-based collocation method with optimal convergence rate for some classes of BVPs. Applied Mathematics and Computation, 2022, 432, 127343.	2.2	6
51	An Efficient Pseudospectral Method for Solving a Class of Nonlinear Optimal Control Problems. Abstract and Applied Analysis, 2013, 2013, 1-7.	0.7	5
52	Convergence Analysis of Legendre Pseudospectral Scheme for Solving Nonlinear Systems of Volterra Integral Equations. Advances in Mathematical Physics, 2014, 2014, 1-12.	0.8	5
53	A fourth order product integration rule by using the generalized Eulerâ€"Maclaurin summation formula. Journal of Computational and Applied Mathematics, 2018, 335, 334-348.	2.0	5
54	RBF collocation approach to calculate numerically the solution of the nonlinear system of qFDEs. Journal of King Saud University - Science, 2021, 33, 101288.	3.5	5

#	Article	IF	Citations
55	Bernoulli Matrix Approach for Solving Two Dimensional Linear Hyperbolic Partial Differential Equations with Constant Coefficients. American Journal of Computational and Applied Mathematics, 2012, 2, 136-139.	0.4	5
56	Numerical solution of weakly singular Fredholm integral equations via generalization of the Euler–Maclaurin summation formula. Journal of Taibah University for Science, 2014, 8, 200-205.	2.5	4
57	High accurate convergent spectral Galerkin methods for nonlinear weakly singular Volterra integro-differential equations. Computational and Applied Mathematics, 2021, 40, 1.	2.2	4
58	An extended block Golub–Kahan algorithm for large algebraic and differential matrix Riccati equations. Computers and Mathematics With Applications, 2020, 79, 2447-2457.	2.7	3
59	A new local non-integer derivative and its application to optimal control problems. AIMS Mathematics, 2022, 7, 16692-16705.	1.6	2
60	A fast and efficient numerical approach for solving advection–diffusion equations by using hybrid functions. Computational and Applied Mathematics, 2019, 38, 1.	2.2	1
61	Corrigendum to "Numerical Solution of Nonlinear Fractional Volterra Integro-Differential Equations via Bernoulli Polynomials". Abstract and Applied Analysis, 2015, 2015, 1-1.	0.7	0