Randhir Singh

List of Publications by Year
in descending order

45	844	430442	525886
papers	citations	18	27
		h-index	g-index

45	45	45	271
all docs	docs citations	times ranked	citing authors

#	ARTICLE	IF	CITATIONS
1	An efficient numerical technique for the solution of nonlinear singular boundary value problems. Computer Physics Communications, 2014, 185, 1282-1289.	3.0	75
2	Haar wavelet collocation method for Lane–Emden equations with Dirichlet, Neumann and Neumann–Robin boundary conditions. Journal of Computational and Applied Mathematics, 2019, 346, 150-161.	1.1	67
3	An algorithm based on the variational iteration technique for the Bratu-type and the Lane–Emden problems. Journal of Mathematical Chemistry, 2016, 54, 527-551.	0.7	55
4	Numerical solution of singular boundary value problems using Green's function and improved decomposition method. Journal of Applied Mathematics and Computing, 2013, 43, 409-425.	1.2	44
5	The optimal modified variational iteration method for the Lane-Emden equations with Neumann and Robin boundary conditions. European Physical Journal Plus, 2017, 132, 1.	1.2	39
6	Haar wavelet quasilinearization method for numerical solution of Emden–Fowler type equations. Mathematics and Computers in Simulation, 2020, 174, 123-133.	2.4	39
7	Analytical approach for solving population balances: a homotopy perturbation method. Journal of Physics A: Mathematical and Theoretical, 2019, 52, 385201.	0.7	37
8	The Adomian decomposition method with Green's function for solving nonlinear singular boundary value problems. Journal of Applied Mathematics and Computing, 2014, 44, 397-416.	1.2	35
9	Haar wavelet collocation approach for Lane-Emden equations arising in mathematical physics and astrophysics. European Physical Journal Plus, 2019, 134, 1.	1.2	30
10	Optimal homotopy analysis method for the non-isothermal reaction–diffusion model equations in a spherical catalyst. Journal of Mathematical Chemistry, 2018, 56, 2579-2590.	0.7	29
11	Adomian decomposition method for solving fragmentation and aggregation population balance equations. Journal of Applied Mathematics and Computing, 2015, 48, 265-292.	1.2	27
12	Finite volume approximation of nonlinear agglomeration population balance equation on triangular grid. Journal of Aerosol Science, 2019, 137, 105430.	1.8	24
13	Approximate series solution of singular boundary value problems with derivative dependence using Green's function technique. Computational and Applied Mathematics, 2014, 33, 451-467.	1.3	22
14	A modified homotopy perturbation method for singular time dependent Emden–Fowler equations with boundary conditions. Journal of Mathematical Chemistry, 2016, 54, 918-931.	0.7	21
15	An efficient semi-numerical technique for solving nonlinear singular boundary value problems arising in various physical models. International Journal of Computer Mathematics, 2016, 93, 1330-1346.	1.0	21
16	New Approach for Solving a Class of Doubly Singular Two-Point Boundary Value Problems Using Adomian Decomposition Method. Advances in Numerical Analysis, 2012, 2012, 1-22.	0.2	20
17	Analytical approach for computation of exact and analytic approximate solutions to the system of Lane-Emden-Fowler type equations arising in astrophysics. European Physical Journal Plus, 2018, 133, 1.	1.2	20
18	An efficient numerical technique for Lane–Emden–Fowler boundary value problems: Bernstein collocation method. European Physical Journal Plus, 2020, 135, 1.	1.2	20

#	Article	IF	Citations
19	Discrete finite volume approach for multidimensional agglomeration population balance equation on unstructured grid. Powder Technology, 2020, 376, 229-240.	2.1	19
20	Analytic solution of singular Emden-Fowler-type equations by Green's function and homotopy analysis method. European Physical Journal Plus, 2019, 134, 1.	1.2	18
21	A Modified Homotopy Perturbation Method for Nonlinear Singular Lane–Emden Equations Arising in Various Physical Models. International Journal of Applied and Computational Mathematics, 2019, 5, 1.	0.9	17
22	Solving a Class of Singular Two-Point Boundary Value Problems Using New Modified Decomposition Method. , 2013, 2013, 1-11.		16
23	Numerical Algorithm for Solution of the System of Emden–Fowler Type Equations. International Journal of Applied and Computational Mathematics, 2021, 7, 1.	0.9	14
24	Finite volume approximation of multidimensional aggregation population balance equation on triangular grid. Mathematics and Computers in Simulation, 2020, 172, 191-212.	2.4	13
25	Approximate series solution of fourth-order boundary value problems using decomposition method with Green's function. Journal of Mathematical Chemistry, 2014, 52, 1099-1118.	0.7	11
26	Laguerre wavelet method for solving Thomas–Fermi type equations. Engineering With Computers, 2022, 38, 2925-2935.	3.5	10
27	Numerical results of Emden–Fowler boundary value problems with derivative dependence using the Bernstein collocation method. Engineering With Computers, 2020, , 1.	3.5	9
28	Numerical solution of system of Emden-Fowler type equations by Bernstein collocation method. Journal of Mathematical Chemistry, 2021, 59, 1117-1138.	0.7	8
29	Approximate Solution of Urysohn Integral Equations Using the Adomian Decomposition Method. Scientific World Journal, The, 2014, 2014, 1-6.	0.8	7
30	A new efficient technique for solving two-point boundary value problems for integro-differential equations. Journal of Mathematical Chemistry, 2014, 52, 2030-2051.	0.7	7
31	Numerical simulation of Emden–Fowler integral equation with Green's function type kernel by Gegenbauer-wavelet, Taylor-wavelet and Laguerre-wavelet collocation methods. Mathematics and Computers in Simulation, 2022, 194, 430-444.	2.4	7
32	Approximate Series Solution of Nonlinear Singular Boundary Value Problems Arising in Physiology. Scientific World Journal, The, 2014, 2014, 1-10.	0.8	6
33	An efficient approach for solving second-order nonlinear differential equation with Neumann boundary conditions. Journal of Mathematical Chemistry, 2015, 53, 767-790.	0.7	6
34	Numerical solutions of fourth-order Volterra integro-differential equations by the Green's function and decomposition method. Mathematical Sciences, 2016, 10, 159-166.	1.0	6
35	Numerical Solution of the Time Dependent Emden-Fowler Equations with Boundary Conditions using Modified Decomposition Method. Applied Mathematics and Information Sciences, 2016, 10, 403-408.	0.7	6
36	Approximate solutions of aggregation and breakage population balance equations. Journal of Mathematical Analysis and Applications, 2022, 512, 126166.	0.5	6

#	Article	IF	Citations
37	An iterative technique for solving a class of local and nonlocal elliptic boundary value problems. Journal of Mathematical Chemistry, 2020, 58, 1874-1894.	0.7	5
38	Solving Coupled Lane-Emden Equations by Green's Function and Decomposition Technique. International Journal of Applied and Computational Mathematics, 2020, 6, 1.	0.9	5
39	Analytical approximations of three-point generalized Thomas–Fermi and Lane–Emden–Fowler type equations. European Physical Journal Plus, 2022, 137, 1.	1.2	5
40	Approximate Solution of Two-Point Boundary Value Problems Using Adomian Decomposition Method with Green's Function. Proceedings of the National Academy of Sciences India Section A - Physical Sciences, 2015, 85, 51-61.	0.8	4
41	A fast numerical algorithm based on Chebyshev-wavelet technique for solving Thomas-Fermi type equation. Engineering With Computers, 2022, 38, 3409-3422.	3.5	4
42	Bernstein and Gegenbauer-wavelet collocation methods for Bratu-like equations arising in electrospinning process. Journal of Mathematical Chemistry, 2021, 59, 2327-2343.	0.7	3
43	An Efficient Method for Solving the Generalized Thomas–Fermi and Lane–Emden–Fowler Type Equations with Nonlocal Integral Type Boundary Conditions. International Journal of Applied and Computational Mathematics, 2022, 8, 1.	0.9	3
44	Convergence of an Iteration of Fifth-Order Using Weaker Conditions on First Order Fréchet Derivative in Banach Spaces. International Journal of Computational Methods, 2018, 15, 1850048.	0.8	2
45	Reply to Comment on 'Analytical approach for solving population balances: a homotopy perturbation method' (2019) J. Phys. A: Math. Theor. 52 385201. Journal of Physics A: Mathematical and Theoretical, 2020, 53, 388002.	0.7	2