Randhir Singh

List of Publications by Year
in descending order

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45	844	430754	526166
papers	citations	18 h-index	27 g-index

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

#	Article	IF	Citations
1	Laguerre wavelet method for solving Thomasâ€“Fermi type equations. Engineering With Computers, 2022, 38, 2925-2935.	3.5	10
2	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
3	Numerical simulation of Emdenâ€“Fowler integral equation with Greenâ€™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
4	An Efficient Method for Solving the Generalized Thomasâ€“Fermi and Laneâ€“Emdenâ€“Fowler Type Equations with Nonlocal Integral Type Boundary Conditions. International Journal of Applied and Computational Mathematics, 2022, 8, 1.	0.9	3
5	Approximate solutions of aggregation and breakage population balance equations. Journal of Mathematical Analysis and Applications, 2022, 512, 126166.	0.5	6
6	Analytical approximations of three-point generalized Thomasâ€“Fermi and Laneâ€“Emdenâ€“Fowler type equations. European Physical Journal Plus, 2022, 137, 1.	1.2	5
7	Numerical solution of system of Emden-Fowler type equations by Bernstein collocation method. Journal of Mathematical Chemistry, 2021, 59, 1117-1138.	0.7	8
8	Numerical Algorithm for Solution of the System of Emdenâ€“Fowler Type Equations. International Journal of Applied and Computational Mathematics, 2021, 7, 1.	0.9	14
9	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
10	Finite volume approximation of multidimensional aggregation population balance equation on triangular grid. Mathematics and Computers in Simulation, 2020, 172, 191-212.	2.4	13
11	Discrete finite volume approach for multidimensional agglomeration population balance equation on unstructured grid. Powder Technology, 2020, 376, 229-240.	2.1	19
12	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
13	Numerical results of Emdenâ€“Fowler boundary value problems with derivative dependence using the Bernstein collocation method. Engineering With Computers, 2020, , 1.	3.5	9
14	Reply to Comment on â€˜Analytical approach for solving population balances: a homotopy perturbation methodâ€™ (2019) J. Phys. A: Math. Theor. 52 385201. Journal of Physics A: Mathematical and Theoretical, 2020, 53, 388002.	0.7	2
15	An efficient numerical technique for Laneâ€“Emdenâ€“Fowler boundary value problems: Bernstein collocation method. European Physical Journal Plus, 2020, 135, 1.	1.2	20
16	Haar wavelet quasilinearization method for numerical solution of Emdenâ€“Fowler type equations. Mathematics and Computers in Simulation, 2020, 174, 123-133.	2.4	39
17	Solving Coupled Lane-Emden Equations by Greenâ€™s Function and Decomposition Technique. International Journal of Applied and Computational Mathematics, 2020, 6, 1.	0.9	5
18	Haar wavelet collocation method for Laneâ€“Emden equations with Dirichlet, Neumann and Neumannâ€“Robin boundary conditions. Journal of Computational and Applied Mathematics, 2019, 346, 150-161.	1.1	67

#	Article	IF	Citations
19	Finite volume approximation of nonlinear agglomeration population balance equation on triangular grid. Journal of Aerosol Science, 2019, 137, 105430.	1.8	24
20	Analytical approach for solving population balances: a homotopy perturbation method. Journal of Physics A: Mathematical and Theoretical, 2019, 52, 385201.	0.7	37
21	Haar wavelet collocation approach for Lane-Emden equations arising in mathematical physics and astrophysics. European Physical Journal Plus, 2019, 134, 1.	1.2	30
22	A Modified Homotopy Perturbation Method for Nonlinear Singular Laneâ€“Emden Equations Arising in Various Physical Models. International Journal of Applied and Computational Mathematics, 2019, 5, 1.	0.9	17
23	Analytic solution of singular Emden-Fowler-type equations by Greenâ€™s function and homotopy analysis method. European Physical Journal Plus, 2019, 134, 1.	1.2	18
24	Optimal homotopy analysis method for the non-isothermal reactionâ€“diffusion model equations in a spherical catalyst. Journal of Mathematical Chemistry, 2018, 56, 2579-2590.	0.7	29
25	Convergence of an Iteration of Fifth-Order Using Weaker Conditions on First Order FrÃ©chet Derivative in Banach Spaces. International Journal of Computational Methods, 2018, 15, 1850048.	0.8	2
26	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
27	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
28	Numerical solutions of fourth-order Volterra integro-differential equations by the Greenâ€™s function and decomposition method. Mathematical Sciences, 2016, 10, 159-166.	1.0	6
29	An algorithm based on the variational iteration technique for the Bratu-type and the Laneâ€“Emden problems. Journal of Mathematical Chemistry, 2016, 54, 527-551.	0.7	55
30	A modified homotopy perturbation method for singular time dependent Emdenâ€“Fowler equations with boundary conditions. Journal of Mathematical Chemistry, 2016, 54, 918-931.	0.7	21
31	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
32	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
33	Adomian decomposition method for solving fragmentation and aggregation population balance equations. Journal of Applied Mathematics and Computing, 2015, 48, 265-292.	1.2	27
34	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
35	Approximate Solution of Two-Point Boundary Value Problems Using Adomian Decomposition Method with Greenâ€™s Function. Proceedings of the National Academy of Sciences India Section A - Physical Sciences, 2015, 85, 51-61.	0.8	4
36	Approximate Solution of Urysohn Integral Equations Using the Adomian Decomposition Method. Scientific World Journal, The, 2014, 2014, 1-6.	0.8	7

#	Article	IF	Citations
37	Approximate Series Solution of Nonlinear Singular Boundary Value Problems Arising in Physiology. Scientific World Journal, The, 2014, 2014, 1-10.	0.8	6
38	The Adomian decomposition method with Greenâ€™s function for solving nonlinear singular boundary value problems. Journal of Applied Mathematics and Computing, 2014, 44, 397-416.	1.2	35
39	Approximate series solution of singular boundary value problems with derivative dependence using Greenâ€™s function technique. Computational and Applied Mathematics, 2014, 33, 451-467.	1.3	22
40	Approximate series solution of fourth-order boundary value problems using decomposition method with Greenâ€™s function. Journal of Mathematical Chemistry, 2014, 52, 1099-1118.	0.7	11
41	An efficient numerical technique for the solution of nonlinear singular boundary value problems. Computer Physics Communications, 2014, 185, 1282-1289.	3.0	75
42	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
43	Numerical solution of singular boundary value problems using Greenâ€™s function and improved decomposition method. Journal of Applied Mathematics and Computing, 2013, 43, 409-425.	1.2	44
44	Solving a Class of Singular Two-Point Boundary Value Problems Using New Modified Decomposition Method. , 2013, 2013, 1-11.		16
45	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