R C Mittal

List of Publications by Year
in descending order

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37	585	567281 15	642732 23
papers	citations	h-index	g-index

37	37	37	319
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	A Comparative Study of Cubic B-spline-Based Quasi-interpolation and Differential Quadrature Methods for Solving Fourth-Order Parabolic PDEs. Proceedings of the National Academy of Sciences India Section A - Physical Sciences, 2021, 91, 461-474.	1.2	5
2	Dark and bright soliton solutions and computational modeling of nonlinear regularized long wave model. Nonlinear Dynamics, 2021, 104, 661-682.	5.2	32
3	The numerical study of advectionâ€“diffusion equations by the fourth-order cubic B-spline collocation method. Mathematical Sciences, 2020, 14, 409-423.	1.7	4
4	A meshfree approach for analysis and computational modeling of non-linear SchrÃ¶dinger equation. Computational and Applied Mathematics, 2020, 39, 1.	2.2	17
5	A numerical study of two-dimensional coupled systems and higher order partial differential equations. Asian-European Journal of Mathematics, 2019, 12, 1950071.	0.5	3
6	Numerical simulation for computational modelling of reactionâ€“diffusion Brusselator model arising in chemical processes. Journal of Mathematical Chemistry, 2019, 57, 149-179.	1.5	22
7	Numerical Simulation of Nonlinear SchrÃ¶dinger Equation in One and Two Dimensions. Mathematical Models and Computer Simulations, 2019, 11, 634-648.	0.5	19
8	New Scale-3 Haar Wavelets Algorithm for Numerical Simulation of Second Order Ordinary Differential Equations. Proceedings of the National Academy of Sciences India Section A - Physical Sciences, 2019, 89, 799-808.	1.2	9
9	Numerical study of reaction diffusion Fisherâ€™s equation by fourth order cubic B-spline collocation method. Mathematical Sciences, 2018, 12, 79-89.	1.7	21
10	Sensitivity analysis of shock wave Burgersâ€™ equation via a novel algorithm based on scale-3 Haar wavelets. International Journal of Computer Mathematics, 2018, 95, 601-625.	1.8	24
11	Numerical Study of SchrÃ¶dinger Equation Using Differential Quadrature Method. International Journal of Applied and Computational Mathematics, 2018, 4, 1.	1.6	1
12	Traveling and Shock Wave Simulations in A Viscous Burgersâ€™ Equation with Periodic Boundary Conditions. International Journal of Applied and Computational Mathematics, 2018, 4, 1.	1.6	2
13	A Quintic B-Spline Based Differential Quadrature Method for Numerical Solution of Kuramoto-Sivashinsky Equation. International Journal of Nonlinear Sciences and Numerical Simulation, 2017, 18, 103-114.	1.0	23
14	A study of one dimensional nonlinear diffusion equations by Bernstein polynomial based differential quadrature method. Journal of Mathematical Chemistry, 2017, 55, 673-695.	1.5	17
15	Numerical Solutions of Symmetric Regularized Long Wave Equations Using Collocation of CubicB-splines Finite Element. International Journal for Computational Methods in Engineering Science and Mechanics, 2015, 16, 142-150.	2.1	11
16	Numerical Solution of Nonlinear Sine-Gordon Equation by Modified Cubic B-Spline Collocation Method. International Journal of Partial Differential Equations, 2014, 2014, 1-8.	0.4	11
17	A Collocation Method for Numerical Solution of Hyperbolic Telegraph Equation with Neumann Boundary Conditions. International Journal of Computational Mathematics, 2014, 2014, 1-9.	0.8	15
18	Numerical solution of some nonlinear wave equations using modified cubic B-spline differential quadrature method. , 2014, , .		2

#	Article	IF	Citations
19	A Collocation Method for Numerical Solutions of Coupled Burgersâ€™ Equations. International Journal for Computational Methods in Engineering Science and Mechanics, 2014, 15, 457-471.	2.1	25
20	Fast Finite Difference Solutions of the Three Dimensional Poissonâ€™s Equation in Cylindrical Coordinates. American Journal of Computational Mathematics, 2013, 03, 356-361.	0.5	4
21	Differential Quadrature Method for Numerical Solution of Coupled Viscous Burgersâ€™ Equations. International Journal for Computational Methods in Engineering Science and Mechanics, 2012, 13, 88-92.	2.1	33
22	A Higher Order Numerical Scheme for Some Nonlinear Differential Equations: Models in Biology. International Journal for Computational Methods in Engineering Science and Mechanics, 2011, 12, 134-140.	2.1	18
23	Numerical Study of Two-Dimensional Reaction-Diffusion Brusselator System by Differential Quadrature Method. International Journal for Computational Methods in Engineering Science and Mechanics, 2011, 12, 14-25.	2.1	12
24	A numerical study of stationary solution of viscous Burgersâ€™ equation using wavelet. International Journal of Computer Mathematics, 2010, 87, 1326-1337.	1.8	7
25	Efficient numerical solution of Fisher's equation by using B-spline method. International Journal of Computer Mathematics, 2010, 87, 3039-3051.	1.8	51
26	Differential Quadrature Method for Two-Dimensional Burgers' Equations. International Journal for Computational Methods in Engineering Science and Mechanics, 2009, 10, 450-459.	2.1	45
27	Linear time invariant system order reduction using multipoint step response matching. International Journal of Systems Science, 2007, 38, 211-217.	5.5	2
28	Numerical study of Fisher's equation by wavelet Galerkin method. International Journal of Computer Mathematics, 2006, 83, 287-298.	1.8	31
29	Numerical solution of Burger's equation. Communications in Numerical Methods in Engineering, 1993, 9, 397-406.	1.3	68
30	Calculation of zeros of a real polynomial using scaling of its coefficients. International Journal of Computer Mathematics, 1993, 48, 117-124.	1.8	1
31	High-Order Finite-Differences Schemes to Solve Poisson's Equation in Polar Coordinates. IMA Journal of Numerical Analysis, 1991, 11, 261-270.	2.9	17
32	Numerical solution of a viscous incompressible flow problem through an orifice. Flow, Turbulence and Combustion, 1987, 44, 361-375.	0.2	5
33	Fast finite difference solution for steady-state Navier-Stokes equations using the BID method. International Journal for Numerical Methods in Fluids, 1987, 7, 911-917.	1.6	4
34	High order finite difference schemes to solve Poisson's equation in cylindrical symmetry. Communications in Applied Numerical Methods, 1987, 3, 457-461.	0.5	5
35	High order difference schemes for the wave equation. International Journal for Numerical Methods in Engineering, 1978, 12, 1623-1628.	2.8	8
36	A cubic B-spline quasi-interpolation algorithm to capture the pattern formation of coupled reaction-diffusion models. Engineering With Computers, 0, , 1.	6.1	11

#	Article	IF	Citations
37	Analysis of chaotic behavior of three-dimensional dynamical systems by a B-spline differential quadrature algorithm. Asian-European Journal of Mathematics, 0, , 2250077.	0.5	0