R C Mittal

List of Publications by Year in descending order

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567281 642732 37 585 15 23 citations h-index g-index papers 37 37 37 319 all docs docs citations times ranked citing authors

#	Article	IF	Citations
1	Numerical solution of Burger's equation. Communications in Numerical Methods in Engineering, 1993, 9, 397-406.	1.3	68
2	Efficient numerical solution of Fisher's equation by using B-spline method. International Journal of Computer Mathematics, 2010, 87, 3039-3051.	1.8	51
3	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
4	Differential Quadrature Method for Numerical Solution of Coupled Viscous Burgers' Equations. International Journal for Computational Methods in Engineering Science and Mechanics, 2012, 13, 88-92.	2.1	33
5	Dark and bright soliton solutions and computational modeling of nonlinear regularized long wave model. Nonlinear Dynamics, 2021, 104, 661-682.	5.2	32
6	Numerical study of Fisher's equation by wavelet Galerkin method. International Journal of Computer Mathematics, 2006, 83, 287-298.	1.8	31
7	A Collocation Method for Numerical Solutions of Coupled Burgers' Equations. International Journal for Computational Methods in Engineering Science and Mechanics, 2014, 15, 457-471.	2.1	25
8	Sensitivity analysis of shock wave Burgers' equation via a novel algorithm based on scale-3 Haar wavelets. International Journal of Computer Mathematics, 2018, 95, 601-625.	1.8	24
9	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
10	Numerical simulation for computational modelling of reaction–diffusion Brusselator model arising in chemical processes. Journal of Mathematical Chemistry, 2019, 57, 149-179.	1.5	22
11	Numerical study of reaction diffusion Fisher's equation by fourth order cubic B-spline collocation method. Mathematical Sciences, 2018, 12, 79-89.	1.7	21
12	Numerical Simulation of Nonlinear SchrĶdinger Equation in One and Two Dimensions. Mathematical Models and Computer Simulations, 2019, 11, 634-648.	0.5	19
13	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
14	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
15	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
16	A meshfree approach for analysis and computational modeling of non-linear SchrĶdinger equation. Computational and Applied Mathematics, 2020, 39, 1.	2.2	17
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 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

#	Article	IF	Citations
19	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
20	Numerical Solutions of Symmetric Regularized Long Wave Equations Using Collocation of Cubic <i>B</i> -splines Finite Element. International Journal for Computational Methods in Engineering Science and Mechanics, 2015, 16, 142-150.	2.1	11
21	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
22	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
23	High order difference schemes for the wave equation. International Journal for Numerical Methods in Engineering, 1978, 12, 1623-1628.	2.8	8
24	A numerical study of stationary solution of viscous Burgers' equation using wavelet. International Journal of Computer Mathematics, 2010, 87, 1326-1337.	1.8	7
25	Numerical solution of a viscous incompressible flow problem through an orifice. Flow, Turbulence and Combustion, 1987, 44, 361-375.	0.2	5
26	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
27	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
28	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
29	Fast Finite Difference Solutions of the Three Dimensional Poisson's Equation in Cylindrical Coordinates. American Journal of Computational Mathematics, 2013, 03, 356-361.	0.5	4
30	The numerical study of advection–diffusion equations by the fourth-order cubic B-spline collocation method. Mathematical Sciences, 2020, 14, 409-423.	1.7	4
31	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
32	Linear time invariant system order reduction using multipoint step response matching. International Journal of Systems Science, 2007, 38, 211-217.	5.5	2
33	Numerical solution of some nonlinear wave equations using modified cubic B-spline differential quadrature method., 2014,,.		2
34	Traveling and Shock Wave Simulations in A Viscous Burgers' Equation with Periodic Boundary Conditions. International Journal of Applied and Computational Mathematics, 2018, 4, 1.	1.6	2
35	Calculation of zeros of a real polynomial using scaling of its coefficients. International Journal of Computer Mathematics, 1993, 48, 117-124.	1.8	1
36	Numerical Study of Schr $ ilde{A}$ ¶dinger Equation Using Differential Quadrature Method. International Journal of Applied and Computational Mathematics, 2018, 4, 1.	1.6	1

#	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	O