Murli M Gupta

List of Publications by Year
in descending order

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		471509	501196
39	1,288	17	28
papers	citations	h-index	g-index

40	40	40	477
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	High-accuracy compact difference schemes for differential equations in mathematical sciences. Annals of Mathematical Sciences and Applications, 2020, 5, 101-138.	0.4	1
2	Optimized BiCGStab Based GPU Accelerated Computation of Incompressible Viscous Flows by the $$psi $$ Ï^ â€“ν Formulation. International Journal of Applied and Computational Mathematics, 2017, 3, 1477-1495.	1.6	0
3	Preface of the â€œSymposium on High Accuracy Solution of Ordinary and Partial Differential Equationsâ€• AIP Conference Proceedings, 2017, , .	0.4	0
4	On the improvement of convergence rate of difference schemes with high order differences for a convection-diffusion equation. AIP Conference Proceedings, 2015, , .	0.4	0
5	Preface of the â€œMinisymposium on high accuracy solution of ordinary and Partial Differential Equationsâ€• AIP Conference Proceedings, 2015, , .	0.4	0
6	GPU accelerated flow computation by the streamfunction-velocity (Ï^-Î½) formulation. AIP Conference Proceedings, 2015, , .	0.4	0
7	A robust implicit compact scheme for two-dimensional unsteady flows with a biharmonic stream function formulation. Computers and Fluids, 2013, 84, 141-163.	2.5	18
8	Oscillatory flow past an inclined square cylinder at low Reynolds numbers. , 2012, , .		0
9	Preface of the "Minisymposium on high accuracy solution of ordinary and partial differential equations". , 2012, , .		0
10	A streamfunctionâ€“velocity approach for 2D transient incompressible viscous flows. International Journal for Numerical Methods in Fluids, 2010, 62, 237-266.	1.6	17
11	High Order Difference Scheme for Helmholtz Equation with Mixed Boundary Conditions. , 2010, , .		0
12	High Order Finite Difference Schemes for Partial Differential Equations (Minisymposium #26). , 2009, , .		0
13	Simulation of the Laminar Flow Past a Square Cylinder by the Î¨â^'ν formulation. , 2009, , .		0
14	Convergence of Fourth Order Compact Difference Schemes for Threeâ€Dimensional Convectionâ€Diffusion Equations. SIAM Journal on Numerical Analysis, 2007, 45, 443-455.	2.3	42
15	On the choice of initial conditions of difference schemes for parabolic equations. Proceedings in Applied Mathematics and Mechanics, 2007, 7, 1025605-1025606.	0.2	0
16	A new paradigm for solving Navierâ€“Stokes equations: streamfunctionâ€“velocity formulation. Journal of Computational Physics, 2005, 207, 52-68.	3.8	115
17	High Accuracy Solution of Three-Dimensional Biharmonic Equations. Numerical Algorithms, 2002, 29, 1-19.	1.9	16
18	High accuracy multigrid solution of the 3D convectionâ€“diffusion equation. Applied Mathematics and Computation, 2000, 113, 249-274.	2.2	79

#	Article	IF	Citations
19	Symbolic derivation of finite difference approximations for the three-dimensional Poisson equation. Numerical Methods for Partial Differential Equations, 1998, 14, 593-606.	3.6	43
20	Multigrid Solution of Automatically Generated High-Order Discretizations for the Biharmonic Equation. SIAM Journal of Scientific Computing, 1998, 19, 1575-1585.	2.8	63
21	Comparison of Second- and Fourth-Order Discretizations for Multigrid Poisson Solvers. Journal of Computational Physics, 1997, 132, 226-232.	3.8	96
22	A Compact Multigrid Solver for Convection-Diffusion Equations. Journal of Computational Physics, 1997, 132, 123-129.	3.8	55
23	High accuracy solutions of incompressible Navier-Stokes equations. Journal of Computational Physics, 1991, 93, 343-359.	3.8	105
24	A Spectrum Enveloping Technique for Iterative Solution of Central Difference Approximations of Convection-Diffusion Equations. SIAM Journal on Algebraic and Discrete Methods, 1986, 7, 513-526.	0.8	2
25	High-order difference schemes for two-dimensional elliptic equations. Numerical Methods for Partial Differential Equations, 1985, 1, 71-80.	3.6	74
26	A single cell high order scheme for the convection-diffusion equation with variable coefficients. International Journal for Numerical Methods in Fluids, 1984, 4, 641-651.	1.6	213
27	A fourth-order poisson solver. Journal of Computational Physics, 1984, 55, 166-172.	3.8	45
28	A survey of some second-order difference schemes for the steady-state convection-diffusion equation. International Journal for Numerical Methods in Fluids, 1983, 3, 319-331.	1.6	12
29	Nature of viscous flows near sharp corners. Computers and Fluids, 1981, 9, 379-388.	2.5	58
30	A comparison of numerical solutions of convective and divergence forms of the Navier-Stokes equations for the driven cavity problem. Journal of Computational Physics, 1981, 43, 260-267.	3.8	6
31	On the use of central difference scheme for Navier-Strokes equations. International Journal for Numerical Methods in Engineering, 1980, 15, 557-573.	2.8	14
32	Boundary approximations and accuracy in viscous flow computations. Journal of Computational Physics, 1979, 31, 265-288.	3.8	62
33	Direct solution of the biharmonic equation using noncoupled approach. Journal of Computational Physics, 1979, 33, 236-248.	3.8	37
34	A critique of a second-order upwind scheme for viscous flow problems. AIAA Journal, 1978, 16, 759-761.	2.6	12
35	Some Difference Schemes for the Biharmonic Equation. SIAM Journal on Numerical Analysis, 1975, 12, 773-790.	2.3	58
36	Discretization Error Estimates for Certain Splitting Procedures for Solving First Biharmonic Boundary Value Problems. SIAM Journal on Numerical Analysis, 1975, 12, 364-377.	2.3	28

#	Article	IF	Citations
37	Numerical solution of a second biharmonic boundary value problem. BIT Numerical Mathematics, 1973, 13, 160-164.	2.0	2
38	A discussion of papers by D. B. Spalding and A. K. Runchal. International Journal for Numerical Methods in Engineering, 1973, 7, 560-563.	2.8	11
39	Numerical solution of a separtated viscous flow problem by a non-uniform finite-difference net. International Journal for Numerical Methods in Engineering, 1972, 4, 251-260.	2.8	4