

Kailash C Patidar

List of Publications by Year in descending order

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54
papers

938
citations

516215

16
h-index

476904

29
g-index

55
all docs

55
docs citations

55
times ranked

339
citing authors

#	ARTICLE	IF	CITATIONS
1	Layer resolving fitted mesh method for parabolic convection-diffusion problems with a variable diffusion. <i>Journal of Applied Mathematics and Computing</i> , 2022, 68, 1245-1270.	1.2	4
2	An unconditionally stable nonstandard finite difference method to solve a mathematical model describing Visceral Leishmaniasis. <i>Mathematics and Computers in Simulation</i> , 2021, 187, 171-190.	2.4	14
3	A non-standard finite difference scheme for a class of predator-prey systems with non-monotonic functional response. <i>Journal of Difference Equations and Applications</i> , 2021, 27, 1310-1328.	0.7	3
4	A robust fitted numerical method for singularly perturbed turning point problems whose solution exhibits an interior layer. <i>Quaestiones Mathematicae</i> , 2020, 43, 1-24.	0.2	6
5	High-order semi-implicit linear multistep LG scheme for a three species competition-diffusion system in two-dimensional spatial domain arising in ecology. <i>Communications in Nonlinear Science and Numerical Simulation</i> , 2020, 84, 105151.	1.7	1
6	A robust nonstandard finite difference scheme for pricing real estate index options. <i>Journal of Difference Equations and Applications</i> , 2020, 26, 1471-1493.	0.7	3
7	A fitted numerical method for parabolic turning point singularly perturbed problems with an interior layer. <i>Numerical Methods for Partial Differential Equations</i> , 2019, 35, 2407-2422.	2.0	12
8	A robust fitted operator finite difference method for singularly perturbed problems whose solution has an interior layer. <i>Mathematics and Computers in Simulation</i> , 2019, 160, 155-167.	2.4	11
9	Fractional-step \hat{L}_1 -method for solving singularly perturbed problem in ecology. <i>Advances in Computational Mathematics</i> , 2018, 44, 645-671.	0.8	0
10	A nonstandard finite difference method for solving a mathematical model of HIV-TB co-infection. <i>Journal of Difference Equations and Applications</i> , 2017, 23, 1105-1132.	0.7	3
11	Pricing Barrier Options Using Integral Transforms. <i>STEAM-H: Science, Technology, Engineering, Agriculture, Mathematics & Health</i> , 2017, , 221-239.	0.0	0
12	Efficient simulation of a slow-fast dynamical system using multirate finite difference schemes. <i>Quaestiones Mathematicae</i> , 2016, 39, 689-714.	0.2	2
13	Solution of Pattern Waves for Diffusive Fisher-like Non-linear Equations with Adaptive Methods. <i>International Journal of Nonlinear Sciences and Numerical Simulation</i> , 2016, 17, 291-304.	0.4	8
14	Effect of spatial configuration of an extended nonlinear Kierstead-Slobodkin reaction-transport model with adaptive numerical scheme. <i>SpringerPlus</i> , 2016, 5, 303.	1.2	13
15	Numerical simulations of multicomponent ecological models with adaptive methods. <i>Theoretical Biology and Medical Modelling</i> , 2016, 13, 1.	2.1	61
16	A fitted numerical method to investigate the effect of various parameters on an MHD flow over an inclined plate. <i>Numerical Methods for Partial Differential Equations</i> , 2016, 32, 106-120.	2.0	2
17	Limitations and improvements of standard spectral methods for pricing standard options. <i>International Journal of Advances in Engineering Sciences and Applied Mathematics</i> , 2015, 7, 106-113.	0.7	0
18	A new fitted operator finite difference method to solve systems of evolutionary reaction-diffusion equations. <i>Quaestiones Mathematicae</i> , 2015, 38, 121-138.	0.2	9

#	ARTICLE	IF	CITATIONS
19	Numerical Solution of Singular Patterns in One-dimensional Gray-Scott-like Models. International Journal of Nonlinear Sciences and Numerical Simulation, 2014, 15, 437-462.	0.4	43
20	Analysis of a malaria model with a distributed delay. IMA Journal of Applied Mathematics, 2014, 79, 1139-1160.	0.8	4
21	A non-standard finite difference method to solve a model of HIVâ€™Malaria co-infection. Journal of Difference Equations and Applications, 2014, 20, 354-378.	0.7	16
22	PERFORMANCE OF RICHARDSON EXTRAPOLATION ON SOME NUMERICAL METHODS FOR A SINGULARLY PERTURBED TURNING POINT PROBLEM WHOSE SOLUTION HAS BOUNDARY LAYERS. Journal of the Korean Mathematical Society, 2014, 51, 679-702.	0.4	12
23	A fitted numerical method for singularly perturbed parabolic reaction-diffusion problems. Computational and Applied Mathematics, 2013, 32, 509-519.	1.3	17
24	A review on singularly perturbed differential equations with turning points and interior layers. Applied Mathematics and Computation, 2013, 219, 10575-10609.	1.4	42
25	An unconditionally stable nonstandard finite difference method applied to a mathematical model of HIV infection. International Journal of Applied Mathematics and Computer Science, 2013, 23, 357-372.	1.5	11
26	Contour integral method for European options with jumps. Communications in Nonlinear Science and Numerical Simulation, 2013, 18, 478-492.	1.7	18
27	Novel fitted operator finite difference methods for singularly perturbed elliptic convectionâ€™diffusion problems in two dimensions. Journal of Difference Equations and Applications, 2012, 18, 799-813.	0.7	13
28	Spectral method for pricing options in illiquid markets. , 2012, , .		1
29	Spline approximation method to solve an option pricing problem. Journal of Difference Equations and Applications, 2012, 18, 1801-1816.	0.7	11
30	A fitted numerical method for a system of partial delay differential equations. Computers and Mathematics With Applications, 2011, 61, 1475-1492.	1.4	14
31	Limitations of Richardsonâ€™s extrapolation for a high order fitted mesh method for self-adjoint singularly perturbed problems. Journal of Applied Mathematics and Computing, 2010, 32, 219-236.	1.2	13
32	Reliable finite element methods for self-adjoint singular perturbation problems. Quaestiones Mathematicae, 2009, 32, 397-413.	0.2	0
33	On Richardson extrapolation for fitted operator finite difference methods. Applied Mathematics and Computation, 2008, 201, 465-480.	1.4	12
34	Comparison of some recent numerical methods for initial-value problems for stiff ordinary differential equations. Computers and Mathematics With Applications, 2008, 55, 733-744.	1.4	33
35	A robust fitted operator finite difference method for a two-parameter singular perturbation problem $\langle \sup \rangle 1 \langle /sup \rangle$. Journal of Difference Equations and Applications, 2008, 14, 1197-1214.	0.7	24
36	Regularity and Discrete Schemes for the Heat Equation on Non-Smooth Domains. AIP Conference Proceedings, 2007, , .	0.3	0

#	ARTICLE	IF	CITATIONS
37	Solving singularly perturbed advectionâ€“reaction equations via non-standard finite difference methods. <i>Mathematical Methods in the Applied Sciences</i> , 2007, 30, 1627-1637.	1.2	12
38	Non-standard methods for singularly perturbed problems possessing oscillatory/layer solutions. <i>Applied Mathematics and Computation</i> , 2007, 187, 1147-1160.	1.4	19
39	High order parameter uniform numerical method for singular perturbation problems. <i>Applied Mathematics and Computation</i> , 2007, 188, 720-733.	1.4	24
40	Uniformly convergent non-standard finite difference methods for self-adjoint singular perturbation problems. <i>Journal of Computational and Applied Mathematics</i> , 2006, 191, 228-238.	1.1	34
41	$\hat{\mu}$ -Uniformly convergent non-standard finite difference methods for singularly perturbed differential difference equations with small delay. <i>Applied Mathematics and Computation</i> , 2006, 175, 864-890.	1.4	26
42	$\hat{\mu}$ -Uniformly convergent fitted methods for the numerical solution of the problems arising from singularly perturbed general DDEs. <i>Applied Mathematics and Computation</i> , 2006, 182, 119-139.	1.4	35
43	Uniformly convergent non-standard finite difference methods for singularly perturbed differential-difference equations with delay and advance. <i>International Journal for Numerical Methods in Engineering</i> , 2006, 66, 272-296.	1.5	40
44	High order fitted operator numerical method for self-adjoint singular perturbation problems. <i>Applied Mathematics and Computation</i> , 2005, 171, 547-566.	1.4	32
45	Non-standard Finite Difference Methods for Dissipative Singular Perturbation Problems. , 2005, , .		3
46	CONTRIBUTIONS TO THE THEORY OF NON-STANDARD FINITE DIFFERENCE METHODS AND APPLICATIONS TO SINGULAR PERTURBATION PROBLEMS. , 2005, , 513-560.		12
47	On the use of nonstandard finite difference methodsâ€™. <i>Journal of Difference Equations and Applications</i> , 2005, 11, 735-758.	0.7	102
48	Title is missing!. <i>Journal of Computational Analysis and Applications</i> , 2003, 5, 425-451.	0.2	4
49	Singularly perturbed problems in partial differential equations: a survey. <i>Applied Mathematics and Computation</i> , 2003, 134, 371-429.	1.4	49
50	Exponentially fitted spline approximation method for solving selfadjoint singular perturbation problems. <i>International Journal of Mathematics and Mathematical Sciences</i> , 2003, 2003, 3873-3891.	0.3	4
51	Numerical Solution of Singularly Perturbed Non-Linear Two Point Boundary Value Problems by Spline in Compression. <i>International Journal of Computer Mathematics</i> , 2002, 79, 271-288.	1.0	10
52	Tension Spline for the Solution of Self-adjoint Singular Perturbation Problems. <i>International Journal of Computer Mathematics</i> , 2002, 79, 849-865.	1.0	4
53	A survey of numerical techniques for solving singularly perturbed ordinary differential equations. <i>Applied Mathematics and Computation</i> , 2002, 130, 457-510.	1.4	81
54	Numerical solution of singularly perturbed two point boundary value problems by spline in compression. <i>International Journal of Computer Mathematics</i> , 2001, 77, 263-283.	1.0	11