

# Kapil K Sharma

## List of Publications by Year in descending order

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394421

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all docs

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docs citations

37  
times ranked

362  
citing authors

#	ARTICLE	IF	CITATIONS
1	A numerical scheme based on weighted average differential quadrature method for the numerical solution of Burgers's equation. Applied Mathematics and Computation, 2013, 219, 6680-6691.	2.2	83
2	Numerical analysis of singularly perturbed delay differential equations with layer behavior. Applied Mathematics and Computation, 2004, 157, 11-28.	2.2	79
3	A numerical method based on finite difference for boundary value problems for singularly perturbed delay differential equations. Applied Mathematics and Computation, 2008, 197, 692-707.	2.2	78
4	Numerical Analysis of Boundary-Value Problems for Singularly-Perturbed Differential-Difference Equations with Small Shifts of Mixed Type. Journal of Optimization Theory and Applications, 2002, 115, 145-163.	1.5	64
5	Numerical treatment of a mathematical model arising from a model of neuronal variability. Journal of Mathematical Analysis and Applications, 2005, 307, 606-627.	1.0	57
6	Numerical method for solving fractional coupled Burgers equations. Applied Mathematics and Computation, 2015, 260, 314-320.	2.2	56
7	Numerical Treatment for the Class of Time Dependent Singularly Perturbed Parabolic Problems with General Shift Arguments. Differential Equations and Dynamical Systems, 2017, 25, 327-346.	1.0	50
8	A parameter-uniform implicit difference scheme for solving time-dependent Burgers's equations. Applied Mathematics and Computation, 2005, 170, 1365-1393.	2.2	46
9	Parameter uniform numerical scheme for time dependent singularly perturbed convection-diffusion-reaction problems with general shift arguments. Numerical Algorithms, 2017, 75, 113-145.	1.9	45
10	A review on singularly perturbed differential equations with turning points and interior layers. Applied Mathematics and Computation, 2013, 219, 10575-10609.	2.2	42
11	Uniformly convergent non-standard finite difference methods for singularly perturbed differential-difference equations with delay and advance. International Journal for Numerical Methods in Engineering, 2006, 66, 272-296.	2.8	40
12	A numerical scheme based on differential quadrature method to solve time dependent Burgers' equation. Engineering Computations, 2012, 30, 117-131.	1.4	31
13	A parameter uniform difference scheme for parabolic partial differential equation with a retarded argument. Applied Mathematical Modelling, 2010, 34, 4232-4242.	4.2	29
14	Numerical analysis of singularly perturbed delay differential turning point problem. Applied Mathematics and Computation, 2011, 218, 3483-3498.	2.2	29
15	$\tilde{\mu}$ -Uniform fitted mesh method for singularly perturbed differential-difference equations: Mixed type of shifts with layer behavior. International Journal of Computer Mathematics, 2004, 81, 49-62.	1.8	28
16	$\hat{\mu}$ -Uniformly convergent non-standard finite difference methods for singularly perturbed differential difference equations with small delay. Applied Mathematics and Computation, 2006, 175, 864-890.	2.2	26
17	Numerical treatment for singularly perturbed nonlinear differential difference equations with negative shift. Nonlinear Analysis: Theory, Methods & Applications, 2005, 63, e1909-e1924.	1.1	25
18	Numerical study of singularly perturbed differential-difference equation arising in the modeling of neuronal variability. Computers and Mathematics With Applications, 2012, 63, 118-132.	2.7	24

#	ARTICLE	IF	CITATIONS
19	Simply constructed family of a Ostrowski's method with optimal order of convergence. Computers and Mathematics With Applications, 2011, 62, 4021-4027.	2.7	21
20	Hyperbolic partial differential-difference equation in the mathematical modeling of neuronal firing and its numerical solution. Applied Mathematics and Computation, 2008, 201, 229-238.	2.2	15
21	Optimal equi-scaled families of Jarratt's method. International Journal of Computer Mathematics, 2013, 90, 408-422.	1.8	15
22	An $\bar{\mu}$ -uniform fitted operator method for solving boundary-value problems for singularly perturbed delay differential equations: Layer behavior. International Journal of Computer Mathematics, 2003, 80, 1261-1276.	1.8	14
23	Parameter uniform numerical method for singularly perturbed differential-difference equations with interior layers. International Journal of Computer Mathematics, 2011, 88, 3416-3435.	1.8	14
24	Numerical approximation for a class of singularly perturbed delay differential equations with boundary and interior layer(s). Numerical Algorithms, 2020, 85, 305-328.	1.9	14
25	A solution of the discrepancy occurs due to using the fitted mesh approach rather than to the fitted operator for solving singularly perturbed differential equations. Applied Mathematics and Computation, 2006, 181, 756-766.	2.2	13
26	Fitted mesh numerical method for singularly perturbed delay differential turning point problems exhibiting boundary layers. International Journal of Computer Mathematics, 2012, 89, 944-961.	1.8	13
27	A higher order uniformly convergent method for singularly perturbed parabolic turning point problems. Numerical Methods for Partial Differential Equations, 2020, 36, 342-368.	3.6	13
28	Parameter uniform numerical method for a boundary-value problem for singularly perturbed nonlinear delay differential equation of neutral type. International Journal of Computer Mathematics, 2004, 81, 845-862.	1.8	9
29	Unconditionally stable numerical method for a nonlinear partial integro-differential equation. Computers and Mathematics With Applications, 2014, 67, 62-76.	2.7	9
30	Finite element method for a nonlinear parabolic integro-differential equation in higher spatial dimensions. Applied Mathematical Modelling, 2015, 39, 7338-7350.	4.2	9
31	Cost-effectiveness of classification ensembles. Pattern Recognition, 2016, 57, 84-96.	8.1	7
32	Expanded mixed FEM with lowest order RT elements for nonlinear and nonlocal parabolic problems. Advances in Computational Mathematics, 2018, 44, 1537-1571.	1.6	7
33	$\epsilon$ -Uniform Numerical Technique for the Class of Time Dependent Singularly Perturbed Parabolic Problems With State Dependent Retarded Argument Arising from Generalised Stein's Model of Neuronal Variability. Differential Equations and Dynamical Systems, 2019, 27, 113-140.	1.0	6
34	A robust numerical algorithm on harmonic mesh for parabolic singularly perturbed convection-diffusion problems with time delay. Numerical Algorithms, 2022, 91, 615-634.	1.9	5
35	High-order discrete-time orthogonal spline collocation methods for singularly perturbed 1D parabolic reaction-diffusion problems. Numerical Methods for Partial Differential Equations, 2020, 36, 495-523.	3.6	4
36	Probability density function of leaky integrate-and-fire model with Levy noise and its numerical approximation. Numerical Analysis and Applications, 2016, 9, 66-73.	0.4	2

#	ARTICLE	IF	CITATIONS
37	A Uniformly Convergent Numerical Algorithm on Harmonic ( $H(\ell)$ ) Mesh for Parabolic Singularly Perturbed Convection-Diffusion Problems with Boundary Layer. Differential Equations and Dynamical Systems, 0, , 1.	1.0	2