

Vinay Kanwar

List of Publications by Year in descending order

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#	ARTICLE	IF	CITATIONS
1	Numerical Solution of Generalized Kuramoto–Sivashinsky Equation Using Cubic Trigonometric B-Spline Based Differential Quadrature Method and One-Step Optimized Hybrid Block Method. International Journal of Applied and Computational Mathematics, 2022, 8, 1.	0.9	4
2	Using a cubic B-spline method in conjunction with a one-step optimized hybrid block approach to solve nonlinear partial differential equations. Computational and Applied Mathematics, 2022, 41, 1.	1.0	8
3	A Family of $\langle \mathit{xmlns}=\text{"http://www.w3.org/1998/Math/MathML"} \textit{id}=\text{"M1"} \rangle \langle \mathit{mi} \textit{mathvariant}=\text{"script"} \rangle \mathit{A} \langle \mathit{mi} \rangle \langle \mathit{math} \rangle$ -Stable Optimized Hybrid Block Methods for Integrating Stiff Differential Systems. Mathematical Problems in Engineering, 2022, 2022, 1-18.	0.6	3
4	Geometrically Constructed Family of the Simple Fixed Point Iteration Method. Mathematics, 2021, 9, 694.	1.1	3
5	Efficient adaptive step-size formulation of an optimized two-step hybrid block method for directly solving general second-order initial-value problems. Computational and Applied Mathematics, 2021, 40, 1.	1.0	4
6	A novel two-parameter class of optimized hybrid block methods for integrating differential systems numerically. Computational and Mathematical Methods, 2021, 3, .	0.3	5
7	Ball convergence for a three-point method with optimal convergence order eight under weak conditions. Asian-European Journal of Mathematics, 2020, 13, 2050048.	0.2	0
8	An efficient optimized adaptive step-size hybrid block method for integrating differential systems. Applied Mathematics and Computation, 2019, 362, 124567.	1.4	17
9	An optimal reconstruction of Chebyshev–Halley type methods for nonlinear equations having multiple zeros. Journal of Computational and Applied Mathematics, 2019, 354, 651-662.	1.1	5
10	General efficient class of Steffensen type methods with memory for solving systems of nonlinear equations. Journal of Computational and Applied Mathematics, 2019, 352, 23-39.	1.1	21
11	HIGHER-ORDER FAMILIES OF MULTIPLE ROOT FINDING METHODS SUITABLE FOR NON-CONVERGENT CASES AND THEIR DYNAMICS. Mathematical Modelling and Analysis, 2019, 24, 422-444.	0.7	2
12	Ball Convergence for Two Optimal Eighth-Order Methods Using Only the First Derivative. International Journal of Applied and Computational Mathematics, 2017, 3, 2291-2301.	0.9	2
13	Some new weighted eighth-order variants of Steffensen-King’s type family for solving nonlinear equations and its dynamics. SeMA Journal, 2017, 74, 75-90.	1.0	3
14	New uni-parametric family of multipoint methods with memory for systems of nonlinear equations. SeMA Journal, 2017, 74, 91-113.	1.0	0
15	New efficient derivative free family of seventh-order methods for solving systems of nonlinear equations. Numerical Algorithms, 2017, 76, 283-307.	1.1	15
16	Higher-order derivative-free families of Chebyshev–Halley type methods with or without memory for solving nonlinear equations. Applied Mathematics and Computation, 2017, 315, 224-245.	1.4	15
17	An embedded 3(2) pair of nonlinear methods for solving first order initial-value ordinary differential systems. Numerical Algorithms, 2017, 75, 509-529.	1.1	13
18	Efficient derivative-free variants of Hansen-Patrick’s family with memory for solving nonlinear equations. Numerical Algorithms, 2016, 73, 1017-1036.	1.1	8

#	ARTICLE	IF	CITATIONS
19	Local convergence for multipoint methods using only the first derivative. SeMA Journal, 2016, 73, 369-378.	1.0	1
20	On the Local Convergence of an Eighth-order Method for Solving Nonlinear Equations. Annals of the West University of Timisoara: Mathematics and Computer Science, 2016, 54, 3-16.	0.1	2
21	An efficient variable step-size rational Falkner-type method for solving the special second-order IVP. Applied Mathematics and Computation, 2016, 291, 39-51.	1.4	18
22	Optimized mean based second derivative-free families of Chebyshev-Halley type methods. Numerical Analysis and Applications, 2016, 9, 129-140.	0.2	2
23	New two-parameter Chebyshev-Halley-like family of fourth and sixth-order methods for systems of nonlinear equations. Applied Mathematics and Computation, 2016, 275, 394-403.	1.4	24
24	A stable class of improved second-derivative free Chebyshev-Halley type methods with optimal eighth order convergence. Numerical Algorithms, 2016, 72, 937-958.	1.1	8
25	An optimal fourth-order family of methods for multiple roots and its dynamics. Numerical Algorithms, 2016, 71, 775-796.	1.1	48
26	Efficient families of Newton's method and its variants suitable for non-convergent cases. Afrika Matematika, 2016, 27, 767-779.	0.4	1
27	An efficient family of two-point sixth-order methods suitable for non-convergence cases. , 2015, , .		2
28	Efficient derivative-free with memory variants of King's family for solving nonlinear equations. , 2015, , .		0
29	An Optimal Eighth-Order Derivative-Free Family of Potra-Ptăjăk's Method. Algorithms, 2015, 8, 309-320.	1.2	7
30	Solving first-order initial-value problems by using an explicit non-standard A-stable one-step method in variable step-size formulation. Applied Mathematics and Computation, 2015, 268, 796-805.	1.4	6
31	New modifications of Hansen-Patrick's family with optimal fourth and eighth orders of convergence. Applied Mathematics and Computation, 2015, 269, 507-519.	1.4	7
32	Iterative Fixed-Point Methods for Solving Nonlinear Problems: Dynamics and Applications. Abstract and Applied Analysis, 2014, 2014, 1-2.	0.3	0
33	New Highly Efficient Families of Higher-Order Methods for Simple Roots, Permitting $f''(x_n)=0$. International Journal of Mathematics and Mathematical Sciences, 2014, 2014, 1-12.	0.3	1
34	New modified optimal families of King's and Traub-Ostrowski's methods. Numerical Analysis and Applications, 2014, 7, 26-35.	0.2	0
35	Highly efficient classes of Chebyshev-Halley type methods free from second-order derivative. , 2014, , .		2
36	New A-stable scheme for initial value problems of ODEs. , 2014, , .		0

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37	New optimal class of higher-order methods for multiple roots, permitting $f \in C^2(x_n) = 0$. Applied Mathematics and Computation, 2013, 222, 564-574.	1.4	17
38	Optimal equi-scaled families of Jarratt's method. International Journal of Computer Mathematics, 2013, 90, 408-422.	1.0	15
39	MODIFIED OPTIMAL FAMILIES OF FOURTH-ORDER JARRATT'S METHOD. International Journal of Pure and Applied Mathematics, 2013, 84, .	0.2	1
40	Another Simple Way of Deriving Several Iterative Functions to Solve Nonlinear Equations. Journal of Applied Mathematics, 2012, 2012, 1-22.	0.4	4
41	On some modified families of multipoint iterative methods for multiple roots of nonlinear equations. Applied Mathematics and Computation, 2012, 218, 7382-7394.	1.4	18
42	Simply constructed family of a Ostrowski's method with optimal order of convergence. Computers and Mathematics With Applications, 2011, 62, 4021-4027.	1.4	21
43	Geometrically Constructed Families of Newton's Method for Unconstrained Optimization and Nonlinear Equations. International Journal of Mathematics and Mathematical Sciences, 2011, 2011, 1-9.	0.3	9
44	A new family of Schröder's method and its variants based on power means for multiple roots of nonlinear equations. International Journal of Mathematical Education in Science and Technology, 2010, 41, 558-565.	0.8	3
45	A family of ellipse methods for solving non-linear equations. International Journal of Mathematical Education in Science and Technology, 2009, 40, 571-575.	0.8	2
46	Exponentially fitted variants of Newton's method with quadratic and cubic convergence. International Journal of Computer Mathematics, 2009, 86, 1603-1611.	1.0	4
47	Simple geometric constructions of quadratically and cubically convergent iterative functions to solve nonlinear equations. Numerical Algorithms, 2008, 47, 95-107.	1.1	13
48	Exponentially fitted variants of Euler's method for ODEs. International Journal of Mathematical Education in Science and Technology, 2008, 39, 1112-1116.	0.8	1
49	Modified families of Newton, Halley and Chebyshev methods. Applied Mathematics and Computation, 2007, 192, 20-26.	1.4	26
50	Modified families of multi-point iterative methods for solving nonlinear equations. Numerical Algorithms, 2007, 44, 381-389.	1.1	10
51	On method of osculating circle for solving nonlinear equations. Applied Mathematics and Computation, 2006, 176, 379-382.	1.4	4
52	A family of third-order multipoint methods for solving nonlinear equations. Applied Mathematics and Computation, 2006, 176, 409-413.	1.4	4
53	Multipoint iterative method with cubic convergence. Applied Mathematics and Computation, 2006, 179, 606-611.	1.4	0
54	On a class of quadratically convergent iteration formulae. Applied Mathematics and Computation, 2005, 166, 633-637.	1.4	42

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55	A new family of Secant-like method with super-linear convergence. Applied Mathematics and Computation, 2005, 171, 104-107.	1.4	12
56	On some third-order iterative methods for solving nonlinear equations. Applied Mathematics and Computation, 2005, 171, 272-280.	1.4	32
57	A new upper bound on the growth rate of linear instability of baroclinic zonal flows in a two-layer model on a beta-plane. Physics of Fluids, 1999, 11, 2925-2927.	1.6	3
58	A Mathematical Theorem in Rotatory Thermohaline Convection. Journal of Mathematical Analysis and Applications, 1995, 189, 351-361.	0.5	6
59	A proof of Howard's conjecture in homogeneous parallel shear flows: Limitations of Fjortoft's necessary instability criterion. Proceedings of the Indian Academy of Sciences: Mathematical Sciences, 1995, 105, 251-257.	0.2	4
60	A proof of Howard's conjecture in homogeneous parallel shear flows. Proceedings of the Indian Academy of Sciences: Mathematical Sciences, 1994, 104, 593-595.	0.2	8
61	An efficient family of Steffensen type methods with memory for solving systems of nonlinear equations. Computational and Mathematical Methods, 0, , e1192.	0.3	0