

# Vinay Kanwar

## List of Publications by Year in descending order

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papers

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citations

686830

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752256

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62  
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62  
docs citations

62  
times ranked

185  
citing authors

#	ARTICLE	IF	CITATIONS
1	An optimal fourth-order family of methods for multiple roots and its dynamics. Numerical Algorithms, 2016, 71, 775-796.	1.1	48
2	On a class of quadratically convergent iteration formulae. Applied Mathematics and Computation, 2005, 166, 633-637.	1.4	42
3	On some third-order iterative methods for solving nonlinear equations. Applied Mathematics and Computation, 2005, 171, 272-280.	1.4	32
4	Modified families of Newton, Halley and Chebyshev methods. Applied Mathematics and Computation, 2007, 192, 20-26.	1.4	26
5	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
6	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
7	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
8	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
9	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
10	New optimal class of higher-order methods for multiple roots, permitting $f''(x_n)=0$ . Applied Mathematics and Computation, 2013, 222, 564-574.	1.4	17
11	An efficient optimized adaptive step-size hybrid block method for integrating differential systems. Applied Mathematics and Computation, 2019, 362, 124567.	1.4	17
12	Optimal equi-scaled families of Jarratt's method. International Journal of Computer Mathematics, 2013, 90, 408-422.	1.0	15
13	New efficient derivative free family of seventh-order methods for solving systems of nonlinear equations. Numerical Algorithms, 2017, 76, 283-307.	1.1	15
14	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
15	Simple geometric constructions of quadratically and cubically convergent iterative functions to solve nonlinear equations. Numerical Algorithms, 2008, 47, 95-107.	1.1	13
16	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
17	A new family of Secant-like method with super-linear convergence. Applied Mathematics and Computation, 2005, 171, 104-107.	1.4	12
18	Modified families of multi-point iterative methods for solving nonlinear equations. Numerical Algorithms, 2007, 44, 381-389.	1.1	10

#	ARTICLE	IF	CITATIONS
19	Geometrically Constructed Families of Newton's Method for Unconstrained Optimization and Nonlinear Equations. <i>International Journal of Mathematics and Mathematical Sciences</i> , 2011, 2011, 1-9.	0.3	9
20	A proof of Howard's conjecture in homogeneous parallel shear flows. <i>Proceedings of the Indian Academy of Sciences: Mathematical Sciences</i> , 1994, 104, 593-595.	0.2	8
21	Efficient derivative-free variants of Hansen-Patrick's family with memory for solving nonlinear equations. <i>Numerical Algorithms</i> , 2016, 73, 1017-1036.	1.1	8
22	A stable class of improved second-derivative free Chebyshev-Halley type methods with optimal eighth order convergence. <i>Numerical Algorithms</i> , 2016, 72, 937-958.	1.1	8
23	Using a cubic B-spline method in conjunction with a one-step optimized hybrid block approach to solve nonlinear partial differential equations. <i>Computational and Applied Mathematics</i> , 2022, 41, 1.	1.0	8
24	An Optimal Eighth-Order Derivative-Free Family of Potra-Ptáková's Method. <i>Algorithms</i> , 2015, 8, 309-320.	1.2	7
25	New modifications of Hansen's Patrick's family with optimal fourth and eighth orders of convergence. <i>Applied Mathematics and Computation</i> , 2015, 269, 507-519.	1.4	7
26	A Mathematical Theorem in Rotatory Thermohaline Convection. <i>Journal of Mathematical Analysis and Applications</i> , 1995, 189, 351-361.	0.5	6
27	Solving first-order initial-value problems by using an explicit non-standard A-stable one-step method in variable step-size formulation. <i>Applied Mathematics and Computation</i> , 2015, 268, 796-805.	1.4	6
28	An optimal reconstruction of Chebyshev's Halley type methods for nonlinear equations having multiple zeros. <i>Journal of Computational and Applied Mathematics</i> , 2019, 354, 651-662.	1.1	5
29	A novel two-parameter class of optimized hybrid block methods for integrating differential systems numerically. <i>Computational and Mathematical Methods</i> , 2021, 3, .	0.3	5
30	A proof of Howard's conjecture in homogeneous parallel shear flows: Limitations of Fjortoft's necessary instability criterion. <i>Proceedings of the Indian Academy of Sciences: Mathematical Sciences</i> , 1995, 105, 251-257.	0.2	4
31	On method of osculating circle for solving nonlinear equations. <i>Applied Mathematics and Computation</i> , 2006, 176, 379-382.	1.4	4
32	A family of third-order multipoint methods for solving nonlinear equations. <i>Applied Mathematics and Computation</i> , 2006, 176, 409-413.	1.4	4
33	Exponentially fitted variants of Newton's method with quadratic and cubic convergence. <i>International Journal of Computer Mathematics</i> , 2009, 86, 1603-1611.	1.0	4
34	Another Simple Way of Deriving Several Iterative Functions to Solve Nonlinear Equations. <i>Journal of Applied Mathematics</i> , 2012, 2012, 1-22.	0.4	4
35	Efficient adaptive step-size formulation of an optimized two-step hybrid block method for directly solving general second-order initial-value problems. <i>Computational and Applied Mathematics</i> , 2021, 40, 1.	1.0	4
36	Numerical Solution of Generalized Kuramoto-Sivashinsky Equation Using Cubic Trigonometric B-Spline Based Differential Quadrature Method and One-Step Optimized Hybrid Block Method. <i>International Journal of Applied and Computational Mathematics</i> , 2022, 8, 1.	0.9	4

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37	A new upper bound on the growth rate of linear instability of baroclinic zonal flows in a two-layer model on a beta-plane. <i>Physics of Fluids</i> , 1999, 11, 2925-2927.	1.6	3
38	A new family of Schröder's method and its variants based on power means for multiple roots of nonlinear equations. <i>International Journal of Mathematical Education in Science and Technology</i> , 2010, 41, 558-565.	0.8	3
39	Some new weighted eighth-order variants of Steffensen-King's type family for solving nonlinear equations and its dynamics. <i>SeMA Journal</i> , 2017, 74, 75-90.	1.0	3
40	Geometrically Constructed Family of the Simple Fixed Point Iteration Method. <i>Mathematics</i> , 2021, 9, 694.	1.1	3
41	A Family of $\langle \text{math xmlns="http://www.w3.org/1998/Math/MathML" id="M1"} \langle \text{mi mathvariant="script"} \rangle A \langle \text{mi} \rangle \langle \text{math} \rangle$ -Stable Optimized Hybrid Block Methods for Integrating Stiff Differential Systems. <i>Mathematical Problems in Engineering</i> , 2022, 2022, 1-18.	0.6	3
42	A family of ellipse methods for solving non-linear equations. <i>International Journal of Mathematical Education in Science and Technology</i> , 2009, 40, 571-575.	0.8	2
43	Highly efficient classes of Chebyshev-Halley type methods free from second-order derivative. , 2014, , .		2
44	An efficient family of two-point sixth-order methods suitable for non-convergence cases. , 2015, , .		2
45	On the Local Convergence of an Eighth-order Method for Solving Nonlinear Equations. <i>Annals of the West University of Timisoara: Mathematics and Computer Science</i> , 2016, 54, 3-16.	0.1	2
46	Optimized mean based second derivative-free families of Chebyshev-Halley type methods. <i>Numerical Analysis and Applications</i> , 2016, 9, 129-140.	0.2	2
47	Ball Convergence for Two Optimal Eighth-Order Methods Using Only the First Derivative. <i>International Journal of Applied and Computational Mathematics</i> , 2017, 3, 2291-2301.	0.9	2
48	HIGHER-ORDER FAMILIES OF MULTIPLE ROOT FINDING METHODS SUITABLE FOR NON-CONVERGENT CASES AND THEIR DYNAMICS. <i>Mathematical Modelling and Analysis</i> , 2019, 24, 422-444.	0.7	2
49	Exponentially fitted variants of Euler's method for ODEs. <i>International Journal of Mathematical Education in Science and Technology</i> , 2008, 39, 1112-1116.	0.8	1
50	New Highly Efficient Families of Higher-Order Methods for Simple Roots, Permitting $f(x_n)=0$ . <i>International Journal of Mathematics and Mathematical Sciences</i> , 2014, 2014, 1-12.	0.3	1
51	Local convergence for multipoint methods using only the first derivative. <i>SeMA Journal</i> , 2016, 73, 369-378.	1.0	1
52	Efficient families of Newton's method and its variants suitable for non-convergent cases. <i>Afrika Matematika</i> , 2016, 27, 767-779.	0.4	1
53	MODIFIED OPTIMAL FAMILIES OF FOURTH-ORDER JARRATT'S METHOD. <i>International Journal of Pure and Applied Mathematics</i> , 2013, 84, .	0.2	1
54	Multipoint iterative method with cubic convergence. <i>Applied Mathematics and Computation</i> , 2006, 179, 606-611.	1.4	0

#	ARTICLE	IF	CITATIONS
55	Iterative Fixed-Point Methods for Solving Nonlinear Problems: Dynamics and Applications. Abstract and Applied Analysis, 2014, 2014, 1-2.	0.3	0
56	New modified optimal families of King's and Traub-Ostrowski's methods. Numerical Analysis and Applications, 2014, 7, 26-35.	0.2	0
57	New A-stable scheme for initial value problems of ODEs. , 2014, , .		0
58	Efficient derivative-free with memory variants of King's family for solving nonlinear equations. , 2015, , .		0
59	New uni-parametric family of multipoint methods with memory for systems of nonlinear equations. SeMA Journal, 2017, 74, 91-113.	1.0	0
60	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
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