

List of Research Publications only in Scopus Journals during 2017-22

1. Sharma JR, Kumar S. 2022. An excellent derivative-free multiple-zero finding numerical technique of optimal eighth order convergence. *Annali Dell'universita'di Ferrara*. 68(1): 161-186.
2. Sharma JR, Kumar S, Singh H. 2022. A new class of derivative-free root solvers with increasing optimal convergence order and their complex dynamics. *SeMA Journal*. 15: 1-20.
3. Rani N, Mishra V. 2022. Behavior of powers of odd ordered special circulant magic squares. *International Journal of Mathematical Education in Science and Technology*. 53(4): 1044-1062.
4. Sharma JR, Argyros IK, Kumar D. 2022. Design and analysis of a faster King-Werner-type derivative free method. *Boletim da Sociedade Paranaense de Matemática*. 40: 1-18.
5. Kaur SP, Mittal AK, Kukreja VK, Kaundal A, Parumasur N, Singh P. 2021. Analysis of a linear and non-linear model for diffusion–dispersion phenomena of pulp washing by using quintic Hermite interpolation polynomials. *Afrika Matematika*. 32(5): 997-1019.
6. Chouhan D, Mishra V, Srivastava HM. 2021. Bernoulli wavelet method for numerical solution of anomalous infiltration and diffusion modeling by nonlinear fractional differential equations of variable order. *Results in Applied Mathematics*. 10: 100146.
7. Sharma JR, Kumar S. 2021. A class of computationally efficient numerical algorithms for locating multiple zeros. *Afrika Matematika*. 32(5): 853-864.
8. Singla C, Gupta S, Singh S. 2021. Bohr's phenomenon for some univalent harmonic functions. *KYUNGPOOK Mathematics Journal*. 62: 243-256.
9. Shallu, Kukreja VK. 2021. An efficient collocation algorithm with SSP-RK43 scheme to solve Rosenau–KdV–RLW equation. *International Journal of Applied and Computational Mathematics*. 7(4): 1-18.
10. Sharma JR, Arora H. 2021. A family of fifth-order iterative methods for finding multiple roots of nonlinear equations. *Numerical Analysis and Applications*. 14(2): 186-199.
11. Kumar S, Sharma JR. 2021. A family of derivative-free methods for solving nonlinear equations. *Annali Dell'universita'di Ferrara*. 67(2): 355-367.
12. Kapil Y, Pal R, Singh M, Aujla JS. 2020. Some norm inequalities for operators. *Advances in Operator Theory*. 5(3): 627-639.
13. Shallu, Kumari A, Kukreja VK. 2020. An efficient super convergent spline collocation algorithm for solving fourth order singularly perturbed problems. *International Journal of Applied and Computational Mathematics*. 6(5): 1-23.
14. Khurana D, Gupta S, Singh S. 2020. on a subclass of univalent harmonic mappings convex in the imaginary direction. *Advances in Mathematics: Scientific Journal*. 9: 445-454.
15. Sharma JR, Arora H. 2019. Efficient Ostrowski-like methods of optimal eighth and sixteenth order convergence and their dynamics. *Afrika Matematika*. 30(5): 921-941.
16. Rani D, Mishra V. 2019. Solutions of Volterra integral and integro-differential equations using modified Laplace Adomian decomposition method. *Journal of Applied Mathematics, Statistics and Informatics*. 15(1): 5-18.
17. Rani D, Mishra V. 2019. Solving linear fractional order differential equations by Chebyshev polynomials based numerical inverse Laplace transform. *Mathematics in Engineering, Science & Aerospace*. 10(4): 781-791.
18. Kumar J, Kukreja VK. 2019. Analytic solution of a diffusion dispersion model of packed bed of finite thickness. *Journal of Interdisciplinary Mathematics*. 22(1): 1-16.
19. Argyros IK, Kumar D, Sharma JR. 2018. Study of optimal eighth order weighted-Newton methods in Banach spaces. *Communications of the Korean Mathematical Society*. 33(2): 677-693.
20. Sharma JR, Argyros IK. 2018. Local convergence of a Newton–Traub composition in Banach spaces. *SeMA Journal*. 75(1): 57-68.
21. Sharma JR, Argyros IK, Kumar D. 2018. Extending the applicability of modified Newton-HSS method for solving systems of nonlinear equations. *Studia Universitatis Babes-Bolyai Mathematica*. 63(2): 257-267.
22. Rani D, Mishra V. 2018. Modification of Laplace Adomian decomposition method for solving nonlinear Volterra integral and integro-differential equations based on Newton Raphson formula. *European Journal of Pure and Applied Mathematics*. 11(1): 202-214.
23. Sharma JR, Argyros IK, Kumar D. 2018. Newton-like methods with increasing order of convergence and their convergence analysis in Banach space. *SeMA Journal*. 75(3): 545-561.

24. Argyros IK, Sharma JR, Kumar D. 2018. Local convergence of Newton-HSS methods with positive definite Jacobian matrices under generalized conditions. *SeMA Journal*. 75(1): 95-109.
25. Sharma JR, Kumar S. 2018. Efficient methods of optimal eighth and sixteenth order convergence for solving nonlinear equations. *SeMA Journal*. 75(2): 229-253.
26. Sharma JR, Arora H. 2017. Improved Newton-like methods for solving systems of nonlinear equations. *SeMA Journal*. 74(2): 147-163.
27. Argyros IK, Sharma JR, Kumar D. 2017. Ball convergence of the Newton–Gauss method in Banach space. *SeMA Journal*. 74(4): 429-439.
28. Arora S, Kaur I, Kumar H, Kukreja VK. 2017. A robust technique of cubic Hermite collocation for solution of two phase non linear model. *Journal of King Saud University-Engineering Sciences*. 29(2): 159-165.