JosÃ© M. GutiÃ©rrez

List of Publications by Year
in descending order

58 papers	1,796 citations	361296 20 h-index	265120 42 g-index
58 all docs	58 docs citations	58 times ranked	384 citing authors

#	Article	IF	Citations
1	Geometric constructions of iterative functions to solve nonlinear equations. Journal of Computational and Applied Mathematics, 2003, 157, 197-205.	1.1	246
2	A family of Chebyshev-Halley type methods in Banach spaces. Bulletin of the Australian Mathematical Society, 1997, 55, 113-130.	0.3	205
3	Recurrence relations for the super-Halley method. Computers and Mathematics With Applications, 1998, 36, 1-8.	1.4	199
4	An acceleration of Newton's method: Super-Halley method. Applied Mathematics and Computation, 2001, 117, 223-239.	1.4	126
5	A new semilocal convergence theorem for Newton's method. Journal of Computational and Applied Mathematics, 1997, 79, 131-145.	1.1	99
6	Complex dynamics of derivative-free methods for nonlinear equations. Applied Mathematics and Computation, 2013, 219, 7023-7035.	1.4	90
7	On some computational orders of convergence. Applied Mathematics Letters, 2010, 23, 472-478.	1.5	67
8	On the semilocal convergence of Newtonâ€“Kantorovich method under center-Lipschitz conditions. Applied Mathematics and Computation, 2013, 221, 79-88.	1.4	61
9	Accessibility Of Solutions By Newton's Method. International Journal of Computer Mathematics, 1995, 57, 239-247.	1.0	53
10	Dynamics of a new family of iterative processes for quadratic polynomials. Journal of Computational and Applied Mathematics, 2010, 233, 2688-2695.	1.1	50
11	Newton's method under weak Kantorovich conditions. IMA Journal of Numerical Analysis, 2000, 20, 521-532.	1.5	46
12	Real dynamics for damped Newtonâ€™s method applied to cubic polynomials. Journal of Computational and Applied Mathematics, 2015, 275, 527-538.	1.1	46
13	On the semilocal convergence of efficient Chebyshevâ€“Secant-type methods. Journal of Computational and Applied Mathematics, 2011, 235, 3195-3206.	1.1	42
14	Third-order iterative methods for operators with bounded second derivative. Journal of Computational and Applied Mathematics, 1997, 82, 171-183.	1.1	34
15	On the local convergence of secant-type methods. International Journal of Computer Mathematics, 2004, 81, 1153-1161.	1.0	32
16	Stability analysis of a parametric family of iterative methods for solving nonlinear models. Applied Mathematics and Computation, 2016, 285, 26-40.	1.4	30
17	Third-order iterative methods with applications to Hammerstein equations: A unified approach. Journal of Computational and Applied Mathematics, 2011, 235, 2936-2943.	1.1	28
18	Real qualitative behavior of a fourth-order family of iterative methods by using the convergence plane. Mathematics and Computers in Simulation, 2014, 105, 49-61.	2.4	26

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19	The â€œGauss-Seidelizationâ€•of iterative methods for solving nonlinear equations in the complex plane. Applied Mathematics and Computation, 2011, 218, 2467-2479.	1.4	23
20	Accelerated iterative methods for finding solutions of a system of nonlinear equations. Applied Mathematics and Computation, 2007, 190, 1815-1823.	1.4	22
21	New identities in the Catalan triangle. Journal of Mathematical Analysis and Applications, 2008, 341, 52-61.	0.5	19
22	An adaptive version of a fourth-order iterative method for quadratic equations. Journal of Computational and Applied Mathematics, 2006, 191, 259-268.	1.1	18
23	Resolution of quadratic equations in banach spaces. Numerical Functional Analysis and Optimization, 1996, 17, 113-121.	0.6	17
24	On the global convergence of Chebyshev's iterative method. Journal of Computational and Applied Mathematics, 2008, 220, 17-21.	1.1	15
25	Solving nonlinear integral equations arising in radiative transfer. Numerical Functional Analysis and Optimization, 1999, 20, 661-673.	0.6	14
26	The application of an inverse-free Jarratt-type approximation to nonlinear integral equations of Hammerstein-type. Computers and Mathematics With Applications, 1998, 36, 9-20.	1.4	13
27	Calculus of nth roots and third order iterative methods. Nonlinear Analysis: Theory, Methods & Applications, 2001, 47, 2875-2880.	0.6	13
28	A complex dynamical approach of Chebyshevâ€™s method. SeMA Journal, 2015, 71, 57-68.	1.0	13
29	New recurrence relations for Chebyshev method. Applied Mathematics Letters, 1997, 10, 63-65.	1.5	12
30	A construction procedure of iterative methods with cubical convergence. Applied Mathematics and Computation, 1997, 85, 181-199.	1.4	12
31	Some variants of the Chebyshevâ€“Halley family of methods with fifth order of convergence. International Journal of Computer Mathematics, 2010, 87, 818-833.	1.0	12
32	Zero-finder methods derived from Obreshkovâ€™s techniques. Applied Mathematics and Computation, 2009, 215, 2992-3001.	1.4	10
33	CONVERGENCE OF THE RELAXED NEWTON'S METHOD. Journal of the Korean Mathematical Society, 2014, 51, 137-162.	0.4	10
34	A numerical procedure to solve non-linear kinematic problems in spatial mechanisms. International Journal for Numerical Methods in Engineering, 2008, 73, 825-843.	1.5	9
35	Influence of the multiplicity of the roots on the basins of attraction of Newtonâ€™s method. Numerical Algorithms, 2014, 66, 431-455.	1.1	9
36	A note on a modification of Moser's method. Journal of Complexity, 2008, 24, 185-197.	0.7	7

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37	Dynamics of a fifth-order iterative method. International Journal of Computer Mathematics, 2012, 89, 822-835.	1.0	7
38	Frozen Iterative Methods Using Divided Differences â€œÃ la Schmidtâ€“Schwetlickâ€• Journal of Optimization Theory and Applications, 2014, 160, 931-948.	0.8	7
39	An acceleration of the continuous Newtonâ€™s method. Journal of Computational and Applied Mathematics, 2019, 354, 213-220.	1.1	6
40	Superattracting Extraneous Fixed Points and n-cycles for Chebyshevâ€™s Method on Cubic Polynomials. Qualitative Theory of Dynamical Systems, 2020, 19, 1.	0.8	6
41	Chebyshev-Secant-type Methods for Non-differentiable Operators. Milan Journal of Mathematics, 2013, 81, 25-35.	0.7	5
42	Numerical Properties of Different Root-Finding Algorithms Obtained for Approximating Continuous Newtonâ€™s Method. Algorithms, 2015, 8, 1210-1218.	1.2	5
43	Graphical representations for the homogeneous bivariate Newtonâ€™s method. Applied Mathematics and Computation, 2015, 269, 988-1006.	1.4	5
44	Improved Iterative Solution of Linear Fredholm Integral Equations of Second Kind via Inverse-Free Iterative Schemes. Mathematics, 2020, 8, 1747.	1.1	5
45	A NOTE ON THE SEMILOCAL CONVERGENCE OF CHEBYSHEVâ€™S METHOD. Bulletin of the Australian Mathematical Society, 2013, 88, 98-105.	0.3	4
46	Fractal Dimension of the Universal Julia Sets for the Chebyshev-Halley Family of Methods. , 2011, , .		3
47	A Picard-Type Iterative Scheme for Fredholm Integral Equations of the Second Kind. Mathematics, 2021, 9, 83.	1.1	3
48	Dynamic Aspects of Damped Newton's Method. , 0, , .		3
49	Extending the applicability of Newtonâ€™s method for a class of boundary value problems using the shooting method. Applied Mathematics and Computation, 2020, 384, 125378.	1.4	3
50	A construction procedure of iterative methods with cubical convergence II: Another convergence approach. Applied Mathematics and Computation, 1998, 92, 59-68.	1.4	2
51	Efficient optimal families of higher-order iterative methods with local convergence. Applicable Analysis and Discrete Mathematics, 2020, 14, 729-753.	0.3	2
52	A multidimensional generalization of some classes of iterative methods. SeMA Journal, 2017, 74, 57-73.	1.0	1
53	A Characterization of the Dynamics of SchrÃ¶derâ€™s Method for Polynomials with Two Roots. Fractal and Fractional, 2021, 5, 25.	1.6	1
54	Solving a nonlinear equation by a uniparametric family of iterative processes. International Journal of Computer Mathematics, 1998, 68, 301-308.	1.0	0

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55	A first overview on the real dynamics of Chebyshevâ€™s method. Journal of Computational and Applied Mathematics, 2017, 318, 422-432.	1.1	0
56	A Graphic Method for Detecting Multiple Roots Based on Self-Maps of the Hopf Fibration and Nullity Tolerances. Mathematics, 2021, 9, 1914.	1.1	0
57	An Ulm-Type Inverse-Free Iterative Scheme for Fredholm Integral Equations of Second Kind. Symmetry, 2021, 13, 1957.	1.1	0
58	On the Application of Iterative Methods for Geometric Problems. , 0, , .		0