

Ángel Alberto Magreñán Ruiz

List of Publications by Year in descending order

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#	ARTICLE	IF	CITATIONS
1	On global convergence for an efficient third-order iterative process. Journal of Computational and Applied Mathematics, 2022, 404, 113417.	1.1	4
2	An improvement of derivative-free point-to-point iterative processes with central divided differences. International Journal of Nonlinear Sciences and Numerical Simulation, 2022, .	0.4	0
3	Toward a unified theory of inverse-free two-step point-to-point iterative processes. AIP Conference Proceedings, 2022, , .	0.3	0
4	An improvement of the Kurchatov method by means of a parametric modification. Mathematical Methods in the Applied Sciences, 2022, 45, 6844-6860.	1.2	4
5	An Algorithm Derivative-Free to Improve the Steffensen-Type Methods. Symmetry, 2022, 14, 4.	1.1	0
6	Learning Itineraries to Work "Mathematic Probability" with Future Teachers in an Online Scenario with Deck.Toys Tool. RIED: Revista Iberoamericana De Educaci3n A Distancia, 2022, 25, .	0.8	1
7	Local convergence comparison between frozen Kurchatov and Schmidt's Schwetlick's Kurchatov solvers with applications. Journal of Computational and Applied Mathematics, 2021, , 113392.	1.1	0
8	On High-Order Iterative Schemes for the Matrix pth Root Avoiding the Use of Inverses. Mathematics, 2021, 9, 144.	1.1	1
9	On the Application of the Generalized Means to Construct Multiresolution Schemes Satisfying Certain Inequalities Proving Stability. Mathematics, 2021, 9, 533.	1.1	1
10	An Optimal Derivative Free Family of Chebyshev's Halley's Method for Multiple Zeros. Mathematics, 2021, 9, 546.	1.1	12
11	On New Means with Interesting Practical Applications: Generalized Power Means. Mathematics, 2021, 9, 925.	1.1	2
12	Extended Kung's Traub Methods for Solving Equations with Applications. Mathematics, 2021, 9, 2635.	1.1	0
13	The use of EdPuzzle to learn polynomial factorization in Secondary Education. Bordon, 2021, 73, 27-42.	0.2	0
14	On the application of Lehmer means in signal and image processing. International Journal of Computer Mathematics, 2020, 97, 1503-1528.	1.0	1
15	A multistep Steffensen's type method for solving nonlinear systems of equations. Mathematical Methods in the Applied Sciences, 2020, 43, 7518-7536.	1.2	3
16	On the use of generalized harmonic means in image processing using multiresolution algorithms. International Journal of Computer Mathematics, 2020, 97, 455-466.	1.0	3
17	Local convergence of fourth and fifth order parametric family of iterative methods in Banach spaces. Journal of Mathematical Chemistry, 2020, 58, 686-705.	0.7	17
18	Extending the choice of starting points for Newton's method. Mathematical Methods in the Applied Sciences, 2020, 43, 8042-8050.	1.2	2

#	ARTICLE	IF	CITATIONS
19	Purely Iterative Algorithms for Newton's Maps and General Convergence. Mathematics, 2020, 8, 1158.	1.1	1
20	Study of Local Convergence and Dynamics of a King-Like Two-Step Method with Applications. Mathematics, 2020, 8, 1062.	1.1	0
21	Digital Escape Room, Using Genial.Ly and A Breakout to Learn Algebra at Secondary Education Level in Spain. Education Sciences, 2020, 10, 271.	1.4	47
22	An efficient high order iterative scheme for large nonlinear systems with dynamics. Journal of Computational and Applied Mathematics, 2020, 404, 113249.	1.1	14
23	Convergence and Dynamics of a Higher-Order Method. Symmetry, 2020, 12, 420.	1.1	3
24	New Improvement of the Domain of Parameters for Newton's Method. Mathematics, 2020, 8, 103.	1.1	5
25	Weaker conditions for inexact multipoint Newton-like methods. Journal of Mathematical Chemistry, 2020, 58, 706-716.	0.7	1
26	A new technique for studying the convergence of Newton's solver with real life applications. Journal of Mathematical Chemistry, 2020, 58, 816-830.	0.7	0
27	Extending the Applicability of Stirling's Method. Mathematics, 2020, 8, 35.	1.1	2
28	A Chebyshev-like method for approximating matrix square root. AIP Conference Proceedings, 2020, , .	0.3	0
29	Comparing of the behaviour of iterative methods based on different means. AIP Conference Proceedings, 2020, , .	0.3	0
30	DIDACTIC PROPOSAL FOR THE LEARNING OF FINANCIAL MATHEMATICS USING DIFFERENT TOOLS. , 2020, , .		0
31	DIDACTIC PROPOSAL FOR THE LEARNING OF NUMERICAL SETS. , 2020, , .		0
32	Highly efficient family of iterative methods for solving nonlinear models. Journal of Computational and Applied Mathematics, 2019, 346, 110-132.	1.1	26
33	The Kumon Method: Its Importance in the Improvement on the Teaching and Learning of Mathematics from the First Levels of Early Childhood and Primary Education. Mathematics, 2019, 7, 109.	1.1	8
34	Considerations about Flip Education in the Teaching of Advanced Mathematics. Education Sciences, 2019, 9, 227.	1.4	9
35	Extended Convergence Analysis of the Newton's Hermitian and Skew Hermitian Splitting Method. Symmetry, 2019, 11, 981.	1.1	0
36	Unified Local Convergence for Newton's Method and Uniqueness of the Solution of Equations under Generalized Conditions in a Banach Space. Mathematics, 2019, 7, 463.	1.1	3

#	ARTICLE	IF	CITATIONS
37	Improved semi-local convergence of the Newton-HSS method for solving large systems of equations. Applied Mathematics Letters, 2019, 98, 29-35.	1.5	0
38	Study of a High Order Family: Local Convergence and Dynamics. Mathematics, 2019, 7, 225.	1.1	6
39	3D visualization through the Hologram for the Learning of Area and Volume Concepts. Mathematics, 2019, 7, 247.	1.1	10
40	Advances in the Semilocal Convergence of Newton's Method with Real-World Applications. Mathematics, 2019, 7, 299.	1.1	5
41	Extended local convergence for some inexact methods with applications. Journal of Mathematical Chemistry, 2019, 57, 1508-1523.	0.7	1
42	On a Bi-Parametric Family of Fourth Order Composite Newton-Jarratt Methods for Nonlinear Systems. Mathematics, 2019, 7, 492.	1.1	2
43	Different methods for solving STEM problems. Journal of Mathematical Chemistry, 2019, 57, 1268-1281.	0.7	1
44	Two general higher-order derivative free iterative techniques having optimal convergence order. Journal of Mathematical Chemistry, 2019, 57, 918-938.	0.7	0
45	Dynamics and local convergence of a family of derivative-free iterative processes. Journal of Computational and Applied Mathematics, 2019, 354, 414-430.	1.1	6
46	An efficient optimal family of sixteenth order methods for nonlinear models. Journal of Computational and Applied Mathematics, 2019, 354, 271-285.	1.1	7
47	Herramienta pedagógica basada en el desarrollo de una aplicación informática para la mejora del aprendizaje en matemática avanzada. Revista Española De Pedagogía, 2019, 77, 457-485.	0.7	6
48	Second derivative free sixth order continuation method for solving nonlinear equations with applications. Journal of Mathematical Chemistry, 2018, 56, 2099-2116.	0.7	8
49	Extending the domain of starting points for Newton's method under conditions on the second derivative. Journal of Computational and Applied Mathematics, 2018, 340, 1-10.	1.1	0
50	Ball convergence of a sixth-order Newton-like method based on means under weak conditions. Journal of Mathematical Chemistry, 2018, 56, 2117-2131.	0.7	18
51	A study of 16 years old student learning strategies from a neuropsychological perspective: An intervention proposal. Trends in Neuroscience and Education, 2018, 11, 1-8.	1.5	4
52	Starting points for Newton's method under a center Lipschitz condition for the second derivative. Journal of Computational and Applied Mathematics, 2018, 330, 721-731.	1.1	6
53	Secant-like methods for solving nonlinear models with applications to chemistry. Journal of Mathematical Chemistry, 2018, 56, 1935-1957.	0.7	1
54	Improved semilocal convergence analysis in Banach space with applications to chemistry. Journal of Mathematical Chemistry, 2018, 56, 1958-1975.	0.7	3

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55	Toward a general theory of point to point iterative processes free of derivatives with quadratic convergence. AIP Conference Proceedings, 2018, , .	0.3	0
56	On a Newton-type family of high-order iterative methods for some matrix functions. AIP Conference Proceedings, 2018, , .	0.3	1
57	The hologram as a teaching medium for the acquisition of STEM contents. International Journal of Learning Technology, 2018, 13, 163.	0.2	18
58	Local convergence and the dynamics of a family of high convergence order method for solving nonlinear equations. AIP Conference Proceedings, 2018, , .	0.3	0
59	The majorization method in the Kantorovich theory. , 2018, , 1-26.		0
60	Directional Newton methods. , 2018, , 27-35.		0
61	Newton's method. , 2018, , 37-47.		1
62	Generalized equations. , 2018, , 49-59.		0
63	Gaussâ€“Newton method. , 2018, , 61-67.		1
64	Gaussâ€“Newton method for convex optimization. , 2018, , 69-80.		0
65	Proximal Gaussâ€“Newton method. , 2018, , 81-87.		0
66	Multistep modified Newtonâ€“Hermitian and Skew-Hermitian Splitting method. , 2018, , 89-103.		0
67	Secant-like methods in chemistry. , 2018, , 105-133.		0
68	Robust convergence of Newton's method for cone inclusion problem. , 2018, , 135-148.		0
69	Gaussâ€“Newton method for convex composite optimization. , 2018, , 149-163.		0
70	Domain of parameters. , 2018, , 165-183.		0
71	Newton's method for solving optimal shape design problems. , 2018, , 185-196.		0
72	Osada method. , 2018, , 197-208.		0

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73	Newton's method to solve equations with solutions of multiplicity greater than one. , 2018, , 209-221.		0
74	Laguerre-like method for multiple zeros. , 2018, , 223-232.		0
75	Traub's method for multiple roots. , 2018, , 233-242.		0
76	Shadowing lemma for operators with chaotic behavior. , 2018, , 243-248.		0
77	Inexact two-point Newton-like methods. , 2018, , 249-263.		0
78	Two-step Newton methods. , 2018, , 265-293.		1
79	Introduction to complex dynamics. , 2018, , 295-310.		0
80	Convergence and the dynamics of Chebyshev-Halley type methods. , 2018, , 311-332.		0
81	Convergence planes of iterative methods. , 2018, , 333-346.		10
82	Convergence and dynamics of a higher order family of iterative methods. , 2018, , 347-365.		0
83	Convergence of iterative methods for multiple zeros. , 2018, , 367-380.		0
84	A study of dynamics via Möbius conjugacy map on a family of sixth-order modified Newton-like multiple-zero finders with bivariate polynomial weight functions. Journal of Computational and Applied Mathematics, 2018, 344, 608-623.	1.1	8
85	Preface of the "Iterative Procedures for Solving Nonlinear Problems" AIP Conference Proceedings, 2018, , .	0.3	0
86	A first overview on the real dynamics of Chebyshev's method. Journal of Computational and Applied Mathematics, 2017, 318, 422-432.	1.1	0
87	Third-degree anomalies of Traub's method. Journal of Computational and Applied Mathematics, 2017, 309, 511-521.	1.1	7
88	Local convergence and the dynamics of a two-point four parameter Jarratt-like method under weak conditions. Numerical Algorithms, 2017, 74, 371-391.	1.1	18
89	On the convergence of a higher order family of methods and its dynamics. Journal of Computational and Applied Mathematics, 2017, 309, 542-562.	1.1	9
90	Convergence of Newton's method under Vertgeim conditions: new extensions using restricted convergence domains. Journal of Mathematical Chemistry, 2017, 55, 1392-1406.	0.7	4

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91	New improved convergence analysis for Newton-like methods with applications. Journal of Mathematical Chemistry, 2017, 55, 1505-1520.	0.7	6
92	On the dynamics of a triparametric family of optimal fourth-order multiple-zero finders with a weight function of the principal mth root of a function-to function ratio. Applied Mathematics and Computation, 2017, 315, 564-590.	1.4	8
93	Games Math. Adaptive Video Game to Evaluate Basic Mathematic Concepts. Communications in Computer and Information Science, 2017, , 27-35.	0.4	1
94	Holographic Tools for Science Learning. Communications in Computer and Information Science, 2017, , 36-45.	0.4	2
95	Local convergence of a relaxed two-step Newton like method with applications. Journal of Mathematical Chemistry, 2017, 55, 1427-1442.	0.7	12
96	Extending the applicability of the local and semilocal convergence of Newton's method. Applied Mathematics and Computation, 2017, 292, 349-355.	1.4	4
97	Improving the domain of parameters for Newton's method with applications. Journal of Computational and Applied Mathematics, 2017, 318, 124-135.	1.1	5
98	Extending the Mesh Independence For Solving Nonlinear Equations Using Restricted Domains. International Journal of Applied and Computational Mathematics, 2017, 3, 1035-1046.	0.9	0
99	Sixth-order iterative methods. , 2017, , 63-87.		3
100	Developments on the Convergence of Some Iterative Methods. , 2017, , 3-22.		0
101	Directional Newton methods and restricted domains. , 2017, , 295-305.		0
102	Local convergence and basins of attraction of a two-step Newton-like method for equations with solutions of multiplicity greater than one. , 2017, , 88-107.		0
103	Lavrentiev Regularization methods for Ill-posed equations. , 2017, , 161-175.		0
104	Secant-like methods. , 2017, , 216-240.		0
105	Extending the Kantorovich theory for solving equations. , 2017, , 108-118.		0
106	Generalized Newton method with applications. , 2017, , 259-270.		0
107	King-Werner-like methods free of derivatives. , 2017, , 241-250.		0
108	Expanding the applicability of the Gauss-Newton method for convex optimization under restricted convergence domains and majorant conditions. , 2017, , 306-318.		0

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109	Gauss-Newton method with applications to convex optimization. , 2017, , 282-294.		0
110	Newton-secant methods with values in a cone. , 2017, , 271-281.		0
111	Ball Convergence for eighth order method. , 2017, , 319-330.		0
112	Robust convergence for inexact Newton method. , 2017, , 119-143.		0
113	Stability analysis of a parametric family of iterative methods for solving nonlinear models. Applied Mathematics and Computation, 2016, 285, 26-40.	1.4	30
114	Inexact Newton Methods on Riemannian Manifolds. SEMA SIMAI Springer Series, 2016, , 57-78.	0.4	0
115	Measures of the Basins of Attracting n-Cycles for the Relaxed Newton's Method. SEMA SIMAI Springer Series, 2016, , 211-245.	0.4	2
116	Local Convergence and the Dynamics of a Two-Step Newton-Like Method. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2016, 26, 1630012.	0.7	7
117	Local convergence and a chemical application of derivative free root finding methods with one parameter based on interpolation. Journal of Mathematical Chemistry, 2016, 54, 1404-1416.	0.7	23
118	Decision model for siting transport and logistic facilities in urban environments: A methodological approach. Journal of Computational and Applied Mathematics, 2016, 291, 478-487.	1.1	24
119	Stability study of eighth-order iterative methods for solving nonlinear equations. Journal of Computational and Applied Mathematics, 2016, 291, 348-357.	1.1	28
120	On the election of the damped parameter of a two-step relaxed Newton-type method. Nonlinear Dynamics, 2016, 84, 9-18.	2.7	26
121	On the local convergence and the dynamics of Chebyshev-Halley methods with six and eight order of convergence. Journal of Computational and Applied Mathematics, 2016, 298, 236-251.	1.1	28
122	A biparametric extension of King's fourth-order methods and their dynamics. Applied Mathematics and Computation, 2016, 282, 254-275.	1.4	23
123	Extending the convergence domain of Newton's method for twice Fréchet differentiable operators. Analysis and Applications, 2016, 14, 303-319.	1.2	0
124	New improved convergence analysis for the secant method. Mathematics and Computers in Simulation, 2016, 119, 161-170.	2.4	11
125	Improved convergence analysis for Newton-like methods. Numerical Algorithms, 2016, 71, 811-826.	1.1	7
126	A study on the local convergence and the dynamics of Chebyshev-Halley type methods free from second derivative. Numerical Algorithms, 2016, 71, 1-23.	1.1	57

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127	Complexity of an Homotopy Method at the Neighbourhood of a Zero. SEMA SIMAI Springer Series, 2016, , 147-171.	0.4	0
128	Expanding the Applicability of a Third Order Newton-Type Method Free of Bilinear Operators. Algorithms, 2015, 8, 669-679.	1.2	6
129	Extending the convergence domain of the Secant and Moser method in Banach Space. Journal of Computational and Applied Mathematics, 2015, 290, 114-124.	1.1	2
130	On the convergence of a damped Newton-like method with modified right hand side vector. Applied Mathematics and Computation, 2015, 266, 927-936.	1.4	7
131	Improved local convergence analysis of the Gauss-Newton method under a majorant condition. Computational Optimization and Applications, 2015, 60, 423-439.	0.9	2
132	A variant of Steffensen-King's type family with accelerated sixth-order convergence and high efficiency index: Dynamic study and approach. Applied Mathematics and Computation, 2015, 252, 347-353.	1.4	18
133	Local convergence for multi-point-parametric Chebyshev-Halley-type methods of high convergence order. Journal of Computational and Applied Mathematics, 2015, 282, 215-224.	1.1	43
134	On the convergence of inexact two-point Newton-like methods on Banach spaces. Applied Mathematics and Computation, 2015, 265, 893-902.	1.4	5
135	Expanding the applicability of the Secant method under weaker conditions. Applied Mathematics and Computation, 2015, 266, 1000-1012.	1.4	2
136	On the convergence of a Damped Secant method with modified right-hand side vector. Applied Mathematics and Computation, 2015, 252, 315-323.	1.4	3
137	Extended convergence results for the Newton-Kantorovich iteration. Journal of Computational and Applied Mathematics, 2015, 286, 54-67.	1.1	8
138	A new fourth-order family for solving nonlinear problems and its dynamics. Journal of Mathematical Chemistry, 2015, 53, 893-910.	0.7	25
139	On the convergence of an optimal fourth-order family of methods and its dynamics. Applied Mathematics and Computation, 2015, 252, 336-346.	1.4	77
140	New semilocal and local convergence analysis for the Secant method. Applied Mathematics and Computation, 2015, 262, 298-307.	1.4	2
141	Ball convergence theorems and the convergence planes of an iterative method for nonlinear equations. SeMA Journal, 2015, 71, 39-55.	1.0	15
142	A complex dynamical approach of Chebyshev's method. SeMA Journal, 2015, 71, 57-68.	1.0	13
143	An extension of a theorem by Wang for Smale's $\hat{\mu}$ -theory and applications. Numerical Algorithms, 2015, 68, 47-60.	1.1	2
144	Real dynamics for damped Newton's method applied to cubic polynomials. Journal of Computational and Applied Mathematics, 2015, 275, 527-538.	1.1	46

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145	ENLARGING THE CONVERGENCE DOMAIN OF SECANT-LIKE METHODS FOR EQUATIONS. Taiwanese Journal of Mathematics, 2015, 19, .	0.2	1
146	EXPANDING THE APPLICABILITY OF SECANT METHOD WITH APPLICATIONS. Bulletin of the Korean Mathematical Society, 2015, 52, 865-880.	0.3	3
147	UX of Social Network Edmodo in Undergraduate Engineering Students. International Journal of Interactive Multimedia and Artificial Intelligence, 2015, 3, 31.	1.0	4
148	EXPANDING THE CONVERGENCE DOMAIN FOR CHUN-STANICA-NETA FAMILY OF THIRD ORDER METHODS IN BANACH SPACES. Journal of the Korean Mathematical Society, 2015, 52, 23-41.	0.4	0
149	IJIMAI Editor's Note - Vol. 3 Issue 4. International Journal of Interactive Multimedia and Artificial Intelligence, 2015, .	1.0	0
150	Study of a Biparametric Family of Iterative Methods. Abstract and Applied Analysis, 2014, 2014, 1-12.	0.3	5
151	Optimizing the applicability of a theorem by F. Potra for Newton-like methods. Applied Mathematics and Computation, 2014, 242, 612-623.	1.4	6
152	Majorizing sequences for Newton's method under centred conditions for the derivative. International Journal of Computer Mathematics, 2014, 91, 2568-2583.	1.0	5
153	Extending the applicability of Gauss's Newton method for convex composite optimization on Riemannian manifolds. Applied Mathematics and Computation, 2014, 249, 453-467.	1.4	4
154	A Semilocal Convergence for a Uniparametric Family of Efficient Secant-Like Methods. Journal of Function Spaces, 2014, 2014, 1-10.	0.4	9
155	Robust semi-local convergence analysis for inexact Newton method. Applied Mathematics and Computation, 2014, 227, 741-754.	1.4	0
156	Expanding the applicability of the Gauss's Newton method for convex optimization under a majorant condition. SeMA Journal, 2014, 65, 37-56.	1.0	2
157	A new tool to study real dynamics: The convergence plane. Applied Mathematics and Computation, 2014, 248, 215-224.	1.4	207
158	Two-step Newton methods. Journal of Complexity, 2014, 30, 533-553.	0.7	14
159	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
160	Local convergence analysis of proximal Gauss's Newton method for penalized nonlinear least squares problems. Applied Mathematics and Computation, 2014, 241, 401-408.	1.4	10
161	Different anomalies in a Jarratt family of iterative root-finding methods. Applied Mathematics and Computation, 2014, 233, 29-38.	1.4	204
162	CONVERGENCE OF THE RELAXED NEWTON'S METHOD. Journal of the Korean Mathematical Society, 2014, 51, 137-162.	0.4	10

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163	LOCAL CONVERGENCE OF THE GAUSS-NEWTON METHOD FOR INJECTIVE-OVERDETERMINED SYSTEMS. Journal of the Korean Mathematical Society, 2014, 51, 955-970.	0.4	1
164	A UNIFIED CONVERGENCE ANALYSIS FOR SECANT-TYPE METHODS. Journal of the Korean Mathematical Society, 2014, 51, 1155-1175.	0.4	5
165	General convergence conditions of Newton's method for Fréchet differentiable operators. Journal of Applied Mathematics and Computing, 2013, 43, 491-506.	1.2	3
166	On the semilocal convergence of Newton-Kantorovich method under center-Lipschitz conditions. Applied Mathematics and Computation, 2013, 221, 79-88.	1.4	61
167	On a two-step relaxed Newton-type method. Applied Mathematics and Computation, 2013, 219, 11341-11347.	1.4	26
168	Reducing Chaos and Bifurcations in Newton-Type Methods. Abstract and Applied Analysis, 2013, 2013, 1-10.	0.3	25
169	Fractal Dimension of the Universal Julia Sets for the Chebyshev-Halley Family of Methods. , 2011, , .		3
170	The "Gauss-Seidelization" of iterative methods for solving nonlinear equations in the complex plane. Applied Mathematics and Computation, 2011, 218, 2467-2479.	1.4	23
171	On an efficient modification of the Chebyshev method. Computational and Mathematical Methods, 0, , .	0.3	0
172	Ball comparison between frozen Potra and Schmidt-Schwetlick schemes with dynamical analysis. Computational and Mathematical Methods, 0, , e1186.	0.3	0
173	Dynamic Aspects of Damped Newton's Method. , 0, , .		3
174	How to Increase the Accessibility of Newton's Method for Operators With Center-Lipschitz Continuous First Derivative. Numerical Functional Analysis and Optimization, 0, , 1-14.	0.6	0