Severiano Gonzalez Pinto

List of Publications by Year
in descending order

52 papers	335 citations	933447 10 h-index	996975 15 g-index
53 all docs	53 docs citations	53 times ranked	123 citing authors

#	Article	IF	Citations
1	Iterative schemes for three-stage implicit Runge-Kutta methods. Applied Numerical Mathematics, 1995, 17, 363-382.	2.1	28
2	Two uniform schemes for the singularly perturbed Riccati equation. Computers and Mathematics With Applications, 1992, 23, 75-85.	2.7	25
3	An efficient family of strongly <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si30.gif" display="inline" overflow="scroll"><mml:mi>A</mml:mi></mml:math>-stable Rungeâ€“Kutta collocation methods for stiff systems and DAEs. Part I: Stability and order results. Journal of Computational and Applied Mathematics, 2010, 234, 1105-1116.	2.0	19
4	Iterative schemes for Gauss methods. Computers and Mathematics With Applications, 1994, 27, 67-81.	2.7	16
5	Global error estimation based on the tolerance proportionality for some adaptive Rungeâ€“Kutta codes. Journal of Computational and Applied Mathematics, 2008, 218, 329-341.	2.0	13
6	AMF-type W-methods for Parabolic Problems with Mixed Derivatives. SIAM Journal of Scientific Computing, 2018, 40, A2905-A2929.	2.8	13
7	Runge-Kutta Methods for the Numerical Solution of Stiff Semilinear Systems. BIT Numerical Mathematics, 2000, 40, 611-639.	2.0	12
8	A family of three-stage third order AMF-W-methods for the time integration of advection diffusion reaction PDEs.. Applied Mathematics and Computation, 2016, 274, 565-584.	2.2	12
9	Implementation of high-order implicit runge-kutta methods. Computers and Mathematics With Applications, 2001, 41, 1009-1024.	2.7	11
10	An efficient family of strongly A-stable Rungeâ€“Kutta collocation methods for stiff systems and DAEs. Part II: Convergence results. Applied Numerical Mathematics, 2012, 62, 1349-1360.	2.1	11
11	Two-step error estimators for implicit Runge--Kutta methods applied to stiff systems. ACM Transactions on Mathematical Software, 2004, 30, 1-18.	2.9	10
12	An iterated Radau method for time-dependent PDEs. Journal of Computational and Applied Mathematics, 2009, 231, 49-66.	2.0	10
13	Rosenbrock-type methods with Inexact AMF for the time integration of advectionâ€“diffusionâ€“reaction PDEs. Journal of Computational and Applied Mathematics, 2014, 262, 304-321.	2.0	10
14	On the Starting Algorithms for Fully Implicit Runge-Kutta Methods. BIT Numerical Mathematics, 2000, 40, 685-714.	2.0	9
15	Efficient iterations for Gauss methods on second-order problems. Journal of Computational and Applied Mathematics, 2006, 189, 80-97.	2.0	9
16	A variable time-step-size code for advectionâ€“diffusionâ€“reaction PDEs. Applied Numerical Mathematics, 2012, 62, 1447-1462.	2.1	9
17	A comparison of AMF- and Krylov-methods in Matlab for large stiff ODE systems. Journal of Computational and Applied Mathematics, 2014, 262, 292-303.	2.0	9
18	W-methods to stabilize standard explicit Rungeâ€“Kutta methods in the time integration of advectionâ€“diffusionâ€“reaction PDEs. Journal of Computational and Applied Mathematics, 2017, 316, 143-160.	2.0	9

#	Article	IF	Citations
19	PDE-W-methods for parabolic problems with mixed derivatives. Numerical Algorithms, 2018, 78, 957-981.	1.9	8
20	Strong A-Acceptability for Rational Functions. BIT Numerical Mathematics, 2003, 43, 555-561.	2.0	7
21	Variable-order starting algorithms for implicit Runge?Kutta methods on stiff problems*1. Applied Numerical Mathematics, 2003, 44, 77-94.	2.1	7
22	Speeding up Newton-type iterations for stiff problems. Journal of Computational and Applied Mathematics, 2005, 181, 266-279.	2.0	6
23	Global error estimates for a uniparametric family ofÂstiffly accurate Runge-Kutta collocation methods onÂsingularly perturbed problems. BIT Numerical Mathematics, 2011, 51, 155-175.	2.0	6
24	Convergence in ell_2 and ell_infty Norm of One-Stage AMF-W-Methods for Parabolic Problems. SIAM Journal on Numerical Analysis, 2020, 58, 1117-1137.	2.3	6
25	A numerical scheme to approximate the solution of a singularly perturbed nonlinear differential equation. Journal of Computational and Applied Mathematics, 1991, 35, 217-225.	2.0	4
26	Improving the efficiency of the iterative schemes for implicit Runge-Kutta methods. Journal of Computational and Applied Mathematics, 1996, 66, 227-238.	2.0	4
27	On the convergence of Runge-Kutta methods for stiff non linear differential equations. Numerische Mathematik, 1998, 81, 31-51.	1.9	4
28	Stabilized starting algorithms for collocation Runge-Kutta methods. Computers and Mathematics With Applications, 2003, 45, 411-428.	2.7	4
29	Stable Runge-Kutta integrations for differential systems with semi-stable equilibria. Numerische Mathematik, 2004, 97, 473-491.	1.9	4
30	Splitting-methods based on Approximate Matrix Factorization and Radau-IIA formulas for the time integration of advection diffusion reaction PDEs. Applied Numerical Mathematics, 2016, 104, 166-181.	2.1	4
31	AMFR-W-methods for parabolic problems with mixed derivates. Applications to the Heston model. Journal of Computational and Applied Mathematics, 2021, 387, 112518.	2.0	4
32	On extrapolation of Jagerman and Stetter rules. Numerical Algorithms, 1992, 3, 211-222.	1.9	3
33	A note on certain generalizations of the midpoint rule. Journal of Computational and Applied Mathematics, 1993, 49, 85-91.	2.0	3
34	On the iterative solution of the algebraic equations in fully implicit Runge-Kutta methods. Numerical Algorithms, 2000, 23, 97-113.	1.9	3
35	AMF-Rungeâ€“Kutta formulas and error estimates for the time integration of advection diffusion reaction PDEs. Journal of Computational and Applied Mathematics, 2015, 289, 3-21.	2.0	3
36	Convergence in the maximum norm of ADI-type methods for parabolic problems. Applied Numerical Mathematics, 2022, 171, 269-280.	2.1	3

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37	A unified formulation of splitting-based implicit time integration schemes. Journal of Computational Physics, 2022, 448, 110766.	3.8	3
38	On the existence of solution of stage equations in implicit Rungeâ€“Kutta methods. Journal of Computational and Applied Mathematics, 1999, 111, 25-36.	2.0	2
39	Differential systems with semi-stable equilibria and numerical methods. Numerische Mathematik, 2003, 96, 253-268.	1.9	2
40	A Code Based on the Two-Stage Runge-Kutta Gauss Formula for Second-Order Initial Value Problems. ACM Transactions on Mathematical Software, 2010, 37, 1-30.	2.9	2
41	Strongly A-stable first stage explicit collocation methods with stepsize control for stiff and differentialâ€“algebraic equations. Journal of Computational and Applied Mathematics, 2014, 259, 138-152.	2.0	2
42	On the global error of special Rungeâ€“Kutta methods applied to linear Differential Algebraic Equations. Applied Mathematics Letters, 2015, 39, 53-59.	2.7	2
43	Power boundedness in the maximum norm of stability matrices for ADI methods. BIT Numerical Mathematics, 2021, 61, 805-827.	2.0	2
44	Semi-implicit methods for differential systems with semi-stable equilibria. Applied Numerical Mathematics, 2006, 56, 210-221.	2.1	1
45	Some Optimal Rungeâ€Kutta Collocation Methods for Stiff Problems and DAEs. , 2008, , .		1
46	A Code Based on Gauss Methods for Second Order Differential Systems. AIP Conference Proceedings, 2007, , .	0.4	0
47	On the Contractivity and Convergence of General Linear Methods on Semiâ€Infinite Intervals. SIAM Journal on Numerical Analysis, 2007, 45, 969-985.	2.3	0
48	A Time-Adaptive Integrator Based on Radau Methods for Advection Diffusion Reaction PDEs. , 2009, , .		0
49	Some convergence results for inexact Radau IIA methods applied to evolutionary PDEs. AIP Conference Proceedings, 2015, , .	0.4	0
50	Optimizing some 3-stage W-methods for the time integration of PDEs. AIP Conference Proceedings, 2017, , .	0.4	0
51	W-Methods and Approximate Matrix Factorization for Parabolic PDEs with Mixed Derivative Terms. Mathematics Online First Collections, 2021, , 69-101.	0.1	0
52	Variable Step-Size Control Based on Two-Steps for Radau IIA Methods. ACM Transactions on Mathematical Software, 2020, 46, 1-24.	2.9	0