Luis Antonio Gavete Corvinos

List of Publications by Year
in descending order

25 papers	889 citations	623734 14 h-index	580821 25 g-index
25 all docs	25 docs citations	25 times ranked	254 citing authors

#	Article	IF	Citations
1	Influence of several factors in the generalized finite difference method. Applied Mathematical Modelling, 2001, 25, 1039-1053.	4.2	217
2	Solving parabolic and hyperbolic equations by the generalized finite difference method. Journal of Computational and Applied Mathematics, 2007, 209, 208-233.	2.0	129
3	An h-adaptive method in the generalized finite differences. Computer Methods in Applied Mechanics and Engineering, 2003, 192, 735-759.	6.6	91
4	Solving second order non-linear elliptic partial differential equations using generalized finite difference method. Journal of Computational and Applied Mathematics, 2017, 318, 378-387.	2.0	91
5	Generalized finite differences for solving 3D elliptic and parabolic equations. Applied Mathematical Modelling, 2016, 40, 955-965.	4.2	46
6	Solving second order non-linear parabolic PDEs using generalized finite difference method (GFDM). Journal of Computational and Applied Mathematics, 2019, 354, 221-241.	2.0	42
7	A note on the dynamic analysis using the generalized finite difference method. Journal of Computational and Applied Mathematics, 2013, 252, 132-147.	2.0	41
8	Implementations with generalized finite differences of the displacements and velocity-stress formulations of seismic wave propagation problem. Applied Mathematical Modelling, 2017, 52, 1-14.	4.2	29
9	Solving the telegraph equation in 2-D and 3-D using generalized finite difference method (GFDM). Engineering Analysis With Boundary Elements, 2020, 112, 13-24.	3.7	29
10	A GFDM with PML for seismic wave equations in heterogeneous media. Journal of Computational and Applied Mathematics, 2013, 252, 40-51.	2.0	27
11	Stability of perfectly matched layer regions in generalized finite difference method for wave problems. Journal of Computational and Applied Mathematics, 2017, 312, 231-239.	2.0	27
12	On the numerical solution to a parabolic-elliptic system with chemotactic and periodic terms using Generalized Finite Differences. Engineering Analysis With Boundary Elements, 2020, 113, 181-190.	3.7	23
13	Wave propagation in soils problems using the Generalized Finite Difference Method. Soil Dynamics and Earthquake Engineering, 2015, 79, 190-198.	3.8	15
14	Solving a chemotaxis–haptotaxis system in 2D using Generalized Finite Difference Method. Computers and Mathematics With Applications, 2020, 80, 762-777.	2.7	15
15	Solving second order non-linear hyperbolic PDEs using generalized finite difference method (GFDM). Journal of Computational and Applied Mathematics, 2020, 363, 1-21.	2.0	13
16	Non-linear Fokker-Planck equation solved with generalized finite differences in 2D and 3D. Applied Mathematics and Computation, 2020, 368, 124801.	2.2	11
17	Solving a fully parabolic chemotaxis system with periodic asymptotic behavior using Generalized Finite Difference Method. Applied Numerical Mathematics, 2020, 157, 356-371.	2.1	8
18	A new meshless approach to deal with interfaces in seismic problems. Applied Mathematical Modelling, 2018, 58, 447-458.	4.2	7

#	Article	IF	Citations
19	Solving Elliptical Equations in 3D by Means of an Adaptive Refinement in Generalized Finite Differences. Mathematical Problems in Engineering, 2018, 2018, 1-14.	1.1	6
20	Solving Monge-Ampère equation in 2D and 3D by Generalized Finite Difference Method. Engineering Analysis With Boundary Elements, 2021, 124, 52-63.	3.7	6
21	Convergence and numerical simulations of prey-predator interactions via a meshless method. Applied Numerical Mathematics, 2021, 161, 333-347.	2.1	5
22	Solving anisotropic elliptic and parabolic equations by a meshless method: simulation of the electrical conductivity of a tissue. International Journal of Computer Mathematics, 2012, 89, 1914-1926.	1.8	4
23	Solving a reaction–diffusion system with chemotaxis and non-local terms using Generalized Finite Difference Method. Study of the convergence. Journal of Computational and Applied Mathematics, 2021, 389, 113325.	2.0	4
24	On the convergence of the generalized finite difference method for solving a chemotaxis system with no chemical diffusion. Computational Particle Mechanics, 2021, 8, 625-636.	3.0	2
25	An adaptive solver for the spherical shallow water equations. Mathematics and Computers in Simulation, 2009, 79, 3466-3477.	4.4	1