JosÃ© Augusto Ferreira

List of Publications by Year
in descending order

75 papers	711 citations	623734 14 h-index	677142 22 g-index
76 all docs	76 docs citations	76 times ranked	435 citing authors

#	Article	IF	Citations
1	Numerical analysis of a porous–elastic model for convection enhanced drug delivery. Journal of Computational and Applied Mathematics, 2022, 399, 113719.	2.0	2
2	Drug delivery enhanced by ultrasound: Mathematical modeling and simulation. Computers and Mathematics With Applications, 2022, 107, 57-69.	2.7	8
3	Nonlinear systems of parabolic IBVP: A stable super-supraconvergent fully discrete piecewise linear FEM. Applied Mathematics and Computation, 2022, 419, 126857.	2.2	0
4	Density-pressure IBVP: Numerical analysis, simulation and cell dynamics in a colonic crypt. Applied Mathematics and Computation, 2022, 424, 127037.	2.2	0
5	Coupling nonlinear electric fields and temperature to enhance drug transport: An accurate numerical tool. Journal of Computational and Applied Mathematics, 2021, 384, 113127.	2.0	2
6	Drug release from viscoelastic polymeric matrices - a stable and supraconvergent FDM. Computers and Mathematics With Applications, 2021, 99, 257-269.	2.7	1
7	Drug release enhanced by temperature: An accurate discrete model for solutions in H_3. Computers and Mathematics With Applications, 2020, 79, 852-875.	2.7	9
8	Aging Effect on Iontophoretic Transdermal Drug Delivery. SIAM Journal on Applied Mathematics, 2020, 80, 1882-1907.	1.8	4
9	Mathematical model for degradation and drug release from an intravitreal biodegradable implant. Computers and Mathematics With Applications, 2020, 80, 2212-2240.	2.7	5
10	Drug release from a surface erosion biodegradable viscoelastic polymeric platform: Analysis and numerical simulation. Computers and Mathematics With Applications, 2020, 80, 3004-3026.	2.7	2
11	An eradication agent acting on a binary cell population model: mathematical analysis. Health and Technology, 2020, 10, 945-959.	3.6	2
12	Drying viscoelastic materials: a non-Fickian approach. Computational and Applied Mathematics, 2020, 39, 1.	2.2	1
13	Drug Delivery from Ophthalmic Lenses. Mathematics in Industry, 2020, , 59-70.	0.3	0
14	Fighting Opportunistic Bacteria in Drug Delivery Medical Devices. SIAM Journal on Applied Mathematics, 2019, 79, 2456-2478.	1.8	2
15	On the accurate simulation of nearshore and dam break problems involving dispersive breaking waves. Wave Motion, 2019, 85, 125-143.	2.0	9
16	An improved Serre model: Efficient simulation and comparative evaluation. Applied Mathematical Modelling, 2018, 56, 404-423.	4.2	11
17	Approximating coupled hyperbolic–parabolic systems arising in enhanced drug delivery. Computers and Mathematics With Applications, 2018, 76, 81-97.	2.7	8
18	Non-Fickian convection–diffusion models in porous media. Numerische Mathematik, 2018, 138, 869-904.	1.9	11

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19	Toward a Precision Ophthalmology: Targeting the Retina. SIAM Journal on Applied Mathematics, 2018, 78, 2996-3023.	1.8	5
20	Drug Release from Viscoelastic Swelling Polymeric Platforms. SIAM Journal on Applied Mathematics, 2018, 78, 1378-1401.	1.8	13
21	An Iterative Method to Compute the Dominant Zero of a Quaternionic Unilateral Polynomial. Advances in Applied Clifford Algebras, 2018, 28, 1.	1.0	1
22	On the exponential decay of waves with memory. Journal of Computational and Applied Mathematics, 2017, 318, 460-478.	2.0	2
23	Second order approximations for kinetic and potential energies in Maxwell's wave equations. Applied Numerical Mathematics, 2017, 120, 125-140.	2.1	5
24	Transdermal iontophoresis—A quantitative and qualitative study. Computers and Mathematics With Applications, 2017, 74, 2231-2242.	2.7	7
25	Mathematics of aging: Diseases of the posterior segment of the eye. Computers and Mathematics With Applications, 2017, 73, 11-26.	2.7	8
26	Tuning polymeric and drug properties in a drug eluting stent: A numerical study. Applied Mathematical Modelling, 2016, 40, 8067-8086.	4.2	8
27	Iontophoretic transdermal drug delivery: a multi-layered approach. Mathematical Medicine and Biology, 2016, 34, dqw017.	1.2	6
28	Numerical and analytical study of drug release from a biodegradable viscoelastic platform. Mathematical Methods in the Applied Sciences, 2016, 39, 4688-4699.	2.3	8
29	Anomalous diffusion in porous media. Applied Mathematical Modelling, 2016, 40, 1850-1862.	4.2	19
30	A coupled non-Fickian model of a cardiovascular drug delivery system. Mathematical Medicine and Biology, 2016, 33, 329-357.	1.2	7
31	An integro-differential model for non-Fickian tracer transport in porous media: validation and numerical simulation. Mathematical Methods in the Applied Sciences, 2016, 39, 4736-4749.	2.3	7
32	Nonfickian effect in time and space for diffusion processes. Numerical Methods for Partial Differential Equations, 2015, 31, 1589-1602.	3.6	2
33	Diffusion, viscoelasticity and erosion: Analytical study and medical applications. Journal of Computational and Applied Mathematics, 2015, 275, 489-501.	2.0	11
34	Analytical and numerical study of a coupled cardiovascular drug delivery model. Journal of Computational and Applied Mathematics, 2015, 275, 433-446.	2.0	11
35	A new look to non-Fickian diffusion. Applied Mathematical Modelling, 2015, 39, 194-204.	4.2	41
36	Molecular Transport in Viscoelastic Materials: Mechanistic Properties and Chemical Affinities. SIAM Journal on Applied Mathematics, 2014, 74, 1598-1614.	1.8	11

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37	A 3D Model for Mechanistic Control of Drug Release. SIAM Journal on Applied Mathematics, 2014, 74, 620-633.	1.8	37
38	Mathematical modeling of efficient protocols to control glioma growth. Mathematical Biosciences, 2014, 255, 83-90.	1.9	17
39	Numerical simulation of aqueous humor flow: From healthy to pathologic situations. Applied Mathematics and Computation, 2014, 226, 777-792.	2.2	22
40	Analytical and Numerical Study of Memory Formalisms in Diffusion Processes. Springer Proceedings in Mathematics and Statistics, 2013, , 67-85.	0.2	0
41	Supraconvergence and supercloseness in quasilinear coupled problems. Journal of Computational and Applied Mathematics, 2013, 252, 120-131.	2.0	9
42	Laplace transform â€" Finite element method for non Fickian flows. Computer Methods in Applied Mechanics and Engineering, 2013, 261-262, 16-23.	6.6	3
43	A Second Order Approximation for Quasilinear Non-Fickian Diffusion Models. Computational Methods in Applied Mathematics, 2013, 13, 471-493.	0.8	10
44	Supraconvergence and supercloseness in Volterra equations. Applied Numerical Mathematics, 2012, 62, 1718-1739.	2.1	8
45	Analytics and numerics of drug release tracking. Journal of Computational and Applied Mathematics, 2012, 236, 3572-3583.	2.0	6
46	Reactionâ€"diffusion in viscoelastic materials. Journal of Computational and Applied Mathematics, 2012, 236, 3783-3795.	2.0	5
47	Flux tracking in drug delivery. Applied Mathematical Modelling, 2011, 35, 4684-4696.	4.2	12
48	-second order convergent estimates for non-Fickian models. Applied Numerical Mathematics, 2011, 61, 201-215.	2.1	15
49	Non-Fickian delay reactionâ€"diffusion equations: Theoretical and numerical study. Applied Numerical Mathematics, 2010, 60, 531-549.	2.1	15
50	Lifting solutions of quasilinear convection-dominated problems. International Journal of Computer Mathematics, 2010, 87, 1522-1537.	1.8	0
51	Looking for the Lost Memory in Diffusion-Reaction Equations. , 2010, , 229-251.		1
52	On the stability of a class of splitting methods for integro-differential equations. Applied Numerical Mathematics, 2009, 59, 436-453.	2.1	23
53	Coupled vehicleâ€"skin models for drug release. Computer Methods in Applied Mechanics and Engineering, 2009, 198, 2078-2086.	6.6	12
54	A singular perturbation of the heat equation with memory. Journal of Computational and Applied Mathematics, 2008, 218, 376-394.	2.0	5

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55	Using splitting methods in continuous digester modeling. Applied Mathematical Modelling, 2008, 32, 1869-1882.	4.2	4
56	Qualitative analysis of a delayed non-Fickian model. Applicable Analysis, 2008, 87, 873-886.	1.3	14
57	Memory effects and random walks in reaction-transport systems. Applicable Analysis, 2007, 86, 99-118.	1.3	19
58	Integro-differential models for percutaneous drug absorption. International Journal of Computer Mathematics, 2007, 84, 451-467.	1.8	11
59	Numerical methods for the generalized Fisher–Kolmogorov–Petrovskii–Piskunov equation. Applied Numerical Mathematics, 2007, 57, 89-102.	2.1	50
60	Supraconvergence and Supercloseness of a Scheme for Elliptic Equations on Nonuniform Grids. Numerical Functional Analysis and Optimization, 2006, 27, 539-564.	1.4	28
61	Metastable, Partially Folded States in the Productive Folding and in the Misfolding and Amyloid Aggregation of Proteins. Cell Biochemistry and Biophysics, 2006, 44, 539-548.	1.8	24
62	On the computation of solutions of systems of interval polynomial equations. Journal of Computational and Applied Mathematics, 2005, 173, 295-302.	2.0	14
63	A superconvergent linear FE approximation for the solution of an elliptic system of PDEs. Journal of Computational and Applied Mathematics, 2005, 177, 287-300.	2.0	1
64	The Role of Abstract Numerical Properties in the Change of Character of Reactive Flows. Journal of Mathematical Fluid Mechanics, 2005, 7, S141-S163.	1.0	1
65	Superconvergence of Piecewise Linear Semi-Discretizations for Parabolic Equations with Nonuniform Triangulations. Journal of Mathematical Fluid Mechanics, 2005, 7, S192-S214.	1.0	1
66	Supraconvergence of a finite difference scheme for solutions in Hs(0, L). IMA Journal of Numerical Analysis, 2005, 25, 797-811.	2.9	32
67	Simulation of the transient behaviour of a digester used in the pulp and paper industry. Computer Aided Chemical Engineering, 2004, , 325-330.	0.5	1
68	On the interval Legendre polynomials. Journal of Computational and Applied Mathematics, 2003, 154, 215-227.	2.0	5
69	A priori estimates for the zeros of interval polynomials. Journal of Computational and Applied Mathematics, 2001, 136, 271-281.	2.0	9
70	A nonstandard linear finite element method for a planar elasticity problem. Applied Numerical Mathematics, 2001, 37, 331-340.	2.1	2
71	On the supraconvergence of elliptic finite difference schemes. Applied Numerical Mathematics, 1998, 28, 275-292.	2.1	26
72	On the convergence on nonrectangular grids. Journal of Computational and Applied Mathematics, 1997, 85, 333-344.	2.0	8

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73	Supraconvergence of a class of moving grid methods for solving a nonlinear problem. Applied Numerical Mathematics, 1996, 21, 43-56.	2.1	2
74	Convergence properties of numerical discretizations and regridding methods. Journal of Computational and Applied Mathematics, 1993, 45, 321-330.	2.0	4
75	The second-order initial/boundary value problem: Supraconvergence of regridding methods. Applied Numerical Mathematics, 1993, 13, 69-81.	2.1	2