

Josã© Augusto Ferreira

List of Publications by Year in descending order

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75
papers

711
citations

623734

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76
all docs

76
docs citations

76
times ranked

435
citing authors

#	ARTICLE	IF	CITATIONS
1	Numerical methods for the generalized Fisher-Kolmogorov-Petrovskii-Piskunov equation. Applied Numerical Mathematics, 2007, 57, 89-102.	2.1	50
2	A new look to non-Fickian diffusion. Applied Mathematical Modelling, 2015, 39, 194-204.	4.2	41
3	A 3D Model for Mechanistic Control of Drug Release. SIAM Journal on Applied Mathematics, 2014, 74, 620-633.	1.8	37
4	Supraconvergence of a finite difference scheme for solutions in $H_s(0, L)$. IMA Journal of Numerical Analysis, 2005, 25, 797-811.	2.9	32
5	Supraconvergence and Supercloseness of a Scheme for Elliptic Equations on Nonuniform Grids. Numerical Functional Analysis and Optimization, 2006, 27, 539-564.	1.4	28
6	On the supraconvergence of elliptic finite difference schemes. Applied Numerical Mathematics, 1998, 28, 275-292.	2.1	26
7	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
8	On the stability of a class of splitting methods for integro-differential equations. Applied Numerical Mathematics, 2009, 59, 436-453.	2.1	23
9	Numerical simulation of aqueous humor flow: From healthy to pathologic situations. Applied Mathematics and Computation, 2014, 226, 777-792.	2.2	22
10	Memory effects and random walks in reaction-transport systems. Applicable Analysis, 2007, 86, 99-118.	1.3	19
11	Anomalous diffusion in porous media. Applied Mathematical Modelling, 2016, 40, 1850-1862.	4.2	19
12	Mathematical modeling of efficient protocols to control glioma growth. Mathematical Biosciences, 2014, 255, 83-90.	1.9	17
13	Non-Fickian delay reaction-diffusion equations: Theoretical and numerical study. Applied Numerical Mathematics, 2010, 60, 531-549.	2.1	15
14	second order convergent estimates for non-Fickian models. Applied Numerical Mathematics, 2011, 61, 201-215.	2.1	15
15	On the computation of solutions of systems of interval polynomial equations. Journal of Computational and Applied Mathematics, 2005, 173, 295-302.	2.0	14
16	Qualitative analysis of a delayed non-Fickian model. Applicable Analysis, 2008, 87, 873-886.	1.3	14
17	Drug Release from Viscoelastic Swelling Polymeric Platforms. SIAM Journal on Applied Mathematics, 2018, 78, 1378-1401.	1.8	13
18	Coupled vehicle-skin models for drug release. Computer Methods in Applied Mechanics and Engineering, 2009, 198, 2078-2086.	6.6	12

#	ARTICLE	IF	CITATIONS
19	Flux tracking in drug delivery. <i>Applied Mathematical Modelling</i> , 2011, 35, 4684-4696.	4.2	12
20	Integro-differential models for percutaneous drug absorption. <i>International Journal of Computer Mathematics</i> , 2007, 84, 451-467.	1.8	11
21	Molecular Transport in Viscoelastic Materials: Mechanistic Properties and Chemical Affinities. <i>SIAM Journal on Applied Mathematics</i> , 2014, 74, 1598-1614.	1.8	11
22	Diffusion, viscoelasticity and erosion: Analytical study and medical applications. <i>Journal of Computational and Applied Mathematics</i> , 2015, 275, 489-501.	2.0	11
23	Analytical and numerical study of a coupled cardiovascular drug delivery model. <i>Journal of Computational and Applied Mathematics</i> , 2015, 275, 433-446.	2.0	11
24	An improved Serre model: Efficient simulation and comparative evaluation. <i>Applied Mathematical Modelling</i> , 2018, 56, 404-423.	4.2	11
25	Non-Fickian convectionâ€“diffusion models in porous media. <i>Numerische Mathematik</i> , 2018, 138, 869-904.	1.9	11
26	A Second Order Approximation for Quasilinear Non-Fickian Diffusion Models. <i>Computational Methods in Applied Mathematics</i> , 2013, 13, 471-493.	0.8	10
27	A priori estimates for the zeros of interval polynomials. <i>Journal of Computational and Applied Mathematics</i> , 2001, 136, 271-281.	2.0	9
28	Supraconvergence and supercloseness in quasilinear coupled problems. <i>Journal of Computational and Applied Mathematics</i> , 2013, 252, 120-131.	2.0	9
29	On the accurate simulation of nearshore and dam break problems involving dispersive breaking waves. <i>Wave Motion</i> , 2019, 85, 125-143.	2.0	9
30	Drug release enhanced by temperature: An accurate discrete model for solutions in $\langle \text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" id="d1e2472" altimg="si2.svg"} \rangle \langle \text{mml:msup} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mi} \rangle H \langle \text{mml:mi} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mn} \rangle 3 \langle \text{mml:mfrac} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mi} \rangle$ Computers and Mathematics With Applications, 2020, 79, 852-875.	2.7	9
31	On the convergence on nonrectangular grids. <i>Journal of Computational and Applied Mathematics</i> , 1997, 85, 333-344.	2.0	8
32	Supraconvergence and supercloseness in Volterra equations. <i>Applied Numerical Mathematics</i> , 2012, 62, 1718-1739.	2.1	8
33	Tuning polymeric and drug properties in a drug eluting stent: A numerical study. <i>Applied Mathematical Modelling</i> , 2016, 40, 8067-8086.	4.2	8
34	Numerical and analytical study of drug release from a biodegradable viscoelastic platform. <i>Mathematical Methods in the Applied Sciences</i> , 2016, 39, 4688-4699.	2.3	8
35	Mathematics of aging: Diseases of the posterior segment of the eye. <i>Computers and Mathematics With Applications</i> , 2017, 73, 11-26.	2.7	8
36	Approximating coupled hyperbolicâ€“parabolic systems arising in enhanced drug delivery. <i>Computers and Mathematics With Applications</i> , 2018, 76, 81-97.	2.7	8

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37	Drug delivery enhanced by ultrasound: Mathematical modeling and simulation. Computers and Mathematics With Applications, 2022, 107, 57-69.	2.7	8
38	A coupled non-Fickian model of a cardiovascular drug delivery system. Mathematical Medicine and Biology, 2016, 33, 329-357.	1.2	7
39	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
40	Transdermal iontophoresis—A quantitative and qualitative study. Computers and Mathematics With Applications, 2017, 74, 2231-2242.	2.7	7
41	Analytics and numerics of drug release tracking. Journal of Computational and Applied Mathematics, 2012, 236, 3572-3583.	2.0	6
42	Iontophoretic transdermal drug delivery: a multi-layered approach. Mathematical Medicine and Biology, 2016, 34, dqw017.	1.2	6
43	On the interval Legendre polynomials. Journal of Computational and Applied Mathematics, 2003, 154, 215-227.	2.0	5
44	A singular perturbation of the heat equation with memory. Journal of Computational and Applied Mathematics, 2008, 218, 376-394.	2.0	5
45	Reaction-diffusion in viscoelastic materials. Journal of Computational and Applied Mathematics, 2012, 236, 3783-3795.	2.0	5
46	Second order approximations for kinetic and potential energies in Maxwell's wave equations. Applied Numerical Mathematics, 2017, 120, 125-140.	2.1	5
47	Toward a Precision Ophthalmology: Targeting the Retina. SIAM Journal on Applied Mathematics, 2018, 78, 2996-3023.	1.8	5
48	Mathematical model for degradation and drug release from an intravitreal biodegradable implant. Computers and Mathematics With Applications, 2020, 80, 2212-2240.	2.7	5
49	Convergence properties of numerical discretizations and regridding methods. Journal of Computational and Applied Mathematics, 1993, 45, 321-330.	2.0	4
50	Using splitting methods in continuous digester modeling. Applied Mathematical Modelling, 2008, 32, 1869-1882.	4.2	4
51	Aging Effect on Iontophoretic Transdermal Drug Delivery. SIAM Journal on Applied Mathematics, 2020, 80, 1882-1907.	1.8	4
52	Laplace transform - Finite element method for non Fickian flows. Computer Methods in Applied Mechanics and Engineering, 2013, 261-262, 16-23.	6.6	3
53	The second-order initial/boundary value problem: Supraconvergence of regridding methods. Applied Numerical Mathematics, 1993, 13, 69-81.	2.1	2
54	Supraconvergence of a class of moving grid methods for solving a nonlinear problem. Applied Numerical Mathematics, 1996, 21, 43-56.	2.1	2

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55	A nonstandard linear finite element method for a planar elasticity problem. Applied Numerical Mathematics, 2001, 37, 331-340.	2.1	2
56	Nonfickian effect in time and space for diffusion processes. Numerical Methods for Partial Differential Equations, 2015, 31, 1589-1602.	3.6	2
57	On the exponential decay of waves with memory. Journal of Computational and Applied Mathematics, 2017, 318, 460-478.	2.0	2
58	Fighting Opportunistic Bacteria in Drug Delivery Medical Devices. SIAM Journal on Applied Mathematics, 2019, 79, 2456-2478.	1.8	2
59	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
60	An eradication agent acting on a binary cell population model: mathematical analysis. Health and Technology, 2020, 10, 945-959.	3.6	2
61	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
62	Numerical analysis of a porous elastic model for convection enhanced drug delivery. Journal of Computational and Applied Mathematics, 2022, 399, 113719.	2.0	2
63	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
64	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
65	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
66	Superconvergence of Piecewise Linear Semi-Discretizations for Parabolic Equations with Nonuniform Triangulations. Journal of Mathematical Fluid Mechanics, 2005, 7, S192-S214.	1.0	1
67	An Iterative Method to Compute the Dominant Zero of a Quaternionic Unilateral Polynomial. Advances in Applied Clifford Algebras, 2018, 28, 1.	1.0	1
68	Drying viscoelastic materials: a non-Fickian approach. Computational and Applied Mathematics, 2020, 39, 1.	2.2	1
69	Drug release from viscoelastic polymeric matrices - a stable and supraconvergent FDM. Computers and Mathematics With Applications, 2021, 99, 257-269.	2.7	1
70	Looking for the Lost Memory in Diffusion-Reaction Equations. , 2010, , 229-251.		1
71	Lifting solutions of quasilinear convection-dominated problems. International Journal of Computer Mathematics, 2010, 87, 1522-1537.	1.8	0
72	Analytical and Numerical Study of Memory Formalisms in Diffusion Processes. Springer Proceedings in Mathematics and Statistics, 2013, , 67-85.	0.2	0

#	ARTICLE	IF	CITATIONS
73	Drug Delivery from Ophthalmic Lenses. Mathematics in Industry, 2020, , 59-70.	0.3	0
74	Nonlinear systems of parabolic IBVP: A stable super-supraconvergent fully discrete piecewise linear FEM. Applied Mathematics and Computation, 2022, 419, 126857.	2.2	0
75	Density-pressure IBVP: Numerical analysis, simulation and cell dynamics in a colonic crypt. Applied Mathematics and Computation, 2022, 424, 127037.	2.2	0