

# J E MacÃ- as-DÃ- az

## List of Publications by Year in descending order

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28  
papers

280  
citations

1040056

9  
h-index

940533

16  
g-index

29  
all docs

29  
docs citations

29  
times ranked

142  
citing authors

#	ARTICLE	IF	CITATIONS
1	Design of a nonlinear model for the propagation of COVID-19 and its efficient nonstandard computational implementation. <i>Applied Mathematical Modelling</i> , 2021, 89, 1835-1846.	4.2	43
2	A finite-difference scheme to approximate non-negative and bounded solutions of a FitzHugh-Nagumo equation. <i>International Journal of Computer Mathematics</i> , 2011, 88, 3186-3201.	1.8	32
3	AN EFFICIENT RECURSIVE ALGORITHM IN THE COMPUTATIONAL SIMULATION OF THE BOUNDED GROWTH OF BIOLOGICAL FILMS. <i>International Journal of Computational Methods</i> , 2012, 09, 1250050.	1.3	26
4	On the solution of a Riesz space-fractional nonlinear wave equation through an efficient and energy-invariant scheme. <i>International Journal of Computer Mathematics</i> , 2019, 96, 337-361.	1.8	24
5	Analysis of a nonstandard computer method to simulate a nonlinear stochastic epidemiological model of coronavirus-like diseases. <i>Computer Methods and Programs in Biomedicine</i> , 2021, 204, 106054.	4.7	20
6	A modified exponential method that preserves structural properties of the solutions of the Burgers-Huxley equation. <i>International Journal of Computer Mathematics</i> , 2018, 95, 3-19.	1.8	16
7	On a boundedness-preserving semi-linear discretization of a two-dimensional nonlinear diffusion-reaction model. <i>International Journal of Computer Mathematics</i> , 2012, 89, 1678-1688.	1.8	12
8	A BOUNDED FINITE-DIFFERENCE DISCRETIZATION OF A TWO-DIMENSIONAL DIFFUSION EQUATION WITH LOGISTIC NONLINEAR REACTION. <i>International Journal of Modern Physics C</i> , 2011, 22, 953-966.	1.7	11
9	On some explicit non-standard methods to approximate nonnegative solutions of a weakly hyperbolic equation with logistic nonlinearity. <i>International Journal of Computer Mathematics</i> , 2011, 88, 3308-3323.	1.8	10
10	An efficient nonlinear finite-difference approach in the computational modeling of the dynamics of a nonlinear diffusion-reaction equation in microbial ecology. <i>Computational Biology and Chemistry</i> , 2013, 47, 24-30.	2.3	9
11	Activity pattern detection in electroneurographic and electromyogram signals through a heteroscedastic change-point method. <i>Mathematical Biosciences</i> , 2010, 224, 109-117.	1.9	8
12	A mathematical model that combines chemotherapy and oncolytic virotherapy as an alternative treatment against a glioma. <i>Journal of Mathematical Chemistry</i> , 2020, 58, 544-554.	1.5	8
13	NONLINEAR SUPRATRANSMISSION AND NONLINEAR BISTABILITY IN A FORCED LINEAR ARRAY OF ANHARMONIC OSCILLATORS: A COMPUTATIONAL STUDY. <i>International Journal of Modern Physics C</i> , 2009, 20, 1911-1923.	1.7	7
14	On a fully discrete finite-difference approximation of a nonlinear diffusion-reaction model in microbial ecology. <i>International Journal of Computer Mathematics</i> , 2013, 90, 1915-1937.	1.8	7
15	COMPUTATIONAL STUDY OF THE TRANSMISSION OF ENERGY IN A TWO-DIMENSIONAL LATTICE WITH NEAREST-NEIGHBOR INTERACTIONS. <i>International Journal of Modern Physics C</i> , 2009, 20, 1933-1943.	1.7	6
16	A computational method for the detection of activation/deactivation patterns in biological signals with three levels of electric intensity. <i>Mathematical Biosciences</i> , 2014, 248, 117-127.	1.9	6
17	Positive computational modelling of the dynamics of active and inert biomass with extracellular polymeric substances. <i>Journal of Difference Equations and Applications</i> , 2015, 21, 319-335.	1.1	5
18	Numerical simulation of Turing patterns in a fractional hyperbolic reaction-diffusion model with Grunwald differences. <i>European Physical Journal Plus</i> , 2019, 134, 1.	2.6	4

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19	An optimal Bayesian threshold method for onset detection in electric biosignals. <i>Mathematical Biosciences</i> , 2019, 309, 12-22.	1.9	4
20	Computer simulation of the dynamics of a spatial susceptible-infected-recovered epidemic model with time delays in transmission and treatment. <i>Computer Methods and Programs in Biomedicine</i> , 2021, 212, 106469.	4.7	4
21	A mathematical model for the pre-diagnostic of glioma growth based on blood glucose levels. <i>Journal of Mathematical Chemistry</i> , 2018, 56, 687-699.	1.5	3
22	A SEIR model with memory effects for the propagation of Ebola-like infections and its dynamically consistent approximation. <i>Computer Methods and Programs in Biomedicine</i> , 2021, 209, 106322.	4.7	3
23	ON THE GENERATION OF LOCALIZED NONLINEAR MODES IN A LINEAR ARRAY OF ANHARMONIC OSCILLATORS. <i>International Journal of Modern Physics C</i> , 2009, 20, 1187-1198.	1.7	2
24	Computational approximation of the likelihood ratio for testing the existence of change-points in a heteroscedastic series. <i>Journal of Statistical Computation and Simulation</i> , 2013, 83, 1491-1506.	1.2	2
25	Finite-difference modeling $\tilde{A}$ la Mickens of the distribution of the stopping time in a stochastic differential equation. <i>Journal of Difference Equations and Applications</i> , 2017, 23, 799-820.	1.1	2
26	A positive and bounded convergent scheme for general space-fractional diffusion-reaction systems with inertial times. <i>International Journal of Computer Mathematics</i> , 2021, 98, 1071-1097.	1.8	2
27	On the Unions of Ascending Chains of Direct Sums of Ideals of $h$ -Local Prüfer Domains. <i>Algebra Colloquium</i> , 2011, 18, 749-757.	0.2	1
28	On the Union of Increasing Chains of Torsion-Free Modules Over Integral Domains. <i>Results in Mathematics</i> , 2013, 63, 221-228.	0.8	0