JosÃ© Vicente Romero Bauset

List of Publications by Year
in descending order

51	592	687363	677142
papers	citations	13	22
		h-index	g-index

51	51	51	355
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Solving fully randomized first-order linear control systems: Application to study the dynamics of a damped oscillator with parametric noise under stochastic control. Journal of Computational and Applied Mathematics, 2022, 404, 113389.	2.0	3
2	Probabilistic calibration and short‐term prediction of the prevalence herpes simplex type 2: A transmission dynamics modelling approach. Mathematical Methods in the Applied Sciences, 2022, 45, 3345-3359.	2.3	0
3	A full probabilistic analysis of a randomized kinetic model for reaction–deactivation of hydrogen peroxide decomposition with applications to real data. Journal of Mathematical Chemistry, 2021, 59, 1479.	1.5	3
4	Probabilistic analysis of random nonlinear oscillators subject to small perturbations via probability density functions: theory and computing. European Physical Journal Plus, 2021, 136, 1.	2.6	5
5	Approximating the Density of Random Differential Equations with Weak Nonlinearities via Perturbation Techniques. Mathematics, 2021, 9, 204.	2.2	1
6	Some results about randomized binary Markov chains: theory, computing and applications. International Journal of Computer Mathematics, 2020, 97, 141-156.	1.8	7
7	Probabilistic Study of the Effect of Anti-Epileptic Drugs Under Uncertainty: Cost-Effectiveness Analysis. Mathematics, 2020, 8, 1120.	2.2	1
8	Introducing randomness in the analysis of chemical reactions: An analysis based on random differential equations and probability density functions. Computational and Mathematical Methods, 2020, , e1141.	0.8	3
9	Full probabilistic solution of a finite dimensional linear control system with random initial and final conditions. Journal of the Franklin Institute, 2020, 357, 8156-8180.	3.4	5
10	Solving Second-Order Linear Differential Equations with Random Analytic Coefficients about Regular-Singular Points. Mathematics, 2020, 8, 230.	2.2	0
11	A probabilistic analysis of a Beverton-Holt-type discrete model: Theoretical and computing analysis. Computational and Mathematical Methods, 2019, 1, e1013.	0.8	2
12	(CMMSE2018 paper) Solving the random Pielou logistic equation with the random variable transformation technique: Theory and applications. Mathematical Methods in the Applied Sciences, 2019, 42, 5708-5717.	2.3	6
13	Solving random boundary heat model using the finite difference method under mean square convergence. Computational and Mathematical Methods, 2019, 1, e1026.	0.8	2
14	Analysis of random non-autonomous logistic-type differential equations via the Karhunen–Loève expansion and the Random Variable Transformation technique. Communications in Nonlinear Science and Numerical Simulation, 2019, 72, 121-138.	3.3	6
15	Solving second-order linear differential equations with random analytic coefficients about ordinary points: A full probabilistic solution by the first probability density function. Applied Mathematics and Computation, 2018, 331, 33-45.	2.2	5
16	Computing the probability density function of non-autonomous first-order linear homogeneous differential equations with uncertainty. Journal of Computational and Applied Mathematics, 2018, 337, 190-208.	2.0	9
17	Solving the random Cauchy one-dimensional advection–diffusion equation: Numerical analysis and computing. Journal of Computational and Applied Mathematics, 2018, 330, 920-936.	2.0	5
18	Computing probabilistic solutions of the Bernoulli random differential equation. Journal of Computational and Applied Mathematics, 2017, 309, 396-407.	2.0	17

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19	Using a homogeneous equilibrium model for the study of the inner nozzle flow and cavitation pattern in convergent–divergent nozzles of diesel injectors. Journal of Computational and Applied Mathematics, 2017, 309, 630-641.	2.0	28
20	Full solution of random autonomous first-order linear systems of difference equations. Application to construct random phase portrait for planar systems. Applied Mathematics Letters, 2017, 68, 150-156.	2.7	22
21	Improving adaptive generalized polynomial chaos method to solve nonlinear random differential equations by the random variable transformation technique. Communications in Nonlinear Science and Numerical Simulation, 2017, 50, 1-15.	3.3	12
22	Randomizing the parameters of a Markov chain to model the stroke disease: A technical generalization of established computational methodologies towards improving real applications. Journal of Computational and Applied Mathematics, 2017, 324, 225-240.	2.0	12
23	Computing the two first probability density functions of the random Cauchy-Euler differential equation: Study about regular-singular points. Applied Mathematics and Nonlinear Sciences, 2017, 2, 213-224.	1.6	4
24	Approximating the Solution Stochastic Process of the Random Cauchy One-Dimensional Heat Model. Abstract and Applied Analysis, 2016, 2016, 1-7.	0.7	2
25	Random First-Order Linear Discrete Models and Their Probabilistic Solution: A Comprehensive Study. Abstract and Applied Analysis, 2016, 2016, 1-22.	0.7	8
26	Solving Random Homogeneous Linear Second-Order Differential Equations: A Full Probabilistic Description. Mediterranean Journal of Mathematics, 2016, 13, 3817-3836.	0.8	16
27	Probabilistic solution of the homogeneous Riccati differential equation: A case-study by using linearization and transformation techniques. Journal of Computational and Applied Mathematics, 2016, 291, 20-35.	2.0	7
28	A comprehensive probabilistic solution of random SIS-type epidemiological models using the random variable transformation technique. Communications in Nonlinear Science and Numerical Simulation, 2016, 32, 199-210.	3.3	45
29	Numerical simulation of primary atomization in diesel spray at low injection pressure. Journal of Computational and Applied Mathematics, 2016, 291, 94-102.	2.0	40
30	Probabilistic solution of random SI-type epidemiological models using the Random Variable Transformation technique. Communications in Nonlinear Science and Numerical Simulation, 2015, 24, 86-97.	3.3	34
31	Constructing adaptive generalized polynomial chaos method to measure the uncertainty in continuous models: A computational approach. Mathematics and Computers in Simulation, 2015, 109, 113-129.	4.4	11
32	Determining the First Probability Density Function of Linear Random Initial Value Problems by the Random Variable Transformation (RVT) Technique: A Comprehensive Study. Abstract and Applied Analysis, 2014, 2014, 1-25.	0.7	15
33	Study of the influence of the needle eccentricity on the internal flow in diesel injector nozzles by computational fluid dynamics calculations. International Journal of Computer Mathematics, 2014, 91, 24-31.	1.8	18
34	Probabilistic solution of random homogeneous linear second-order difference equations. Applied Mathematics Letters, 2014, 34, 27-32.	2.7	20
35	Computational study of the cavitation phenomenon and its interaction with the turbulence developed in diesel injector nozzles by Large Eddy Simulation (LES). Mathematical and Computer Modelling, 2013, 57, 1656-1662.	2.0	57
36	Do the generalized polynomial chaos and Fröbenius methods retain the statistical moments of random differential equations?. Applied Mathematics Letters, 2013, 26, 553-558.	2.7	2

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37	Some recommendations for applying gPC (generalized polynomial chaos) to modeling: An analysis through the Airy random differential equation. Applied Mathematics and Computation, 2013, 219, 4208-4218.	2.2	10
38	Dealing with Dependent Uncertainty in Modelling: A Comparative Study Case through the Airy Equation. Abstract and Applied Analysis, 2013, 2013, 1-12.	0.7	1
39	Solving Continuous Models with Dependent Uncertainty: A Computational Approach. Abstract and Applied Analysis, 2013, 2013, 1-10.	0.7	7
40	Double Discretization Difference Schemes for Partial Integrodifferential Option Pricing Jump Diffusion Models. Abstract and Applied Analysis, 2012, 2012, 1-20.	0.7	4
41	Applying the Wiener-Hermite Random Technique to Study the Evolution of Excess Weight Population in the Region of Valencia (Spain). American Journal of Computational Mathematics, 2012, 02, 274-281.	0.5	8
42	A comparative study of the numerical approximation of the random Airy differential equation. Computers and Mathematics With Applications, 2011, 62, 3411-3417.	2.7	1
43	Influence of biofuels on the internal flow in diesel injector nozzles. Mathematical and Computer Modelling, 2011, 54, 1699-1705.	2.0	22
44	Solving random diffusion models with nonlinear perturbations by the Wienerâ€"Hermite expansion method. Computers and Mathematics With Applications, 2011, 61, 1946-1950.	2.7	11
45	Validation of a code for modeling cavitation phenomena in Diesel injector nozzles. Mathematical and Computer Modelling, 2010, 52, 1123-1132.	2.0	62
46	A second order numerical method for solving advection-diffusion models. Mathematical and Computer Modelling, 2009, 50, 806-811.	2.0	6
47	Experimental validation of a new semiâ€‘implicit CEâ€"SE scheme for the calculation of unsteady oneâ€‘dimensional flow in tapered ducts. International Journal for Numerical Methods in Engineering, 2008, 74, 1473-1494.	2.8	4
48	A stable numerical method for solving variable coefficient advectionâ€"diffusion models. Computers and Mathematics With Applications, 2008, 56, 754-768.	2.7	5
49	New pixellation scheme for CT algebraic reconstruction to exploit matrix symmetries. Computers and Mathematics With Applications, 2008, 56, 715-726.	2.7	13
50	A nonuniform mesh semi-implicit CEâ€"SE method modelling unsteady flow in tapered ducts. Mathematics and Computers in Simulation, 2007, 76, 94-98.	4.4	4
51	Solving fully randomized higherâ€‘order linear control differential equations: Application to study the dynamics of an oscillator. Computational and Mathematical Methods, 0, , e1163.	0.8	1