Damian Ginestar

List of Publications by Year
in descending order

113 papers	1,210 citations	430442 18 h-index	476904 29 g-index
116 all docs	116 docs citations	116 times ranked	622 citing authors

#	Article	IF	Citations
1	The discrete fractional order difference applied to an epidemic model with indirect transmission. Applied Mathematical Modelling, 2022, 103, 636-648.	2.2	8
2	Localizing Perturbations in Pressurized Water Reactors Using One-Dimensional Deep Convolutional Neural Networks. Sensors, 2022, 22, 113.	2.1	3
3	Frequency-domain models in the SP$_N$ approximation for neutron noise calculations. Progress in Nuclear Energy, 2022, 148, 104233.	1.3	4
4	Edge-wise perturbations to model vibrating fuel assemblies in the frequency-domain using FEMFFUSION: Development and verification. Annals of Nuclear Energy, 2022, 175, 109246.	0.9	2
5	Soil nitrogen dynamics in fallow periods in a rainfed semiarid Mediterranean system. Pedosphere, 2022, , .	2.1	4
6	Modelling and simulations of reactor neutron noise induced by mechanical vibrations. Annals of Nuclear Energy, 2022, 177, 109300.	0.9	5
7	Strategies of Preconditioner Updates for Sequences of Linear Systems Associated with the Neutron Diffusion. Computational and Mathematical Methods, 2022, 2022, 1-13.	0.3	0
8	Adaptive time-step control for modal methods to integrate the neutron diffusion equation. Nuclear Engineering and Technology, 2021, 53, 399-413.	1.1	7
9	ADAPTIVE TIME-STEP CONTROL FOR THE MODAL METHOD TO INTEGRATE THE MULTIGROUP NEUTRON DIFFUSION EQUATION. EPJ Web of Conferences, 2021, 247, 07010.	0.1	0
10	A FINITE ELEMENT METHOD FOR NEUTRON NOISE ANALYSIS IN HEXAGONAL REACTORS. EPJ Web of Conferences, 2021, 247, 21007.	0.1	1
11	Analysis of the PHWR benchmark transient using a high-order spherical harmonics-nodal collocation method and treatment of rod cusping effect. Progress in Nuclear Energy, 2021, 135, 103701.	1.3	0
12	Comments on â€œSPICE Model of Photomultiplier Tube Under Different Bias Conditionsâ€. IEEE Sensors Journal, 2021, 21, 17395-17402.	2.4	5
13	Time-dependent simplified spherical harmonics formulations for a nuclear reactor system. Nuclear Engineering and Technology, 2021, 53, 3861-3878.	1.1	3
14	A time and frequency domain analysis of the effect of vibrating fuel assemblies on the neutron noise. Annals of Nuclear Energy, 2020, 137, 107076.	0.9	18
15	Neutronic Simulation of Fuel Assembly Vibrations in a Nuclear Reactor. Nuclear Science and Engineering, 2020, 194, 1067-1078.	0.5	5
16	Validation of the SHNC time-dependent transport code based on the spherical harmonics method for complex nuclear fuel assemblies. Journal of Computational and Applied Mathematics, 2020, 375, 112814.	1.1	3
17	Sensitivity analysis and parameterization of two agricultural models in cauliflower crops. Spanish Journal of Agricultural Research, 2020, 17, e1106.	0.3	4
18	A Matrix-Free Eigenvalue Solver for the Multigroup Neutron Diffusion Equation. Lecture Notes in Computer Science, 2019, , 702-709.	1.0	0

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19	Modal methods for the neutron diffusion equation using different spatial modes. Progress in Nuclear Energy, 2019, 115, 181-193.	1.3	10
20	Block Preconditioning Matrices for the Newton Method to Compute the Dominant λ-Modes Associated with the Neutron Diffusion Equation. Mathematical and Computational Applications, 2019, 24, 9.	0.7	1
21	Differential Entropy Approximations and Diffusive Restoration of Digital Images. , 2019, , 102-105.		0
22	Modelo reducido de un reactor nuclear y su utilizaciÃ³n en las asignaturas del Ã¡mbito de la IngenierÃa Nuclear. Modelling in Science Education and Learning, 2019, 12, 47.	0.1	0
23	Numerical analysis of the 2D C5G7 MOX benchmark using PL equations and a nodal collocation method. Annals of Nuclear Energy, 2018, 114, 32-41.	0.9	3
24	Pin-wise homogenization for SP$_N$ neutron transport approximation using the finite element method. Journal of Computational and Applied Mathematics, 2018, 330, 806-821.	1.1	6
25	Block hybrid multilevel method to compute the dominant λ-modes of the neutron diffusion equation. Annals of Nuclear Energy, 2018, 121, 513-524.	0.9	7
26	The Solution of the Lambda Modes Problem Using Block Iterative Eigensolvers. Lecture Notes in Computer Science, 2018, , 846-855.	1.0	0
27	Schwarz type preconditioners for the neutron diffusion equation. Journal of Computational and Applied Mathematics, 2017, 309, 563-574.	1.1	3
28	A study of the radiative transfer equation using a spherical harmonics-nodal collocation method. Journal of Quantitative Spectroscopy and Radiative Transfer, 2017, 189, 25-36.	1.1	3
29	Spatial modes for the neutron diffusion equation and their computation. Annals of Nuclear Energy, 2017, 110, 1010-1022.	0.9	13
30	Multilevel method to compute the lambda modes of the neutron diffusion equation. Applied Mathematics and Nonlinear Sciences, 2017, 2, 225-236.	0.9	8
31	Utilizacion de un modelo simple de transporte de agua y nitrÃ³geno en el suelo en las practicas de Horticultura. Modelling in Science Education and Learning, 2017, 10, 21.	0.1	0
32	Light propagation in tissue using the multidimensional P$_L$ equations. , 2016, , .		0
33	Use of discontinuity factors in high-order finite element methods. Annals of Nuclear Energy, 2016, 87, 728-738.	0.9	6
34	Development of a finite volume inter-cell polynomial expansion method for the neutron diffusion equation. Journal of Nuclear Science and Technology, 2016, 53, 1212-1223.	0.7	6
35	Nodal collocation method for the multidimensional PL equations applied to neutron transport source problems. Annals of Nuclear Energy, 2016, 87, 89-100.	0.9	7
36	Moving meshes to solve the time-dependent neutron diffusion equation in hexagonal geometry. Journal of Computational and Applied Mathematics, 2016, 291, 197-208.	1.1	17

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37	Resolution of the Generalized Eigenvalue Problem in the Neutron Diffusion Equation Discretized by the Finite Volume Method. Abstract and Applied Analysis, 2014, 2014, 1-15.	0.3	9
38	Solution of the Lambda modes problem of a nuclear power reactor using an h–p finite element method. Annals of Nuclear Energy, 2014, 72, 338-349.	0.9	30
39	Preconditioning the solution of the time-dependent neutron diffusion equation by recycling Krylov subspaces. International Journal of Computer Mathematics, 2014, 91, 42-52.	1.0	2
40	Modal decomposition method for BWR stability analysis using Alpha-modes. Annals of Nuclear Energy, 2014, 67, 31-40.	0.9	3
41	NOKIN1D: one-dimensional neutron kinetics based on a nodal collocation method. , 2014, , .		0
42	Dynamic model of a shell-and-tube condenser. Analysis of the mean void fraction correlation influence on the model performance. Energy, 2013, 59, 521-533.	4.5	15
43	Assessment of LEACHN and a simple compartmental model to simulate nitrogen dynamics in citrus orchards. Agricultural Water Management, 2013, 121, 42-53.	2.4	19
44	Using proper generalized decomposition to compute the dominant mode of a nuclear reactor. Mathematical and Computer Modelling, 2013, 57, 1807-1815.	2.0	12
45	Modified Block Newton method for the lambda modes problem. Nuclear Engineering and Design, 2013, 259, 230-239.	0.8	0
46	Using finite mixture models in thermal-hydraulics system code uncertainty analysis. Nuclear Engineering and Design, 2013, 262, 306-318.	0.8	13
47	Drazin inverse based numerical methods for singular linear differential systems. Advances in Engineering Software, 2012, 50, 37-43.	1.8	1
48	Application of a nodal collocation approximation for the multidimensional PL equations to the 3D Takeda benchmark problems. Annals of Nuclear Energy, 2012, 40, 1-13.	0.9	11
49	Peach bottom instability analysis with a RELAP5/PARCSv2.7 detailed thermal-hydraulic–neutronic model. Nuclear Engineering and Design, 2012, 249, 24-34.	0.8	1
50	Modal processing of the Local Power Range Monitors signals in BWR NPP. Annals of Nuclear Energy, 2011, 38, 2441-2455.	0.9	8
51	Updating the Lambda modes of a nuclear power reactor. Mathematical and Computer Modelling, 2011, 54, 1796-1801.	2.0	4
52	Steady-state model of a variable speed vapor compression system using R134a as working fluid. International Journal of Energy Research, 2010, 34, 933-945.	2.2	23
53	Simulation of a cubic-like Chua's oscillator with variable characteristic. Mathematical and Computer Modelling, 2010, 52, 1211-1218.	2.0	6
54	Time integration of the neutron diffusion equation on hexagonal geometries. Mathematical and Computer Modelling, 2010, 52, 1203-1210.	2.0	9

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55	Application of a lumped model for predicting energy performance of a variable-speed vapour compression system. Applied Thermal Engineering, 2010, 30, 286-294.	3.0	23
56	3D Alpha Modes of a Nuclear Power Reactor. Journal of Nuclear Science and Technology, 2010, 47, 501-514.	0.7	10
57	Experimental orthogonal functions for the qualification of BWR stability events. Application to Peach Bottom NPP. , 2010, , .		0
58	Modified Block Newton iteration for the lambda modes problem in hexagonal geometry. , 2010, , .		0
59	Experimental orthogonal functions and principal oscillation patterns of an unstable event in a BWR nuclear power reactor. , 2009, , .		0
60	Continuous pseudospectral methods for the neutron diffusion equation in 1D geometries. Mathematical and Computer Modelling, 2009, 50, 783-793.	2.0	2
61	Compartmental model for nitrogen dynamics in citrus orchards. Mathematical and Computer Modelling, 2009, 50, 794-805.	2.0	8
62	High Order Finite Element Method for the Lambda modes problem on hexagonal geometry. Annals of Nuclear Energy, 2009, 36, 1450-1462.	0.9	26
63	Applications of the multidimensional equations to complex fuel assembly problems. Annals of Nuclear Energy, 2009, 36, 1624-1634.	0.9	4
64	Modelling the pesticide concentration in a rice field by a level IV fugacity model coupled with a dispersion-advection equation. Computers and Mathematics With Applications, 2008, 56, 657-669.	1.4	6
65	Handling occlusion in optical flow algorithms for object tracking. Computers and Mathematics With Applications, 2008, 56, 733-742.	1.4	15
66	A nodal collocation approximation for the multi-dimensional equations â€" 2D applications. Annals of Nuclear Energy, 2008, 35, 1820-1830.	0.9	18
67	Retardation time spectra computed from complex compliance functions. Journal of Chemical Physics, 2008, 129, 104513.	1.2	7
68	Assessment of the Negentropy Based Stopping Time Criterion in the Diffusive Restoration of Digital Images. Computing Letters, 2007, 3, 13-21.	0.5	0
69	X-ray spectrum unfolding using a regularized truncated SVD method. X-Ray Spectrometry, 2006, 35, 63-70.	0.9	20
70	Diffusion equations with negentropy applied to denoise mammographic images. , 2006, 2006, 4751-4.		1
71	A nodal collocation method for the calculation of the lambda modes of the PL equations. Annals of Nuclear Energy, 2005, 32, 1825-1853.	0.9	18
72	Using the Jacobiâ€"Davidson method to obtain the dominant Lambda modes of a nuclear power reactor. Annals of Nuclear Energy, 2005, 32, 1274-1296.	0.9	14

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73	Ancient origin of the CAG expansion causing Huntington disease in a Spanish population. Human Mutation, 2005, 25, 453-459.	1.1	21
74	Nonlinear Diffusion, Negentropy and Restoration of Mammographic Images. , 2005, 2005, 6587-90.		0
75	Vector measure orthonormal systems and self-weighted functions approximation. Publications of the Research Institute for Mathematical Sciences, 2005, 41, 551-563.	0.4	3
76	Peach Bottom Transients Analysis with TRAC/BF1-VALKIN. Nuclear Science and Engineering, 2004, 148, 256-269.	0.5	3
77	Time dependence of linear stability parameters of a BWR. Progress in Nuclear Energy, 2003, 43, 187-194.	1.3	11
78	Analysis of pressure signals using a Singular System Analysis (SSA) methodology. Progress in Nuclear Energy, 2003, 43, 329-336.	1.3	6
79	Parameter estimation in thermalhydraulic models using the multidirectional search method. Annals of Nuclear Energy, 2003, 30, 133-158.	0.9	11
80	BWR stability monitoring using adaptive methods. Annals of Nuclear Energy, 2003, 30, 755-773.	0.9	11
81	1D BWR Nuclear Power Reactor Model to Study Thermal-hydraulic Oscillations. Journal of Computational Methods in Sciences and Engineering, 2003, 3, 445-454.	0.1	0
82	Thermohydraulics Oscillations and Numerical Integration. Nuclear Science and Engineering, 2002, 140, 172-180.	0.5	1
83	Time series analysis and forecasting techniques for municipal solid waste management. Resources, Conservation and Recycling, 2002, 35, 201-214.	5.3	123
84	Iterative schemes for the neutron diffusion equation. Computers and Mathematics With Applications, 2002, 44, 1307-1323.	1.4	9
85	A nodal modal method for the neutron diffusion equation. Application to BWR instabilities analysis. Annals of Nuclear Energy, 2002, 29, 1171-1194.	0.9	52
86	A Transient Modal Analysis of a BWR Instability Event. Journal of Nuclear Science and Technology, 2002, 39, 554-563.	0.7	18
87	Neutronic signal conditioning using a singular system analysis. Annals of Nuclear Energy, 2001, 28, 565-583.	0.9	12
88	Multilevel methods to solve the neutron diffusion equation. Applied Mathematical Modelling, 2001, 25, 463-477.	2.2	6
89	Coupling of density wave oscillations in parallel channels with high order modal kinetics: application to BWR out of phase oscillations. Annals of Nuclear Energy, 2000, 27, 1345-1371.	0.9	33
90	On the regional oscillation phenomenon in BWR's. Progress in Nuclear Energy, 2000, 36, 189-229.	1.3	25

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91	Integration with respect to a vector measure and function approximation. Abstract and Applied Analysis, 2000, 5, 207-226.	0.3	6
92	The implicit restarted Arnoldi method, an efficient alternative to solve the neutron diffusion equation. Annals of Nuclear Energy, 1999, 26, 579-593.	0.9	37
93	Dynamics reconstruction using orthonormal functions. Applied Mathematics Letters, 1999, 12, 39-43.	1.5	34
94	Variational acceleration for Subspace Iteration Method. Application to nuclear power reactors. International Journal for Numerical Methods in Engineering, 1998, 41, 391-407.	1.5	11
95	High order backward discretization of the neutron diffusion equation. Annals of Nuclear Energy, 1998, 25, 47-64.	0.9	28
96	Reactor noise analysis based on the singular value decomposition (SVD). Annals of Nuclear Energy, 1998, 25, 907-921.	0.9	15
97	Modal Decomposition Method for-BWR Stability Analysis. Journal of Nuclear Science and Technology, 1998, 35, 538-546.	0.7	19
98	Modal Decomposition Method for BWR Stability Analysis.. Journal of Nuclear Science and Technology, 1998, 35, 538-546.	0.7	13
99	Optimization of the Subspace Iteration Method for the Lambda Modes Determination of a Nuclear Power Reactor. Journal of Nuclear Science and Technology, 1997, 34, 939-947.	0.7	2
100	New approach to the decay ratio estimation in B.W.R. N.P.P.: Frequency-moments technique. Annals of Nuclear Energy, 1997, 24, 113-133.	0.9	4
101	Eigenvalues calculation algorithms for Î»-modes determination. Parallelization approach. Annals of Nuclear Energy, 1997, 24, 387-410.	0.9	7
102	Complex Lyapunov Exponents from Short and Noisy Sets of Data. Application to Stability Analysis of BWRs. Annals of Nuclear Energy, 1997, 24, 973-994.	0.9	12
103	Optimization of the Subspace Iteration Method for the Lambda Modes Determination of a Nuclear Power Reactor.. Journal of Nuclear Science and Technology, 1997, 34, 939-947.	0.7	4
104	Non linear analysis of out of phase oscillations in boiling water reactors. Annals of Nuclear Energy, 1996, 23, 1301-1335.	0.9	38
105	A consistent multidimensional nodal method for transient calculations. Annals of Nuclear Energy, 1995, 22, 395-410.	0.9	14
106	3D Î»-modes of the neutron-diffusion equation. Annals of Nuclear Energy, 1994, 21, 405-421.	0.9	68
107	Lambda modes of the neutron-diffusion equation: Application to B.W.R.'s out-of-phase instabilities. Annals of Nuclear Energy, 1993, 20, 477-501.	0.9	6
108	Nonrelativistic limit of supersymmetric theories. Journal of Mathematical Physics, 1991, 32, 3500-3508.	0.5	25

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109	Two Techniques for the Analysis of the Local Power Range Monitors Readings~ under BWR Unstable Conditions. , 0, , .		3
110	A Block Arnoldi Method for the SPN Equations. International Journal of Computer Mathematics, 0, , 1-22.	1.0	10
111	A Transient Modal Analysis of a BWR Instability Event. , 0, .		9
112	Utilización de un modelo compartimental de transporte de pesticidas en las prácticas de Química Agrícola y Ambiental. Modelling in Science Education and Learning, 0, 4, 147.	0.1	0
113	Multilevel matrix-free preconditioner to solve linear systems associated with a the time-dependent SPN equations. , 0, , .		0