Ioannis Th Famelis

List of Publications by Year
in descending order

55 papers	787 citations	759055 12 h-index	501076 28 g-index
55 all docs	55 docs citations	55 times ranked	267 citing authors

#	Article	IF	Citations
1	A neural network training algorithm for singular perturbation boundary value problems. Neural Computing and Applications, 2022, 34, 607-615.	3.2	3
2	Parameterized neural network training for the solution of a class of stiff initial value systems. Neural Computing and Applications, 2021, 33, 3363-3370.	3.2	8
3	Neural Network Solution of Single-Delay Differential Equations. Mediterranean Journal of Mathematics, 2020, 17, 1.	0.4	38
4	Neural network solution of pantograph type differential equations. Mathematical Methods in the Applied Sciences, 2020, 43, 3369-3374.	1.2	42
5	On the neural network solution of stiff initial value problems. AIP Conference Proceedings, 2020, , .	0.3	3
6	Extended precision rational Lâˆž approximations to the matrix exponential. AIP Conference Proceedings, 2019, , .	0.3	0
7	Design and Evaluation of a Multidirectional Thermal Flow Sensor on Flexible Substrate. Journal of Sensors, 2019, 2019, 1-10.	0.6	6
8	A new eighth order exponentially fitted explicit Numerov-type method for solving oscillatory problems. Journal of Mathematical Chemistry, 2018, 56, 1456-1466.	0.7	4
9	A highly accurate differential evolutionâ€“particle swarm optimization algorithm for the construction of initial value problem solvers. Engineering Optimization, 2018, 50, 1364-1379.	1.5	15
10	New phase-fitted Runge-Kutta pairs of orders 8(7). AIP Conference Proceedings, 2018, , .	0.3	0
11	Bounds for variable degree rational Lâˆž approximations to the matrix exponential. Applied Mathematics and Computation, 2018, 338, 376-386.	1.4	2
12	A new approach to the construction of DIMSIMs of high order and stage order. Applied Numerical Mathematics, 2017, 119, 79-93.	1.2	2
13	Phase-fitted Rungeâ€“Kutta pairs of orders 8(7). Journal of Computational and Applied Mathematics, 2017, 321, 226-231.	1.1	84
14	High phase-lag order Runge Kutta pairs of orders 8(7). AIP Conference Proceedings, 2017, , .	0.3	1
15	A new Kalman filter based on Information Geometry techniques for optimizing numerical environmental simulations. Stochastic Environmental Research and Risk Assessment, 2017, 31, 1423-1435.	1.9	4
16	Symbolic derivation of Rungeâ€“Kuttaâ€“NystrÃ¶m type order conditions and methods for solving <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si72.gif" overflow="scroll"><mml:mrow><mml:msup><mml:mi>y</mml:mi><mml:mrow><mml:mo>â€²</mml:mo><mml:mo>â€²</mml:mo><mml:mo><m Applied Mathematics and Computation, 2017, 297, 50-60.	1.4	3
17	On the modification of Differential Evolution strategy for the construction of Runge Kutta pairs. MATEC Web of Conferences, 2016, 41, 05001.	0.1	2
18	Particle swarm optimization for complex nonlinear optimization problems. AIP Conference Proceedings, 2016, , .	0.3	5

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19	Evolutionary generation of high order Runge â€“ Kutta â€“ NystrÃ¶m type pairs for solving y(4) = f (x,y). AIP Conference Proceedings, 2016, , .	0.3	2
20	New efficient optimizing techniques for Kalman filters and numerical weather prediction models. AIP Conference Proceedings, 2016, , .	0.3	0
21	On modifications of Rungeâ€“Kuttaâ€“NystrÃ¶m methods for solving <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si60.gif" overflow="scroll"><mml:mrow><mml:msup><mml:mi>y</mml:mi><mml:mrow><mml:mo>(</mml:mo><mml:mn>4</mml:mn><mml:mo>)</mml:mo></mml:mrow></mml:msup><mml:mo>=</mml:mo><mml:mi>f</mml:mi><mml:mo>(</mml:mo><mml:mi>x</mml:mi><mml:mo>,</mml:mo><mml:mi>y</mml:mi><mml:mo>)</mml:mo></mml:mrow></mml:math>. Applied Mathematics and Computation, 2016, 273, 726-734.	1.4	5
22	Minimax vs Pade approximation of matrix exponential for normal and nonnegative matrices. AIP Conference Proceedings, 2015, , .	0.3	2
23	Preface of the â€œSymposium on computational intelligence: Theory and applications on mathematical modeling, optimization and controlâ€• AIP Conference Proceedings, 2015, , .	0.3	0
24	Long-term time-series prediction using radial basis function neural networks. AIP Conference Proceedings, 2015, , .	0.3	1
25	Differential evolution for the derivation of Runge Kutta pairs. AIP Conference Proceedings, 2015, , .	0.3	5
26	QUADRATIC SHOOTING SOLUTION FOR AN ENVIRONMENTAL PARAMETER PREDICTION PROBLEM. Far East Journal of Applied Mathematics, 2015, 91, 81-98.	0.1	4
27	Preface of the "Symposium on computational issues on applications of differential equations in science and engineering". , 2014, , .		0
28	Optimization of numerical weather/wave prediction models based on information geometry and computational techniques. , 2014, , .		0
29	Quadratic RK shooting solution for a environmental parameter prediction boundary value problem. , 2014, , .		0
30	Runge-Kutta solutions for an environmental parameter prediction boundary value problem. Journal of Coupled Systems and Multiscale Dynamics, 2014, 2, 62-69.	0.2	3
31	Classical and Quasi-Newton Methods for a Meteorological Parameters Prediction Boundary Value Problem. Applied Mathematics and Information Sciences, 2014, 8, 2683-2693.	0.7	4
32	On the numerical solution of a boundary value problem which rises in the prediction of meteorological parameters. , 2012, , .		0
33	Using neural networks for the derivation of Rungeâ€“Kuttaâ€“NystrÃ¶m pairs for integration of orbits. New Astronomy, 2012, 17, 469-473.	0.8	8
34	On modified Rungeâ€“Kutta trees and methods. Computers and Mathematics With Applications, 2011, 62, 2101-2111.	1.4	129
35	NEURAL NETWORK-BASED DERIVATION OF EFFICIENT HIGH-ORDER RUNGEâ€“KUTTAâ€“NYSTRÃ–M PAIRS FOR THE INTEGRATION OF ORBITS. International Journal of Modern Physics C, 2011, 22, 1309-1316.	0.8	0
36	NUMEROV-TYPE METHODS FOR OSCILLATORY LINEAR INITIAL VALUE PROBLEMS. International Journal of Modern Physics C, 2009, 20, 383-398.	0.8	4

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37	On the Numerical Solution of Improved Boussinesq Equation by the Method of Lines. , 2009, , .		2
38	Symbolic derivation of Rungeâ€“Kuttaâ€“NystrÃ¶m order conditions. Journal of Mathematical Chemistry, 2009, 46, 896-912.	0.7	38
39	Rungeâ€“Kutta methods for fuzzy differential equations. Applied Mathematics and Computation, 2009, 209, 97-105.	1.4	59
40	Quadratic StÃ¶rmerâ€type methods for the solution of the Boussinesq equation by the method of lines. Numerical Methods for Partial Differential Equations, 2008, 24, 1321-1328.	2.0	4
41	A discrete Adomian decomposition method for discrete nonlinear SchrÃ¶dinger equations. Applied Mathematics and Computation, 2008, 197, 190-205.	1.4	32
42	Symbolic derivation of order conditions for hybrid Numerov-type methods solving <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si47.gif" overflow="scroll"><mml:msup><mml:mrow><mml:mi>y</mml:mi></mml:mrow><mml:mrow><mml:mo>â€³</mml:mo></mml:mrow></ stretchy="false">(</mml:mo><mml:mi>x</mml:mi><mml:mo>,</mml:mo><mml:mi>y</mml:mi><mml:mo) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 11 29 218, 543-555.		
43	Runge Kutta Families for Additive Noise Stochastic Differential Equations.. , 2008, , .		0
44	EXPLICIT EIGHTH ORDER NUMEROV-TYPE METHODS WITH REDUCED NUMBER OF STAGES FOR OSCILLATORY IVPs. International Journal of Modern Physics C, 2008, 19, 957-970.	0.8	10
45	Numerov-Type Method Families for Second Order Linear IVPs with Oscillating Solutions. AIP Conference Proceedings, 2007, , .	0.3	0
46	A parametric finite-difference method for shallow sea waves. International Journal for Numerical Methods in Fluids, 2007, 53, 129-147.	0.9	4
47	Phase-fitted Numerov type methods. Applied Mathematics and Computation, 2007, 184, 23-29.	1.4	6
48	Symbolic derivation of Rungeâ€“Kutta order conditions. Journal of Symbolic Computation, 2004, 37, 311-327.	0.5	36
49	Zero Dissipative, Explicit Numerov-Type Methods for Second Order IVPs with Oscillating Solutions. Numerical Algorithms, 2003, 34, 27-40.	1.1	113
50	Continuous Runge-Kutta-NystrÃ¶m methods for initial value problems with periodic solutions. Computers and Mathematics With Applications, 2001, 42, 1165-1176.	1.4	2
51	EXPLICIT NUMEROV TYPE METHODS FOR SECOND ORDER IVPs WITH OSCILLATING SOLUTIONS. International Journal of Modern Physics C, 2001, 12, 657-666.	0.8	28
52	On using explicit Rungeâ€“Kuttaâ€“NystrÃ¶m methods for the treatment of retarded differential equations with periodic solutions. Applied Mathematics and Computation, 1999, 102, 63-76.	1.4	6
53	A P-stable singly diagonally implicit Rungeâ€“Kuttaâ€“NystrÃ¶m method. Numerical Algorithms, 1998, 17, 345-353.	1.1	24
54	Equilibrium states of adaptive algorithms for delay differential equations. Journal of Computational and Applied Mathematics, 1995, 58, 151-169.	1.1	5

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55	Optimization of the Navyâ€™s three-dimensional mine impact burial prediction simulation model, Impact35, using high-order numerical methods. Journal of Defense Modeling and Simulation, 0, , 154851292110286.	1.2	0