Dimitrios Mitsotakis

List of Publications by Year
in descending order

49 papers	796 citations	471061 17 h-index	552369 26 g-index
49 all docs	49 docs citations	49 times ranked	342 citing authors

#	Article	IF	Citations
1	Deep learning of inverse water waves problems using multi-fidelity data: Application to Serre–Green–Naghdi equations. Ocean Engineering, 2022, 248, 110775.	1.9	37
2	A regularized shallow-water waves system with slip-wall boundary conditions in a basin: theory and numerical analysis. Nonlinearity, 2022, 35, 750-786.	0.6	4
3	A Conservative Fully Discrete Numerical Method for the Regularized Shallow Water Wave Equations. SIAM Journal of Scientific Computing, 2021, 43, B508-B537.	1.3	8
4	A Broad Class of Conservative Numerical Methods for Dispersive Wave Equations. Communications in Computational Physics, 2021, 29, 979-1029.	0.7	14
5	Solitary-wave solutions of Benjamin-Ono and other systems for internal waves. I. approximations. Discrete and Continuous Dynamical Systems, 2021, 41, 87-111.	0.5	2
6	Boussinesq-Peregrine water wave models and their numerical approximation. Journal of Computational Physics, 2020, 417, 109579.	1.9	4
7	Hamiltonian regularisation of shallow water equations with uneven bottom. Journal of Physics A: Mathematical and Theoretical, 2019, 52, 42LT01.	0.7	2
8	On the multi-symplectic structure of Boussinesq-type systems. II: Geometric discretization. Physica D: Nonlinear Phenomena, 2019, 397, 1-16.	1.3	1
9	On some model equations for pulsatile flow in viscoelastic vessels. Wave Motion, 2019, 90, 139-151.	1.0	10
10	Numerical Simulation of Conservation Laws with Moving Grid Nodes: Application to Tsunami Wave Modelling. Geosciences (Switzerland), 2019, 9, 197.	1.0	8
11	Error estimates for Galerkin finite element methods for the Camassa–Holm equation. Numerische Mathematik, 2019, 142, 833-862.	0.9	8
12	On the multi-symplectic structure of Boussinesq-type systems. I: Derivation and mathematical properties. Physica D: Nonlinear Phenomena, 2019, 388, 10-21.	1.3	3
13	Numerical approximation to Benjamin type equations. Generation and stability of solitary waves. Wave Motion, 2019, 85, 34-56.	1.0	6
14	Peregrine's System Revisited. , 2018, , 3-43.		5
15	Solitary wave solutions and their interactions for fully nonlinear water waves with surface tension in the generalized Serre equations. Theoretical and Computational Fluid Dynamics, 2018, 32, 371-397.	0.9	8
16	Asymptotic nonlinear and dispersive pulsatile flow in elastic vessels with cylindrical symmetry. Computers and Mathematics With Applications, 2018, 75, 4022-4047.	1.4	2
17	On the reflection of solitons of the cubic nonlinear Schrödinger equation. Mathematical Methods in the Applied Sciences, 2018, 41, 1013-1018.	1.2	6
18	Dispersive Shallow Water Wave Modelling. Part I: Model Derivation on a Globally Flat Space. Communications in Computational Physics, 2018, 23, .	0.7	6

#	Article	IF	Citations
19	Error Estimates for Galerkin Approximations of the Serre Equations. SIAM Journal on Numerical Analysis, 2017, 55, 841-868.	1.1	8
20	On weakly singular and fully nonlinear travelling shallow capillaryâ€"gravity waves in the critical regime. Physics Letters, Section A: General, Atomic and Solid State Physics, 2017, 381, 1719-1726.	0.9	6
21	Conservative modified Serreâ€"Greenâ€"Naghdi equations with improved dispersion characteristics. Communications in Nonlinear Science and Numerical Simulation, 2017, 45, 245-257.	1.7	40
22	A modified Galerkin/finite element method for the numerical solution of the Serreâ€"Greenâ€"Naghdi system. International Journal for Numerical Methods in Fluids, 2017, 83, 755-778.	0.9	21
23	On the nonlinear dynamics of the traveling-wave solutions of the Serre system. Wave Motion, 2017, 70, 166-182.	1.0	11
24	Numerical approximation of solitary waves of the Benjamin equation. Mathematics and Computers in Simulation, 2016, 127, 56-79.	2.4	16
25	Mechanical balance laws for fully nonlinear and weakly dispersive water waves. Physica D: Nonlinear Phenomena, 2016, 333, 243-253.	1.3	9
26	A new run-up algorithm based on local high-order analytic expansions. Journal of Computational and Applied Mathematics, 2016, 298, 82-96.	1.1	8
27	Singular Solutions of a Boussinesq System for Water Waves. Journal of Mathematical Study, 2016, 49, 205-220.	0.6	5
28	Legendre Pseudospectral Approximation of Boussinesq Systems and Applications to Wave Breaking. Journal of Mathematical Study, 2016, 49, 221-237.	0.6	3
29	Numerical solution of the Benjamin equation. Wave Motion, 2015, 52, 194-215.	1.0	10
30	On the Galerkin/Finite-Element Method for the Serre Equations. Journal of Scientific Computing, 2014, 61, 166-195.	1.1	46
31	Finite volume methods for unidirectional dispersive wave models. International Journal for Numerical Methods in Fluids, 2013, 71, 717-736.	0.9	33
32	On the Galilean Invariance of Some Nonlinear Dispersive Wave Equations. Studies in Applied Mathematics, 2013, 131, 359-388.	1.1	21
33	On the use of the finite fault solution for tsunami generation problems. Theoretical and Computational Fluid Dynamics, 2013, 27, 177-199.	0.9	22
34	Finite volume and pseudo-spectral schemes for the fully nonlinear 1D Serre equations. European Journal of Applied Mathematics, 2013, 24, 761-787.	1.4	57
35	On the contribution of the horizontal sea-bed displacements into the tsunami generation process. Ocean Modelling, 2012, 56, 43-56.	1.0	22
36	Dispersive waves generated by an underwater landslide. , 2012, , 245-250.		2

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37	Finite volume schemes for dispersive wave propagation and runup. Journal of Computational Physics, 2011, 230, 3035-3061.	1.9	71
38	Long Wave Run-Up on Random Beaches. Physical Review Letters, 2011, 107, 184504.	2.9	16
39	Dispersive wave runup on non-uniform shores. Springer Proceedings in Mathematics, 2011, , 389-397.	0.5	6
40	Boussinesq Systems of Bona-Smith Type on Plane Domains: Theory and Numerical Analysis. Journal of Scientific Computing, 2010, 44, 109-135.	1.1	17
41	Numerical solution of Boussinesq systems of the Bonaâ€"Smith family. Applied Numerical Mathematics, 2010, 60, 314-336.	1.2	32
42	On the relevance of the dam break problem in the context of nonlinear shallow water equations. Discrete and Continuous Dynamical Systems - Series B, 2010, 13, 799-818.	0.5	8
43	Boussinesq systems in two space dimensions over a variable bottom for the generation and propagation of tsunami waves. Mathematics and Computers in Simulation, 2009, 80, 860-873.	2.4	33
44	On initial-boundary value problems for a Boussinesq system of BBM-BBM type in a plane domain. Discrete and Continuous Dynamical Systems, 2009, 23, 1191-1204.	0.5	18
45	Numerical solution of Boussinesq systems of KdVâ€"KdV type: II. Evolution of radiating solitary waves. Nonlinearity, 2008, 21, 2825-2848.	0.6	29
46	On some Boussinesq systems in two space dimensions: theory and numerical analysis. ESAIM: Mathematical Modelling and Numerical Analysis, 2007, 41, 825-854.	0.8	24
47	A Numerical Study of the Stability of Solitary Waves ofÂtheÂBonaâ€"Smith Family of Boussinesq Systems. Journal of Nonlinear Science, 2007, 17, 569-607.	1.0	27
48	Numerical solution of KdVâ€"KdV systems of Boussinesq equations. Mathematics and Computers in Simulation, 2007, 74, 214-228.	2.4	37
49	SOLITARY WAVES OF THE BONA - SMITH SYSTEM. , 2004, , .		4