

# Dimitrios Mitsotakis

## List of Publications by Year in descending order

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49  
papers

796  
citations

471061  
17  
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552369  
26  
g-index

49  
all docs

49  
docs citations

49  
times ranked

342  
citing authors

#	ARTICLE	IF	CITATIONS
1	Finite volume schemes for dispersive wave propagation and runup. Journal of Computational Physics, 2011, 230, 3035-3061.	1.9	71
2	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
3	On the Galerkin/Finite-Element Method for the Serre Equations. Journal of Scientific Computing, 2014, 61, 166-195.	1.1	46
4	Conservative modified Serre-Green-Naghdi equations with improved dispersion characteristics. Communications in Nonlinear Science and Numerical Simulation, 2017, 45, 245-257.	1.7	40
5	Numerical solution of KdV-KdV systems of Boussinesq equations. Mathematics and Computers in Simulation, 2007, 74, 214-228.	2.4	37
6	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
7	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
8	Finite volume methods for unidirectional dispersive wave models. International Journal for Numerical Methods in Fluids, 2013, 71, 717-736.	0.9	33
9	Numerical solution of Boussinesq systems of the Bona-Smith family. Applied Numerical Mathematics, 2010, 60, 314-336.	1.2	32
10	Numerical solution of Boussinesq systems of KdV-KdV type: II. Evolution of radiating solitary waves. Nonlinearity, 2008, 21, 2825-2848.	0.6	29
11	A Numerical Study of the Stability of Solitary Waves of the Bona-Smith Family of Boussinesq Systems. Journal of Nonlinear Science, 2007, 17, 569-607.	1.0	27
12	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
13	On the contribution of the horizontal sea-bed displacements into the tsunami generation process. Ocean Modelling, 2012, 56, 43-56.	1.0	22
14	On the use of the finite fault solution for tsunami generation problems. Theoretical and Computational Fluid Dynamics, 2013, 27, 177-199.	0.9	22
15	On the Galilean Invariance of Some Nonlinear Dispersive Wave Equations. Studies in Applied Mathematics, 2013, 131, 359-388.	1.1	21
16	A modified Galerkin/finite element method for the numerical solution of the Serre-Green-Naghdi system. International Journal for Numerical Methods in Fluids, 2017, 83, 755-778.	0.9	21
17	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
18	Boussinesq Systems of Bona-Smith Type on Plane Domains: Theory and Numerical Analysis. Journal of Scientific Computing, 2010, 44, 109-135.	1.1	17

#	ARTICLE	IF	CITATIONS
19	Long Wave Run-Up on Random Beaches. <i>Physical Review Letters</i> , 2011, 107, 184504.	2.9	16
20	Numerical approximation of solitary waves of the Benjamin equation. <i>Mathematics and Computers in Simulation</i> , 2016, 127, 56-79.	2.4	16
21	A Broad Class of Conservative Numerical Methods for Dispersive Wave Equations. <i>Communications in Computational Physics</i> , 2021, 29, 979-1029.	0.7	14
22	On the nonlinear dynamics of the traveling-wave solutions of the Serre system. <i>Wave Motion</i> , 2017, 70, 166-182.	1.0	11
23	Numerical solution of the Benjamin equation. <i>Wave Motion</i> , 2015, 52, 194-215.	1.0	10
24	On some model equations for pulsatile flow in viscoelastic vessels. <i>Wave Motion</i> , 2019, 90, 139-151.	1.0	10
25	Mechanical balance laws for fully nonlinear and weakly dispersive water waves. <i>Physica D: Nonlinear Phenomena</i> , 2016, 333, 243-253.	1.3	9
26	A new run-up algorithm based on local high-order analytic expansions. <i>Journal of Computational and Applied Mathematics</i> , 2016, 298, 82-96.	1.1	8
27	Error Estimates for Galerkin Approximations of the Serre Equations. <i>SIAM Journal on Numerical Analysis</i> , 2017, 55, 841-868.	1.1	8
28	Solitary wave solutions and their interactions for fully nonlinear water waves with surface tension in the generalized Serre equations. <i>Theoretical and Computational Fluid Dynamics</i> , 2018, 32, 371-397.	0.9	8
29	Numerical Simulation of Conservation Laws with Moving Grid Nodes: Application to Tsunami Wave Modelling. <i>Geosciences (Switzerland)</i> , 2019, 9, 197.	1.0	8
30	Error estimates for Galerkin finite element methods for the Camassa-Holm equation. <i>Numerische Mathematik</i> , 2019, 142, 833-862.	0.9	8
31	A Conservative Fully Discrete Numerical Method for the Regularized Shallow Water Wave Equations. <i>SIAM Journal of Scientific Computing</i> , 2021, 43, B508-B537.	1.3	8
32	On the relevance of the dam break problem in the context of nonlinear shallow water equations. <i>Discrete and Continuous Dynamical Systems - Series B</i> , 2010, 13, 799-818.	0.5	8
33	On weakly singular and fully nonlinear travelling shallow capillary-gravity waves in the critical regime. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 2017, 381, 1719-1726.	0.9	6
34	On the reflection of solitons of the cubic nonlinear Schrödinger equation. <i>Mathematical Methods in the Applied Sciences</i> , 2018, 41, 1013-1018.	1.2	6
35	Numerical approximation to Benjamin type equations. Generation and stability of solitary waves. <i>Wave Motion</i> , 2019, 85, 34-56.	1.0	6
36	Dispersive wave runup on non-uniform shores. <i>Springer Proceedings in Mathematics</i> , 2011, , 389-397.	0.5	6

#	ARTICLE	IF	CITATIONS
37	Dispersive Shallow Water Wave Modelling. Part I: Model Derivation on a Globally Flat Space. Communications in Computational Physics, 2018, 23, .	0.7	6
38	Peregrine's System Revisited. , 2018, , 3-43.		5
39	Singular Solutions of a Boussinesq System for Water Waves. Journal of Mathematical Study, 2016, 49, 205-220.	0.6	5
40	Boussinesq-Peregrine water wave models and their numerical approximation. Journal of Computational Physics, 2020, 417, 109579.	1.9	4
41	SOLITARY WAVES OF THE BONA - SMITH SYSTEM. , 2004, , .		4
42	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
43	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
44	Legendre Pseudospectral Approximation of Boussinesq Systems and Applications to Wave Breaking. Journal of Mathematical Study, 2016, 49, 221-237.	0.6	3
45	Asymptotic nonlinear and dispersive pulsatile flow in elastic vessels with cylindrical symmetry. Computers and Mathematics With Applications, 2018, 75, 4022-4047.	1.4	2
46	Hamiltonian regularisation of shallow water equations with uneven bottom. Journal of Physics A: Mathematical and Theoretical, 2019, 52, 42LT01.	0.7	2
47	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
48	Dispersive waves generated by an underwater landslide. , 2012, , 245-250.		2
49	On the multi-symplectic structure of Boussinesq-type systems. II: Geometric discretization. Physica D: Nonlinear Phenomena, 2019, 397, 1-16.	1.3	1