As Fokas

List of Publications by Year
in descending order

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50 papers	3,638 citations	304743 22 h-index	233421 45 g-index
51 all docs	51 docs citations	51 times ranked	990 citing authors

#	Article	IF	Citations
1	Symplectic structures, their BÃcklund transformations and hereditary symmetries. Physica D: Nonlinear Phenomena, 1981, 4, 47-66.	2.8	1,420
2	On a class of physically important integrable equations. Physica D: Nonlinear Phenomena, 1995, 87, 145-150.	2.8	449
3	Dromions and a boundary value problem for the Davey-Stewartson 1 equation. Physica D: Nonlinear Phenomena, 1990, 44, 99-130.	2.8	222
4	Integrable Nonlinear Evolution Equations on the Half-Line. Communications in Mathematical Physics, 2002, 230, 1-39.	2.2	217
5	The hierarchy of the Benjamin-Ono equation. Physics Letters, Section A: General, Atomic and Solid State Physics, 1981, 86, 341-345.	2.1	179
6	Twoâ€“dimensional linear partial differential equations in a convex polygon. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2001, 457, 371-393.	2.1	103
7	Interaction of lumps with a line soliton for the DSII equation. Physica D: Nonlinear Phenomena, 2001, 152-153, 189-198.	2.8	80
8	An initial-boundary value problem for the nonlinear SchrÃ¶dinger equation. Physica D: Nonlinear Phenomena, 1989, 35, 167-185.	2.8	76
9	BÃcklund transformations for hereditary symmetries. Nonlinear Analysis: Theory, Methods & Applications, 1981, 5, 423-432.	1.1	73
10	A method of linearization for PainlevÃ© equations: PainlevÃ© IV, V. Physica D: Nonlinear Phenomena, 1988, 30, 247-283.	2.8	53
11	An initial-boundary value problem for the Kortewegâ€“de Vries equation. Mathematics and Computers in Simulation, 1994, 37, 293-321.	4.4	52
12	A hybrid analyticalâ€“numerical method for solving evolution partial differential equations. I. The half-line. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2008, 464, 1823-1849.	2.1	51
13	Quadratic and cubic invariants in classical mechanics. Journal of Mathematical Analysis and Applications, 1980, 74, 325-341.	1.0	50
14	An analytical method for linear elliptic PDEs and its numerical implementation. Journal of Computational and Applied Mathematics, 2004, 167, 465-483.	2.0	41
15	The generalized Dirichletâ€“Neumann map for linear elliptic PDEs and its numerical implementation. Journal of Computational and Applied Mathematics, 2008, 219, 9-34.	2.0	40
16	A formula for constructing infinitely many surfaces on Lie algebras and integrable equations. Selecta Mathematica, New Series, 2000, 6, 347-375.	1.0	39
17	Reconstruction algorithm for single photon emission computed tomography and its numerical implementation. Journal of the Royal Society Interface, 2006, 3, 45-54.	3.4	38
18	Soliton cellular automata. Physica D: Nonlinear Phenomena, 1990, 41, 297-321.	2.8	35

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19	Electroâ€“magneto-encephalography for a three-shell model: distributed current in arbitrary, spherical and ellipsoidal geometries. Journal of the Royal Society Interface, 2009, 6, 479-488.	3.4	35
20	The basic elliptic equations in an equilateral triangle. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2005, 461, 2721-2748.	2.1	29
21	A semi-analytical numerical method for solving evolution and elliptic partial differential equations. Journal of Computational and Applied Mathematics, 2009, 227, 59-74.	2.0	28
22	The scaling reduction of the three-wave resonant system and the PainlevÃ© VI equation. Physics Letters, Section A: General, Atomic and Solid State Physics, 1986, 115, 329-332.	2.1	26
23	Initialâ€“boundary value problems associated with the Ablowitzâ€“Ladik system. Physica D: Nonlinear Phenomena, 2018, 364, 27-61.	2.8	23
24	Group theoretical aspects of constants of motion and separable solutions in classical mechanics. Journal of Mathematical Analysis and Applications, 1979, 68, 347-370.	1.0	22
25	Localised coherent solutions of the DSI and DSII equationsâ€”a numerical study. Mathematics and Computers in Simulation, 2005, 69, 424-438.	4.4	21
26	Evolution of methacrylate distribution during wood saturation. Applied Mathematics Letters, 2005, 18, 321-328.	2.7	21
27	A quantitative framework for exploring exit strategies from the COVID-19 lockdown. Chaos, Solitons and Fractals, 2020, 140, 110244.	5.1	21
28	Coherent structures in cellular automata. Physics Letters, Section A: General, Atomic and Solid State Physics, 1990, 147, 369-379.	2.1	19
29	Soliton multidimensional equations and integrable evolutions preserving Laplace's equation. Physics Letters, Section A: General, Atomic and Solid State Physics, 2008, 372, 1277-1279.	2.1	19
30	On the construction of evolution equations admitting aÂmasterÂsymmetry. Physics Letters, Section A: General, Atomic and Solid State Physics, 2002, 293, 36-44.	2.1	15
31	Lax pairs and a new spectral method for linear and integrable nonlinear PDEs. Selecta Mathematica, New Series, 1998, 4, 31-68.	1.0	14
32	A Riemannâ€“Hilbert Approach to the Laplace Equation. Journal of Mathematical Analysis and Applications, 2000, 251, 770-804.	1.0	14
33	On the structure, masses and thermodynamics of the W<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si27.gif" display="inline" overflow="scroll"><mml:msup><mml:mrow /><mml:mrow><mml:mo>Â±</mml:mo></mml:mrow></mml:msup></mml:math>bosons. Physica A: Statistical Mechanics and its Applications, 2016, 450, 37-48.	2.6	14
34	Note on solutions to a class of nonlinear singular integro-differential equations. Physics Letters, Section A: General, Atomic and Solid State Physics, 1987, 120, 215-218.	2.1	13
35	The direct linearizing transform and the Benjamin-Ono equation. Physics Letters, Section A: General, Atomic and Solid State Physics, 1983, 93, 375-378.	2.1	12
36	The Kadomtsevâ€“Petviashvili II equation on the half-plane. Physica D: Nonlinear Phenomena, 2011, 240, 477-511.	2.8	10

#	Article	IF	Citations
37	Dynamical complexity in the C.elegans neural network. European Physical Journal: Special Topics, 2016, 225, 1255-1269.	2.6	10
38	On the structure, mass and thermodynamics of the Z<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si9.gif" display="inline" overflow="scroll"><mml:msup><mml:mrow /><mml:mrow><mml:mi>o</mml:mi></mml:mrow></mml:msup></mml:math> bosons. Physica A: Statistical Mechanics and Its Applications, 2016, 464, 231-240.	2.6	9
39	Catalysis and autocatalysis of chemical synthesis and of hadronization. Applied Catalysis B: Environmental, 2017, 203, 582-590.	20.2	9
40	On the mass and thermodynamics of the Higgs boson. Physica A: Statistical Mechanics and Its Applications, 2018, 492, 737-746.	2.6	8
41	On the use of Lie-BÃcklund operators in quantum mechanics. Journal of Mathematical Analysis and Applications, 1980, 74, 342-358.	1.0	5
42	The dressing method, symmetries, and invariant solutions. Physics Letters, Section A: General, Atomic and Solid State Physics, 1990, 150, 369-374.	2.1	5
43	Elliptic equations with low regularity boundary data via the unified method. Complex Variables and Elliptic Equations, 2015, 60, 596-619.	0.8	5
44	An iterative spatial-stepping numerical method for linear elliptic PDEs using the Unified Transform. Journal of Computational and Applied Mathematics, 2019, 352, 194-209.	2.0	4
45	Computation of masses and binding energies of some hadrons and bosons according to the rotating lepton model and the relativistic Newton equation. Journal of Physics: Conference Series, 2016, 738, 012080.	0.4	2
46	Analytical reconstructions for PET and spect employing L¹-denoising. , 2009, , .		1
47	Integrable Systems and the Inverse Scattering Method. , 2006, , 93-101.		1
48	A new spectral transform for solving the continuous and spatially discrete heat equations on simple trees. , 1999, , 178-194.		0
49	Solitons. , 2003, , 329-340.		0
50	Gravitationally confined relativistic neutrinos. Journal of Physics: Conference Series, 2017, 888, 012174.	0.4	0