

Athanassios S Fokas

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/5210965/publications.pdf>

Version: 2024-02-01

294
papers

14,527
citations

22548

61
h-index

29333

108
g-index

303
all docs

303
docs citations

303
times ranked

2979
citing authors

#	ARTICLE	IF	CITATIONS
1	Reconstruction of Preclinical PET Images via Chebyshev Polynomial Approximation of the Sinogram. Applied Sciences (Switzerland), 2022, 12, 3335.	1.3	3
2	Simple Formulae, Deep Learning and Elaborate Modelling for the COVID-19 Pandemic. Encyclopedia, 2022, 2, 679-689.	2.4	1
3	Accounting for super-spreader events and algebraic decay in SIR models. Computer Methods in Applied Mechanics and Engineering, 2022, , 115286.	3.4	6
4	A new approach to integrable evolution equations on the circle. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2021, 477, 20200605.	1.0	7
5	The implementation of the unified transform to the nonlinear Schrödinger equation with periodic initial conditions. Letters in Mathematical Physics, 2021, 111, 1.	0.5	9
6	Easing COVID-19 lockdown measures while protecting the older restricts the deaths to the level of the full lockdown. Scientific Reports, 2021, 11, 5839.	1.6	14
7	Solving the Initial Value Problem for the 3-Wave Interaction Equations in Multidimensions. Computational Methods and Function Theory, 2021, 21, 9-39.	0.8	1
8	Doubly Localized Two-Dimensional Rogue Waves in the Davey-Stewartson I Equation. Journal of Nonlinear Science, 2021, 31, 1.	1.0	45
9	Covid-19: predictive mathematical formulae for the number of deaths during lockdown and possible scenarios for the post-lockdown period. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2021, 477, 20200745.	1.0	7
10	SARS-CoV-2: The Second Wave in Europe. Journal of Medical Internet Research, 2021, 23, e22431.	2.1	10
11	The unified transform for evolution equations on the half-line with time-periodic boundary conditions*. Studies in Applied Mathematics, 2021, 147, 1339-1368.	1.1	4
12	Explicit asymptotics for certain single and double exponential sums. Proceedings of the Royal Society of Edinburgh Section A: Mathematics, 2020, 150, 607-632.	0.8	2
13	Electro-magnetoencephalography for a spherical multiple-shell model: novel integral operators with singular-value decompositions. Inverse Problems, 2020, 36, 035003.	1.0	2
14	A quantitative framework for exploring exit strategies from the COVID-19 lockdown. Chaos, Solitons and Fractals, 2020, 140, 110244.	2.5	21
15	Mathematical models and deep learning for predicting the number of individuals reported to be infected with SARS-CoV-2. Journal of the Royal Society Interface, 2020, 17, 20200494.	1.5	53
16	The Modified Helmholtz Equation on a Regular Hexagon—The Symmetric Dirichlet Problem. Axioms, 2020, 9, 89.	0.9	1
17	Fokas method for linear boundary value problems involving mixed spatial derivatives. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2020, 476, 20200076.	1.0	10
18	A hybrid analytical-numerical algorithm for determining the neuronal current via electroencephalography. Journal of the Royal Society Interface, 2020, 17, 20190831.	1.5	4

#	ARTICLE	IF	CITATIONS
19	Linearizable boundary value problems for the elliptic sine-Gordon and the elliptic Ernst equations. <i>Journal of Nonlinear Mathematical Physics</i> , 2020, 27, 337.	0.8	0
20	A Novel Integral Equation for the Riemann Zeta Function and Large t-Asymptotics. <i>Mathematics</i> , 2019, 7, 650.	1.1	1
21	Relations among the Riemann Zeta and Hurwitz Zeta Functions, as Well as Their Products. <i>Symmetry</i> , 2019, 11, 754.	1.1	2
22	Evolution equations on time-dependent intervals. <i>IMA Journal of Applied Mathematics</i> , 2019, 84, 1044-1060.	0.8	3
23	A novel approach to the Lindelöf hypothesis. <i>Transactions of Mathematics and Its Applications</i> , 2019, 3, .	1.6	1
24	An iterative spatial-stepping numerical method for linear elliptic PDEs using the Unified Transform. <i>Journal of Computational and Applied Mathematics</i> , 2019, 352, 194-209.	1.1	4
25	A hybrid analytical-numerical method for solving advection-dispersion problems on a half-line. <i>International Journal of Heat and Mass Transfer</i> , 2019, 139, 482-491.	2.5	23
26	Ultra-relativistic gravity has properties associated with the strong force. <i>European Physical Journal C</i> , 2019, 79, 1.	1.4	2
27	The unified transform for mixed boundary condition problems in unbounded domains. <i>Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences</i> , 2019, 475, 20180605.	1.0	16
28	Helmholtz decomposition of the neuronal current for the ellipsoidal head model. <i>Inverse Problems</i> , 2019, 35, 025002.	1.0	6
29	A parallel unified transform solver based on domain decomposition for solving linear elliptic PDEs. <i>Journal of Supercomputing</i> , 2019, 75, 4947-4985.	2.4	0
30	Numerical Evaluation of Fokas's™ Transform Solution of the Heat Equation on the Half-Line. <i>Studies in Computational Intelligence</i> , 2019, , 245-256.	0.7	0
31	A New Approach for the Inversion of the Attenuated Radon Transform. <i>Springer Optimization and Its Applications</i> , 2019, , 433-457.	0.6	1
32	The Unified Transform and the Water Wave Problem. <i>Tutorials, Schools, and Workshops in the Mathematical Sciences</i> , 2019, , 35-52.	0.3	0
33	Generalised Dirichlet to Neumann maps for linear dispersive equations on half-line. <i>Mathematical Proceedings of the Cambridge Philosophical Society</i> , 2018, 164, 297-324.	0.3	4
34	Uniform asymptotics as a stationary point approaches an endpoint. <i>IMA Journal of Applied Mathematics</i> , 2018, 83, 204-242.	0.8	1
35	EEG for Current With Two-Dimensional Support. <i>IEEE Transactions on Biomedical Engineering</i> , 2018, 65, 2101-2108.	2.5	4
36	Initial-boundary value problems associated with the Ablowitz-Ladik system. <i>Physica D: Nonlinear Phenomena</i> , 2018, 364, 27-61.	1.3	23

#	ARTICLE	IF	CITATIONS
37	Computing eigenvalues and eigenfunctions of the Laplacian for convex polygons. Applied Numerical Mathematics, 2018, 126, 1-17.	1.2	9
38	On the mass and thermodynamics of the Higgs boson. Physica A: Statistical Mechanics and Its Applications, 2018, 492, 737-746.	1.2	8
39	The attenuated spline reconstruction technique for single photon emission computed tomography. Journal of the Royal Society Interface, 2018, 15, 20180509.	1.5	12
40	Equations of motion of self-gravitating N -body systems in the first post-Minkowskian approximation. Physical Review D, 2018, 98, .	1.6	25
41	Complexification and integrability in multidimensions. Journal of Mathematical Physics, 2018, 59, 091413.	0.5	16
42	Rogue waves of the nonlocal Davey-Stewartson I equation. Nonlinearity, 2018, 31, 4090-4107.	0.6	78
43	Asymptotics to all orders of the Hurwitz zeta function. Journal of Mathematical Analysis and Applications, 2018, 465, 423-458.	0.5	5
44	Solving PDEs of fractional order using the unified transform method. Applied Mathematics and Computation, 2018, 339, 738-749.	1.4	38
45	Water waves with moving boundaries. Journal of Fluid Mechanics, 2017, 832, 641-665.	1.4	7
46	Linear Elliptic PDEs in a Cylindrical Domain with a Polygonal Cross-Section. Studies in Applied Mathematics, 2017, 139, 288-321.	1.1	3
47	Catalysis and autocatalysis of chemical synthesis and of hadronization. Applied Catalysis B: Environmental, 2017, 203, 582-590.	10.8	9
48	Fractal analysis of tree paintings by Piet Mondrian (1872-1944). International Journal of Arts and Technology, 2017, 10, 27.	0.1	8
49	Preface: Mark J. Ablowitz, nonlinear waves and integrable systems. Part I. Studies in Applied Mathematics, 2016, 137, 3-9.	1.1	1
50	On the structure, mass and thermodynamics of the Z^9 bosons. Physica A: Statistical Mechanics and Its Applications, 2016, 464, 231-240.	1.2	9
51	The nonlinear Schrödinger equation on the half-line. Transactions of the American Mathematical Society, 2016, 369, 681-709.	0.5	56
52	aSRT: A new analytic reconstruction algorithm for SPECT. , 2016, , .		0
53	Preface: Mark J. Ablowitz, nonlinear waves and integrable systems. Part II. Studies in Applied Mathematics, 2016, 137, 157-158.	1.1	0
54	The Korteweg-de Vries equation on the half-line. Nonlinearity, 2016, 29, 489-527.	0.6	43

#	ARTICLE	IF	CITATIONS
55	Integrable multidimensional versions of the nonlocal nonlinear Schrödinger equation. Nonlinearity, 2016, 29, 319-324.	0.6	209
56	On the structure, masses and thermodynamics of the W bosons. Physica A: Statistical Mechanics and Its Applications, 2016, 450, 37-48.	1.2	14
57	The SRT reconstruction algorithm for semiquantification in PET imaging. Medical Physics, 2015, 42, 5970-5982.	1.6	5
58	The unified transform for the heat equation: II. Non-separable boundary conditions in two dimensions. European Journal of Applied Mathematics, 2015, 26, 887-916.	1.4	5
59	The nonlinear Schrödinger equation with τ -periodic data: II. Perturbative results. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2015, 471, 20140926.	1.0	14
60	Characterization of an acoustic spherical cloak. Inverse Problems, 2015, 31, 035001.	1.0	1
61	A numerical technique for linear elliptic partial differential equations in polygonal domains. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2015, 471, 20140747.	1.0	16
62	Linearisable nonlinear partial differential equations in multidimensions. Journal of Mathematical Physics, 2015, 56, 013511.	0.5	4
63	The Poisson and the Biharmonic Equations in the Interior of a Convex Polygon. Studies in Applied Mathematics, 2015, 134, 456-498.	1.1	4
64	The nonlinear Schrödinger equation with τ -periodic data: I. Exact results. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2015, 471, 20140925.	1.0	16
65	Riemann-Hilbert Methods. , 2015, , 1260-1268.		0
66	The unified transform for linear, linearizable and integrable nonlinear partial differential equations. Physica Scripta, 2014, 89, 038004.	1.2	3
67	Chapter 3: Evolution Problems: Nonlinear. , 2014, , 49-60.		1
68	Chapter 7: Numerical Methods for Elliptic Problems. , 2014, , 163-258.		1
69	Perturbative and Exact Results on the Neumann Value for the Nonlinear Schrödinger on the Half-line. Journal of Physics: Conference Series, 2014, 482, 012015.	0.3	1
70	Eigenvalues for the Laplace Operator in the Interior of an Equilateral Triangle. Computational Methods and Function Theory, 2014, 14, 1-33.	0.8	11
71	A Bohr-type model of a composite particle using gravity as the attractive force. Physica A: Statistical Mechanics and Its Applications, 2014, 405, 360-379.	1.2	17
72	Boundary Value Problems for the Elliptic Sine-Gordon Equation in a Semi-strip. Journal of Nonlinear Science, 2013, 23, 241-282.	1.0	19

#	ARTICLE	IF	CITATIONS
73	Davey-Stewartson type equations in 4+2 and 3+1 possessing soliton solutions. Journal of Mathematical Physics, 2013, 54, 081504.	0.5	22
74	Rogue wave management in an inhomogeneous Nonlinear Fibre with higher order effects. Journal of Nonlinear Mathematical Physics, 2013, 20, 407.	0.8	47
75	Generating mechanism for higher-order rogue waves. Physical Review E, 2013, 87, 052914.	0.8	288
76	The Laplace equation in the exterior of the Hankel contour and novel identities for hypergeometric functions. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2013, 469, 20130081.	1.0	3
77	The unified method for the heat equation: I. non-separable boundary conditions and non-local constraints in one dimension. European Journal of Applied Mathematics, 2013, 24, 857-886.	1.4	18
78	The Modified Korteweg-de Vries Equation on the Half-Line with a Sine-Wave as Dirichlet Datum. Journal of Nonlinear Mathematical Physics, 2013, 20, 135.	0.8	15
79	The definite non-uniqueness results for deterministic EEG and MEG data. Inverse Problems, 2013, 29, 065012.	1.0	20
80	Electro-magneto-encephalography for the three-shell model: numerical implementation via splines for distributed current in spherical geometry. Inverse Problems, 2012, 28, 035009.	1.0	21
81	Electro-magneto-encephalography for the three-shell model: minimal L^2 -norm in spherical geometry. Inverse Problems, 2012, 28, 035010.	1.0	5
82	The Dirichlet-to-Neumann map for the elliptic sine-Gordon equation. Nonlinearity, 2012, 25, 1011-1031.	0.6	24
83	The unified method: II. NLS on the half-line with i -periodic boundary conditions. Journal of Physics A: Mathematical and Theoretical, 2012, 45, 195202.	0.7	66
84	The unified method: I. Nonlinearizable problems on the half-line. Journal of Physics A: Mathematical and Theoretical, 2012, 45, 195201.	0.7	94
85	ON A NOVEL CLASS OF INTEGRABLE ODEs RELATED TO THE PAINLEVÉ EQUATIONS. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2012, 22, 1250211.	0.7	4
86	Water waves over a variable bottom: a non-local formulation and conformal mappings. Journal of Fluid Mechanics, 2012, 695, 288-309.	1.4	35
87	Synthesis, as Opposed to Separation, of Variables. SIAM Review, 2012, 54, 291-324.	4.2	69
88	The unified method: III. Nonlinearizable problems on the interval. Journal of Physics A: Mathematical and Theoretical, 2012, 45, 195203.	0.7	31
89	Electro-magneto-encephalography for the three-shell model : a single dipole in ellipsoidal geometry. Mathematical Methods in the Applied Sciences, 2012, 35, 1415-1422.	1.2	9
90	Hamiltonians and conjugate Hamiltonians of some fourth-order nonlinear ODEs. Nonlinear Analysis: Theory, Methods & Applications, 2012, 75, 2126-2138.	0.6	2

#	ARTICLE	IF	CITATIONS
91	Generalized Dirichlet-Neumann Map in Time-Dependent Domains. Studies in Applied Mathematics, 2012, 129, 51-90.	1.1	10
92	The Kadomtsev-Petviashvili II equation on the half-plane. Physica D: Nonlinear Phenomena, 2011, 240, 477-511.	1.3	10
93	Evaluation of a Spline Reconstruction Technique for SPECT: Comparison with FBP and OSEM. , 2011, , .		4
94	A non-local formulation of rotational water waves. Journal of Fluid Mechanics, 2011, 689, 129-148.	1.4	30
95	Boundary-value problems for the stationary axisymmetric Einstein equations: a rotating disc. Nonlinearity, 2011, 24, 177-206.	0.6	26
96	The Heat Equation in the Interior of an Equilateral Triangle. Studies in Applied Mathematics, 2010, 124, 283-305.	1.1	16
97	Laplace's equation in the exterior of a convex polygon. The equilateral triangle. Quarterly of Applied Mathematics, 2010, 68, 645-660.	0.5	5
98	A new transform method I: domain-dependent fundamental solutions and integral representations. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2010, 466, 2259-2281.	1.0	21
99	A new transform method II: the global relation and boundary-value problems in polar coordinates. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2010, 466, 2283-2307.	1.0	20
100	Evaluation of a spline reconstruction technique: Comparison with FBP, MLEM and OSEM. , 2010, , .		8
101	A spectral collocation method for the Laplace and modified Helmholtz equations in a convex polygon. IMA Journal of Numerical Analysis, 2010, 30, 1184-1205.	1.5	43
102	Explicit soliton asymptotics for the Korteweg-de Vries equation on the half-line. Nonlinearity, 2010, 23, 937-976.	0.6	33
103	On a novel integrable generalization of the sine-Gordon equation. Journal of Mathematical Physics, 2010, 51, .	0.5	19
104	On a novel integrable generalization of the nonlinear Schrödinger equation. Nonlinearity, 2009, 22, 11-27.	0.6	131
105	An integrable generalization of the nonlinear Schrödinger equation on the half-line and solitons. Inverse Problems, 2009, 25, 115006.	1.0	88
106	Electro-magneto-encephalography and fundamental solutions. Quarterly of Applied Mathematics, 2009, 67, 771-780.	0.5	5
107	Electro-magneto-encephalography for a three-shell model: dipoles and beyond for the spherical geometry. Inverse Problems, 2009, 25, 035001.	1.0	32
108	A novel method of solution for the fluid-loaded plate. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2009, 465, 3667-3685.	1.0	2

#	ARTICLE	IF	CITATIONS
109	The Davey-Stewartson Equation on the Half-Plane. <i>Communications in Mathematical Physics</i> , 2009, 289, 957-993.	1.0	21
110	Kadomtsev-Petviashvili Equation Revisited and Integrability in $4 + 2$ and $3 + 1$. <i>Studies in Applied Mathematics</i> , 2009, 122, 347-359.	1.1	9
111	On Two Useful Identities in the Theory of Ellipsoidal Harmonics. <i>Studies in Applied Mathematics</i> , 2009, 123, 361-373.	1.1	5
112	A semi-analytical numerical method for solving evolution and elliptic partial differential equations. <i>Journal of Computational and Applied Mathematics</i> , 2009, 227, 59-74.	1.1	28
113	Lax pairs: a novel type of separability. <i>Inverse Problems</i> , 2009, 25, 123007.	1.0	17
114	Systematic construction and prediction of the arrangement of the strands of sandwich proteins. <i>Journal of the Royal Society Interface</i> , 2009, 6, 63-73.	1.5	5
115	Electro-magneto-encephalography for a three-shell model: distributed current in arbitrary, spherical and ellipsoidal geometries. <i>Journal of the Royal Society Interface</i> , 2009, 6, 479-488.	1.5	35
116	The Generalized Dirichlet to Neumann Map for the KdV Equation on the Half-Line. <i>Journal of Nonlinear Science</i> , 2008, 18, 191-217.	1.0	26
117	Soliton multidimensional equations and integrable evolutions preserving Laplace's equation. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 2008, 372, 1277-1279.	0.9	19
118	The generalized Dirichlet-Neumann map for linear elliptic PDEs and its numerical implementation. <i>Journal of Computational and Applied Mathematics</i> , 2008, 219, 9-34.	1.1	40
119	Initial-boundary-value problems for linear and integrable nonlinear dispersive partial differential equations. <i>Nonlinearity</i> , 2008, 21, T195-T203.	0.6	33
120	The D-bar method, inversion of certain integrals and integrability in $4 + 2$ and $3 + 1$ dimensions. <i>Journal of Physics A: Mathematical and Theoretical</i> , 2008, 41, 344006.	0.7	10
121	A unified approach to various techniques for the non-uniqueness of the inverse gravimetric problem and wavelet-based methods. <i>Inverse Problems</i> , 2008, 24, 045019.	1.0	66
122	Methods for Solving Elliptic PDEs in Spherical Coordinates. <i>SIAM Journal on Applied Mathematics</i> , 2008, 68, 1080-1096.	0.8	10
123	On the asymptotic linearization of acoustic waves. <i>Transactions of the American Mathematical Society</i> , 2008, 360, 6403-6445.	0.5	2
124	Generalized Dirichlet to Neumann map for moving initial-boundary value problems. <i>Journal of Mathematical Physics</i> , 2007, 48, 013502.	0.5	22
125	On the complementarity of electroencephalography and magnetoencephalography. <i>Inverse Problems</i> , 2007, 23, 2541-2549.	1.0	42
126	Nonlinear Fourier transforms, integrability and nonlocality in multidimensions. <i>Nonlinearity</i> , 2007, 20, 2093-2113.	0.6	17

#	ARTICLE	IF	CITATIONS
127	Initial-boundary value problems for linear PDEs with variable coefficients. <i>Mathematical Proceedings of the Cambridge Philosophical Society</i> , 2007, 143, 221-242.	0.3	7
128	Quaternions, Evaluation of Integrals and Boundary Value Problems. <i>Computational Methods and Function Theory</i> , 2007, 7, 443-476.	0.8	12
129	The Dirichlet-to-Neumann map for the heat equation on a moving boundary. <i>Inverse Problems</i> , 2007, 23, 1699-1710.	1.0	19
130	Reconstruction algorithm for single photon emission computed tomography and its numerical implementation. <i>Journal of the Royal Society Interface</i> , 2006, 3, 45-54.	1.5	38
131	On a new non-local formulation of water waves. <i>Journal of Fluid Mechanics</i> , 2006, 562, 313.	1.4	109
132	Integrable Nonlinear Evolution Partial Differential Equations in $4+2$ and $3+1$ Dimensions. <i>Physical Review Letters</i> , 2006, 96, 190201.	2.9	121
133	Integrable Nonlinear Evolution Equations on a Finite Interval. <i>Communications in Mathematical Physics</i> , 2006, 263, 133-172.	1.0	52
134	The Dbar formalism for certain linear non-homogeneous elliptic PDEs in two dimensions. <i>European Journal of Applied Mathematics</i> , 2006, 17, 323-346.	1.4	19
135	Strict rules determine arrangements of strands in sandwich proteins. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2006, 103, 4107-4110.	3.3	14
136	THE MATHEMATICS OF THE IMAGING TECHNIQUES OF MEG, CT, PET AND SPECT. <i>International Journal of Bifurcation and Chaos in Applied Sciences and Engineering</i> , 2006, 16, 1671-1687.	0.7	3
137	Localised coherent solutions of the DSI and DSII equations—a numerical study. <i>Mathematics and Computers in Simulation</i> , 2005, 69, 424-438.	2.4	21
138	Evolution of methacrylate distribution during wood saturation. <i>Applied Mathematics Letters</i> , 2005, 18, 321-328.	1.5	21
139	Absolute and Convective Instability for Evolution PDEs on the Half-Line. <i>Studies in Applied Mathematics</i> , 2005, 114, 95-114.	1.1	13
140	The generalized Dirichlet-to-Neumann map for certain nonlinear evolution PDEs. <i>Communications on Pure and Applied Mathematics</i> , 2005, 58, 639-670.	1.2	83
141	Boundary Value Problems for Boussinesq Type Systems. <i>Mathematical Physics Analysis and Geometry</i> , 2005, 8, 59-96.	0.4	29
142	A geometric construction determines all permissible strand arrangements of sandwich proteins. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2005, 102, 15851-15853.	3.3	13
143	The Time Periodic Solution of the Burgers Equation on the Half-Line and an Application to Steady Streaming. <i>Journal of Nonlinear Mathematical Physics</i> , 2005, 12, 302.	0.8	8
144	The modified Helmholtz equation in a semi-strip. <i>Mathematical Proceedings of the Cambridge Philosophical Society</i> , 2005, 138, 339-365.	0.3	22

#	ARTICLE	IF	CITATIONS
145	On the non-uniqueness of the inverse MEG problem. <i>Inverse Problems</i> , 2005, 21, L1-L5.	1.0	48
146	A transform method for linear evolution PDEs on a finite interval. <i>IMA Journal of Applied Mathematics</i> , 2005, 70, 564-587.	0.8	70
147	The nonlinear Schrödinger equation on the half-line. <i>Nonlinearity</i> , 2005, 18, 1771-1822.	0.6	188
148	Zero-dispersion limit for integrable equations on the half-line with linearisable data. <i>Abstract and Applied Analysis</i> , 2004, 2004, 361-370.	0.3	11
149	The unique determination of neuronal currents in the brain via magnetoencephalography. <i>Inverse Problems</i> , 2004, 20, 1067-1082.	1.0	87
150	Prediction of the structural motifs of sandwich proteins. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2004, 101, 16780-16783.	3.3	9
151	THE mKdV EQUATION ON THE HALF-LINE. <i>Journal of the Institute of Mathematics of Jussieu</i> , 2004, 3, 139-164.	0.4	73
152	Boundary value problems for systems of linear evolution equations. <i>IMA Journal of Applied Mathematics</i> , 2004, 69, 539-555.	0.8	6
153	Linearizable initial boundary value problems for the sine-Gordon equation on the half-line. <i>Nonlinearity</i> , 2004, 17, 1521-1534.	0.6	28
154	An analytical method for linear elliptic PDEs and its numerical implementation. <i>Journal of Computational and Applied Mathematics</i> , 2004, 167, 465-483.	1.1	41
155	The nonlinear Schrödinger equation on the interval. <i>Journal of Physics A</i> , 2004, 37, 6091-6114.	1.6	76
156	Boundary-value problems for linear PDEs with variable coefficients. <i>Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences</i> , 2004, 460, 1131-1151.	1.0	13
157	Explicit integral solutions for the plane elastostatic semi-strip. <i>Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences</i> , 2004, 460, 1285-1309.	1.0	27
158	Analysis of the Global Relation for the Nonlinear Schrödinger Equation on the Half-line. <i>Letters in Mathematical Physics</i> , 2003, 65, 199-212.	0.5	69
159	Long-time asymptotics of moving boundary problems using an Ehrenpreis-type representation and its Riemann-Hilbert nonlinearization. <i>Communications on Pure and Applied Mathematics</i> , 2003, 56, 517-548.	1.2	9
160	Ehrenpreis Type Representations and Their Riemann-Hilbert Nonlinearisation. <i>Journal of Nonlinear Mathematical Physics</i> , 2003, 10, 47.	0.8	2
161	The Davey-Stewartson I equation on the quarter plane with homogeneous Dirichlet boundary conditions. <i>Journal of Mathematical Physics</i> , 2003, 44, 3226-3244.	0.5	5
162	Inverse scattering transform for the KPI equation on the background of a one-line soliton*. <i>Nonlinearity</i> , 2003, 16, 771-783.	0.6	38

#	ARTICLE	IF	CITATIONS
163	On a transform method for the Laplace equation in a polygon. IMA Journal of Applied Mathematics, 2003, 68, 355-408.	0.8	46
164	The Fundamental Differential Form and Boundary-Value Problems. Quarterly Journal of Mechanics and Applied Mathematics, 2002, 55, 457-479.	0.5	23
165	A new transform method for evolution partial differential equations. IMA Journal of Applied Mathematics, 2002, 67, 559-590.	0.8	106
166	Integrable Nonlinear Evolution Equations on the Half-Line. Communications in Mathematical Physics, 2002, 230, 1-39.	1.0	217
167	On the construction of evolution equations admitting a master symmetry. Physics Letters, Section A: General, Atomic and Solid State Physics, 2002, 293, 36-44.	0.9	15
168	Two-point boundary value problems for linear evolution equations. Mathematical Proceedings of the Cambridge Philosophical Society, 2001, 131, 521-543.	0.3	29
169	Initial/Boundary Value Problems for Simultaneous Evolution Equations in Three Dimensions. Studies in Applied Mathematics, 2001, 107, 391-401.	1.1	0
170	Integrable evolution equations in time-dependent domains. Inverse Problems, 2001, 17, 919-935.	1.0	11
171	Solution of the modified Helmholtz equation in a triangular domain and an application to diffusion-limited coalescence. Physical Review E, 2001, 64, 016114.	0.8	24
172	A Riemann-Hilbert Approach to the Laplace Equation. Journal of Mathematical Analysis and Applications, 2000, 251, 770-804.	0.5	14
173	A formula for constructing infinitely many surfaces on Lie algebras and integrable equations. Selecta Mathematica, New Series, 2000, 6, 347-375.	0.4	39
174	Method for Solving Moving Boundary Value Problems for Linear Evolution Equations. Physical Review Letters, 2000, 84, 4785-4789.	2.9	32
175	Deformations of surfaces associated with integrable Gauss-Mainardi-Codazzi equations. Journal of Mathematical Physics, 2000, 41, 2251-2270.	0.5	39
176	On the integrability of linear and nonlinear partial differential equations. Journal of Mathematical Physics, 2000, 41, 4188-4237.	0.5	156
177	Integral transforms, spectral representation and the d-bar problem. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2000, 456, 805-833.	1.0	25
178	The Solution of the modified Helmholtz equation in a wedge and an application to diffusion-limited coalescence. Physics Letters, Section A: General, Atomic and Solid State Physics, 1999, 263, 355-359.	0.9	18
179	Dynamically stretched vortices as solutions of the 3D Navier-Stokes equations. Physica D: Nonlinear Phenomena, 1999, 132, 497-510.	1.3	63
180	Integrability and Self-Similarity in Transient Stimulated Raman Scattering. Journal of Nonlinear Science, 1999, 9, 1-31.	1.0	33

#	ARTICLE	IF	CITATIONS
181	Integrability and beyond. Journal of Mathematical Sciences, 1999, 94, 1593-1599.	0.1	0
182	The Cauchy problem for the Kadomtsev-Petviashvili equation without the zero mass constraint. Mathematical Proceedings of the Cambridge Philosophical Society, 1999, 125, 113-138.	0.3	33
183	The Inverse Spectral Method for Colliding Gravitational Waves. Mathematical Physics Analysis and Geometry, 1998, 1, 313-330.	0.4	12
184	Lax pairs and a new spectral method for linear and integrable nonlinear PDEs. Selecta Mathematica, New Series, 1998, 4, 31-68.	0.4	14
185	The solution of certain initial boundary-value problems for the linearized Korteweg-deVries equation. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 1998, 454, 645-657.	1.0	28
186	A Hele-Shaw problem and the second Painlevé transcendent. Mathematical Proceedings of the Cambridge Philosophical Society, 1998, 124, 169-191.	0.3	22
187	A unified transform method for solving linear and certain nonlinear PDEs. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 1997, 453, 1411-1443.	1.0	412
188	A Plethora of Integrable Bi-Hamiltonian Equations. , 1997, , 93-101.		27
189	Nonlinear integrable equations and nonlinear Fourier transform. , 1997, , 139-170.		3
190	On the asymptotic integrability of a higher-order evolution equation describing internal waves in a deep fluid. Journal of Mathematical Physics, 1996, 37, 3415-3421.	0.5	5
191	Exact interaction of solitary waves for certain nonintegrable equations. Journal of Mathematical Physics, 1996, 37, 324-345.	0.5	28
192	The Linearization of the Initial-Boundary Value Problem of the Nonlinear Schrödinger Equation. SIAM Journal on Mathematical Analysis, 1996, 27, 738-764.	0.9	106
193	Surfaces on Lie groups, on Lie algebras, and their integrability. Communications in Mathematical Physics, 1996, 177, 203-220.	1.0	91
194	Order and the ubiquitous occurrence of chaos. Physica A: Statistical Mechanics and Its Applications, 1996, 228, 236-244.	1.2	21
195	Asymptotic Integrability of Water Waves. Physical Review Letters, 1996, 77, 2347-2351.	2.9	118
196	Inversion method for magnetoencephalography. Inverse Problems, 1996, 12, L9-L11.	1.0	40
197	A Unified Method for Solving Linear and Nonlinear Evolution Equations and an Application to Integrable Surfaces. , 1996, , 75-92.		2
198	Matrix models of two-dimensional quantum gravity and isomonodromic solutions of discrete Painlevé equations. Journal of Mathematical Sciences, 1995, 73, 415-429.	0.1	11

#	ARTICLE	IF	CITATIONS
199	The Korteweg-de Vries equation and beyond. <i>Acta Applicandae Mathematicae</i> , 1995, 39, 295-305.	0.5	63
200	On a class of physically important integrable equations. <i>Physica D: Nonlinear Phenomena</i> , 1995, 87, 145-150.	1.3	449
201	Integrable equations on the half-infinite line. <i>Chaos, Solitons and Fractals</i> , 1995, 5, 2367-2376.	2.5	7
202	The Korteweg-de Vries Equation and Beyond. , 1995, , 295-305.		4
203	Integrable functional equations and algebraic geometry. <i>Duke Mathematical Journal</i> , 1994, 76, 645.	0.8	11
204	Nonlinear interaction of traveling waves of nonintegrable equations. <i>Physical Review Letters</i> , 1994, 72, 3293-3296.	2.9	142
205	Integrability of linear and nonlinear evolution equations and the associated nonlinear fourier transforms. <i>Letters in Mathematical Physics</i> , 1994, 32, 189-210.	0.5	63
206	Generalized conditional symmetries and exact solutions of non-integrable equations. <i>Theoretical and Mathematical Physics(Russian Federation)</i> , 1994, 99, 571-582.	0.3	56
207	On the simplest integrable equation in 2+1. <i>Inverse Problems</i> , 1994, 10, L19-L22.	1.0	77
208	On the asymptotic analysis of the Painleve equations via the isomonodromy method. <i>Nonlinearity</i> , 1994, 7, 1291-1325.	0.6	32
209	Quadratic Poisson algebras and their infinite-dimensional extensions. <i>Journal of Mathematical Physics</i> , 1994, 35, 3117-3131.	0.5	7
210	Integrable Equations with a Forcing of a Distribution Type. <i>Studies in Applied Mathematics</i> , 1994, 92, 97-114.	1.1	1
211	From Continuous to Discrete Painlevé Equations. <i>Journal of Mathematical Analysis and Applications</i> , 1993, 180, 342-360.	0.5	123
212	Bi-Hamiltonian Structures and Integrability. <i>Springer Series in Nonlinear Dynamics</i> , 1993, , 259-282.	0.2	9
213	The Inverse Spectral Method on the Plane. <i>Springer Series in Nonlinear Dynamics</i> , 1993, , 58-85.	0.2	1
214	The Isomonodromy Method and the Painlevé Equations. <i>Springer Series in Nonlinear Dynamics</i> , 1993, , 99-122.	0.2	7
215	Initial Boundary-Value Problems for Soliton Equations. <i>Springer Series in Nonlinear Dynamics</i> , 1993, , 96-101.	0.2	4
216	On the solvability of Painleve I, III and V. <i>Inverse Problems</i> , 1992, 8, 757-785.	1.0	62

#	ARTICLE	IF	CITATIONS
217	Soliton generation for initial-boundary-value problems. <i>Physical Review Letters</i> , 1992, 68, 3117-3120.	2.9	52
218	Integrable Nonlinear Equations. <i>Mathematics in Science and Engineering</i> , 1992, 185, 175-210.	0.1	0
219	Hamiltonian theory over noncommutative rings and integrability in multidimensions. <i>Journal of Mathematical Physics</i> , 1992, 33, 2504-2514.	0.5	48
220	Schlesinger transformations of Painlevé II. <i>Journal of Mathematical Physics</i> , 1992, 33, 2031-2045.	0.5	22
221	On the solvability of the N-wave, Davey-Stewartson and Kadomtsev-Petviashvili equations. <i>Inverse Problems</i> , 1992, 8, 673-708.	1.0	92
222	An initial-boundary value problem for the sine-Gordon equation in laboratory coordinates. <i>Theoretical and Mathematical Physics (Russian Federation)</i> , 1992, 92, 964-978.	0.3	43
223	The dressing method and nonlocal Riemann-Hilbert problems. <i>Journal of Nonlinear Science</i> , 1992, 2, 109-134.	1.0	79
224	The isomonodromy approach to matric models in 2D quantum gravity. <i>Communications in Mathematical Physics</i> , 1992, 147, 395-430.	1.0	431
225	On the solvability of Painlevé II and IV. <i>Communications in Mathematical Physics</i> , 1992, 144, 601-622.	1.0	83
226	Continuous and Discrete Painlevé Equations. <i>NATO ASI Series Series B: Physics</i> , 1992, , 33-47.	0.2	6
227	Inverse Problems in Multidimensions. <i>SIAM Journal on Mathematical Analysis</i> , 1991, 22, 1303-1331.	0.9	7
228	Inverse problem for $N \times N$ hyperbolic systems on the plane and the N-wave interactions. <i>Communications on Pure and Applied Mathematics</i> , 1991, 44, 535-571.	1.2	21
229	Discrete Painlevé equations and their appearance in quantum gravity. <i>Communications in Mathematical Physics</i> , 1991, 142, 313-344.	1.0	244
230	Recent Developments in Multidimensional Inverse Scattering. <i>Research Reports in Physics</i> , 1991, , 34-46.	0.0	0
231	Mathematical model of granulocytopenia and chronic myelogenous leukemia. <i>Cancer Research</i> , 1991, 51, 2084-91.	0.4	34
232	Soliton cellular automata. <i>Physica D: Nonlinear Phenomena</i> , 1990, 41, 297-321.	1.3	35
233	Dromions and a boundary value problem for the Davey-Stewartson 1 equation. <i>Physica D: Nonlinear Phenomena</i> , 1990, 44, 99-130.	1.3	222
234	The dressing method, symmetries, and invariant solutions. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 1990, 150, 369-374.	0.9	5

#	ARTICLE	IF	CITATIONS
235	Coherent structures in cellular automata. Physics Letters, Section A: General, Atomic and Solid State Physics, 1990, 147, 369-379.	0.9	19
236	The isomonodromy approach in the theory of two-dimensional quantum gravitation. Russian Mathematical Surveys, 1990, 45, 155-157.	0.2	36
237	On the Initial Value Problem of the Third Painlevé Equation. Research Reports in Physics, 1990, , 82-86.	0.0	2
238	Boundary Value Problems in 1 + 1 and in 2 + 1, the Dressing Method, and Cellular Automata. Research Reports in Physics, 1990, , 14-25.	0.0	1
239	Solitons and Dromions, Coherent Structures in a Nonlinear World. Research Reports in Physics, 1990, , 2-13.	0.0	0
240	Dromions, a New Manifestation in Nonlinear Phenomena. Inverse Problems and Theoretical Imaging, 1990, , 584-594.	0.2	0
241	The Initial-Boundary Value Problem for the Davey-Stewartson I Equation; How to Generate and Drive Localized Coherent Structures in Multidimensions. , 1990, , 223-259.		0
242	A Unified Approach to Recursion Operators. The IMA Volumes in Mathematics and Its Applications, 1990, , 79-96.	0.5	1
243	Coherent structures in multidimensions. Physical Review Letters, 1989, 63, 1329-1333.	2.9	211
244	An initial-boundary value problem for the nonlinear Schrödinger equation. Physica D: Nonlinear Phenomena, 1989, 35, 167-185.	1.3	76
245	Hodograph Transformations of Linearizable Partial Differential Equations. SIAM Journal on Applied Mathematics, 1989, 49, 1188-1209.	0.8	88
246	Forced Nonlinear Evolution Equations and the Inverse Scattering Transform. Studies in Applied Mathematics, 1989, 80, 253-272.	1.1	37
247	Linearized maps for the Davey-Stewartson I equation. , 1989, , 95-104.		0
248	Evolution Theory, Periodic Particles, and Solitons in Cellular Automata. Studies in Applied Mathematics, 1989, 80, 165-182.	1.1	25
249	Interaction of Simple Particles in Soliton Cellular Automata. Studies in Applied Mathematics, 1989, 81, 153-180.	1.1	31
250	Recursion operators and bi-Hamiltonian structures in multidimensions. I. Communications in Mathematical Physics, 1988, 115, 375-419.	1.0	165
251	Recursion operators and bi-Hamiltonian structures in multidimensions. II. Communications in Mathematical Physics, 1988, 116, 449-474.	1.0	137
252	A method of linearization for Painlevé equations: Painlevé IV, V. Physica D: Nonlinear Phenomena, 1988, 30, 247-283.	1.3	53

#	ARTICLE	IF	CITATIONS
253	Bi-Hamiltonian formulation of the Kadomtsev-Petviashvili and Benjamin-Ono equations. Journal of Mathematical Physics, 1988, 29, 604-617.	0.5	45
254	The bi-Hamiltonian formulation of the Landau-Lifshitz equation. Journal of Mathematical Physics, 1988, 29, 2628-2633.	0.5	25
255	Inverse Problems and a Unified Approach to Integrability in 1, 1+1 and 2+1 Dimensions. Springer Series in Nonlinear Dynamics, 1988, , 63-85.	0.2	0
256	Integrable Equations in Multi-Dimensions (2+1) are Bi-Hamiltonian Systems. Springer Series in Nonlinear Dynamics, 1988, , 118-144.	0.2	0
257	On the initial value problem for a class of nonlinear integral evolution equations including the sine-Hilbert equation. Journal of Mathematical Physics, 1987, 28, 2310-2316.	0.5	13
258	Symmetries and Integrability. Studies in Applied Mathematics, 1987, 77, 253-299.	1.1	296
259	An inverse problem for multidimensional first-order systems. Journal of Mathematical Physics, 1986, 27, 1737-1746.	0.5	17
260	The Recursion Operator of the Kadomtsev-Petviashvili Equation and the Squared Eigenfunctions of the Schrödinger Operator. Studies in Applied Mathematics, 1986, 75, 179-185.	1.1	90
261	The scaling reduction of the three-wave resonant system and the Painlevé VI equation. Physics Letters, Section A: General, Atomic and Solid State Physics, 1986, 115, 329-332.	0.9	26
262	Inverse Scattering and Integrability in Multidimensions. Physical Review Letters, 1986, 57, 159-162.	2.9	11
263	The direct linearization of a class of nonlinear evolution equations. Journal of Mathematical Physics, 1984, 25, 2614-2619.	0.5	43
264	On the inverse scattering transform of multidimensional nonlinear equations related to first-order systems in the plane. Journal of Mathematical Physics, 1984, 25, 2494-2505.	0.5	220
265	On the limit from the intermediate long wave equation to the Benjamin-Ono equation. Journal of Mathematical Physics, 1984, 25, 892-899.	0.5	29
266	Infinitely many commuting symmetries and constants of motion in involution for explicitly time-dependent evolution equations. Journal of Mathematical Physics, 1984, 25, 918-922.	0.5	15
267	On the initial value problem of the second Painlevé ₂ Transcendent. Communications in Mathematical Physics, 1983, 91, 381-403.	1.0	71
268	On the inverse scattering and direct linearizing transforms for the Kadomtsev-Petviashvili equation. Physics Letters, Section A: General, Atomic and Solid State Physics, 1983, 94, 67-70.	0.9	49
269	The direct linearizing transform and the Benjamin-Ono equation. Physics Letters, Section A: General, Atomic and Solid State Physics, 1983, 93, 375-378.	0.9	12
270	The inverse scattering transform for multidimensional (2+1) problems. , 1983, , 137-183.		28

#	ARTICLE	IF	CITATIONS
271	Method of Solution for a Class of Multidimensional Nonlinear Evolution Equations. Physical Review Letters, 1983, 51, 7-10.	2.9	70
272	Inverse Scattering of First-Order Systems in the Plane Related to Nonlinear Multidimensional Equations. Physical Review Letters, 1983, 51, 3-6.	2.9	80
273	Comments on the inverse scattering transform and related nonlinear evolution equations. , 1983, , 3-24.		8
274	The Inverse Scattering Transform for the Benjamin-Ono Equation—A Pivot to Multidimensional Problems. Studies in Applied Mathematics, 1983, 68, 1-10.	1.1	146
275	On the Inverse Scattering of the Time-Dependent Schrödinger Equation and the Associated Kadomtsev-Petviashvili (I) Equation. Studies in Applied Mathematics, 1983, 69, 211-228.	1.1	187
276	On the Inverse Scattering Transform for the Kadomtsev-Petviashvili Equation. Studies in Applied Mathematics, 1983, 69, 135-143.	1.1	270
277	An Analytical Solution for Linear Waterflood Including the Effects of Capillary Pressure. Society of Petroleum Engineers Journal, 1983, 23, 115-124.	0.9	75
278	On the use of isospectral eigenvalue problems for obtaining hereditary symmetries for Hamiltonian systems. Journal of Mathematical Physics, 1982, 23, 1066-1073.	0.5	111
279	On the periodic intermediate long wave equation. Journal of Physics A, 1982, 15, 781-786.	1.6	23
280	A direct linearization associated with the Benjamin-Ono equation. , 1982, , .		4
281	On a unified approach to transformations and elementary solutions of Painlevé equations. Journal of Mathematical Physics, 1982, 23, 2033-2042.	0.5	194
282	On the exactly solvable equation $S_t = [(\eta S + \gamma)^{-2} S_x]_x + \alpha (\eta S + \gamma)^{-2} S_x$ Occurring in Two-Phase Flow in Porous Media. SIAM Journal on Applied Mathematics, 1982, 42, 318-332.	0.8	161
283	Comments on the symmetry structure of bi-Hamiltonian systems. European Physical Journal D, 1982, 32, 365-369.	0.4	0
284	Symplectic structures, their Bäcklund transformations and hereditary symmetries. Physica D: Nonlinear Phenomena, 1981, 4, 47-66.	1.3	1,420
285	The hierarchy of the Benjamin-Ono equation. Physics Letters, Section A: General, Atomic and Solid State Physics, 1981, 86, 341-345.	0.9	179
286	Linearization of the Korteweg-de Vries and Painlevé II Equations. Physical Review Letters, 1981, 47, 1096-1100.	2.9	146
287	Quadratic and cubic invariants in classical mechanics. Journal of Mathematical Analysis and Applications, 1980, 74, 325-341.	0.5	50
288	On the use of Lie-Bäcklund operators in quantum mechanics. Journal of Mathematical Analysis and Applications, 1980, 74, 342-358.	0.5	5

#	ARTICLE	IF	CITATIONS
289	On the structure of symplectic operators and hereditary symmetries. Lettere Al Nuovo Cimento Rivista Internazionale Della Societ� Italiana Di Fisica, 1980, 28, 299-303.	0.4	126
290	A symmetry approach to exactly solvable evolution equations. Journal of Mathematical Physics, 1980, 21, 1318-1325.	0.5	234
291	Group theoretical aspects of constants of motion and separable solutions in classical mechanics. Journal of Mathematical Analysis and Applications, 1979, 68, 347-370.	0.5	22
292	Group theoretical nature of Birkhoff transformations. Letters in Mathematical Physics, 1979, 3, 117-126.	0.5	15
293	Generalized symmetries and constants of motion of evolution equations. Letters in Mathematical Physics, 1979, 3, 467-473.	0.5	16
294	A Novel Non-Local Formulation of Water Waves. , 0, , 63-77.		2