Dmitry Shepelsky

List of Publications by Year
in descending order

63	1,158	394421 19	414414 32
papers	citations	h-index	g-index

65	65	65	303
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Long-time Asymptotics for the Camassaâ€“Holm Equation. SIAM Journal on Mathematical Analysis, 2009, 41, 1559-1588.	1.9	153
2	A Riemannâ€“Hilbert approach for the Degasperisâ€“Procesi equation. Nonlinearity, 2013, 26, 2081-2107.	1.4	79
3	THE mKdV EQUATION ON THE HALF-LINE. Journal of the Institute of Mathematics of Jussieu, 2004, 3, 139-164.	0.7	73
4	Analysis of the Global Relation for the Nonlinear SchrÃ¶dinger Equation on the Half-line. Letters in Mathematical Physics, 2003, 65, 199-212.	1.1	69
5	Riemannâ€“Hilbert approach for the Camassaâ€“Holm equation on the line. Comptes Rendus Mathematique, 2006, 343, 627-632.	0.3	69
6	Integrable Nonlinear Evolution Equations on a Finite Interval. Communications in Mathematical Physics, 2006, 263, 133-172.	2.2	52
7	The short pulse equation by a Riemannâ€“Hilbert approach. Letters in Mathematical Physics, 2017, 107, 1345-1373.	1.1	51
8	The Ostrovskyâ€“Vakhnenko equation by a Riemannâ€“Hilbert approach. Journal of Physics A: Mathematical and Theoretical, 2015, 48, 035204.	2.1	42
9	Inverse scattering method in electromagnetic sounding theory. Inverse Problems, 1994, 10, 1-37.	2.0	38
10	Long-time asymptotics for the integrable nonlocal nonlinear SchrÃ¶dinger equation. Journal of Mathematical Physics, 2019, 60, .	1.1	37
11	PainlevÃ©-Type Asymptotics for the Camassaâ€“Holm Equation. SIAM Journal on Mathematical Analysis, 2010, 42, 1854-1873.	1.9	35
12	Long-time asymptotics for the Degasperisâ€“Procesi equation on the half-line. Annales De L'Institut Fourier, 2019, 69, 171-230.	0.6	34
13	Initial boundary value problem for the mKdV equation on a finite interval. Annales De L'Institut Fourier, 2004, 54, 1477-1495.	0.6	28
14	Long-time asymptotics for the nonlocal nonlinear SchrÃ¶dinger equation with step-like initial data. Journal of Differential Equations, 2021, 270, 694-724.	2.2	23
15	Direct nonlinear Fourier transform algorithms for the computation of solitonic spectra in focusing nonlinear SchrÃ¶dinger equation. Communications in Nonlinear Science and Numerical Simulation, 2019, 68, 347-371.	3.3	22
16	The modified KdV equation on a finite interval. Comptes Rendus Mathematique, 2003, 337, 517-522.	0.3	21
17	The Camassaâ€“Holm Equation on the Half-Line: aÂRiemannâ€“Hilbert Approach. Journal of Geometric Analysis, 2008, 18, 285-323.	1.0	20
18	Initial boundary value problems for integrable systems: towards the long time asymptotics. Nonlinearity, 2010, 23, 2483-2499.	1.4	20

#	Article	IF	Citations
19	Channel model and the achievable information rates of the optical nonlinear frequency division-multiplexed systems employing continuous b-modulation. Optics Express, 2021, 29, 6384.	3.4	20
20	The Focusing NLS Equation with Step-Like Oscillating Background: Scenarios of Long-Time Asymptotics. Communications in Mathematical Physics, 2021, 383, 893-952.	2.2	19
21	Long-Time Asymptotics for the Integrable Nonlocal Focusing Nonlinear SchrÃ¶dinger Equation for a Family of Step-Like Initial Data. Communications in Mathematical Physics, 2021, 382, 87-121.	2.2	17
22	Long time asymptotics of the Camassaâ€“Holm equation on the half-line. Annales De L'Institut Fourier, 2009, 59, 3015-3056.	0.6	17
23	The short-wave model for the Camassaâ€“Holm equation: a Riemannâ€“Hilbert approach. Inverse Problems, 2011, 27, 105006.	2.0	15
24	Signal Modulation and Processing in Nonlinear Fibre Channels by Employing the Riemannâ€“Hilbert Problem. Journal of Lightwave Technology, 2018, 36, 5714-5727.	4.6	15
25	Focusing NLS Equation: Long-Time Dynamics of Step-Like Initial Data. International Mathematics Research Notices, 0, , .	1.0	14
26	Initial boundary value problem for the focusing nonlinear SchrÃ¶dinger equation with Robin boundary condition: half-line approach. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2013, 469, 20120199.	2.1	14
27	Planar unimodular Baker-Akhiezer function for the nonlinear SchrÃ¶dinger equation. Annals of Mathematical Sciences and Applications, 2017, 2, 343-384.	0.4	12
28	Direct and inverse scattering problem for a stratified nonreciprocal chiral medium. Inverse Problems, 1997, 13, 239-251.	2.0	11
29	Inverse scattering problem for anisotropic media. Journal of Mathematical Physics, 1995, 36, 3443-3453.	1.1	10
30	Inverse scattering problem for a stratified bi-isotropic medium at oblique incidence. Inverse Problems, 1998, 14, 29-40.	2.0	10
31	A Riemannâ€“Hilbert approach to the modified Camassaâ€“Holm equation with nonzero boundary conditions. Journal of Mathematical Physics, 2020, 61, 031504.	1.1	8
32	The inverse scattering transform in the form of a Riemann-Hilbert problem for the Dullin-Gottwald-Holm equation. Opuscula Mathematica, 2017, 37, 167.	0.8	8
33	Inverse scattering problem for a stratified anisotropic slab. Inverse Problems, 1999, 15, 499-514.	2.0	7
34	The Ostrovskyâ€“Vakhnenko equation: A Riemannâ€“Hilbert approach. Comptes Rendus Mathematique, 2014, 352, 189-195.	0.3	7
35	Nonlinear Fourier Spectrum Characterization of Time-Limited Signals. IEEE Transactions on Communications, 2020, 68, 3024-3032.	7.8	7
36	A frequencyâ€“domain inverse problem for a dispersive stratified chiral medium. Journal of Mathematical Physics, 2000, 41, 6116-6129.	1.1	6

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37	The Camassaâ€“Holm equation on the half-line. Comptes Rendus Mathematique, 2005, 341, 611-616.	0.3	6
38	Communication System Based on Periodic Nonlinear Fourier Transform with Exact Inverse Transformation. , 2018, , .		6
39	The Focusing NLS Equation with Step-Like Oscillating Background: The Genus 3 Sector. Communications in Mathematical Physics, 2022, 390, 1081-1148.	2.2	6
40	Uniqueness in a frequency-domain inverse problem of a stratified uniaxial bianisotropic medium. Wave Motion, 2000, 31, 371-385.	2.0	5
41	Decaying Long-Time Asymptotics for the Focusing NLS Equation with Periodic Boundary Condition. International Mathematics Research Notices, 0, , .	1.0	5
42	Uniqueness in the Simultaneous Reconstruction of Multiparameters of a Transmission Line. Progress in Electromagnetics Research, 1999, 21, 153-172.	4.4	4
43	Robin boundary condition and shock problem for the focusing nonlinear SchrÃ¶dinger equation. Journal of Nonlinear Mathematical Physics, 2015, 22, 448.	1.3	4
44	Full-Spectrum Periodic Nonlinear Fourier Transform Optical Communication Through Solving the Riemann-Hilbert Problem. Journal of Lightwave Technology, 2020, 38, 3602-3615.	4.6	4
45	Curved wedges in the longâ€time asymptotics for the integrable nonlocal nonlinear SchrÃ¶dinger equation. Studies in Applied Mathematics, 2021, 147, 872-903.	2.4	4
46	A Riemann-Hilbert Approach for the Novikov Equation. Symmetry, Integrability and Geometry: Methods and Applications (SIGMA), 0, , .	0.5	3
47	Reconstruction of a stratified omega medium and the associated RiemannÂHilbert problem. Inverse Problems, 2002, 18, 1377-1395.	2.0	2
48	Initial-Boundary Value Problem for the Camassaâ€“Holm Equation with Linearizable Boundary Condition. Letters in Mathematical Physics, 2011, 96, 123-141.	1.1	2
49	Communication System Using Periodic Nonlinear Fourier Transform Based on Riemann-Hilbert Problem. , 2018, , .		2
50	Asymptotic stage of modulation instability for the nonlocal nonlinear SchrÃ¶dinger equation. Physica D: Nonlinear Phenomena, 2021, 428, 133060.	2.8	2
51	Inverse scattering approach for stratified chiral media. Lecture Notes in Physics, 1997, , 47-57.	0.7	1
52	Uniqueness in the Simultaneous Reconstruction of Multiparameters of a Transmission Line - Abstract. Journal of Electromagnetic Waves and Applications, 1999, 13, 337-338.	1.6	1
53	Title is missing!. Mathematical Physics Analysis and Geometry, 2000, 3, 179-193.	1.0	1
54	Multiparameter reconstruction for a stratified coating on a reflecting support. Inverse Problems in Science and Engineering, 2006, 14, 111-127.	1.2	1

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55	The Camassaâ€“Holm equation on the half-line with linearizable boundary condition. Comptes Rendus Mathematique, 2010, 348, 775-780.	0.3	1
56	Chapter 3: Evolution Problems: Nonlinear. , 2014, , 49-60.		1
57	Defocusing Nonlocal Nonlinear SchrÃ¶dinger Equation with Step-like Boundary Conditions: Long-time Behavior for Shifted Initial Data. Journal of Mathematical Physics, Analysis, Geometry, 2020, 16, 418-453.	0.1	1
58	On the integrated density of states for a certain ensemble of random matrices. Random Operators and Stochastic Equations, 1998, 6, .	0.1	0
59	Inverse scattering problem for a stratified dispersive chiral medium. , 1999, , .		0
60	Multisymbol periodic nonlinear Fourier transform communication. , 2019, , .		0
61	Riemannâ€“Hilbert Methods in Integrable Systems. , 2006, , 429-435.		0
62	E.Ya.Khruslov. On the occasion of his 70th birthday. Networks and Heterogeneous Media, 2008, 3, 647-650.	1.1	0
63	Analytical model of nonlinear noise in the b-modulated optical transmission systems. , 2020, , .		0