Anastasiia Vasylchenkova

List of Publications by Year
in descending order

20	212	1307594 7	1372567 10
papers	citations	h-index	g-index

20	20	20	142
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Combining nonlinear Fourier transform and neural network-based processing in optical communications. Optics Letters, 2020, 45, 3462.	3.3	41
2	Signal-Noise Interaction in Optical-Fiber Communication Systems Employing Nonlinear Frequency-Division Multiplexing. Physical Review Applied, 2020, 13, .	3.8	35
3	Convolutional long short-term memory neural network equalizer for nonlinear Fourier transform-based optical transmission systems. Optics Express, 2021, 29, 11254.	3.4	29
4	Contour integrals for numerical computation of discrete eigenvalues in the Zakharovâ€“Shabat problem. Optics Letters, 2018, 43, 3690.	3.3	23
5	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
6	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
7	On the impact of launch power optimization and transceiver noise on the performance of ultra-wideband transmission systems [Invited]. Journal of Optical Communications and Networking, 2022, 14, B11.	4.8	10
8	Unsupervised and supervised machine learning for performance improvement of NFT optical transmission. , 2018, , .		9
9	Nonlinear Fourier Spectrum Characterization of Time-Limited Signals. IEEE Transactions on Communications, 2020, 68, 3024-3032.	7.8	7
10	Communication System Based on Periodic Nonlinear Fourier Transform with Exact Inverse Transformation. , 2018, , .		6
11	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
12	Fixed-point realization of fast nonlinear Fourier transform algorithm for FPGA implementation of optical data processing. , 2021, , .		3
13	Methods of nonlinear fourier-based optical transmission with periodically-extended signals. , 2018, , .		2
14	Combining the Discrete NFT Spectrum with B-Modulation for High-Efficiency Optical Transmission. , 2019, , .		2
15	Classical Mechanics Approach Applied to Analysis of Genetic Oscillators. IEEE/ACM Transactions on Computational Biology and Bioinformatics, 2017, 14, 721-727.	3.0	1
16	Signal-Dependent Noise for B-Modulation NFT-Based Transmission. , 2019, , .		1
17	Properties of the effective noise in the nonlinear Fourier transform-based transmission. , 2018, , .		1
18	Noise-induced Signal Corruption in Nonlinear Fourier-based Optical Transmission System in the Presence of Discrete Eigenvalues. , 2019, , .		1

#	Article	IF	Citations
19	Study of Noise-Induced Signal Corruption for Nonlinear Fourier-Based Optical Transmission. , 2018, , .		0
20	Analytical model of nonlinear noise in the b-modulated optical transmission systems. , 2020, , .		0