Boris Karanov

List of Publications by Year
in descending order

18 papers	460 citations	1684188 5 h-index	1872680 6 g-index
18 all docs	18 docs citations	18 times ranked	480 citing authors

#	Article	IF	Citations
1	End-to-End Deep Learning of Optical Fiber Communications. Journal of Lightwave Technology, 2018, 36, 4843-4855.	4.6	256
2	End-to-end optimized transmission over dispersive intensity-modulated channels using bidirectional recurrent neural networks. Optics Express, 2019, 27, 19650.	3.4	71
3	Nonlinearity-Free Coherent Transmission in Hollow-Core Antiresonant Fiber. Journal of Lightwave Technology, 2019, 37, 909-916.	4.6	43
4	Concept and Experimental Demonstration of Optical IM/DD End-to-End System Optimization using a Generative Model. , 2020, , .		18
5	Digital nonlinearity compensation in high-capacity optical communication systems considering signal spectral broadening effect. Scientific Reports, 2017, 7, 12986.	3.3	15
6	Experimental Demonstration of a Dispersion Tolerant End-to-End Deep Learning-Based IM-DD Transmission System. , 2018, , .		14
7	Experimental Investigation of Deep Learning for Digital Signal Processing in Short Reach Optical Fiber Communications. , 2020, , .		11
8	Deep Learning for Communication over Dispersive Nonlinear Channels: Performance and Comparison with Classical Digital Signal Processing. , 2019, , .		8
9	Span length and information rate optimisation in optical transmission systems using single-channel digital backpropagation. Optics Express, 2017, 25, 25353.	3.4	6
10	Time-Domain Learned Digital Back-Propagation. , 2020, , .		5
11	Distance-Agnostic Auto-Encoders for Short Reach Fiber Communications. , 2021, , .		5
12	Digital Back Propagation via Sub-Band Processing in Spatial Multiplexing Systems. Journal of Lightwave Technology, 2021, 39, 1020-1026.	4.6	3
13	Digital Nonlinearity Compensation Considering Signal Spectral Broadening Effects in Dispersion-managed Systems. , 2018, , .		2
14	Optical Fiber Communication Systems Based on End-to-End Deep Learning : (Invited Paper). , 2020, , .		2
15	Nonlinearity Compensation and Information Rates in Fully-Loaded C-band Optical Fibre Transmission Systems. , 2017, , .		1
16	Digital nonlinearity compensation in high-capacity optical fibre communication systems: Performance and optimisation. , 2017, , .		0
17	Influence of Spectral Broadening on Nonlinearity Compensation in Ultra-Wideband Optical Fiber Communications. , 2020, , .		0
18	Machine learning for short reach optical fiber systems. , 2022, , 65-89.		0