Georg BÃ¶cherer

List of Publications by Year
in descending order

25 papers	1,830 citations	686830 13 h-index	940134 16 g-index
25 all docs	25 docs citations	25 times ranked	824 citing authors

#	Article	IF	Citations
1	1.71 Tb/s Single-Channel and 56.51 Tb/s DWDM Transmission Over 96.5 km Field-Deployed SSMF. IEEE Photonics Technology Letters, 2022, 34, 157-160.	1.3	19
2	Soft-Demapping for Short Reach Optical Communication: A Comparison of Deep Neural Networks and Volterra Series. Journal of Lightwave Technology, 2021, 39, 3095-3105.	2.7	33
3	Recurrent Neural Network Soft-Demapping for Nonlinear ISI in 800Gbit/s DWDM Coherent Optical Transmissions. Journal of Lightwave Technology, 2021, 39, 5278-5286.	2.7	15
4	PAM-6 Coded Modulation for IM/DD Channels with a Peak-Power Constraint. , 2021, , .		1
5	Performance-Complexity Tradeoffs of Concatenated FEC for Higher-Order Modulation. Journal of Lightwave Technology, 2020, , 1-1.	2.7	22
6	Neural Network Assisted Geometric Shaping for 800Gbit/s and 1Tbit/s Optical Transmission. , 2020, , .		16
7	Probabilistic Shaping and Forward Error Correction for Fiber-Optic Communication Systems. Journal of Lightwave Technology, 2019, 37, 230-244.	2.7	144
8	Bit-Metric Decoding of Non-Binary LDPC Codes With Probabilistic Amplitude Shaping. IEEE Communications Letters, 2018, 22, 2210-2213.	2.5	19
9	Field Trial of a 1 Tb/s Super-Channel Network Using Probabilistically Shaped Constellations. Journal of Lightwave Technology, 2017, 35, 1399-1406.	2.7	48
10	Capacity Bounds for Discrete-Time, Amplitude-Constrained, Additive White Gaussian Noise Channels. IEEE Transactions on Information Theory, 2017, 63, 4172-4182.	1.5	44
11	Polar coded probabilistic amplitude shaping for short packets. , 2017, , .		21
12	Fast Probabilistic Shaping Implementation for Long-Haul Fiber-Optic Communication Systems. , 2017, , .		20
13	Experimental Comparison of Probabilistic Shaping Methods for Unrepeated Fiber Transmission. Journal of Lightwave Technology, 2017, 35, 4871-4879.	2.7	65
14	Greedy Algorithms for Optimal Distribution Approximation. Entropy, 2016, 18, 262.	1.1	1
15	On Probabilistic Shaping of Quadrature Amplitude Modulation for the Nonlinear Fiber Channel. Journal of Lightwave Technology, 2016, 34, 5063-5073.	2.7	264
16	Optimal Quantization for Distribution Synthesis. IEEE Transactions on Information Theory, 2016, 62, 6162-6172.	1.5	26
17	Constant Composition Distribution Matching. IEEE Transactions on Information Theory, 2016, 62, 430-434.	1.5	508
18	Rate Adaptation and Reach Increase by Probabilistically Shaped 64-QAM: An Experimental Demonstration. Journal of Lightwave Technology, 2016, 34, 1599-1609.	2.7	492

#	Article	IF	Citations
19	Discrete Signaling for Non-Coherent, Single-Antenna, Rayleigh Block-Fading Channels. IEEE Communications Letters, 2016, 20, 764-767.	2.5	1
20	Informational divergence and entropy rate on rooted trees with probabilities. , 2014, , .		8
21	Probabilistic signal shaping for bit-metric decoding. , 2014, , .		30
22	Labeling Non-Square QAM Constellations for One-Dimensional Bit-Metric Decoding. IEEE Communications Letters, 2014, 18, 1515-1518.	2.5	10
23	Fixed-to-variable length resolution coding for target distributions. , 2013, , .		5
24	Fixed-to-variable length distribution matching. , 2013, , .		17
25	An efficient algorithm to calculate BICM capacity. , 2012, , .		1