

# Sergey Loyka

## List of Publications by Year in descending order

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91  
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91  
docs citations

91  
times ranked

509  
citing authors

#	ARTICLE	IF	CITATIONS
1	Favorable Propagation for Massive MIMO With Circular and Cylindrical Antenna Arrays. IEEE Wireless Communications Letters, 2022, 11, 458-462.	5.0	4
2	On the Capacity of Gaussian MIMO Channels With Memory. IEEE Communications Letters, 2022, 26, 1760-1763.	4.1	1
3	Favorable Propagation for Wideband Massive MIMO with Non-Uniform Linear Arrays. , 2022, , .		0
4	Simple Closed-Form Approximations for Achievable Information Rates of Coded Modulation Systems. Journal of Lightwave Technology, 2021, 39, 1306-1311.	4.6	2
5	Comments on "Precoding and Artificial Noise Design for Cognitive MIMOME Wiretap Channels". IEEE Transactions on Vehicular Technology, 2021, 70, 2917-2921.	6.3	0
6	On Optimal Power Allocation for Modulation-Constrained Gaussian Channels. , 2021, , .		0
7	Multi-Antenna Techniques for Interference Mitigation and Control. , 2021, , .		0
8	To Jam or Not to Jam in Gaussian MIMO Wiretap Channels?: Invited Paper. , 2021, , .		1
9	Algorithms for Globally-Optimal Secure Signaling Over Gaussian MIMO Wiretap Channels Under Interference Constraints. IEEE Transactions on Signal Processing, 2020, 68, 4513-4528.	5.3	10
10	From Feedback Capacity to Tight Achievable Rates without Feedback for AGN Channels with Stable and Unstable Autoregressive Noise. , 2020, , .		1
11	On The Capacity of Gaussian MIMO Channels Under Interference Constraints. , 2020, , .		0
12	The Capacity and Optimal Signaling for Gaussian MIMO Channels Under Interference Constraints. IEEE Transactions on Communications, 2020, 68, 3386-3400.	7.8	4
13	Comments on "AN-Aided Secrecy Precoding for SWIPT in Cognitive MIMO Broadcast Channels". IEEE Communications Letters, 2020, 24, 1146-1149.	4.1	0
14	Comments on "Precoding for secrecy rate maximisation in cognitive MIMO wiretap channels". Electronics Letters, 2020, 56, 902-904.	1.0	4
15	Optimal Location of Cellular Base Station via Convex Optimization. , 2020, , .		0
16	On the Capacity of Gaussian MIMO Channels Under the Joint Power Constraints. IEEE Wireless Communications Letters, 2019, 8, 332-335.	5.0	4
17	Massive MIMO Channels Under the Joint Power Constraints. , 2019, , .		0
18	Comments on "On Favorable Propagation in Massive MIMO Systems and Different Antenna Configurations". IEEE Access, 2019, 7, 185369-185372.	4.2	1

#	ARTICLE	IF	CITATIONS
19	Optimal Full-Rank Signaling Over MIMO Wiretap Channels Under Interference Constraint. IEEE Wireless Communications Letters, 2018, 7, 534-537.	5.0	6
20	Control-Coding Capacity of Decision Models Driven by Correlated Noise and Gaussian Application Examples. , 2018, , .		4
21	Asymptotic Reverse-Waterfilling Characterization of Nonanticipative Rate Distortion Function of Vector-Valued Gauss-Markov Processes with MSE Distortion. , 2018, , .		2
22	The Secrecy Capacity of Gaussian MIMO Wiretap Channels Under Interference Constraints. IEEE Journal on Selected Areas in Communications, 2018, 36, 704-722.	14.0	11
23	The Capacity of Gaussian MIMO Channels Under Total and Per-Antenna Power Constraints. IEEE Transactions on Communications, 2017, 65, 1035-1043.	7.8	60
24	The operational secrecy capacity of cognitive radio MIMO channel. , 2017, , .		4
25	An algorithm for optimal secure signaling over cognitive radio MIMO channels. , 2017, , .		2
26	Closed-form solutions for optimal secure signaling over cognitive radio MIMO channels. , 2017, , .		1
27	On optimal signaling over Gaussian MIMO channels under interference constraints. , 2017, , .		3
28	The capacity of Gaussian MISO channels under total and per-antenna power constraints. , 2016, , .		3
29	Rank-Deficient Solutions for Optimal Signaling Over Wiretap MIMO Channels. IEEE Transactions on Communications, 2016, 64, 2400-2411.	7.8	10
30	Feedback does not increase the capacity of compound channels with additive noise. , 2016, , .		2
31	Optimal Signaling for Secure Communications Over Gaussian MIMO Wiretap Channels. IEEE Transactions on Information Theory, 2016, 62, 7207-7215.	2.4	32
32	A General Formula for Compound Channel Capacity. IEEE Transactions on Information Theory, 2016, 62, 3971-3991.	2.4	6
33	A general formula for compound channel capacity. , 2015, , .		1
34	An Algorithm for Global Maximization of Secrecy Rates in Gaussian MIMO Wiretap Channels. IEEE Transactions on Communications, 2015, 63, 2288-2299.	7.8	38
35	Ergodic capacity under channel distribution uncertainty. , 2014, , .		1
36	Rank-deficient solutions for optimal signaling over secure MIMO channels. , 2014, , .		5

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37	On optimal detection ordering for coded V-BLAST. , 2013, , .		0
38	The secrecy capacity of a compound MIMO Gaussian channel. , 2013, , .		16
39	Convexity of error rates in digital communications under non-Gaussian noise. , 2013, , .		0
40	Extremum problems with total variation distance. , 2013, , .		0
41	Further results on optimal signaling over secure MIMO channels. , 2013, , .		11
42	On optimal signaling over secure MIMO channels. , 2012, , .		31
43	Asymptotic analysis of outage probability in cognitive radio networks. , 2012, , .		2
44	Outage probability under channel distribution uncertainty. , 2011, , .		0
45	Diversity-Multiplexing Tradeoff in the Low-SNR Regime. IEEE Communications Letters, 2011, 15, 542-544.	4.1	7
46	Electromagnetic interference and safety in wireless networks: A statistical approach. , 2011, , .		1
47	Performance analysis of coded V-BLAST with optimum power and rate allocation. , 2011, , .		0
48	On distribution of aggregate interference in cognitive radio networks. , 2010, , .		8
49	Diversity-multiplexing tradeoff in MIMO relay channels for a broad class of fading distributions. IEEE Communications Letters, 2010, 14, 327-329.	4.1	7
50	The Impact of Fading on the Outage Probability in Cognitive Radio Networks. , 2010, , .		7
51	Diversity-multiplexing tradeoff and outage probability in MIMO relay channels. , 2010, , .		7
52	On Capacity-Maximizing Angular Densities of Multipath in MIMO Channels. , 2010, , .		10
53	What is the best angular density of multipath in MIMO channels?. , 2009, , .		1
54	Optimum Power and Rate Allocation for Coded V-BLAST. , 2009, , .		4

#	ARTICLE	IF	CITATIONS
55	The impact of fading and interference cancelation on node density - Outage probability tradeoff in wireless networks. , 2009, , .		1
56	On physically-based normalization of MIMO channel matrices. IEEE Transactions on Wireless Communications, 2009, 8, 1107-1112.	9.2	37
57	On the Outage Capacity Distribution of Correlated Keyhole MIMO Channels. IEEE Transactions on Information Theory, 2008, 54, 3232-3245.	2.4	57
58	On outage and error rate analysis of the ordered V-BLAST. IEEE Transactions on Wireless Communications, 2008, 7, 3679-3685.	9.2	21
59	Comments on "Asymptotic eigenvalue distributions and capacity for MIMO channels under correlated fading. IEEE Transactions on Wireless Communications, 2008, 7, 475-479.	9.2	7
60	On the capacity of a class of MIMO channels subject to normed uncertainty. , 2008, , .		3
61	On node density - outage probability tradeoff in wireless networks. , 2008, , .		5
62	Performance Analysis of V-BLAST with Optimum Power Allocation. , 2007, , .		0
63	On Accuracy and Efficiency of Monte-Carlo BER Simulations for Fading Channels. , 2007, , .		6
64	On Finite-SNR Diversity-Multiplexing Tradeoff. , 2007, , .		12
65	On Asymptotic Outage Capacity Distribution of Correlated MIMO Channels. , 2007, , .		0
66	Diversity-Multiplexing Tradeoff via Asymptotic Analysis of Large MIMO Systems. , 2007, , .		7
67	Symbol Error Rates of Maximum-Likelihood Detector: Convex/Concave Behavior and Applications. , 2007, , .		7
68	Correlated Keyhole MIMO Channels: SNR and Outage Capacity Distributions. , 2006, , .		0
69	Multi-Keyhole MIMO Channels: Asymptotic Analysis of Outage Capacity. , 2006, , .		24
70	Analytical BER analysis of the V-BLAST in a rayleigh fading channel. , 2006, , .		6
71	On multipath clustering in angular domain and its impact on channel capacity and diversity gain. , 2006, , .		1
72	Information theory and electromagnetism: Are they related?. , 2004, , .		7

#	ARTICLE	IF	CITATIONS
73	Exact capacity distributions for MIMO systems with small numbers of antennas. IEEE Communications Letters, 2003, 7, 481-483.	4.1	48
74	Comments on "Pattern characteristics of harmonic and intermodulation products in broad-band active transmit arrays". IEEE Transactions on Antennas and Propagation, 2003, 51, 1683.	5.1	1
75	Comments on "New method of performance analysis for diversity reception with correlated Rayleigh-fading signals". IEEE Transactions on Vehicular Technology, 2003, 52, 725-726.	6.3	9
76	New compound upper bound on MIMO channel capacity. IEEE Communications Letters, 2002, 6, 96-98.	4.1	47
77	Estimating MIMO system performance using the correlation matrix approach. IEEE Communications Letters, 2002, 6, 19-21.	4.1	75
78	On MIMO channel capacity, correlations, and keyholes: analysis of degenerate channels. IEEE Transactions on Communications, 2002, 50, 1886-1888.	7.8	54
79	V-BLAST outage probability: analytical analysis. , 0, , .		12
80	Performance analysis of the V-BLAST algorithm: an analytical approach. , 0, , .		9
81	Statistical approach to MIMO capacity analysis in a fading channel. , 0, , .		5
82	Statistical analysis of a measured MIMO channel. , 0, , .		4
83	Electromagnetic interference in wireless communications: behavioral-level simulation approach. , 0, , .		7
84	Analytical framework for outage and BER analysis of the V-BLAST algorithm. , 0, , .		19
85	On BER analysis of the BLAST without optimal ordering over Rayleigh fading channel. , 0, , .		8
86	Statistical analysis of the $2^{\tilde{A}-n}$ V-BLAST algorithm over Rayleigh fading channel. , 0, , .		1
87	On the relationship of information theory and electromagnetism. , 0, , .		4
88	Transmit Power Allocation for the V-Blast Algorithm. , 0, , .		1
89	Multi-Keyholes and Measure of Correlation in MIMO Channels. , 0, , .		5
90	On Optimization of the V-BLAST Algorithm. , 0, , .		5

#	ARTICLE	IF	CITATIONS
91	Secrecy Rate Maximization in Gaussian MIMO Wiretap Channels. , 0 , 109-139.		2