Gonzalo Vazquez-Vilar

List of Publications by Year
in descending order

38 papers	678 citations	1040056 9 h-index	996975 15 g-index
38 all docs	38 docs citations	38 times ranked	506 citing authors

#	Article	IF	Citations
1	Detection of Rank-P Signals in Cognitive Radio Networks With Uncalibrated Multiple Antennas. IEEE Transactions on Signal Processing, 2011, 59, 3764-3774.	5.3	143
2	Dynamic Spectrum Leasing: A New Paradigm for Spectrum Sharing in Cognitive Radio Networks. IEEE Transactions on Vehicular Technology, 2010, 59, 2328-2339.	6.3	111
3	Multiantenna spectrum sensing for Cognitive Radio: overcoming noise uncertainty. , 2010, , .		65
4	Spatial separation of multi-user MIMO channels. , 2009, , .		38
5	Multiantenna Spectrum Sensing Exploiting Spectral a priori Information. IEEE Transactions on Wireless Communications, 2011, 10, 4345-4355.	9.2	33
6	Saddlepoint Approximations for Short-Packet Wireless Communications. IEEE Transactions on Wireless Communications, 2020, 19, 4831-4846.	9.2	25
7	Multiantenna GLR Detection of Rank-One Signals With Known Power Spectrum in White Noise With Unknown Spatial Correlation. IEEE Transactions on Signal Processing, 2012, 60, 3065-3078.	5.3	24
8	Bayesian <inline-formula> <tex-math notation="LaTeX">M </tex-math> </inline-formula>-Ary Hypothesis Testing: The Meta-Converse and Verdú-Han Bounds Are Tight. IEEE Transactions on Information Theory, 2016, 62, 2324-2333.	2.4	23
9	Saddlepoint approximations of lower and upper bounds to the error probability in channel coding. , 2018, , .		22
10	On the sum capacity of a class of cyclically symmetric deterministic interference channels. , 2009, , .		21
11	Primary User Enters the Game: Performance of Dynamic Spectrum Leasing in Cognitive Radio Networks. IEEE Transactions on Wireless Communications, 2010, 9, 1-5.	9.2	21
12	Saddlepoint Approximation of the Error Probability of Binary Hypothesis Testing. , 2018, , .		17
13	Wideband spectrum sensing in cognitive radio: Joint estimation of noise variance and multiple signal levels. , 2009, , .		16
14	Spectrum Sensing Exploiting Guard Bands and Weak Channels. IEEE Transactions on Signal Processing, 2011, 59, 6045-6057.	5.3	12
15	Wideband spectral estimation from compressed measurements exploiting spectral a priori information in Cognitive Radio systems. , 2010, , .		11
16	Multi-Class Source-Channel Coding. IEEE Transactions on Information Theory, 2016, 62, 5093-5104.	2.4	11
17	Spatial rank estimation in cognitive radio networks with uncalibrated multiple antennas. , 2011, , .		9
18	Source-channel coding with multiple classes. , 2014, , .		8

#	Article	IF	Citations
19	Random-coding joint source-channel bounds. , 2011, , .		7
20	A Derivation of the Source-Channel Error Exponent Using Nonidentical Product Distributions. IEEE Transactions on Information Theory, 2014, 60, 3209-3217.	2.4	7
21	Multiantenna GLR Detection of Rank-One Signals With Known Power Spectral Shape Under Spatially Uncorrelated Noise. IEEE Transactions on Signal Processing, 2016, 64, 6269-6283.	5.3	7
22	Multiantenna detection of multicarrier primary signals exploiting spectral a priori information. , 2009, , .		6
23	Multiantenna detection under noise uncertainty and primary user's spatial structure. , 2011, , .		6
24	Detection diversity of multiantenna spectrum sensors. , 2011, , .		4
25	Converse bounds for finite-length joint source-channel coding. , 2012, , .		4
26	A Rigorous Approach to High-Resolution Entropy-Constrained Vector Quantization. IEEE Transactions on Information Theory, 2018, 64, 2609-2625.	2.4	4
27	Robust Signaling for Bursty Interference. Entropy, 2018, 20, 870.	2.2	4
28	The Error Probability of Generalized Perfect Codes via the Meta-Converse. IEEE Transactions on Information Theory, 2019, 65, 5705-5717.	2.4	4
29	Saddlepoint Approximations for Noncoherent Single-Antenna Rayleigh Block-Fading Channels. , 2019, , .		4
30	Error Probability Bounds for Gaussian Channels Under Maximal and Average Power Constraints. IEEE Transactions on Information Theory, 2021, 67, 3965-3985.	2.4	3
31	The meta-converse bound is tight. , 2013, , .		2
32	Multiple quantum hypothesis testing expressions and classical-quantum channel converse bounds. , 2016, , .		2
33	A general rate-distortion converse bound for entropy-constrained scalar quantization. , 2016, , .		2
34	Low-complexity fixed-to-fixed joint source-channel coding. , 2014, , .		1
35	A derivation of the cost-constrained sphere-packing exponent. , 2015, , .		1
36	Mobility dependent feedback scheme for point-to-point MIMO systems. , 2008, , .		0

#	Article	IF	Citations
37	The Error Probability of Generalized Perfect Codes. , 2018, , .		0
38	Finite-Blocklength Approximations for Noncoherent Rayleigh Block-Fading Channels. , 2019, , .		0