Abbas El Gamal

List of Publications by Year
in descending order

53 papers	3,300 citations	567144 15 h-index	477173 29 g-index
54 all docs	54 docs citations	54 times ranked	1897 citing authors

#	Article	IF	Citations
1	Noisy Network Coding. IEEE Transactions on Information Theory, 2011, 57, 3132-3152.	1.5	351
2	CMOS Image Sensor With Per-Column Î£Î" ADC and Programmable Compressed Sensing. IEEE Journal of Solid-State Circuits, 2013, 48, 318-328.	3.5	175
3	Modeling and Analysis of the Role of Energy Storage for Renewable Integration: Power Balancing. IEEE Transactions on Power Systems, 2013, 28, 4109-4117.	4.6	126
4	Relay Networks With Delays. IEEE Transactions on Information Theory, 2007, 53, 3413-3431.	1.5	82
5	The capacity region of a class of three-receiver broadcast channels with degraded message sets. IEEE Transactions on Information Theory, 2009, 55, 4479-4493.	1.5	78
6	Wiretap Channel With Causal State Information. IEEE Transactions on Information Theory, 2012, 58, 2838-2849.	1.5	67
7	Modeling and analysis of the role of fast-response energy storage in the smart grid. , 2011, , .		64
8	Source Coding With Limited-Look-Ahead Side Information at the Decoder. IEEE Transactions on Information Theory, 2006, 52, 5218-5239.	1.5	54
9	Three-Receiver Broadcast Channels With Common and Confidential Messages. IEEE Transactions on Information Theory, 2012, 58, 2748-2765.	1.5	52
10	Cascade multiterminal source coding. , 2009, , .		45
11	Exact common information. , 2014, , .		37
12	Strong Functional Representation Lemma and Applications to Coding Theorems. IEEE Transactions on Information Theory, 2018, 64, 6967-6978.	1.5	37
13	A 3D Multi-Aperture Image Sensor Architecture. , 2006, , .		33
14	Optimal Achievable Rates for Interference Networks With Random Codes. IEEE Transactions on Information Theory, 2015, 61, 6536-6549.	1.5	33
15	A Multi-Aperture Image Sensor With 0.7 $mu{hbox{m}}$ Pixels in 0.11 $mu{hbox{m}}$ CMOS Technology. IEEE Journal of Solid-State Circuits, 2008, 43, 2990-3005.	3.5	25
16	Interference Decoding for Deterministic Channels. IEEE Transactions on Information Theory, 2011, 57, 2966-2975.	1.5	20
17	An Outer Bound to the Capacity Region of the Broadcast Channel. , 2006, , .		16
18	An Efficient Feedback Coding Scheme With Low Error Probability for Discrete Memoryless Channels. IEEE Transactions on Information Theory, 2015, 61, 2953-2963.	1.5	16

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19	Distributed Simulation of Continuous Random Variables. IEEE Transactions on Information Theory, 2017, 63, 6329-6343.	1.5	16
20	The capacity region of a class of 3-receiver broadcast channels with degraded message sets. , 2008, , .		15
21	The prospect of 3D-IC. , 2009, , .		15
22	Superposition Coding Is Almost Always Optimal for the Poisson Broadcast Channel. IEEE Transactions on Information Theory, 2016, 62, 1782-1794.	1.5	15
23	Architectures for High Dynamic Range, High Speed Image Sensor Readout Circuits. , 2006, , .		14
24	A Low-Power Field-Programmable Gate Array Routing Fabric. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 2009, 17, 1481-1494.	2.1	12
25	Two-way source coding through a relay. , 2010, , .		11
26	A Note on the Broadcast Channel With Stale State Information at the Transmitter. IEEE Transactions on Information Theory, 2015, 61, 3622-3631.	1.5	11
27	Co-optimizing the value of storage in energy and regulation service markets. Energy Systems, 2017, 8, 369-387.	1.8	11
28	State-Dependent Relay Channel: Achievable Rate and Capacity of a Semideterministic Class. IEEE Transactions on Information Theory, 2013, 59, 2629-2638.	1.5	10
29	Coordination of Distributed Energy Storage Under Spatial and Temporal Data Asymmetry. IEEE Transactions on Smart Grid, 2019, 10, 1184-1194.	6.2	9
30	A 0.18Î¼m CMOS 1000 frames/sec, 138dB Dynamic Range Readout Circuit for 3D-IC IR Focal Plane Arrays. , 2006, , .		8
31	Distributed Lossy Averaging. IEEE Transactions on Information Theory, 2010, 56, 3422-3437.	1.5	8
32	A Two-Layer Decentralized Control Architecture for DER Coordination. , 2018, , .		8
33	Relay with Side Information. , 2007, , .		7
34	A 0.5 μm pixel frame-transfer CCD image sensor in 110 nm CMOS. , 2007, , .		6
35	Wiretap channel with causal state information. , 2010, , .		6
36	Distributed simulation of continuous random variables. , 2016, , .		6

#	Article	IF	Citations
37	Maximal Correlation Secrecy. IEEE Transactions on Information Theory, 2018, 64, 3916-3926.	1.5	6
38	Network Information Theoretic Security With Omnipresent Eavesdropping. IEEE Transactions on Information Theory, 2021, 67, 8280-8299.	1.5	6
39	A Universal Coding Scheme for Remote Generation of Continuous Random Variables. IEEE Transactions on Information Theory, 2018, 64, 2583-2592.	1.5	5
40	Extended Gray–Wyner System With Complementary Causal Side Information. IEEE Transactions on Information Theory, 2018, 64, 5862-5878.	1.5	5
41	A Strengthened Cutset Upper Bound on the Capacity of the Relay Channel and Applications. IEEE Transactions on Information Theory, 2022, 68, 5013-5043.	1.5	5
42	On Marton's Inner Bound for the General Broadcast Channel. IEEE Transactions on Information Theory, 2014, 60, 3748-3762.	1.5	4
43	Superposition coding is almost always optimal for the Poisson broadcast channel. , 2015, , .		4
44	On Energy-Reliability Tradeoff in Analog-to-Digital Converters with Imperfect Comparators. , 2006, , .		3
45	An efficient feedback coding scheme with low error probability for discrete memoryless channels. , 2014, , .		3
46	Maximal correlation secrecy. , 2015, , .		3
47	Capacity Theorems for Broadcast Channels With Two Channel State Components Known at the Receivers. IEEE Transactions on Information Theory, 2016, 62, 6917-6930.	1.5	3
48	Network Information Theoretic Security. , 2020, , .		3
49	Object Tracking in the Presence of Occlusions via a Camera Network. , 2007, , .		2
50	Minimax Learning for Distributed Inference. IEEE Transactions on Information Theory, 2020, 66, 7929-7938.	1.5	2
51	Capacity region of the broadcast channel with two deterministic channel state components. , 2014, , .		1
52	Source Description Cost. , 2006, , .		0
53	Joy Thomas: legacy, foundation and the IT society. IEEE BITS the Information Theory Magazine, 2021, , 1-1.	1.0	0