

Charalambos D

List of Publications by Year in descending order

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papers

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times ranked

497
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#	ARTICLE	IF	CITATIONS
1	Complete Characterization of Gorbunov and Pinsker Nonanticipatory Epsilon Entropy of Multivariate Gaussian Sources: Structural Properties. IEEE Transactions on Information Theory, 2022, 68, 1440-1464.	1.5	1
2	Jump LQR Systems With Unknown Transition Probabilities. IEEE Transactions on Automatic Control, 2021, 66, 2693-2708.	3.6	5
3	Sequential Characterizations of Cover and Pombra Gaussian Feedback Capacity: Generalizations to MIMO Channels via Sufficient Statistic. , 2021, , .		1
4	A Distributionally Robust LQR for Systems with Multiple Uncertain Players. , 2021, , .		4
5	Joint Nonanticipative Rate Distortion Function for a Tuple of Random Processes with Individual Fidelity Criteria. , 2021, , .		0
6	Linear Quadratic Tracking Control of Hidden Markov Jump Linear Systems Subject to Ambiguity. , 2021, , .		0
7	From Feedback Capacity to Tight Achievable Rates without Feedback for AGN Channels with Stable and Unstable Autoregressive Noise. , 2020, , .		1
8	Characterization of Conditional Independence and Weak Realizations of Multivariate Gaussian Random Variables: Applications to Networks. , 2020, , .		4
9	Structural Properties of Nonanticipatory Epsilon Entropy of Multivariate Gaussian Sources. , 2020, , .		8
10	New Formulas of Ergodic Feedback Capacity of AGN Channels Driven by Stable and Unstable Autoregressive Noise. , 2020, , .		3
11	Ergodic Control-Coding Capacity of Stochastic Control Systems: Information Signalling and Hierarchical Optimality of Gaussian Systems. SIAM Journal on Control and Optimization, 2020, 58, 104-135.	1.1	2
12	Canonical Dynamic Programming Equations subject to Ambiguity. IFAC-PapersOnLine, 2020, 53, 7166-7171.	0.5	0
13	Infinite Horizon Average Cost Dynamic Programming Subject to Total Variation Distance Ambiguity. SIAM Journal on Control and Optimization, 2019, 57, 2843-2872.	1.1	9
14	Robust LQG for Markov Jump Linear Systems. , 2019, , .		2
15	Concepts, Decompositions, and Optimal Control Laws for a Gaussian Team Problem. , 2019, , .		0
16	Generalizations of Nonanticipative Rate Distortion Function to Multivariate Nonstationary Gaussian Autoregressive Processes. , 2019, , .		5
17	Finite-Time Nonanticipative Rate Distortion Function for Time-Varying Scalar-Valued Gauss-Markov Sources. , 2018, 2, 175-180.		16
18	Information Structures for Feedback Capacity of Channels With Memory and Transmission Cost: Stochastic Optimal Control and Variational Equalities. IEEE Transactions on Information Theory, 2018, 64, 4962-4992.	1.5	15

#	ARTICLE	IF	CITATIONS
19	Centralized Versus Decentralized Optimization of Distributed Stochastic Differential Decision Systems With Different Information Structures—Part II: Applications. IEEE Transactions on Automatic Control, 2018, 63, 1913-1928.	3.6	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	A Sufficient Condition for General Decentralized Cooperative Stochastic Differential Games. , 2018, , .		0
23	Optimal Estimation via Nonanticipative Rate Distortion Function and Applications to Time-Varying Gauss-Markov Processes. SIAM Journal on Control and Optimization, 2018, 56, 3731-3765.	1.1	23
24	A General Coding Scheme for Signaling Gaussian Processes Over Gaussian Decision Models. , 2018, , .		1
25	Zero-Delay Rate Distortion via Filtering for Vector-Valued Gaussian Sources. IEEE Journal on Selected Topics in Signal Processing, 2018, 12, 841-856.	7.3	32
26	Capacity Achieving Distributions and Separation Principle for Feedback Gaussian Channels With Memory: the LQG Theory of Directed Information. IEEE Transactions on Information Theory, 2018, 64, 6384-6418.	1.5	9
27	Directed Information Subject to a Fidelity. Applications to Conditionally Gaussian Processes. , 2018, , .		0
28	Team Optimality Conditions of Distributed Stochastic Differential Decision Systems With Decentralized Noisy Information Structures. IEEE Transactions on Automatic Control, 2017, 62, 708-723.	3.6	4
29	Approximation of Markov Processes by Lower Dimensional Processes via Total Variation Metrics. IEEE Transactions on Automatic Control, 2017, 62, 1030-1045.	3.6	4
30	Centralized Versus Decentralized Optimization of Distributed Stochastic Differential Decision Systems With Different Information Structures-Part I: A General Theory. IEEE Transactions on Automatic Control, 2017, 62, 1194-1209.	3.6	23
31	Information Transfer of Control Strategies: Dualities of Stochastic Optimal Control Theory and Feedback Capacity of Information Theory. IEEE Transactions on Automatic Control, 2017, 62, 5010-5025.	3.6	10
32	Sequential Necessary and Sufficient Conditions for Capacity Achieving Distributions of Channels With Memory and Feedback. IEEE Transactions on Information Theory, 2017, 63, 7095-7115.	1.5	11
33	Two-letter capacity formula for channels with memory and feedback. , 2017, , .		0
34	The capacity of unstable dynamical systems-interaction of control and information transmission. , 2017, , .		4
35	An upper bound to zero-delay rate distortion via Kalman filtering for vector Gaussian sources. , 2017, , .		6
36	Hierarchical decomposition of optimal control and information strategies in control-coding capacity of stochastic systems. , 2017, , .		3

#	ARTICLE	IF	CITATIONS
37	Signalling of information in networked stochastic dynamical control systems. , 2017, , .		0
38	Hierarchical optimality of linear controllers-encoders-decoders operating at control-coding capacity of LQG control systems. , 2017, , .		1
39	Decentralized sufficient & necessary optimality conditions for cooperative stochastic differential decision problems. , 2016, , .		0
40	Filtering with fidelity for time-varying Gauss-Markov processes. , 2016, , .		9
41	Robust Linear Quadratic Regulator for uncertain systems. , 2016, , .		10
42	Information transfer in stochastic optimal control with randomized strategies and directed information criterion. , 2016, , .		2
43	Infinite horizon discounted dynamic programming subject to total variation ambiguity on conditional distribution. , 2016, , .		0
44	Rank-Deficient Solutions for Optimal Signaling Over Wiretap MIMO Channels. IEEE Transactions on Communications, 2016, 64, 2400-2411.	4.9	10
45	Decentralized optimality conditions of stochastic differential decision problems via Girsanov's measure transformation. Mathematics of Control, Signals, and Systems, 2016, 28, 1.	1.4	18
46	Feedback does not increase the capacity of compound channels with additive noise. , 2016, , .		2
47	Optimal Signaling for Secure Communications Over Gaussian MIMO Wiretap Channels. IEEE Transactions on Information Theory, 2016, 62, 7207-7215.	1.5	32
48	Directed Information on Abstract Spaces: Properties and Variational Equalities. IEEE Transactions on Information Theory, 2016, 62, 6019-6052.	1.5	35
49	A General Formula for Compound Channel Capacity. IEEE Transactions on Information Theory, 2016, 62, 3971-3991.	1.5	6
50	Nonanticipative transmission for sources and channels with memory. , 2015, , .		6
51	Capacity of Binary State Symmetric Channel with and without feedback and transmission cost. , 2015, , .		8
52	A general formula for compound channel capacity. , 2015, , .		1
53	A sufficient condition for decentralized non-cooperative stochastic differential games and relations to mean field games. , 2015, , .		0
54	Infinite horizon average cost dynamic programming subject to ambiguity on conditional distribution. , 2015, , .		2

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55	Novel Matrix Singular Value Inequalities and Their Applications to Uncertain MIMO Channels. IEEE Transactions on Information Theory, 2015, 61, 6623-6634.	1.5	13
56	An Algorithm for Global Maximization of Secrecy Rates in Gaussian MIMO Wiretap Channels. IEEE Transactions on Communications, 2015, 63, 2288-2299.	4.9	38
57	Dynamic Programming Subject to Total Variation Distance Ambiguity. SIAM Journal on Control and Optimization, 2015, 53, 2040-2075.	1.1	21
58	Information Nonanticipative Rate Distortion Function and Its Applications. Lecture Notes in Control and Information Sciences, 2015, , 317-324.	0.6	7
59	On Shannon's Duality of a Source and a Channel and Nonanticipative Communication and Communication for Control. Lecture Notes in Control and Information Sciences, 2015, , 291-305.	0.6	0
60	Nonanticipative Duality of Sources and Channels with Memory and Feedback. Lecture Notes in Control and Information Sciences, 2015, , 325-335.	0.6	1
61	Applications of information Nonanticipative Rate Distortion Function. , 2014, , .		4
62	Maximum principle for decentralized stochastic differential decision systems. , 2014, , .		0
63	Ergodic capacity under channel distribution uncertainty. , 2014, , .		1
64	Team optimality conditions of differential decision systems with nonclassical information structures. , 2014, , .		0
65	Optimization of directed information and relations to filtering theory. , 2014, , .		11
66	Rank-deficient solutions for optimal signaling over secure MIMO channels. , 2014, , .		5
67	Nonanticipative Rate Distortion Function and Relations to Filtering Theory. IEEE Transactions on Automatic Control, 2014, 59, 937-952.	3.6	41
68	Extremum Problems With Total Variation Distance and Their Applications. IEEE Transactions on Automatic Control, 2014, 59, 2353-2368.	3.6	20
69	Optimal Merging Algorithms for Lossless Codes With Generalized Criteria. IEEE Transactions on Information Theory, 2014, 60, 5486-5499.	1.5	0
70	Equivalence of decentralized stochastic dynamic decision systems via Girsanov's measure transformation. , 2014, , .		7
71	Approximation of Markov processes by lower dimensional processes. , 2014, , .		1
72	Stochastic Minimum Principle for Partially Observed Systems Subject to Continuous and Jump Diffusion Processes and Driven by Relaxed Controls. SIAM Journal on Control and Optimization, 2013, 51, 3235-3257.	1.1	24

#	ARTICLE	IF	CITATIONS
73	Special issue on control, communication, and complexity. Mathematics of Control, Signals, and Systems, 2013, 25, 433-436.	1.4	0
74	Encoder, controller and decoder design of jump linear systems over jump communication channels. , 2013, , .		0
75	Extremum problems with total variation distance. , 2013, , .		0
76	Further results on optimal signaling over secure MIMO channels. , 2013, , .		11
77	Variational equalities of directed information and applications. , 2013, , .		4
78	Dynamic team optimality conditions of distributed stochastic differential decision systems with decentralized noisy information structures. , 2013, , .		4
79	On the relation of nonanticipative rate distortion function and filtering theory. , 2013, , .		0
80	Dynamic programming with total variational distance uncertainty. , 2012, , .		0
81	Optimization of stochastic uncertain systems: Entropy rate functionals, minimax games and robustness. Advances in Statistics, Probability and Actuarial Science, 2012, , 465-502.	0.2	0
82	On optimal signaling over secure MIMO channels. , 2012, , .		31
83	Directed information on abstract spaces: Properties and extremum problems. , 2012, , .		9
84	Outage Probability Under Channel Distribution Uncertainty. IEEE Transactions on Information Theory, 2012, 58, 6825-6838.	1.5	17
85	Optimal Control of Uncertain Stochastic Systems Subject to Total Variation Distance Uncertainty. SIAM Journal on Control and Optimization, 2012, 50, 2683-2725.	1.1	7
86	Noncoherent Energy Detection With Orthogonal Signaling for an Uncoded Two-Way Relay Channel. IEEE Transactions on Vehicular Technology, 2012, 61, 404-409.	3.9	7
87	On the Compound Capacity of a Class of MIMO Channels Subject to Normed Uncertainty. IEEE Transactions on Information Theory, 2012, 58, 2048-2063.	1.5	33
88	A low-cost non-coherent transmission for uncoded two-way relay channels. , 2011, , .		0
89	Optimal Filtering Over Uncertain Wireless Communication Channels. IEEE Signal Processing Letters, 2011, 18, 359-362.	2.1	11
90	Outage probability under channel distribution uncertainty. , 2011, , .		0

#	ARTICLE	IF	CITATIONS
91	Estimation and identification of time-varying long-term fading channels via the particle filter and the EM algorithm. , 2011, , .		1
92	Information Theoretic Modeling and Analysis for Global Interconnects With Process Variations. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 2011, 19, 397-410.	2.1	3
93	Mutual Information Expansion for MIMO Systems and Capacity Formulae at Low SNR. IEEE Communications Letters, 2011, 15, 329-331.	2.5	3
94	Stochastic Optimal Control Subject to Ambiguity. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2011, 44, 4459-4464.	0.4	0
95	Optimal Encoders Maximizing Directed Information of Channels with Memory and Feedback: Stochastic Control and Dynamic Programming. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2011, 44, 6598-6603.	0.4	0
96	Stochastic optimal control of discrete-time systems subject to conditional distribution uncertainty. , 2011, , .		4
97	Lossless coding with generalized criteria. , 2011, , .		1
98	Optimal encoder and control strategies in stochastic control subject to rate constraints for channels with memory and feedback. , 2011, , .		5
99	Stability and reliable data reconstruction of uncertain dynamic systems over finite capacity channels. Automatica, 2010, 46, 889-896.	3.0	19
100	Optimal stochastic control of discrete-time systems subject to total variation distance uncertainty. , 2010, , .		1
101	Capacity of channels with memory and feedback: Encoder properties and dynamic programming. , 2010, , .		4
102	Rate distortion function with causal decoding. , 2010, , .		0
103	Capacity for MIMO systems at low SNR. , 2010, , .		0
104	Minimax rate distortion for a class of sources. , 2010, , .		0
105	Outage capacity and probability for a class of MIMO channels. , 2010, , .		0
106	Optimum immigration policies based on Linear Quadratic Theory. , 2010, , .		0
107	Dynamic demographic models and parameter identification: Simulations based on statistical data. , 2009, , .		1
108	Minimizing outage probability for a class of MIMO channels. , 2009, , .		1

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109	Stochastic control over finite capacity channels: Causality, feedback and uncertainty. , 2009, , .		1
110	Stochastic optimal control subject to variational norm uncertainty: viscosity subsolution for generalized HJB inequality. , 2009, , .		0
111	Information Theoretic Bounds for Compound MIMO Gaussian Channels. IEEE Transactions on Information Theory, 2009, 55, 1603-1617.	1.5	9
112	Nonlinear Estimation for a Class of Systems. IEEE Transactions on Information Theory, 2009, 55, 1930-1938.	1.5	6
113	Capacity of the Class of MIMO Channels With Incomplete CDIâ€™Properties of Mutual Information for a Class of Channels. IEEE Transactions on Information Theory, 2009, 55, 3725-3734.	1.5	6
114	Stochastic differential equations for modeling, estimation and identification of mobile-to-mobile communication channels. IEEE Transactions on Wireless Communications, 2009, 8, 1754-1763.	6.1	23
115	Stochastic optimal control subject to variational norm uncertainty: Dynamic programming and HJB equation. , 2009, , .		0
116	Stochastic control over finite capacity channels: Causality and feedback. , 2009, , .		0
117	LQG optimality and separation principle for general discrete time partially observed stochastic systems over finite capacity communication channels. Automatica, 2008, 44, 3181-3188.	3.0	63
118	Robust coding for a class of sources: Applications in control and reliable communication over limited capacity channels. Systems and Control Letters, 2008, 57, 1005-1012.	1.3	13
119	Optimal control of a two-wheeled mobile robot via finite capacity communication channel. , 2008, , .		2
120	Control of Continuous-Time Linear Gaussian Systems Over Additive Gaussian Wireless Fading Channels: A Separation Principle. IEEE Transactions on Automatic Control, 2008, 53, 1013-1019.	3.6	44
121	On the capacity of a class of MIMO channels subject to normed uncertainty. , 2008, , .		3
122	Statistical Analysis of Multipath Fading Channels Using Generalizations of Shot Noise. Eurasip Journal on Wireless Communications and Networking, 2008, 2008, .	1.5	1
123	Stochastic Wireless Channel Modeling, Estimation and Identification from Measurements. AIP Conference Proceedings, 2008, , .	0.3	0
124	Robust stabilizing scheme for uncertain systems controlled over limited capacity Additive White Gaussian Noise channels. , 2008, , .		0
125	Least-square estimation for nonlinear systems with applications to phase and envelope estimation in wireless fading channels. , 2008, , .		1
126	Robust estimation with applications to phase and envelope estimation in frequency selective wireless fading channels. , 2008, , .		0

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127	Control of Jump Linear Systems Over Jump Communication Channels - Source-Channel Matching Approach. , 2007, , .		2
128	Estimation of mobile station position and velocity in multipath wireless networks using the unscented particle filter. , 2007, , .		5
129	Time Varying Wireless Channel Modeling, Estimation, Identification, and Power Control from Measurements. Proceedings of the American Control Conference, 2007, , .	0.0	3
130	Supervisory and Notification Aggregator Service Enabler in a Fixed Mobile Convergent Architecture. , 2007, , .		1
131	Distributed Stochastic Power Control for Time-Varying Long-Term and Short-Term Fading Wireless Networks. Proceedings of the American Control Conference, 2007, , .	0.0	4
132	Robust control of a class of feedback systems subject to limited capacity constraints. , 2007, , .		2
133	Optimization of stochastic uncertain systems with variational norm constraints. , 2007, , .		8
134	Stochastic Uncertain Systems Subject to Relative Entropy Constraints: Induced Norms and Monotonicity Properties of Minimax Games. IEEE Transactions on Automatic Control, 2007, 52, 647-663.	3.6	51
135	Estimation and identification of time-varying long-term fading wireless channels with application to power control. , 2007, , .		0
136	Time-varying optimal disturbance rejection in presence of plant uncertainty. , 2007, , .		0
137	Nonlinear Estimation for a Class of Systems. , 2006, , .		1
138	Information Capacity of MIMO Channels with Relative Entropy Constraint. , 2006, , .		3
139	Stochastic Power Control for Time-Varying Long-Term Fading Wireless Networks. Eurasip Journal on Advances in Signal Processing, 2006, 2006, 1.	1.0	28
140	Quadratic forms for Feynman-Kac semigroups. Physics Letters, Section A: General, Atomic and Solid State Physics, 2006, 353, 446-451.	0.9	0
141	Is robustness of stochastic uncertain systems related to information theory and statistical mechanics? (Keynote Address). , 2005, 5847, 88.		0
142	Binding of Sodium Dodecyl Sulfate to Linear and Star Homopolymers of the Nonionic Poly(methoxyhexa(ethylene glycol) methacrylate) and the Polycation Poly(2-(dimethylamino)ethyl) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 Small-Angle Neutron Scattering Measurements. Langmuir, 2004, 20, 6458-6469.	1.6	20
143	Large deviations and deterministic measures of information. , 2003, , .		1
144	Discrete-Time Risk-Sensitive Filters with Non-Gaussian Initial Conditions and Their Ergodic Properties. Asian Journal of Control, 2001, 3, 262-271.	1.9	8

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145	Fault Monitoring of Control Systems with Abrupt Changes. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2000, 33, 1023-1028.	0.4	0
146	Lie algebraic methods in optimal control of stochastic systems with exponential-of-integral cost. Systems and Control Letters, 1999, 37, 93-105.	1.3	0
147	Necessary Conditions of Optimization for Partially Observed Controlled Diffusions. SIAM Journal on Control and Optimization, 1999, 37, 1676-1700.	1.1	2
148	New explicit filters and smoothers for diffusions with nonlinear drift and measurements. Systems and Control Letters, 1998, 33, 89-103.	1.3	7
149	Classes of Nonlinear Partially Observable Stochastic Optimal Control Problems with Explicit Optimal Control Laws. SIAM Journal on Control and Optimization, 1998, 36, 542-578.	1.1	33
150	On the application of minimum principle for solving partially observable risk-sensitive control problems. Systems and Control Letters, 1996, 27, 169-179.	1.3	10
151	Minimum principle for partially observable nonlinear risk-sensitive control problems using measure-valued decompositions. Stochastic and Stochastics Reports, 1996, 57, 247-288.	0.6	54