Aristotle Arapostathis

List of Publications by Year in Descending Order

130 papers	**2,973** citations	**23** h-index	**52** g-index
161 ext. papers	**3,652** ext. citations	**2.6** avg, IF	**4.94** L-index

#	Paper	IF	Citations
130	On ergodic control problem for viscous Hamilton–Jacobi equations for weakly coupled elliptic systems. *Journal of Differential Equations*, **2022**, 314, 128-160	2.1	
129	Optimal Sensor Scheduling under Intermittent Observations Subject to Network Dynamics. *IEEE Transactions on Automatic Control*, **2022**, 1-1	5.9	0
128	Exponential ergodicity and steady-state approximations for a class of markov processes under fast regime switching. *Advances in Applied Probability*, **2021**, 53, 1-29	0.7	
127	Optimal Scheduling of Critically Loaded Multiclass GI/M/n+M Queues in an Alternating Renewal Environment. *Applied Mathematics and Optimization*, **2021**, 84, 1857-1901	1.5	
126	On the policy improvement algorithm for ergodic risk-sensitive control. *Proceedings of the Royal Society of Edinburgh Section A: Mathematics*, **2021**, 151, 1305-1330	1	1
125	A Variational Characterization of the Risk-Sensitive Average Reward for Controlled Diffusions on $\mathbb{R}^d$. *SIAM Journal on Control and Optimization*, **2020**, 58, 3785-3813	1.9	1
124	Controlled–Versions of the Collatz–Wielandt and Donsker–Varadhan Formulae. *Infosys Science Foundation Series*, **2020**, 199-214	0.1	
123	A Variational Formula for Risk-Sensitive Control of Diffusions in $\mathbb{R}^d$. *SIAM Journal on Control and Optimization*, **2020**, 58, 85-103	1.9	6
122	Ergodic control of diffusions with compound Poisson jumps under a general structural hypothesis. *Stochastic Processes and Their Applications*, **2020**, 130, 6733-6756	1.1	3
121	Infinite horizon asymptotic average optimality for large-scale parallel server networks. *Stochastic Processes and Their Applications*, **2019**, 129, 283-322	1.1	3
120	Ergodic Control of a Class of Jump Diffusions with Finite Lévy Measures and Rough Kernels. *SIAM Journal on Control and Optimization*, **2019**, 57, 1516-1540	1.9	4
119	Ergodicity of a Lévy-driven SDE arising from multiclass many-server queues. *Annals of Applied Probability*, **2019**, 29,	2	13
118	Strict monotonicity of principal eigenvalues of elliptic operators in Rd and risk-sensitive control. *Journal Des Mathematiques Pures Et Appliquees*, **2019**, 124, 169-219	1.7	11
117	On uniqueness of solutions to viscous HJB equations with a subquadratic nonlinearity in the gradient. *Communications in Partial Differential Equations*, **2019**, 44, 1466-1480	1.6	4
116	Optimal Control of Markov-Modulated Multiclass Many-Server Queues. *Stochastic Systems*, **2019**, 9, 155-181	1.1	4
115	Uniform Polynomial Rates of Convergence for A Class of Lévy-Driven Controlled SDEs Arising in Multiclass Many-Server Queues. *The IMA Volumes in Mathematics and Its Applications*, **2019**, 1-20	0.5	2
114	Optimal scheduling of multiple sensors which transmit measurements over a dynamic lossy network **2019**,		2

113	Open Problem—Convergence and Asymptotic Optimality of the Relative Value Iteration in Ergodic Control. *Stochastic Systems*, **2019**, 9, 292-294	1.7	1
112	Infinite-Horizon Average Optimality of the N-Network in the Halfin–Whitt Regime. *Mathematics of Operations Research*, **2018**, 43, 838-866	1.5	5
111	A counterexample to a nonlinear version of the Krein–Rutman theorem by R. Mahadevan. *Nonlinear Analysis: Theory, Methods & Applications*, **2018**, 171, 170-176	1.3	6
110	Infinite horizon risk-sensitive control of diffusions without any blanket stability assumptions. *Stochastic Processes and Their Applications*, **2018**, 128, 1485-1524	1.1	14
109	Certain Liouville properties of eigenfunctions of elliptic operators. *Transactions of the American Mathematical Society*, **2018**, 371, 4377-4409	1	4
108	Augmenting Max-Weight With Explicit Learning for Wireless Scheduling With Switching Costs. *IEEE/ACM Transactions on Networking*, **2018**, 26, 2501-2514	3.8	6
107	Controlled equilibrium selection in stochastically perturbed dynamics. *Annals of Probability*, **2018**, 46,	1.9	3
106	Some New Results on Sample Path Optimality in Ergodic Control of Diffusions. *IEEE Transactions on Automatic Control*, **2017**, 62, 5351-5356	5.9	2
105	A Correction to "A Relative Value Iteration Algorithm for Nondegenerate Controlled Diffusions''. *SIAM Journal on Control and Optimization*, **2017**, 55, 1711-1715	1.9	
104	On solutions of mean field games with ergodic cost. *Journal Des Mathematiques Pures Et Appliquees* , **2017**, 107, 205-251	1.7	8
103	Augmenting max-weight with explicit learning for wireless scheduling with switching costs **2017**,		8
102	Ergodic diffusion control of multiclass multi-pool networks in the Halfin–Whitt regime. *Annals of Applied Probability*, **2016**, 26,	2	6
101	Risk-Sensitive Control and an Abstract Collatz–Wielandt Formula. *Journal of Theoretical Probability*, **2016**, 29, 1458-1484	0.5	10
100	The Dirichlet problem for stable-like operators and related probabilistic representations. *Communications in Partial Differential Equations*, **2016**, 41, 1472-1511	1.6	12
99	. *IEEE Transactions on Automatic Control*, **2015**, 60, 19-33	5.9	2
98	Greedy Motion Planning for Simultaneous Signal Landscape Mapping and Receiver Localization. *IEEE Journal on Selected Topics in Signal Processing*, **2015**, 9, 247-258	7.5	20
97	Reliability analysis of three-dimensional shipboard electrical power distribution systems **2015**,		2
96	Ergodic control of multi-class $M/M/N+M$ queues in the Halfin–Whitt regime. *Annals of Applied Probability*, **2015**, 25,	2	10

95	Convergence of the Relative Value Iteration for the Ergodic Control Problem of Nondegenerate Diffusions under Near-Monotone Costs. *SIAM Journal on Control and Optimization*, **2014**, 52, 1-31	1.9	4
94	Aspiration Learning in Coordination Games. *SIAM Journal on Control and Optimization*, **2013**, 51, 465-490	1.9	7
93	Relative Value Iteration for Stochastic Differential Games **2013**, 3-27		3
92	A Relative Value Iteration Algorithm for Nondegenerate Controlled Diffusions. *SIAM Journal on Control and Optimization*, **2012**, 50, 1886-1902	1.9	6
91	Eigen-genomic system dynamic-pattern analysis (ESDA): modeling mRNA degradation and self-regulation. *IEEE/ACM Transactions on Computational Biology and Bioinformatics*, **2012**, 9, 430-7	3	3
90	Resource allocation: Realizing mean-variability-fairness tradeoffs **2012**,		5
89	Principal-oscillation-pattern analysis of gene expression. *PLoS ONE*, **2012**, 7, e28805	3.7	7
88	On the Policy Iteration Algorithm for Nondegenerate Controlled Diffusions Under the Ergodic Criterion **2012**, 1-12		
87	On the adaptive control of a class of partially observed Markov decision processes. *Journal of Mathematical Analysis and Applications*, **2011**, 380, 1-9	1.1	
86	Ergodic Control of Diffusion Processes **2011**,		22
85	Aspiration learning in coordination games **2010**,		4
84	Power Electronic Transient Load Model for Use in Stability Studies of Electric Power Grids. *IEEE Transactions on Power Systems*, **2010**, 25, 914-921	7	14
83	Uniform Recurrence Properties of Controlled Diffusions and Applications to Optimal Control. *SIAM Journal on Control and Optimization*, **2010**, 48, 4181-4223	1.9	15
82	Detection of Flicker Caused by Interharmonics. *IEEE Transactions on Instrumentation and Measurement*, **2009**, 58, 152-160	5.2	18
81	Signal Processing-Based Direction Finder for Transient Capacitor Switching Disturbances. *IEEE Transactions on Power Delivery*, **2008**, 23, 2555-2562	4.3	5
80	Necessary and Sufficient Conditions for State Equivalence to a Nonlinear Discrete-Time Observer Canonical Form. *IEEE Transactions on Automatic Control*, **2008**, 53, 2701-2707	5.9	10
79	Optimal Sensor Querying: General Markovian and LQG Models With Controlled Observations. *IEEE Transactions on Automatic Control*, **2008**, 53, 1392-1405	5.9	34
78	Condition Monitoring Based on Estimating Complex Coupling Coefficients **2008**,		1

77	Joint Network Coding and Superposition Coding for Multi-User Information Exchange in Wireless Relaying Networks **2008**,		20
76	Broadcasting in Sensor Networks: The Role of Local Information. *IEEE/ACM Transactions on Networking*, **2008**, 16, 1133-1146	3.8	5
75	LED Lamp Flicker Caused by Interharmonics **2008**,		18
74	Stability and controllability of planar, conewise linear systems. *Systems and Control Letters*, **2007**, 56, 150-158	2.4	21
73	Capacity of a Class of Cognitive Radio Channels: Interference Channels With Degraded Message Sets. *IEEE Transactions on Information Theory*, **2007**, 53, 4391-4399	2.8	128
72	Stability and controllability of planar, conewise linear systems **2007**,		1
71	Detection of Flicker Caused by High-frequency Interharmonics. *Conference Record - IEEE Instrumentation and Measurement Technology Conference*, **2007**,		3
70	. *IEEE Power Engineering Society General Meeting*, **2007**,		5
69	Optimal Power Generation Scheduling of a Shipboard Power System **2007**,		6
68	Perspectives on Power System Reconfiguration for Shipboard Applications **2007**,		2
67	Reconfiguration in Shipboard Power Systems. *Proceedings of the American Control Conference*, **2007**,	1.2	5
66	A Novel QPC Detector for the Health Monitoring of Rotating Machines. *Conference Record - IEEE Instrumentation and Measurement Technology Conference*, **2007**,		9
65	On the Capacity of Gaussian Weak Interference Channels with Degraded Message sets **2006**,		21
64	Analytical Modeling of SRAM Dynamic Stability. *IEEE/ACM International Conference on Computer-Aided Design, Digest of Technical Papers*, **2006**,		24
63	Broadcasting in Sensor Networks: The Role of Local Information **2006**,		2
62	Optimal power allocation for a time-varying wireless channel under heavy-traffic approximation. *IEEE Transactions on Automatic Control*, **2006**, 51, 580-594	5.9	20
61	. *IEEE Transactions on Power Delivery*, **2006**, 21, 253-261	4.3	58
60	On the existence of stationary optimal policies for partially observed MDPs under the long-run average cost criterion. *Systems and Control Letters*, **2006**, 55, 165-173	2.4	14

59	**2005**,		2
58	Minimum outage probability transmission with imperfect feedback for MISO fading channels. *IEEE Transactions on Wireless Communications*, **2005**, 4, 1084-1091	9.6	23
57	. *IEEE Transactions on Automation Science and Engineering*, **2005**, 2, 333-343	4.9	10
56	Controlled Markov chains with safety upper bound. *IEEE Transactions on Automatic Control*, **2003**, 48, 1230-1234	5.9	20
55	Linearization of discrete-time systems via restricted dynamic feedback. *IEEE Transactions on Automatic Control*, **2003**, 48, 1646-1650	5.9	4
54	Continuous selections of trajectories of hybrid systems. *Systems and Control Letters*, **2002**, 47, 149-157	2.4	26
53	A time-domain procedure for locating switched capacitors in power distribution systems. *IEEE Transactions on Power Delivery*, **2002**, 17, 1044-1049	4.3	1
52	On the controllability of a class of nonlinear stochastic systems. *Systems and Control Letters*, **2001**, 44, 25-34	2.4	22
51	Continuous Interpolation of Solutions of Lipschitz Inclusions. *Journal of Mathematical Analysis and Applications*, **2001**, 258, 565-572	1.1	5
50	A Note on Controllability of Impulsive Systems. *Journal of Mathematical Analysis and Applications*, **2000**, 241, 276-283	1.1	79
49	Safety Control of Completely Observed Markov Chains **2000**, 421-428		
48	Harnack's inequality for cooperative weakly coupled elliptic systems. *Communications in Partial Differential Equations*, **1999**, 24, 1555-1571	1.6	23
47	A statistical analysis of the effect of electric vehicle battery charging on distribution system harmonic voltages. *IEEE Transactions on Power Delivery*, **1998**, 13, 640-646	4.3	69
46	A procedure for derating a substation transformer in the presence of widespread electric vehicle battery charging. *IEEE Transactions on Power Delivery*, **1997**, 12, 1562-1568	4.3	40
45	A statistical method for predicting the net harmonic currents generated by a concentration of electric vehicle battery chargers. *IEEE Transactions on Power Delivery*, **1997**, 12, 1258-1266	4.3	78
44	Ergodic Control of Switching Diffusions. *SIAM Journal on Control and Optimization*, **1997**, 35, 1952-1988	1.9	143
43	Controlled switching diffusions as hybrid processes. *Lecture Notes in Computer Science*, **1996**, 64-75	0.9	1
42	. *IEEE Transactions on Automatic Control*, **1995**, 40, 1919-1921	5.9	3

41	Discrete-Time Controlled Markov Processes with Average Cost Criterion: A Survey. *SIAM Journal on Control and Optimization*, **1993**, 31, 282-344	1.9	348
40	Optimal Control of Switching Diffusions with Application to Flexible Manufacturing Systems. *SIAM Journal on Control and Optimization*, **1993**, 31, 1183-1204	1.9	135
39	. *IEEE Transactions on Power Delivery*, **1993**, 8, 1303-1310	4.3	43
38	Some numerical aspects of approximate linearization of single input non-linear systems. *International Journal of Control*, **1993**, 57, 463-472	1.5	14
37	. *IEEE Transactions on Automatic Control*, **1993**, 38, 987-993	5.9	22
36	Structured solutions for stochastic control problems **1992**, 172-184		2
35	. *IEEE Transactions on Automatic Control*, **1992**, 37, 378-380	5.9	20
34	Adaptive control of a partially observed controlled Markov chain **1992**, 161-171		
33	Optimal control of switching diffusions modelling a flexible manufacturing system **1992**, 210-224		1
32	Discrete-Time Controlled Markov Processes With Average Cost Criterion: A Survey **1992**,		3
31	On the average cost optimality equation and the structure of optimal policies for partially observable Markov decision processes. *Annals of Operations Research*, **1991**, 29, 439-469	3.2	44
30	Optimal Control of Switching Diffusions With Application to Flexible Manufacturing Systems **1991**,		3
29	. *IEEE Transactions on Circuits and Systems*, **1990**, 37, 946-948		
28	Analysis of an identification algorithm arising in the adaptive estimation of Markov chains. *Mathematics of Control, Signals, and Systems*, **1990**, 3, 1-29	1.3	33
27	Remarks on the existence of solutions to the average cost optimality equation in Markov decision processes. *Systems and Control Letters*, **1990**, 15, 425-432	2.4	14
26	**1990**,		2
25	Linearization of discrete and discretized nonlinear systems **1989**, 91-101		1
24	The effect of sampling on linear equivalence and feedback linearization. *Systems and Control Letters*, **1989**, 13, 373-381	2.4	34

23	Quarternion feedback regulator for spacecraft eigenaxis rotations. *Journal of Guidance, Control, and Dynamics*, **1989**, 12, 375-380	2.1	330
22	On the adaptive control of a partially observable binary markov decision process **1989**, 217-228		4
21	Digital control of linearizable systems **1989**, 276-280		
20	Remarks on smooth feedback stabilization of nonlinear systems. *Systems and Control Letters*, **1988**, 10, 41-44	2.4	76
19	. *IEEE Transactions on Automatic Control*, **1988**, 33, 803-811	5.9	141
18	Remarks on the periodic orbits of the matrix Riccati equation. *International Journal of Control*, **1988**, 48, 949-959	1.5	1
17	Stabilization of discrete-time linear systems with a time delay in the feedback loop. *International Journal of Control*, **1988**, 48, 1475-1485	1.5	5
16	Linearization of discrete-time systems. *International Journal of Control*, **1987**, 45, 1803-1822	1.5	99
15	Remarks of discretization and linear equivalence of continuous time nonlinear systems **1987**,		4
14	Simple sliding mode control scheme applied to robot manipulators! This research was supported in part by the National Science Foundation under grant ECS-8307547.. *International Journal of Control*, **1987**, 45, 1197-1209	1.5	98
13	On the controllability of piecewise-linear hypersurface systems. *Systems and Control Letters*, **1987**, 9, 89-96	2.4	16
12	A structure preserving energy function for power system transient stability analysis. *IEEE Transactions on Circuits and Systems*, **1985**, 32, 1041-1049		147
11	Behaviour of three-node power networks. *International Journal of Electrical Power and Energy Systems*, **1983**, 5, 22-30	5.1	6
10	Analytic expressions for the unstable manifold at equilibrium points in dynamical systems of differential equations **1983**,		8
9	Global analysis of swing dynamics. *IEEE Transactions on Circuits and Systems*, **1982**, 29, 673-679		32
8	Bifurcation analysis of the load flow equations **1980**,		2
7	Remarks on redundance in stability criteria and a counterexample to Fuller's conjecture Research sponsored by the National Science Foundation Grant ENG76-21816.. *International Journal of Control*, **1979**, 29, 1027-1034	1.5	7
6	Virtual power quality analysis for ship power system design		2

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1   Subexponential Upper and Lower Bounds in Wasserstein Distance for Markov Processes. *Applied Mathematics and Optimization*,1   1.5   0