Paul Dupuis

List of Publications by Year
in descending order

65 papers	3,010 citations	172457 29 h-index	168389 53 g-index
88 all docs	88 docs citations	88 times ranked	910 citing authors

#	Article	IF	Citations
1	Dynamical systems and variational inequalities. Annals of Operations Research, 1993, 44, 7-42.	4.1	335
2	On lipschitz continuity of the solution mapping to the skorokhod problem, with applications. Stochastic and Stochastics Reports, 1991, 35, 31-62.	0.6	181
3	A variational representation for certain functionals of Brownian motion. Annals of Probability, 1998, 26, 1641.	1.8	151
4	Lyapunov Functions for Semimartingale Reflecting Brownian Motions. Annals of Probability, 1994, 22, 680.	1.8	126
5	SDEs with Oblique Reflection on Nonsmooth Domains. Annals of Probability, 1993, 21, 554.	1.8	117
6	Importance Sampling, Large Deviations, and Differential Games. Stochastic and Stochastics Reports, 2004, 76, 481-508.	0.6	114
7	Markov Chain Approximations for Deterministic Control Problems with Affine Dynamics and Quadratic Cost in the Control. SIAM Journal on Numerical Analysis, 1999, 36, 667-695.	2.3	101
8	Variational representations for continuous time processes. Annales De L'institut Henri Poincare (B) Probability and Statistics, 2011, 47, .	1.1	80
9	Subsolutions of an Isaacs Equation and Efficient Schemes for Importance Sampling. Mathematics of Operations Research, 2007, 32, 723-757.	1.3	77
10	Dynamic importance sampling for queueing networks. Annals of Applied Probability, 2007, 17, .	1.3	76
11	Large deviations for stochastic partial differential equations driven by a Poisson random measure. Stochastic Processes and Their Applications, 2013, 123, 523-560.	0.9	73
12	Convex duality and the Skorokhod Problem. I. Probability Theory and Related Fields, 1999, 115, 153-195.	1.8	72
13	Splitting for rare event simulation: A large deviation approach to design and analysis. Stochastic Processes and Their Applications, 2009, 119, 562-587.	0.9	72
14	Robust Properties of Risk-Sensitive Control. Mathematics of Control, Signals, and Systems, 2000, 13, 318-332.	2.3	57
15	Stochastic Approximation and Large Deviations: Upper Bounds and w.p.1 Convergence. SIAM Journal on Control and Optimization, 1989, 27, 1108-1135.	2.1	55
16	An Optimal Control Formulation and Related Numerical Methods for a Problem in Shape Reconstruction. Annals of Applied Probability, 1994, 4, .	1.3	55
17	Importance Sampling for Multiscale Diffusions. Multiscale Modeling and Simulation, 2012, 10, 1-27.	1.6	47
18	Convex duality and the Skorokhod Problem. II. Probability Theory and Related Fields, 1999, 115, 197-236.	1.8	43

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19	Dynamic importance sampling for uniformly recurrent Markov chains. Annals of Applied Probability, 2005, 15, .	1.3	43
20	Moderate deviation principles for stochastic differential equations with jumps. Annals of Probability, 2016, 44, .	1.8	41
21	On Positive Recurrence of Constrained Diffusion Processes. Annals of Probability, 2001, 29, 979.	1.8	39
22	Large deviations analysis of reflected diffusions and constrained stochastic approximation algorithms in convex sets^{â€}. Stochastics, 1987, 21, 63-96.	0.6	37
23	Importance sampling for Jackson networks. Queueing Systems, 2009, 62, 113-157.	0.9	36
24	Large deviations for multiscale diffusion via weak convergence methods. Stochastic Processes and Their Applications, 2012, 122, 1947-1987.	0.9	36
25	Large deviations and queueing networks: Methods for rate function identification. Stochastic Processes and Their Applications, 1999, 84, 255-296.	0.9	35
26	Robust Bounds on Risk-Sensitive Functionals via RÃ©nyi Divergence. SIAM-ASA Journal on Uncertainty Quantification, 2015, 3, 18-33.	2.0	35
27	Simple Necessary and Sufficient Conditions for the Stability of Constrained Processes. SIAM Journal on Applied Mathematics, 1999, 59, 1686-1700.	1.8	34
28	A Skorokhod Problem formulation and large deviation analysis of a processor sharing model. Queueing Systems, 1998, 28, 109-124.	0.9	31
29	The Large Deviation Principle for a General Class of Queueing Systems I. Transactions of the American Mathematical Society, 1995, 347, 2689.	0.9	29
30	A Multiclass Feedback Queueing Network with a Regular Skorokhod Problem. , 2000, 36, 327-349.		27
31	A time-reversed representation for the tail probabilities of stationary reflected Brownian motion. Stochastic Processes and Their Applications, 2002, 98, 253-287.	0.9	25
32	Escaping from an attractor: Importance sampling and rest points I. Annals of Applied Probability, 2015, 25, .	1.3	22
33	Rates of Convergence for Approximation Schemes in Optimal Control. SIAM Journal on Control and Optimization, 1998, 36, 719-741.	2.1	17
34	Large deviations for small noise diffusions with discontinuous statistics. Probability Theory and Related Fields, 2000, 116, 125-149.	1.8	17
35	An Escape-Time Criterion for Queueing Networks: Asymptotic Risk-Sensitive Control via Differential Games. Mathematics of Operations Research, 2003, 28, 801-835.	1.3	17
36	Large deviations and importance sampling for a tandem network with slow-down. Queueing Systems, 2007, 57, 71-83.	0.9	16

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37	The design and analysis of a generalized RESTART/DPR algorithm for rare event simulation. Annals of Operations Research, 2011, 189, 63-102.	4.1	16
38	Large deviation properties of data streams that share a buffer. Annals of Applied Probability, 1998, 8, 1070.	1.3	15
39	A differential game with constrained dynamics and viscosity solutions of a related HJB equation. Nonlinear Analysis: Theory, Methods & Applications, 2002, 51, 1105-1130.	1.1	14
40	Convergence of the Optimal Feedback Policies in a Numerical Method for a Class of Deterministic Optimal Control Problems. SIAM Journal on Control and Optimization, 2001, 40, 393-420.	2.1	13
41	Uniform large deviation principles for Banach space valued stochastic evolution equations. Transactions of the American Mathematical Society, 2019, 372, 8363-8421.	0.9	13
42	On performance measures for infinite swapping Monte Carlo methods. Journal of Chemical Physics, 2015, 142, 024111.	3.0	12
43	Risk-Sensitive and Robust Escape Control for Degenerate Diffusion Processes. Mathematics of Control, Signals, and Systems, 2001, 14, 62-85.	2.3	11
44	Second Order Numerical Methods for First Order Hamilton--Jacobi Equations. SIAM Journal on Numerical Analysis, 2002, 40, 1136-1183.	2.3	10
45	Importance Sampling for Weighted-Serve-the-Longest-Queue. Mathematics of Operations Research, 2009, 34, 642-660.	1.3	10
46	Sensitivity analysis for rare events based on RÃ©nyi divergence. Annals of Applied Probability, 2020, 30, .	1.3	10
47	Moderate deviations-based importance sampling for stochastic recursive equations. Advances in Applied Probability, 2017, 49, 981-1010.	0.7	7
48	Large-Deviation Approximations for General Occupancy Models. Combinatorics Probability and Computing, 2008, 17, 437-470.	1.3	6
49	Rare event simulation for rough energy landscapes. , 2011, , .		6
50	The Large Deviation Principle for Interacting Dynamical Systems on Random Graphs. Communications in Mathematical Physics, 2022, 390, 545-575.	2.2	6
51	Moderate Deviations for Recursive Stochastic Algorithms. Stochastic Systems, 2015, 5, 87-119.	1.1	5
52	Large deviations for the empirical measure of a diffusion via weak convergence methods. Stochastic Processes and Their Applications, 2018, 128, 2581-2604.	0.9	4
53	Minimizing escape probabilities: A large deviations approach. , 1987, , .		3
54	Explicit Solution for a Network Control Problem in the Large Deviation Regime. Queueing Systems, 2004, 46, 159-176.	0.9	3

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55	Robust bounds and optimization at the large deviations scale for queueing models via RÃ©nyi divergence. Annals of Applied Probability, 2021, 31, .	1.3	3
56	Analysis of an interacting particle method for rare event estimation. Queueing Systems, 2013, 73, 345-406.	0.9	1
57	Rare event simulation in the neighborhood of a rest point. , 2014, , .		1
58	Exit time risk-sensitive control for systems of cooperative agents. Mathematics of Control, Signals, and Systems, 2019, 31, 279-332.	2.3	1
59	Infinite Swapping using IID Samples. ACM Transactions on Modeling and Computer Simulation, 2019, 29, 1-26.	0.8	1
60	Large Deviation Properties of the Empirical Measure of a Metastable Small Noise Diffusion. Journal of Theoretical Probability, 2022, 35, 1049-1136.	0.8	1
61	Analysis and Optimization of Certain Parallel Monte Carlo Methods in the Low Temperature Limit. Multiscale Modeling and Simulation, 2022, 20, 220-249.	1.6	1
62	On proving W.P.I. convergence for stochastic approximation algorithm via large deviations. , 1987, , .		0
63	Large Deviations for the Single-Server Queue and the Reneging Paradox. Mathematics of Operations Research, 2022, 47, 232-258.	1.3	0
64	Rare Event Simulation. , 2013, , 1264-1279.		0
65	Rare event asymptotics for exploration processes for random graphs. Annals of Applied Probability, 2022, 32, .	1.3	0