Rainer Buckdahn

List of Publications by Year in Descending Order

50 papers	1,626 citations	18 h-index	40 g-index
51 ext. papers	1,881 ext. citations	1.4 avg, IF	4.77 L-index

#	Paper	IF	Citations
50	Representation of limit values for nonexpansive stochastic differential games. *Journal of Differential Equations*, **2021**, 276, 187-227	2.1	2
49	Partial derivative with respect to the measure and its application to general controlled mean-field systems. *Stochastic Processes and Their Applications*, **2021**, 134, 265-307	1.1	0
48	Representation Formulas for Limit Values of Long Run Stochastic Optimal Controls. *SIAM Journal on Control and Optimization*, **2020**, 58, 1846-1873	1.9	2
47	Viability of an open set for stochastic control systems. *Stochastic Processes and Their Applications*, **2019**, 129, 4108-4118	1.1	1
46	Mean-field stochastic differential equations and associated PDEs. *Annals of Probability*, **2017**, 45,	1.9	71
45	Mean-Field SDE Driven by a Fractional Brownian Motion and Related Stochastic Control Problem. *SIAM Journal on Control and Optimization*, **2017**, 55, 1500-1533	1.9	4
44	A mean-field stochastic control problem with partial observations. *Annals of Applied Probability*, **2017**, 27,	2	12
43	A Stochastic Maximum Principle for General Mean-Field Systems. *Applied Mathematics and Optimization*, **2016**, 74, 507-534	1.5	21
42	Differential games with asymmetric information and without Isaacs condition. *International Journal of Game Theory*, **2016**, 45, 795-816	0.5	8
41	Pathwise Taylor expansions for random fields on multiple dimensional paths. *Stochastic Processes and Their Applications*, **2015**, 125, 2820-2855	1.1	11
40	On representation formulas for long run averaging optimal control problem. *Journal of Differential Equations*, **2015**, 259, 5554-5581	2.1	13
39	Stochastic variational inequalities on non-convex domains. *Journal of Differential Equations*, **2015**, 259, 7332-7374	2.1	4
38	Nonlinear Stochastic Differential Games Involving a Major Player and a Large Number of Collectively Acting Minor Agents. *SIAM Journal on Control and Optimization*, **2014**, 52, 451-492	1.9	12
37	Peng maximum principle for a stochastic control problem driven by a fractional and a standard Brownian motion. *Science China Mathematics*, **2014**, 57, 2025-2042	0.8	3
36	Value in mixed strategies for zero-sum stochastic differential games without Isaacs condition. *Annals of Probability*, **2014**, 42,	1.9	14
35	Existence of Asymptotic Values for Nonexpansive Stochastic Control Systems. *Applied Mathematics and Optimization*, **2014**, 70, 1-28	1.5	10
34	Value function of differential games without Isaacs conditions. An approach with nonanticipative mixed strategies. *International Journal of Game Theory*, **2013**, 42, 989-1020	0.5	14

33	Regularity Properties for General HJB Equations: A Backward Stochastic Differential Equation Method. *SIAM Journal on Control and Optimization*, **2012**, 50, 1466-1501	1.9	9
32	Stochastic representation for solutions of Isaacs‐type integral‐partial differential equations. *Stochastic Processes and Their Applications*, **2011**, 121, 2715-2750	1.1	18
31	Stochastic differential games with reflection and related obstacle problems for Isaacs equations. *Acta Mathematicae Applicatae Sinica*, **2011**, 27, 647-678	0.3	6
30	Stochastic Optimal Control and Linear Programming Approach. *Applied Mathematics and Optimization*, **2011**, 63, 257-276	1.5	23
29	A General Stochastic Maximum Principle for SDEs of Mean-field Type. *Applied Mathematics and Optimization*, **2011**, 64, 197-216	1.5	157
28	Some Recent Aspects of Differential Game Theory. *Dynamic Games and Applications*, **2011**, 1, 74-114	1.1	62
27	Pathwise Taylor expansions for Itô random fields. *Mathematical Control and Related Fields*, **2011**, 1, 437-468	0.5	3
26	Existence of an optimal control for stochastic control systems with nonlinear cost functional. *Stochastics*, **2010**, 82, 241-256	0.6	15
25	Probabilistic interpretation of a coupled system of Hamilton‐Jacobi‐Bellman equations. *Journal of Evolution Equations*, **2010**, 10, 529-549	1.2	4
24	Lipschitz continuity and semiconcavity properties of the value function of a stochastic control problem. *Nonlinear Differential Equations and Applications*, **2010**, 17, 715-728	0.8	6
23	Inf-convolution of G-expectations. *Science China Mathematics*, **2010**, 53, 1957-1970	0.8	1
22	Another proof for the equivalence between invariance of closed sets with respect to stochastic and deterministic systems??The authors gratefully acknowledge the support from the RTN network HPRN-CT-2002-00281 (European Union) and from the FWF-grant Y 328 (Austrian Science Funds).. *Bulletin Des Sciences Mathematiques*, **2010**, 134, 207-214	0.7	6
21	Mean-field backward stochastic differential equations: A limit approach. *Annals of Probability*, **2009**, 37,	1.9	145
20	Mean-field backward stochastic differential equations and related partial differential equations. *Stochastic Processes and Their Applications*, **2009**, 119, 3133-3154	1.1	172
19	Probabilistic interpretation for systems of Isaacs equations with two reflecting barriers. *Nonlinear Differential Equations and Applications*, **2009**, 16, 381-420	0.8	14
18	On limiting values of stochastic differential equations with small noise intensity tending to zero. *Bulletin Des Sciences Mathematiques*, **2009**, 133, 229-237	0.7	21
17	Stochastic Differential Games and Viscosity Solutions of Hamilton‐Jacobi‐Bellman‐Isaacs Equations. *SIAM Journal on Control and Optimization*, **2008**, 47, 444-475	1.9	147
16	Controlled Stochastic Differential Equations under Constraints in Infinite Dimensional Spaces. *SIAM Journal on Control and Optimization*, **2008**, 47, 218-250	1.9	2

15	Pathwise Stochastic Control Problems and Stochastic HJB Equations. *SIAM Journal on Control and Optimization*, **2007**, 45, 2224-2256	1.9	24
14	A Stochastic Tikhonov Theorem in Infinite Dimensions. *Applied Mathematics and Optimization*, **2006**, 53, 221-258	1.5	2
13	Limit Theorem for Controlled Backward SDEs and Homogenization of Hamilton–Jacobi–Bellman Equations. *Applied Mathematics and Optimization*, **2005**, 51, 1-33	1.5	17
12	Stochastic control with exit time and constraints, application to small time attainability of sets. *Applied Mathematics and Optimization*, **2004**, 49, 99-112	1.5	2
11	Stochastic Control with Exit Time and Constraints, Application to Small Time Attainability of Sets. *Applied Mathematics and Optimization*, **2004**, 49, 99-112	1.5	9
10	Nash Equilibrium Payoffs for Nonzero-Sum Stochastic Differential Games. *SIAM Journal on Control and Optimization*, **2004**, 43, 624-642	1.9	59
9	On the existence of stochastic optimal control of distributed state system. *Nonlinear Analysis: Theory, Methods & Applications*, **2003**, 52, 1153-1184	1.3	13
8	Pathwise stochastic Taylor expansions and stochastic viscosity solutions for fully nonlinear stochastic PDEs. *Annals of Probability*, **2002**, 30, 1131	1.9	20
7	Stochastic viscosity solutions for nonlinear stochastic partial differential equations. Part II. *Stochastic Processes and Their Applications*, **2001**, 93, 205-228	1.1	40
6	Stochastic viscosity solutions for nonlinear stochastic partial differential equations. Part I. *Stochastic Processes and Their Applications*, **2001**, 93, 181-204	1.1	55
5	A Representation Formula for the Mean Curvature Motion. *SIAM Journal on Mathematical Analysis*, **2001**, 33, 827-846	1.7	31
4	Viability property for a backward stochastic differential equation and applications to partial differential equations. *Probability Theory and Related Fields*, **2000**, 116, 485-504	1.4	42
3	Existence of stochastic control under state constraints. *Comptes Rendus Mathematique*, **1998**, 327, 17-22		36
2	Pricing of American Contingent Claims with Jump Stock Price and Constrained Portfolios. *Mathematics of Operations Research*, **1998**, 23, 177-203	1.5	11
1	Backward stochastic differential equations and integral-partial differential equations. *Stochastic and Stochastics Reports*, **1997**, 60, 57-83		252