Nicolas Privault

List of Publications by Year
in descending order

173 papers	1,413 citations	471509 17 h-index	477307 29 g-index
186 all docs	186 docs citations	186 times ranked	668 citing authors

#	Article	IF	Citations
1	Characterization of stochastic equilibrium controls by the Malliavin calculus. Stochastics and Dynamics, 2022, 22, .	1.2	0
2	Existence and probabilistic representation of the solutions of semilinear parabolic PDEs with fractional Laplacians. Stochastics and Partial Differential Equations: Analysis and Computations, 2022, 10, 446-474.	0.9	3
3	A Constructive Approach to Existence of Equilibria in Time-Inconsistent Stochastic Control Problems. SIAM Journal on Control and Optimization, 2022, 60, 674-698.	2.1	0
4	$ G $-expectation approach to stochastic ordering. Frontiers of Mathematical Finance, 2022, .	0.7	0
5	Berry-Esseen bounds for functionals of independent random variables. Electronic Journal of Probability, 2022, 27, .	1.0	0
6	Computation of Coverage Probabilities in a Spherical Germ-Grain Model. Methodology and Computing in Applied Probability, 2021, 23, 491-502.	1.2	0
7	Stochastic ordering by <i>g</i>-expectations. Probability, Uncertainty and Quantitative Risk, 2021, 6, 61.	0.8	1
8	Stochastic SIR Lévy Jump Model with Heavy-Tailed Increments. Journal of Nonlinear Science, 2021, 31, 1.	2.1	13
9	Recursive computation of the Hawkes cumulants. Statistics and Probability Letters, 2021, 177, 109161.	0.7	4
10	Cardinality estimation for random stopping sets based on Poisson point processes. ESAIM - Probability and Statistics, 2021, 25, 87-108.	0.5	1
11	Bounds in Total Variation Distance for Discrete-time Processes on the Sequence Space. Potential Analysis, 2020, 52, 223-243.	0.9	1
12	Cournot Games with Limited Demand: From Multiple Equilibria to Stochastic Equilibrium. Applied Mathematics and Optimization, 2020, 81, 195-220.	1.6	0
13	Nonstationary shot noise modeling of neuron membrane potentials by closed-form moments and Gram–Charlier expansions. Biological Cybernetics, 2020, 114, 499-518.	1.3	7
14	Wasserstein Distance Estimates for Stochastic Integrals by Forward-Backward Stochastic Calculus. Potential Analysis, 2020, , 1.	0.9	1
15	Second-order multi-object filtering with target interaction using determinantal point processes. Mathematics of Control, Signals, and Systems, 2020, 32, 569-609.	2.3	3
16	Integrability and Regularity of the Flow of Stochastic Differential Equations with Jumps. Theory of Probability and Its Applications, 2020, 65, 82-101.	0.3	3
17	Normal approximation for sums of weighted U-statistics – application to Kolmogorov bounds in random subgraph counting. Bernoulli, 2020, 26, .	1.3	12
18	Poisson discretizations of Wiener functionals and Malliavin operators with Wasserstein estimates. Stochastic Processes and Their Applications, 2019, 129, 3376-3405.	0.9	1

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19	Moments of <i>k</i>-hop counts in the random-connection model. Journal of Applied Probability, 2019, 56, 1106-1121.	0.7	2
20	Third Cumulant Stein Approximation for Poisson Stochastic Integrals. Journal of Theoretical Probability, 2019, 32, 1461-1481.	0.8	3
21	Functional inequalities for marked point processes. Electronic Journal of Probability, 2019, 24, .	1.0	1
22	Managing Physical Layer Security in Wireless Cellular Networks: A Cyber Insurance Approach. IEEE Journal on Selected Areas in Communications, 2018, 36, 1648-1661.	14.0	24
23	Extended Mellin integral representations for the absolute value of the gamma function. Analysis (Germany), 2018, 38, 11-20.	0.4	0
24	A Recursive Algorithm for Selling at the Ultimate Maximum in Regime-Switching Models. Methodology and Computing in Applied Probability, 2018, 20, 369-384.	1.2	11
25	FAST COMPUTATION OF RISK MEASURES FOR VARIABLE ANNUITIES WITH ADDITIONAL EARNINGS BY CONDITIONAL MOMENT MATCHING. ASTIN Bulletin, 2018, 48, 171-196.	1.0	2
26	Wireless Caching Helper Networks: Ginibre Point Process Modeling and Analysis. , 2018, , .		1
27	A Cyber Insurance Approach to Manage Physical Layer Secrecy for Massive MIMO Cellular Networks. , 2018, , .		3
28	Stein approximation for functionals of independent random sequences. Electronic Journal of Probability, 2018, 23, .	1.0	4
29	Fog Radio Access Networks: Ginibre Point Process Modeling and Analysis. IEEE Transactions on Wireless Communications, 2018, 17, 5564-5580.	9.2	19
30	Stein normal approximation for multidimensional Poisson random measures by third cumulant expansions. Alea, 2018, 15, 1141.	0.7	4
31	A stochastic newsvendor game with dynamic retail prices. Journal of Industrial and Management Optimization, 2018, 14, 731-742.	1.3	3
32	Supermodular ordering of Poisson and binomial random vectors by tree-based correlations. Probability and Mathematical Statistics, 2018, 38, 385-405.	0.4	0
33	SELLING AT THE ULTIMATE MAXIMUM IN A REGIME-SWITCHING MODEL. International Journal of Theoretical and Applied Finance, 2017, 20, 1750018.	0.5	6
34	Conditional Stein approximation for ItÃ´ and Skorohod integrals. Statistics and Probability Letters, 2017, 128, 1-7.	0.7	0
35	Pricing CIR Yield Options by Conditional Moment Matching. Asia-Pacific Financial Markets, 2017, 24, 19-38.	2.4	4
36	Wireless Energy Harvesting Sensor Networks: Booleanâ€"Poisson Modeling and Analysis. IEEE Transactions on Wireless Communications, 2017, 16, 7108-7122.	9.2	7

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37	Analysis of Heterogeneous Wireless Networks Using Poisson Hard-Core Hole Process. IEEE Transactions on Wireless Communications, 2017, 16, 7152-7167.	9.2	32
38	An integration by parts formula in a Markovian regime switching model and application to sensitivity analysis. Stochastic Analysis and Applications, 2017, 35, 919-940.	1.5	2
39	Modeling and analysis of wireless networks using poisson hard-core process. , 2017, , .		5
40	De Rhamâ€"Hodge decomposition and vanishing of harmonic forms by derivation operators on the Poisson space. Infinite Dimensional Analysis, Quantum Probability and Related Topics, 2016, 19, 1650010.	0.5	1
41	On the performance of wireless energy harvesting networks in a Boolean-Poisson model. , 2016, , .		2
42	Self-Sustainable Communications With RF Energy Harvesting: Ginibre Point Process Modeling and Analysis. IEEE Journal on Selected Areas in Communications, 2016, 34, 1518-1535.	14.0	55
43	Exact Performance Analysis of Ambient RF Energy Harvesting Wireless Sensor Networks With Ginibre Point Process. IEEE Journal on Selected Areas in Communications, 2016, 34, 3769-3784.	14.0	31
44	Large deviations for Bernstein bridges. Stochastic Processes and Their Applications, 2016, 126, 1285-1305.	0.9	3
45	Mixing of Poisson random measures under interacting transformations. Stochastics, 2016, 88, 321-335.	1.1	1
46	Analytic bond pricing for short rate dynamics evolving on matrix Lie groups. Quantitative Finance, 2016, 16, 119-129.	1.7	2
47	Option pricing and implied volatilities in a 2-hypergeometric stochastic volatility model. Applied Mathematics Letters, 2016, 53, 77-84.	2.7	3
48	Determinantal Point Processes. Bocconi and Springer Series, 2016, , 311-342.	0.0	12
49	Combinatorics of Poisson Stochastic Integrals with Random Integrands. Bocconi and Springer Series, 2016, , 37-80.	0.0	12
50	Poisson sphere counting processes with random radii. ESAIM - Probability and Statistics, 2016, 20, 417-431.	0.5	1
51	Stratified approximations for the pricing of options on average. Journal of Computational Finance, 2016, 19, 95-113.	0.3	2
52	WeitzenbÃ¶ck and Clark-Ocone Decompositions for Differential Forms on the Space of Normal Martingales. Lecture Notes in Mathematics, 2016, , 231-265.	0.2	0
53	Laplace transform identities for the volume of stopping sets based on Poisson point processes. Advances in Applied Probability, 2015, 47, 919-933.	0.7	0
54	Stein approximation for ItÃ´ and Skorohod integrals by Edgeworth type expansions. Electronic Communications in Probability, 2015, 20, .	0.4	4

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55	Laplace transform identities for the volume of stopping sets based on Poisson point processes. Advances in Applied Probability, 2015, 47, 919-933.	0.7	4
56	Conditionally Gaussian stochastic integrals. Comptes Rendus Mathematique, 2015, 353, 1153-1158.	0.3	1
57	Supermodular ordering of Poisson arrays. Statistics and Probability Letters, 2015, 98, 136-143.	0.7	1
58	Closed form modeling of evolutionary rates by exponential Brownian functionals. Journal of Mathematical Biology, 2015, 71, 1387-1409.	1.9	3
59	Gaussian Estimates for the Solutions of Some One-dimensional Stochastic Equations. Potential Analysis, 2015, 43, 289-311.	0.9	17
60	Performance Analysis of Ambient RF Energy Harvesting with Repulsive Point Process Modeling. IEEE Transactions on Wireless Communications, 2015, 14, 5402-5416.	9.2	65
61	Performance analysis of simultaneous wireless information and power transfer with ambient RF energy harvesting. , 2015, , .		9
62	Cumulant Operators for Lie–Wiener–Itô–Poisson Stochastic Integrals. Journal of Theoretical Probability, 2015, 28, 269-298.	0.8	6
63	COMPUTATION OF FREDHOLM DETERMINANTS FOR QUADRATIC ORNSTEIN-UHLENBECK FUNCTIONALS. Taiwanese Journal of Mathematics, 2015, 19, .	0.4	1
64	Blowup estimates for a family of semilinear SPDEs with time-dependent coefficients. Differential Equations and Applications, 2015, , 201-219.	0.4	2
65	Stochastic dynamics of determinantal processes by integration by parts. Communications on Stochastic Analysis, 2015, 9, .	0.1	0
66	Performance analysis of ambient RF energy harvesting: A stochastic geometry approach. , 2014, , .		45
67	Factorial moments of point processes. Stochastic Processes and Their Applications, 2014, 124, 3412-3428.	0.9	8
68	Understanding Markov Chains. Springer Undergraduate Mathematics Series, 2013, , .	0.1	55
69	Monte Carlo Computation of the Laplace Transform of Exponential Brownian Functionals. Methodology and Computing in Applied Probability, 2013, 15, 511-524.	1.2	5
70	Convex concentration for some additive functionals of jump stochastic differential equations. Acta Mathematica Sinica, English Series, 2013, 29, 1449-1458.	0.6	3
71	Cumulant operators and moments of the Itô and Skorohod integrals. Comptes Rendus Mathematique, 2013, 351, 397-400.	0.3	3
72	Infinite divisibility of interpolated gamma powers. Journal of Mathematical Analysis and Applications, 2013, 405, 373-387.	1.0	2

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73	Convex comparison inequalities for non-Markovian stochastic integrals. Stochastics, 2013, 85, 789-806.	1.1	4
74	Probability approximation by Clark-Ocone covariance representation. Electronic Journal of Probability, 2013, 18, .	1.0	10
75	Spatial Poisson Processes. Springer Undergraduate Mathematics Series, 2013, , 225-239.	0.1	1
76	Measure Invariance on the Lie-Wiener Path Space. Springer Proceedings in Mathematics and Statistics, 2012, , 133-151.	0.2	1
77	Invariance of Poisson measures under random transformations. Annales De L'institut Henri Poincare (B) Probability and Statistics, 2012, 48, .	1.1	15
78	Laplace transform identities and measure-preserving transformations on the Lie–Wiener–Poisson spaces. Journal of Functional Analysis, 2012, 263, 2993-3023.	1.4	5
79	Risk-neutral hedging of interest rate derivatives. Risk and Decision Analysis, 2012, 3, 201-209.	0.4	3
80	Girsanov identities for Poisson measures under quasi-nilpotent transformations. Annals of Probability, 2012, 40, .	1.8	4
81	THE DOTHAN PRICING MODEL REVISITED. Mathematical Finance, 2011, 21, 355-363.	1.8	7
82	Density Estimation of Functionals of Spatial Point Processes with Application to Wireless Networks. SIAM Journal on Mathematical Analysis, 2011, 43, 1311-1344.	1.9	9
83	SURE shrinkage of Gaussian paths and signal identification. ESAIM - Probability and Statistics, 2011, 15, 180-196.	0.5	1
84	Large time behavior of reaction–diffusion equations with Bessel generators. Journal of Mathematical Analysis and Applications, 2011, 383, 560-572.	1.0	2
85	Generalized Bell Polynomials and the Combinatorics of Poisson Central Moments. Electronic Journal of Combinatorics, 2011, 18, .	0.4	16
86	A DIRECT SOLUTION TO THE FOKKER–PLANCK EQUATION FOR EXPONENTIAL BROWNIAN FUNCTIONALS. Analysis and Applications, 2010, 08, 287-304.	2.2	11
87	Stochastic deformation of integrable dynamical systems and random time symmetry. Journal of Mathematical Physics, 2010, 51, 082104.	1.1	7
88	RANDOM HERMITE POLYNOMIALS AND GIRSANOV IDENTITIES ON THE WIENER SPACE. Infinite Dimensional Analysis, Quantum Probability and Related Topics, 2010, 13, 663-675.	0.5	8
89	Stein estimation of Poisson process intensities. Statistical Inference for Stochastic Processes, 2009, 12, 37-53.	0.6	7
90	Moment identities for Poisson–Skorohod integrals and application to measure invariance. Comptes Rendus Mathematique, 2009, 347, 1071-1074.	0.3	11

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91	Sensitivity analysis and density estimation for finite-time ruin probabilities. Journal of Computational and Applied Mathematics, 2009, 230, 107-120.	2.0	8
92	Numerical computation of Theta in a jump-diffusion model by integration by parts. Quantitative Finance, 2009, 9, 727-735.	1.7	1
93	Stochastic Analysis in Discrete and Continuous Settings. Lecture Notes in Mathematics, 2009, , .	0.2	65
94	Moment identities for Skorohod integrals on the Wiener space and applications. Electronic Communications in Probability, 2009, 14, .	0.4	13
95	Annihilation and Creation Operators. Lecture Notes in Mathematics, 2009, , 131-160.	0.2	0
96	Gradient and Divergence Operators. Lecture Notes in Mathematics, 2009, , 113-130.	0.2	0
97	Convex Ordering for Random Vectors using Predictable Representation. Potential Analysis, 2008, 29, 327-349.	0.9	11
98	Isoperimetric and related bounds on configuration spaces. Statistics and Probability Letters, 2008, 78, 2154-2164.	0.7	3
99	BOUNDS ON OPTION PRICES IN POINT PROCESS DIFFUSION MODELS. International Journal of Theoretical and Applied Finance, 2008, 11, 597-610.	0.5	4
100	Stein estimation for the drift of Gaussian processes using the Malliavin calculus. Annals of Statistics, 2008, 36, .	2.6	22
101	A probabilistic interpretation to the symmetries of a discrete heat equation. Lecture Notes in Mathematics, 2008, , 379-399.	0.2	1
102	Stochastic analysis of Bernoulli processes. Probability Surveys, 2008, 5, .	1.3	52
103	Potential Theory in Classical Probability. Lecture Notes in Mathematics, 2008, , 3-59.	0.2	0
104	Integration by Parts for Point Processes and Monte Carlo Estimation. Journal of Applied Probability, 2007, 44, 806-823.	0.7	1
105	Dimension Free and Infinite Variance Tail Estimates on Poisson Space. Acta Applicandae Mathematicae, 2007, 95, 151-203.	1.0	15
106	Integration by Parts for Point Processes and Monte Carlo Estimation. Journal of Applied Probability, 2007, 44, 806-823.	0.7	3
107	A LOGARITHMIC SOBOLEV INEQUALITY FOR AN INTERACTING SPIN SYSTEM UNDER A GEOMETRIC REFERENCE MEASURE. , 2007, , .		0
108	Superefficient drift estimation on the Wiener space. Comptes Rendus Mathematique, 2006, 343, 607-612.	0.3	6

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109	Convex Concentration Inequalities and Forward-Backward Stochastic Calculus. Electronic Journal of Probability, 2006, 11, .	1.0	22
110	Non-Gaussian Malliavin calculus on real Lie algebras. Journal of Functional Analysis, 2005, 218, 347-371.	1.4	3
111	Blow-up and stability of semilinear PDEs with gamma generators. Journal of Mathematical Analysis and Applications, 2005, 307, 181-205.	1.0	6
112	Deviation inequalities and the law of iterated logarithm on the path space over a loop group. Stochastics, 2005, 77, 515-536.	1.1	0
113	Euclidean quantum mechanics in the momentum representation. Journal of Mathematical Physics, 2005, 46, 032105.	1.1	5
114	QUASI-INVARIANCE FORMULAS FOR COMPONENTS OF QUANTUM LÃ‰VY PROCESSES. Infinite Dimensional Analysis, Quantum Probability and Related Topics, 2004, 07, 131-145.	0.5	4
115	Computations of Greeks in a market with jumps via the Malliavin calculus. Finance and Stochastics, 2004, 8, 161-179.	1.1	52
116	Markovian bridges and reversible diffusion processes with jumps. Annales De L'institut Henri Poincare (B) Probability and Statistics, 2004, 40, 599-633.	1.1	22
117	A Malliavin calculus approach to sensitivity analysis in insurance. Insurance: Mathematics and Economics, 2004, 35, 679-690.	1.2	17
118	Asymptotic estimates for white noise distributions. Comptes Rendus Mathematique, 2004, 338, 799-804.	0.3	4
119	Quantum Stochastic Calculus Applied to Path Spaces over Lie Groups. , 2004, , 85-94.		3
120	Functional inequalities for discrete gradients and application to the geometric distribution. ESAIM - Probability and Statistics, 2004, 8, 87-101.	0.5	4
121	Smoothness of Wigner densities on the affine algebra. Comptes Rendus Mathematique, 2003, 337, 609-614.	0.3	0
122	Clark formula and logarithmic Sobolev inequalities for Bernoulli measures. Comptes Rendus Mathematique, 2003, 336, 51-56.	0.3	3
123	Conditional Calculus on Poisson Space and Enlargement of Filtration. Stochastic Analysis and Applications, 2003, 21, 183-204.	1.5	3
124	A Concentration Inequality on Riemannian Path Space. , 2003, , 15-21.		3
125	Quasi-invariance for LÃ©vy Processes under Anticipating Shifts. , 2003, , 181-202.		2
126	Discrete chaotic calculus and covariance identities. Stochastic and Stochastics Reports, 2002, 72, 289-316.	0.6	12

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127	SPLITTING OF POISSON NOISE AND LÃ‰VY PROCESSES ON REAL LIE ALGEBRAS. Infinite Dimensional Analysis, Quantum Probability and Related Topics, 2002, 05, 21-40.	0.5	4
128	A Complete Market Model with Poisson and Brownian Components. , 2002, , 189-204.		7
129	Distribution-valued iterated gradient and chaotic decompositions of Poisson jump times functionals. Publicacions Matematiques, 2002, 46, 27-48.	0.5	6
130	Extended covariance identities and inequalities. Statistics and Probability Letters, 2001, 55, 247-255.	0.7	4
131	Connections and Curvature in the Riemannian Geometry of Configuration Spaces. Journal of Functional Analysis, 2001, 185, 367-403.	1.4	13
132	A Characterization of Grand Canonical Gibbs Measures by Duality. Potential Analysis, 2001, 15, 23-38.	0.9	2
133	Quantum stochastic calculus for the uniform measure and Boolean convolution. Lecture Notes in Mathematics, 2001, , 28-47.	0.2	3
134	Variational Calculus for a LÃ©vy Process Based on a Lie Group. , 2001, , 207-223.		0
135	Hypothesis testing and Skorokhod stochastic integration. Journal of Applied Probability, 2000, 37, 560-574.	0.7	1
136	Connection, parallel transport, curvature and energy identities on spaces of configurations. Comptes Rendus Mathematique, 2000, 330, 899-904.	0.5	4
137	White noise generalizations of the Clark-Haussmann-Ocone theorem with application to mathematical finance. Finance and Stochastics, 2000, 4, 465-496.	1.1	90
138	Chaotic Kabanov Formula for the AzÃ©ma Martingales. Bernoulli, 2000, 6, 633.	1.3	11
139	Hypothesis testing and Skorokhod stochastic integration. Journal of Applied Probability, 2000, 37, 560-574.	0.7	3
140	Equivalence of gradients on configuration spaces. Random Operators and Stochastic Equations, 1999, 7, .	0.1	12
141	Multiple stochastic integral expansions of arbitrary Poisson jump times functionals. Statistics and Probability Letters, 1999, 43, 179-188.	0.7	3
142	A calculus on Fock space and its probabilistic interpretations. Bulletin Des Sciences Mathematiques, 1999, 123, 97-114.	1.0	10
143	Explicit Stochastic Analysis of Brownian Motion and Point Measures on Riemannian Manifolds. Journal of Functional Analysis, 1999, 167, 201-242.	1.4	16
144	Independence of a Class of Multiple Stochastic Integrals. , 1999, , 249-259.		6

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145	Poisson stochastic integration in Hilbert spaces. Annales Mathematiques Blaise Pascal, 1999, 6, 41-61.	0.1	15
146	Absolute Continuity in Infinite Dimensions and Anticipating Stochastic Calculus. Potential Analysis, 1998, 8, 325-343.	0.9	8
147	An analytic approach to stochastic calculus. Comptes Rendus Mathematique, 1998, 326, 353-358.	0.5	3
148	A pointwise equivalence of gradients on configuration spaces. Comptes Rendus Mathematique, 1998, 327, 677-682.	0.5	7
149	Skorohod stochastic integration with respect to non-adapted processes on wiener space. Stochastic and Stochastics Reports, 1998, 65, 13-39.	0.6	13
150	The Sard Inequality on Two Non-Gaussian Spaces. , 1998, , 349-356.		2
151	Construction of a Quantum Field Linked to the Coulomb Potential. , 1998, , 333-348.		0
152	Calcul des variations stochastique pour la mesure de densité uniforme. Potential Analysis, 1997, 7, 577-601.	0.9	7
153	Girsanov theorem for anticipative shifts on Poisson space. Probability Theory and Related Fields, 1996, 104, 61-76.	1.8	13
154	A different quantum stochastic calculus for the Poisson process. Probability Theory and Related Fields, 1996, 105, 255-278.	1.8	8
155	Linear Skorohod stochastic differential equations on Poisson space. , 1996, , 237-253.		8
156	Girsanov theorem for anticipative shifts on Poisson space. Probability Theory and Related Fields, 1996, 104, 61-76.	1.8	2
157	A different quantum stochastic calculus for the Poisson process. Probability Theory and Related Fields, 1996, 105, 255-278.	1.8	0
158	A Transfer Principle from Wiener to Poisson Space and Applications. Journal of Functional Analysis, 1995, 132, 335-360.	1.4	22
159	Chaotic and variational calculus in discrete and continuous time for the poisson process. Stochastic and Stochastics Reports, 1994, 51, 83-109.	0.6	51
160	Boson Fock space. , 0, , 1-9.		0
161	Real Lie algebras. , 0, , 10-26.		0
162	Basic probability distributions on Lie algebras. , 0, , 27-46.		0

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163	Noncommutative random variables. , 0, , 47-74.		0
164	Noncommutative stochastic integration. , 0, , 75-89.		0
165	Random variables on real Lie algebras. , 0, , 90-102.		0
166	Weyl calculus on real Lie algebras. , 0, , 103-130.		0
167	A guide to the Malliavin calculus. , 0, , 149-177.		0
168	Noncommutative Girsanov theorem. , 0, , 178-189.		0
169	Noncommutative integration by parts. , 0, , 190-216.		0
170	Smoothness of densities on real Lie algebras. , 0, , 217-230.		0
171	Normal approximation for generalized U-statistics and weighted random graphs. Stochastics, 0, , 1-27.	1.1	1
172	Stochastic Finance. , 0, , .		15
173	Moments of Markovian growth–collapse processes. Advances in Applied Probability, 0, , 1-24.	0.7	0