Zhen Wu

List of Publications by Year in Descending Order

96 papers	1,298 citations	17 h-index	33 g-index
106 ext. papers	1,618 ext. citations	1.8 avg, IF	5.16 L-index

#	Paper	IF	Citations
96	A general maximum principle for partially observed mean-field stochastic system with random jumps in progressive structure. *Mathematical Control and Related Fields*, **2022**,	1.5	
95	Social optima in mean field linear‐quadratic‐Gaussian models with control input constraint. *Systems and Control Letters*, **2022**, 162, 105174	2.4	
94	Relationship between backward and forward linear-quadratic mean-field-game with terminal constraint and optimal asset allocation for insurers and pension funds. *International Journal of Control*, **2021**, 94, 336-350	1.5	1
93	Mean-field linear-quadratic stochastic differential games. *Journal of Differential Equations*, **2021**, 296, 299-334	2.1	2
92	Backward stochastic differential equations with Markov chains and associated PDEs. *Journal of Differential Equations*, **2021**, 302, 854-894	2.1	
91	Linear-quadratic non-zero sum differential game for mean-field stochastic systems with asymmetric information. *Journal of Mathematical Analysis and Applications*, **2021**, 504, 125315	1.1	0
90	Robust Stackelberg Differential Game with Model Uncertainty. *IEEE Transactions on Automatic Control*, **2021**, 1-1	5.9	1
89	Stochastic Optimal Control Problem in Advertising Model with Delay. *Journal of Systems Science and Complexity*, **2020**, 33, 968-987	1	4
88	The Dynkin game with regime switching and applications to pricing game options. *Annals of Operations Research*, **2020**, 1	3.2	0
87	Linear-quadratic mean-field game for stochastic large-population systems with jump diffusion. *IET Control Theory and Applications*, **2020**, 14, 481-489	2.5	2
86	A kind of optimal investment problem under inflation and uncertain time horizon. *Applied Mathematics and Computation*, **2020**, 375, 125084	2.7	2
85	Necessary and sufficient conditions of near-optimality in a regime-switching diffusion model. *Optimal Control Applications and Methods*, **2020**, 41, 793-807	1.7	
84	Near-optimal control problems for forward-backward regime-switching systems. *ESAIM - Control, Optimisation and Calculus of Variations*, **2020**, 26, 94	1	
83	Quadratic reflected BSDEs and related obstacle problems for PDEs. *Communications in Statistics - Theory and Methods*, **2020**, 49, 567-589	0.5	2
82	Mean-variance portfolio selection with discontinuous prices and random horizon in an incomplete market. *Science China Information Sciences*, **2020**, 63, 1	3.4	2
81	Linear‐quadratic optimal control for time-delay stochastic system with recursive utility under full and partial information. *Automatica*, **2020**, 121, 109169	5.7	4
80	Backward Doubly Stochastic Differential Equations with Markov Chains and a Comparison Theorem. *Symmetry*, **2020**, 12, 1953	2.7	2

79	The Maximum Principle for Progressive Optimal Stochastic Control Problems with Random Jumps. *SIAM Journal on Control and Optimization*, **2020**, 58, 2171-2187	1.9	2
78	Linear-Quadratic Mixed Stackelberg–Nash Stochastic Differential Game with Major–Minor Agents. *Applied Mathematics and Optimization*, **2020**, 84, 2445	1.5	2
77	A kind of stochastic recursive Zero-Sum differential game problem with double obstacles constraint. *Communications in Statistics - Theory and Methods*, **2020**, 49, 5356-5370	0.5	
76	Well-Posedness of Fully Coupled Linear Forward-Backward Stochastic Differential Equations. *Journal of Systems Science and Complexity*, **2019**, 32, 789-802	1	0
75	Linear-Quadratic Stackelberg Game for Mean-Field Backward Stochastic Differential System and Application. *Mathematical Problems in Engineering*, **2019**, 2019, 1-17	1.1	7
74	Probabilistic interpretation for Sobolev solutions of McKean–Vlasov partial differential equations. *Statistics and Probability Letters*, **2019**, 145, 273-283	0.6	1
73	Stabilization Control for Linear Continuous-Time Mean-Field Systems. *IEEE Transactions on Automatic Control*, **2019**, 64, 3461-3468	5.9	17
72	An Indefinite Stochastic Linear Quadratic Optimal Control Problem with Delay and Related Forward–Backward Stochastic Differential Equations. *Journal of Optimization Theory and Applications*, **2018**, 179, 722-744	1.6	6
71	Well-posedness of a class of two-point boundary value problems associated with ordinary differential equations. *Advances in Difference Equations*, **2018**, 2018,	3.6	8
70	A sufficient stochastic maximum principle for a kind of recursive optimal control problem with obstacle constraint. *Systems and Control Letters*, **2018**, 114, 27-30	2.4	2
69	Necessary and sufficient conditions for near-optimality of stochastic delay systems. *International Journal of Control*, **2018**, 91, 1730-1744	1.5	4
68	Indefinite stochastic linear-quadratic optimal control problems with random jumps and related stochastic Riccati equations. *Science China Mathematics*, **2018**, 61, 563-576	0.8	13
67	Infinite horizon reflected backward stochastic differential equations with Markov chains. *Communications in Statistics - Theory and Methods*, **2018**, 47, 3360-3376	0.5	
66	Partially observed time-inconsistent stochastic linear-quadratic control with random jumps. *Optimal Control Applications and Methods*, **2018**, 39, 230-247	1.7	6
65	Linear quadratic mean-field-game of backward stochastic differential systems. *Mathematical Control and Related Fields*, **2018**, 8, 653-678	1.5	7
64	Optimal Control of Fully Coupled FBSDE with Partial Information. *SpringerBriefs in Mathematics*, **2018**, 41-58	0.6	0
63	Linear-quadratic partially observed forward–backward stochastic differential games and its application in finance. *Applied Mathematics and Computation*, **2018**, 321, 577-592	2.7	5
62	Stochastic Maximum Principle for Forward-Backward Regime Switching Jump Diffusion Systems and Applications to Finance. *Chinese Annals of Mathematics Series B*, **2018**, 39, 773-790	0.4	1

61	An Introduction to Optimal Control of FBSDE with Incomplete Information. *SpringerBriefs in Mathematics*, **2018**,	0.6	12
60	Optimal switching under a hybrid diffusion model and applications to stock trading. *Automatica*, **2018**, 94, 361-372	5.7	3
59	Stochastic maximum principle for optimal control problems of forward-backward delay systems involving impulse controls. *Journal of Systems Science and Complexity*, **2017**, 30, 280-306	1	6
58	Connection between MP and DPP for Stochastic Recursive Optimal Control Problems: Viscosity Solution Framework in the General Case. *SIAM Journal on Control and Optimization*, **2017**, 55, 3258-3294	1.9	11
57	Linear-quadratic optimal control problem of forward-backward stochastic system with delay **2017**,		1
56	Maximum principle for optimal control of anticipated forward–backward stochastic differential delayed systems with regime switching. *Optimal Control Applications and Methods*, **2016**, 37, 154-175	1.7	13
55	Continuous-time mean–variance portfolio selection with random horizon in an incomplete market. *Automatica*, **2016**, 69, 176-180	5.7	15
54	Backward Mean-Field Linear-Quadratic-Gaussian (LQG) Games: Full and Partial Information. *IEEE Transactions on Automatic Control*, **2016**, 61, 3784-3796	5.9	20
53	Connection between MP and DPP for stochastic recursive optimal control problems: Viscosity solution framework in local case **2016**,		5
52	Backward-forward linear-quadratic mean-field games with major and minor agents. *Probability, Uncertainty and Quantitative Risk*, **2016**, 1,	2.2	5
51	Optimal Switching under a Regime-Switching Model with Two-Time-Scale Markov Chains. *Multiscale Modeling and Simulation*, **2015**, 13, 99-131	1.8	7
50	A Linear-Quadratic Optimal Control Problem of Forward-Backward Stochastic Differential Equations With Partial Information. *IEEE Transactions on Automatic Control*, **2015**, 60, 2904-2916	5.9	42
49	An indefinite stochastic linear quadratic optimal control problem for the FBSDE system with jumps **2015**,		1
48	Backward stochastic differential equations with Markov switching driven by Brownian motion and Poisson random measure. *Stochastics*, **2015**, 87, 1-29	0.6	3
47	On well-posedness of forward–backward SDEs: A unified approach. *Annals of Applied Probability*, **2015**, 25,	2	58
46	Maximum Principle for Optimal Control Problems of Forward-Backward Regime-Switching Systems Involving Impulse Controls. *Mathematical Problems in Engineering*, **2015**, 2015, 1-13	1.1	3
45	Maximum principle for anticipated recursive stochastic optimal control problem with delay and Lévy processes. *Applied Mathematics*, **2014**, 29, 67-85	0.7	5
44	Sobolev Weak Solutions of the Hamilton--Jacobi--Bellman Equations. *SIAM Journal on Control and Optimization*, **2014**, 52, 1499-1526	1.9	5

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43	Probabilistic interpretation for a system of quasilinear parabolic partial differential equation combined with algebra equations. *Stochastic Processes and Their Applications*, **2014**, 124, 3921-3947	1.1	17
42	Backward Stochastic H_2/H_{∞} Control: Infinite Horizon Case. *Mathematical Problems in Engineering*, **2014**, 2014, 1-8	1.1	
41	Convertible Bonds with Higher Loan Rate: Model, Valuation, and Optimal Strategy. *Abstract and Applied Analysis*, **2014**, 2014, 1-9	0.7	1
40	Maximum principles for partially observed mean-field stochastic systems with application to financial engineering **2014**,		6
39	Partially Observed Time-Inconsistency Recursive Optimization Problem and Application. *Journal of Optimization Theory and Applications*, **2014**, 161, 664-687	1.6	8
38	Pricing and hedging problem of foreign currency option with higher borrowing rate. *Journal of Systems Science and Complexity*, **2013**, 26, 407-418	1	
37	Maximum Principles for Forward-Backward Stochastic Control Systems with Correlated State and Observation Noises. *SIAM Journal on Control and Optimization*, **2013**, 51, 491-524	1.9	50
36	A general maximum principle for optimal control of forward–backward stochastic systems. *Automatica*, **2013**, 49, 1473-1480	5.7	60
35	BSDEs with regime switching: Weak convergence and applications. *Journal of Mathematical Analysis and Applications*, **2013**, 407, 97-111	1.1	11
34	Maximum principle for optimal control problems of forward–backward regime-switching system and applications. *Systems and Control Letters*, **2012**, 61, 911-917	2.4	15
33	Maximum Principle for Risk-Sensitive Stochastic Optimal Control Problem and Applications to Finance. *Stochastic Analysis and Applications*, **2012**, 30, 997-1018	1.1	12
32	Partial information LQ optimal control of backward stochastic differential equations **2012**,		1
31	Backward stochastic viability and related properties on Z for BSDEs with applications. *Journal of Systems Science and Complexity*, **2012**, 25, 675-690	1	3
30	Delayed Stochastic Linear-Quadratic Control Problem and Related Applications. *Journal of Applied Mathematics*, **2012**, 2012, 1-22	1.1	11
29	Maximum Principle for Stochastic Recursive Optimal Control Problems Involving Impulse Controls. *Abstract and Applied Analysis*, **2012**, 2012, 1-16	0.7	2
28	Stochastic Recursive Zero-Sum Differential Game and Mixed Zero-Sum Differential Game Problem. *Mathematical Problems in Engineering*, **2012**, 2012, 1-15	1.1	0
27	Stochastic Maximum Principle for Optimal Control Problems of Forward-Backward Systems Involving Impulse Controls. *IEEE Transactions on Automatic Control*, **2011**, 56, 1401-1406	5.9	20
26	A comparison theorem and uniqueness theorem of backward doubly stochastic differential equations. *Acta Mathematicae Applicatae Sinica*, **2011**, 27, 223-232	0.3	6

25	Relationship Between MP and DPP for the Stochastic Optimal Control Problem of Jump Diffusions. *Applied Mathematics and Optimization*, **2011**, 63, 151-189	1.5	16
24	A type of general forward-backward stochastic differential equations and applications. *Chinese Annals of Mathematics Series B*, **2011**, 32, 279-292	0.4	14
23	BDSDEs with locally monotone coefficients and Sobolev solutions for SPDEs. *Journal of Differential Equations*, **2011**, 251, 759-784	2.1	16
22	Mean-Variance Hedging and Forward-Backward Stochastic Differential Filtering Equations. *Abstract and Applied Analysis*, **2011**, 2011, 1-20	0.7	6
21	An Application of Dynamic Programming Principle in Corporate International Optimal Investment and Consumption Choice Problem. *Mathematical Problems in Engineering*, **2010**, 2010, 1-16	1.1	0
20	Maximum principle for forward-backward stochastic control system with random jumps and applications to finance. *Journal of Systems Science and Complexity*, **2010**, 23, 219-231	1	45
19	A maximum principle for partially observed optimal control of forward-backward stochastic control systems. *Science China Information Sciences*, **2010**, 53, 2205-2214	3.4	29
18	Maximum principle for the stochastic optimal control problem with delay and application. *Automatica*, **2010**, 46, 1074-1080	5.7	107
17	Optimal premium policy of an insurance firm: Full and partial information. *Insurance: Mathematics and Economics*, **2010**, 47, 208-215	1.5	18
16	Maximum principle for stochastic optimal control problem of forward-backward system with delay **2009**,		5
15	A simple model of corporate international investment under incomplete information and taxes. *Annals of Operations Research*, **2009**, 165, 123-143	3.2	15
14	Stochastic differential equations and stochastic linear quadratic optimal control problem with Lévy processes. *Journal of Systems Science and Complexity*, **2009**, 22, 122-136	1	21
13	Comparison theorems for forward backward SDEs. *Statistics and Probability Letters*, **2009**, 79, 426-435	0.6	8
12	Nash equilibrium point for one kind of stochastic nonzero-sum game problem and BSDEs. *Comptes Rendus Mathematique*, **2009**, 347, 959-964	0.4	7
11	The Maximum Principles for Stochastic Recursive Optimal Control Problems Under Partial Information. *IEEE Transactions on Automatic Control*, **2009**, 54, 1230-1242	5.9	73
10	Dynamic Programming Principle for One Kind of Stochastic Recursive Optimal Control Problem and Hamilton–Jacobi–Bellman Equation. *SIAM Journal on Control and Optimization*, **2008**, 47, 2616-2641	1.9	34
9	Kalman–Bucy filtering equations of forward and backward stochastic systems and applications to recursive optimal control problems. *Journal of Mathematical Analysis and Applications*, **2008**, 342, 1280-1296	1.1	44
8	The Maximum Principle for One Kind of Stochastic Optimization Problem and Application in Dynamic Measure of Risk. *Acta Mathematica Sinica, English Series*, **2007**, 23, 2189-2204	0.6	7

7	The corporate optimal portfolio and consumption choice problem in the real project with borrowing rate higher than deposit rate. *Applied Mathematics and Computation*, **2006**, 175, 1596-1608	2.7	3
6	Fully coupled FBSDE with Brownian motion and Poisson process in stopping time duration. *Journal of the Australian Mathematical Society*, **2003**, 74, 249-266	0.5	24
5	A MODEL FOR MARKET CLOSURE AND INTERNATIONAL PORTFOLIO MANAGEMENT WITHIN INCOMPLETE INFORMATION. *International Journal of Theoretical and Applied Finance*, **2002**, 05, 479-495	0.5	7
4	Fully Coupled Forward-Backward Stochastic Differential Equations and Applications to Optimal Control. *SIAM Journal on Control and Optimization*, **1999**, 37, 825-843	1.9	255
3	Finite-time control of linear singular systems subject to parametric uncertain and disturbances		3
2	Time-inconsistent linear-quadratic non-zero sum stochastic differential games with random jumps. *International Journal of Control*,1-11	1.5	
1	An optimal pricing policy under a Markov chain model. *Science China Mathematics*,1	0.8	0