Erhan Bayraktar

List of Publications by Year in Descending Order

164 papers	1,741 citations	23 h-index	31 g-index
182 ext. papers	2,188 ext. citations	1.5 avg, IF	5.53 L-index

#	Paper	IF	Citations
164	Optimal Investment and Consumption under a Habit-Formation Constraint. *SIAM Journal on Financial Mathematics*, **2022**, 13, 321-352	1.4	0
163	Short Communication: A Note on Utility Maximization with Proportional Transaction Costs and Stability of Optimal Portfolios. *SIAM Journal on Financial Mathematics*, **2021**, 12, SC115-SC125	1.4	0
162	Finite state mean field games with Wright–Fisher common noise. *Journal Des Mathematiques Pures Et Appliquees*, **2021**, 147, 98-162	1.7	6
161	Embedding of Walsh Brownian motion. *Stochastic Processes and Their Applications*, **2021**, 134, 1-28	1.1	
160	Transport Plans with Domain Constraints. *Applied Mathematics and Optimization*, **2021**, 84, 1131-1158	1.5	
159	Asymptotics for small nonlinear price impact: A PDE approach to the multidimensional case. *Mathematical Finance*, **2021**, 31, 36-108	2.3	2
158	Malicious Experts Versus the Multiplicative Weights Algorithm in Online Prediction. *IEEE Transactions on Information Theory*, **2021**, 67, 559-565	2.8	1
157	Equilibrium concepts for time-inconsistent stopping problems in continuous time. *Mathematical Finance*, **2021**, 31, 508-530	2.3	9
156	A Macroeconomic SIR Model for COVID-19. *Mathematics*, **2021**, 9, 1901	2.3	3
155	Mean field interaction on random graphs with dynamically changing multi-color edges. *Stochastic Processes and Their Applications*, **2021**, 141, 197-244	1.1	1
154	On the Adversarial Robustness of Robust Estimators. *IEEE Transactions on Information Theory*, **2020**, 66, 5097-5109	2.8	2
153	Finite-time 4-expert prediction problem. *Communications in Partial Differential Equations*, **2020**, 45, 714-757	1.1	1
152	On non-uniqueness in mean field games. *Proceedings of the American Mathematical Society*, **2020**, 148, 4091-4106	0.8	4
151	On the quasi-sure superhedging duality with frictions. *Finance and Stochastics*, **2020**, 24, 249-275	1.9	0
150	Continuity of utility maximization under weak convergence. *Mathematics and Financial Economics*, **2020**, 14, 725-757	1	7
149	Extended weak convergence and utility maximisation with proportional transaction costs. *Finance and Stochastics*, **2020**, 24, 1013-1034	1.9	4
148	Optimal Dividend Distribution Under Drawdown and Ratcheting Constraints on Dividend Rates. *SIAM Journal on Financial Mathematics*, **2019**, 10, 547-577	1.4	6

147	High Order Bellman Equations and Weakly Chained Diagonally Dominant Tensors. *SIAM Journal on Matrix Analysis and Applications*, **2019**, 40, 276-298	1.5	8
146	No-Arbitrage and Hedging with Liquid American Options. *Mathematics of Operations Research*, **2019**, 44, 468-486	1.5	3
145	Time Consistent Stopping for the Mean-Standard Deviation Problem---The Discrete Time Case. *SIAM Journal on Financial Mathematics*, **2019**, 10, 667-697	1.4	9
144	Large tournament games. *Annals of Applied Probability*, **2019**, 29,	2	3
143	Optimal investment with random endowments and transaction costs: duality theory and shadow prices. *Mathematics and Financial Economics*, **2019**, 13, 253-286	1	2
142	Rate control under heavy traffic with strategic servers. *Annals of Applied Probability*, **2019**, 29,	2	4
141	On the Controller-Stopper Problems with Controlled Jumps. *Applied Mathematics and Optimization*, **2019**, 80, 195-222	1.5	1
140	Distribution-constrained optimal stopping. *Mathematical Finance*, **2019**, 29, 368-406	2.3	3
139	Quantile Hedging in a semi-static market with model uncertainty. *Mathematical Methods of Operations Research*, **2018**, 87, 197-227	1	
138	Martingale Optimal Transport with Stopping. *SIAM Journal on Control and Optimization*, **2018**, 56, 417-433	1.9	4
137	Solvability of the Nonlinear Dirichlet Problem with Integro-differential Operators. *SIAM Journal on Control and Optimization*, **2018**, 56, 292-315	1.9	3
136	Risk Sensitive Control of the Lifetime Ruin Problem. *Applied Mathematics and Optimization*, **2018**, 77, 229-252	1.5	3
135	On Zero-Sum Optimal Stopping Games. *Applied Mathematics and Optimization*, **2018**, 78, 457-468	1.5	
134	Efficient Byzantine Sequential Change Detection. *IEEE Transactions on Information Theory*, **2018**, 64, 3346-3360	2.3	15
133	Recombining Tree Approximations for Optimal Stopping for Diffusions. *SIAM Journal on Financial Mathematics*, **2018**, 9, 602-633	1.4	1
132	Path-dependent Hamilton–Jacobi equations in infinite dimensions. *Journal of Functional Analysis*, **2018**, 275, 2096-2161	1.4	9
131	On the market viability under proportional transaction costs. *Mathematical Finance*, **2018**, 28, 800-838	2.3	3
130	Large Tournament Games. *SSRN Electronic Journal*, **2018**,	1	1

129	A Numerical Scheme for a Mean Field Game in Some Queueing Systems Based on Markov Chain Approximation Method. *SIAM Journal on Control and Optimization*, **2018**, 56, 4017-4044	1.9	4
128	Convergence of Implicit Schemes for Hamilton--Jacobi--Bellman Quasi-Variational Inequalities. *SIAM Journal on Control and Optimization*, **2018**, 56, 3994-4016	1.9	15
127	Mini-Flash Crashes, Model Risk, and Optimal Execution. *Market Microstructure and Liquidity*, **2018**, 04, 1850010		4
126	Analysis of a Finite State Many Player Game Using Its Master Equation. *SIAM Journal on Control and Optimization*, **2018**, 56, 3538-3568	1.9	21
125	ON ARBITRAGE AND DUALITY UNDER MODEL UNCERTAINTY AND PORTFOLIO CONSTRAINTS. *Mathematical Finance*, **2017**, 27, 988-1012	2.3	23
124	Optimal stopping with random maturity under nonlinear expectations. *Stochastic Processes and Their Applications*, **2017**, 127, 2586-2629	1.1	2
123	High-Roller Impact: A Large Generalized Game Model of Parimutuel Wagering. *Market Microstructure and Liquidity*, **2017**, 03, 1750006		2
122	On an Optimal Stopping Problem of an Insider. *Theory of Probability and Its Applications*, **2017**, 61, 129-135		1
121	Analysis of a Finite State Many Player Game Using Its Master Equation. *SSRN Electronic Journal*, **2017**,	1	4
120	Mini-Flash Crashes, Model Risk, and Optimal Execution. *SSRN Electronic Journal*, **2017**,	1	1
119	SUPER-HEDGING AMERICAN OPTIONS WITH SEMI-STATIC TRADING STRATEGIES UNDER MODEL UNCERTAINTY. *International Journal of Theoretical and Applied Finance*, **2017**, 20, 1750036	0.5	7
118	Ergodicity of Robust Switching Control and Nonlinear System of Quasi-Variational Inequalities. *SIAM Journal on Control and Optimization*, **2017**, 55, 1915-1953	1.9	2
117	Randomized dynamic programming principle and Feynman-Kac representation for optimal control of McKean-Vlasov dynamics. *Transactions of the American Mathematical Society*, **2017**, 370, 2115-2160	1	21
116	On the robust Dynkin game. *Annals of Applied Probability*, **2017**, 27,	2	5
115	Optimal investment to minimize the probability of drawdown. *Stochastics*, **2016**, 88, 946-958	0.6	12
114	An $alpha$-stable limit theorem under sublinear expectation. *Bernoulli*, **2016**, 22,	1.6	2
113	Robust Feedback Switching Control: Dynamic Programming and Viscosity Solutions. *SIAM Journal on Control and Optimization*, **2016**, 54, 2594-2628	1.9	10
112	Stochastic Perron for stochastic target games. *Annals of Applied Probability*, **2016**, 26,	2	4

111	A rank-based mean field game in the strong formulation. *Electronic Communications in Probability*, **2016**, 21,	1	6
110	Optimal Investment with Random Endowments and Transaction Costs: Duality Theory and Shadow Prices. *SSRN Electronic Journal*, **2016**,	1	2
109	Super-Hedging American Options with Semi-Static Trading Strategies Under Model Uncertainty. *SSRN Electronic Journal*, **2016**,	1	1
108	Optimally investing to reach a bequest goal. *Insurance: Mathematics and Economics*, **2016**, 70, 1-10	1.5	8
107	Arbitrage, hedging and utility maximization using semi-static trading strategies with American options. *Annals of Applied Probability*, **2016**, 26,	2	6
106	On a stopping game in continuous time. *Proceedings of the American Mathematical Society*, **2016**, 144, 3589-3596	0.8	2
105	Purchasing Term Life Insurance to Reach a Bequest Goal while Consuming. *SIAM Journal on Financial Mathematics*, **2016**, 7, 183-214	1.4	5
104	Fundamental Theorem of Asset Pricing Under Transaction Costs and Model Uncertainty. *Mathematics of Operations Research*, **2016**, 41, 1039-1054	1.5	14
103	Stochastic Perron for Stochastic Target Problems. *Journal of Optimization Theory and Applications*, **2016**, 170, 1026-1054	1.6	3
102	Minimizing the probability of lifetime drawdown under constant consumption. *Insurance: Mathematics and Economics*, **2016**, 69, 210-223	1.5	14
101	Doubly reflected BSDEs with integrable parameters and related Dynkin games. *Stochastic Processes and Their Applications*, **2015**, 125, 4489-4542	1.1	7
100	On Hedging American Options under Model Uncertainty. *SIAM Journal on Financial Mathematics*, **2015**, 6, 425-447	1.4	20
99	Quickest Detection with Discretely Controlled Observations. *Sequential Analysis*, **2015**, 34, 77-133	0.7	3
98	Stochastic Perron's Method for the Probability of Lifetime Ruin Problem Under Transaction Costs. *SIAM Journal on Control and Optimization*, **2015**, 53, 91-113	1.9	14
97	Byzantine Fault Tolerant Distributed Quickest Change Detection. *SIAM Journal on Control and Optimization*, **2015**, 53, 575-591	1.9	9
96	Minimizing the expected lifetime spent in drawdown under proportional consumption. *Finance Research Letters*, **2015**, 15, 106-114	8.1	6
95	Weak reflection principle for Lévy processes. *Annals of Applied Probability*, **2015**, 25,	2	1
94	Optimally Investing to Reach a Bequest Goal. *SSRN Electronic Journal*, **2015**,	1	5

93	Purchasing Term Life Insurance to Reach a Bequest Goal: Time-Dependent Case. *North American Actuarial Journal*, **2015**, 19, 224-236	0.7	6
92	Minimizing the Probability of Lifetime Ruin Under Ambiguity Aversion. *SIAM Journal on Control and Optimization*, **2015**, 53, 58-90	1.9	40
91	Comparing the G-normal distribution to its classical counterpart. *Communications on Stochastic Analysis*, **2015**, 9,	0.4	1
90	A stochastic approximation for fully nonlinear free boundary parabolic problems. *Numerical Methods for Partial Differential Equations*, **2014**, 30, 902-929	2.5	4
89	On the Robust Optimal Stopping Problem. *SIAM Journal on Control and Optimization*, **2014**, 52, 3135-3175	1.9	14
88	Bayesian Quickest Change-Point Detection With Sampling Right Constraints. *IEEE Transactions on Information Theory*, **2014**, 60, 6474-6490	2.8	9
87	Purchasing life insurance to reach a bequest goal. *Insurance: Mathematics and Economics*, **2014**, 58, 204-216	1.9	11
86	A Note on the Fundamental Theorem of Asset Pricing under Model Uncertainty. *Risks*, **2014**, 2, 425-433	1.6	9
85	Stochastic Perron's method and verification without smoothness using viscosity comparison: Obstacle problems and Dynkin games. *Proceedings of the American Mathematical Society*, **2014**, 142, 1399-1412	0.8	26
84	A note on applications of stochastic ordering to control problems in insurance and finance. *Stochastics*, **2014**, 86, 330-340	0.6	15
83	On the Existence Of Consistent Price Systems. *Stochastic Analysis and Applications*, **2014**, 32, 152-162	1.1	
82	Quickest search over Brownian channels. *Stochastics*, **2014**, 86, 473-490	0.6	2
81	On Controller-Stopper Problems with Jumps and Their Applications to Indifference Pricing of American Options. *SIAM Journal on Financial Mathematics*, **2014**, 5, 20-49	1.4	5
80	LIQUIDATION IN LIMIT ORDER BOOKS WITH CONTROLLED INTENSITY. *Mathematical Finance*, **2014**, 24, 627-650	2.3	69
79	Optimal dividends in the dual model under transaction costs. *Insurance: Mathematics and Economics* , **2014**, 54, 133-143	1.5	35
78	Optimal reinsurance and investment with unobservable claim size and intensity. *Insurance: Mathematics and Economics*, **2014**, 55, 156-166	1.5	46
77	On the Multidimensional Controller-and-Stopper Games. *SIAM Journal on Control and Optimization*, **2013**, 51, 1263-1297	1.9	22
76	Stochastic Perron's Method for Hamilton--Jacobi--Bellman Equations. *SIAM Journal on Control and Optimization*, **2013**, 51, 4274-4294	1.9	35

75	Stability of exponential utility maximization with respect to market perturbations. *Stochastic Processes and Their Applications*, **2013**, 123, 1671-1690	1.1	4
74	A Weak Dynamic Programming Principle for Zero-Sum Stochastic Differential Games with Unbounded Controls. *SIAM Journal on Control and Optimization*, **2013**, 51, 2036-2080	1.9	12
73	On the Impulse Control of Jump Diffusions. *SIAM Journal on Control and Optimization*, **2013**, 51, 2612-2637	1.9	15
72	ON OPTIMAL DIVIDENDS IN THE DUAL MODEL. *ASTIN Bulletin*, **2013**, 43, 359-372	1.6	57
71	Life Insurance Purchasing to Maximize Utility of Household Consumption. *North American Actuarial Journal*, **2013**, 17, 114-135	0.7	9
70	Robust maximization of asymptotic growth under covariance uncertainty. *Annals of Applied Probability*, **2013**, 23,	2	5
69	Quadratic reflected BSDEs with unbounded obstacles. *Stochastic Processes and Their Applications*, **2012**, 122, 1155-1203	1.1	15
68	Outperforming the market portfolio with a given probability. *Annals of Applied Probability*, **2012**, 22,	2	5
67	Valuation Equations for Stochastic Volatility Models. *SIAM Journal on Financial Mathematics*, **2012**, 3, 351-373	1.4	14
66	Regularity of the Optimal Stopping Problem for Jump Diffusions. *SIAM Journal on Control and Optimization*, **2012**, 50, 1337-1357	1.9	6
65	Quickest change point detection with sampling right constraints **2012**,		2
64	Strict local martingale deflators and valuing American call-type options. *Finance and Stochastics*, **2012**, 16, 275-291	1.9	9
63	Stochastic Perron's method and verification without smoothness using viscosity comparison: The linear case. *Proceedings of the American Mathematical Society*, **2012**, 140, 3645-3654	0.8	46
62	PRICING ASIAN OPTIONS FOR JUMP DIFFUSION. *Mathematical Finance*, **2011**, 21, 117-143	2.3	37
61	A UNIFIED FRAMEWORK FOR PRICING CREDIT AND EQUITY DERIVATIVES. *Mathematical Finance*, **2011**, 21, 493-517	2.3	8
60	Proving regularity of the minimal probability of ruin via a game of stopping and control. *Finance and Stochastics*, **2011**, 15, 785-818	1.9	15
59	Optimal stopping for non-linear expectations—Part II. *Stochastic Processes and Their Applications*, **2011**, 121, 212-264	1.1	25
58	Minimizing the probability of lifetime ruin under stochastic volatility. *Insurance: Mathematics and Economics*, **2011**, 49, 194-206	1.5	5

57	On the perpetual American put options for level dependent volatility models with jumps. *Quantitative Finance*, **2011**, 11, 335-341	1.6	4
56	Optimal stopping for non-linear expectations Part I. *Stochastic Processes and Their Applications*, **2011**, 121, 185-211	1.1	30
55	OPTIMAL TRADE EXECUTION IN ILLIQUID MARKETS. *Mathematical Finance*, **2010**, 21, no-no	2.3	15
54	Optimal stopping for dynamic convex risk measures. *Illinois Journal of Mathematics*, **2010**, 54,	0.9	33
53	On the Continuity of Stochastic Exit Time Control Problems. *Stochastic Analysis and Applications*, **2010**, 29, 48-60	1.1	17
52	On the One-Dimensional Optimal Switching Problem. *Mathematics of Operations Research*, **2010**, 35, 140-159	1.5	31
51	On the uniqueness of classical solutions of Cauchy problems. *Proceedings of the American Mathematical Society*, **2010**, 138, 2061-2064	0.8	8
50	On the stickiness property. *Quantitative Finance*, **2010**, 10, 1109-1112	1.6	7
49	A unified treatment of dividend payment problems under fixed cost and implementation delays. *Mathematical Methods of Operations Research*, **2010**, 71, 325-351	1	2
48	No arbitrage conditions for simple trading strategies. *Annals of Finance*, **2010**, 6, 147-156	1	4
47	Optimal investment strategy to minimize occupation time. *Annals of Operations Research*, **2010**, 176, 389-408	3.2	16
46	Inventory management with partially observed nonstationary demand. *Annals of Operations Research*, **2010**, 176, 7-39	3.2	19
45	Minimizing the Probability of Lifetime Ruin with Deferred Life Annuities. *North American Actuarial Journal*, **2009**, 13, 141-154	0.7	8
44	Multi-Scale Time-Changed Birth Processes for Pricing Multi-Name Credit Derivatives. *Applied Mathematical Finance*, **2009**, 16, 429-449	0.9	4
43	Sequential tracking of a hidden Markov chain using point process observations. *Stochastic Processes and Their Applications*, **2009**, 119, 1792-1822	1.1	16
42	Pricing American options for jump diffusions by iterating optimal stopping problems for diffusions. *Mathematical Methods of Operations Research*, **2009**, 70, 505-525	1	11
41	Valuation of mortality risk via the instantaneous Sharpe ratio: Applications to life annuities. *Journal of Economic Dynamics and Control*, **2009**, 33, 676-691	1.3	46
40	Minimizing the lifetime shortfall or shortfall at death. *Insurance: Mathematics and Economics*, **2009**, 44, 447-458	1.5	3

39	Relative Hedging of Systematic Mortality Risk. *North American Actuarial Journal*, **2009**, 13, 106-140	0.7	5
38	Online Change Detection for a Poisson Process with a Phase-Type Change-Time Prior Distribution. *Sequential Analysis*, **2009**, 28, 218-250	0.7	4
37	Analysis of the Optimal Exercise Boundary of American Options for Jump Diffusions. *SIAM Journal on Mathematical Analysis*, **2009**, 41, 825-860	1.7	18
36	A Proof of the Smoothness of the Finite Time Horizon American Put Option for Jump Diffusions. *SIAM Journal on Control and Optimization*, **2009**, 48, 551-572	1.9	10
35	Minimizing the Probability of Lifetime Ruin under Random Consumption. *North American Actuarial Journal*, **2008**, 12, 384-400	0.7	5
34	Minimizing the Probability of Ruin When Consumption is Ratcheted. *North American Actuarial Journal*, **2008**, 12, 428-442	0.7	8
33	Mutual fund theorems when minimizing the probability of lifetime ruin. *Finance Research Letters*, **2008**, 5, 69-78	8.1	1
32	Maximizing utility of consumption subject to a constraint on the probability of lifetime ruin. *Finance Research Letters*, **2008**, 5, 204-212	8.1	6
31	An Analysis of Monotone Follower Problems for Diffusion Processes. *Mathematics of Operations Research*, **2008**, 33, 336-350	1.5	8
30	Pricing Options on Defaultable Stocks*View all notes. *Applied Mathematical Finance*, **2008**, 15, 277-304	0.9	6
29	Optimizing venture capital investments in a jump diffusion model. *Mathematical Methods of Operations Research*, **2008**, 67, 21-42	1	46
28	Optimal time to change premiums. *Mathematical Methods of Operations Research*, **2008**, 68, 125-158	1	1
27	Pricing options in incomplete equity markets via the instantaneous Sharpe ratio. *Annals of Finance*, **2008**, 4, 399-429	1	21
26	The effects of implementation delay on decision-making under uncertainty. *Stochastic Processes and Their Applications*, **2007**, 117, 333-358	1.1	15
25	Correspondence between lifetime minimum wealth and utility of consumption. *Finance and Stochastics*, **2007**, 11, 213-236	1.9	25
24	Hedging life insurance with pure endowments. *Insurance: Mathematics and Economics*, **2007**, 40, 435-444	1.5	24
23	Minimizing the probability of lifetime ruin under borrowing constraints. *Insurance: Mathematics and Economics*, **2007**, 41, 196-221	1.5	30
22	Chapter 15 Queuing Theoretic Approaches to Financial Price Fluctuations. *Handbooks in Operations Research and Management Science*, **2007**, 637-677		6

21	Quickest Detection of a Minimum of Two Poisson Disorder Times. *SIAM Journal on Control and Optimization*, **2007**, 46, 308-331	1.9	14
20	Poisson Disorder Problem with Exponential Penalty for Delay. *Mathematics of Operations Research*, **2006**, 31, 217-233	1.5	21
19	A Limit Theorem for Financial Markets with Inert Investors. *Mathematics of Operations Research*, **2006**, 31, 789-810	1.5	26
18	PROJECTING THE FORWARD RATE FLOW ONTO A FINITE DIMENSIONAL MANIFOLD. *International Journal of Theoretical and Applied Finance*, **2006**, 09, 777-785	0.5	2
17	Adaptive Poisson disorder problem. *Annals of Applied Probability*, **2006**, 16, 1190	2	34
16	Stochastic Differential Games in a Non-Markovian Setting. *SIAM Journal on Control and Optimization* , **2005**, 43, 1737-1756	1.9	10
15	The standard Poisson disorder problem revisited. *Stochastic Processes and Their Applications*, **2005**, 115, 1437-1450	1.1	31
14	Prediction and tracking of long-range-dependent sequences. *Systems and Control Letters*, **2005**, 54, 1083-1090	2.1	5
13	Consistency Problems for Jump-diffusion Models. *Applied Mathematical Finance*, **2005**, 12, 101-119	0.9	3
12	ARBITRAGE IN FRACTAL MODULATED BLACK–SCHOLES MODELS WHEN THE VOLATILITY IS STOCHASTIC. *International Journal of Theoretical and Applied Finance*, **2005**, 08, 283-300	0.5	4
11	ESTIMATING THE FRACTAL DIMENSION OF THE S&P 500 INDEX USING WAVELET ANALYSIS. *International Journal of Theoretical and Applied Finance*, **2004**, 07, 615-643	0.5	40
10	Efficient estimation of the Hurst parameter in high frequency financial data with seasonalities using wavelets		2
9	Quickest Detection of a Minimum of Disorder Times		1
8	On the Market Viability Under Proportional Transaction Costs. *SSRN Electronic Journal*,	1	3
7	On Zero-Sum Optimal Stopping Games. *SSRN Electronic Journal*,	1	2
6	Purchasing Term Life Insurance to Reach a Bequest Goal While Consuming. *SSRN Electronic Journal*,	1	1
5	No-Arbitrage and Hedging with Liquid American Options. *SSRN Electronic Journal*,	1	1
4	Optimal Stopping with Random Maturity Under Nonlinear Expectations. *SSRN Electronic Journal*,	1	2

3	Terminal Ranking Games. *SSRN Electronic Journal*,	1	1
2	Terminal Ranking Games. *Mathematics of Operations Research*,	1.5	2
1	Disorder detection with costly observations. *Journal of Applied Probability*,1-12	0.8	