Jean-Philippe Bouchaud

List of Publications by Year
in descending order

187	11,597	71061	30058
papers	citations	41	103
		h-index	g-index

194	194	194	5729
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Hawkes processes with infinite mean intensity. Physical Review E, 2022, 105, L032101.	0.8	2
2	Out-of-equilibrium dynamics and excess volatility in firm networks. Journal of Economic Dynamics and Control, 2022, 138, 104362.	0.9	5
3	Non-self-averaging Lyapunov exponent in random conewise linear systems. Physical Review E, 2022, 105, .	0.8	1
4	The inelastic market hypothesis: a microstructural interpretation. Quantitative Finance, 2022, 22, 1785-1795.	0.9	1
5	Optimal multi-asset trading with linear costs: a mean-field approach. Quantitative Finance, 2021, 21, 185-195.	0.9	1
6	Conditional Correlations and Principal Regression Analysis for Futures. Wilmott Magazine, 2021, 2021, 63-73.	0.1	3
7	Vâ€“, Uâ€“, Lâ€“ or Wâ€“shaped economic recovery after Covid-19: Insights from an Agent Based Model. PLoS ONE, 2021, 16, e0247823.	1.1	35
8	Matrix Kesten recursion, inverse-Wishart ensemble and fermions in a Morse potential. Journal of Physics A: Mathematical and Theoretical, 2021, 54, 255201.	0.7	9
9	Equity Factors: To Short or Not to Short, That Is the Question. Journal of Investing, 2021, 30, 34-46.	0.1	0
10	Good speciation and endogenous business cycles in a constraint satisfaction macroeconomic model. Journal of Statistical Mechanics: Theory and Experiment, 2021, 2021, 063403.	0.9	5
11	Amorphous Order and Nonlinear Susceptibilities in Glassy Materials. Journal of Physical Chemistry B, 2021, 125, 7578-7586.	1.2	9
12	Cultural diversity and wisdom of crowds are mutually beneficial and evolutionarily stable. Scientific Reports, 2021, 11, 16566.	1.6	3
13	Radical Complexity. Entropy, 2021, 23, 1676.	1.1	1
14	Crisis propagation in a heterogeneous self-reflexive DSGE model. PLoS ONE, 2021, 16, e0261423.	1.1	1
15	Co-existence of trend and value in financial markets: Estimating an extended Chiarella model. Journal of Economic Dynamics and Control, 2020, 112, 103791.	0.9	12
16	Deterministic Matrices. , 2020, , 3-14.		0
17	Wigner Ensemble and Semi-Circle Law. , 2020, , 15-29.		0
18	More on Gaussian Matrices*. , 2020, , 30-42.		0

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19	Wishart Ensemble and MarÄenkoâ€“Pastur Distribution. , 2020, , 43-57.		0
20	Joint Distribution of Eigenvalues. , 2020, , 58-82.		0
21	Eigenvalues and Orthogonal Polynomials*. , 2020, , 83-96.		0
22	The Jacobi Ensemble*. , 2020, , 97-108.		0
23	Addition of Random Variables and Brownian Motion. , 2020, , 111-120.		0
24	Dyson Brownian Motion. , 2020, , 121-135.		0
25	Addition of Large Random Matrices. , 2020, , 136-154.		0
26	Free Probabilities. , 2020, , 155-176.		0
27	Free Random Matrices. , 2020, , 177-198.		0
28	Products of Many Random Matrices. , 2020, , 257-266.		0
29	Sample Covariance Matrices. , 2020, , 267-280.		0
30	Bayesian Estimation. , 2020, , 281-296.		0
31	The Replica Method*. , 2020, , 199-219.		0
32	Edge Eigenvalues and Outliers. , 2020, , 220-240.		0
33	Addition and Multiplication: Recipes and Examples. , 2020, , 243-256.		0
34	Eigenvector Overlaps and Rotationally Invariant Estimators. , 2020, , 297-320.		0
35	Applications to Finance. , 2020, , 321-338.		0
36	By force of habit: Self-trapping in a dynamical utility landscape. Chaos, 2020, 30, 053123.	1.0	12

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37	Confidence collapse in a multihousehold, self-reflexive DSGE model. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 9244-9249.	3.3	9
38	Are trading invariants really invariant? Trading costs matter. Quantitative Finance, 2020, 20, 1059-1068.	0.9	5
39	The Multivariate Kyle Model: More is Different. SIAM Journal on Financial Mathematics, 2020, 11, 327-357.	0.7	13
40	Beauty and structural complexity. Physical Review Research, 2020, 2, .	1.3	17
41	Agnostic Allocation Portfolios: A Sweet Spot in the Risk-Based Jungle?. Journal of Portfolio Management, 2020, 46, 22-38.	0.3	5
42	Impact is not just volatility. Quantitative Finance, 2019, 19, 1763-1766.	0.9	8
43	How Should You Discount Your Backtest PnL?. Wilmott Magazine, 2019, 2019, 53-57.	0.1	2
44	May's instability in large economies. Physical Review E, 2019, 100, 032307.	0.8	36
45	The Size Premium in Equity Markets: Where Is the Risk?. Journal of Portfolio Management, 2019, 45, 58-68.	0.3	3
46	Can the glass transition be explained without a growing static length scale?. Journal of Chemical Physics, 2019, 150, 094501.	1.2	38
47	Crossover from Linear to Square-Root Market Impact. Physical Review Letters, 2019, 122, 108302.	2.9	17
48	Self-planting: digging holes in rough landscapes. Journal of Statistical Mechanics: Theory and Experiment, 2019, 2019, 123301.	0.9	3
49	Two short pieces around the Wigner problem. Journal of Physics A: Mathematical and Theoretical, 2019, 52, 024001.	0.7	0
50	Sticky Expectations and the Profitability Anomaly. Journal of Finance, 2019, 74, 639-674.	3.2	142
51	A fractional reactionâ€“diffusion description of supply and demand. European Physical Journal B, 2018, 91, 1.	0.6	6
52	You Are in a Drawdown. When Should You Start Worrying?. Wilmott Magazine, 2018, 2018, 56-59.	0.1	3
53	Universal scaling and nonlinearity of aggregate price impact in financial markets. Physical Review E, 2018, 97, 012304.	0.8	21
54	Linear models for the impact of order flow on prices. II. The Mixture Transition Distribution model. Quantitative Finance, 2018, 18, 917-931.	0.9	8

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55	Linear models for the impact of order flow on prices. I. History dependent impact models. Quantitative Finance, 2018, 18, 903-915.	0.9	13
56	Overlaps between eigenvectors of correlated random matrices. Physical Review E, 2018, 98, .	0.8	8
57	Optimal inflation target: insights from an agent-based model. Economics, 2018, 12, .	0.2	6
58	Agent-Based Models for Market Impact and Volatility. Handbook of Computational Economics, 2018, 4, 393-436.	1.6	9
59	Monetary policy and dark corners in a stylized agent-based model. Journal of Economic Interaction and Coordination, 2017, 12, 507-537.	0.4	17
60	Do investors trade too much? A laboratory experiment. Journal of Economic Behavior and Organization, 2017, 140, 18-34.	1.0	19
61	Deconstructing the Low-Vol Anomaly. Journal of Portfolio Management, 2017, 44, 91-103.	0.3	14
62	Edge mode amplification in disordered elastic networks. Soft Matter, 2017, 13, 5795-5801.	1.2	8
63	Genuine localization transition in a long-range hopping model. Physical Review E, 2017, 95, 062118.	0.8	9
64	Cleaning large correlation matrices: Tools from Random Matrix Theory. Physics Reports, 2017, 666, 1-109.	10.3	155
65	Nonlinear price impact from linear models. Journal of Statistical Mechanics: Theory and Experiment, 2017, 2017, 123404.	0.9	8
66	The Short-Term Price Impact of Trades is Universal. Market Microstructure and Liquidity, 2017, 03, 1850002.	0.6	5
67	Rotational Invariant Estimator for General Noisy Matrices. IEEE Transactions on Information Theory, 2016, 62, 7475-7490.	1.5	49
68	Spontaneous instabilities and stick-slip motion in a generalized HÃ©braudâ€“Lequeux model. Soft Matter, 2016, 12, 1230-1237.	1.2	8
69	On growth-optimal tax rates and the issue of wealth inequalities. Journal of Statistical Mechanics: Theory and Experiment, 2015, 2015, P11011.	0.9	29
70	Why Do Markets Crash? Bitcoin Data Offers Unprecedented Insights. PLoS ONE, 2015, 10, e0139356.	1.1	54
71	Turbulent Fracture Surfaces: A Footprint of Damage Percolation?. Physical Review Letters, 2015, 114, 215501.	2.9	24
72	Tipping points in macroeconomic agent-based models. Journal of Economic Dynamics and Control, 2015, 50, 29-61.	0.9	117

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73	Endogenous Crisis Waves: Stochastic Model with Synchronized Collective Behavior. Physical Review Letters, 2015, 114, 088701.	2.9	30
74	Sudden trust collapse in networked societies. European Physical Journal B, 2015, 88, 1.	0.6	10
75	SKEW AND IMPLIED LEVERAGE EFFECT: SMILE DYNAMICS REVISITED. International Journal of Theoretical and Applied Finance, 2015, 18, 1550022.	0.2	7
76	Branching-ratio approximation for the self-exciting Hawkes process. Physical Review E, 2014, 90, 062807.	0.8	32
77	Critical Dynamical Heterogeneities Close to Continuous Second-Order Glass Transitions. Physical Review Letters, 2014, 113, 245701.	2.9	13
78	Agent-based models for latent liquidity and concave price impact. Physical Review E, 2014, 89, 042805.	0.8	64
79	Explore or Exploit? A Generic Model and an Exactly Solvable Case. Physical Review Letters, 2014, 112, 050602.	2.9	31
80	Eigenvector dynamics under free addition. Random Matrices: Theory and Application, 2014, 03, 1450010.	0.5	18
81	On the emergence of an â€˜intention fieldâ€™ for socially cohesive agents. Journal of Statistical Mechanics: Theory and Experiment, 2014, 2014, P03010.	0.9	13
82	The fine structure of volatility feedback II: Overnight and intra-day effects. Physica A: Statistical Mechanics and Its Applications, 2014, 402, 58-75.	1.2	25
83	The fine-structure of volatility feedback I: Multi-scale self-reflexivity. Physica A: Statistical Mechanics and Its Applications, 2014, 410, 174-195.	1.2	27
84	Instabilities in large economies: aggregate volatility without idiosyncratic shocks. Journal of Statistical Mechanics: Theory and Experiment, 2014, 2014, P10040.	0.9	10
85	Some Applications of First-Passage Ideas to Finance. , 2014, , 447-476.		8
86	Critical reflexivity in financial markets: a Hawkes process analysis. European Physical Journal B, 2013, 86, 1.	0.6	111
87	Crises and Collective Socio-Economic Phenomena: Simple Models and Challenges. Journal of Statistical Physics, 2013, 151, 567-606.	0.5	171
88	THE JOINT DISTRIBUTION OF STOCK RETURNS IS NOT ELLIPTICAL. International Journal of Theoretical and Applied Finance, 2012, 15, 1250019.	0.2	25
89	Dynamics of Ranking Processes in Complex Systems. Physical Review Letters, 2012, 109, 128701.	2.9	54
90	The price impact of order book events: market orders, limit orders and cancellations. Quantitative Finance, 2012, 12, 1395-1419.	0.9	130

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91	Election Turnout Statistics in Many Countries: Similarities, Differences, and a Diffusive Field Model for Decision-Making. PLoS ONE, 2012, 7, e36289.	1.1	41
92	The Endogenous Dynamics of Markets: A Complex System Point of View. Procedia Computer Science, 2011, 7, 22-23.	1.2	5
93	Principal regression analysis and the index leverage effect. Physica A: Statistical Mechanics and Its Applications, 2011, 390, 3026-3035.	1.2	30
94	Goodness-of-fit tests with dependent observations. Journal of Statistical Mechanics: Theory and Experiment, 2011, 2011, P09003.	0.9	20
95	Benoit Mandelbrot: a personal tribute. Quantitative Finance, 2011, 11, 161-161.	0.9	0
96	Elementary excitation modes in a granular glass above jamming. Soft Matter, 2010, 6, 3013.	1.2	46
97	Predictive power of MCT: numerical testing and finite size scaling for a mean field spin glass. Journal of Statistical Mechanics: Theory and Experiment, 2009, 2009, P08014.	0.9	24
98	Smile dynamics: a theory of the implied leverage effect. Wilmott Journal, 2009, 1, 87-94.	0.4	13
99	Economics needs a scientific revolution. Nature, 2008, 455, 1181-1181.	13.7	209
100	Relation between bidâ€“ask spread, impact and volatility in order-driven markets. Quantitative Finance, 2008, 8, 41-57.	0.9	126
101	Optimal time to sell a stock in the Blackâ€“Scholes model: comment on â€˜Thou shalt buy and holdâ€™, by A. Shiryaev, Z. Xu and X.Y. Zhou. Quantitative Finance, 2008, 8, 753-760.	0.9	40
102	Freezing and extreme-value statistics in a random energy model with logarithmically correlated potential. Journal of Physics A: Mathematical and Theoretical, 2008, 41, 372001.	0.7	113
103	Models of Randomness and Complexity, from Turbulence to Stock Markets. Leonardo, 2008, 41, 239-243.	0.2	2
104	Statistical mechanics of a single particle in a multiscale random potential: Parisi landscapes in finite-dimensional Euclidean spaces. Journal of Physics A: Mathematical and Theoretical, 2008, 41, 324009.	0.7	26
105	Self-referential behaviour, overreaction and conventions in financial markets. Journal of Economic Behavior and Organization, 2007, 63, 1-24.	1.0	46
106	Critical fluctuations and breakdown of the Stokesâ€“Einstein relation in the mode-coupling theory of glasses. Journal of Physics Condensed Matter, 2007, 19, 205101.	0.7	61
107	Extreme value problems in random matrix theory and other disordered systems. Journal of Statistical Mechanics: Theory and Experiment, 2007, 2007, P07019-P07019.	0.9	54
108	Of songs and men: a model for multiple choice with herding. Quality and Quantity, 2007, 41, 557-568.	2.0	42

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109	Inhomogeneous Mode-Coupling Theory and Growing Dynamic Length in Supercooled Liquids. Physical Review Letters, 2006, 97, 195701.	2.9	262
110	Random walks, liquidity molasses and critical response in financial markets. Quantitative Finance, 2006, 6, 115-123.	0.9	128
111	EXPERTS' EARNING FORECASTS: BIAS, HERDING AND GOSSAMER INFORMATION. International Journal of Theoretical and Applied Finance, 2005, 08, 933-946.	0.2	34
112	Nonlinear susceptibility in glassy systems: A probe for cooperative dynamical length scales. Physical Review B, 2005, 72, .	1.1	147
113	The subtle nature of financial random walks. Chaos, 2005, 15, 026104.	1.0	37
114	THE SUBTLE NATURE OF MARKET EFFICIENCY. , 2005, , .		0
115	On the Adam-Gibbs-Kirkpatrick-Thirumalai-Wolynes scenario for the viscosity increase in glasses. Journal of Chemical Physics, 2004, 121, 7347-7354.	1.2	399
116	A non-Gaussian option pricing model with skew. Quantitative Finance, 2004, 4, 499-514.	0.9	61
117	Option pricing and hedging with minimum local expected shortfall. Quantitative Finance, 2004, 4, 607-618.	0.9	10
118	More statistical properties of order books and price impact. Physica A: Statistical Mechanics and Its Applications, 2003, 324, 133-140.	1.2	222
119	Volatility clustering in agent based market models. Physica A: Statistical Mechanics and Its Applications, 2003, 324, 6-16.	1.2	10
120	Statistical models for company growth. Physica A: Statistical Mechanics and Its Applications, 2003, 326, 241-255.	1.2	39
121	Glassy dynamics in a simple model of a one-dimensional homogeneous polymer. Journal of Physics Condensed Matter, 2002, 14, 1659-1672.	0.7	0
122	The skewed multifractal random walk with applications to option smiles. Quantitative Finance, 2002, 2, 303-314.	0.9	47
123	An introduction to statistical finance. Physica A: Statistical Mechanics and Its Applications, 2002, 313, 238-251.	1.2	144
124	Statistical properties of stock order books: empirical results and models. Quantitative Finance, 2002, 2, 251-256.	0.9	254
125	Hedged Monte-Carlo: low variance derivative pricing with objective probabilities. Physica A: Statistical Mechanics and Its Applications, 2001, 289, 517-525.	1.2	43
126	Microscopic models for long ranged volatility correlations. Physica A: Statistical Mechanics and Its Applications, 2001, 299, 28-39.	1.2	85

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127	More stylized facts of financial markets: leverage effect and downside correlations. Physica A: Statistical Mechanics and Its Applications, 2001, 299, 60-70.	1.2	57
128	Leverage Effect in Financial Markets: The Retarded Volatility Model. Physical Review Letters, 2001, 87, 228701.	2.9	254
129	Wealth condensation in a simple model of economy. Physica A: Statistical Mechanics and Its Applications, 2000, 282, 536-545.	1.2	449
130	Multiple Scaling Regimes in Simple Aging Models. Physical Review Letters, 2000, 84, 5403-5406.	2.9	75
131	Phenomenology of the interest rate curve. Applied Mathematical Finance, 1999, 6, 209-232.	0.8	45
132	Noise Dressing of Financial Correlation Matrices. Physical Review Letters, 1999, 83, 1467-1470.	2.9	1,049
133	Rational decisions, random matrices and spin glasses. Physica A: Statistical Mechanics and Its Applications, 1998, 259, 449-456.	1.2	87
134	Comment on â€œRoughening Transition of Interfaces in Disordered Systemsâ€• Physical Review Letters, 1998, 81, 5953-5953.	2.9	4
135	Static Avalanches and Giant Stress Fluctuations in Silos. Physical Review Letters, 1997, 78, 231-234.	2.9	77
136	Landscape approach for pinned elastic interfaces. Physica D: Nonlinear Phenomena, 1997, 107, 174-182.	1.3	3
137	Aging in Glasses: Traps and Mode-Coupling Theory. Progress of Theoretical Physics Supplement, 1997, 126, 181-184.	0.2	8
138	The Large Scale Energy Landscape of Randomly Pinned Objects. Journal De Physique, I, 1996, 6, 1007-1020.	1.2	61
139	Mode-coupling approximations, glass theory and disordered systems. Physica A: Statistical Mechanics and Its Applications, 1996, 226, 243-273.	1.2	251
140	Velocity fluctuations in forced Burgers turbulence. Physical Review E, 1996, 54, 5116-5121.	0.8	34
141	Stock Market Crashes, Precursors and Replicas. Journal De Physique, I, 1996, 6, 167-175.	1.2	294
142	Triblock copolymers in a selective solvent: Dilute and semiâ€dilute solutions. Macromolecular Symposia, 1995, 90, 203-229.	0.4	2
143	On a Dynamical Model of Glasses. Journal De Physique, I, 1995, 5, 1521-1526.	1.2	37
144	The Black-Scholes option pricing problem in mathematical finance: generalization and extensions for a large class of stochastic processes. Journal De Physique, I, 1994, 4, 863-881.	1.2	137

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145	Conductance statistics in small GaAs:Si wires at low temperatures. I. Theoretical analysis: truncated quantum fluctuations in insulating wires. Journal De Physique, I, 1993, 3, 2311-2320.	1.2	13
146	Variational theory for the pinning of vortex lattices by impurities. Physical Review B, 1992, 46, 14686-14701.	1.1	40
147	Competition between lattice pinning and impurity pinning: Variational theory and physical realizations. Physical Review Letters, 1992, 68, 3908-3911.	2.9	31
148	Gutzwiller wave function for a model of strongly interacting bosons. Physical Review B, 1992, 45, 3137-3140.	1.1	192
149	Can strong localization of waves be attained by internal resonances ?. Journal De Physique, I, 1992, 2, 1861-1867.	1.2	2
150	Variational theory for disordered vortex lattices. Physical Review Letters, 1991, 67, 3840-3843.	2.9	71
151	Anomalous diffusion in disordered media: Statistical mechanisms, models and physical applications. Physics Reports, 1990, 195, 127-293.	10.3	3,538
152	Flory formula as an extended law of large numbers. Physical Review B, 1989, 39, 2846-2849.	1.1	21
153	Universal shape of diffusion fronts in inhomogeneous media from linear response requirements. Physica A: Statistical Mechanics and Its Applications, 1989, 157, 619.	1.2	0
154	High Field Behavior of Liquid and Solid3He: A New Solid Phase?. Japanese Journal of Applied Physics, 1987, 26, 207.	0.8	0
155	Numerical study of aD-dimensional periodic Lorentz gas with universal properties. Journal of Statistical Physics, 1985, 41, 225-248.	0.5	68
156	HOW AND WHY DO PRICES MOVE?. , 0, , 1-4.		0
157	The Ecology of Financial Markets. , 0, , 5-21.		0
158	The Statistics of Price Changes: An Informal Primer. , 0, , 22-40.		0
159	LIMIT ORDER BOOKS: INTRODUCTION. , 0, , 41-43.		0
160	Limit Order Books. , 0, , 44-57.		0
161	Empirical Properties of Limit Order Books. , 0, , 58-74.		0
162	LIMIT ORDER BOOKS: MODELS. , 0, , 75-77.		0

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163	Single-Queue Dynamics: Simple Models. , 0, , 78-100.		0
164	Single-Queue Dynamics for Large-Tick Stocks. , 0, , 101-116.		0
165	Joint-Queue Dynamics for Large-Tick Stocks. , 0, , 117-133.		0
166	The Santa Fe Model for Limit Order Books. , 0, , 134-158.		0
167	CLUSTERING AND CORRELATIONS. , 0, , 159-162.		0
168	Time Clustering and Hawkes Processes. , 0, , 163-186.		0
169	Long-Range Persistence of Order Flow. , 0, , 187-204.		0
170	PRICE IMPACT. , 0, , 205-207.		0
171	The Impact of Market Orders. , 0, , 208-228.		0
172	The Impact of Metaorders. , 0, , 229-244.		0
173	MARKET DYNAMICS AT THE MICRO-SCALE. , 0, , 245-248.		0
174	The Propagator Model. , 0, , 249-269.		0
175	Generalised Propagator Models. , 0, , 270-286.		0
176	ADVERSE SELECTION AND LIQUIDITY PROVISION. , 0, , 287-289.		0
177	The Kyle Model. , 0, , 290-297.		0
178	The Determinants of the Bidâ€“Ask Spread. , 0, , 298-318.		0
179	The Profitability of Market-Making. , 0, , 319-332.		0
180	MARKET DYNAMICS AT THE MESO-SCALE. , 0, , 333-336.		0

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181	Latent Liquidity and Walrasian Auctions. , 0, , 337-353.		0
182	Impact Dynamics in a Continuous-Time Double Auction. , 0, , 354-365.		0
183	The Information Content of Prices. , 0, , 366-380.		5
184	PRACTICAL CONSEQUENCES. , 0, , 381-383.		0
185	Optimal Execution. , 0, , 384-405.		0
186	Market Fairness and Stability. , 0, , 406-421.		0
187	Non-parametric estimation of quadratic Hawkes processes for order book events. European Journal of Finance, 0, , 1-16.	1.7	6