

Michel Benaim

List of Publications by Year in descending order

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Version: 2024-02-01

50
papers

2,208
citations

236925

25
h-index

223800

46
g-index

52
all docs

52
docs citations

52
times ranked

858
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|--|-----|-----------|
| 1 | A class of mean field interaction models for computer and communication systems. <i>Performance Evaluation</i> , 2008, 65, 823-838. | 1.2 | 240 |
| 2 | Deterministic Approximation of Stochastic Evolution in Games. <i>Econometrica</i> , 2003, 71, 873-903. | 4.2 | 215 |
| 3 | Stochastic Approximations and Differential Inclusions. <i>SIAM Journal on Control and Optimization</i> , 2005, 44, 328-348. | 2.1 | 180 |
| 4 | A Dynamical System Approach to Stochastic Approximations. <i>SIAM Journal on Control and Optimization</i> , 1996, 34, 437-472. | 2.1 | 147 |
| 5 | Persistence in fluctuating environments. <i>Journal of Mathematical Biology</i> , 2011, 62, 655-683. | 1.9 | 137 |
| 6 | Stochastic Approximations and Differential Inclusions, Part II: Applications. <i>Mathematics of Operations Research</i> , 2006, 31, 673-695. | 1.3 | 77 |
| 7 | Asymptotic pseudotrajectories and chain recurrent flows, with applications. <i>Journal of Dynamics and Differential Equations</i> , 1996, 8, 141-176. | 1.9 | 76 |
| 8 | Qualitative properties of certain piecewise deterministic Markov processes. <i>Annales De L'institut Henri Poincaré (B) Probability and Statistics</i> , 2015, 51, . | 1.1 | 71 |
| 9 | Persistence of structured populations in random environments. <i>Theoretical Population Biology</i> , 2009, 76, 19-34. | 1.1 | 60 |
| 10 | Recursive algorithms, urn processes and chaining number of chain recurrent sets. <i>Ergodic Theory and Dynamical Systems</i> , 1998, 18, 53-87. | 0.6 | 50 |
| 11 | Self-interacting diffusions. <i>Probability Theory and Related Fields</i> , 2002, 122, 1-41. | 1.8 | 50 |
| 12 | Persistence and extinction for stochastic ecological models with internal and external variables. <i>Journal of Mathematical Biology</i> , 2019, 79, 393-431. | 1.9 | 46 |
| 13 | Learning in games with unstable equilibria. <i>Journal of Economic Theory</i> , 2009, 144, 1694-1709. | 1.1 | 45 |
| 14 | Lotka–Volterra with randomly fluctuating environments or how switching between beneficial environments can make survival harder. <i>Annals of Applied Probability</i> , 2016, 26, . | 1.3 | 43 |
| 15 | On Functional Approximation with Normalized Gaussian Units. <i>Neural Computation</i> , 1994, 6, 319-333. | 2.2 | 42 |
| 16 | Exponential concentration for first passage percolation through modified Poincaré inequalities. <i>Annales De L'institut Henri Poincaré (B) Probability and Statistics</i> , 2008, 44, . | 1.1 | 41 |
| 17 | Quantitative ergodicity for some switched dynamical systems. <i>Electronic Communications in Probability</i> , 2012, 17, . | 0.4 | 38 |
| 18 | Standardization in Decentralized Economies. <i>American Economic Review</i> , 2000, 90, 550-570. | 8.5 | 37 |

| # | ARTICLE | IF | CITATIONS |
|----|--|-----|-----------|
| 19 | Generalized URN models of evolutionary processes. <i>Annals of Applied Probability</i> , 2004, 14, . | 1.3 | 37 |
| 20 | Vertex-reinforced random walks and a conjecture of Pemantle. <i>Annals of Probability</i> , 1997, 25, 361. | 1.8 | 36 |
| 21 | Robust permanence and impermanence for stochastic replicator dynamics. <i>Journal of Biological Dynamics</i> , 2008, 2, 180-195. | 1.7 | 32 |
| 22 | Dynamics of Morse-Smale urn processes. <i>Ergodic Theory and Dynamical Systems</i> , 1995, 15, 1005-1030. | 0.6 | 28 |
| 23 | Stochastic approximation algorithms with constant step size whose average is cooperative. <i>Annals of Applied Probability</i> , 1999, 9, 216. | 1.3 | 28 |
| 24 | A generalized Pólya's urn with graph based interactions. <i>Random Structures and Algorithms</i> , 2015, 46, 614-634. | 1.1 | 28 |
| 25 | Stochastic approximation of quasi-stationary distributions on compact spaces and applications. <i>Annals of Applied Probability</i> , 2018, 28, . | 1.3 | 22 |
| 26 | Convergence of the one-dimensional Kohonen algorithm. <i>Advances in Applied Probability</i> , 1998, 30, 850-869. | 0.7 | 21 |
| 27 | Perturbations of Set-Valued Dynamical Systems, with Applications to Game Theory. <i>Dynamic Games and Applications</i> , 2012, 2, 195-205. | 1.9 | 20 |
| 28 | Random switching between vector fields having a common zero. <i>Annals of Applied Probability</i> , 2019, 29, . | 1.3 | 19 |
| 29 | Self-interacting diffusions. III. Symmetric interactions. <i>Annals of Probability</i> , 2005, 33, 1716. | 1.8 | 18 |
| 30 | Self-repelling diffusions via an infinite dimensional approach. <i>Stochastics and Partial Differential Equations: Analysis and Computations</i> , 2015, 3, 506-530. | 0.9 | 15 |
| 31 | On Invariant Hypersurfaces of Strongly Monotone Maps. <i>Journal of Differential Equations</i> , 1997, 137, 302-319. | 2.2 | 13 |
| 32 | Ergodic Properties of Weak Asymptotic Pseudotrajectories for Semiflows. <i>Journal of Dynamics and Differential Equations</i> , 2000, 12, 579-598. | 1.9 | 12 |
| 33 | Stochastic approximation, cooperative dynamics and supermodular games. <i>Annals of Applied Probability</i> , 2012, 22, . | 1.3 | 12 |
| 34 | A class of mean field interaction models for computer and communication systems. , 2008, , . | | 11 |
| 35 | Chain recurrence in surface flows. <i>Discrete and Continuous Dynamical Systems</i> , 1995, 1, 1-16. | 0.9 | 10 |
| 36 | Metric properties of the group of area preserving diffeomorphisms. <i>Transactions of the American Mathematical Society</i> , 2001, 353, 4661-4672. | 0.9 | 9 |

| # | ARTICLE | IF | CITATIONS |
|----|--|-----|-----------|
| 37 | Dynamics of vertex-reinforced random walks. <i>Annals of Probability</i> , 2011, 39, . | 1.8 | 9 |
| 38 | Consistency of Vanishingly Smooth Fictitious Play. <i>Mathematics of Operations Research</i> , 2013, 38, 437-450. | 1.3 | 9 |
| 39 | Convergence with probability one of stochastic approximation algorithms whose average is cooperative. <i>Nonlinearity</i> , 2000, 13, 601-616. | 1.4 | 8 |
| 40 | Self-repelling diffusions on a Riemannian manifold. <i>Probability Theory and Related Fields</i> , 2017, 169, 63-104. | 1.8 | 6 |
| 41 | A two armed bandit type problem. <i>International Journal of Game Theory</i> , 2003, 32, 3-16. | 0.5 | 5 |
| 42 | Smale strategies for network prisoner's dilemma games. <i>Journal of Dynamics and Games</i> , 2015, 2, 141-155. | 1.0 | 5 |
| 43 | A Class of Self-Interacting Processes with Applications to Games and Reinforced Random Walks. <i>SIAM Journal on Control and Optimization</i> , 2010, 48, 4707-4730. | 2.1 | 4 |
| 44 | Stochastic persistence in degenerate stochastic Lotka-Volterra food chains. <i>Discrete and Continuous Dynamical Systems - Series B</i> , 2022, 27, 6841. | 0.9 | 4 |
| 45 | Convergence Theorems for Hybrid Learning Rules. <i>Neural Computation</i> , 1995, 7, 19-24. | 2.2 | 3 |
| 46 | On self attracting/repelling diffusions. <i>Comptes Rendus Mathematique</i> , 2002, 335, 541-544. | 0.3 | 3 |
| 47 | On Gradient Like Properties of Population Games, Learning Models and Self Reinforced Processes. <i>CIM Series in Mathematical Sciences</i> , 2015, , 117-152. | 0.4 | 3 |
| 48 | Convergence of adaptive biasing potential methods for diffusions. <i>Comptes Rendus Mathematique</i> , 2016, 354, 842-846. | 0.3 | 2 |
| 49 | Convergence and oscillation in standardization games. <i>European Journal of Economic and Social Systems</i> , 2001, 15, 39-55. | 0.2 | 2 |
| 50 | Analysis of an Adaptive Biasing Force method based on self-interacting dynamics. <i>Electronic Journal of Probability</i> , 2020, 25, . | 1.0 | 2 |