

# François Baccelli

## List of Publications by Year in descending order

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Version: 2024-02-01

51  
papers

6,492  
citations

430442

18  
h-index

414034

32  
g-index

52  
all docs

52  
docs citations

52  
times ranked

3039  
citing authors

| #  | ARTICLE  | IF   | CITATIONS |
|----|--|------|-----------|
| 1  | A Tractable Approach to Coverage and Rate in Cellular Networks. IEEE Transactions on Communications, 2011, 59, 3122-3134.  | 4.9  | 2,540     |
| 2  | Modeling and Analysis of K-Tier Downlink Heterogeneous Cellular Networks. IEEE Journal on Selected Areas in Communications, 2012, 30, 550-560.                     | 9.7  | 1,290     |
| 3  | Stochastic Geometry and Wireless Networks: Volume I Theory. Foundations and Trends in Networking, 2010, 3, 249-449.  | 10.2 | 381       |
| 4  | Stochastic Geometry and Wireless Networks: Volume II Applications. Foundations and Trends in Networking, 2009, 4, 1-312.   | 10.2 | 256       |
| 5  | Elements of Queueing Theory. , 2003, , .   |      | 255       |
| 6  | Stochastic analysis of spatial and opportunistic aloha. IEEE Journal on Selected Areas in Communications, 2009, 27, 1105-1119.                                     | 9.7  | 237       |
| 7  | Stochastic geometry and architecture of communication networks. Telecommunication Systems, 1997, 7, 209-227.   | 1.6  | 228       |
| 8  | A Stochastic Geometry Framework for Analyzing Pairwise-Cooperative Cellular Networks. IEEE Transactions on Wireless Communications, 2015, 14, 794-808.             | 6.1  | 100       |
| 9  | SINR and Throughput of Dense Cellular Networks With Stretched Exponential Path Loss. IEEE Transactions on Wireless Communications, 2018, 17, 1147-1160.            | 6.1  | 78        |
| 10 | Interference Networks With Point-to-Point Codes. IEEE Transactions on Information Theory, 2011, 57, 2582-2596.   | 1.5  | 77        |
| 11 | A new phase transitions for local delays in MANETs. , 2010, , .  |      | 75        |
| 12 | Statistical Modeling and Probabilistic Analysis of Cellular Networks With Determinantal Point Processes. IEEE Transactions on Communications, 2015, 63, 3405-3422. | 4.9  | 73        |
| 13 | An Analytical Framework for Coverage in Cellular Networks Leveraging Vehicles. IEEE Transactions on Communications, 2018, , 1-1.                                   | 4.9  | 58        |
| 14 | On a coverage process ranging from the Boolean model to the Poisson-Voronoi tessellation with applications to wireless communications. , 2001, 33, 293-323.        |      | 53        |
| 15 | Poisson Cox Point Processes for Vehicular Networks. IEEE Transactions on Vehicular Technology, 2018, 67, 10160-10165.  | 3.9  | 50        |
| 16 | On Association Cells in Random Heterogeneous Networks. IEEE Wireless Communications Letters, 2014, 3, 70-73.   | 3.2  | 41        |
| 17 | Spectral Efficiency Scaling Laws in Dense Random Wireless Networks With Multiple Receive Antennas. IEEE Transactions on Information Theory, 2016, 62, 1344-1359.   | 1.5  | 40        |
| 18 | A Unified Asymptotic Analysis of Area Spectral Efficiency in Ultradense Cellular Networks. IEEE Transactions on Information Theory, 2019, 65, 1236-1248.           | 1.5  | 36        |

| #  | ARTICLE   | IF  | CITATIONS |
|----|---|-----|-----------|
| 19 | Spatial Birth-Death Wireless Networks. IEEE Transactions on Information Theory, 2017, 63, 3964-3982.  | 1.5 | 25        |
| 20 | Pairwise Stochastic Bounded Confidence Opinion Dynamics: Heavy Tails and Stability. IEEE Transactions on Automatic Control, 2017, 62, 5678-5693.                  | 3.6 | 21        |
| 21 | Beam Management in 5G: A Stochastic Geometry Analysis. IEEE Transactions on Wireless Communications, 2022, 21, 2275-2290.   | 6.1 | 21        |
| 22 | On Scaling Limits of Power Law Shot-Noise Fields. Stochastic Models, 2015, 31, 187-207.   | 0.3 | 18        |
| 23 | Equilibria of a class of transport equations arising in congestion control. Queueing Systems, 2007, 55, 1-8.  | 0.6 | 12        |
| 24 | Pairwise stochastic bounded confidence opinion dynamics: Heavy tails and stability. , 2015, , .   |     | 10        |
| 25 | Densification Leveraging Mobility. , 2018, , .  |     | 10        |
| 26 | Spatial and Temporal Analysis of Direct Communications From Static Devices to Mobile Vehicles. IEEE Transactions on Wireless Communications, 2019, 18, 5128-5140. | 6.1 | 10        |
| 27 | On the entropy and mutual information of point processes. , 2016, , .   |     | 9         |
| 28 | Modeling and Analysis of Vehicle Safety Message Broadcast in Cellular Networks. IEEE Transactions on Wireless Communications, 2021, 20, 4087-4099.                | 6.1 | 9         |
| 29 | Mutual service processes in Euclidean spaces: existence and ergodicity. Queueing Systems, 2017, 86, 95-140.   | 0.6 | 8         |
| 30 | Modeling and Analysis of Data Harvesting Architecture Based on Unmanned Aerial Vehicles. IEEE Transactions on Wireless Communications, 2020, 19, 1825-1838.       | 6.1 | 8         |
| 31 | Stochastic bounded confidence opinion dynamics. , 2014, , .   |     | 7         |
| 32 | ComHapDet: a spatial community detection algorithm for haplotype assembly. BMC Genomics, 2020, 21, 586.   | 1.2 | 7         |
| 33 | Directional Cell Search Delay Analysis for Cellular Networks With Static Users. IEEE Transactions on Communications, 2018, 66, 4318-4332.                         | 4.9 | 6         |
| 34 | Powers Maximizing Proportional Fairness Among Poisson Bipoles. , 2019, , .  |     | 6         |
| 35 | Modeling and Optimization of Direct Communications from IoT Devices to Vehicles. , 2018, , .  |     | 3         |
| 36 | Asymptotic Analysis of Area Spectral Efficiency in Dense Cellular Networks. , 2018, , .   |     | 3         |

| #  | ARTICLE  | IF  | CITATIONS |
|----|--|-----|-----------|
| 37 | Escaping the Densification Plateau in Cellular Networks Through mmWave Beamforming. IEEE Wireless Communications Letters, 2020, 9, 1874-1878.                        | 3.2 | 3         |
| 38 | On error exponents for a dimension-matched vector MAC with additive noise. , 2015, , .   |     | 2         |
| 39 | End-to-End Optimization of High-Throughput DNA Sequencing. Journal of Computational Biology, 2016, 23, 789-800.  | 0.8 | 2         |
| 40 | Stability of Wireless Random Access Systems. , 2019, , .   |     | 2         |
| 41 | A computational framework for evaluating the role of mobility on the propagation of epidemics on point processes. Journal of Mathematical Biology, 2022, 84, 4.      | 0.8 | 2         |
| 42 | Coverage Analysis in Cellular Networks with Planar and Vehicular Base Stations. , 2018, , .  |     | 1         |
| 43 | Community detection on Euclidean random graphs. Information and Inference, 2021, 10, 109-160.  | 0.9 | 1         |
| 44 | How wireless queues benefit from motion: an analysis of the continuum between zero and infinite mobility. IEEE Transactions on Wireless Communications, 2021, , 1-1. | 6.1 | 1         |
| 45 | On point processes defined by angular conditions on Delaunay neighbors in the Poisson-Voronoi Tessellation. Journal of Applied Probability, 2021, 58, 952-965.       | 0.4 | 1         |
| 46 | Scaling Laws of Dense Multi-Antenna Cellular Networks. , 2020, , .   |     | 1         |
| 47 | On Spatial and Temporal Variations in Ultra Dense Wireless Networks. , 2018, , .   |     | 0         |
| 48 | Error Exponents for Dimension-Matched Vector Multiple Access Channels With Additive Noise. IEEE Transactions on Information Theory, 2019, 65, 2808-2823.             | 1.5 | 0         |
| 49 | Mobility-Driven Association Policies for Dense Wireless Networks. Journal of the Indian Institute of Science, 2020, 100, 349-368.                                    | 0.9 | 0         |
| 50 | On the steady state of continuous-time stochastic opinion dynamics with power-law confidence. Journal of Applied Probability, 2021, 58, 746-772.                     | 0.4 | 0         |
| 51 | Nash equilibrium structure of Cox process Hotelling games. Advances in Applied Probability, 2022, 54, 570-598.   | 0.4 | 0         |