# Bernard Chazelle

List of Publications by Year
in descending order

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|---|---|---|---|
| 45 papers | 4,477 citations | 249298 26 h-index | 406436 35 g-index |
| 45 all docs | 45 docs citations | 45 times ranked | 1836 citing authors |

| # | Article | IF | Citations |
|---|---------|----|-----------|
| 1 | Computing Hereditary Convex Structures. Discrete and Computational Geometry, 2011, 45, 796-823. | 0.4 | 5 |
| 2 | Faster dimension reduction. Communications of the ACM, 2010, 53, 97-104. | 3.3 | 276 |
| 3 | Computing hereditary convex structures. , 2009, , . | | 8 |
| 4 | The Fast Johnsonâ€"Lindenstrauss Transform and Approximate Nearest Neighbors. SIAM Journal on Computing, 2009, 39, 302-322. | 0.8 | 239 |
| 5 | Lower bounds for intersection searching and fractional cascading in higher dimension. Journal of Computer and System Sciences, 2004, 68, 269-284. | 0.9 | 7 |
| 6 | Splitting a Delaunay Triangulation in Linear Time. Lecture Notes in Computer Science, 2001, , 312-320. | 1.0 | 0 |
| 7 | Irregularities of Distribution, Derandomization, and Complexity Theory. Lecture Notes in Computer Science, 2000, , 46-54. | 1.0 | 0 |
| 8 | Product Range Spaces, Sensitive Sampling, and Derandomization. SIAM Journal on Computing, 1999, 28, 1552-1575. | 0.8 | 45 |
| 9 | The Discrepancy Method. Lecture Notes in Computer Science, 1998, , 1-3. | 1.0 | 40 |
| 10 | Strategies for polyhedral surface decomposition: An experimental study. Computational Geometry: Theory and Applications, 1997, 7, 327-342. | 0.3 | 87 |
| 11 | Simplex range reporting on a pointer machine. Computational Geometry: Theory and Applications, 1996, 5, 237-247. | 0.3 | 27 |
| 12 | Derandomizing an output-sensitive convex hull algorithm in three dimensions. Computational Geometry: Theory and Applications, 1995, 5, 27-32. | 0.3 | 32 |
| 13 | Bounds on the size of tetrahedralizations. , 1994, , . | | 11 |
| 14 | Algorithms for bichromatic line-segment problems and polyhedral terrains. Algorithmica, 1994, 11, 116-132. | 1.0 | 76 |
| 15 | An optimal convex hull algorithm in any fixed dimension. Discrete and Computational Geometry, 1993, 10, 377-409. | 0.4 | 267 |
| 16 | Cutting hyperplanes for divide-and-conquer. Discrete and Computational Geometry, 1993, 9, 145-158. | 0.4 | 212 |
| 17 | An optimal algorithm for intersecting line segments in the plane. Journal of the ACM, 1992, 39, 1-54. | 1.8 | 250 |
| 18 | Decomposing the boundary of a nonconvex polyhedron. Lecture Notes in Computer Science, 1992, , 364-375. | 1.0 | 7 |

| # | ARTICLE | IF | CITATIONS |
|---|---------|-----|-----------|
| 19 | Lower bounds on the complexity of simplex range reporting on a pointer machine. Lecture Notes in Computer Science, 1992, , 439-449. | 1.0 | 8 |
| 20 | A singly exponential stratification scheme for real semi-algebraic varieties and its applications. Theoretical Computer Science, 1991, 84, 77-105. | 0.5 | 103 |
| 21 | Triangulating a simple polygon in linear time. Discrete and Computational Geometry, 1991, 6, 485-524. | 0.4 | 443 |
| 22 | Ray shooting in polygons using geodesic triangulations. Lecture Notes in Computer Science, 1991, , 661-673. | 1.0 | 28 |
| 23 | Computational geometry for the gourmet old fare and new dishes. Lecture Notes in Computer Science, 1991, , 686-696. | 1.0 | 2 |
| 24 | Triangulating a nonconvex polytope. Discrete and Computational Geometry, 1990, 5, 505-526. | 0.4 | 81 |
| 25 | An algorithm for generalized point location and its applications. Journal of Symbolic Computation, 1990, 10, 281-309. | 0.5 | 28 |
| 26 | Lower bounds for orthogonal range searching: I. The reporting case. Journal of the ACM, 1990, 37, 200-212. | 1.8 | 118 |
| 27 | A singly-exponential stratification scheme for real semi-algebraic varieties and its applications. Lecture Notes in Computer Science, 1989, , 179-193. | 1.0 | 40 |
| 28 | Visibility and intersection problems in plane geometry. Discrete and Computational Geometry, 1989, 4, 551-581. | 0.4 | 150 |
| 29 | A Functional Approach to Data Structures and Its Use in Multidimensional Searching. SIAM Journal on Computing, 1988, 17, 427-462. | 0.8 | 272 |
| 30 | Polytope range searching and integral geometry. , 1987, , . | | 12 |
| 31 | Linear space data structures for two types of range search. Discrete and Computational Geometry, 1987, 2, 113-126. | 0.4 | 28 |
| 32 | Computing on a free tree via complexity-preserving mappings. Algorithmica, 1987, 2, 337-361. | 1.0 | 73 |
| 33 | Some techniques for geometric searching with implicit set representations. Acta Informatica, 1987, 24, 565-582. | 0.5 | 7 |
| 34 | Filtering Search: A New Approach to Query-Answering. SIAM Journal on Computing, 1986, 15, 703-724. | 0.8 | 233 |
| 35 | Fractional cascading: I. A data structuring technique. Algorithmica, 1986, 1, 133-162. | 1.0 | 351 |
| 36 | Fractional cascading: II. Applications. Algorithmica, 1986, 1, 163-191. | 1.0 | 101 |

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|---|---------|----|-----------|
| 37 | Fractional cascading: A data structuring technique with geometric applications. , 1985, , 90-100. | | 12 |
| 38 | The power of geometric duality. BIT Numerical Mathematics, 1985, 25, 76-90. | 1.0 | 214 |
| 39 | Parallel computational geometry. , 1985, , . | | 48 |
| 40 | Optimal Convex Decompositions. Machine Intelligence and Pattern Recognition, 1985, , 63-133. | 0.2 | 88 |
| 41 | Convex Partitions of Polyhedra: A Lower Bound and Worst-Case Optimal Algorithm. SIAM Journal on Computing, 1984, 13, 488-507. | 0.8 | 197 |
| 42 | An improved algorithm for the fixed-radius neighbor problem. Information Processing Letters, 1983, 16, 193-198. | 0.4 | 18 |
| 43 | Filtering search: A new approach to query-answering. , 1983, , . | | 38 |
| 44 | A theorem on polygon cutting with applications. , 1982, , . | | 164 |
| 45 | Detection is easier than computation (Extended Abstract). , 1980, , . | | 31 |