# BenoÃ®t B Mandelbrot

## List of Publications by Year
in descending order

| 80 papers | 27,845 citations | 94269 <br> 37 h-index | 114278 <br> 63 g-index |
|---|---|---|---|
| 87 all docs | 87 docs citations | 87 times ranked | 12485 citing authors |

| # | Article | IF | Citations |
|---|---------|-----|-----------|
| 1 | A PRIMER OF NEGATIVE TEST DIMENSIONS AND DEGREES OF EMPTINESS FOR LATENT SETS. Fractals, 2009, 17, 1-14. | 1.8 | 9 |
| 2 | "New Methods of Statistical Economics," revisited: Short versus long tails and Gaussian versus power-law distributions. Complexity, 2009, 14, 55-65. | 0.9 | 18 |
| 3 | Parallel cartoons of fractal models of finance. Annals of Finance, 2005, 1, 179-192. | 0.3 | 12 |
| 4 | The inescapable need for fractal tools in finance. Annals of Finance, 2005, 1, 193-195. | 0.3 | 17 |
| 5 | Fractals and Chaos. , 2004, , . | | 197 |
| 6 | SELECTED TOPICS IN MATHEMATICS, PHYSICS, AND FINANCE ORIGINATING IN FRACTAL GEOMETRY. , 2004, , . | | 1 |
| 7 | Title is missing!. Journal of Statistical Physics, 2003, 110, 739-774. | 0.5 | 42 |
| 8 | Fractal Sums of Pulses and a Practical Challenge to the Distinction Between Local and Global Dependence. Lecture Notes in Physics, 2003, , 118-135. | 0.3 | 1 |
| 9 | Fractals. , 2003, , 185-207. | | 3 |
| 10 | Heavy Tails in Finance for Independent or Multifractal Price Increments. , 2003, , 1-34. | | 10 |
| 11 | Angular Gaps in Radial Diffusion-Limited Aggregation: Two Fractal Dimensions and Nontransient Deviations from Linear Self-Similarity. Physical Review Letters, 2002, 88, 055501. | 2.9 | 46 |
| 12 | Multifractal products of cylindrical pulses. Probability Theory and Related Fields, 2002, 124, 409-430. | 0.9 | 142 |
| 13 | TOPICS ON FRACTALS IN MATHEMATICS AND PHYSICS. , 2001, , . | | 1 |
| 14 | The Canopy and Shortest Path in a Self-Contacting Fractal Tree. Mathematical Intelligencer, 1999, 21, 18-27. | 0.1 | 25 |
| 15 | Easy and Natural Generation of Multifractals: Multiplying Harmonics of Periodic Functions. , 1999, , 113-122. | | 2 |
| 16 | Multifractals and $1/\text{Æ}'$ Noise. , 1999, , . | | 197 |
| 17 | Exceptions to the multifractal formalism for discontinuous measures. Mathematical Proceedings of the Cambridge Philosophical Society, 1998, 123, 133-157. | 0.3 | 21 |
| 18 | Is Nature Fractal?. Science, 1998, 279, 783c-783. | 6.0 | 74 |

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| 19 | Lévy dusts, Mittag-Leffler statistics, mass fractal lacunarity, and perceived dimension. Physical Review E, 1997, 56, 112-118. | 0.8 | 38 |
| 20 | Peano-pólya motions, when time is intrinsic or binomial (uniform or multifractal). Mathematical Intelligencer, 1997, 19, 21-26. | 0.1 | 5 |
| 21 | Inverse Measures, the Inversion Formula, and Discontinuous Multifractals. Advances in Applied Mathematics, 1997, 18, 50-58. | 0.4 | 21 |
| 22 | Inversion Formula for Continuous Multifractals. Advances in Applied Mathematics, 1997, 19, 332-354. | 0.4 | 15 |
| 23 | Fractals and Scaling in Finance. , 1997, , . | | 862 |
| 24 | Local Regularity of Nonsmooth Wavelet Expansions and Application to the Polya Function. Advances in Mathematics, 1996, 120, 265-282. | 0.5 | 23 |
| 25 | Gap Independence and Lacunarity in Percolation Clusters. Physical Review Letters, 1996, 77, 877-880. | 2.9 | 19 |
| 26 | Exactly Self-similar Left-sided Multifractals. , 1996, , 367-399. | | 0 |
| 27 | Parallel diffusion-limited aggregation. Physical Review E, 1995, 52, 5602-5609. | 0.8 | 22 |
| 28 | Stable Fractal Sums of Pulses: The Cylindrical Case. Bernoulli, 1995, 1, 201. | 0.7 | 8 |
| 29 | Measures of Fractal Lacunarity: Minkowski Content and Alternatives. , 1995, , 15-42. | | 25 |
| 30 | OPINIONS. Fractals, 1993, 01, 117-123. | 1.8 | 5 |
| 31 | Variability of the form and of the harmonic measure for small off-off-lattice diffusion-limited aggregates. Physical Review A, 1992, 45, 5798-5804. | 1.0 | 6 |
| 32 | Self-similarity of harmonic measure on DLA. Physica A: Statistical Mechanics and Its Applications, 1992, 185, 77-86. | 1.2 | 28 |
| 33 | Plane DLA is not self-similar; is it a fractal that becomes increasingly compact as it grows?. Physica A: Statistical Mechanics and Its Applications, 1992, 191, 95-107. | 1.2 | 69 |
| 34 | Multifractality of the harmonic measure on fractal aggregates, and extended self-similarity. Physica A: Statistical Mechanics and Its Applications, 1991, 177, 386-393. | 1.2 | 37 |
| 35 | Fractal aggregates, and the current lines of their electrostatic potentials. Physica A: Statistical Mechanics and Its Applications, 1991, 177, 589-592. | 1.2 | 6 |
| 36 | Exactly Self-Similar Left-Sided Multifractals. , 1991, , 323-344. | | 10 |

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| 37 | The potential distribution around growing fractal clusters. Nature, 1990, 348, 143-145. | 13.7 | 93 |
| 38 | Negative fractal dimensions and multifractals. Physica A: Statistical Mechanics and Its Applications, 1990, 163, 306-315. | 1.2 | 143 |
| 39 | New "anomalous" multiplicative multifractals: Left sided Æ'(α) and the modelling of DLA. Physica A: Statistical Mechanics and Its Applications, 1990, 168, 95-111. | 1.2 | 53 |
| 40 | Exactly self-similar left-sided multifractal measures. Physical Review A, 1990, 42, 4528-4536. | 1.0 | 71 |
| 41 | A Class of Multinomial Multifractal Measures with Negative (Latent) Values for the "Dimension" f(α). , 1989, , 3-29. | | 20 |
| 42 | Multifractal Measures, Especially for the Geophysicist. , 1989, , 5-42. | | 81 |
| 43 | Invariant multifractal measures in chaotic Hamiltonian systems, and related structures. Physical Review Letters, 1988, 60, 673-676. | 2.9 | 37 |
| 44 | The Science of Fractal Images. , 1988, , . | | 292 |
| 45 | Towards a Second Stage of Indeterminism in Science. Interdisciplinary Science Reviews, 1987, 12, 117-127. | 1.0 | 61 |
| 46 | SELF-AFFINE FRACTAL SETS, III: HAUSDORFF DIMENSION ANOMALIES AND THEIR IMPLICATIONS. , 1986, , 21-28. | | 3 |
| 47 | Continuous Interpolation of the Complex Discrete Map $z \to \lambda z(1 -z)$, and Related Topics.On the dynamics of iterated mapsIX. Physica Scripta, 1985, T9, 59-63. | 1.2 | 0 |
| 48 | Self-Affine Fractals and Fractal Dimension. Physica Scripta, 1985, 32, 257-260. | 1.2 | 836 |
| 49 | Fractal character of fracture surfaces of metals. Nature, 1984, 308, 721-722. | 13.7 | 1,702 |
| 50 | Fractals in physics: Squig clusters, diffusions, fractal measures, and the unicity of fractal dimensionality. Journal of Statistical Physics, 1984, 34, 895-930. | 0.5 | 125 |
| 51 | Squig sheets and some other squig fractal constructions. Journal of Statistical Physics, 1984, 36, 519-539. | 0.5 | 13 |
| 52 | Comment on the equivalence between fracton/spectral dimensionality, and the dimensionality of recurrence. Journal of Statistical Physics, 1984, 36, 541-543. | 0.5 | 9 |
| 53 | A new model of percolation clusters. Journal of Statistical Physics, 1984, 36, 545-545. | 0.5 | 0 |
| 54 | Physical Properties of a New Fractal Model of Percolation Clusters. Physical Review Letters, 1984, 52, 1853-1856. | 2.9 | 94 |

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| 55 | ON THE AGGREGATIVE FRACTALS CALLED â€œSQUIGSâ€; WHICH INCLUDE RECURSIVE MODELS OF POLYMERS AND OF PERCOLATION CLUSTERS. , 1984, , 5-7. | | 2 |
| 56 | On the quadratic mapping zâ†'z2-Î¼ for complex Î¼ and z: The fractal structure of its set, and scaling. Physica D: Nonlinear Phenomena, 1983, 7, 224-239. | 1.3 | 42 |
| 57 | Geometric Implementation of Hypercubic Lattices with Noninteger Dimensionality by Use of Low Lacunarity Fractal Lattices. Physical Review Letters, 1983, 50, 145-148. | 2.9 | 227 |
| 58 | Solvable Fractal Family, and Its Possible Relation to the Backbone at Percolation. Physical Review Letters, 1981, 47, 1771-1774. | 2.9 | 364 |
| 59 | FRACTAL ASPECTS OF THE ITERATION OF z â†'Î»z(1- z) FOR COMPLEX Î» AND z. Annals of the New York Academy of Sciences, 1980, 357, 249-259. | 1.8 | 216 |
| 60 | Critical Phenomena on Fractal Lattices. Physical Review Letters, 1980, 45, 855-858. | 2.9 | 408 |
| 61 | Limit theorems on the self-normalized range for weakly and strongly dependent processes. Zeitschrift FÃ¼r Wahrscheinlichkeitstheorie Und Verwandte Gebiete, 1975, 31, 271-285. | 0.8 | 142 |
| 62 | On the geometry of homogeneous turbulence, with stress on the fractal dimension of the iso-surfaces of scalars. Journal of Fluid Mechanics, 1975, 72, 401. | 1.4 | 243 |
| 63 | Intermittent turbulence in self-similar cascades: divergence of high moments and dimension of the carrier. Journal of Fluid Mechanics, 1974, 62, 331-358. | 1.4 | 1,683 |
| 64 | Comments on: "A Subordinated Stochastic Process Model with Finite Variance for Speculative Prices," by Peter K. Clark. Econometrica, 1973, 41, 157. | 2.6 | 52 |
| 65 | Possible refinement of the lognormal hypothesis concerning the distribution of energy dissipation in intermittent turbulence. Lecture Notes in Physics, 1972, , 333-351. | 0.3 | 159 |
| 66 | Broken line process derived as an approximation to fractional noise. Water Resources Research, 1972, 8, 1354-1356. | 1.7 | 28 |
| 67 | Renewal sets and random cutouts. Zeitschrift FÃ¼r Wahrscheinlichkeitstheorie Und Verwandte Gebiete, 1972, 22, 145-157. | 0.8 | 56 |
| 68 | On Dvoretzky coverings for the circle. Zeitschrift FÃ¼r Wahrscheinlichkeitstheorie Und Verwandte Gebiete, 1972, 22, 158-160. | 0.8 | 21 |
| 69 | When Can Price be Arbitraged Efficiently? A Limit to the Validity of the Random Walk and Martingale Models. Review of Economics and Statistics, 1971, 53, 225. | 2.3 | 362 |
| 70 | A Fast Fractional Gaussian Noise Generator. Water Resources Research, 1971, 7, 543-553. | 1.7 | 263 |
| 71 | On the Secular Pole Motion and the Chandler Wobble. Geophysical Journal International, 1970, 21, 217-232. | 1.0 | 32 |
| 72 | Comment on â€˜Stochastic Models in Hydrologyâ€™ by Adrian E. Scheidegger. Water Resources Research, 1970, 6, 1791-1791. | 1.7 | 7 |

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| 73 | Computer Experiments With Fractional Gaussian Noises: Part 1, Averages and Variances. Water Resources Research, 1969, 5, 228-241. | 1.7 | 476 |
| 74 | Computer Experiments with Fractional Gaussian Noises: Part 2, Rescaled Ranges and Spectra. Water Resources Research, 1969, 5, 242-259. | 1.7 | 144 |
| 75 | Computer Experiments with Fractional Gaussian Noises: Part 3, Mathematical Appendix. Water Resources Research, 1969, 5, 260-267. | 1.7 | 115 |
| 76 | Some long‑run properties of geophysical records. Water Resources Research, 1969, 5, 321-340. | 1.7 | 825 |
| 77 | Reply [to â€œComments on â€˜Noah, Joseph, and Operational Hydrologyâ€™ by Benoit B. Mandelbrot and James R. Wallisâ€]. Water Resources Research, 1969, 5, 917-920. | 1.7 | 6 |
| 78 | Robustness of the rescaled range R/S in the measurement of noncyclic long run statistical dependence. Water Resources Research, 1969, 5, 967-988. | 1.7 | 788 |
| 79 | Fractional Brownian Motions, Fractional Noises and Applications. SIAM Review, 1968, 10, 422-437. | 4.2 | 6,147 |
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