

# Bernd Sturmfels

## List of Publications by Year in descending order

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67  
papers

2,433  
citations

279798

23  
h-index

233421

45  
g-index

73  
all docs

73  
docs citations

73  
times ranked

1084  
citing authors

#	ARTICLE	IF	CITATIONS
1	Linear PDE with constant coefficients. Glasgow Mathematical Journal, 2023, 65, S2-S27.	0.3	5
2	Voronoi cells of varieties. Journal of Symbolic Computation, 2022, 109, 351-366.	0.8	4
3	Orders and polytropes: matrix algebras from valuations. Beitrage Zur Algebra Und Geometrie, 2022, 63, 515-531.	0.5	2
4	Wasserstein distance to independence models. Journal of Symbolic Computation, 2021, 104, 855-873.	0.8	25
5	Theta Surfaces. Vietnam Journal of Mathematics, 2021, 49, 319-347.	0.8	4
6	Primary Ideals and Their Differential Equations. Foundations of Computational Mathematics, 2021, 21, 1363.	2.5	10
7	Bad projections of the PSD cone. Collectanea Mathematica, 2021, 72, 261-280.	0.9	2
8	The Dubrovin threefold of an algebraic curve. Nonlinearity, 2021, 34, 3783-3812.	1.4	4
9	The geometry of SDP-exactness in quadratic optimization. Mathematical Programming, 2020, 182, 399-428.	2.4	7
10	The Schläfli Fan. Discrete and Computational Geometry, 2020, 64, 355-381.	0.6	4
11	Maximum likelihood estimation for totally positive log-concave densities. Scandinavian Journal of Statistics, 2020, 48, 817.	1.4	3
12	VARIETIES OF SIGNATURE TENSORS. Forum of Mathematics, Sigma, 2019, 7, .	0.7	9
13	Geometry of Log-Concave Density Estimation. Discrete and Computational Geometry, 2019, 61, 136-160.	0.6	4
14	Learning Paths from Signature Tensors. SIAM Journal on Matrix Analysis and Applications, 2019, 40, 394-416.	1.4	10
15	The Geometry of Gaussoids. Foundations of Computational Mathematics, 2019, 19, 775-812.	2.5	8
16	Sixty-Four Curves of Degree Six. Experimental Mathematics, 2019, 28, 132-150.	0.7	5
17	Changing Views on Curves and Surfaces. Acta Mathematica Vietnamica, 2018, 43, 1-29.	0.4	2
18	Distortion Varieties. Foundations of Computational Mathematics, 2018, 18, 1043-1071.	2.5	6

#	ARTICLE	IF	CITATIONS
19	Learning algebraic varieties from samples. <i>Revista Matematica Complutense</i> , 2018, 31, 545-593.	1.2	32
20	Algebraic Identifiability of Gaussian Mixtures. <i>International Mathematics Research Notices</i> , 2018, 2018, 6556-6580.	1.0	9
21	Real rank two geometry. <i>Journal of Algebra</i> , 2017, 484, 310-333.	0.7	5
22	Does Antibiotic Resistance Evolve in Hospitals?. <i>Bulletin of Mathematical Biology</i> , 2017, 79, 191-208.	1.9	8
23	Convexity in Tree Spaces. <i>SIAM Journal on Discrete Mathematics</i> , 2017, 31, 2015-2038.	0.8	40
24	The Hurwitz form of a projective variety. <i>Journal of Symbolic Computation</i> , 2017, 79, 186-196.	0.8	19
25	On the Existence of Epipolar Matrices. <i>International Journal of Computer Vision</i> , 2017, 121, 403-415.	15.6	19
26	Rigid multiview varieties. <i>International Journal of Algebra and Computation</i> , 2016, 26, 775-788.	0.5	6
27	Exponential varieties. <i>Proceedings of the London Mathematical Society</i> , 2016, 112, 27-56.	1.3	17
28	Symmetric matrices, Catalan paths, and correlations. <i>Journal of Combinatorial Theory - Series A</i> , 2016, 144, 496-510.	0.8	4
29	The Euclidean Distance Degree of an Algebraic Variety. <i>Foundations of Computational Mathematics</i> , 2016, 16, 99-149.	2.5	115
30	Duality of multiple root loci. <i>Journal of Algebra</i> , 2016, 446, 499-526.	0.7	14
31	Moment Varieties of Gaussian Mixtures. <i>Journal of Algebraic Statistics</i> , 2016, 7, .	0.6	23
32	Cayley's "Bacharach Formulas. <i>American Mathematical Monthly</i> , 2015, 122, 845.	0.3	4
33	Generic Spectrahedral Shadows. <i>SIAM Journal on Optimization</i> , 2015, 25, 1209-1220.	2.0	9
34	Rational Design of Antibiotic Treatment Plans: A Treatment Strategy for Managing Evolution and Reversing Resistance. <i>PLoS ONE</i> , 2015, 10, e0122283.	2.5	52
35	Hypersurfaces and Their Singularities in Partial Correlation Testing. <i>Foundations of Computational Mathematics</i> , 2014, 14, 1079-1116.	2.5	6
36	Tropicalization of Classical Moduli Spaces. <i>Mathematics in Computer Science</i> , 2014, 8, 119-145.	0.4	13

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37	Mixed discriminants. <i>Mathematische Zeitschrift</i> , 2013, 274, 761-778.	0.9	25
38	Toric cubes. <i>Rendiconti Del Circolo Matematico Di Palermo</i> , 2013, 62, 67-78.	1.3	5
39	Binary Cumulant Varieties. <i>Annals of Combinatorics</i> , 2013, 17, 229-250.	0.6	14
40	Monomials, binomials and Riemann-Roch. <i>Journal of Algebraic Combinatorics</i> , 2013, 37, 737-756.	0.8	14
41	The Universal Kummer Threefold. <i>Experimental Mathematics</i> , 2013, 22, 327-362.	0.7	13
42	On the convex hull of a space curve. <i>Advances in Geometry</i> , 2012, 12, 157-178.	0.4	19
43	Algebraic boundaries of Hilbert's SOS cones. <i>Compositio Mathematica</i> , 2012, 148, 1717-1735.	0.8	26
44	Commutative algebra of statistical ranking. <i>Journal of Algebra</i> , 2012, 361, 264-286.	0.7	15
45	ORBITOPES. <i>Mathematika</i> , 2011, 57, 275-314.	0.5	54
46	Mustafin varieties. <i>Selecta Mathematica, New Series</i> , 2011, 17, 757-793.	1.0	13
47	Quartic curves and their bitangents. <i>Journal of Symbolic Computation</i> , 2011, 46, 712-733.	0.8	42
48	The algebraic degree of semidefinite programming. <i>Mathematical Programming</i> , 2010, 122, 379-405.	2.4	67
49	Multivariate Gaussians, semidefinite matrix completion, and convex algebraic geometry. <i>Annals of the Institute of Statistical Mathematics</i> , 2010, 62, 603-638.	0.8	38
50	Computer Algebra in Systems Biology. <i>American Mathematical Monthly</i> , 2009, 116, 882-891.	0.3	20
51	Lectures on Algebraic Statistics. , 2009, , .		172
52	Three Counter-Examples on Semi-Graphoids. <i>Combinatorics Probability and Computing</i> , 2008, 17, 239-257.	1.3	12
53	Tropical discriminants. <i>Journal of the American Mathematical Society</i> , 2007, 20, 1111-1133.	3.9	82
54	Hyperdeterminantal relations among symmetric principal minors. <i>Journal of Algebra</i> , 2007, 316, 634-648.	0.7	52

#	ARTICLE	IF	CITATIONS
55	Computing the integer programming gap. <i>Combinatorica</i> , 2007, 27, 367-382.	1.2	43
56	Algebraic factor analysis: tetrads, pentads and beyond. <i>Probability Theory and Related Fields</i> , 2007, 138, 463-493.	1.8	51
57	Solving the Likelihood Equations. <i>Foundations of Computational Mathematics</i> , 2005, 5, 389-407.	2.5	57
58	Toric Ideals of Phylogenetic Invariants. <i>Journal of Computational Biology</i> , 2005, 12, 457-481.	1.6	29
59	Toric Ideals of Phylogenetic Invariants. <i>Journal of Computational Biology</i> , 2005, 12, 204-228.	1.6	82
60	Supernormal Vector Configurations. <i>Journal of Algebraic Combinatorics</i> , 2004, 19, 297-313.	0.8	2
61	Algebraic unimodular counting. <i>Mathematical Programming</i> , 2003, 96, 183-203.	2.4	19
62	Hypergeometric Polynomials and Integer Programming. <i>Compositio Mathematica</i> , 1999, 115, 231-240.	0.8	13
63	How to shell a monoid. <i>Mathematische Annalen</i> , 1998, 310, 379-393.	1.4	38
64	Syzygies of codimension 2 lattice ideals. <i>Mathematische Zeitschrift</i> , 1998, 229, 163-194.	0.9	58
65	Variation of cost functions in integer programming. <i>Mathematical Programming</i> , 1997, 77, 357-387.	2.4	40
66	Structural Gröbner Basis Detection. <i>Applicable Algebra in Engineering, Communications and Computing</i> , 1997, 8, 257-263.	0.5	3
67	Primary Decomposition with Differential Operators. <i>International Mathematics Research Notices</i> , 0, , .	1.0	2