

Albrecht Boettcher

List of Publications by Year in descending order

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102
papers

2,026
citations

393982

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38
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107
all docs

107
docs citations

107
times ranked

648
citing authors

#	ARTICLE	IF	CITATIONS
1	Introduction to Large Truncated Toeplitz Matrices. Universitext, 1999, , .	0.2	392
2	A gentle guide to the basics of two projections theory. Linear Algebra and Its Applications, 2010, 432, 1412-1459.	0.4	111
3	The Frobenius norm and the commutator. Linear Algebra and Its Applications, 2008, 429, 1864-1885.	0.4	78
4	Pseudospectra and Singular Values of Large Convolution Operators. Journal of Integral Equations and Applications, 1994, 6, 267.	0.2	69
5	On the condition numbers of large semidefinite Toeplitz matrices. Linear Algebra and Its Applications, 1998, 279, 285-301.	0.4	63
6	Toeplitz matrices and determinants with Fisher-Hartwig symbols. Journal of Functional Analysis, 1985, 63, 178-214.	0.7	52
7	How big can the commutator of two matrices be and how big is it typically?. Linear Algebra and Its Applications, 2005, 403, 216-228.	0.4	52
8	Convergence rates for Tikhonov regularization from different kinds of smoothness conditions. Applicable Analysis, 2006, 85, 555-578.	0.6	45
9	The finite section method for TOEPLITZ operators on the quarter-plane with piecewise continuous symbols. Mathematische Nachrichten, 1983, 110, 279-291.	0.4	43
10	Szegő via Jacobi. Linear Algebra and Its Applications, 2006, 419, 656-667.	0.4	43
11	Toeplitz Operators and Determinants Generated by Symbols with One Fisher-Hartwig Singularity. Mathematische Nachrichten, 1986, 127, 95-123.	0.4	41
12	Inside the eigenvalues of certain Hermitian Toeplitz band matrices. Journal of Computational and Applied Mathematics, 2010, 233, 2245-2264.	1.1	38
13	Toeplitz Matrices, Asymptotic Linear Algebra and Functional Analysis. , 2000, , .		37
14	The asymptotic behavior of Toeplitz determinants for generating functions with zeros of integral orders. Mathematische Nachrichten, 1981, 102, 79-105.	0.4	36
15	From Toeplitz Eigenvalues through Green's Kernels to Higher-order Wirtinger-Sobolev Inequalities. , 2006, , 73-87.		35
16	Eigenvalues of Hermitian Toeplitz matrices with smooth simple-loop symbols. Journal of Mathematical Analysis and Applications, 2015, 422, 1308-1334.	0.5	31
17	Notes on the asymptotic behavior of block TOEPLITZ matrices and determinants. Mathematische Nachrichten, 1980, 98, 183-210.	0.4	28
18	Mellin pseudodifferential operators with slowly varying symbols and singular integrals on Carleson curves with Muckenhoupt weights. Manuscripta Mathematica, 1998, 95, 363-376.	0.3	26

#	ARTICLE	IF	CITATIONS
19	Functions of banded Hermitian block Toeplitz matrices in signal processing. <i>Linear Algebra and Its Applications</i> , 2007, 422, 788-807.	0.4	23
20	WIENER-HOPE Determinants with Rational Symbols. <i>Mathematische Nachrichten</i> , 1989, 144, 39-64.	0.4	22
21	Eigenvectors of Hermitian Toeplitz matrices with smooth simple-loop symbols. <i>Linear Algebra and Its Applications</i> , 2016, 493, 606-637.	0.4	20
22	Weighted Markov-type inequalities, norms of Volterra operators, and zeros of Bessel functions. <i>Mathematische Nachrichten</i> , 2010, 283, 40-57.	0.4	19
23	The Onsager formula, the fisher-hartwig conjecture, and their influence on research into Toeplitz operators. <i>Journal of Statistical Physics</i> , 1995, 78, 575-584.	0.5	18
24	Toeplitz operators with PQC symbols on weighted Hardy spaces. <i>Journal of Functional Analysis</i> , 1991, 97, 194-214.	0.7	17
25	Approximation of approximation numbers by truncation. <i>Integral Equations and Operator Theory</i> , 2001, 39, 387-395.	0.4	16
26	Mass concentration in quasicommutators of Toeplitz matrices. <i>Journal of Computational and Applied Mathematics</i> , 2007, 205, 129-148.	1.1	16
27	One more proof of the Borodin-Okounkov formula for Toeplitz determinants. <i>Integral Equations and Operator Theory</i> , 2001, 41, 123-125.	0.4	14
28	The First Order Asymptotics of the Extreme Eigenvectors of Certain Hermitian Toeplitz Matrices. <i>Integral Equations and Operator Theory</i> , 2009, 63, 165-180.	0.4	14
29	Two Elementary Derivations of the Pure Fisher-Hartwig Determinant. <i>Integral Equations and Operator Theory</i> , 2005, 53, 593-596.	0.4	13
30	On the best constants in inequalities of the Markov and Wirtinger types for polynomials on the half-line. <i>Linear Algebra and Its Applications</i> , 2009, 430, 1057-1069.	0.4	13
31	Toeplitz operators with frequency modulated semi-almost periodic symbols. <i>Journal of Fourier Analysis and Applications</i> , 2001, 7, 523-535.	0.5	12
32	Spectral theory of large Wiener-Hopf operators with complex-symmetric kernels and rational symbols. <i>Mathematical Proceedings of the Cambridge Philosophical Society</i> , 2011, 151, 161-191.	0.3	12
33	Toeplitz determinants with perturbations in the corners. <i>Journal of Functional Analysis</i> , 2015, 268, 171-193.	0.7	12
34	The \widehat{C}^* -algebra of singular integral operators with semi-almost periodic coefficients. <i>Journal of Functional Analysis</i> , 2003, 204, 445-484.	0.7	11
35	Drazin inversion in the von Neumann algebra generated by two orthogonal projections. <i>Journal of Mathematical Analysis and Applications</i> , 2009, 358, 403-409.	0.5	11
36	Wiener-Hopf and spectral factorization of real polynomials by Newton's method. <i>Linear Algebra and Its Applications</i> , 2013, 438, 4760-4805.	0.4	11

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37	Toeplitz operators with PC symbols on general Carleson Jordan curves with arbitrary Muckenhoupt weights. <i>Transactions of the American Mathematical Society</i> , 1999, 351, 3143-3196.	0.5	10
38	The Constants in the Asymptotic Formulas by Rambour and Seghier for Inverses of Toeplitz Matrices. <i>Integral Equations and Operator Theory</i> , 2004, 50, 43-55.	0.4	10
39	Norms of Toeplitz Matrices with Fisher-Hartwig Symbols. <i>SIAM Journal on Matrix Analysis and Applications</i> , 2007, 29, 660-671.	0.7	10
40	The Norm of the Product of a Large Matrix and a Random Vector. <i>Electronic Journal of Probability</i> , 2003, 8, .	0.5	10
41	On the corona theorem for almost periodic functions. <i>Integral Equations and Operator Theory</i> , 1999, 33, 253-272.	0.4	9
42	Convergence speed estimates for the norms of the inverses of large truncated Toeplitz matrices. <i>Calcolo</i> , 1999, 36, 103-122.	0.6	9
43	Piecewise Continuous Toeplitz Matrices and Operators: Slow Approach to Infinity. <i>SIAM Journal on Matrix Analysis and Applications</i> , 2002, 24, 484-489.	0.7	9
44	Polynomial factorization through Toeplitz matrix computations. <i>Linear Algebra and Its Applications</i> , 2003, 366, 25-37.	0.4	9
45	Orthogonal and Skew-Symmetric Operators in Real Hilbert Space. <i>Integral Equations and Operator Theory</i> , 2012, 74, 497-511.	0.4	9
46	Similarity Between Two Projections. <i>Integral Equations and Operator Theory</i> , 2017, 89, 507-518.	0.4	9
47	On large Toeplitz band matrices with an uncertain block. <i>Linear Algebra and Its Applications</i> , 2003, 366, 87-97.	0.4	8
48	On the best constants in Markov-type inequalities involving Laguerre norms with different weights. <i>Monatshefte Fur Mathematik</i> , 2010, 161, 357-367.	0.5	8
49	On Lattices Generated by Finite Abelian Groups. <i>SIAM Journal on Discrete Mathematics</i> , 2015, 29, 382-404.	0.4	8
50	From convergence in distribution to uniform convergence. <i>Boletin De La Sociedad Matematica Mexicana</i> , 2016, 22, 695-710.	0.2	8
51	Truncated Toeplitz operators on the polydisk. <i>Monatshefte Fur Mathematik</i> , 1990, 110, 23-32.	0.5	7
52	Infinite Toeplitz and Hankel Matrices with Operator-Valued Entries. <i>SIAM Journal on Mathematical Analysis</i> , 1996, 27, 805-822.	0.9	7
53	On the eigenvalues of certain canonical higher-order ordinary differential operators. <i>Journal of Mathematical Analysis and Applications</i> , 2006, 322, 990-1000.	0.5	7
54	Orthogonal Symmetric Toeplitz Matrices. <i>Complex Analysis and Operator Theory</i> , 2008, 2, 285-298.	0.3	7

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55	Explicit analytic equations for multimolecular thermal melting curves. <i>Biophysical Chemistry</i> , 2015, 202, 32-39.	1.5	7
56	Large Sections of Bergman Space Toeplitz Operators with Piecewise Continuous Symbols. <i>Mathematische Nachrichten</i> , 1992, 156, 129-155.	0.4	6
57	Galerkinâ€™Petrov Methods for Bergman Space Toeplitz Operators. <i>SIAM Journal on Numerical Analysis</i> , 1993, 30, 846-863.	1.1	6
58	Submultiplicative functions and spectral theory of toeplitz operators. <i>Integral Transforms and Special Functions</i> , 1996, 4, 181-202.	0.8	6
59	Toeplitz Operators with Semi-Almost-Periodic Matrix Symbols on Hardy Spaces. <i>Acta Applicandae Mathematicae</i> , 2001, 65, 115-136.	0.5	6
60	Uniform Boundedness of Toeplitz Matrices with Variable Coefficients. <i>Integral Equations and Operator Theory</i> , 2008, 60, 313-328.	0.4	6
61	Pushing the envelope of the test functions in the Szegÿ and Avramâ€™Parter theorems. <i>Linear Algebra and Its Applications</i> , 2008, 429, 346-366.	0.4	6
62	Probabilistic spherical Marcinkiewiczâ€™Zygmund inequalities. <i>Journal of Approximation Theory</i> , 2009, 157, 113-126.	0.5	6
63	Eigenvalue Clusters of Large Tetradiagonal Toeplitz Matrices. <i>Integral Equations and Operator Theory</i> , 2021, 93, 1.	0.4	6
64	The Finite Section Method for Two-dimensional Wiener-Hopf Integral Operators in L_p with Piecewise Continuous Symbols. <i>Mathematische Nachrichten</i> , 1984, 116, 61-73.	0.4	5
65	Asymptotic Spectra of Dense Toeplitz Matrices Are Unstable. <i>Numerical Algorithms</i> , 2003, 33, 105-112.	1.1	5
66	Inequalities of the Markov type for partial derivatives of polynomials in several variables. <i>Journal of Integral Equations and Applications</i> , 2011, 23, .	0.2	5
67	Weighted means of B-splines, positivity of divided differences, and complete homogeneous symmetric polynomials. <i>Linear Algebra and Its Applications</i> , 2021, 608, 68-83.	0.4	5
68	Algebraic composition operators. <i>Integral Equations and Operator Theory</i> , 1992, 15, 389-411.	0.4	4
69	Asymptotic invertibility of Bergman and Bargmann space Toeplitz operators. <i>Asymptotic Analysis</i> , 1994, 8, 15-33.	0.2	4
70	Topics in the numerical linear algebra of Toeplitz and Hankel matrices. <i>GAMM Mitteilungen</i> , 2004, 27, 174-188.	2.7	4
71	Classification of the finite-dimensional algebras generated by two tightly coupled idempotents. <i>Linear Algebra and Its Applications</i> , 2013, 439, 538-551.	0.4	4
72	The limit of the zero set of polynomials of the Fibonacci type. <i>Journal of Number Theory</i> , 2016, 163, 89-100.	0.2	4

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73	Spectral approximation for Segal-Bargmann space Toeplitz operators. Banach Center Publications, 1997, 38, 25-48.	0.1	4
74	Matrix functions with arbitrarily prescribed left and right partial indices. Integral Equations and Operator Theory, 2000, 36, 71-91.	0.4	3
75	On the asymptotics of all eigenvalues of Hermitian Toeplitz band matrices. Doklady Mathematics, 2009, 80, 662-664.	0.1	3
76	A Newton method for canonical Wiener-Hopf and spectral factorization of matrix polynomials. Electronic Journal of Linear Algebra, 0, 26, .	0.6	3
77	On the Problem of Testing the Structure of a Matrix by Displacement Operations. SIAM Journal on Numerical Analysis, 2006, 44, 41-54.	1.1	2
78	Borodin and Okounkov and Szegő for Toeplitz Operators on Model Spaces. Integral Equations and Operator Theory, 2014, 78, 407-414.	0.4	2
79	Lattices from equiangular tight frames. Linear Algebra and Its Applications, 2016, 510, 395-420.	0.4	2
80	Lattices from Hermitian function fields. Journal of Algebra, 2016, 447, 560-579.	0.4	2
81	Representing integers by multilinear polynomials. Research in Number Theory, 2020, 6, 1.	0.1	2
82	On the symmetrization of general Wiener-Hopf operators. Journal of Operator Theory, 2016, 76, 335-349.	0.2	2
83	Some Problems Concerning the Test Functions in the Szegő and Avram-Parter Theorems. , 2008, , 81-93.		2
84	Harold Widom's work in Toeplitz operators. Bulletin of the American Mathematical Society, 2022, 59, 175-190.	0.8	2
85	Rigorous stochastic bounds for the error in large covariance matrices. Mathematical Methods in the Applied Sciences, 2008, 31, 1209-1220.	1.2	1
86	The part of my path I walked together with Sergei Grudsky. Boletín De La Sociedad Matemática Mexicana, 2016, 22, 309-327.	0.2	1
87	On the constants in Markov inequalities for the Laplace operator on polynomials with the Laguerre norm. Asymptotic Analysis, 2017, 101, 227-239.	0.2	1
88	Spherical 2-Designs and Lattices from Abelian Groups. Discrete and Computational Geometry, 2019, 61, 123-135.	0.4	1
89	The norm attainment problem for functions of projections. Archiv Der Mathematik, 2021, 117, 397-403.	0.3	1
90	Algebraic and essentially algebraic composition operators on $C(X)$. Aequationes Mathematicae, 1995, 49, 276-294.	0.4	0

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91	Polynomial collocation over massive sets for Toeplitz integral equations on the Bergman space. Journal of Computational and Applied Mathematics, 1996, 66, 89-96.	1.1	0
92	Georg Heinig (1947â€“2005). Integral Equations and Operator Theory, 2005, 53, 297-300.	0.4	0
93	On the Verification of Linear Equations and the Identification of the Toeplitz-plus-Hankel Structure. , 2006, , 43-51.		0
94	An operator theoretic approach to the brickwork Ising model with second-neighbor interactions. Linear Algebra and Its Applications, 2013, 439, 675-685.	0.4	0
95	On Hurwitz Stable Polynomials with Integer Coefficients. Computational Methods and Function Theory, 2014, 14, 139-156.	0.8	0
96	Canonical Wiener-Hopf and spectral factorization of large-degree matrix polynomials. Proceedings in Applied Mathematics and Mechanics, 2014, 14, 817-818.	0.2	0
97	How to solve an equation with a Toeplitz operator?. Operator Theory: Advances and Applications, 2018, , 145-166.	0.2	0
98	Groups of Orthogonal Matrices All Orbits of Which Generate Lattices. Operator Theory: Advances and Applications, 2021, , 95-111.	0.2	0
99	Variable-coefficient Toeplitz Matrices with Symbols beyond the Wiener Algebra. , 2010, , 191-202.		0
100	Special Types of Matrices. Discrete Mathematics and Its Applications, 2013, , 363-382.	0.1	0
101	Skew compressions of positive definite operators and matrices. Electronic Journal of Linear Algebra, 2020, 36, 400-410.	0.6	0
102	Entries of the inverses of large positive definite Toeplitz matrices. Acta Scientiarum Mathematicarum, 0, , 1.	0.2	0