

Eric Schost

List of Publications by Year in descending order

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71
papers

972
citations

430874

18
h-index

526287

27
g-index

71
all docs

71
docs citations

71
times ranked

245
citing authors

#	ARTICLE	IF	CITATIONS
1	Linear Recurrences with Polynomial Coefficients and Application to Integer Factorization and Cartier's Manin Operator. SIAM Journal on Computing, 2007, 36, 1777-1806.	1.0	65
2	Computing Parametric Geometric Resolutions. Applicable Algebra in Engineering, Communications and Computing, 2003, 13, 349-393.	0.5	62
3	Polynomial evaluation and interpolation on special sets of points. Journal of Complexity, 2005, 21, 420-446.	1.3	60
4	Polar varieties and computation of one point in each connected component of a smooth real algebraic set. , 2003, , .		55
5	Genus 2 point counting over prime fields. Journal of Symbolic Computation, 2012, 47, 368-400.	0.8	50
6	On the geometry of polar varieties. Applicable Algebra in Engineering, Communications and Computing, 2010, 21, 33-83.	0.5	43
7	Fast computation of special resultants. Journal of Symbolic Computation, 2006, 41, 1-29.	0.8	42
8	Interpolation of polynomials given by straight-line programs. Theoretical Computer Science, 2009, 410, 2659-2662.	0.9	39
9	Differential equations for algebraic functions. , 2007, , .		38
10	Construction of Secure Random Curves of Genus 2 over Prime Fields. Lecture Notes in Computer Science, 2004, , 239-256.	1.3	27
11	Solving structured linear systems with large displacement rank. Theoretical Computer Science, 2008, 407, 155-181.	0.9	26
12	A Nearly Optimal Algorithm for Deciding Connectivity Queries in Smooth and Bounded Real Algebraic Sets. Journal of the ACM, 2017, 63, 1-37.	2.2	24
13	Complexity results for triangular sets. Journal of Symbolic Computation, 2003, 36, 555-594.	0.8	23
14	Computing minimal interpolation bases. Journal of Symbolic Computation, 2017, 83, 272-314.	0.8	23
15	A Baby Steps/Giant Steps Probabilistic Algorithm for Computing Roadmaps in Smooth Bounded Real Hypersurface. Discrete and Computational Geometry, 2011, 45, 181-220.	0.6	22
16	Optimization techniques for small matrix multiplication. Theoretical Computer Science, 2011, 412, 2219-2236.	0.9	22
17	Faster Algorithms for Multivariate Interpolation With Multiplicities and Simultaneous Polynomial Approximations. IEEE Transactions on Information Theory, 2015, 61, 2370-2387.	2.4	22
18	On the complexity of computing with zero-dimensional triangular sets. Journal of Symbolic Computation, 2013, 50, 110-138.	0.8	21

#	ARTICLE	IF	CITATIONS
19	Fast arithmetic for triangular sets: From theory to practice. Journal of Symbolic Computation, 2009, 44, 891-907.	0.8	20
20	The modpn library: Bringing fast polynomial arithmetic into Maple. Journal of Symbolic Computation, 2011, 46, 841-858.	0.8	20
21	Bit complexity for multi-homogeneous polynomial system solving Application to polynomial minimization. Journal of Symbolic Computation, 2018, 87, 176-206.	0.8	17
22	Change of order for regular chains in positive dimension. Theoretical Computer Science, 2008, 392, 37-65.	0.9	15
23	Fast Algorithms for Zero-Dimensional Polynomial Systems using Duality. Applicable Algebra in Engineering, Communications and Computing, 2003, 14, 239-272.	0.5	14
24	Fast Computation of Minimal Interpolation Bases in Popov Form for Arbitrary Shifts. , 2016, , .		14
25	Modular Composition Modulo Triangular Sets and Applications. Computational Complexity, 2013, 22, 463-516.	0.3	13
26	Multi-point evaluation in higher dimensions. Applicable Algebra in Engineering, Communications and Computing, 2013, 24, 37-52.	0.5	11
27	Linear Recurrences with Polynomial Coefficients and Computation of the Cartier-Manin Operator on Hyperelliptic Curves. Lecture Notes in Computer Science, 2004, , 40-58.	1.3	11
28	Taking roots over high extensions of finite fields. Mathematics of Computation, 2013, 83, 435-446.	2.1	10
29	A fast algorithm for computing the characteristic polynomial of the p-curvature. , 2014, , .		10
30	A softly optimal Monte Carlo algorithm for solving bivariate polynomial systems over the integers. Journal of Complexity, 2016, 34, 78-128.	1.3	10
31	Fast arithmetics in Artin's Schreier towers over finite fields. Journal of Symbolic Computation, 2012, 47, 771-792.	0.8	9
32	A Fast Algorithm for Computing the P-curvature. , 2015, , .		9
33	Power series composition and change of basis. , 2008, , .		8
34	Homotopy techniques for multiplication modulo triangular sets. Journal of Symbolic Computation, 2011, 46, 1378-1402.	0.8	8
35	Computing syzygies in finite dimension using fast linear algebra. Journal of Complexity, 2020, 60, 101502.	1.3	7
36	On the complexities of multipoint evaluation and interpolation. Theoretical Computer Science, 2004, 329, 223-235.	0.9	6

#	ARTICLE	IF	CITATIONS
37	EVALUATION PROPERTIES OF SYMMETRIC POLYNOMIALS. International Journal of Algebra and Computation, 2006, 16, 505-523.	0.5	6
38	A simple and fast algorithm for computing exponentials of power series. Information Processing Letters, 2009, 109, 754-756.	0.6	6
39	Fast conversion algorithms for orthogonal polynomials. Linear Algebra and Its Applications, 2010, 432, 249-258.	0.9	6
40	A Fast Algorithm for Computing the Truncated Resultant. , 2016, , .		6
41	Solving determinantal systems using homotopy techniques. Journal of Symbolic Computation, 2021, 104, 754-804.	0.8	6
42	Multivariate power series multiplication. , 2005, , .		5
43	Bit-size estimates for triangular sets in positive dimension. Journal of Complexity, 2012, 28, 109-135.	1.3	5
44	Computing in degree 2^k -extensions of finite fields of odd characteristic. Designs, Codes, and Cryptography, 2015, 74, 559-569.	1.6	5
45	Implementations of Efficient Univariate Polynomial Matrix Algorithms and Application to Bivariate Resultants. , 2019, , .		5
46	Fast arithmetic for the algebraic closure of finite fields. , 2014, , .		4
47	Computation of the Similarity Class of the p-Curvature. , 2016, , .		4
48	Sparse Rational Univariate Representation. , 2017, , .		4
49	Homotopy techniques for solving sparse column support determinantal polynomial systems. Journal of Complexity, 2021, 66, 101557.	1.3	4
50	Explicit isogenies in quadratic time in any characteristic. LMS Journal of Computation and Mathematics, 2016, 19, 267-282.	0.9	4
51	The modpn library. ACM Communications in Computer Algebra, 2009, 42, 172-174.	0.4	3
52	Block-Krylov techniques in the context of sparse-FGLM algorithms. Journal of Symbolic Computation, 2020, 98, 163-191.	0.8	3
53	Algorithms for the universal decomposition algebra. , 2012, , .		2
54	Change of Basis for m-primary Ideals in One and Two Variables. , 2019, , .		2

#	ARTICLE	IF	CITATIONS
55	Computing the Characteristic Polynomial of a Finite Rank Two Drinfeld Module. , 2019, , .		2
56	Drinfeld modules with complex multiplication, Hasse invariants and factoring polynomials over finite fields. Journal of Symbolic Computation, 2021, 105, 199-213.	0.8	2
57	On the bit complexity of finding points in connected components of a smooth real hypersurface. , 2020, , .		2
58	High-Performance Symbolic Computation in a Hybrid Compiled-Interpreted Programming Environment. , 2008, , .		1
59	Complexity and Performance Results for Non FFT-Based Univariate Polynomial Multiplication. , 2011, , .		1
60	Algorithms for Zero-Dimensional Ideals Using Linear Recurrent Sequences. Lecture Notes in Computer Science, 2017, , 313-328.	1.3	1
61	On semiring complexity of Schur polynomials. Computational Complexity, 2018, 27, 595-616.	0.3	1
62	Quadratic-Time Algorithms for Normal Elements. , 2019, , .		1
63	Subquadratic-Time Algorithms for Normal Bases. Computational Complexity, 2021, 30, 1.	0.3	1
64	Algorithms for Linearly Recurrent Sequences of Truncated Polynomials. , 2021, , .		1
65	Sparse Multiplication of Multivariate Linear Differential Operators. , 2021, , .		1
66	Inversion Modulo Zero-Dimensional Regular Chains. Lecture Notes in Computer Science, 2012, , 224-235.	1.3	1
67	Algebraic construction of quasi-split algebraic tori. Journal of Algebra and Its Applications, 2020, 19, 2050206.	0.4	1
68	Evaluation properties of invariant polynomials. Journal of Symbolic Computation, 2009, 44, 1592-1604.	0.8	0
69	Almost linear time operations with triangular sets. ACM Communications in Computer Algebra, 2011, 44, 103-104.	0.4	0
70	On the complexity of computing certain resultants. ACM Communications in Computer Algebra, 2013, 46, 108-109.	0.4	0
71	Algorithms for Finite Field Arithmetic. , 2015, , .		0