

# Chaoping Xing

## List of Publications by Year in descending order

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126  
papers

2,615  
citations

236612

25  
h-index

276539

41  
g-index

128  
all docs

128  
docs citations

128  
times ranked

720  
citing authors

#	ARTICLE	IF	CITATIONS
1	Low-Discrepancy Sequences and Global Function Fields with Many Rational Places. <i>Finite Fields and Their Applications</i> , 1996, 2, 241-273.	0.6	139
2	Application of Classical Hermitian Self-Orthogonal MDS Codes to Quantum MDS Codes. <i>IEEE Transactions on Information Theory</i> , 2010, 56, 4735-4740.	1.5	108
3	Linear authentication codes: bounds and constructions. <i>IEEE Transactions on Information Theory</i> , 2003, 49, 866-872.	1.5	76
4	Optimal Locally Repairable Codes of Distance 3 and 4 via Cyclic Codes. <i>IEEE Transactions on Information Theory</i> , 2019, 65, 1048-1053.	1.5	75
5	On Self-Dual Cyclic Codes Over Finite Fields. <i>IEEE Transactions on Information Theory</i> , 2011, 57, 2243-2251.	1.5	72
6	A Construction of New Quantum MDS Codes. <i>IEEE Transactions on Information Theory</i> , 2014, 60, 2921-2925.	1.5	72
7	Optimal Locally Repairable Codes Via Elliptic Curves. <i>IEEE Transactions on Information Theory</i> , 2019, 65, 108-117.	1.5	65
8	Asymmetric Quantum Codes: Characterization and Constructions. <i>IEEE Transactions on Information Theory</i> , 2010, 56, 2938-2945.	1.5	63
9	New MDS Self-Dual Codes From Generalized Reed-Solomon Codes. <i>IEEE Transactions on Information Theory</i> , 2017, 63, 1434-1438.	1.5	62
10	A construction of low-discrepancy sequences using global function fields. <i>Acta Arithmetica</i> , 1995, 73, 87-102.	0.2	59
11	How Long Can Optimal Locally Repairable Codes Be?. <i>IEEE Transactions on Information Theory</i> , 2019, 65, 3662-3670.	1.5	57
12	Asymptotic bounds on quantum codes from algebraic geometry codes. <i>IEEE Transactions on Information Theory</i> , 2006, 52, 986-991.	1.5	55
13	Quantum Codes From Concatenated Algebraic-Geometric Codes. <i>IEEE Transactions on Information Theory</i> , 2005, 51, 2915-2920.	1.5	54
14	Generalization of Steane's Enlargement Construction of Quantum Codes and Applications. <i>IEEE Transactions on Information Theory</i> , 2010, 56, 4080-4084.	1.5	49
15	A generalization of algebraic-geometry codes. <i>IEEE Transactions on Information Theory</i> , 1999, 45, 2498-2501.	1.5	39
16	The genus of maximal function fields over finite fields. <i>Manuscripta Mathematica</i> , 1995, 86, 217-224.	0.3	38
17	Towers of Global Function Fields with Asymptotically Many Rational Places and an Improvement on the Gilbert-Varshamov Bound. <i>Mathematische Nachrichten</i> , 1998, 195, 171-186.	0.4	38
18	Asymptotically good quantum codes exceeding the Ashikhmin-Litsyn-Tsfasman bound. <i>IEEE Transactions on Information Theory</i> , 2001, 47, 2055-2058.	1.5	38

#	ARTICLE	IF	CITATIONS
19	Construction of Optimal Locally Repairable Codes via Automorphism Groups of Rational Function Fields. IEEE Transactions on Information Theory, 2020, 66, 210-221.	1.5	35
20	Nonlinear codes from algebraic curves improving the Tsfasman-Vladut-Zink bound. IEEE Transactions on Information Theory, 2003, 49, 1653-1657.	1.5	31
21	Explicit Constructions of Perfect Hash Families from Algebraic Curves over Finite Fields. Journal of Combinatorial Theory - Series A, 2001, 93, 112-124.	0.5	30
22	Low-discrepancy sequences obtained from algebraic function fields over finite fields. Acta Arithmetica, 1995, 72, 281-298.	0.2	30
23	Multi-sequences with Almost Perfect Linear Complexity Profile and Function Fields over Finite Fields. Journal of Complexity, 2000, 16, 661-675.	0.7	28
24	Improvements on parameters of one-point AG codes from Hermitian curves. IEEE Transactions on Information Theory, 2002, 48, 535-537.	1.5	28
25	Cyclotomic function fields, Hilbert class fields, and global function fields with many rational places. Acta Arithmetica, 1997, 79, 59-76.	0.2	27
26	Sequences with almost perfect linear complexity profiles and curves over finite fields. IEEE Transactions on Information Theory, 1999, 45, 1267-1270.	1.5	26
27	A New Construction of Algebraic Geometry Codes. Applicable Algebra in Engineering, Communications and Computing, 1999, 9, 373-381.	0.3	25
28	Some new codes from algebraic curves. IEEE Transactions on Information Theory, 2000, 46, 2638-2642.	1.5	24
29	Asymptotically Good Ideal Linear Secret Sharing with Strong Multiplication over Any Fixed Finite Field. Lecture Notes in Computer Science, 2009, , 466-486.	1.0	24
30	Asymptotic bounds on frameproof codes. IEEE Transactions on Information Theory, 2002, 48, 2991-2995.	1.5	23
31	Explicit List-Decodable Rank-Metric and Subspace Codes via Subspace Designs. IEEE Transactions on Information Theory, 2016, 62, 2707-2718.	1.5	23
32	Algebraic-geometry codes with asymptotic parameters better than the Gilbert-Varshamov and the Tsfasman-Vladut-Zink bounds. IEEE Transactions on Information Theory, 2001, 47, 347-352.	1.5	22
33	Explicit global function fields over the binary field with many rational places. Acta Arithmetica, 1996, 75, 383-396.	0.2	21
34	On Supersingular Abelian Varieties of Dimension Two over Finite Fields. Finite Fields and Their Applications, 1996, 2, 407-421.	0.6	20
35	Constructions of algebraic-geometry codes. IEEE Transactions on Information Theory, 1999, 45, 1186-1193.	1.5	20
36	Constructions of authentication codes from algebraic curves over finite fields. IEEE Transactions on Information Theory, 2000, 46, 886-892.	1.5	20

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37	A class of linear codes with good parameters from algebraic curves. IEEE Transactions on Information Theory, 2000, 46, 1527-1532.	1.5	20
38	Excellent Nonlinear Codes From Algebraic Function Fields. IEEE Transactions on Information Theory, 2005, 51, 4044-4046.	1.5	20
39	Bounds on the Threshold Gap in Secret Sharing and its Applications. IEEE Transactions on Information Theory, 2013, 59, 5600-5612.	1.5	20
40	Natural Generalizations of Threshold Secret Sharing. IEEE Transactions on Information Theory, 2014, 60, 1652-1664.	1.5	20
41	Sequences With High Nonlinear Complexity. IEEE Transactions on Information Theory, 2014, 60, 6696-6701.	1.5	20
42	Drinfeld modules of rank 1 and algebraic curves with many rational points. II. Acta Arithmetica, 1997, 81, 81-100.	0.2	19
43	On automorphism groups of the Hermitian codes. IEEE Transactions on Information Theory, 1995, 41, 1629-1635.	1.5	18
44	Towards a characterization of subfields of the Deligne-Lusztig function fields. Journal of Combinatorial Theory - Series A, 2013, 120, 1351-1371.	0.5	17
45	A Construction of Optimal Frequency Hopping Sequence Set via Combination of Multiplicative and Additive Groups of Finite Fields. IEEE Transactions on Information Theory, 2020, 66, 5310-5315.	1.5	17
46	Constructions of Maximally Recoverable Local Reconstruction Codes via Function Fields. IEEE Transactions on Information Theory, 2020, 66, 6133-6143.	1.5	17
47	New lower bounds and constructions for binary codes correcting asymmetric errors. IEEE Transactions on Information Theory, 2003, 49, 3294-3299.	1.5	15
48	Several classes of $(2m-1, w, 2)$ optical orthogonal codes. Discrete Applied Mathematics, 2003, 128, 103-120.	0.5	15
49	Drinfeld Modules of Rank 1 and Algebraic Curves with Many Rational Points. Monatshefte Fur Mathematik, 1999, 127, 219-241.	0.5	14
50	Low-correlation, large linear span sequences from function fields. IEEE Transactions on Information Theory, 2003, 49, 1439-1446.	1.5	14
51	Torsion Limits and Riemann-Roch Systems for Function Fields and Applications. IEEE Transactions on Information Theory, 2014, 60, 3871-3888.	1.5	14
52	Constructions of digital nets. Acta Arithmetica, 2002, 102, 189-197.	0.2	14
53	On the structure of the divisor class group of a class of curves over finite fields. Archiv Der Mathematik, 1995, 65, 141-150.	0.3	13
54	Constructions of codes from residue rings of polynomials. IEEE Transactions on Information Theory, 2002, 48, 2995-2997.	1.5	13

#	ARTICLE	IF	CITATIONS
55	Diagonal Lattice Space-Time Codes From Number Fields and Asymptotic Bounds. IEEE Transactions on Information Theory, 2007, 53, 3921-3926.	1.5	13
56	New Extension Constructions of Optimal Frequency-Hopping Sequence Sets. IEEE Transactions on Information Theory, 2019, 65, 5846-5855.	1.5	12
57	Biometric key generation based on generated intervals and two-layer error correcting technique. Pattern Recognition, 2021, 111, 107733.	5.1	12
58	Constructions of Sequences with Almost Perfect Linear Complexity Profile from Curves over Finite Fields. Finite Fields and Their Applications, 1999, 5, 301-313.	0.6	11
59	Polyadic Codes Revisited. IEEE Transactions on Information Theory, 2004, 50, 200-207.	1.5	11
60	A Propagation Rule for Linear Codes. Applicable Algebra in Engineering, Communications and Computing, 2000, 10, 425-432.	0.3	10
61	Symmetric Polynomials and Some Good Codes. Finite Fields and Their Applications, 2001, 7, 142-148.	0.6	10
62	Algebraic Geometry Codes With Complementary Duals Exceed the Asymptotic Gilbert-Varshamov Bound. IEEE Transactions on Information Theory, 2018, 64, 6277-6282.	1.5	10
63	Explicit Constructions of Two-Dimensional Reed-Solomon Codes in High Insertion and Deletion Noise Regime. IEEE Transactions on Information Theory, 2021, 67, 2808-2820.	1.5	10
64	Global function fields with many rational places over the ternary field. Acta Arithmetica, 1998, 83, 65-86.	0.2	10
65	The structure of the rational point groups of simple abelian varieties of dimension two over finite fields. Archiv Der Mathematik, 1994, 63, 427-430.	0.3	9
66	Construction and Enumeration of All Binary Duadic Codes of Length pm. Fundamenta Informaticae, 1999, 38, 149-161.	0.3	9
67	The minimum distance of the duals of binary irreducible cyclic codes. IEEE Transactions on Information Theory, 2002, 48, 2679-2689.	1.5	9
68	Multisequences With Large Linear and $k$ -Error Linear Complexity From Hermitian Function Fields. IEEE Transactions on Information Theory, 2009, 55, 3858-3863.	1.5	9
69	Construction of Sequences With High Nonlinear Complexity From Function Fields. IEEE Transactions on Information Theory, 2017, 63, 7646-7650.	1.5	9
70	Subspace designs based on algebraic function fields. Transactions of the American Mathematical Society, 2018, 370, 8757-8775.	0.5	9
71	New binary linear codes from algebraic curves. IEEE Transactions on Information Theory, 2002, 48, 285-287.	1.5	8
72	A Construction of Binary Constant-Weight Codes From Algebraic Curves Over Finite Fields. IEEE Transactions on Information Theory, 2005, 51, 3674-3678.	1.5	8

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73	Algebraic curves with many points over the binary field. <i>Journal of Algebra</i> , 2007, 311, 775-780.	0.4	8
74	Construction of Asymptotically Good Locally Repairable Codes via Automorphism Groups of Function Fields. <i>IEEE Transactions on Information Theory</i> , 2019, 65, 7087-7094.	1.5	8
75	List Decodability of Symbol-Pair Codes. <i>IEEE Transactions on Information Theory</i> , 2019, 65, 4815-4821.	1.5	8
76	Goppa geometric codes achieving the Gilbert-Varshamov bound. <i>IEEE Transactions on Information Theory</i> , 2005, 51, 259-264.	1.5	7
77	New Linear Codes and Algebraic Function Fields Over Finite Fields. <i>IEEE Transactions on Information Theory</i> , 2007, 53, 4822-4825.	1.5	7
78	Optimal rate algebraic list decoding using narrow ray class fields. <i>Journal of Combinatorial Theory - Series A</i> , 2015, 129, 160-183.	0.5	7
79	Multipartite entangled states, symmetric matrices and error-correcting codes. <i>IEEE Transactions on Information Theory</i> , 2017, , 1-1.	1.5	7
80	On subfields of the Hermitian function field involving the involution automorphism. <i>Journal of Number Theory</i> , 2019, 198, 293-317.	0.2	7
81	Asymptotic Gilbert-Varshamov Bound on Frequency Hopping Sequences. <i>IEEE Transactions on Information Theory</i> , 2020, 66, 1213-1218.	1.5	7
82	GLOBAL FUNCTION FIELDS WITH MANY RATIONAL PLACES OVER THE QUINARY FIELD. <i>Demonstratio Mathematica</i> , 1997, 30, 919-930.	0.6	6
83	Access Structures of Elliptic Secret Sharing Schemes. <i>IEEE Transactions on Information Theory</i> , 2008, 54, 850-852.	1.5	6
84	Structure of functional codes defined on non-degenerate Hermitian varieties. <i>Journal of Combinatorial Theory - Series A</i> , 2011, 118, 2436-2444.	0.5	6
85	On automorphism groups of cyclotomic function fields over finite fields. <i>Journal of Number Theory</i> , 2016, 169, 406-419.	0.2	6
86	Repairing Algebraic Geometry Codes. <i>IEEE Transactions on Information Theory</i> , 2018, 64, 900-908.	1.5	6
87	Efficiently List-Decodable Insertion and Deletion Codes via Concatenation. <i>IEEE Transactions on Information Theory</i> , 2021, 67, 5778-5790.	1.5	6
88	On the Representability of the Biuniform Matroid. <i>SIAM Journal on Discrete Mathematics</i> , 2013, 27, 1482-1491.	0.4	5
89	List Decodability of Random Subcodes of Gabidulin Codes. <i>IEEE Transactions on Information Theory</i> , 2017, 63, 159-163.	1.5	5
90	List Decoding of Cover Metric Codes Up to the Singleton Bound. <i>IEEE Transactions on Information Theory</i> , 2018, 64, 2410-2416.	1.5	5

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91	Constructive Asymptotic Bounds of Locally Repairable Codes via Function Fields. IEEE Transactions on Information Theory, 2020, 66, 5395-5403.	1.5	5
92	Communication Efficient Secret Sharing With Small Share Size. IEEE Transactions on Information Theory, 2022, 68, 659-669.	1.5	5
93	Linear Codes From Narrow Ray Class Groups of Algebraic Curves. IEEE Transactions on Information Theory, 2004, 50, 541-543.	1.5	4
94	Disjoint Linear Codes From Algebraic Function Fields. IEEE Transactions on Information Theory, 2004, 50, 2174-2177.	1.5	4
95	Function-field codes. Applicable Algebra in Engineering, Communications and Computing, 2008, 19, 201-211.	0.3	4
96	Asymptotically Good Nonlinear Codes From Algebraic Curves. IEEE Transactions on Information Theory, 2011, 57, 5991-5995.	1.5	4
97	Erasure List-Decodable Codes From Random and Algebraic Geometry Codes. IEEE Transactions on Information Theory, 2014, 60, 3889-3894.	1.5	4
98	Efficiently List-Decodable Punctured Reed-Muller Codes. IEEE Transactions on Information Theory, 2017, 63, 4317-4324.	1.5	4
99	On the Bounded Distance Decoding Problem for Lattices Constructed and Their Cryptographic Applications. IEEE Transactions on Information Theory, 2020, 66, 2588-2598.	1.5	4
100	Construction of Optimal $(\langle i \rangle_r, \hat{\Gamma})$ -Locally Recoverable Codes and Connection With Graph Theory. IEEE Transactions on Information Theory, 2022, 68, 4320-4328.	1.5	4
101	Automorphism group of elliptic codes. Communications in Algebra, 1995, 23, 4061-4072.	0.3	3
102	A $2 \times 2$ lattice space-time code of rank 5. Proceedings of the American Mathematical Society, 2008, 136, 3415-3418.	0.4	3
103	Good Linear Codes from Polynomial Evaluations. IEEE Transactions on Communications, 2012, 60, 357-363.	4.9	3
104	New results on two hypercube coloring problems. Discrete Applied Mathematics, 2013, 161, 2937-2945.	0.5	3
105	On Secret Sharing with Nonlinear Product Reconstruction. SIAM Journal on Discrete Mathematics, 2015, 29, 1114-1131.	0.4	3
106	Efficient Multi-Point Local Decoding of Reed-Muller Codes via Interleaved Codex. IEEE Transactions on Information Theory, 2020, 66, 263-272.	1.5	3
107	A New Construction of Nonlinear Codes via Rational Function Fields. IEEE Transactions on Information Theory, 2021, 67, 770-777.	1.5	3
108	Global function fields with many rational places over the quinary field. II. Acta Arithmetica, 1998, 86, 277-288.	0.2	3

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109	A Counterexample to Perret's Conjecture on Infinite Class Field Towers for Global Function Fields. Finite Fields and Their Applications, 1999, 5, 240-245.	0.6	2
110	An explicit class of codes with good parameters and their duals. Discrete Applied Mathematics, 2006, 154, 346-356.	0.5	2
111	Dense packings from quadratic fields and codes. Journal of Combinatorial Theory - Series A, 2008, 115, 1021-1035.	0.5	2
112	A New Class of Rank-Metric Codes and Their List Decoding Beyond the Unique Decoding Radius. IEEE Transactions on Information Theory, 2018, 64, 3394-3402.	1.5	2
113	The asymptotic behavior of automorphism groups of function fields over finite fields. Transactions of the American Mathematical Society, 2019, 372, 35-52.	0.5	2
114	Lossless Dimension Expanders Via Linearized Polynomials and Subspace Designs. Combinatorica, 2021, 41, 545-579.	0.6	2
115	Optimal Rate List Decoding over Bounded Alphabets Using Algebraic-geometric Codes. Journal of the ACM, 2022, 69, 1-48.	1.8	2
116	Zeta-functions of curves of genus 2 over finite fields. Journal of Algebra, 2007, 308, 734-741.	0.4	1
117	A Gilbert-Varshamov type bound for Euclidean packings. Mathematics of Computation, 2008, 77, 2339-2344.	1.1	1
118	An Upper Bound on the Complexity of Multiplication of Polynomials Modulo a Power of an Irreducible Polynomial. IEEE Transactions on Information Theory, 2013, 59, 6845-6850.	1.5	1
119	Binary Sequences With a Low Correlation via Cyclotomic Function Fields. IEEE Transactions on Information Theory, 2022, 68, 3445-3454.	1.5	1
120	Some Computational Problems of Cryptographic Significance Concerning Elliptic Curves over Rings. Information and Computation, 1999, 151, 92-99.	0.5	0
121	A short biography of Harald Niederreiter. Journal of Complexity, 2004, 20, 134-136.	0.7	0
122	Special issue on cryptography and coding theory. Journal of Complexity, 2004, 20, 133.	0.7	0
123	On the variance of average distance of subsets in the Hamming space. Discrete Applied Mathematics, 2005, 145, 465-478.	0.5	0
124	A constructive bound on kissing numbers. Proceedings of the American Mathematical Society, 2009, 137, 2953-2953.	0.4	0
125	A Gilbert-Varshamov-type bound for lattice packings. Journal of Combinatorial Theory - Series A, 2011, 118, 938-948.	0.5	0
126	A relation between embedding degrees and class numbers of binary quadratic forms. Mathematics of Computation, 2014, 83, 3001-3004.	1.1	0