Frederique Oggier

List of Publications by Year
in descending order

129 papers	3,233 citations	394421 19 h-index	223800 46 g-index
133 all docs	133 docs citations	133 times ranked	1723 citing authors

#	Article	IF	Citations
1	The Secrecy Capacity of the MIMO Wiretap Channel. IEEE Transactions on Information Theory, 2011, 57, 4961-4972.	2.4	800
2	Perfect Space–Time Block Codes. IEEE Transactions on Information Theory, 2006, 52, 3885-3902.	2.4	369
3	The secrecy capacity of the MIMO wiretap channel. , 2008, , .		219
4	Self-repairing homomorphic codes for distributed storage systems. , 2011, , .		168
5	New Algebraic Constructions of Rotated<tex>$ mmb Z^n$</tex>-Lattice Constellations for the Rayleigh Fading Channel. IEEE Transactions on Information Theory, 2004, 50, 702-714.	2.4	124
6	Locally repairable codes with multiple repair alternatives. , 2013, , .		97
7	Algebraic Number Theory and Code Design for Rayleigh Fading Channels. Foundations and Trends in Communications and Information Theory, 2004, 1, 333-416.	3.1	83
8	Lattice Codes for the Wiretap Gaussian Channel: Construction and Analysis. IEEE Transactions on Information Theory, 2016, 62, 5690-5708.	2.4	65
9	An Overview of Information-Theoretic Security and Privacy: Metrics, Limits and Applications. IEEE Journal on Selected Areas in Information Theory, 2021, 2, 5-22.	2.5	56
10	Secrecy gain: A wiretap lattice code design. , 2010, , .		47
11	Cyclic Division Algebras: A Tool for Space-Time Coding. Foundations and Trends in Communications and Information Theory, 2007, 4, 1-95.	3.1	46
12	Lightweight MDS Involution Matrices. Lecture Notes in Computer Science, 2015, , 471-493.	1.3	44
13	Fast-Decodable Asymmetric Space-Time Codes From Division Algebras. IEEE Transactions on Information Theory, 2012, 58, 2362-2385.	2.4	40
14	An Algebraic Family of Distributed Space-Time Codes for Wireless Relay Networks. , 2006, , .		39
15	Algebraic lattice constellations: bounds on performance. IEEE Transactions on Information Theory, 2006, 52, 319-327.	2.4	30
16	Self-Repairing Codes for distributed storage &#x2014; A projective geometric construction. , 2011, , .		29
17	Byzantine fault tolerance of regenerating codes. , 2011, , .		29
18	RapidRAID: Pipelined erasure codes for fast data archival in distributed storage systems. , 2013, , .		27

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19	Algebraic Cayley Differential Space–Time Codes. IEEE Transactions on Information Theory, 2007, 53, 1911-1919.	2.4	26
20	An Error Probability Approach to MIMO Wiretap Channels. IEEE Transactions on Communications, 2013, 61, 3396-3403.	7.8	25
21	EGRET: Extortion Graph Exploration Techniques in the Bitcoin Network. , 2018, , .		25
22	Construction A of Lattices Over Number Fields and Block Fading (Wiretap) Coding. IEEE Transactions on Information Theory, 2015, 61, 2273-2282.	2.4	23
23	Lattice Code Design for the Rayleigh Fading Wiretap Channel. , 2011, , .		22
24	An Algebraic Coding Scheme for Wireless Relay Networks With Multiple-Antenna Nodes. IEEE Transactions on Signal Processing, 2008, 56, 2957-2966.	5.3	21
25	An Authentication Code Against Pollution Attacks in Network Coding. IEEE/ACM Transactions on Networking, 2011, 19, 1587-1596.	3.8	21
26	A Classification of Unimodular Lattice Wiretap Codes in Small Dimensions. IEEE Transactions on Information Theory, 2013, 59, 3295-3303.	2.4	21
27	Fast-decodable MIDO codes from crossed product algebras. , 2010, , .		20
28	Code Design for Multihop Wireless Relay Networks. Eurasip Journal on Advances in Signal Processing, 2007, 2008, .	1.7	19
29	Iterated Space-Time Code Constructions From Cyclic Algebras. IEEE Transactions on Information Theory, 2013, 59, 5966-5979.	2.4	19
30	Decentralized Erasure Coding for Efficient Data Archival in Distributed Storage Systems. Lecture Notes in Computer Science, 2013, , 42-56.	1.3	19
31	An algebraic MIDO-MISO code construction. , 2010, , .		18
32	Connections between Construction D and related constructions of lattices. Designs, Codes, and Cryptography, 2014, 73, 441-455.	1.6	18
33	Cyclic Algebras for Noncoherent Differential Space–Time Coding. IEEE Transactions on Information Theory, 2007, 53, 3053-3065.	2.4	17
34	An overview of codes tailor-made for better repairability in networked distributed storage systems. ACM SIGACT News, 2013, 44, 89-105.	0.1	17
35	An Information-Theoretic Security Evaluation of a Class of Randomized Encryption Schemes. IEEE Transactions on Information Forensics and Security, 2014, 9, 158-168.	6.9	17
36	Asymptotically optimal cooperative wireless networks with reduced signaling complexity. IEEE Journal on Selected Areas in Communications, 2007, 25, 258-267.	14.0	16

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37	Codes Over Matrix Rings for Space-Time Coded Modulations. IEEE Transactions on Information Theory, 2012, 58, 734-746.	2.4	14
38	Nonintersecting Subspaces Based on Finite Alphabets. IEEE Transactions on Information Theory, 2005, 51, 4320-4325.	2.4	13
39	On the Existence of Perfect Space–Time Codes. IEEE Transactions on Information Theory, 2009, 55, 2078-2082.	2.4	13
40	In-network redundancy generation for opportunistic speedup of data backup. Future Generation Computer Systems, 2013, 29, 1353-1362.	7.5	13
41	Lattices Applied to Coding for Reliable and Secure Communications. SpringerBriefs in Mathematics, 2017, , .	0.3	13
42	A wire-tap approach to enhance security in communication systems using the encoding-encryption paradigm. , 2010, , .		12
43	A family of fast-decodable MIDO codes from crossed-product algebras over ℚ. , 2011, , .		12
44	BiVA: Bitcoin Network Visualization & Analysis. , 2018, , .		12
45	Quotients of orders in cyclic algebras and space-time codes. Advances in Mathematics of Communications, 2013, 7, 441-461.	0.7	12
46	Cyclic Distributed Space–Time Codes for Wireless Relay Networks With No Channel Information. IEEE Transactions on Information Theory, 2010, 56, 250-265.	2.4	11
47	On storage codes allowing partially collaborative repairs. , 2014, , .		11
48	A Perspective on the MIMO Wiretap Channel. Proceedings of the IEEE, 2015, 103, 1874-1882.	21.3	11
49	An Overview of Coding for Distributed Storage Systems. Signals and Communication Technology, 2018, , 363-383.	0.5	11
50	2- and 3-Modular lattice wiretap codes in small dimensions. Applicable Algebra in Engineering, Communications and Computing, 2015, 26, 571-590.	0.5	10
51	On the Optimality of the Golden Code. , 2006, , .		9
52	Space-Time Codes from Crossed Product Algebras of Degree 4. , 2007, , 90-99.		9
53	An ego network analysis of sextortionists. Social Network Analysis and Mining, 2020, 10, 1.	2.8	9
54	New algebraic constructions of rotated cubic lattice constellations for the Rayleigh fading channel. , 0, , .		8

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55	The MIMO wiretap channel. , 2008, , .		8
56	Differential distributed cayley space-time codes. IEEE Transactions on Wireless Communications, 2009, 8, 3808-3814.	9.2	8
57	Enabling multiplication in lattice codes via Construction A. , 2013, , .		8
58	Data Insertion and Archiving in Erasure-Coding Based Large-Scale Storage Systems. Lecture Notes in Computer Science, 2013, , 47-68.	1.3	8
59	Redundantly grouped cross-object coding for repairable storage. , 2012, , .		8
60	On skew polynomial codes and lattices from quotients of cyclic division algebras. Advances in Mathematics of Communications, 2016, 10, 79-94.	0.7	8
61	A Coding Scheme for Wireless Networks with Multiple Antenna Nodes and No Channel Information. , 2007, , .		7
62	Wiretap lattice codes from number fields with no small norm elements. Designs, Codes, and Cryptography, 2014, 73, 425-440.	1.6	7
63	Sparsity Exploiting Erasure Coding for Resilient Storage and Efficient I/O Access in Delta Based Versioning Systems. , 2015, , .		7
64	Security evaluation and design elements for a class of randomised encryptions. IET Information Security, 2019, 13, 36-47.	1.7	7
65	Analysis of multiâ€input multiâ€output transactions in the Bitcoin network. Concurrency Computation Practice and Experience, 2021, 33, .	2.2	7
66	Coding for Wiretap Channels. Wireless Networks and Mobile Communications, 2013, , 17-32.	1.0	7
67	Secrecy gain of Gaussian wiretap codes from unimodular lattices. , 2011, , .		6
68	Gaussian wiretap lattice codes from binary self-dual codes. , 2012, , .		6
69	Rank weight hierarchy of some classes of cyclic codes. , 2014, , .		6
70	On LCD codes and lattices. , 2016, , .		6
71	Multi-receiver authentication code for network coding. , 2008, , .		5
72	Iterated MIDO space-time code constructions. , 2011, , .		5

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73	MIDO space-time codes from associative and nonassociative cyclic algebras. , 2012, , .		5
74	Self-repairing codes. Computing (Vienna/New York), 2015, 97, 171-201.	4.8	5
75	On Cyclic and Nearly Cyclic Multiagent Interactions in the Plane. , 2012, , 513-539.		5
76	Modular lattices from a variation of construction a over number fields. Advances in Mathematics of Communications, 2017, 11, 719-745.	0.7	5
77	Asymptotically Optimal Cooperative Wireless Networks without Constellation Expansion. , 2006, , .		4
78	A practical scheme for string commitment based on the Gaussian channel. , 2008, , .		4
79	Storage codes: Managing big data with small overheads. , 2013, , .		4
80	Constructions a of lattices from number fields and division algebras. , 2014, , .		4
81	Sparsity exploiting erasure coding for distributed storage of versioned data. Computing (Vienna/New) Tj ETQq1 1 0,784314 rgBT /Overl	4.8	4
82	On the Secrecy Gain of Extremal Even *l*-modular Lattices. Experimental Mathematics, 2019, 28, 492-508.	0.7	4
83	Entropic Centrality for non-atomic Flow Networks. , 2018, , .		4
84	On Abelian group representability of finite groups. Advances in Mathematics of Communications, 2014, 8, 139-152.	0.7	4
85	A split-and-transfer flow based entropic centrality. PeerJ Computer Science, 2019, 5, e220.	4.5	4
86	On applications of orbit codes to storage. Advances in Mathematics of Communications, 2016, 10, 113-130.	0.7	4
87	Semidefinite programs for the design of codes for delay-constrained communication in networks. , 0, , .		3
88	Higher dimensional perfect space-time coded modulation. , 2009, , .		3
89	Codes over M<inf>2</inf>(F<inf>2</inf>) and applications to Golden space-time coded modulation. , 2009, , .		3
90	Secrecy gain of Gaussian wiretap codes from 2- and 3-modular lattices. , 2012, , .		3

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91	Explicit constructions of quasi-uniform codes from groups. , 2013, , .		3
92	Wiretap encoding of lattices from number fields using codes over F<inf>p</inf>. , 2013, , .		3
93	A USRP implementation of wiretap lattice codes. , 2014, , .		3
94	Construction and secrecy gain of a family of 5-modular lattices. , 2014, , .		3
95	DiVers: An erasure code based storage architecture for versioning exploiting sparsity. Future Generation Computer Systems, 2016, 59, 47-62.	7.5	3
96	A study of the performance of novel storage-centric repairable codes. Computing (Vienna/New York), 2016, 98, 319-341.	4.8	3
97	Maximal order codes over number fields. Journal of Pure and Applied Algebra, 2018, 222, 1827-1858.	0.6	3
98	Renyi entropy driven hierarchical graph clustering. PeerJ Computer Science, 2021, 7, e366.	4.5	3
99	On the Optimality of the Golden Code. , 2006, , .		2
100	Design of algebraic cyclic codes. , 2008, , .		2
101	Differential distributed space-time coding based on Cayley codes. , 2008, , .		2
102	Finite nilpotent and metacyclic groups never violate the Ingleton inequality. , 2012, , .		2
103	A note on quasi-uniform distributions and Abelian group representability. , 2012, , .		2
104	Fast decodable codes for 6Tx-3Rx MIMO systems. , 2012, , .		2
105	Groups and information inequalities in 5 variables. , 2013, , .		2
106	On Algebraic Manipulation Detection codes from linear codes and their application to storage systems. , 2015, , .		2
107	Partially collaborative storage codes in the presence of an eavesdropper. International Journal of Information and Coding Theory, 2016, 3, 177.	0.3	2
108	Performance of lattice coset codes on Universal Software Radio Peripherals. Physical Communication, 2017, 24, 94-102.	2.1	2

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109	A Survey of Algebraic Unitary Codes. Lecture Notes in Computer Science, 2009, , 171-187.	1.3	2
110	Lattice Encoding of Cyclic Codes from Skew-Polynomial Rings. CIM Series in Mathematical Sciences, 2015, , 161-167.	0.4	2
111	Constructions of Orthonormal Lattices and Quaternion Division Algebras for Totally Real Number Fields. , 2007, , 138-147.		2
112	On Improving 4 ï¿½ 4 Space-Time Codes. , 2006, , .		1
113	An analysis of small dimensional fading wiretap lattice codes. , 2014, , .		1
114	Entropy-based Graph Clustering - A Simulated Annealing Approach. , 2018, , .		1
115	QLOC: Quorums With Local Reconstruction Codes. IEEE Access, 2021, 9, 93298-93314.	4.2	1
116	On Grid Quorums for Erasure Coded Data. Entropy, 2021, 23, 177.	2.2	1
117	Differential Erasure Codes for Efficient Archival of Versioned Data in Cloud Storage Systems. Lecture Notes in Computer Science, 2016, , 23-65.	1.3	1
118	Lattices from Codes. SpringerBriefs in Mathematics, 2017, , 37-58.	0.3	1
119	Quorums over codes. Journal of Parallel and Distributed Computing, 2022, 161, 1-19.	4.1	1
120	Coding Constructions for Efficient Oblivious Transfer From Noisy Channels. IEEE Transactions on Information Theory, 2022, 68, 2719-2734.	2.4	1
121	A class of iterated fast decodable space-time codes for 2^n Tx antennas. , 2012, , .		0
122	Applications of quasi-uniform codes to storage. , 2014, , .		0
123	On repairing erasure coded data in an active-passive mixed storage network. International Journal of Information and Coding Theory, 2015, 3, 58.	0.3	0
124	A quadratic form approach to Construction A of lattices over cyclic algebras. Journal of Pure and Applied Algebra, 2021, 225, 106600.	0.6	0
125	Centrality informed embedding of networks for temporal feature extraction. Social Network Analysis and Mining, 2021, 11, 1.	2.8	0
126	On group violations of inequalities in five subgroups. Advances in Mathematics of Communications, 2016, 10, 871-893.	0.7	0

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127	Ideal Lattices. SpringerBriefs in Mathematics, 2017, , 59-71.	0.3	0
128	On the generalised rank weights of quasi-cyclic codes. Advances in Mathematics of Communications, 2024, 18, 192-205.	0.7	0
129	A Modular Framework for Centrality and Clustering in Complex Networks. IEEE Access, 2022, 10, 40001-40026.	4.2	0