Zhengchun Zhou

List of Publications by Year
in descending order

		236925	254184
124 papers	2,379 citations	25 h-index	43 g-index
124 all docs	124 docs citations	124 times ranked	749 citing authors

#	Article	IF	Citations
1	A Sharp Condition for Exact Support Recovery With Orthogonal Matching Pursuit. IEEE Transactions on Signal Processing, 2017, 65, 1370-1382.	5.3	143
2	A class of three-weight cyclic codes. Finite Fields and Their Applications, 2014, 25, 79-93.	1.0	123
3	Linear Codes With Two or Three Weights From Weakly Regular Bent Functions. IEEE Transactions on Information Theory, 2016, 62, 1166-1176.	2.4	115
4	Linear codes with two or three weights from quadratic Bent functions. Designs, Codes, and Cryptography, 2016, 81, 283-295.	1.6	104
5	A New Class of Sequences With Zero or Low Correlation Zone Based on Interleaving Technique. IEEE Transactions on Information Theory, 2008, 54, 4267-4273.	2.4	93
6	Three-weight cyclic codes and their weight distributions. Discrete Mathematics, 2016, 339, 415-427.	0.7	81
7	Minimal linear codes over finite fields. Finite Fields and Their Applications, 2018, 54, 176-196.	1.0	74
8	A Family of Five-Weight Cyclic Codes and Their Weight Enumerators. IEEE Transactions on Information Theory, 2013, 59, 6674-6682.	2.4	64
9	New Constructions for Optimal Sets of Frequency-Hopping Sequences. IEEE Transactions on Information Theory, 2011, 57, 3831-3840.	2.4	62
10	New Classes of Frequency-Hopping Sequences With Optimal Partial Correlation. IEEE Transactions on Information Theory, 2012, 58, 453-458.	2.4	62
11	The Bose and Minimum Distance of a Class of BCH Codes. IEEE Transactions on Information Theory, 2015, 61, 2351-2356.	2.4	60
12	The dimension and minimum distance of two classes of primitive BCH codes. Finite Fields and Their Applications, 2017, 45, 237-263.	1.0	59
13	Seven Classes of Three-Weight Cyclic Codes. IEEE Transactions on Communications, 2013, 61, 4120-4126.	7.8	56
14	Minimal Binary Linear Codes. IEEE Transactions on Information Theory, 2018, 64, 6536-6545.	2.4	55
15	Sharp sufficient conditions for stable recovery of block sparse signals by block orthogonal matching pursuit. Applied and Computational Harmonic Analysis, 2019, 47, 948-974.	2.2	44
16	Sparse Signal Recovery With Minimization of 1-Norm Minus 2-Norm. IEEE Transactions on Vehicular Technology, 2019, 68, 6847-6854.	6.3	40
17	Binary LCD Codes and Self-Orthogonal Codes From a Generic Construction. IEEE Transactions on Information Theory, 2019, 65, 16-27.	2.4	38
18	Perfect Gaussian Integer Sequences of Odd Prime Length. IEEE Signal Processing Letters, 2012, 19, 615-618.	3.6	37

#	Article	IF	Citations
19	A Novel Sufficient Condition for Generalized Orthogonal Matching Pursuit. IEEE Communications Letters, 2017, 21, 805-808.	4.1	36
20	A New Construction of Frequency-Hopping Sequences With Optimal Partial Hamming Correlation. IEEE Transactions on Information Theory, 2014, 60, 5782-5790.	2.4	34
21	A Construction of Multiple Optimal ZCZ Sequence Sets With Good Cross Correlation. IEEE Transactions on Information Theory, 2018, 64, 1340-1346.	2.4	34
22	New nearly optimal codebooks from relative difference sets. Advances in Mathematics of Communications, 2011, 5, 521-527.	0.7	34
23	Some New Classes of Zero-Difference Balanced Functions. IEEE Transactions on Information Theory, 2012, 58, 139-145.	2.4	32
24	Binary cyclic codes from explicit polynomials over<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si1.gif" display="inline" overflow="scroll"><mml:mstyle mathvariant="normal"><mml:mi>GF</mml:mi></mml:mstyle><mml:mrow><mml:mo>(</mml:mo><mml:msup><mml:mrow><mml:mn> Discrete Mathematics, 2014, 321, 76-89.	0.7	29
25	A Generic Construction of Z-Periodic Complementary Sequence Sets with Flexible Flock Size and Zero Correlation Zone Length. IEEE Signal Processing Letters, 2015, 22, 1462-1466.	3.6	28
26	A class of optimal ternary cyclic codes and their duals. Finite Fields and Their Applications, 2016, 37, 193-202.	1.0	27
27	A family of optimal ternary cyclic codes from the Niho-type exponent. Finite Fields and Their Applications, 2018, 54, 101-112.	1.0	26
28	Generic Construction of Bent Functions and Bent Idempotents With Any Possible Algebraic Degrees. IEEE Transactions on Information Theory, 2017, 63, 6149-6157.	2.4	25
29	Full Characterization of Minimal Linear Codes as Cutting Blocking Sets. IEEE Transactions on Information Theory, 2021, 67, 3690-3700.	2.4	25
30	Investigations on c-(Almost) Perfect Nonlinear Functions. IEEE Transactions on Information Theory, 2021, 67, 6916-6925.	2.4	25
31	Strictly Optimal Frequency-Hopping Sequence Sets With Optimal Family Sizes. IEEE Transactions on Information Theory, 2016, 62, 1087-1093.	2.4	24
32	Five Families of Three-Weight Ternary Cyclic Codes and Their Duals. IEEE Transactions on Information Theory, 2013, 59, 7940-7946.	2.4	23
33	An Optimal Condition for the Block Orthogonal Matching Pursuit Algorithm. IEEE Access, 2018, 6, 38179-38185.	4.2	21
34	New Optimal Binary Z-Complementary Pairs of Odd Length 2^m+3. IEEE Signal Processing Letters, 2019, 26, 1931-1934.	3.6	21
35	New sets of frequency-hopping sequences with optimal Hamming correlation. Designs, Codes, and Cryptography, 2014, 72, 423-434.	1.6	20
36	Optimal Cyclic Locally Repairable Codes via Cyclotomic Polynomials. IEEE Communications Letters, 2019, 23, 202-205.	4.1	20

#	ARTICLE	IF	CITATIONS
37	A sharp condition for exact support recovery of sparse signals with orthogonal matching pursuit. , 2016, , .		19
38	On a conjecture about a class of optimal ternary cyclic codes. , 2015, , .		18
39	Frequency/time hopping sequence sets with optimal partial Hamming correlation properties. Science China Information Sciences, 2012, 55, 2207-2215.	4.3	17
40	New classes of optimal frequency hopping sequences with low hit zone. Advances in Mathematics of Communications, 2013, 7, 293-310.	0.7	16
41	New quaternary sequences of even length with optimal auto-correlation. Science China Information Sciences, 2018, 61, 1.	4.3	16
42	A new frequency-hopping sequence set based upon generalized cyclotomy. Designs, Codes, and Cryptography, 2013, 69, 247-259.	1.6	15
43	A Construction of Codebooks Nearly Achieving the Levenstein Bound. IEEE Signal Processing Letters, 2016, 23, 1306-1309.	3.6	15
44	Zero-Difference Balanced Functions With New Parameters and Their Applications. IEEE Transactions on Information Theory, 2017, 63, 4379-4387.	2.4	15
45	Differential Spectrum of Kasami Power Permutations Over Odd Characteristic Finite Fields. IEEE Transactions on Information Theory, 2019, 65, 6819-6826.	2.4	15
46	A Generalized Construction of Multiple Complete Complementary Codes and Asymptotically Optimal Aperiodic Quasi-Complementary Sequence Sets. IEEE Transactions on Communications, 2020, 68, 3564-3571.	7.8	15
47	Construction of Highly Nonlinear 1-Resilient Boolean Functions with Optimal Algebraic Immunity and Provably High Fast Algebraic Immunity. IEEE Transactions on Information Theory, 2017, , 1-1.	2.4	14
48	A Family of Polyphase Sequences With Asymptotically Optimal Correlation. IEEE Transactions on Information Theory, 2018, 64, 2896-2900.	2.4	14
49	Binary linear codes from vectorial boolean functions and their weight distribution. Discrete Mathematics, 2017, 340, 3055-3072.	0.7	13
50	Three-weight ternary linear codes from a family of cyclic difference sets. Designs, Codes, and Cryptography, 2018, 86, 2513-2523.	1.6	13
51	Strong No-Hit-Zone Sequences for Improved Quasi-Orthogonal FHMA Systems: Sequence Design and Performance Analysis. IEEE Transactions on Communications, 2019, 67, 5336-5345.	7.8	13
52	Constructions of Cross Z-Complementary Pairs With New Lengths. IEEE Transactions on Signal Processing, 2020, 68, 4700-4712.	5.3	13
53	The weight distribution of a class of two-weight linear codes derived from Kloosterman sums. Cryptography and Communications, 2018, 10, 291-299.	1.4	12
54	BEM-PSP for Single-Carrier and SC-FDMA Communication Over a Doubly Selective Fading Channel. IEEE Transactions on Wireless Communications, 2020, 19, 3924-3937.	9.2	12

#	Article	IF	Citations
55	Generalized Constructions of Complementary Sets of Sequences of Lengths Non-Power-of-Two. IEEE Signal Processing Letters, 2020, 27, 136-140.	3.6	12
56	The Weight Enumerator of Three Families of Cyclic Codes. IEEE Transactions on Information Theory, 2013, 59, 6002-6009.	2.4	11
57	New Construction of Optimal Type-II Binary Z-Complementary Pairs. IEEE Transactions on Information Theory, 2021, 67, 3497-3508.	2.4	11
58	Constructions of Optimal Uniform Wide-Gap Frequency-Hopping Sequences. IEEE Transactions on Information Theory, 2022, 68, 692-700.	2.4	11
59	Low Ambiguity Zone: Theoretical Bounds and Doppler-Resilient Sequence Design in Integrated Sensing and Communication Systems. IEEE Journal on Selected Areas in Communications, 2022, 40, 1809-1822.	14.0	11
60	A Hybrid Incomplete Exponential Sum With Application to Aperiodic Hamming Correlation of Some Frequency-Hopping Sequences. IEEE Transactions on Information Theory, 2012, 58, 6610-6615.	2.4	10
61	Deterministic Compressed Sensing Matrices From Sequences With Optimal Correlation. IEEE Access, 2019, 7, 16704-16710.	4.2	10
62	A Construction of Binary Golay Complementary Sets Based on Even-Shift Complementary Pairs. IEEE Access, 2020, 8, 29882-29890.	4.2	10
63	Weight distribution of cyclic codes with arbitrary number of generalized Niho type zeroes. Designs, Codes, and Cryptography, 2016, 78, 713-730.	1.6	9
64	Pilot Design for BEM-Based Channel Estimation in Doubly Selective Channel. IEEE Transactions on Vehicular Technology, 2020, 69, 1679-1694.	6.3	9
65	Quasi-Orthogonal Z-Complementary Pairs and Their Applications in Fully Polarimetric Radar Systems. IEEE Transactions on Information Theory, 2021, 67, 4876-4890.	2.4	9
66	New constructions of optimal frequency hopping sequences with new parameters. Advances in Mathematics of Communications, 2013, 7, 91-101.	0.7	9
67	Generalized modified Gold sequences. Designs, Codes, and Cryptography, 2011, 60, 241-253.	1.6	8
68	Parameters of 2-Designs from Some BCH Codes. Lecture Notes in Computer Science, 2017, , 110-127.	1.3	8
69	Two Constructions of Quaternary Periodic Complementary Pairs. IEEE Communications Letters, 2018, 22, 2507-2510.	4.1	8
70	A new lower bound on the second-order nonlinearity of a class of monomial bent functions. Cryptography and Communications, 2020, 12, 77-83.	1.4	8
71	Asymptotically Optimal and Near-Optimal Aperiodic Quasi-Complementary Sequence Sets Based on Florentine Rectangles. IEEE Transactions on Communications, 2022, 70, 1475-1485.	7.8	8
72	A class of almost MDS codes. Finite Fields and Their Applications, 2022, 79, 101996.	1.0	8

#	Article	IF	Citations
73	Optimal and perfect difference systems of sets from q-ary sequences with difference-balanced property. Designs, Codes, and Cryptography, 2010, 57, 215-223.	1.6	7
74	Improved Sufficient Conditions for Support Recovery of Sparse Signals Via Orthogonal Matching Pursuit. IEEE Access, 2018, 6, 30437-30443.	4.2	7
75	New Complementary Sets With Low PAPR Property Under Spectral Null Constraints. IEEE Transactions on Information Theory, 2020, 66, 7022-7032.	2.4	7
76	A Generalized Construction of Mutually Orthogonal Complementary Sequence Sets With Non-Power-of-Two Lengths. IEEE Transactions on Communications, 2021, 69, 4247-4253.	7.8	7
77	On The Average Partial Hamming Correlation of Frequency-Hopping Sequences. IEICE Transactions on Fundamentals of Electronics, Communications and Computer Sciences, 2013, E96.A, 1010-1013.	0.3	7
78	The Autocorrelation Magnitude of Balanced Binary Sequence Pairs of Prime Period		

#	Article	IF	Citations
91	Full Mean-Square Analysis of Affine Combination of Two Complex-Valued LMS Filters for Second-Order Non-Circular Inputs. IEEE Signal Processing Letters, 2022, 29, 1157-1161.	3.6	4
92	A New Class of Sequences with Zero Correlation Zone Based on Interleaved Perfect Sequences. , 2006, , .		3
93	A New Class of Sequences with Zero Correlation Zone Based on Interleaved Perfect Sequences. , 2006, , .		3
94	New classes of optimal frequency hopping sequences with low hit zone with new parameters. , 2011, , .		3
95	New p-ary sequence family with low correlation and large linear span. Applicable Algebra in Engineering, Communications and Computing, 2011, 22, 301-309.	0.5	3
96	Two classes of zero difference balanced functions and their optimal constant composition codes. , 2016, , .		3
97	Orthogonal Least Squares Detector for Generalized Spatial Modulation. IEEE Transactions on Wireless Communications, 2021, 20, 5071-5082.	9.2	3
98	A new family of polyphase sequences with low correlation. Cryptography and Communications, 2022, 14, 135-144.	1.4	3
99	New Classes of Optimal Low Hit Zone Frequency Hopping Sequences with New Parameters. IEICE Transactions on Fundamentals of Electronics, Communications and Computer Sciences, 2014, E97.A, 2567-2571.	0.3	3
100	A new construction of optimal frequency hopping sequence sets. , 2009, , .		2
101	Preface: Special functions and codes. Cryptography and Communications, 2017, 9, 1-2.	1.4	2
102	Three-phase Z-complementary triads and almost complementary triads. Cryptography and Communications, 2021, 13, 763-773.	1.4	2
103	A hybrid algorithm for the search of long binary sequences with low aperiodic autocorrelations. Soft Computing, 2021, 25, 12725-12744.	3.6	2
104	New Families of Binary Sequences with Low Correlation and Large Size. IEICE Transactions on Fundamentals of Electronics, Communications and Computer Sciences, 2009, E92-A, 291-297.	0.3	2
105	Constructions of Binary Signature Sets With Optimal Odd Total Squared Correlation and Their Application to Device Activity Detection. IEEE Transactions on Intelligent Transportation Systems, 2021, , 1-13.	8.0	2
106	HpGAN: Sequence Search With Generative Adversarial Networks. IEEE Transactions on Neural Networks and Learning Systems, 2023, 34, 4944-4956.	11.3	2
107	Constructions of Non-Contiguous Complementary Sequence Sets and Their Applications. IEEE Transactions on Wireless Communications, 2022, 21, 4871-4882.	9.2	2
108	Classification of optimal quaternary low correlation zone sequence sets. , 2009, , .		1

#	Article	IF	Citations
109	Optimal frequency hopping sequence sets from MDS codes. , 2013, , .		1
110	Autocorrelation of the Modified Binary Two-Prime Sidelnikov Sequence. International Journal of Foundations of Computer Science, 2017, 28, 391-409.	1.1	1
111	Two infinite classes of rotation symmetric bent functions with simple representation. Applicable Algebra in Engineering, Communications and Computing, 2018, 29, 197-208.	0.5	1
112	Optimization Method for Designing Sequences With Low Partial-period Autocorrelation Sidelobes. , 2019, , .		1
113	4q-QAM Complementary Sequence Sets with Non-Power-of-Two Length*. , 2019, , .		1
114	Large Zero Correlation Zones of Golay Complementary Sets. , 2019, , .		1
115	New Constructions of Binary (Near) Complementary Sets. , 2019, , .		1
116	Two constructions for 16-QAM complementary sequence sets with non-power-of-two length. Cryptography and Communications, 2020, 12, 349-362.	1.4	1
117	On the Aperiodic Hamming Correlation of Frequency-Hopping Sequences from Norm Functions. Lecture Notes in Computer Science, 2012, , 148-158.	1.3	1
118	Binary signature set with optimal odd periodic total squared correlation. , 2015, , .		0
119	Editorial: Special issue on sequences and their applications 2018. Cryptography and Communications, 2020, 12, 321-323.	1.4	0
120	A Tighter Correlation Lower Bound for Quasi-Complementary Sequence Sets with Low Correlation Zone. IEICE Transactions on Fundamentals of Electronics, Communications and Computer Sciences, 2021, E104.A, 392-398.	0.3	0
121	Sequences with Low Partial-Period Autocorrelation Sidelobes Constructed via Optimization Method. IEICE Transactions on Fundamentals of Electronics, Communications and Computer Sciences, 2021, E104.A, 384-391.	0.3	0
122	Cyclic LRCs with Availability from Linearized Polynomials. IEICE Transactions on Fundamentals of Electronics, Communications and Computer Sciences, 2021, E104.A, 991-995.	0.3	0
123	A Large Class of p-Ary Cyclic Codes and Sequence Families. IEICE Transactions on Fundamentals of Electronics, Communications and Computer Sciences, 2010, E93-A, 2272-2277.	0.3	0
124	Signal Design with Low/Zero Ambiguity Zone Characteristics for Joint Radar-Communication Systems. , 2021, , .		0