Ron M Roth

List of Publications by Year
in descending order

55 papers	331 citations	933447 10 h-index	940533 16 g-index
55 all docs	55 docs citations	55 times ranked	188 citing authors

#	Article	IF	Citations
1	Asymptotic Bounds on the Rate of Locally Repairable Codes. IEEE Transactions on Information Theory, 2022, 68, 1581-1598.	2.4	0
2	On Bi-Modal Constrained Coding. IEEE Transactions on Information Theory, 2021, 67, 1609-1621.	2.4	2
3	On the number of factorizations of polynomials over finite fields. Journal of Combinatorial Theory - Series A, 2021, 182, 105462.	0.8	0
4	Variable-Length Constrained Coding and Kraft Conditions: The Parity-Preserving Case. IEEE Transactions on Information Theory, 2021, 67, 6179-6192.	2.4	0
5	On Parity-Preserving Variable-Length Constrained Coding. , 2020, , .		1
6	On the Number of Factorizations of Polynomials over Finite Fields. , 2020, , .		1
7	Analog Error-Correcting Codes. IEEE Transactions on Information Theory, 2020, 66, 4075-4088.	2.4	10
8	On the Pointwise Threshold Behavior of the Binary Erasure Polarization Subchannels. IEEE Transactions on Information Theory, 2019, 65, 6044-6055.	2.4	2
9	The Capacity of Count-Constrained ICI-Free Systems. , 2019, , .		1
10	Analog Error-Correcting Codes. , 2019, , .		1
11	Fault-Tolerant Dot-Product Engines. IEEE Transactions on Information Theory, 2019, 65, 2046-2057.	2.4	18
12	On Spectral Design Methods for Quasi-Cyclic Codes. IEEE Transactions on Information Theory, 2019, 65, 2637-2647.	2.4	0
13	On Decoding Rank-Metric Codes Over Large Fields. IEEE Transactions on Information Theory, 2018, 64, 944-951.	2.4	2
14	Fault- Tolerant Dot-Product Engines. , 2018, , .		0
15	Construction of Sidon Spaces With Applications to Coding. IEEE Transactions on Information Theory, 2018, 64, 4412-4422.	2.4	26
16	On the Capacity of Generalized Ising Channels. IEEE Transactions on Information Theory, 2017, 63, 2338-2356.	2.4	13
17	On decoding rank-metric codes over large fields. , 2017, , .		0
18	Long Cyclic Codes Over GF(4) and GF(8) Better Than BCH Codes in the High-Rate Region. IEEE Transactions on Information Theory, 2017, 63, 150-158.	2.4	3

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19	On the pointwise threshold behavior of the binary erasure polarization subchannels. , 2017, , .		3
20	Long cyclic codes over GF(4) and GF(8) better than BCH codes in the high-rate region. , 2016, , .		0
21	On spectral design methods for quasi-cyclic codes. , 2016, , .		0
22	On the capacity of generalized Ising channels. , 2015, , .		4
23	Improved burst error correction via list decoding quasi-cyclic codes. , 2015, , .		2
24	New Bounds and Constructions for Granular Media Coding. IEEE Transactions on Information Theory, 2015, 61, 4227-4238.	2.4	4
25	New upper bounds for grain-correcting and grain-detecting codes. , 2014, , .		1
26	Bounds and Constructions for Granular Media Coding. IEEE Transactions on Information Theory, 2014, 60, 2010-2027.	2.4	6
27	Burst List Decoding of Interleaved Reed–Solomon Codes. IEEE Transactions on Information Theory, 2014, 60, 182-190.	2.4	2
28	Hamming-weight constrained coded arrays based on covering codes. , 2013, , .		1
29	On q-ary antipodal matchings and applications. , 2012, , .		0
30	Burst list decoding of interleaved Reed-Solomon codes. , 2012, , .		0
31	Low Complexity Two-Dimensional Weight-Constrained Codes. IEEE Transactions on Information Theory, 2012, 58, 3892-3899.	2.4	17
32	Two-Dimensional Maximum-Likelihood Sequence Detection Is NP Hard. IEEE Transactions on Information Theory, 2011, 57, 7661-7670.	2.4	11
33	Asymptotic enumeration of binary matrices with bounded row and column weights. , 2011, , .		6
34	Low complexity two-dimensional weight-constrained codes. , 2011, , .		7
35	Bounds and constructions for granular media coding. , 2011, , .		8
36	Bounds on the Rate of 2-D Bit-Stuffing Encoders. IEEE Transactions on Information Theory, 2010, 56, 2561-2567.	2.4	15

#	ARTICLE	IF	CITATIONS
37	Fixed-rate tiling encoders for 2-D constraints. , 2010, , .		3
38	On linear balancing sets. , 2009, , .		3
39	Defect-tolerant demultiplexer circuits based on threshold logic and coding. Nanotechnology, 2009, 20, 135201.	2.6	1
40	List Decoding of Burst Errors. IEEE Transactions on Information Theory, 2009, 55, 4179-4190.	2.4	9
41	Single-Exclusion Number and the Stopping Redundancy of MDS Codes. IEEE Transactions on Information Theory, 2009, 55, 4155-4166.	2.4	5
42	Concave programming upper bounds on the capacity of 2-D constraints. , 2009, , .		3
43	Probabilistic algorithm for finding roots of linearized polynomials. Designs, Codes, and Cryptography, 2008, 46, 17-23.	1.6	10
44	On the Hardness of Decoding the Galeâ€"Berlekamp Code. IEEE Transactions on Information Theory, 2008, 54, 1050-1060.	2.4	10
45	List decoding of burst errors. , 2008, , .		2
46	Two-dimensional constrained coding based on tiling. , 2008, , .		3
47	On the Hardness of Decoding the Gale-Berlekamp Code. , 2007, , .		0
48	Capacity Lower Bounds and Approximate Enumerative Coding for 2-D Constraints. , 2007, , .		7
49	Bounds on Single-Exclusion Numbers and Stopping Redundancy of MDS Codes. , 2007, , .		2
50	Bounds for Binary Codes With Narrow Distance Distributions. IEEE Transactions on Information Theory, 2007, 53, 2760-2768.	2.4	4
51	Resistor-logic demultiplexers for nanoelectronics based on constant-weight codes. Nanotechnology, 2006, 17, 1052-1061.	2.6	33
52	Spectral-Null Codes and Null Spaces of Hadamard Submatrices. Designs, Codes, and Cryptography, 1996, 9, 177-191.	1.6	3
53	Spectral-null codes and null spaces of Hadamard submatrices. Designs, Codes, and Cryptography, 1996, 9, 177-191.	1.6	4
54	Constructions of permutation arrays for certain scheduling cost measures. Random Structures and Algorithms, 1995, 6, 39-50.	1.1	12

#	Article	IF	Citations
55	Interpolation and Approximation of Sparse Multivariate Polynomials over $GF(2)$. SIAM Journal on Computing, 1991, 20, 291-314.	1.0	50