

Francesca Vatta

List of Publications by Year in descending order

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83
docs citations

83
times ranked

210
citing authors

#	ARTICLE	IF	CITATIONS
1	Some Notes on Rate-Compatible Punctured Turbo Codes (RCPTC) Design. IEEE Transactions on Communications, 2004, 52, 681-684.	7.8	33
2	Nonsystematic Turbo Codes. IEEE Transactions on Communications, 2005, 53, 1841-1849.	7.8	25
3	Geometrical Synthesis of Sparse Antenna Arrays Using Compressive Sensing for 5G IoT Applications. Sensors, 2020, 20, 350.	3.8	23
4	Design and performance analysis of a new class of rate compatible serially concatenated convolutional codes. IEEE Transactions on Communications, 2009, 57, 2280-2289.	7.8	20
5	3D Multi-Beam and Null Synthesis by Phase-Only Control for 5G Antenna Arrays. Electronics (Switzerland), 2019, 8, 656.	3.1	20
6	Low-complexity bound on irregular LDPC belief-propagation decoding thresholds using a Gaussian approximation. Electronics Letters, 2018, 54, 1038-1040.	1.0	19
7	Useful Mathematical Tools for Capacity Approaching Codes Design. IEEE Communications Letters, 2017, 21, 1949-1952.	4.1	18
8	Design of rate-compatible punctured turbo (RCPT) codes. , 0, , .		17
9	More Accurate Analysis of Sum-Product Decoding of LDPC Codes Using a Gaussian Approximation. IEEE Communications Letters, 2019, 23, 230-233.	4.1	17
10	Hybrid concatenated codes with asymptotically good distance growth. , 2008, , .		15
11	Analysis and design of rate compatible serial concatenated convolutional codes. , 2005, , .		13
12	Analysis and Design of Tuned Turbo Codes. IEEE Transactions on Information Theory, 2012, 58, 4796-4813.	2.4	12
13	Analysis and design of rate compatible LDPC codes. , 2016, , .		12
14	Properties and encoding aspects of direct product convolutional codes. , 2012, , .		10
15	Low complexity rate compatible puncturing patterns design for LDPC codes. , 2017, , .		10
16	On Rate-Compatible Punctured Turbo Codes Design. Eurasip Journal on Advances in Signal Processing, 2005, 2005, 1.	1.7	9
17	New explicitly invertible approximation of the function involved in LDPC codes density evolution analysis using a Gaussian approximation. Electronics Letters, 2019, 55, 1183-1186.	1.0	9
18	Performance Study of a Class of Irregular LDPC Codes through Low Complexity Bounds on Their Belief-Propagation Decoding Thresholds. , 2019, , .		9

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19	Rate-compatible punctured serial concatenated convolutional codes. , 0, , .		8
20	Physical AWGN Channel Emulator for Bit Error Rate Test of Digital Baseband Communication. Applied Mechanics and Materials, 2012, 241-244, 2491-2495.	0.2	8
21	Turbo Codes Construction for Robust Hybrid Multitransmission Schemes. Journal of Communications Software and Systems, 2017, 7, 128.	0.8	8
22	Design of rate-compatible punctured serial concatenated convolutional codes. , 2004, , .		7
23	Video quality estimation in wireless IP networks. ACM Transactions on Multimedia Computing, Communications and Applications, 2008, 4, 1-18.	4.3	7
24	Effects of Sectorization on Cellular Radio Systems Capacity with Different Traffic Loads. Wireless Personal Communications, 2002, 21, 269-288.	2.7	6
25	Robust, efficient and balanced (REB) rate-compatible puncturing schemes, for hybrid ARQ algorithms using turbo codes. , 2006, , .		6
26	A multimode voice communications system with source-matched error protection for mobile communications. , 0, , .		5
27	Capacity of cellular mobile radio systems. Electronics Letters, 1998, 34, 517.	1.0	5
28	Performance bounds of continuous and blockwise decoded turbo codes in Rician fading channel. Electronics Letters, 1998, 34, 1646.	1.0	5
29	Analysis and simulation of turbo codes performance over Rice fading channels. , 0, , .		5
30	Performance of Hybrid ARQ Schemes for the Mobile LEO Satellite Channel. Wireless Personal Communications, 2003, 24, 275-289.	2.7	5
31	Achievable performance of turbo codes over the correlated rician channel. IEEE Transactions on Communications, 2003, 51, 1-4.	7.8	5
32	Partially Systematic Rate-Compatible Punctured SCCCs. IEEE Communications Letters, 2004, 8, 241-243.	4.1	5
33	MMC05-3: Distortion Estimation Algorithms (DEAs) for Wireless Video Streaming. , 2006, , .		5
34	Improved union bounds on turbo codes performance. IET Communications, 2000, 147, 337.	1.0	4
35	Performance of hybrid ARQ schemes for the LEO satellite channel. , 0, , .		4
36	Tuned turbo codes. , 2008, , .		4

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37	3D Millimeter-Wave Peer-to-Peer Networks With Boundary Located Destination. IEEE Communications Letters, 2019, 23, 1227-1230.	4.1	4
38	Low Complexity Rate Compatible Puncturing Patterns Design for LDPC Codes. Journal of Communications Software and Systems, 2018, 14, .	0.8	4
39	Transmission of multimode and variable-rate encoded speech samples on packet switched radio networks handling wide band voice information. , 0, , .		3
40	Development of a test-bench for objective speech quality measurements under different simulated fading conditions. , 0, , .		3
41	Termination and tailbiting of direct product convolutional codes. , 2009, , .		3
42	Low-Complexity Phase-Only Scanning by Aperiodic Antenna Arrays. IEEE Antennas and Wireless Propagation Letters, 2019, 18, 966-970.	4.0	3
43	Estimation of the Bit Error Rate (BER) for Uplink Millimeter-Wave Line-of-Sight Communications. , 2019, , .		3
44	Energy-Constrained Uncoordinated Multiple Access for Next-Generation Networks. IEEE Open Journal of the Communications Society, 2020, 1, 1808-1819.	6.9	3
45	On the design of nonsystematic turbo codes. , 2003, , .		2
46	Nonsystematic turbo codes: Design and bounds on effective free distance. , 2008, , .		2
47	Termination and tailbiting of rate-k/n direct product convolutional codes. , 2010, , .		2
48	Turbo codes for quantum key distribution (QKD) applications. , 2011, , .		2
49	On the error statistics of turbo decoding for hybrid concatenated codes design. , 2017, , .		2
50	Role of the Product $\hat{\mu}^2(0)\hat{\mu}^2(1)$ in Determining LDPC Code Performance. Electronics (Switzerland), 2019, 8, 1515.	3.1	2
51	New Very Simply Explicitly Invertible Approximation of the Gaussian Q-Function. , 2019, , .		2
52	Gaussian Approach for the Synthesis of Periodic and Aperiodic Antenna Arrays: Method Review and Design Guidelines. Sensors, 2021, 21, 2343.	3.8	2
53	A Survey on Old and New Approximations to the Function $\tilde{I}^*(x)$ Involved in LDPC Codes Density Evolution Analysis Using a Gaussian Approximation. Information (Switzerland), 2021, 12, 212.	2.9	2
54	Energy-Constrained Design of Joint NOMA-Diversity Schemes with Imperfect Interference Cancellation. Sensors, 2021, 21, 4194.	3.8	2

#	ARTICLE	IF	CITATIONS
55	Performance Study of a Class of Irregular LDPC Codes Based on Their Weight Distribution Analysis. , 2019, , .		2
56	Video Distortion Estimation and Content-Aware QoS Strategies for Video Streaming over Wireless Networks. Advances in Wireless Technologies and Telecommunication Book Series, 0, , 377-406.	0.4	2
57	Software Implementation of Error Detection and Correction Against Single-Event Upsets. , 2020, , .		2
58	Performance evaluation of source-matched blockwise decoded convolutional codes for mobile communications. , 0, , .		1
59	Design of source-matched blockwise decoded convolutional codes for mobile communications. , 0, , .		1
60	A Multimode and Variable-Rate Voice Communications System with Source-Matched Error Protection for Mobile Communications. European Transactions on Telecommunications, 1999, 10, 523-536.	1.2	1
61	Turbo coded diversity system for mobile satellite communications. , 0, , .		1
62	Design of turbo codes using high rate nonsystematic convolutional encoders. , 0, , .		1
63	Performance enhancement of partially systematic rate-compatible SCCCs through puncturing design. , 0, , .		1
64	Applications of Video Distortion Estimation Algorithms for Efficient Video Streaming. , 2008, , .		1
65	Implementation of a burst error and burst erasure channel emulator using an FPGA architecture. , 2014, , .		1
66	Energy-Constrained NOMA with Packet Diversity for Slotted Aloha Systems. , 2020, , .		1
67	Impact of the Neighbor's Order on the Capacity of Millimeter-Wave Links with Poisson-Distributed Nodes in Line of Sight Conditions. , 2021, , .		1
68	A New Accurate Approximation of the Gaussian Q-Function with Relative Error Less Than 1 Thousandth in a Significant Domain. , 2021, , .		1
69	Low Complexity Bounds on a Class of Irregular LDPC Belief-Propagation Decoding Thresholds. , 2020, , .		1
70	Source-matched channel coding and networking techniques for mobile communications. , 0, , .		0
71	The new generation of coding techniques for wireless multimedia: a performance analysis and evaluation. , 0, , .		0
72	Performance evaluation of source-matched channel coding for mobile communications. , 0, , .		0

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73	Coding and Networking Techniques for Radio Networks. , 2002, , 285-299.		0
74	Spectral Efficiency of Cellular Mobile Radio Systems with Different Traffic Loads. AEU - International Journal of Electronics and Communications, 2002, 56, 99-107.	2.9	0
75	Comparison of some recent classes of turbo like codes for the upcoming DVB standards. , 2007, , .		0
76	Analysis and design of parallel concatenated channel codes for Quantum Key Distribution (QKD) applications. , 2010, , .		0
77	A Simple Method for Including the Antenna Pattern in Interfered Wireless Communications. , 2019, , .		0
78	On the Error Statistics of Turbo Decoding for Hybrid Concatenated Codes Design. Journal of Communications Software and Systems, 2019, 15, 202.	0.8	0
79	Comparison Between Deterministic and Stochastic Methods for the Synthesis of Aperiodic Arrays. , 2019, , .		0
80	Phase-Controlled Beam-Scanning of Arbitrary Antenna Arrays with Far-Field Fixed Nulls. , 2019, , .		0
81	Computational Complexity Analysis of Hamming Codes Polynomial Co-Decoding. , 2021, , .		0
82	Capacity. , 2001, , 419-463.		0
83	3D Poisson-Based Neighborhood Capacity Analysis for Millimeter Wave Communications. Sensors, 2022, 22, 2098.	3.8	0