

Luc Vandendorpe

List of Publications by Year in descending order

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101
papers

1,908
citations

257357

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101
all docs

101
docs citations

101
times ranked

1682
citing authors

#	ARTICLE	IF	CITATIONS
1	On the Number of RF Chains and Phase Shifters, and Scheduling Design With Hybrid Analog"Digital Beamforming. IEEE Transactions on Wireless Communications, 2016, 15, 3311-3326.	6.1	187
2	Iterative Resource Allocation for Maximizing Weighted Sum Min-Rate in Downlink Cellular OFDMA Systems. IEEE Transactions on Signal Processing, 2011, 59, 223-234.	3.2	148
3	MIMO Relay Design for Multipoint-to-Multipoint Communications With Imperfect Channel State Information. IEEE Transactions on Signal Processing, 2009, 57, 2785-2796.	3.2	123
4	Optimization of MIMO Relays for Multipoint-to-Multipoint Communications: Nonrobust and Robust Designs. IEEE Transactions on Signal Processing, 2010, 58, 6355-6368.	3.2	77
5	On the SCALE Algorithm for Multiuser Multicarrier Power Spectrum Management. IEEE Transactions on Signal Processing, 2012, 60, 4992-4998.	3.2	65
6	Weighted Sum Rate Optimization for Downlink Multiuser MIMO Coordinated Base Station Systems: Centralized and Distributed Algorithms. IEEE Transactions on Signal Processing, 2012, 60, 1876-1889.	3.2	60
7	Cooperative Relaying With State Available Noncausally at the Relay. IEEE Transactions on Information Theory, 2010, 56, 2272-2298.	1.5	57
8	Comparison of EM-Based Algorithms for MIMO Channel Estimation. IEEE Transactions on Communications, 2007, 55, 216-226.	4.9	51
9	Sum Rate Maximized Resource Allocation in Multiple DF Relays Aided OFDM Transmission. IEEE Journal on Selected Areas in Communications, 2011, 29, 1559-1571.	9.7	48
10	Robust Transceiver Optimization for Downlink Multiuser MIMO Systems. IEEE Transactions on Signal Processing, 2011, 59, 446-453.	3.2	42
11	Secure Degrees of Freedom of MIMO X-Channels With Output Feedback and Delayed CSIT. IEEE Transactions on Information Forensics and Security, 2013, 8, 1760-1774.	4.5	37
12	Max-Min SNR Signal Energy Based Spectrum Sensing Algorithms for Cognitive Radio Networks with Noise Variance Uncertainty. IEEE Transactions on Wireless Communications, 2014, 13, 280-290.	6.1	37
13	Bit and Power Allocation for Goodput Optimization in Coded Parallel Subchannels With ARQ. IEEE Transactions on Signal Processing, 2008, 56, 3652-3661.	3.2	36
14	WSR Maximized Resource Allocation in Multiple DF Relays Aided OFDMA Downlink Transmission. IEEE Transactions on Signal Processing, 2011, 59, 3964-3976.	3.2	36
15	Power Constrained Linear Estimation in Wireless Sensor Networks With Correlated Data and Digital Modulation. IEEE Transactions on Signal Processing, 2012, 60, 570-584.	3.2	36
16	A Theoretical Framework for Iterative Synchronization Based on the Sum"Product and the Expectation-Maximization Algorithms. IEEE Transactions on Signal Processing, 2007, 55, 1644-1658.	3.2	34
17	On the Optimum Energy Efficiency for Flat-Fading Channels with Rate-dependent Circuit Power. IEEE Transactions on Communications, 2013, 61, 4910-4921.	4.9	34
18	Outage Probability and Energy Efficiency of Cooperative MIMO with Antenna Selection. IEEE Transactions on Wireless Communications, 2013, 12, 5896-5907.	6.1	34

#	ARTICLE	IF	CITATIONS
19	Multiple classifier combination for face-based identity verification. <i>Pattern Recognition</i> , 2004, 37, 1459-1469.	5.1	33
20	Secure Communication Over Parallel Relay Channel. <i>IEEE Transactions on Information Forensics and Security</i> , 2012, 7, 359-371.	4.5	32
21	Weighted Sum Rate Maximization for Downlink OFDMA With Subcarrier-Pair Based Opportunistic DF Relaying. <i>IEEE Transactions on Signal Processing</i> , 2013, 61, 2512-2524.	3.2	31
22	Compute-and-Forward on a Multiaccess Relay Channel: Coding and Symmetric-Rate Optimization. <i>IEEE Transactions on Wireless Communications</i> , 2014, 13, 1932-1947.	6.1	31
23	Power Minimization for OFDM Transmission with Subcarrier-Pair Based Opportunistic DF Relaying. <i>IEEE Communications Letters</i> , 2013, 17, 471-474.	2.5	29
24	On Maximum-Likelihood Timing Synchronization. <i>IEEE Transactions on Communications</i> , 2007, 55, 1116-1119.	4.9	25
25	About the diversity in cyclic prefixed single-carrier systems. <i>Physical Communication</i> , 2008, 1, 266-276.	1.2	25
26	Image-based multimodal face authentication. <i>Signal Processing</i> , 1998, 69, 59-79.	2.1	24
27	Wide-Band Sensing and Optimization for Cognitive Radio Networks With Noise Variance Uncertainty. <i>IEEE Transactions on Communications</i> , 2015, 63, 1091-1105.	4.9	24
28	Link Resource Adaptation for Multiantenna Bit-Interleaved Coded Multicarrier Systems. <i>IEEE Transactions on Signal Processing</i> , 2012, 60, 3644-3656.	3.2	23
29	Power Control in Networks With Heterogeneous Users: A Quasi-Variational Inequality Approach. <i>IEEE Transactions on Signal Processing</i> , 2015, 63, 5691-5705.	3.2	22
30	Energy-Saving UAV-Assisted Multiuser Communications With Massive MIMO Hybrid Beamforming. <i>IEEE Communications Letters</i> , 2020, 24, 1100-1104.	2.5	22
31	Weighted Spectral Efficiency Optimization for Hybrid Beamforming in Multiuser Massive MIMO-OFDM Systems. <i>IEEE Transactions on Vehicular Technology</i> , 2019, 68, 9698-9712.	3.9	21
32	Coding Schemes for Relay-Assisted Information Embedding. <i>IEEE Transactions on Information Forensics and Security</i> , 2009, 4, 70-85.	4.5	20
33	Aligning the Light Without Channel State Information for Visible Light Communications. <i>IEEE Journal on Selected Areas in Communications</i> , 2018, 36, 91-105.	9.7	20
34	Distributed Dynamic Resource Allocation for Cooperative Cognitive Radio Networks With Multi-Antenna Relay Selection. <i>IEEE Transactions on Wireless Communications</i> , 2017, 16, 1236-1249.	6.1	19
35	A Semi-Analytical Method for Predicting the Performance and Convergence Behavior of a Multiuser Turbo-Equalizer/Demapper. <i>IEEE Transactions on Signal Processing</i> , 2007, 55, 1104-1117.	3.2	17
36	A Blind Equalization Algorithm Based on Minimization of Normalized Variance for DS/CDMA Communications. <i>IEEE Transactions on Vehicular Technology</i> , 2008, 57, 3453-3461.	3.9	17

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37	An Energy-Efficient Fine-Grained Deep Neural Network Partitioning Scheme for Wireless Collaborative Fog Computing. IEEE Access, 2021, 9, 79611-79627.	2.6	16
38	Statistics of the MLE and Approximate Upper and Lower Bounds—Part I: Application to TOA Estimation. IEEE Transactions on Signal Processing, 2014, 62, 5663-5676.	3.2	15
39	Block error-correcting codes for systems with a very high BER: Theoretical analysis and application to the protection of watermarks. Signal Processing: Image Communication, 2002, 17, 409-421.	1.8	13
40	Antenna Selection for Energy Efficient MISO Systems. IEEE Communications Letters, 2017, 21, 2758-2761.	2.5	13
41	Local CSI Based Selection Beamforming for Amplify-and-Forward MIMO Relay Networks. IEEE Transactions on Signal Processing, 2012, 60, 2433-2446.	3.2	12
42	An Ultra-Low Power Ultra-Wide Bandwidth Positioning System. IEEE Journal of Radio Frequency Identification, 2020, 4, 353-364.	1.5	12
43	Performance analysis of linear receivers in a MIMO relaying system. IEEE Communications Letters, 2009, 13, 330-332.	2.5	11
44	Subcarrier Allocation and Precoder Design for Energy Efficient MIMO-OFDMA Downlink Systems. IEEE Transactions on Communications, 2016, , 1-1.	4.9	11
45	Design and Performance of Space-Time Codes for Spatially Correlated MIMO Channels. IEEE Transactions on Communications, 2007, 55, 64-68.	4.9	10
46	Compute-and-Forward on a Multi-User Multi-Relay Channel. IEEE Wireless Communications Letters, 2014, 3, 589-592.	3.2	10
47	Energy efficient precoder design for MIMO-OFDM with rate-dependent circuit power. , 2015, , .		10
48	Optimum quality and progressive resolution of video signals. Annales Des Telecommunications/Annals of Telecommunications, 1990, 45, 487-502.	1.6	9
49	Joint source-channel codes based on irregular turbo codes and variable length codes. IEEE Transactions on Communications, 2008, 56, 1824-1835.	4.9	9
50	Bit rate comparison of adaptive OFDM and cyclic prefixed single-carrier with DFE. IEEE Communications Letters, 2009, 13, 838-840.	2.5	9
51	Multipath Multiplexing for Capacity Enhancement in SIMO Wireless Systems. IEEE Transactions on Wireless Communications, 2017, 16, 6895-6911.	6.1	8
52	Hybrid Beamforming Design for Multiuser Massive MIMO-OFDM Systems. , 2018, , .		8
53	Power Allocation for Energy Efficient Multiple Antenna Systems with Joint Total and Per-Antenna Power Constraints. IEEE Transactions on Communications, 2018, , 1-1.	4.9	8
54	Performances of linear tools and models for error detection and concealment in subband image transmission. IEEE Transactions on Image Processing, 2002, 11, 518-529.	6.0	7

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55	On Signal-to-Noise Ratio-Assisted Crosstalk Channel Estimation in Downstream DSL Systems. IEEE Transactions on Signal Processing, 2010, 58, 2327-2338.	3.2	7
56	Pilot Contamination Mitigation for Wideband Massive MIMO Systems. IEEE Transactions on Communications, 2019, 67, 7889-7906.	4.9	7
57	Goodput-Based Link Resource Adaptation for Reliable Packet Transmissions in BIC-OFDM Cognitive Radio Networks. IEEE Transactions on Signal Processing, 2013, 61, 2267-2281.	3.2	6
58	A blind interference alignment scheme for practical channels. , 2016, , .		6
59	On Joint Cooperative Relaying, Resource Allocation, and Scheduling for Mobile Edge Computing Networks. IEEE Transactions on Communications, 2022, 70, 5882-5897.	4.9	6
60	Human visual weighted quantization : a unified approach for subband and pyramidal image coders. Annales Des Telecommunications/Annals of Telecommunications, 1992, 47, 282-292.	1.6	5
61	Fractionally spaced linear and DF MIMO equalizers for multitone systems without guard time. Annales Des Telecommunications/Annals of Telecommunications, 1997, 52, 21-30.	1.6	5
62	Decision feedback multiuser detection for multitone CDMA. European Transactions on Telecommunications, 1997, 8, 67-78.	1.2	5
63	MAP-Based Code-Aided Hypothesis Testing. IEEE Transactions on Wireless Communications, 2008, 7, 2856-2860.	6.1	5
64	Code-Aided Maximum-Likelihood Ambiguity Resolution Through Free-Energy Minimization. IEEE Transactions on Signal Processing, 2010, 58, 6238-6250.	3.2	5
65	Linear Transceiver Design for Downlink Multiuser MIMO Systems: Downlink-Interference Duality Approach. IEEE Transactions on Signal Processing, 2013, 61, 4686-4700.	3.2	5
66	Weighted Sum-SINR and Fairness Optimization for SWIPT-Multigroup Multicasting Systems With Heterogeneous Users. IEEE Open Journal of the Communications Society, 2020, 1, 1470-1484.	4.4	5
67	Low-Complexity LMMSE-SIC Turbo Receiver for Continuous Phase Modulation, Based on a Multiaccess Multipath Analogy. IEEE Transactions on Communications, 2020, 68, 7672-7686.	4.9	5
68	A Cram�r-Rao Bound Characterization of the EM-Algorithm Mean Speed of Convergence. IEEE Transactions on Signal Processing, 2008, 56, 2218-2228.	3.2	4
69	Resource allocation for multicarrier cooperative cognitive radio networks with imperfect channel state information. , 2014, , .		4
70	Resource Allocation via Max-Min Goodput Optimization for BIC-OFDMA Systems. IEEE Transactions on Communications, 2016, 64, 2412-2426.	4.9	4
71	On the Effect of Blockage Objects in Dense MIMO SWIPT Networks. IEEE Transactions on Communications, 2019, 67, 1059-1069.	4.9	4
72	Rate Maximizing Online Power Allocation at Energy Harvesting Transmitter for Multiple Receivers. , 2020, , .		4

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73	(Sell ₁ ,ell ₂)-RIP and Projected Back-Projection Reconstruction for Phase-Only Measurements. IEEE Signal Processing Letters, 2020, 27, 396-400.	2.1	4
74	A comparison between chip fractional and non-fractional sampling for a direct sequence CDMA receiver. IEEE Transactions on Signal Processing, 2002, 50, 1713-1723.	3.2	3
75	An ultra-low-power frequency-tunable UWB pulse generator using 65nm CMOS technology. , 2010, , .		3
76	Statistics of the MLE and Approximate Upper and Lower Boundsâ€œPart II: Threshold Computation and Optimal Pulse Design for TOA Estimation. IEEE Transactions on Signal Processing, 2014, 62, 5677-5689.	3.2	3
77	Resource allocation and subcarrier pairing in energy efficient relay-assisted OFDMA downlink systems. , 2017, , .		3
78	Degrees of Freedom of 2-Tier Networks Without Channel State Information at the Transmitter. IEEE Signal Processing Letters, 2019, 26, 382-386.	2.1	3
79	Energy-Efficient Edge-Facilitated Wireless Collaborative Computing using Map-Reduce. , 2019, , .		3
80	A Fractionally Spaced Decision Feedback Joint Detection Proposal for Multi Carrier CDMA. European Transactions on Telecommunications, 1999, 10, 407-416.	1.2	2
81	Performance Bounds and Distance Spectra of Variable Length Codes in Turbo/Concatenated Systems. IEEE Transactions on Communications, 2010, 58, 2537-2548.	4.9	2
82	Impact of Variable Length Codes on the Interleaving Gain of Turbo Systems: The Concept of Bounded Spectrum. IEEE Transactions on Communications, 2011, 59, 1796-1806.	4.9	2
83	Goodput-maximizing resource allocation in cognitive Radio BIC-OFDM systems with DF relay selection. , 2015, , .		2
84	Energy efficient power allocation and relay selection in MIMO relay channels. , 2016, , .		2
85	Interference Management for K -Tier Networks Without CSIT Based on Reconfigurable Antennas. IEEE Transactions on Communications, 2021, 69, 8068-8084.	4.9	2
86	Online Power Allocation at Energy Harvesting Transmitter for Multiple Receivers With and Without Individual Rate Constraints for OMA and NOMA Transmissions. IEEE Transactions on Green Communications and Networking, 2021, 5, 1594-1609.	3.5	2
87	Analysis of CRLB for AoA estimation in Massive MIMO systems. , 2021, , .		2
88	Hybrid slow frequency hopping/ direct sequence spread spectrum indoor communication systems with QPSK modulation. Annales Des Telecommunications/Annals of Telecommunications, 1994, 49, 518-526.	1.6	1
89	Image processing for multimedia terminals and related architectures. Signal Processing, 2000, 80, 1167-1183.	2.1	1
90	Optimal precoder design for MIMO-OFDM: Understanding the role of power amplifiers and nonlinear distortion noise. , 2016, , .		1

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91	Energy efficient resource allocation in MIMO-OFDMA downlink systems. , 2016, , .		1
92	Can the Use of Reconfigurable Antennas Overcome the CSI Bottleneck for FDD Massive MIMO?. , 2017, , .		1
93	A Multiple-Relay Communication Protocol for Achieving Fairness in Dense Networks. IEEE Access, 2018, 6, 6740-6754.	2.6	1
94	Leveraging User-Diversity in Energy-Efficient Edge-Facilitated Collaborative Fog Computing. IEEE Access, 2021, 9, 95636-95650.	2.6	1
95	Iterative ToA-Based Localization of Wireless Transmitters Using Dirichlet-Kernel-Based Range Representation. , 2021, , .		1
96	Self-Synchronization Based Localization of a Time-Misaligned Transmitter in Cellular Networks. IEEE Transactions on Vehicular Technology, 2022, 71, 4102-4115.	3.9	1
97	Energy Efficiency of Angle of Arrival Estimation in Massive MIMO Systems. IEEE Transactions on Communications, 2022, 70, 4175-4188.	4.9	1
98	Accurate modeling of the predicted $\hat{\rho}$ ESM-based link performance metric for BIC-OFDM systems. , 2015, , .		0
99	Localization of Rotating Targets Using a Monochromatic Continuous-Wave Radar. IEEE Antennas and Wireless Propagation Letters, 2017, 16, 2598-2601.	2.4	0
100	Clustering and Power Optimization for NOMA Multi-Objective Problems. , 2020, , .		0
101	On the Performance of SWIPT MEC Systems in the Presence of Spatially Correlated Shadowing. , 2020, , .		0