Angelo Coluccia

List of Publications by Year in descending order

98 papers	1,646 citations	331259 21 h-index	377514 34 g-index
98 all docs	98 docs citations	98 times ranked	1358 citing authors

#	Article	IF	Citations
1	On the Hybrid TOA/RSS Range Estimation in Wireless Sensor Networks. IEEE Transactions on Wireless Communications, 2018, 17, 361-371.	6.1	91
2	Angle of Arrival-Based Cooperative Positioning for Smart Vehicles. IEEE Transactions on Intelligent Transportation Systems, 2018, 19, 2880-2892.	4.7	79
3	Detection and Classification of Multirotor Drones in Radar Sensor Networks: A Review. Sensors, 2020, 20, 4172.	2.1	72
4	RSS-Based Localization via Bayesian Ranging and Iterative Least Squares Positioning. IEEE Communications Letters, 2014, 18, 873-876.	2.5	66
5	A Localization Algorithm Based on V2I Communications and AOA Estimation. IEEE Signal Processing Letters, 2017, 24, 126-130.	2.1	60
6	Drone vs. Bird Detection: Deep Learning Algorithms and Results from a Grand Challenge. Sensors, 2021, 21, 2824.	2.1	56
7	On ML estimation for automatic RSS-based indoor localization. , 2010, , .		55
8	Millimeter-Wave Downlink Positioning With a Single-Antenna Receiver. IEEE Transactions on Wireless Communications, 2019, 18, 4479-4490.	6.1	55
9	A Cognitive Algorithm for Received Signal Strength Based Localization. IEEE Transactions on Signal Processing, 2015, 63, 1726-1736.	3.2	53
10	A review of DoS attack models for 3G cellular networks from a system-design perspective. Computer Communications, 2010, 33, 551-558.	3.1	49
11	A Distribution-Based Approach to Anomaly Detection and Application to 3G Mobile Traffic. , 2009, , .		47
12	Challenge. , 2010, , .		46
13	Generalized Likelihood Ratio Test for Detection of Gaussian Rank-One Signals in Gaussian Noise With Unknown Statistics. IEEE Transactions on Signal Processing, 2017, 65, 1082-1092.	3.2	40
14	Reduced-Bias ML-Based Estimators with Low Complexity for Self-Calibrating RSS Ranging. IEEE Transactions on Wireless Communications, 2013, 12, 1220-1230.	6.1	39
15	Distribution-based anomaly detection via generalized likelihood ratio test: A general Maximum Entropy approach. Computer Networks, 2013, 57, 3446-3462.	3.2	39
16	Positioning Based on Signals of Opportunity. IEEE Communications Letters, 2014, 18, 356-359.	2.5	39
17	A Review of Advanced Localization Techniques for Crowdsensing Wireless Sensor Networks. Sensors, 2019, 19, 988.	2.1	38
18	Hybrid TOA/RSS Range-Based Localization with Self-Calibration in Asynchronous Wireless Networks. Journal of Sensor and Actuator Networks, 2019, 8, 31.	2.3	37

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19	Drone-vs-Bird Detection Challenge at IEEE AVSS2019. , 2019, , .		37
20	RIS-Aided Joint Localization and Synchronization With a Single-Antenna Receiver: Beamforming Design and Low-Complexity Estimation. IEEE Journal on Selected Topics in Signal Processing, 2022, 16, 1141-1156.	7.3	30
21	CFAR Feature Plane: A Novel Framework for the Analysis and Design of Radar Detectors. IEEE Transactions on Signal Processing, 2020, 68, 3903-3916.	3.2	29
22	Distribution-based anomaly detection in 3G mobile networks: from theory to practice. International Journal of Network Management, 2010, 20, 245-269.	1.4	28
23	Downlink Single-Snapshot Localization and Mapping With a Single-Antenna Receiver. IEEE Transactions on Wireless Communications, 2021, 20, 4672-4684.	6.1	28
24	RIS-Aided Joint Localization and Synchronization with a Single-Antenna Mmwave Receiver. , 2021, , .		27
25	ABORT-Like Detection Strategies to Combat Possible Deceptive ECM Signals in a Network of Radars. IEEE Transactions on Signal Processing, 2015, 63, 2904-2914.	3.2	26
26	A Pseudo Maximum likelihood approach to position estimation in dynamic multipath environments. Signal Processing, 2021, 181, 107907.	2.1	24
27	A Methodological Overview on Anomaly Detection. Lecture Notes in Computer Science, 2013, , 148-183.	1.0	21
28	A k-nearest neighbors approach to the design of radar detectors. Signal Processing, 2020, 174, 107609.	2.1	20
29	On the optimality of max–min fairness in resource allocation. Annales Des Telecommunications/Annals of Telecommunications, 2012, 67, 15-26.	1.6	19
30	Drone-vs-Bird Detection Challenge at IEEE AVSS2021. , 2021, , .		19
31	Drone-vs-Bird detection challenge at IEEE AVSS2017. , 2017, , .		18
32	ABORT-Like Detectors: A Bayesian Approach. IEEE Transactions on Signal Processing, 2015, 63, 5274-5284.	3.2	16
33	Low-Complexity Accurate Mmwave Positioning for Single-Antenna Users Based on Angle-of-Departure and Adaptive Beamforming. , 2020, , .		16
34	A KNN-Based Radar Detector for Coherent Targets in Non-Gaussian Noise. IEEE Signal Processing Letters, 2021, 28, 778-782.	2.1	16
35	Maximum Likelihood trajectory estimation of a mobile node from RSS measurements. , 2012, , .		15
36	A Tunable W-ABORT-Like Detector with Improved Detection vs Rejection Capabilities Trade-Off. IEEE Signal Processing Letters, 2015, 22, 713-717.	2.1	14

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37	A software-defined radio tool for experimenting with RSS measurements in IEEE 802.15.4: implementation and applications. International Journal of Sensor Networks, 2013, 14, 144.	0.2	12
38	CRLB for I/Q Imbalance Estimation in FMCW Radar Receivers. IEEE Signal Processing Letters, 2016, 23, 1707-1711.	2.1	12
39	On the Role of Flows and Sessions in Internet Traffic Modeling: An Explorative Toy-Model. , 2009, , .		11
40	Spectrum sensing by higher-order SVM-based detection. , 2019, , .		11
41	A Software-Defined Radio Tool for Experimenting with RSS Measurements in IEEE 802.15.4: Implementation and Applications. , 2012, , .		10
42	Regularized Covariance Matrix Estimation via Empirical Bayes. IEEE Signal Processing Letters, 2015, 22, 2127-2131.	2.1	10
43	Design of Robust Radar Detectors Through Random Perturbation of the Target Signature. IEEE Transactions on Signal Processing, 2019, 67, 5118-5129.	3.2	10
44	Channel Gain Lower Bound for IRS-Assisted UAV-Aided Communications. IEEE Communications Letters, 2021, 25, 3805-3809.	2.5	10
45	A GLRT-like CFAR detector for heterogeneous environments. Signal Processing, 2022, 194, 108401.	2.1	10
46	Low-Complexity Downlink Channel Estimation in mmWave Multiple-Input Single-Output Systems. IEEE Wireless Communications Letters, 2022, 11, 518-522.	3.2	10
47	Distributed estimation of binary event probabilities via hierarchical Bayes and dual decomposition. , 2013, , .		9
48	TDOA Localization in Asynchronous WSNs. , 2014, , .		9
49	Adaptive Radar Detectors for Point-Like Gaussian Targets in Gaussian Noise. IEEE Transactions on Aerospace and Electronic Systems, 2017, 53, 1284-1294.	2.6	8
50	A novel approach to robust radar detection of range-spread targets. Signal Processing, 2020, 166, 107223.	2.1	8
51	A Bayesian Framework for Distributed Estimation of Arrival Rates in Asynchronous Networks. IEEE Transactions on Signal Processing, 2016, 64, 3984-3996.	3.2	7
52	Robust CFAR Radar Detection Using a K-nearest Neighbors Rule. , 2020, , .		7
53	Explorative analysis of one-way delays in a mobile 3G network. , 2008, , .		6
54	On Robust Estimation of Network-Wide Packet Loss in 3G Cellular Networks. , 2009, , .		6

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55	Bayesian Estimation of Network-Wide Mean Failure Probability in 3G Cellular Networks. Lecture Notes in Computer Science, 2011, , 167-178.	1.0	6
56	On the Expected Value and Higher-Order Moments of the Euclidean Norm for Elliptical Normal Variates. IEEE Communications Letters, 2013, 17, 2364-2367.	2.5	6
57	Distributed Bayesian estimation of arrival rates in asynchronous monitoring networks. , 2014, , .		6
58	RSS-based localization in non-homogeneous environments. , 2014, , .		6
59	Improving Localization by Testing Mobility. IEEE Transactions on Signal Processing, 2019, 67, 3412-3423.	3.2	6
60	On the Use of TCP Passive Measurements for Anomaly Detection: A Case Study from an Operational 3G Network. Lecture Notes in Computer Science, 2010, , 183-197.	1.0	6
61	Interaction-Based Distributed Learning in Cyber-Physical and Social Networks. IEEE Transactions on Automatic Control, 2020, 65, 223-236.	3.6	5
62	Acoustic Dual-Function Communication and Echo-Location in Inaudible Band. Sensors, 2022, 22, 1284.	2.1	5
63	Cramér-Rao Bound Analysis of Radars for Extended Vehicular Targets With Known and Unknown Shape. IEEE Transactions on Signal Processing, 2022, 70, 3280-3295.	3.2	5
64	Robust estimation of the mean probability of binary events: A low-complexity minimax approach. , 2013, , .		4
65	A Hierarchical Bayes Approach for Distributed Binary Classification in Cyber-Physical and Social Networks. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2014, 47, 7406-7411.	0.4	4
66	Robust Opportunistic Inference From Non-Homogeneous Distribution-Free Measurements. IEEE Transactions on Signal Processing, 2016, 64, 3945-3954.	3.2	4
67	Radar detection in K-distributed clutter plus thermal noise based on KNN methods. , 2019, , .		4
68	Crowdsensing networks in the IoT age. Transactions on Emerging Telecommunications Technologies, 2019, 30, e3621.	2.6	4
69	Distribution-Based Anomaly Detection in Network Traffic. Lecture Notes in Computer Science, 2013, , 202-216.	1.0	3
70	A radar network based W-ABORT approach to counteract deceptive ECM signals. , 2014, , .		3
71	Improved estimation of instantaneous arrival rates via Empirical Bayes. , 2014, , .		3
72	Robust estimation of mean failure probability in access networks. Computer Networks, 2014, 73, 282-301.	3.2	3

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73	On the estimation of link delay distributions by cumulant-based moment matching. Internet Technology Letters, 2018, 1, e11.	1.4	3
74	An Empirical Bayes Approach for Distributed Estimation of Spatial Fields. , 2018, , .		3
75	Online Estimation and Smoothing of a Target Trajectory in Mixed Stationary/moving Conditions. , 2019, , .		3
76	5G multi-BS Positioning with a Single-Antenna Receiver. , 2020, , .		3
77	RSS-based localization of a moving node in homogeneous environments. , 2015, , .		2
78	An alternative procedure to cumulative sum for cyber-physical attack detection. Internet Technology Letters, 2018, 1, e2.	1.4	2
79	A change-detection approach to mobile node localization in bounded domains. , 2018, , .		2
80	On the probabilistic modeling of fake news (hoax) persistency in online social networks and the role of debunking and filtering. Internet Technology Letters, 2020, 3, e204.	1.4	2
81	Adaptive Radar Detection Without Secondary Data for Uncooperative Spectrum Sharing Scenarios. IEEE Transactions on Signal Processing, 2021, 69, 3206-3219.	3.2	2
82	On the sum of random samples with bounded Pareto distribution. Signal Processing, 2022, 192, 108389.	2.1	2
83	One-way loss measurements from IPFIX records. , 2011, , .		1
84	SINR base station placement and mobile association games under cooperation. , 2012, , .		1
85	Rethinking Stream Ciphers: Can Extracting be Better than Expanding?. Wireless Personal Communications, 2013, 73, 77-94.	1.8	1
86	A test of homogeneity for RSS measurements within a wireless sensor network. , 2014, , .		1
87	A random-signal approach to robust radar detection. , 2018, , .		1
88	Bayesian Identification of Distributed Vector AutoRegressive Processes. , 2019, , .		1
89	Direct Position Estimation of a Mobile Receiver in Multipath Environments via Adaptive Beamforming. , 2021, , .		1
90	Distributed Learning from Interactions in Social Networks. , 2018, , .		1

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91	On time-frequency correlation in spectrogram samples with application to target detection. Signal Processing, 2022, 200, 108648.	2.1	1
92	Rethinking Stream Ciphers: Can Extracting Be Better Than Expanding?. , 2012, , .		0
93	Non-idealities compensation in full-digital receivers with application to Ultra-Wide Band. , 2013, , .		0
94	Non-idealities Compensation in Full-Digital Receivers with Application to Ultra-Wide Band. Wireless Personal Communications, 2014, 78, 671-686.	1.8	0
95	A Bayesian approach to orthogonal rejection tests. , 2015, , .		0
96	On the statistics of the orbital residuals of the LAGEOS satellites. Modern Physics Letters A, 2015, 30, 1550091.	0.5	0
97	A Low-Complexity Approach for Improving the Accuracy of Sensor Networks. International Journal of Distributed Sensor Networks, 2015, 11, 521948.	1.3	0
98	Multi-Channel and Multi-Agent Signal Processing. Applied Sciences (Switzerland), 2022, 12, 1851.	1.3	0