

# Wei Fan

## List of Publications by Year in descending order

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121  
papers

1,817  
citations

304743

22  
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345221

36  
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121  
all docs

121  
docs citations

121  
times ranked

1082  
citing authors

#	ARTICLE	IF	CITATIONS
1	Over-the-Air Radiated Testing of Millimeter-Wave Beam-Steerable Devices in a Cost-Effective Measurement Setup. IEEE Communications Magazine, 2018, 56, 64-71.	6.1	132
2	A Step Toward 5G in 2020: Low-cost OTA performance evaluation of massive MIMO base stations. IEEE Antennas and Propagation Magazine, 2017, 59, 38-47.	1.4	101
3	Emulating Spatial Characteristics of MIMO Channels for OTA Testing. IEEE Transactions on Antennas and Propagation, 2013, 61, 4306-4314.	5.1	87
4	Measured wideband characteristics of indoor channels at centimetric and millimetric bands. Eurasip Journal on Wireless Communications and Networking, 2016, 2016, .	2.4	72
5	On Radiated Performance Evaluation of Massive MIMO Devices in Multiprobe Anechoic Chamber OTA Setups. IEEE Transactions on Antennas and Propagation, 2018, 66, 5485-5497.	5.1	61
6	Millimeter Wave Multi-User Performance Evaluation Based on Measured Channels With Virtual Antenna Array Channel Sounder. IEEE Access, 2018, 6, 12318-12326.	4.2	50
7	On Dimensions of OTA Setups for Massive MIMO Base Stations Radiated Testing. IEEE Access, 2016, 4, 5971-5981.	4.2	45
8	Split-Ring Resonator-Loaded Baffles for Decoupling of Dual-Polarized Base Station Array. IEEE Antennas and Wireless Propagation Letters, 2020, 19, 1828-1832.	4.0	44
9	Emulating Ray-Tracing Channels in Multiprobe Anechoic Chamber Setups for Virtual Drive Testing. IEEE Transactions on Antennas and Propagation, 2016, 64, 730-739.	5.1	37
10	Wideband MIMO Channel Capacity Analysis in Multiprobe Anechoic Chamber Setups. IEEE Transactions on Vehicular Technology, 2016, 65, 2861-2871.	6.3	36
11	MIMO Terminal Performance Evaluation With a Novel Wireless Cable Method. IEEE Transactions on Antennas and Propagation, 2017, 65, 4803-4814.	5.1	35
12	Probe Selection in Multiprobe OTA Setups. IEEE Transactions on Antennas and Propagation, 2014, 62, 2109-2120.	5.1	34
13	Dynamic Channel Modeling for Indoor Millimeter-Wave Propagation Channels Based on Measurements. IEEE Transactions on Communications, 2020, 68, 5878-5891.	7.8	34
14	On Channel Emulation Methods in Multiprobe Anechoic Chamber Setups for Over-the-Air Testing. IEEE Transactions on Vehicular Technology, 2018, 67, 6740-6751.	6.3	32
15	Experimental Characterization of Millimeter-Wave Indoor Propagation Channels at 28 GHz. IEEE Access, 2018, 6, 76516-76526.	4.2	30
16	A Complexity-Efficient High Resolution Propagation Parameter Estimation Algorithm for Ultra-Wideband Large-Scale Uniform Circular Array. IEEE Transactions on Communications, 2019, 67, 5862-5874.	7.8	29
17	Improved Over-the-Air Phased Array Calibration Based on Measured Complex Array Signals. IEEE Antennas and Wireless Propagation Letters, 2019, 18, 1174-1178.	4.0	28
18	Empirical Study of Near Ground Propagation in Forest Terrain for Internet-of-Things Type Device-to-Device Communication. IEEE Access, 2018, 6, 54052-54063.	4.2	26

#	ARTICLE	IF	CITATIONS
19	Throughput Modeling and Validations for MIMO-OTA Testing With Arbitrary Multipath. IEEE Antennas and Wireless Propagation Letters, 2018, 17, 637-640.	4.0	25
20	A Channel Sounder for Massive MIMO and MmWave Channels. IEEE Communications Magazine, 2018, 56, 67-73.	6.1	25
21	Design and Implementation of a Wideband Dual-Polarized Plane Wave Generator With Tapered Feeding Nonuniform Array. IEEE Antennas and Wireless Propagation Letters, 2020, 19, 1988-1992.	4.0	24
22	On Angular Sampling Methods for 3-D Spatial Channel Models. IEEE Antennas and Wireless Propagation Letters, 2015, 14, 531-534.	4.0	23
23	Frequency-Invariant Uniform Circular Array for Wideband mm-Wave Channel Characterization. IEEE Antennas and Wireless Propagation Letters, 2017, 16, 641-644.	4.0	23
24	Phase-Compensated Optical Fiber-Based Ultrawideband Channel Sounder. IEEE Transactions on Microwave Theory and Techniques, 2020, 68, 636-647.	4.6	23
25	Channel Characterization for Wideband Large-Scale Antenna Systems Based on a Low-Complexity Maximum Likelihood Estimator. IEEE Transactions on Wireless Communications, 2018, 17, 6018-6028.	9.2	22
26	3D channel emulation in multi-probe setup. Electronics Letters, 2013, 49, 623-625.	1.0	21
27	Measured 21.5 GHz Indoor Channels With User-Held Handset Antenna Array. IEEE Transactions on Antennas and Propagation, 2017, 65, 6574-6583.	5.1	20
28	Over-the-Air Testing of MIMO-Capable Terminals: Evaluation of Multiple-Antenna Systems in Realistic Multipath Propagation Environments Using an OTA Method. IEEE Vehicular Technology Magazine, 2015, 10, 38-46.	3.4	19
29	Comparison of ray tracing simulations and channel measurements at mmWave bands for indoor scenarios. , 2016, , .		19
30	A Flexible Millimeter-Wave Radio Channel Emulator Design With Experimental Validations. IEEE Transactions on Antennas and Propagation, 2018, 66, 6446-6451.	5.1	19
31	Over-the-Air Array Calibration of mmWave Phased Array in Beam-Steering Mode Based on Measured Complex Signals. IEEE Transactions on Antennas and Propagation, 2021, 69, 7876-7888.	5.1	19
32	Test Zone Size Characterization With Measured MIMO Throughput for Simulated MPAC Configurations in Conductive Setups. IEEE Transactions on Vehicular Technology, 2017, 66, 10532-10536.	6.3	18
33	Near-Field Ultra-Wideband mmWave Channel Characterization Using Successive Cancellation BeamSpace UCA Algorithm. IEEE Transactions on Vehicular Technology, 2019, 68, 7248-7259.	6.3	18
34	Assessing measurement distances for OTA testing of massive MIMO base station at 28 GHz. , 2017, , .		17
35	Interference Modeling for Low-Height Air-to-Ground Channels in Live LTE Networks. IEEE Antennas and Wireless Propagation Letters, 2019, 18, 2011-2015.	4.0	17
36	Antenna Pattern Impact on MIMO OTA Testing. IEEE Transactions on Antennas and Propagation, 2013, 61, 5714-5723.	5.1	16

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37	Experimental Evaluation of User Influence on Test Zone Size in Multi-Probe Anechoic Chamber Setups. IEEE Access, 2017, 5, 18545-18556.	4.2	16
38	Trajectory-Aided Maximum-Likelihood Algorithm for Channel Parameter Estimation in Ultrawideband Large-Scale Arrays. IEEE Transactions on Antennas and Propagation, 2020, 68, 7131-7143.	5.1	16
39	Review on Ray Tracing Channel Simulation Accuracy in Sub-6 GHz Outdoor Deployment Scenarios. IEEE Open Journal of Antennas and Propagation, 2021, 2, 22-37.	3.7	15
40	Validation of 5G METIS map-based channel model at mmwave bands in indoor scenarios. , 2016, , .		14
41	MIMO OTA Testing in Small Multiprobe Anechoic Chamber Setups. IEEE Antennas and Wireless Propagation Letters, 2016, 15, 1167-1170.	4.0	14
42	Achieving Wireless Cable Testing of High-Order MIMO Devices With a Novel Closed-Form Calibration Method. IEEE Transactions on Antennas and Propagation, 2021, 69, 478-487.	5.1	14
43	Reducing Correlation in Compact Arrays by Adjusting Near-Field Phase Distribution for MIMO Applications. IEEE Transactions on Vehicular Technology, 2021, 70, 7885-7896.	6.3	14
44	Measurement Verification of Plane Wave Synthesis Technique Based on Multi-Probe MIMO-OTA Setup. , 2012, , .		13
45	3D Channel Model Emulation in a MIMO OTA Setup. , 2013, , .		13
46	Channel Spatial Correlation Reconstruction in Flexible Multiprobe Setups. IEEE Antennas and Wireless Propagation Letters, 2013, 12, 1724-1727.	4.0	13
47	Virtual Drive Testing of Adaptive Antenna Systems in Dynamic Propagation Scenarios for Vehicle Communications. IEEE Access, 2018, 6, 7829-7838.	4.2	13
48	On Angular Sampling Intervals for Reconstructing Wideband Channel Spatial Profiles in Directional Scanning Measurements. IEEE Transactions on Vehicular Technology, 2020, 69, 13910-13915.	6.3	12
49	Ultrawideband VNA based channel sounding system for centimetre and millimetre wave bands. , 2016, , .		11
50	Channel Sounding System for MM-Wave Bands and Characterization of Indoor Propagation at 28 GHz. International Journal of Wireless Information Networks, 2017, 24, 204-216.	2.7	11
51	Phase Noise Effect on MIMO-OFDM Systems with Common and Independent Oscillators. Wireless Communications and Mobile Computing, 2017, 2017, 1-12.	1.2	11
52	A Map-Free Indoor Localization Method Using Ultrawideband Large-Scale Array Systems. IEEE Antennas and Wireless Propagation Letters, 2018, 17, 1682-1686.	4.0	11
53	Comparing Channel Emulation Algorithms by Using Plane Waves and Spherical Vector Waves in Multiprobe Anechoic Chamber Setups. IEEE Transactions on Antennas and Propagation, 2019, 67, 4091-4103.	5.1	11
54	Virtual Drive Testing Over-the-Air for Vehicular Communications. IEEE Transactions on Vehicular Technology, 2020, 69, 1203-1213.	6.3	11

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55	Design and Experimental Validation of Automated Millimeter-Wave phased Array Antenna-in-Package (AiP) Experimental Platform. IEEE Transactions on Instrumentation and Measurement, 2021, 70, 1-11.	4.7	11
56	Virtual Large-Scale Array Beamforming Analysis Using Measured Subarray Antenna Patterns. IEEE Access, 2017, 5, 19812-19823.	4.2	10
57	Wireless Cable Method for High-Order MIMO Terminals Based on Particle Swarm Optimization Algorithm. IEEE Transactions on Antennas and Propagation, 2018, 66, 5536-5545.	5.1	10
58	Design and Validation of the Phase-Compensated Long-Range Sub-THz VNA-Based Channel Sounder. IEEE Antennas and Wireless Propagation Letters, 2021, 20, 2461-2465.	4.0	10
59	A Survey of Dense Multipath and Its Impact on Wireless Systems. IEEE Open Journal of Antennas and Propagation, 2022, 3, 435-460.	3.7	10
60	Rician Channel Modeling for Multiprobe Anechoic Chamber Setups. IEEE Antennas and Wireless Propagation Letters, 2014, 13, 1761-1764.	4.0	9
61	Reproducing standard SCME channel models for massive MIMO base station radiated testing. , 2017, , .		9
62	Emulating Dynamic Radio Channels for Radiated Testing of Massive MIMO Devices. , 2018, , .		9
63	Evaluation of massive MIMO systems using time-reversal beamforming technique. , 2016, , .		8
64	Low Scattering Plane Wave Generator Design Using a Novel Non-Coplanar Structure for Near-Field Over-the-Air Testing. IEEE Access, 2020, 8, 211348-211357.	4.2	8
65	Over-the-Air Testing of 5G Communication Systems: Validation of the Test Environment in Simple-Sectorized Multiprobe Anechoic Chamber Setups. IEEE Antennas and Propagation Magazine, 2021, 63, 40-50.	1.4	8
66	Measurement uncertainty investigation in the multi-probe OTA setups. , 2014, , .		7
67	Emulating UAV Air-to-Ground Radio Channel in Multi-Probe Anechoic Chamber. , 2018, , .		7
68	Over-the-Air Testing for Carrier Aggregation Enabled MIMO Terminals Using Radiated Two-Stage Method. IEEE Access, 2018, 6, 71622-71631.	4.2	7
69	Analysis of Simulated and Measured Indoor Channels for mm-Wave Beamforming Applications. International Journal of Antennas and Propagation, 2018, 2018, 1-17.	1.2	7
70	Frequency Characteristics of Geometry-Based Clusters in Indoor Hall Environment at SHF Bands. IEEE Access, 2019, 7, 75420-75433.	4.2	7
71	Semi-Deterministic Dynamic Millimeter-Wave Channel Modeling Based on an Optimal Neural Network Approach. IEEE Transactions on Antennas and Propagation, 2022, 70, 4082-4095.	5.1	7
72	Channel estimation using spherical-wave model for indoor LoS and obstructed LoS scenarios. , 2017, , .		6

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73	Recent advances on OTA testing for 5G antenna systems in multi-probe anechoic chamber setups. , 2017, , .		6
74	Antenna Correlation Under Geometry-Based Stochastic Channel Models. IEEE Antennas and Wireless Propagation Letters, 2019, 18, 2567-2571.	4.0	6
75	Comparisons of Channel Emulation Methods for State-of-the-Art Multi-Probe Anechoic Chamber Based Millimeter-Wave Over-the-Air Testing. , 2019, , .		6
76	SVM-Assisted Adaptive Kernel Power Density Clustering Algorithm for Millimeter Wave Channels. IEEE Transactions on Antennas and Propagation, 2022, 70, 4014-4026.	5.1	6
77	Impact of probe placement error on MIMO OTA test zone performance. , 2012, , .		5
78	Channel Verification Results for the SCME Models in a Multi-Probe Based MIMO OTA Setup. , 2013, , .		5
79	Near-Field Signal Model for Large-Scale Uniform Circular Array and Its Experimental Validation. IEEE Antennas and Wireless Propagation Letters, 2017, 16, 1237-1240.	4.0	5
80	Performance evaluation of sectored MPAC for 5G UE antenna systems. , 2017, , .		5
81	OTA Evaluation of Mobile Phone Antenna Performance for VoLTE [Measurements Corner]. IEEE Antennas and Propagation Magazine, 2018, 60, 122-130.	1.4	5
82	On Uncertainty Investigation of mmWave Phased-Array Element Control With an All-On-Off Method. IEEE Antennas and Wireless Propagation Letters, 2020, 19, 1993-1997.	4.0	5
83	Millimeter-Wave New Radio Test Zone Validation for MIMO Over-the-Air Testing. IEEE Transactions on Antennas and Propagation, 2022, 70, 1569-1574.	5.1	5
84	Experimental Comparison of On-Off and All-On Calibration Modes for Beam-Steering Performance of mmWave Phased Array Antenna-in-Package. IEEE Transactions on Instrumentation and Measurement, 2021, 70, 1-9.	4.7	5
85	An Improved Complex Signal-Based Calibration Method for Beam-Steering Phased Array. IEEE Antennas and Wireless Propagation Letters, 2021, 20, 2161-2165.	4.0	5
86	Accurate Channel Sounding with a Phase Stabilizing Scheme. , 2020, , .		5
87	Experimental Evaluation of MIMO Terminals With User Influence in OTA Setups. IEEE Antennas and Wireless Propagation Letters, 2017, 16, 3030-3033.	4.0	4
88	Characterization of Human Body Shadowing in Measured Millimeter-wave Indoor Channels. , 2018, , .		4
89	Channel Estimation Algorithms and Their Impact on Wideband Millimeter Wave Channel Characteristics. , 2018, , .		4
90	Performance testing of MIMO device with the wireless cable method based on particle swarm optimization algorithm. , 2018, , .		4

#	ARTICLE	IF	CITATIONS
91	On Simplification of Ray Tracing Channels in Radio Channel Emulators for Device Testing. , 2021, , .		4
92	Spatial fading channel emulation for over-the-air testing of millimeter-wave radios: concepts and experimental validations. <i>Frontiers of Information Technology and Electronic Engineering</i> , 2021, 22, 548-559.	2.6	4
93	Modeling Multi-Frequency Characteristics for Classroom and Hall Scenarios at 2-4, 9-11 and 27-29 GHz Bands. <i>IEEE Access</i> , 2021, 9, 14549-14563.	4.2	4
94	Dynamic mmWave Channel Emulation in a Cost-Effective MPAC With Dominant-Cluster Concept. <i>IEEE Transactions on Antennas and Propagation</i> , 2022, 70, 4691-4704.	5.1	4
95	Generating Spatial Channel Models in Multi-Probe Anechoic Chamber Setups. , 2016, , .		3
96	Comparative study of centimetric and millimetric propagation channels in indoor environments. , 2016, , .		3
97	Validation of emulated omnidirectional antenna output using directive antenna data. , 2017, , .		3
98	A Simultaneous Wideband Calibration for Digital Beamforming Arrays at Short Distances [Measurements Corner]. <i>IEEE Antennas and Propagation Magazine</i> , 2021, 63, 102-111.	1.4	3
99	Joint Modeling of Received Power, Mean Delay, and Delay Spread for Wideband Radio Channels. <i>IEEE Transactions on Antennas and Propagation</i> , 2021, 69, 4871-4882.	5.1	3
100	System development and experimental validation of a long-range VNA-based channel sounder. <i>IET Microwaves, Antennas and Propagation</i> , 2020, 14, 1733-1741.	1.4	3
101	Phased Array Calibration Based on Measured Complex Signals in a Compact Multiprobe Setup. <i>IEEE Antennas and Wireless Propagation Letters</i> , 2022, 21, 833-837.	4.0	3
102	A Fast Multibeam Measurement Method for Millimeter-Wave Phased Arrays. <i>IEEE Antennas and Wireless Propagation Letters</i> , 2022, 21, 1502-1506.	4.0	3
103	Estimating Discrete Power Angular Spectra in Multiprobe OTA Setups. <i>IEEE Antennas and Wireless Propagation Letters</i> , 2014, 13, 349-352.	4.0	2
104	Covariance-Based Spatial Channel Structure Emulation for MIMO OTA Testing. <i>IEEE Communications Letters</i> , 2014, 18, 205-208.	4.1	2
105	Emulating Realistic Bidirectional Spatial Channels for MIMO OTA Testing. <i>International Journal of Antennas and Propagation</i> , 2015, 2015, 1-13.	1.2	2
106	Performance Testing of Massive MIMO Base Station with Multi-Probe Anechoic Chamber Setups. , 2018, , .		2
107	Cluster Intensity and Spread Characteristics in Classroom Scenario at 10 and 28 GHz Bands. , 2020, , .		2
108	On Simple-Sectored Multi-Probe Anechoic Chamber Design for mmWave Adaptive Terminal. <i>IEEE Access</i> , 2020, 8, 26419-26432.	4.2	2

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109	Radio Channel Emulation for Virtual Drive Testing with Site-Specific Channels. , 2022, , .		2
110	On Probe weighting for MIMO OTA testing in anechoic chamber setups. , 2015, , .		1
111	Frequency Characteristics of Diffuse Scattering in SHF band in Indoor Environments. , 2019, , .		1
112	On Noise and Interference Modeling for Over-the-air Testing of MIMO Terminals. , 2020, , .		1
113	Channel Spatial Profile Validation for FR2 New Radio Over-the-air Testing. , 2021, , .		1
114	On Low-Pass Phase Noise Mitigation in OFDM System for mmWave Communications. Lecture Notes of the Institute for Computer Sciences, Social-Informatics and Telecommunications Engineering, 2018, , 271-280.	0.3	1
115	Millimeter-Wave Hybrid Precoder Design With a Fast Iterative Beam Split and Detection Algorithm. IEEE Antennas and Wireless Propagation Letters, 2020, 19, 2368-2372.	4.0	1
116	Hybrid Precoding for Correlated Multi-user mm-wave Channels Based on Beam Alignment. IEEE Wireless Communications Letters, 2021, , 1-1.	5.0	1
117	Fast Array Diagnosis for Subarray Structured 5G Base Station Antennas. IEEE Antennas and Wireless Propagation Letters, 2022, 21, 1393-1397.	4.0	1
118	Fast Array Diagnosis Based on Measured Complex Array Signals with Short Measurement Distance. , 2022, , .		1
119	Estimating power angular spectra in multi-probe setups for terminal testing. , 2014, , .		0
120	Analytic and experimental investigation of beamforming algorithms for MM-wave channel characterization. , 2017, , .		0
121	On the Phase-Compensated Long-Range VNA-based Channel Sounder for sub-6 GHz, mmWave and sub-THz frequency bands. , 2022, , .		0