

# Tian-Hong Loh

## List of Publications by Year in descending order

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84  
papers

825  
citations

759233

12  
h-index

580821

25  
g-index

85  
all docs

85  
docs citations

85  
times ranked

800  
citing authors

#	ARTICLE	IF	CITATIONS
1	Electrically Small and Low Cost Smart Antenna for Wireless Communication. IEEE Transactions on Antennas and Propagation, 2012, 60, 1540-1549.	5.1	136
2	Small Director Array for Low-Profile Smart Antennas Achieving Higher Gain. IEEE Transactions on Antennas and Propagation, 2013, 61, 162-168.	5.1	86
3	Compact Smart Antenna With Electronic Beam-Switching and Reconfigurable Polarizations. IEEE Transactions on Antennas and Propagation, 2015, 63, 5325-5333.	5.1	73
4	Compact Dual-Band Antenna With Electronic Beam-Steering and Beamforming Capability. IEEE Antennas and Wireless Propagation Letters, 2011, 10, 1349-1352.	4.0	36
5	Compact MIMO Antenna With Frequency Reconfigurability and Adaptive Radiation Patterns. IEEE Antennas and Wireless Propagation Letters, 2013, 12, 269-272.	4.0	32
6	Characterizing the Spectral Properties and Time Variation of the In-Vehicle Wireless Communication Channel. IEEE Transactions on Communications, 2014, 62, 2390-2399.	7.8	26
7	A Wideband Spiral UHF Coupler With Tuning Nodules for Partial Discharge Detection. IEEE Transactions on Power Delivery, 2019, 34, 1300-1308.	4.3	26
8	Implementation of an Exact Modal Absorbing Boundary Termination Condition for the Application of the Finite-Element Time-Domain Technique to Discontinuity Problems in Closed Homogeneous Waveguides. IEEE Transactions on Microwave Theory and Techniques, 2004, 52, 882-888.	4.6	23
9	Measurement of electrically small antennas via optical fibre. , 2009, , .		20
10	Empty Substrate Integrated Waveguide Slot Antenna Array for 5G Applications. , 2018, , .		19
11	Developing the First mmWave Fully-Connected Hybrid Beamformer With a Large Antenna Array. IEEE Access, 2020, 8, 141282-141291.	4.2	16
12	A Method to Minimize Emission Measurement Uncertainty of Electrically Large EUTs in GTEM Cells and FARs Above 1 GHz. IEEE Transactions on Electromagnetic Compatibility, 2006, 48, 634-640.	2.2	14
13	Compact-size Electronically Steerable Parasitic Array Radiator antenna. , 2009, , .		12
14	A Study on Frequency Diversity for Intra-Vehicular Wireless Sensor Networks (WSNs). , 2011, , .		12
15	A $K$ -band antenna based on an enhanced $F$ -ranklin model for $5G$ cellular networks. Microwave and Optical Technology Letters, 2018, 60, 1562-1566.	1.4	12
16	Empty Substrate-Integrated Waveguide-Fed Patch Antenna Array for 5G Millimeter-Wave Communication Systems. IEEE Antennas and Wireless Propagation Letters, 2020, 19, 776-780.	4.0	12
17	Design and Optimization of Compact Printed Log-Periodic Dipole Array Antennas with Extended Low-Frequency Response. Electronics (Switzerland), 2021, 10, 2044.	3.1	11
18	An Impulse Response Model and $Q$ -Factor Estimation for Vehicle Cavities. IEEE Transactions on Vehicular Technology, 2013, 62, 4240-4250.	6.3	10

#	ARTICLE	IF	CITATIONS
19	Evaluation of chamber effects on antenna efficiency measurements using non-reference antenna methods in two reverberation chambers. IET Microwaves, Antennas and Propagation, 2017, 11, 1536-1541.	1.4	10
20	An Assessment of the Radio Frequency Electromagnetic Field Exposure from A Massive MIMO 5G Testbed. , 2020, , .		10
21	Strong, omnidirectional radar backscatter from subwavelength, 3D printed metacubes. IET Microwaves, Antennas and Propagation, 2020, 14, 1862-1868.	1.4	10
22	Radiation Pattern Measurement of a Low-Profile Wearable Antenna Using an Optical Fibre and a Solid Anthropomorphic Phantom. Electronics (Switzerland), 2014, 3, 462-473.	3.1	9
23	Assessment of the adaptive routing performance of a Wireless Sensor Network using smart antennas. IET Wireless Sensor Systems, 2014, 4, 196-205.	1.7	9
24	A comparison of antenna efficiency measurements performed in two reverberation chambers using non-reference antenna methods. , 2015, , .		9
25	Understanding the Temporal Fading in Wireless Industrial Networks: Measurements and Analyses. , 2018, , .		9
26	Optimization of Log-Periodic TV Reception Antenna with UHF Mobile Communications Band Rejection. Electronics (Switzerland), 2020, 9, 1830.	3.1	9
27	Circular Polarized 3-D-Printed Dielectric Loaded Antenna Using Inset Waveguide-to-Dielectric Transition for 5G Millimeter-Wave Application. IEEE Antennas and Wireless Propagation Letters, 2020, 19, 1929-1932.	4.0	9
28	A MIMO Antenna with High Gain and Enhanced Isolation for WLAN Applications. Applied Sciences (Switzerland), 2022, 12, 2279.	2.5	9
29	Low-cost intelligent antenna with low profile and broad bandwidth. IET Microwaves, Antennas and Propagation, 2013, 7, 356-364.	1.4	8
30	On the Analogy Between Vehicle and Vehicle-Like Cavities With Reverberation Chambers. IEEE Transactions on Antennas and Propagation, 2014, 62, 6236-6245.	5.1	8
31	Measurement of absorption cross section of a lossy object in reverberation chamber without the need for calibration. , 2016, , .		8
32	Minimized Triple-Band Eight-Element Antenna Array for 5G Metal-frame Smartphone Applications. Micromachines, 2022, 13, 136.	2.9	8
33	A Compact Minimally Invasive Antenna for OTA Testing. IEEE Antennas and Wireless Propagation Letters, 2019, 18, 1381-1385.	4.0	7
34	Assessment of a low-profile planar antenna for a wireless sensor network monitoring the local water distribution network. IET Wireless Sensor Systems, 2014, 4, 191-195.	1.7	6
35	A software-defined-radio platform for multiple-input-multiple-output over-the-air measurement. , 2016, , .		6
36	Virtual Sensing Directional Hub MAC (VSDH-MAC) Protocol with Power Control. Electronics (Switzerland), 2020, 9, 1219.	3.1	6

#	ARTICLE	IF	CITATIONS
37	Non-invasive measurement of electrically small ultra-wideband and smart antennas. , 2013, , .		5
38	Experimental evaluation of wearable antenna efficiency for applications in body-centric wireless networks. , 2014, , .		5
39	Investigation of bandpass filters in the time domain signal analysis of reverberation chamber. , 2017, , .		5
40	Hybrid Beamforming With Switches and Phase Shifters Over Frequency-Selective Channels. IEEE Wireless Communications Letters, 2020, 9, 1305-1308.	5.0	5
41	Small smart antenna composed of reconfigurable inverted F-type antenna. , 2009, , .		4
42	A comparison of MIMO antenna efficiency measurements performed in Anechoic Chamber and Reverberation Chamber. , 2015, , .		4
43	Empty Substrate Integrated Waveguide Planar Slot Antenna Array for 5G Wireless Systems. , 2019, , .		4
44	Experimental Investigation of Empty Substrate Integrated Waveguide-Fed MMW Patch Antenna for 5G Applications. , 2019, , .		4
45	A Cost-Effective Direct Magnitude Measurement Methodology for Smart Antennas. IEEE Transactions on Antennas and Propagation, 2013, 61, 2043-2050.	5.1	3
46	A millimeter wave MIMO testbed for 5G communications. , 2017, , .		3
47	The residual errors of multiport VNA measurements due to non-ideal TRM calibration. , 2017, , .		3
48	Empty Substrate Integrated Waveguide-Fed MMW Aperture-Coupled Patch Antenna for 5G Applications. , 2018, , .		3
49	An investigation of millimeter wave reflectarrays for small satellite platforms. Acta Astronautica, 2018, 151, 475-486.	3.2	3
50	A Closed-Form Formula of Radiation and Total Efficiency for Lossy Multiport Antennas. IEEE Antennas and Wireless Propagation Letters, 2019, 18, 2468-2472.	4.0	3
51	Approximate Analytical Equations for the Stirrer Angular Correlation in a Reverberation Chamber. IEEE Transactions on Electromagnetic Compatibility, 2019, 61, 1707-1713.	2.2	3
52	A novel design of a 10-dipole log-periodic antenna with LTE-800 and GSM-900 band rejection. , 2019, , .		3
53	A Broadband Reference Antenna for Efficiency Measurements in a Reverberation Chamber. , 2020, , .		3
54	A Low-Cost and Efficient Single Probe Based MIMO OTA Measurement Method. IEEE Transactions on Instrumentation and Measurement, 2022, 71, 1-15.	4.7	3

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55	An Empirical Study of the Stochastic Nature of Electromagnetic Field Exposure in Massive MIMO Systems. IEEE Access, 2022, 10, 63100-63112.	4.2	3
56	Phantoms for antenna measurements at 2.4 GHz. , 2012, , .		2
57	Radiation pattern characterisation of embedded radios emitting modulated signals. , 2012, , .		2
58	A novel tunable high impedance surface electromagnetic band gap metamaterials for RF and microwave applications. , 2015, , .		2
59	A Simple Recursively Computable Lower Bound on the Noncoherent Capacity of Highly Underspread Fading Channels. IEEE Transactions on Wireless Communications, 2016, 15, 3964-3978.	9.2	2
60	An efficient algorithm for electrically large reflectarray antenna design automation. , 2017, , .		2
61	Routing and link performance assessment of a wireless sensor network in a reverberation chamber with different absorber loading conditions. , 2017, , .		2
62	The Noise Level of Total Scattering Cross Section Measurement in a Reverberation Chamber. IEEE Antennas and Wireless Propagation Letters, 2018, 17, 1842-1846.	4.0	2
63	Characterisation of Doppler shift in Millimetre Wave Vehicular Channel. , 2019, , .		2
64	Measuring the Total Radiated Energy of Transient Signals in a Reverberation Chamber. , 2021, , .		2
65	On the Improvement of Positioning Accuracy in Wireless Sensor Network using Smart Antennas. , 2020, , .		2
66	Comparison of electric field strength at VHF frequencies generated by dipoles and TEM cells. , 2007, , .		1
67	New facility for minimally invasive measurements of electrically small antennas. , 2008, , .		1
68	Effects of antenna mount on a spherical scanning measurement of the radiation efficiency of a wire antenna. , 2011, , .		1
69	Low-cost beam-switching circularly-polarised antenna using tunable high impedance surface. , 2012, , .		1
70	The effect of receiving antenna orientation and polarization on measurements of antenna efficiency in a reverberation chamber. , 2017, , .		1
71	How coarse is too coarse in electrically large reflectarray smart antennas?. , 2017, , .		1
72	Efficient Uncertainty Evaluation of Vector Network Analyser Measurements Using Two-Tier Bayesian Analysis and Monte Carlo Method. , 2018, , .		1

#	ARTICLE	IF	CITATIONS
73	An Evaluation of Distortion and Interference Sources Originating Within a Millimeter-Wave MIMO Testbed for 5G Communications. , 2018, , .		1
74	Experimental Evaluation of a Millimeter-wave Fully-Connected Hybrid Beamformer with a Large Antenna Array. , 2021, , .		1
75	On the Realization Challenges for Accurate SCME Channel Implementation in RC. , 2021, , .		1
76	Antenna height scan for minimizing EUT emission measurement uncertainty in fully anechoic chambers above 1 GHz. , 2006, , .		0
77	Low cost beam switchable reflectarray antenna. , 2012, , .		0
78	Boundary Conditions for Two-Dimensional Finite-Element Modeling of Microwave Devices. , 2013, , 401-451.		0
79	Boundary Conditions for Three-Dimensional Finite-Element Modeling of Microwave Devices. , 2013, , 453-487.		0
80	Millimeter-Wave Over-the-Air Signal-to-Interference-plus-Noise-Ratio Measurements Using a MIMO Testbed. , 2018, , .		0
81	Guest Editorial: Metrology for 5G Technologies. IET Microwaves, Antennas and Propagation, 2019, 13, 2581-2583.	1.4	0
82	Single Layer PCB Broadband Circular Polarisation Millimetre Wave Massive MIMO Array. , 2018, , .		0
83	A rigorous link performance and measurement uncertainty assessment for MIMO OTA characterisation. , 2018, , .		0
84	Estimating the Unloaded Quality Factor of Reverberation Chambers Using the Effective Conductivity Model. IEEE Electromagnetic Compatibility Magazine, 2021, 10, 39-47.	0.1	0