Xiao-ming Chen

List of Publications by Year
in descending order

104	1,972	236833	289141
papers	citations	25 h-index	40 g-index

105	105	105	1845
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Flexible, Equipment-Wearable Piezoelectric Sensor With Piezoelectricity Calibration Enabled by In-Situ Temperature Self-Sensing. IEEE Transactions on Industrial Electronics, 2022, 69, 6381-6390.	5.2	17
2	Co- and Cross-Polarization Decoupling Structure With Polarization Rotation Property Between Linearly Polarized Dipole Antennas With Application to Decoupling of Circularly Polarized Antennas. IEEE Transactions on Antennas and Propagation, 2022, 70, 702-707.	3.1	18
3	Single-Layer Re-Organizable All-Dielectric Meta-Lens Platform for Arbitrary Transmissive Phase Manipulation at Millimeter-Wave Frequencies. IEEE Transactions on Antennas and Propagation, 2022, 70, 2059-2069.	3.1	6
4	Bioinspired Hierarchical Structures for Contactâ€Sensible Adhesives. Advanced Functional Materials, 2022, 32, 2109076.	7.8	30
5	W band solidâ€state power amplifier for aerospace usage. Journal of Engineering, 2022, 2022, 210-215.	0.6	1
6	Hybrid Decoupling Structure Based on Neutralization and Partition Schemes for Compact Large-Scale Base Station Arrays. IEEE Antennas and Wireless Propagation Letters, 2022, 21, 267-271.	2.4	8
7	A Switchable Metamaterial Absorber for Fine-Tuning of the Coherence Bandwidth in a Reverberation Chamber. IEEE Transactions on Antennas and Propagation, 2022, 70, 4908-4913.	3.1	6
8	Average Rician K-Factor-Based Uncertainty Model of Measured Antenna Efficiency Using the Reference Antenna Method in Reverberation Chambers. IEEE Transactions on Instrumentation and Measurement, 2022, 71, 1-11.	2.4	3
9	Self-healing and stretchable conductor based on embedded liquid metal patterns within imprintable dynamic covalent elastomer. Journal of Materials Chemistry C, 2022, 10, 1039-1047.	2.7	23
10	Signal and Coherence Bandwidth Effects on Total Radiated Power Measurements of LTE Devices in Reverberation Chambers. IEEE Transactions on Instrumentation and Measurement, 2022, 71, 1-3.	2.4	7
11	Chirality-Intrigged Spin-Selective Metasurface and Applications in Generating Orbital Angular Momentum. IEEE Transactions on Antennas and Propagation, 2022, 70, 4549-4557.	3.1	12
12	Wideband Monopole-Like Cup Dielectric Resonator Antenna With Coil Feeding Structure. IEEE Transactions on Antennas and Propagation, 2022, 70, 7118-7123.	3.1	2
13	Scanning Angle Extension of a Millimeter-Wave Antenna Array Using Electromagnetic Band Gap Ground. IEEE Transactions on Antennas and Propagation, 2022, 70, 7264-7269.	3.1	21
14	An Improved Method for Reconstructing Antenna Radiation Pattern in a Loaded Reverberation Chamber. IEEE Transactions on Instrumentation and Measurement, 2022, 71, 1-12.	2.4	2
15	Key issues and algorithms of multiple-input-multiple-output over-the-air testing in the multi-probe anechoic chamber setup. Science China Information Sciences, 2022, 65, 1.	2.7	15
16	Deformation Mechanism of Depositing Amorphous Cu-Ta Alloy Film via Nanoindentation Test. Nanomaterials, 2022, 12, 1022.	1.9	3
17	Enhancing mechanical strength of carbon fiber-epoxy interface through electrowetting of fiber surface. Composites Part B: Engineering, 2022, 234, 109751.	5.9	25
18	On the uniqueness of virtual substrate for metasurface in a dielectric half-space. Science China Information Sciences, 2022, 65, 1.	2.7	7

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19	Wideâ€angle scanning phased array using wideâ€beamwidth dielectric resonator antenna with miniaturised radiator. Electronics Letters, 2022, 58, 182-184.	0.5	1
20	Frequency-Tunable and Magnitude-Tunable Microwave Metasurface Absorbers Enabled by Shape Memory Polymers. IEEE Transactions on Antennas and Propagation, 2022, 70, 6804-6812.	3.1	12
21	Graphene-assisted wetting transition on grooved surfaces: A molecular dynamics study. Computational Materials Science, 2022, 209, 111415.	1.4	3
22	Throughput Multiplexing Efficiency for High-Order Handset MIMO Antennas. Electronics (Switzerland), 2022, 11, 1301.	1.8	2
23	Extension of Babinet Principle to Complementary Metallic Elements on the Interface of Different Substrates. IEEE Microwave and Wireless Components Letters, 2022, 32, 1151-1154.	2.0	2
24	Electrostatic incitation on fiber surface for enhancing mechanical properties of fiber-reinforced composite. Composites Science and Technology, 2022, 228, 109627.	3.8	10
25	A new rapid synthesis of thermoelectric Sb2Te3 ingots using selective laser melting 3D printing. Materials Science in Semiconductor Processing, 2021, 123, 105551.	1.9	15
26	Critical frequency of metasurfaces on dielectric halfâ€space. Electronics Letters, 2021, 57, 164-165.	0.5	0
27	A Unified Approach for Uncertainty Analyses for Total Radiated Power and Total Isotropic Sensitivity Measurements in Reverberation Chamber. IEEE Transactions on Instrumentation and Measurement, 2021, 70, 1-12.	2.4	9
28	A Decoupling Network for Resonant and Non-Resonant Sub-1 GHz MIMO Mobile Terminal Antennas With Improved Compactness and Efficiency. IEEE Access, 2021, 9, 59475-59485.	2.6	1
29	Fast and Simple Gradient Projection Algorithms for Phase-Only Beamforming. IEEE Transactions on Vehicular Technology, 2021, 70, 10620-10632.	3.9	9
30	Influence of coreâ€“shell structured conductive fillers on the electromechanical properties of ferroelectric nanocomposites. Journal of Materials Science, 2021, 56, 9157-9170.	1.7	6
31	Performance Analysis of Millimeter Wave Wireless Power Transfer With Imperfect Beam Alignment. IEEE Transactions on Vehicular Technology, 2021, 70, 2605-2618.	3.9	9
32	Statistical Models of Antenna Efficiency Measured Using Non-Reference Antenna Methods With Hybrid Stirring. , 2021, , .		1
33	Decoupling of Microstrip Antennas With Defected Ground Structure Using the Common/Differential Mode Theory. IEEE Antennas and Wireless Propagation Letters, 2021, 20, 828-832.	2.4	43
34	Spoof plasmon polariton coupler based on the highâ€order modes of reflective metasurface. Microwave and Optical Technology Letters, 2021, 63, 2309.	0.9	1
35	Mutual Coupling Reduction With Dielectric Superstrate for Base Station Arrays. IEEE Antennas and Wireless Propagation Letters, 2021, 20, 843-847.	2.4	28
36	3-D Printing Disordered-Cavity-Based Metaimager for Coincidence Imaging. IEEE Microwave and Wireless Components Letters, 2021, 31, 620-623.	2.0	3

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37	Frequencyâ€“Polarization Sensitive Metasurface Antenna for Coincidence Imaging. IEEE Antennas and Wireless Propagation Letters, 2021, 20, 1274-1278.	2.4	2
38	Reducing Correlation in Compact Arrays by Adjusting Near-Field Phase Distribution for MIMO Applications. IEEE Transactions on Vehicular Technology, 2021, 70, 7885-7896.	3.9	14
39	Miniaturization of Patch Antenna with Double Torsion Coil Feeding Structure. , 2021, , .		1
40	Orthogonal Pattern Design for MIMO System. , 2021, , .		0
41	Near-field Over-the-Air Calibration of Phased Array Using Plane Wave Generator. , 2021, , .		2
42	Antenna Miniaturization Using Dielectric Cavity. , 2021, , .		0
43	Antenna Radiation Pattern Reconstruction Based on Spherical Wave Decomposition in Imperfect Reverberation Chamber. , 2021, , .		0
44	A wearable, nozzleâ€‘diffuser microfluidic pump based on highâ€‘performance ferroelectric nanocomposites. Sensors and Actuators B: Chemical, 2021, 347, 130611.	4.0	12
45	Frequency-Diverse Metamaterial Cavity Antenna for Microwave Coincidence Imaging. IEEE Antennas and Wireless Propagation Letters, 2021, 20, 1103-1107.	2.4	8
46	Effects of Signal Bandwidth on Total Isotropic Sensitivity Measurements in Reverberation Chamber. IEEE Transactions on Instrumentation and Measurement, 2021, 70, 1-8.	2.4	10
47	Hydrogen bond reinforced, transparent polycaprolactone-based degradable polyurethane. Materials Chemistry Frontiers, 2021, 5, 5371-5381.	3.2	24
48	A Compact Dual-Band and Dual-Polarized Millimeter-Wave Beam Scanning Antenna Array for 5G Mobile Terminals. IEEE Access, 2021, 9, 109042-109052.	2.6	51
49	Generation of Multiple High-Order Bessel Beams Carrying Different Orbital-Angular-Momentum Modes through an Anisotropic Holographic Impedance Metasurface. Physical Review Applied, 2021, 16, .	1.5	11
50	Accuracies of Channel Emulation Methods for Sectored Multi-probe Anechoic Chamber. , 2021, , .		0
51	Analysis of TRP and TIS Tests with Different Combinations of Mechanical Stirring Samples. , 2021, , .		2
52	Approaching the Fundamental Limit of Orbital-Angular-Momentum Multiplexing Through a Hologram Metasurface. Physical Review Applied, 2021, 16, .	1.5	15
53	3D printed piezoelectric BNNTs nanocomposites with tunable interface and microarchitectures for self-powered conformal sensors. Nano Energy, 2020, 77, 105300.	8.2	54
54	Polythiourethane Covalent Adaptable Networks for Strong and Reworkable Adhesives and Fully Recyclable Carbon Fiber-Reinforced Composites. ACS Applied Materials & Interfaces, 2020, 12, 47975-47983.	4.0	85

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55	A Metasurface Superstrate for Mutual Coupling Reduction of Large Antenna Arrays. IEEE Access, 2020, 8, 126859-126867.	2.6	51
56	Statistical Analysis of Antenna Efficiency Measurements With Non-Reference Antenna Methods in a Reverberation Chamber. IEEE Access, 2020, 8, 113967-113980.	2.6	13
57	Improving actuation strain and breakdown strength of dielectric elastomers using core-shell structured CNT-Al2O3. Composites Science and Technology, 2020, 200, 108393.	3.8	39
58	Split-Ring Resonator-Loaded Baffles for Decoupling of Dual-Polarized Base Station Array. IEEE Antennas and Wireless Propagation Letters, 2020, 19, 1828-1832.	2.4	44
59	Statistical analysis of measurement uncertainty in total radiated power of wireless devices in reverberation chamber. IET Microwaves, Antennas and Propagation, 2020, 14, 1241-1245.	0.7	3
60	An electrically active gecko-effect soft gripper under a low voltage by mimicking gecko's adhesive structures and toe muscles. Soft Matter, 2020, 16, 5599-5608.	1.2	38
61	Direction-of-Arrival Estimation in the Presence of Phase Noise. IEEE Communications Letters, 2020, 24, 1710-1714.	2.5	4
62	Role of geometric shapes on the load transfer in graphene-PMMA nanocomposites. Computational Materials Science, 2020, 184, 109863.	1.4	4
63	Extremely Tough, Puncture-Resistant, Transparent, and Photoluminescent Polyurethane Elastomers for Crack Self-Diagnose and Healing Tracking. ACS Applied Materials & Interfaces, 2020, 12, 30847-30855.	4.0	92
64	Mechanical properties and enhancement mechanisms of titanium-graphene nanocomposites. Acta Mechanica Sinica/Lixue Xuebao, 2020, 36, 855-865.	1.5	14
65	Performance Study of a MIMO Mobile Terminal With Upto 18 Elements Operating in the Sub-6 GHz 5G Band With User Hand. IEEE Access, 2020, 8, 28164-28177.	2.6	9
66	Launcher of high-order Bessel vortex beam carrying orbital angular momentum by designing anisotropic holographic metasurface. Applied Physics Letters, 2020, 117, .	1.5	16
67	Investigation of Mutual Coupling Reduction in Base Station Antenna Array. , 2020, , .		0
68	OAM Multiplexing in Multipath Environment. , 2020, , .		2
69	Evaluation of the Purity of OAM Modes Using the Reverberation Chamber Technique. , 2020, , .		1
70	A Method Based on Metasurface to Reduce the Measurement Uncertainty in Reverberation Chamber. , 2020, , .		0
71	Impact of Front-to-Rear Ratio, Side Lobe Level, and Beam Orientation of Base Station Antennas on MIMO Performance. , 2020, , .		1
72	Polarization Sensitive Array Beamforming Algorithm for Multipath Mitigation in GNSS. , 2020, , .		0

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73	U-shaped Decoupling Structure for MIMO Antenna Array. , 2020, , .		0
74	Broadband Dual-polarization Dual-dipole Filter Antenna Applied to Base Station. , 2020, , .		0
75	Improving Field Uniformity Using Source Stirring With Orbital Angular Momentum Modes in a Reverberation Chamber. IEEE Microwave and Wireless Components Letters, 2019, 29, 560-562.	2.0	20
76	Bending and interlayer shear moduli of ultrathin boron nitride nanosheet. Journal Physics D: Applied Physics, 2019, 52, 465301.	1.3	26
77	Dual-Polarized Broadband Base Station Antenna Backed With Dielectric Cavity for 5G Communications. IEEE Antennas and Wireless Propagation Letters, 2019, 18, 2051-2055.	2.4	55
78	A numerical-experimental approach towards picomechanics and picotribology: the case study of defective carbon nanotubes bundles. Journal Physics D: Applied Physics, 2019, 52, 255305.	1.3	1
79	High-performance piezoelectric nanogenerator based on microstructured P(VDF-TrFE)/BNNTs composite for energy harvesting and radiation protection in space. Nano Energy, 2019, 60, 701-714.	8.2	138
80	Nanomechanical Unfolding of Self-Folded Graphene on Flat Substrate. Experimental Mechanics, 2019, 59, 381-386.	1.1	3
81	An Optically Transparent Metasurface-Based Resonant Cavity Fed by Patch Antenna for Improved Gain. Materials, 2019, 12, 3805.	1.3	2
82	Direct nanomechanical characterization of carbon nanotubes - titanium interfaces. Carbon, 2018, 132, 548-555.	5.4	34
83	Temperature-dependent frictional properties of ultra-thin boron nitride nanosheets. Applied Physics Letters, 2017, 110, .	1.5	9
84	Piezoelectric and elastic properties of multiwall boron-nitride nanotubes and their fibers: A molecular dynamics study. Computational Materials Science, 2017, 135, 29-42.	1.4	26
85	Design and fabrication of a differential scanning nanocalorimeter. Journal of Micromechanics and Microengineering, 2017, 27, 025006.	1.5	7
86	Direct measurements of the mechanical strength of carbon nanotube - Aluminum interfaces. Carbon, 2017, 125, 93-102.	5.4	36
87	Quantitative Characterization of Structural and Mechanical Properties of Boron Nitride Nanotubes in High Temperature Environments. Scientific Reports, 2017, 7, 11388.	1.6	48
88	Deformation of nanotubes in peeling contact with flat substrate: An in situ electron microscopy nanomechanical study. Journal of Applied Physics, 2016, 119, 154305.	1.1	10
89	Structural and physical properties of boron nitride nanotubes and their applications in nanocomposites. , 2016, , 183-199.		8
90	Nanomechanical z-shape folding of graphene on flat substrate. Extreme Mechanics Letters, 2016, 9, 84-90.	2.0	14

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91	Enhancing the oxidation resistance of copper by using sandblasted copper surfaces. Applied Surface Science, 2015, 357, 2160-2168.	3.1	18
92	Mechanical strength of boron nitride nanotube-polymer interfaces. Applied Physics Letters, 2015, 107, .	1.5	90
93	Interfacial Interactions in 1D and 2D Nanostructure-Based Material Systems. Nanoscience and Technology, 2015, , 379-424.	1.5	1
94	Bending stiffness and interlayer shear modulus of few-layer graphene. Applied Physics Letters, 2015, 106, .	1.5	98
95	Quantitative nanomechanical characterization of the van der Waals interfaces between carbon nanotubes and epoxy. Carbon, 2015, 82, 214-228.	5.4	87
96	Graphene folding on flat substrates. Journal of Applied Physics, 2014, 116, 164301.	1.1	43
97	Mechanical deformations of boron nitride nanotubes in crossed junctions. Journal of Applied Physics, 2014, 115, 164305.	1.1	22
98	Nanomechanical cutting of boron nitride nanotubes by atomic force microscopy. Nanotechnology, 2013, 24, 505719.	1.3	19
99	Direct Measurements of the Mechanical Strength of Carbon Nanotubeâ€“Poly(methyl methacrylate) Interfaces. Small, 2013, 9, 3345-3351.	5.2	64
100	Collision and dynamic frictional properties of boron nitride nanotubes. Applied Physics Letters, 2013, 102, .	1.5	3
101	Radial Mechanical Properties of Singleâ€Walled Boron Nitride Nanotubes. Small, 2012, 8, 116-121.	5.2	44
102	Design and Fabrication of Differential Scanning Nanocalorimeter for Biological Applications. , 2011, , .		0
103	Design and Analysis of a New Type of Electromagnetic Damper With Increased Energy Density. Journal of Vibration and Acoustics, Transactions of the ASME, 2011, 133, .	1.0	62
104	Lâ€band high power solidâ€state power amplifier for aerospace usage. Electronics Letters, 0, , .	0.5	0