

Wonbin Hong

List of Publications by Year in descending order

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91
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docs citations

91
times ranked

1765
citing authors

#	ARTICLE	IF	CITATIONS
1	Efficient Analysis of Radiation From a Dipole Source in Woodpile EBG Structures. IEEE Transactions on Antennas and Propagation, 2022, 70, 389-400.	5.1	1
2	Analytical Design Method and Implementation of Broadband 4-Element Nolen Matrix. IEEE Transactions on Microwave Theory and Techniques, 2022, 70, 343-355.	4.6	10
3	A Planar, Polarization-Switchable Endfire and Broadside Millimeter-Wave Antenna Array Without Lumped Components. IEEE Transactions on Antennas and Propagation, 2022, 70, 3864-3869.	5.1	9
4	Microwave Sensor for Nondestructive, Volume-Independent Liquid Characterization. , 2022, 6, 1-4.		3
5	Antenna-on-Display Concept on an Extremely Thin Substrate for Sub-6 GHz Wireless Applications. IEEE Transactions on Antennas and Propagation, 2022, 70, 5929-5934.	5.1	9
6	A Programmable Reconfigurable Two-Port Half-Loop Antenna Concept for mmWave Wireless Applications. IEEE Open Journal of Antennas and Propagation, 2022, 3, 594-603.	3.7	3
7	Analysis of Dielectric Post-Wall Waveguide-based Passive Circuits using Recurrent Neural Network. , 2022, , .		0
8	Dome-Shaped mmWave Lens Antenna Optimization for Wide-Angle Scanning and Scan Loss Mitigation Using Geometric Optics and Multiple Scattering. IEEE Journal on Multiscale and Multiphysics Computational Techniques, 2022, 7, 142-150.	2.2	2
9	Cost-Effective and Compact Antenna Applications Using Planar HIS: Research Survey and Possibility. , 2022, , .		0
10	Highly Reconfigurable Dual-Band Coupler With Independently Tunable Frequency and Coupling Coefficient at the Lower Band. IEEE Transactions on Industrial Electronics, 2021, 68, 2408-2416.	7.9	9
11	A Software-Programmable Directivity, Beamsteering, and Polarization Reconfigurable Block Cell Antenna Concept for Millimeter-Wave 5G Phased-Array Architectures. IEEE Transactions on Antennas and Propagation, 2021, 69, 146-154.	5.1	16
12	Achieving 360° Coverage Dynamic and Switchable Beamforming Through Resource-Efficient Switchable Antennas for Future mmWave IoT Devices. IEEE Transactions on Industrial Electronics, 2021, 68, 8982-8991.	7.9	4
13	Circuit-on-Display: A Flexible, Invisible Hybrid Electromagnetic Sensor Concept. IEEE Journal of Microwaves, 2021, 1, 550-559.	6.5	9
14	Wideband Transmissive Polarization Rotator With In-Band Notches Enabling Multiband Operation. IEEE Access, 2021, 9, 44751-44756.	4.2	4
15	Reconfigurable Binary-Amplitude Fresnel Zone Plate for Millimeter-Wave Beamforming. IEEE Transactions on Antennas and Propagation, 2021, 69, 6444-6452.	5.1	5
16	Wheeler Method for Evaluation of Antennas Submerged in Lossy Media. Applied Sciences (Switzerland), 2021, 11, 1862.	2.5	1
17	Broadband and Wide-Angle Scanning Capability in Low-Coupled mm-Wave Phased-Arrays Incorporating ILA With HIS Fabricated on FR-4 PCB. IEEE Transactions on Vehicular Technology, 2021, 70, 2076-2088.	6.3	18
18	Heterogeneous Phased Array Architecture Consisting of AoD and AiP to Enhance Spherical Beamforming Coverage for 5G/6G Cellular Handsets. , 2021, , .		2

#	ARTICLE	IF	CITATIONS
19	24â€¹: <i>Invited Paper:</i> Optically Invisible Antennaâ€œonâ€œDisplay (AoD) Technologies: Review, Demonstration and Opportunities for Microwave, Millimeterâ€œWave and Subâ€œTHz Wireless Applications. Digest of Technical Papers SID International Symposium, 2021, 52, 293-296.	0.3	1
20	A Wideband Switched-Beam Antenna Array Fed by Compact Single-Layer Butler Matrix. IEEE Transactions on Antennas and Propagation, 2021, 69, 5130-5135.	5.1	17
21	A Compact Wideband Vertically Polarized End-Fire Millimeter-Wave Antenna Utilizing Slot, Dielectric, and Cavity Resonators. IEEE Transactions on Antennas and Propagation, 2021, 69, 5234-5243.	5.1	17
22	FR-4 PCB Process-based mm-Wave Phased Array Antenna Using Planar High-Impedance Surfaces. , 2021, , .		2
23	Performance Enhancement of mm-Wave Phased Arrays for Mobile Terminals Through Grounded Coplanar Waveguide Feeding Networks With via Fences. Frontiers in Communications and Networks, 2021, 2, .	3.0	1
24	OLED Touch Display-Integrated Phased-Array Antennas and RF Front-ends Packaging Technology for beyond 5G Wireless Devices. , 2021, , .		0
25	A Software-Defined Reconfigurable Phased-Array Architecture for Beyond 5G Applications. , 2021, , .		1
26	Dual-Polarized End-fire and Â±Broadside Millimeter-Wave Antenna Array. , 2021, , .		0
27	Dual-Function Dielectric Layer Enabling Compact Wideband End-Fire Millimeter-Wave Antenna. , 2021, , .		0
28	Energy-Efficient 5G Phased Arrays Incorporating Vertically Polarized Endfire Planar Folded Slot Antenna for mmWave Mobile Terminals. IEEE Transactions on Antennas and Propagation, 2020, 68, 230-241.	5.1	68
29	Polarization and Frequency-Selective Surface for Vehicular Beamforming Communications Requiring Near-Zero Profile. IEEE Transactions on Vehicular Technology, 2020, 69, 1719-1726.	6.3	7
30	A Single-Layer Vialess Wideband Reflective Polarization Rotator Utilizing Perforated Holes. IEEE Antennas and Wireless Propagation Letters, 2020, 19, 2053-2056.	4.0	15
31	On the Design of Multiband Antenna Employing AFSR Structure as Ground Plane for Low Out-of-Band RCS. , 2020, , .		1
32	Efficient Analysis of Electromagnetic Scattering in Post-Wall Waveguides and Its Application to Optimization of Millimeter Wave Filters. IEEE Open Journal of Antennas and Propagation, 2020, 1, 448-455.	3.7	3
33	A Software-Defined mmWave Radio Architecture Comprised of Modular, Controllable Pixels to attain Near-Infinite Pattern, Polarization, and Beam Steering Angles IMS. , 2020, , .		3
34	OLED Display-Integrated Optically Invisible Phased Arrays for Millimeter-Wave 5G Cellular Devices. , 2020, , .		6
35	mmWave 5G NR Cellular Handset Prototype Featuring Optically Invisible Beamforming Antenna-on-Display. IEEE Communications Magazine, 2020, 58, 54-60.	6.1	18
36	Metal Stamped Antenna-in-Package for Millimeter-wave Large-scale Phased-array Applications Using Multiphysics Analysis. , 2020, , .		3

#	ARTICLE	IF	CITATIONS
37	Adaptive 5G Architecture for an mmWave Antenna Front-End Package Consisting of Tunable Matching Network and Surface-Mount Technology. IEEE Transactions on Components, Packaging and Manufacturing Technology, 2020, 10, 2037-2046.	2.5	4
38	Systematically Integrated Phased-Array Antenna Configuration to Enhance Beam Coverage Efficiencies of Millimeter-wave 5G Mobile Devices. , 2020, , .		2
39	A Symmetrically Stacked Planar Antenna Concept Exhibiting Quasi-Isotropic Radiation Coverage. IEEE Antennas and Wireless Propagation Letters, 2020, 19, 1390-1394.	4.0	19
40	Efficient NFC coil antennas for fully enclosed metallicâ€framed wearable devices. IET Microwaves, Antennas and Propagation, 2020, 14, 211-214.	1.4	3
41	A Low-Profile Wideband Shared-Aperture Dual-Polarized Antenna Utilizing Dual-Function Slot. IEEE Open Journal of Antennas and Propagation, 2020, 1, 95-103.	3.7	0
42	A 3-D Lumped-Components-Free Absorptive Frequency-Selective Transmission Structure Featuring Very Wide Two-Sided Absorption Bandwidths. IEEE Antennas and Wireless Propagation Letters, 2020, 19, 761-765.	4.0	24
43	Comments on â€œBroadband Symmetrical E-Shaped Patch Antenna With Multimode Resonance for 5G Millimeter-Wave Applicationsâ€. IEEE Transactions on Antennas and Propagation, 2020, 68, 1219-1219.	5.1	1
44	Frequency-Adjustable Planar Folded Slot Antenna Using Fully Integrated Multithrow Function for 5G Mobile Devices at Millimeter-Wave Spectrum. IEEE Transactions on Microwave Theory and Techniques, 2020, 68, 1872-1881.	4.6	26
45	Optically Invisible Touch Sensor Panel Integrated Antenna: Concept and Demonstration at mmWave Spectrum. , 2020, , .		0
46	Performance Enhancement in Compact Inverted-L Antenna by Using 1-D EBG Ground Structures and Beam Directors. IEEE Access, 2019, 7, 93264-93274.	4.2	11
47	Modular, Reconfigurable Block Cell Antenna Concept for Millimeter-wave 5G. , 2019, , .		1
48	Antenna-on-Display (AoD) for Millimeter-wave 5G Mobile Devices. , 2019, , .		4
49	Characterizing Volume Density of Subwavelength Particles at 220â€325 GHz Using Deep Neural Network and Nonfeatured Scattering Matrix. IEEE Antennas and Wireless Propagation Letters, 2019, 18, 2240-2243.	4.0	0
50	Millimeter-Wave Phased-Array Antenna-in-Package (AiP) Using Stamped Metal Process for Enhanced Heat Dissipation. IEEE Antennas and Wireless Propagation Letters, 2019, 18, 2355-2359.	4.0	23
51	Circularly polarized wave beamforming using oneâ€dimensional Fresnel zone plate. Microwave and Optical Technology Letters, 2019, 61, 1263-1267.	1.4	1
52	A Frequency-Reconfigurable Antenna With 1-mm Nonground Portion for Metal-Frame and Full-Display Screen Handset Applications Using Mode Control Method. IEEE Access, 2019, 7, 48037-48045.	4.2	9
53	An Optically Invisible Antenna-on-Display Concept for Millimeter-Wave 5G Cellular Devices. IEEE Transactions on Antennas and Propagation, 2019, 67, 2942-2952.	5.1	82
54	Design and Measurement Considerations of Feeding Network Including Power Divider for Multi-Port Antenna Arrays. , 2019, , .		5

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55	Tight Coupling Dual-Band Coupler With Large Frequency Ratio and Arbitrary Power Division Ratios Over Two Bands. IEEE Access, 2019, 7, 184489-184499.	4.2	4
56	Frequency-Reconfigurable mmWave Antenna Loaded with Capacitive Structure Integrated within a Microstrip Line. , 2019, , .		3
57	Guest Editorial Antenna-in-Package, Antenna-on-Chip, Antenna-IC Interface: Joint Design and Cointegration. IEEE Antennas and Wireless Propagation Letters, 2019, 18, 2345-2350.	4.0	2
58	mmWave Double Cavity-Backed Slot Antenna featuring Electrically Small and Low-Profile. , 2019, , .		0
59	Four-Element Reconfigurable Coupled Loop MIMO Antenna Featuring LTE Full-Band Operation for Metallic-Rimmed Smartphone. IEEE Transactions on Antennas and Propagation, 2019, 67, 99-107.	5.1	72
60	Gain Variation of 60 GHz Aperture-Coupled Patch Antenna Dependent on the Position on the Ground Plane and Periodic Characteristic. The Journal of Korean Institute of Electromagnetic Engineering and Science, 2019, 30, 803-807.	0.3	1
61	37-39 GHz Vertically-Polarized End-fire 5G Antenna Array featuring Electrically Small Profile. , 2018, , .		8
62	A Frequency-Reconfigurable Tuner-Loaded Coupled-Fed Frame-Antenna for All-Metal-Shell Handsets. IEEE Access, 2018, 6, 64041-64049.	4.2	10
63	Hybrid Antenna Module Concept for 28 GHz 5G Beamsteering Cellular Devices. , 2018, , .		25
64	High-Efficiency Crossed-Loop 4G LTE Antenna for All Display Metal-Rimmed Smartphones. International Journal of Antennas and Propagation, 2018, 2018, 1-7.	1.2	1
65	Optically Transparent Nano-Patterned Antennas: A Review and Future Directions. Applied Sciences (Switzerland), 2018, 8, 901.	2.5	51
66	Optically Invisible Antenna Integrated Within an OLED Touch Display Panel for IoT Applications. IEEE Transactions on Antennas and Propagation, 2017, 65, 3750-3755.	5.1	57
67	Equivalent circuit characterization of a parallel-wire T-junction discontinuity with radiation loss. Microwave and Optical Technology Letters, 2017, 59, 1434-1438.	1.4	0
68	Solving the 5G Mobile Antenna Puzzle: Assessing Future Directions for the 5G Mobile Antenna Paradigm Shift. IEEE Microwave Magazine, 2017, 18, 86-102.	0.8	181
69	Exploitation of Dual-Polarization Diversity for 5G Millimeter-Wave MIMO Beamforming Systems. IEEE Transactions on Antennas and Propagation, 2017, 65, 6646-6655.	5.1	76
70	Millimeter-Wave 5G Antennas for Smartphones: Overview and Experimental Demonstration. IEEE Transactions on Antennas and Propagation, 2017, 65, 6250-6261.	5.1	371
71	Gain variation of 60 GHz patch antennas due to ground plane dimensions. Microwave and Optical Technology Letters, 2016, 58, 745-747.	1.4	2
72	Circularly polarized antenna with folded ground and parasitic branch for 60GHz WLAN. , 2016, , .		0

#	ARTICLE	IF	CITATIONS
73	60 GHz antenna module featuring spherical coverage for nomadic and mobile Gbps applications. , 2015, , .		0
74	Multi-polarized antenna array configuration for mmWave 5G mobile terminals. , 2015, , .		18
75	Design and empirical investigation of miniaturized mmWave antenna array modules within cellular devices. , 2015, , .		0
76	A planar, via-less zeroth-order antenna for wearable electrocardiography. , 2014, , .		1
77	Design and testing of a millimeter-wave beam-steering mesh-grid array for 5th generation (5G) mobile communication handset devices. , 2014, , .		2
78	Planar lens using mixed-order spatial elliptic filter. , 2014, , .		3
79	Holistic design considerations for environmentally adaptive 60 GHz beamforming technology. , 2014, 52, 30-38.		13
80	Radiation Efficiency-Improvement Using a Via-Less, Planar ZOR Antenna for Wireless ECG Sensors on a Lossy Medium. IEEE Antennas and Wireless Propagation Letters, 2014, 13, 1211-1214.	4.0	3
81	mmWave phased-array with hemispheric coverage for 5th generation cellular handsets. , 2014, , .		14
82	Design and analysis of a low-profile 28 GHz beam steering antenna solution for Future 5G cellular applications. , 2014, , .		113
83	Study and prototyping of practically large-scale mmWave antenna systems for 5G cellular devices. , 2014, 52, 63-69.		460
84	Planar beam steerable lens antenna system using non-uniform feed method. , 2014, , .		4
85	Highly miniaturized vertical end-fire antenna array for mmWave wireless communication. , 2013, , .		6
86	Grid Assembly-Free 60-GHz Antenna Module Embedded in FR-4 Transceiver Carrier Board. IEEE Transactions on Antennas and Propagation, 2013, 61, 1573-1580.	5.1	46
87	Measurement accuracy enhancement using an optical probe system for electrically small MIMO antennas. Microwave and Optical Technology Letters, 2013, 55, 238-241.	1.4	0
88	Characterization of SU-8 using terahertz time-domain spectroscopy. , 2013, , .		1
89	Integrated Resonant Structure for Simultaneous Wireless Power Transfer and Data Telemetry. IEEE Antennas and Wireless Propagation Letters, 2012, 11, 1659-1662.	4.0	15
90	Multilayer Antenna Package for IEEE 802.11ad Employing Ultralow-Cost FR4. IEEE Transactions on Antennas and Propagation, 2012, 60, 5932-5938.	5.1	43

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91	24-Element Antenna-in-Package for Stationary 60-GHz Communication Scenarios. IEEE Antennas and Wireless Propagation Letters, 2011, 10, 738-741.	4.0	56