Hao Chi Zhang

List of Publications by Year
in descending order

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77 papers	3,038 citations	147726 31 h-index	168321 53 g-index
79 all docs	79 docs citations	79 times ranked	1392 citing authors

#	Article	IF	Citations
1	Broadband amplification of spoof surface plasmon polaritons at microwave frequencies. Laser and Photonics Reviews, 2015, 9, 83-90.	4.4	204
2	A programmable diffractive deep neural network based on a digital-coding metasurface array. Nature Electronics, 2022, 5, 113-122.	13.1	171
3	Efficient conversion of surface-plasmon-like modes to spatial radiated modes. Applied Physics Letters, 2015, 106, .	1.5	149
4	Concept, Theory, Design, and Applications of Spoof Surface Plasmon Polaritons at Microwave Frequencies. Advanced Optical Materials, 2019, 7, 1800421.	3.6	148
5	Breaking the Challenge of Signal Integrity Using Time-Domain Spoof Surface Plasmon Polaritons. ACS Photonics, 2015, 2, 1333-1340.	3.2	143
6	Broadband Frequency-Selective Spoof Surface Plasmon Polaritons on Ultrathin Metallic Structure. Scientific Reports, 2015, 5, 8165.	1.6	123
7	Frequency-Fixed Beam-Scanning Leaky-Wave Antenna Using Electronically Controllable Corrugated Microstrip Line. IEEE Transactions on Antennas and Propagation, 2018, 66, 4449-4457.	3.1	114
8	Second-Harmonic Generation of Spoof Surface Plasmon Polaritons Using Nonlinear Plasmonic Metamaterials. ACS Photonics, 2016, 3, 139-146.	3.2	105
9	A Hybrid Circuit for Spoof Surface Plasmons and Spatial Waveguide Modes to Reach Controllable Band-Pass Filters. Scientific Reports, 2015, 5, 16531.	1.6	94
10	A plasmonic route for the integrated wireless communication of subdiffraction-limited signals. Light: Science and Applications, 2020, 9, 113.	7.7	79
11	Smaller-loss planar SPP transmission line than conventional microstrip in microwave frequencies. Scientific Reports, 2016, 6, 23396.	1.6	69
12	Capacitive-coupled Series Spoof Surface Plasmon Polaritons. Scientific Reports, 2016, 6, 24605.	1.6	63
13	Realâ€Time Controls of Designer Surface Plasmon Polaritons Using Programmable Plasmonic Metamaterial. Advanced Materials Technologies, 2017, 2, 1600202.	3.0	62
14	Direct Radiations of Surface Plasmon Polariton Waves by Gradient Groove Depth and Flaring Metal Structure. IEEE Antennas and Wireless Propagation Letters, 2016, 15, 865-868.	2.4	61
15	On-chip sub-terahertz surface plasmon polariton transmission lines in CMOS. Scientific Reports, 2015, 5, 14853.	1.6	60
16	A series of compact rejection filters based on the interaction between spoof SPPs and CSRRs. Scientific Reports, 2016, 6, 28256.	1.6	60
17	Spoof surface plasmon photonics. Reviews of Modern Physics, 2022, 94, .	16.4	60
18	Active digital spoof plasmonics. National Science Review, 2020, 7, 261-269.	4.6	59

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19	An Active Wideband and Wide-Angle Electromagnetic Absorber at Microwave Frequencies. IEEE Antennas and Wireless Propagation Letters, 2016, 15, 1913-1916.	2.4	56
20	Transmission-spectrum-controllable spoof surface plasmon polaritons using tunable metamaterial particles. Applied Physics Letters, 2016, 108, .	1.5	54
21	Trapping surface plasmon polaritons on ultrathin corrugated metallic strips in microwave frequencies. Optics Express, 2015, 23, 7031.	1.7	53
22	Negative reflection and negative surface wave conversion from obliquely incident electromagnetic waves. Light: Science and Applications, 2018, 7, 18008-18008.	7.7	53
23	Pass-band reconfigurable spoof surface plasmon polaritons. Journal of Physics Condensed Matter, 2018, 30, 134004.	0.7	42
24	Compact Feeding Network for Array Radiations of Spoof Surface Plasmon Polaritons. Scientific Reports, 2016, 6, 22692.	1.6	41
25	A Dual-Band Electronic-Scanning Leaky-Wave Antenna Based on a Corrugated Microstrip Line. IEEE Transactions on Antennas and Propagation, 2019, 67, 3433-3438.	3.1	40
26	A Spoof Surface Plasmon Transmission Line Loaded with Varactors and Shortâ€Circuit Stubs and Its Application in Wilkinson Power Dividers. Advanced Materials Technologies, 2018, 3, 1800046.	3.0	39
27	An ultra-compact rejection filter based on spoof surface plasmon polaritons. Scientific Reports, 2017, 7, 10576.	1.6	38
28	Planar Spoof SPP Transmission Lines: Applications in Microwave Circuits. IEEE Microwave Magazine, 2019, 20, 73-91.	0.7	38
29	Programmable Controls of Multiple Modes of Spoof Surface Plasmon Polaritons to Reach Reconfigurable Plasmonic Devices. Advanced Materials Technologies, 2019, 4, 1800603.	3.0	36
30	Crosstalk Suppression Based on Mode Mismatch Between Spoof SPP Transmission Line and Microstrip. IEEE Transactions on Components, Packaging and Manufacturing Technology, 2019, 9, 2267-2275.	1.4	34
31	Intensityâ€Dependent Metasurface with Digitally Reconfigurable Distribution of Nonlinearity. Advanced Optical Materials, 2019, 7, 1900792.	3.6	33
32	Design of Miniaturized Antenna Using Corrugated Microstrip. IEEE Transactions on Antennas and Propagation, 2020, 68, 1918-1924.	3.1	31
33	Compact filters with adjustable multi-band rejections based on spoof surface plasmon polaritons. Journal Physics D: Applied Physics, 2019, 52, 025107.	1.3	29
34	Dynamic Controls of Secondâ€Harmonic Generations in Both Forward and Backward Modes Using Reconfigurable Plasmonic Metawaveguide. Advanced Optical Materials, 2020, 8, 1902058.	3.6	29
35	Programmable Multifunctional Device Based on Spoof Surface Plasmon Polaritons. IEEE Transactions on Antennas and Propagation, 2020, 68, 3770-3779.	3.1	29
36	Reduction of radiation loss at small-radius bend using spoof surface plasmon polariton transmission line. Scientific Reports, 2017, 7, 41077.	1.6	26

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37	Ultralow temperature terahertz magnetic thermodynamics of perovskite-like SmFeO3 ceramic. Scientific Reports, 2015, 5, 14777.	1.6	25
38	Multi-layer topological transmissions of spoof surface plasmon polaritons. Scientific Reports, 2016, 6, 22702.	1.6	25
39	Reduction of Shielding-Box Volume Using SPP-Like Transmission Lines. IEEE Transactions on Components, Packaging and Manufacturing Technology, 2017, 7, 1486-1492.	1.4	25
40	Dispersion Analysis of Deep-Subwavelength-Decorated Metallic Surface Using Field-Network Joint Solution. IEEE Transactions on Antennas and Propagation, 2018, 66, 2923-2933.	3.1	25
41	A novel spoof surface plasmon polariton structure to reach ultra-strong field confinements. Opto-Electronic Advances, 2019, 2, 19000101-19000107.	6.4	25
42	Dynamic excitation of spoof surface plasmon polaritons. Applied Physics Letters, 2014, 105, .	1.5	24
43	A Wide-Angle Broadband Converter: From Odd-Mode Spoof Surface Plasmon Polaritons to Spatial Waves. IEEE Transactions on Antennas and Propagation, 2019, 67, 7425-7432.	3.1	24
44	Multilayer Transmissions of Spoof Surface Plasmon Polaritons for Multifunctional Applications. Advanced Materials Technologies, 2017, 2, 1600159.	3.0	23
45	A Broadband and High-Efficiency Compact Transition From Microstrip Line to Spoof Surface Plasmon Polaritons. IEEE Microwave and Wireless Components Letters, 2020, 30, 23-26.	2.0	22
46	Reconfigurable Parametric Amplifications of Spoof Surface Plasmons. Advanced Science, 2021, 8, e2100795.	5.6	21
47	Diffraction radiation based on an anti-symmetry structure of spoof surface-plasmon waveguide. Applied Physics Letters, 2017, 110, .	1.5	19
48	A Dual-Mode UWB Antenna for Pattern Diversity Application. IEEE Transactions on Antennas and Propagation, 2020, 68, 3219-3224.	3.1	19
49	Measurement Method of Dispersion Curves for Spoof Surface Plasmon Polaritons. IEEE Transactions on Antennas and Propagation, 2019, 67, 4920-4923.	3.1	18
50	Compact and Wideband Octuple-Mode Filter Based on Hybrid Substrate Integrated Waveguide and Spoof Localized Surface Plasmon Structure. IEEE Transactions on Circuits and Systems II: Express Briefs, 2020, 67, 2377-2381.	2.2	18
51	Loss Analysis of Plasmonic Metasurfaces Using Field-Network-Joint Method. IEEE Transactions on Antennas and Propagation, 2019, 67, 3521-3526.	3.1	17
52	Characteristic Impedance Extraction of Spoof Surface Plasmon Polariton Waveguides. Journal Physics D: Applied Physics, 0, , .	1.3	16
53	Crosstalk Noise Suppression Between Single and Differential Transmission Lines Using Spoof Surface Plasmon Polaritons. IEEE Transactions on Components, Packaging and Manufacturing Technology, 2020, 10, 1367-1374.	1.4	15
54	Gainâ€Associated Nonlinear Phenomenon in Singleâ€Conductor Oddâ€Mode Plasmonic Metamaterials. Laser and Photonics Reviews, 2022, 16, .	4.4	15

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55	A Multi-Layer Spoof Surface Plasmon Polariton Waveguide With Corrugated Ground. IEEE Access, 2017, 5, 25306-25311.	2.6	14
56	Spoof surface plasmon polariton beam splitters integrated with broadband rejection filtering function. Journal Physics D: Applied Physics, 2021, 54, 335105.	1.3	14
57	A 13.5-Gb/s 140-GHz Silicon Redriver Exploiting Metadevices for Short-Range OOK Communications. IEEE Transactions on Microwave Theory and Techniques, 2022, 70, 239-253.	2.9	14
58	Multiple band-rejection filters in dual-frequency bands based on spoof surface plasmon polaritons. Journal of Optics (United Kingdom), 2020, 22, 015001.	1.0	13
59	Suppressing High-Power Microwave Pulses Using Spoof Surface Plasmon Polariton Mono-Pulse Antenna. IEEE Transactions on Antennas and Propagation, 2021, 69, 8069-8079.	3.1	12
60	Programmable Hybrid Circuit Based on Reconfigurable SPP and Spatial Waveguide Modes. Advanced Materials Technologies, 2020, 5, 1900828.	3.0	11
61	Design of Compact Circularly Polarized Antenna Using Sunshine-Shaped Slotted Patch. IEEE Transactions on Antennas and Propagation, 2020, 68, 6800-6805.	3.1	11
62	Shielding Spoof Surface Plasmon Polariton Transmission Lines Using Dielectric Box. IEEE Microwave and Wireless Components Letters, 2018, 28, 1077-1079.	2.0	8
63	Mode jumping of split-ring resonator metamaterials controlled by high-permittivity BST and incident electric fields. Scientific Reports, 2016, 6, 31274.	1.6	7
64	Dual-band and dual-polarized programmable metasurface unit with independent channels. Journal Physics D: Applied Physics, 2021, 54, 145109.	1.3	6
65	CMOS THz On-chip surface plasmon polariton T-lines and converter. , 2015, , .		5
66	A Broadband 90Â° Balun With Low-Phase-Imbalance Performance Based on Periodic Slow Wave Structure. IEEE Transactions on Antennas and Propagation, 2021, 69, 4681-4687.	3.1	5
67	Wave propagation in reconfigurable broadband gain metamaterials at microwave frequencies. Journal of Applied Physics, 2016, 119, 194904.	1.1	3
68	A Novel Low-Crosstalk Driveline Based on Spoof Surface Plasmon Polaritons. IEEE Access, 2019, 7, 30702-30707.	2.6	3
69	High-Order Modes Analysis of Complex Plasmonic Surface Using the Field-Network Joint Solution. IEEE Access, 2019, 7, 129734-129740.	2.6	2
70	Design of compact multipleâ€input and multipleâ€output antenna based on slowâ€wave corrugated strips. IET Microwaves, Antennas and Propagation, 2022, 16, 617-626.	0.7	2
71	A general method for extending a lossy network to a lossless network using the matrix decomposition. , 2018, , .		1
72	Frequency Splitter with High Isolation Based on Spoof Surface Plasmon Polaritons. , 2021, , .		1

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73	Polymorphic impedance matching technique for MEMS phase shifter. , 2018, , .		0
74	Dispersion and Loss of Complex Structured Plasmonic Surface. , 2018, , .		0
75	Microwave plasmonic waveguides and devices. , 2018, , .		0
76	Crosstalk Noise Characterization Between Spoof SPP Transmission Line and Differential Microstrip Lines. , 2019, , .		0
77	Mode Analyses of Subwavelength Periodic Metallic Structures With Finite Thickness. IEEE Antennas and Wireless Propagation Letters, 2022, 21, 79-83.	2.4	0