Shulabh Gupta

List of Publications by Year in Descending Order

71 papers	**1,052** citations	**17** h-index	**31** g-index
90 ext. papers	**1,379** ext. citations	**3.3** avg, IF	**4.75** L-index

#	Paper	IF	Citations
71	IE-GSTC Metasurface Field Solver using Surface Susceptibility Tensors with Normal Polarizabilities. *IEEE Transactions on Antennas and Propagation*, **2022**, 1-1	4.9	1
70	Metasurface Near-Field Measurements with Incident Field Reconstruction Using a Single Horn Antenna. *IEEE Instrumentation and Measurement Magazine*, **2022**, 25, 69-75	1.4	
69	All-Dielectric Fabry-Pérot-Based Compound Huygens Structure for Millimeter-Wave Beamforming. *IEEE Transactions on Antennas and Propagation*, **2021**, 69, 273-285	4.9	5
68	Millimeter-Wave Huygens Transmit Arrays Based on Coupled Metallic Resonators. *IEEE Transactions on Antennas and Propagation*, **2021**, 69, 2686-2696	4.9	4
67	Floquet Analysis of Space-Time Modulated Metasurfaces with Lorentz Dispersion. *IEEE Transactions on Antennas and Propagation*, **2021**, 1-1	4.9	6
66	Ray-Optical Evaluation of Scattering from Electrically Large Metasurfaces Characterized by Locally Periodic Surface Susceptibilities. *IEEE Transactions on Antennas and Propagation*, **2021**, 1-1	4.9	1
65	Complex Eigenmodes and Eigenfrequencies in Electromagnetics. *IEEE Transactions on Antennas and Propagation*, **2021**, 69, 4644-4656	4.9	1
64	Integrated Multiport Leaky-Wave Antenna Multiplexer/Demultiplexer System for Millimeter-Wave Communication. *IEEE Transactions on Antennas and Propagation*, **2021**, 69, 5244-5256	4.9	3
63	Millimeter-Wave Integrated Side-Fire Leaky-Wave Antenna and Its Application as a Spectrum Analyzer. *IEEE Transactions on Antennas and Propagation*, **2021**, 69, 5401-5412	4.9	3
62	Direct thermal emission testing of aperiodic dielectric stack for narrowband thermal emission at mid-IR. *Journal of Applied Physics*, **2020**, 127, 114502	2.5	1
61	FDTD Simulation of Dispersive Metasurfaces With Lorentzian Surface Susceptibilities. *IEEE Access*, **2020**, 8, 83027-83040	3.5	6
60	. *IEEE Access*, **2020**, 8, 93408-93425	3.5	7
59	Millimeter-Wave Slot Array Antenna Front-End for Amplitude-Only Direction Finding. *IEEE Transactions on Antennas and Propagation*, **2020**, 68, 5365-5374	4.9	5
58	Conductor-backed dielectric metasurface thermal emitters for mid-infrared spectroscopy. *Journal of Applied Physics*, **2020**, 127, 033105	2.5	1
57	. *IEEE Access*, **2020**, 8, 226866-226886	3.5	5
56	Metasurface Modeling of Periodic Diffraction Gratings based on Generalized Sheet Transition Conditions (GSTCs) **2020**,		2
55	Multi-Port Leaky-Wave Antennas as Real-Time Analog Spectral Decomposers **2020**,		2

No.	Title	IF	Cit.
54	General Formulation of the Boundary Element Method (BEM) for Curvilinear Metasurfaces in the Presence of Multiple Scattering Objects **2020**,		3
53	All-Dielectric Huygens Metasurface Pair for mm-Wave Circularly-Polarized Beam-Forming **2020**,		2
52	Laser-Drilled All-Dielectric Huygens Transmit-Arrays as 120 GHz Band Beamformers. *IEEE Access*, **2020**, 8, 153815-153825	3.5	1
51	Fabry Pot-Based Compound All-Dielectric Huygens Structure for Circularly Polarized Millimeter-Wave Beamforming. *IEEE Antennas and Wireless Propagation Letters*, **2020**, 19, 1784-1788	3.8	1
50	Surface Impedance Engineered Low-Profile Dual-Band Grooved-Dielectric Choke Ring for GNSS Applications. *IEEE Transactions on Antennas and Propagation*, **2019**, 67, 2008-2011	4.9	8
49	Modified Explicit Finite-Difference Time-Domain Method for Nonparaxial Wave Scattering From Electromagnetic Metasurfaces. *IEEE Antennas and Wireless Propagation Letters*, **2019**, 18, 1238-1242	3.8	2
48	Experimental demonstration of active phasers based on codirectional coupling for real-time analog signal processing. *Microwave and Optical Technology Letters*, **2019**, 61, 1778-1782	1.2	1
47	A Low-cost Light-weight 3D-printed Choke Ring for Multipath Mitigation for GNSS Antennas **2019**,		3
46	Reflection-Cancelling Dielectric Huygens Metasurface Pair for Wideband Millimeter-Wave Beam-Forming **2019**,		2
45	Relation between Complex Propagation Constant and Complex Eigenmodes in Lossy Traveling-Wave Structures **2019**,		1
44	Scattering Field Solutions of Metasurfaces Based on the Boundary Element Method for Interconnected Regions in 2-D. *IEEE Transactions on Antennas and Propagation*, **2019**, 67, 7487-7495	4.9	11
43	Finite-Difference Time-Domain Modeling of Space Time-Modulated Metasurfaces. *IEEE Transactions on Antennas and Propagation*, **2018**, 66, 281-292	4.9	33
42	Real-Time Dispersion Code Multiple Access for High-Speed Wireless Communications. *IEEE Transactions on Wireless Communications*, **2018**, 17, 266-281	9.6	6
41	High-Q all-dielectric thermal emitters for mid-infrared gas-sensing applications. *Journal of the Optical Society of America A: Optics and Image Science, and Vision*, **2018**, 35, 119-124	1.8	11
40	Amplitude-equalized microwave phasers **2018**,		1
39	Active Phasers based on Co-directional Couplers for Millimeter-wave Analog Signal Processing **2018**,		1
38	Nonreciprocal Nongyrotropic Magnetless Metasurface. *IEEE Transactions on Antennas and Propagation*, **2017**, 65, 3589-3597	4.9	76
37	A Simple Picosecond Pulse Generator Based on a Pair of Step Recovery Diodes. *IEEE Microwave and Wireless Components Letters*, **2017**, 27, 467-469	2.6	19

36	Finite-Difference Modeling of Broadband Huygens Metasurfaces Based on Generalized Sheet Transition Conditions. *IEEE Transactions on Antennas and Propagation*, **2017**, 65, 2566-2577	4.9	13
35	Generalized spatial Talbot effect based on all-dielectric metasurfaces. *Optics Communications*, **2017**, 384, 25-29	2	
34	Real-Time Electromagnetic Signal Processing: Principles and Illustrations **2017**,		1
33	Loss-Gain Equalized Reconfigurable C-Section Analog Signal Processor. *IEEE Transactions on Microwave Theory and Techniques*, **2017**, 65, 555-564	4.1	9
32	Dielectric Resonator Metasurface for Dispersion Engineering. *IEEE Transactions on Antennas and Propagation*, **2017**, 65, 673-680	4.9	28
31	Perfect Dispersive Medium for Real-Time Signal Processing. *IEEE Transactions on Antennas and Propagation*, **2016**, 64, 5299-5308	4.9	6
30	Active micro-ring resonators as compact perfect dispersive devices **2016**,		2
29	Enhanced Bandwidth and Diversity in Real-Time Analog Signal Processing (R-ASP) Using Nonuniform C-Section Phasers. *IEEE Microwave and Wireless Components Letters*, **2016**, 26, 663-665	2.6	8
28	Generalized Coupled-Line All-Pass Phasers. *IEEE Transactions on Microwave Theory and Techniques*, **2015**, 63, 1007-1018	4.1	19
27	Bit-error-rate (BER) performance in dispersion code multiple access (DCMA) **2015**,		10
26	Synthesis of electromagnetic metasurfaces: principles and illustrations. *EPJ Applied Metamaterials*, **2015**, 2, 12	0.8	50
25	All-pass metasurfaces based on interconnected dielectric resonators as a spatial phaser for real-time analog signal processing **2015**,		4
24	Reconfigurable phaser using gain-loss C-sections for radio analog signal processing (R-ASP) **2015**,		5
23	Enhancement of Time-Reversal Subwavelength Wireless Transmission Using Pulse Shaping. *IEEE Transactions on Antennas and Propagation*, **2015**, 63, 4169-4174	4.9	8
22	Unveiling Magnetic Dipole Radiation in Phase-Reversal Leaky-Wave Antennas. *IEEE Antennas and Wireless Propagation Letters*, **2014**, 13, 786-789	3.8	
21	All-pass dispersion synthesis using microwave C-sections. *International Journal of Circuit Theory and Applications*, **2014**, 42, 1228-1245	2	16
20	Hybrid-cascade coupled-line phasers for high-resolution radio-analog signal processing. *Microwave and Optical Technology Letters*, **2014**, 56, 2502-2504	1.2	2
19	Analog Signal Processing: A Possible Alternative or Complement to Dominantly Digital Radio Schemes. *IEEE Microwave Magazine*, **2013**, 14, 87-103	1.2	93

18	Chipless RFID tags based on multiple band-rejected planar log-periodic antennas **2013**,		1
17	Wave-Interference Explanation of Group-Delay Dispersion in Resonators [Education Column]. *IEEE Antennas and Propagation Magazine*, **2013**, 55, 212-227	1.7	9
16	Multilayer Broadside-Coupled Dispersive Delay Structures for Analog Signal Processing. *IEEE Microwave and Wireless Components Letters*, **2012**, 22, 1-3	2.6	23
15	Synthesis of Narrowband Reflection-Type Phasers With Arbitrary Prescribed Group Delay. *IEEE Transactions on Microwave Theory and Techniques*, **2012**, 60, 2394-2402	4.1	42
14	Distortion-Less Real-Time Spectrum Sniffing Based on a Stepped Group-Delay Phaser. *IEEE Microwave and Wireless Components Letters*, **2012**, 22, 601-603	2.6	33
13	CRLH–CRLH C-Section Dispersive Delay Structures With Enhanced Group-Delay Swing for Higher Analog Signal Processing Resolution. *IEEE Transactions on Microwave Theory and Techniques*, **2012**, 60, 3939-3949	4.1	21
12	Low-Cost Analog Pulse Compression Technique Based on Mixing With an Auxiliary Pulse. *IEEE Microwave and Wireless Components Letters*, **2012**, 22, 150-152	2.6	1
11	Group delay swing enhancement in transmission-line all-pass networks using coupling and dispersion boosting ferrimagnetic substrate. *Microwave and Optical Technology Letters*, **2012**, 54, 589-593	1.2	3
10	Analog signal processing (ASP) for high-speed microwave and millimeter-wave systems **2012**,		4
9	Chipless RFID System Based on Group Delay Engineered Dispersive Delay Structures. *IEEE Antennas and Wireless Propagation Letters*, **2011**, 10, 1366-1368	3.8	55
8	Increased Group-Delay Slope Loop System for Enhanced-Resolution Analog Signal Processing. *IEEE Transactions on Microwave Theory and Techniques*, **2011**, 59, 1622-1628	4.1	39
7	Group-Delay Engineered Noncommensurate Transmission Line All-Pass Network for Analog Signal Processing. *IEEE Transactions on Microwave Theory and Techniques*, **2010**, 58, 2392-2407	4.1	107
6	CRLH leaky-wave antenna based frequency division diplexing transceiver yes **2009**,		2
5	Compressive Receiver Using a CRLH-Based Dispersive Delay Line for Analog Signal Processing. *IEEE Transactions on Microwave Theory and Techniques*, **2009**, 57, 2617-2626	4.1	58
4	Microwave Analog Real-Time Spectrum Analyzer (RTSA) Based on the Spectral–Spatial Decomposition Property of Leaky-Wave Structures. *IEEE Transactions on Microwave Theory and Techniques*, **2009**, 57, 2989-2999	4.1	86
3	Schrödinger solitons in left-handed SiO2–Ag–SiO2 and Ag–SiO2–Ag plasmonic waveguides calculated with a nonlinear transmission line approach. *Journal of Applied Physics*, **2008**, 104, 124510	2.5	8
2	Experimental Demonstration and Characterization of a Tunable CRLH Delay Line System for Impulse/Continuous Wave. *IEEE Microwave and Wireless Components Letters*, **2007**, 17, 864-866	2.6	36
1	Complete family of periodic Talbot filters for pulse repetition rate multiplication. *Optics Express*, **2006**, 14, 4270-9	3.3	13