

# Gregory H Huff

## List of Publications by Year in descending order

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102  
papers

1,109  
citations

516710

16  
h-index

454955

30  
g-index

103  
all docs

103  
docs citations

103  
times ranked

908  
citing authors

#	ARTICLE	IF	CITATIONS
1	Mapping geometric and electromagnetic feature spaces with machine learning for additively manufactured RF devices. Additive Manufacturing, 2022, 50, 102549.	3.0	2
2	Design Optimization of Origami-Tunable Frequency Selective Surfaces. IEEE Open Journal of Antennas and Propagation, 2021, 2, 897-910.	3.7	2
3	Multi-Layer and Conformally Integrated Structurally Embedded Vascular Antenna (SEVA) Arrays. Sensors, 2021, 21, 1764.	3.8	3
4	3-D Printed Directional Couplers in Circular Waveguide. IEEE Microwave and Wireless Components Letters, 2021, 31, 561-564.	3.2	9
5	Lossy Beam Generation of Circular Arrays. , 2021, , .		0
6	Circularly-polarised origami-inspired folding patch antenna sub-array. IET Microwaves, Antennas and Propagation, 2020, 14, 1262-1271.	1.4	5
7	A polarization reconfigurable microstrip patch antenna using liquid metal microfluidics. Smart Materials and Structures, 2020, 29, 045032.	3.5	1
8	Null Beamsteering Using Distributed Arrays and Shared Aperture Distributions. IEEE Transactions on Antennas and Propagation, 2020, 68, 5353-5364.	5.1	5
9	Self-foldable origami reflector antenna enabled by shape memory polymer actuation. Smart Materials and Structures, 2020, 29, 115011.	3.5	29
10	Impact of Position Errors on Synthetic Aperture DOA Convergence Based on Swarming UAV s. , 2020, , .		2
11	A Sensor-Driven Analysis of Distributed Direction Finding Systems Based on UAV Swarms. Sensors, 2019, 19, 2659.	3.8	7
12	Origami-Inspired Frequency Selective Surface with Fixed Frequency Response under Folding. Sensors, 2019, 19, 4808.	3.8	14
13	Electroless silver plating of 3D printed waveguide components by peristaltic pump driven system. Electronics Letters, 2019, 55, 100-102.	1.0	5
14	Electroless Silver Plating of Additive Manufactured Trough Waveguide Mode Transducer and Antenna Structure. , 2019, , .		2
15	Statistical Analysis and Discussion of Circularly Bound Random Antenna Array Distributions. , 2019, , .		2
16	Folding, Tessellation, and Deployment of an Origami-Inspired Active-Material-Enabled Self-Folding Reflector Antenna. , 2018, , .		7
17	INVESTIGATION OF FOLD-DEPENDENT BEHAVIOR IN AN ORIGAMI-INSPIRED FSS UNDER NORMAL INCIDENCE. Progress in Electromagnetics Research M, 2018, 63, 131-139.	0.9	25
18	An Origami Inspired Circularly-Polarized Folding Patch Antenna Array. , 2018, , .		9

#	ARTICLE	IF	CITATIONS
19	Polygonalization of mm-wave dual-band circular phased arrays for multi-mode beamforming. , 2018, , .		2
20	Experimental Mechanics for Multifunctional Composites and Next Generation UAVs. Conference Proceedings of the Society for Experimental Mechanics, 2018, , 215-221.	0.5	1
21	Occupancy Estimation With Wireless Monitoring Devices and Application-Specific Antennas. IEEE Transactions on Signal Processing, 2017, 65, 2123-2135.	5.3	3
22	RF Dielectric Loss Due to MOCVD Aluminum Nitride on High Resistivity Silicon. IEEE Transactions on Microwave Theory and Techniques, 2017, 65, 1465-1470.	4.6	19
23	A Physically Reconfigurable Structurally Embedded Vascular Antenna. IEEE Transactions on Antennas and Propagation, 2017, 65, 2282-2288.	5.1	27
24	Experimental transmit beamforming using a circular canonical family bound to a locus of quadric roots. , 2017, , .		0
25	Transmit beamforming for radar applications using circularly tapered random arrays. , 2017, , .		1
26	A computer vision-based framework for the synthesis and analysis of beamforming behavior in swarming intelligent systems. , 2017, , .		3
27	Synchronization considerations using circularly distributed arrays. , 2017, , .		1
28	A liquid metal-based structurally embedded vascular antenna: I. Concept and multiphysical modeling. Smart Materials and Structures, 2017, 26, 025001.	3.5	15
29	Graphical Material Selection Methods for Multi-Constraint, Multi-Functional Composites Pressure Vessels. , 2017, , .		0
30	Physical reconfiguration of an origami-inspired deployable microstrip patch antenna array. , 2017, , .		15
31	Frequency tuning through physical reconfiguration of a corrugated origami frequency selective surface. , 2017, , .		2
32	Impact of UAV swarm density and heterogeneity on synthetic aperture DoA convergence. , 2017, , .		3
33	Investigation of beamforming patterns from volumetrically distributed phased arrays. , 2017, , .		7
34	An investigation of geolocation-aware beamforming algorithms for swarming UAVs. , 2017, , .		11
35	Modal beam generation from circularly bound random array topologies. , 2016, , .		0
36	Analysis and characterization of structurally embedded vascular antennas using liquid metals. Proceedings of SPIE, 2016, , .	0.8	5

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37	A study of liquid metal alloy reconfigurable antennas embedded in a structural composite. , 2016, , .		1
38	Development of UAS Design Based on Wideband Antenna Architecture. Aerospace, 2015, 2, 312-324.	2.2	0
39	Random antenna array phase and range limitations. , 2015, , .		2
40	A cognitive spatial learning control system for volumetric random arrays. , 2015, , .		0
41	Orientation-awareness and wireless systems. , 2015, , .		2
42	Distributed beamforming from triangular planar random antenna arrays. , 2015, , .		1
43	Z0lver: A cross-platform open-source App for transmission line analysis and circuit design. , 2015, , .		0
44	A micro air vehicle design based on a wideband antenna. , 2015, , .		0
45	Manipulating Liquid Metal Droplets in Microfluidic Channels With Minimized Skin Residues Toward Tunable RF Applications. Journal of Microelectromechanical Systems, 2015, 24, 1069-1076.	2.5	66
46	Dual-band frequency selective surfaces based on multi-arm sub-wavelength Archimedean spirals. Electronics Letters, 2015, 51, 1476-1478.	1.0	3
47	Analysis and experiments on peaking sidelobe and scanning behavior in planar random arrays. , 2014, , .		1
48	Antenna design for graph inference: Striking a balance between quality and quantity. , 2014, , .		0
49	On the Constant Input Impedance of the Archimedean Spiral Antenna in Free-Space. IEEE Transactions on Antennas and Propagation, 2014, 62, 3869-3872.	5.1	6
50	Development and analysis of a stripline Archimedean snail antenna for disk-shaped unmanned aerial vehicle applications. Journal of Electromagnetic Waves and Applications, 2014, 28, 685-699.	1.6	2
51	Reconfigurable Antennas, Preemptive Switching and Virtual Channel Management. IEEE Transactions on Communications, 2014, 62, 1272-1282.	7.8	5
52	Adding dimensions to wireless systems with orientation-aware devices and reconfigurable antennas. , 2014, , .		0
53	On the design and analysis of antenna patterns for localization with smart devices. , 2014, , .		0
54	Design, analysis, and reconfiguration of a multi-arm spiral frequency selective surface. , 2014, , .		0

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55	A Stochastic Mathematical Framework for the Analysis of Spherically-Bound Random Arrays. IEEE Transactions on Antennas and Propagation, 2014, 62, 3002-3011.	5.1	46
56	A Fluidic Loading Mechanism in a Polarization Reconfigurable Antenna With a Comparison to Solid State Approaches. IEEE Transactions on Antennas and Propagation, 2014, 62, 4008-4014.	5.1	20
57	A novel fluidic switch for high power applications. , 2014, , .		0
58	Cognitive Motion-Dynamic Tethering of a Phased Array to an Android Smartphone. IEEE Transactions on Antennas and Propagation, 2014, 62, 1093-1101.	5.1	7
59	Fluidic-Enabled Reconfigurable Patch With Integrated Dielectric Spectrometer. IEEE Antennas and Wireless Propagation Letters, 2014, 13, 1116-1119.	4.0	1
60	Transmission line analysis of the Archimedean spiral antenna in free space. Journal of Electromagnetic Waves and Applications, 2014, 28, 1175-1193.	1.6	8
61	Microfluidically Switched Frequency-Reconfigurable Slot Antennas. IEEE Antennas and Wireless Propagation Letters, 2013, 12, 828-831.	4.0	55
62	Re-visitation on the input impedance of two-arm frequency-independent antennas in free space. , 2013, , .		0
63	Localization of a single source with orientation-aware smart devices. , 2013, , .		0
64	Fluidic tuning of a frequency selective surface based on a four-arm Archimedean spiral. , 2013, , .		2
65	A Geometrically-Appropriate Cavity Model for a Spherical Inverted-F Antenna (SIFA). IEEE Transactions on Antennas and Propagation, 2013, 61, 2404-2410.	5.1	2
66	A closed-form analysis of infinitely parallel coplanar waveguides. , 2013, , .		1
67	Real-time and near-real-time acquisition systems for measuring aliasing in small arrays based on crystal microstructures. , 2013, , .		1
68	Analysis of a Variable SIW Resonator Enabled by Dielectric Material Perturbations and Applications. IEEE Transactions on Microwave Theory and Techniques, 2013, 61, 225-233.	4.6	33
69	Frequency reconfigurable patch antenna using liquid metal as switching mechanism. Electronics Letters, 2013, 49, 1370-1371.	1.0	78
70	A fluidic-enabled polarization reconfigurable antenna on a hexagonal substrate tile. , 2013, , .		1
71	An android-controlled direction of arrival system using polarization-reconfigurable antennas. , 2013, , .		0
72	Reconfigurable antennas, preemptive switching and virtual channel management under partial observations. , 2013, , .		0

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73	Evaluation of Fluidic-Based Mechanisms for Electromagnetic Compensation from Mechanical Bending and Thermoregulation of Flexible Patch Antenna. , 2013, , .		0
74	ANALYTICAL INVESTIGATION OF PERIODIC COPLANAR WAVEGUIDES. Progress in Electromagnetics Research M, 2013, 30, 167-181.	0.9	8
75	Modal Resistance of Spiral Antenna. Journal of Electromagnetic Analysis and Applications, 2013, 05, 223-228.	0.2	4
76	Detecting the presence of a proximate cellular user through distributed femtocell sensing. , 2012, , .		1
77	Automation of reconfiguration, compensation, and thermoregulation using vascular networks. , 2012, , .		0
78	Direction of arrival estimation using canonical and crystallographic volumetric element configurations. , 2012, , .		4
79	Stripline-Fed Archimedean Spiral Antenna. IEEE Antennas and Wireless Propagation Letters, 2011, 10, 346-349.	4.0	44
80	A Fluidic Loading Mechanism for Phase Reconfigurable Reflectarray Elements. IEEE Antennas and Wireless Propagation Letters, 2011, 10, 876-879.	4.0	16
81	A comparison of geometrically bound random arrays in euclidean space. , 2011, , .		12
82	Biologically-inspired vascular antenna reconfiguration mechanism. Electronics Letters, 2011, 47, 637.	1.0	5
83	Performance analysis of wireless hybrid-ARQ systems with delay-sensitive traffic. IEEE Transactions on Communications, 2010, 58, 1262-1272.	7.8	32
84	Experiments on a fluidic loading mechanism for beam-steering reflectarrays. , 2010, , .		5
85	A Frequency Reconfigurable Dielectric Resonator Antenna Using Colloidal Dispersions. IEEE Antennas and Wireless Propagation Letters, 2010, 9, 288-290.	4.0	52
86	A Coaxial Stub Microfluidic Impedance Transformer (&lt;emph>Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 227 Td (emphasistype="italic"& 2010, 20, 154-156.	3.2	10
87	An adaptive SIW filter using vertically-orientated fluidic material perturbations. , 2010, , .		2
88	A Substrate Integrated Fluidic Compensation Mechanism for Deformable Antennas. , 2009, , .		5
89	A Spherical Inverted-F Antenna (SIFA). IEEE Antennas and Wireless Propagation Letters, 2009, 8, 649-652.	4.0	14
90	A cognitive compensation mechanism for deformable antennas. , 2009, , .		0

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91	On the Applications for a Radiation Reconfigurable Antenna. , 2007, , .		16
92	Colloidal microstructures, transport, and impedance properties within interfacial microelectrodes. Applied Physics Letters, 2007, 90, 224102.	3.3	18
93	Reconfigurable radiation from a W-band trough waveguide antenna: trade-offs in impedance and radiation from tapered MEMS-based perturbations. , 2007, , .		0
94	Increasing channel capacity on MIMO system employing adaptive pattern/polarization reconfigurable antenna. , 2007, , .		17
95	Stripline-based spiral antennas with integrated feed structure, impedance transformer, and dyson-style balun. , 2007, , .		9
96	A comparative study of diversity gain and spatial coverage: Fixed versus reconfigurable antennas for portable devices. Microwave and Optical Technology Letters, 2007, 49, 535-539.	1.4	10
97	Enabling High Performance Wireless Communication Systems Using Reconfigurable Antennas. , 2006, , .		7
98	Three variations of a pattern-reconfigurable microstrip parasitic array. Microwave and Optical Technology Letters, 2005, 45, 369-372.	1.4	16
99	A novel radiation pattern and frequency reconfigurable single turn square spiral microstrip antenna. IEEE Microwave and Wireless Components Letters, 2003, 13, 57-59.	3.2	178
100	Ground plane edge serrations for improved performance of microstrip active reflectarray elements. IEEE Antennas and Wireless Propagation Letters, 2003, 2, 334-336.	4.0	1
101	Improvements in the performance of microstrip antennas on finite ground planes through ground plane edge serrations. IEEE Microwave and Wireless Components Letters, 2002, 12, 308-310.	3.2	24
102	Additive manufactured spherical resonator Vâ€band elliptical waveguide filter. Microwave and Optical Technology Letters, 0, , .	1.4	0