Ashwin K Iyer

List of Publications by Year in Descending Order

62 papers	1,834 citations	13 h-index	42 g-index
76 ext. papers	2,314 ext. citations	4.2 avg, IF	5.15 L-index

#	Paper	IF	Citations
62	A Battery-Less Six-Port RFID-Based Wireless Sensor Architecture for IoT Applications. *IEEE Internet of Things Journal*, **2022**, 1-1	10.7	
61	Metamaterial Liner for MRI Excitation Part 1: Theory, Modelling and Design. *IEEE Access*, **2022**, 1-1	3.5	1
60	Metamaterial Liner for MRI Excitation Part 2: Design and Performance at 4.7T. *IEEE Access*, **2022**, 1-1	3.5	1
59	The MTM-EBG as a Rigorous Multiconductor Model of the UC-EBG and Approaches for Miniaturization. *IEEE Transactions on Antennas and Propagation*, **2021**, 1-1	4.9	
58	Low-Profile Uniplanar Dual-Band and Dual- Polarized Microstrip Patch Antenna Using Embedded MTM-EBGs. *IEEE Transactions on Antennas and Propagation*, **2021**, 69, 3645-3653	4.9	4
57	A Survey on Battery-Less RFID-Based Wireless Sensors. *Micromachines*, **2021**, 12,	3.3	7
56	Facilitation of MRI Detection at 3 Tesla by Engineering the Electromagnetic Properties of a Metamaterial Slab Employed as a Receive Array **2021**,		1
55	Patterning of Complex, Nanometer-Scale Features in Wide-Area Gold Nanoplasmonic Structures Using Helium Focused Ion Beam Milling. *ACS Applied Materials & Interfaces*, **2021**, 13, 43209-43220	9.5	1
54	A Battery-Less RFID Sensor Architecture with Distance Ambiguity Resolution for Smart Home IoT Applications. *IEEE Internet of Things Journal*, **2021**, 1-1	10.7	6
53	Simulation Comparison of Birdcage Coil and Metamaterial Liner for MRI at 3T and 4.7T **2021**,		2
52	Design of a Highly Miniaturized, Inherently Matched, Spherical Folded Dipole Antenna and Evaluation of its Quality Factor. *IEEE Transactions on Antennas and Propagation*, **2021**, 1-1	4.9	4
51	Surface-enhanced mid-infrared absorption spectroscopy using miniaturized-disc metasurface. *Scientific Reports*, **2021**, 11, 23557	4.9	1
50	A Strongly Miniaturized and Inherently Matched Folded Dipole Antenna for Narrowband Applications. *IEEE Transactions on Antennas and Propagation*, **2020**, 68, 3377-3386	4.9	8
49	Metamaterials and Metasurfaces Historical Context, Recent Advances, and Future Directions. *IEEE Transactions on Antennas and Propagation*, **2020**, 68, 1223-1231	4.9	26
48	Single-Layer Dual-Band Polarization-Selective Metafilm With Independently Controlled and Closely Spaced Shielding Bands. *IEEE Transactions on Antennas and Propagation*, **2020**, 68, 1448-1457	4.9	8
47	Mu-Negative and Near-Zero Lined Disks for Surface-Enhanced Mid-Infrared Spectroscopy **2020**,		1
46	Fully Printed and Electrically Small Folded Dipole with Inherent Matching **2020**,		1

45	Analytical and Numerical Investigation of Radiation Enhancement by Anisotropic Metamaterial Shells. *IEEE Access*, **2020**, 8, 2983-2994	3.5	1
44	Theory and Design of Dual-Band Microstrip Networks Using Embedded Metamaterial-Based Electromagnetic Bandgap Structures. *IEEE Transactions on Antennas and Propagation*, **2020**, 68, 1761-1772	4.9	3
43	A Fano-Reflection Metafilm Composed of Metamaterial-Lined Discs. *IEEE Access*, **2020**, 8, 117018-117027	3.5	2
42	Compact Mechanically Tunable Microstrip Bandstop Filter With Constant Absolute Bandwidth Using an Embedded Metamaterial-Based EBG. *IEEE Transactions on Microwave Theory and Techniques*, **2020**, 68, 4369-4380	4.1	3
41	Embedded MTM-EBGs in Patch Antenna for Simultaneously Dual-Band and Dual-Polarized Operation **2020**,		1
40	. *IEEE Access*, **2020**, 8, 219955-219970	3.5	
39	A Highly Miniaturized and Inherently Conjugately Matched Folded Dipole-Based RFID Tag Antenna. *IEEE Access*, **2019**, 7, 101658-101664	3.5	6
38	Optical Metasurface Based on Subwavelength Nanoplasmonic Metamaterial-Lined Apertures. *IEEE Journal of Selected Topics in Quantum Electronics*, **2019**, 25, 1-8	3.8	11
37	Dual-Band Microstrip Corporate Feed Network Using an Embedded Metamaterial-Based EBG. *IEEE Transactions on Antennas and Propagation*, **2019**, 67, 7031-7039	4.9	5
36	The MTM-EBG: A Fully Uniplanar, Printable, and Embedded Solution for Multi-Band Functionality in Microstrip Devices and Antennas **2019**,		1
35	Design and Characterization of a Dual-Band Impedance Transformer Based on an Embedded MTM-EBG **2019**,		1
34	Strongly Enhanced Sensitivity in Planar Microwave Sensors Based on Metamaterial Coupling. *IEEE Transactions on Microwave Theory and Techniques*, **2018**, 66, 1843-1855	4.1	135
33	Far-Field Magnification of Subdiffraction Conducting Features Using Metamaterial-Lined Aperture Arrays. *IEEE Transactions on Antennas and Propagation*, **2018**, 66, 3482-3490	4.9	8
32	Dual-Band Open-Ended Waveguide Feeder Antennas With Collinear Feed Design. *IEEE Transactions on Antennas and Propagation*, **2018**, 66, 6358-6363	4.9	5
31	A Dual-Band Quadrature Hybrid Coupler Using Embedded MTM-EBGs **2018**,		8
30	Compact Tri-Band Microstrip Stub Filter Using Embedded MTM-EBGs **2018**,		3
29	Choke Rings for Pattern Shaping of a GPR Dipole Antenna. *IEEE Transactions on Antennas and Propagation*, **2018**, 66, 6781-6790	4.9	9
28	Investigation of choke-ring structures for ground-penetrating radar **2017**,		1

27	A low-profile dual-band circular patch antenna for GPS using metamaterial-based EBGs **2017**,		5
26	Subwavelength metamaterial-lined apertures AS far-field imaging devices **2017**,		1
25	Bandwidth control of cylindrical ring dielectric resonator antennas using metallic cap and sleeve loading. *IET Microwaves, Antennas and Propagation*, **2017**, 11, 1742-1747	1.6	8
24	Dual-band wilkinson power divider using uniplanar metamaterial-based EBGs **2017**,		4
23	Dual-Band Microstrip Patch Antenna Using Integrated Uniplanar Metamaterial-Based EBGs. *IEEE Transactions on Antennas and Propagation*, **2016**, 64, 5046-5053	4.9	46
22	Experimental Verification of Below-Cutoff Propagation in Miniaturized Circular Waveguides Using Anisotropic ENNZ Metamaterial Liners. *IEEE Transactions on Microwave Theory and Techniques*, **2016** , 64, 1297-1305	4.1	20
21	Far-field high-resolution imaging of conducting obstacles using metamaterial-lined aperture arrays **2016**,		2
20	A class of circular waveguiding structures containing cylindrically anisotropic metamaterials: Applications from radio frequency/microwave to optical frequencies. *Journal of Applied Physics*, **2016**, 119, 083103	2.5	10
19	A Miniaturized Uniplanar Metamaterial-Based EBG for Parallel-Plate Mode Suppression. *IEEE Transactions on Microwave Theory and Techniques*, **2016**, 64, 1176-1185	4.1	24
18	Anisotropic metamaterial optical fibers. *Optics Express*, **2015**, 23, 9074-85	3.3	24
17	New approach for extraordinary transmission through an array of subwavelength apertures using thin ENNZ metamaterial liners. *Optics Express*, **2015**, 23, 20356-65	3.3	12
16	Design of multi-band microstrip patch antennas using miniaturized 1D metamaterial-based EBGs **2015**,		2
15	Free-Space Focusing at C-Band Using a Flat Fully Printed Multilayer Metamaterial Lens. *IEEE Transactions on Antennas and Propagation*, **2015**, 63, 4702-4714	4.9	8
14	Miniaturized Circular-Waveguide Probe Antennas Using Metamaterial Liners. *IEEE Transactions on Antennas and Propagation*, **2015**, 63, 428-433	4.9	18
13	Design of a frequency notched coplanar tapered slot antenna using split ring resonator **2015**,		1
12	Radiation characteristics of miniaturized metamaterial-lined waveguide probe antennas **2015**,		2
11	Below-Cutoff Propagation in Metamaterial-Lined Circular Waveguides. *IEEE Transactions on Microwave Theory and Techniques*, **2013**, 61, 3169-3178	4.1	42
10	Analysis of propagation in metamaterial-lined circular waveguides **2013**,		1

List of Publications

9	Effective-Medium Properties of Cylindrical Transmission-Line Metamaterials. *IEEE Antennas and Wireless Propagation Letters*, **2011**, 10, 1491-1494	3.8	6
8	Free-Space Imaging Beyond the Diffraction Limit Using a Veselago-Pendry Transmission-Line Metamaterial Superlens. *IEEE Transactions on Antennas and Propagation*, **2009**, 57, 1720-1727	4.9	45
7	A Multilayer Negative-Refractive-Index Transmission-Line (NRI-TL) Metamaterial Free-Space Lens at X-Band. *IEEE Transactions on Antennas and Propagation*, **2007**, 55, 2746-2753	4.9	39
6	Characterization of a Multilayered Negative-Refractive-Index Transmission-Line (NRI-TL) Metamaterial **2006**,		2
5	Negative-Refractive-Index Transmission-Line Metamaterials **2005**, 1-52		7
4	Leaky-wave radiation from planar negative-refractive-index transmission-line metamaterials **2004**,		10
3	Transmission line models for negative refractive index media and associated implementations without excess resonators. *IEEE Microwave and Wireless Components Letters*, **2003**, 13, 51-53	2.6	152
2	. *IEEE Transactions on Microwave Theory and Techniques*, **2002**, 50, 2702-2712	4.1	952
1	Negative refractive index metamaterials supporting 2-D waves		112