Christophe Caloz

List of Publications by Year in Descending Order

364 papers	11,511 citations	53 h-index	98 g-index
517 ext. papers	15,186 ext. citations	3.3 avg, IF	6.96 L-index

#	Paper	IF	Citations
364	Metasurface magnetless specular isolator.. *Scientific Reports*, **2022**, 12, 5652	4.9	0
363	Pseudorandom Sequence (Space-) Time-Modulated Metasurfaces: Principles, Operations, and Applications.. *IEEE Antennas and Propagation Magazine*, **2022**, 2-11	1.7	1
362	Photonic Gap Antennas Based on High-Index-Contrast Slot Waveguides. *Physical Review Applied*, **2021**, 16,	4.3	1
361	Bessel beams: a unified and extended perspective. *Optica*, **2021**, 8, 451	8.6	7
360	Generalized Brewster effect using bianisotropic metasurfaces. *Optics Express*, **2021**, 29, 11361-11370	3.3	10
359	Electromagnetic Wave Scattering from a Moving Medium with Stationary Interface across the Interluminal Regime. *Photonics*, **2021**, 8, 202	2.2	0
358	Magnetless reflective gyrotropic spatial isolator metasurface. *New Journal of Physics*, **2021**, 23, 075006	2.9	3
357	Spread-Spectrum Selective Camouflaging Based on Time-Modulated Metasurface. *IEEE Transactions on Antennas and Propagation*, **2021**, 69, 286-295	4.9	14
356	Electromagnetic Inversion With Local Power Conservation for Metasurface Design. *IEEE Antennas and Wireless Propagation Letters*, **2020**, 19, 1291-1295	3.8	7
355	Electromagnetic Chirality, Part 2: The Macroscopic Perspective [Electromagnetic Perspectives]. *IEEE Antennas and Propagation Magazine*, **2020**, 62, 82-98	1.7	13
354	Electromagnetic Chirality, Part 1: The Microscopic Perspective [Electromagnetic Perspectives]. *IEEE Antennas and Propagation Magazine*, **2020**, 62, 58-71	1.7	23
353	IE-GSTC Analysis of Metasurface Cavities and Application to Redirection Cloaking **2020**,		1
352	Limitations of the Metasurface Diluted-Slab Model. *IEEE Journal on Multiscale and Multiphysics Computational Techniques*, **2020**, 5, 255-264	1.5	1
351	Advances in Spacetime-Modulated Metasurfaces **2020**,		1
350	Spacetime Metamaterials—Part I: General Concepts. *IEEE Transactions on Antennas and Propagation* , **2020**, 68, 1569-1582	4.9	88
349	On the Use of Electromagnetic Inversion for Metasurface Design. *IEEE Transactions on Antennas and Propagation*, **2020**, 68, 1812-1824	4.9	15
348	Spacetime Metamaterials—Part II: Theory and Applications. *IEEE Transactions on Antennas and Propagation*, **2020**, 68, 1583-1598	4.9	62

347	Synthesis of Spherical Metasurfaces Based on Susceptibility Tensor GSTCs. *IEEE Transactions on Antennas and Propagation*, **2019**, 67, 2542-2554	4.9	11
346	Microwave Hilbert Transformer and Its Applications in Real-Time Analog Processing. *IEEE Transactions on Microwave Theory and Techniques*, **2019**, 67, 2216-2226	4.1	4
345	Wave Scattering by a Cylindrical Metasurface Cavity of Arbitrary Cross Section: Theory and Applications. *IEEE Transactions on Antennas and Propagation*, **2019**, 67, 4059-4072	4.9	23
344	Solar Meta-Sails for Agile Optical Force Control. *IEEE Transactions on Antennas and Propagation*, **2019**, 67, 6924-6934	4.9	9
343	. *IEEE Transactions on Antennas and Propagation*, **2019**, 67, 7396-7406	4.9	5
342	Roadmap on metasurfaces. *Journal of Optics (United Kingdom)*, **2019**, 21, 073002	1.7	69
341	Large-Angle, Broadband, and Multifunctional Directive Waveguide Scatterer Gratings. *ACS Photonics*, **2019**, 6, 3298-3305	6.3	8
340	Uniform-velocity spacetime crystals. *Advanced Photonics*, **2019**, 1, 1	8.1	11
339	Perfect Penetrable Cloaking Using Gain-Less and Loss-less Bianisotropic Metasurfaces **2019**,		1
338	Spread-Spectrum Camouflaging based on Time-Modulated Metasurface **2019**,		5
337	**2019**,		2
336	Spacetime-Modulated Metasurface for Spatial Multiplexing Communication **2019**,		4
335	Simultaneous Control of the Spatial and Temporal Spectra of Light With Space-Time Varying Metasurfaces. *IEEE Transactions on Antennas and Propagation*, **2019**, 67, 2430-2441	4.9	37
334	Real-Time Dispersion Code Multiple Access for High-Speed Wireless Communications. *IEEE Transactions on Wireless Communications*, **2018**, 17, 266-281	9.6	6
333	Susceptibility Derivation and Experimental Demonstration of Refracting Metasurfaces Without Spurious Diffraction. *IEEE Transactions on Antennas and Propagation*, **2018**, 66, 1321-1330	4.9	87
332	Time-Reversal Routing for Dispersion Code Multiple Access (DCMA) Communications. *IEEE Access*, **2018**, 6, 9650-9654	3.5	3
331	Wave deflection and shifted refocusing in a medium modulated by a superluminal rectangular pulse. *Physical Review B*, **2018**, 97,	3.3	9
330	Inverse prism based on temporal discontinuity and spatial dispersion. *Optics Letters*, **2018**, 43, 3297-3300	3	32

329	Unidirectional Loop Metamaterials (ULM) as Magnetless Artificial Ferrimagnetic Materials: Principles and Applications. *IEEE Antennas and Wireless Propagation Letters*, **2018**, 17, 1943-1947	3.8	14
328	Unusual electromagnetic modes in space-time-modulated dispersion-engineered media. *Physical Review A*, **2018**, 97,	2.6	15
327	Generalized Sheet Transition Condition FDTD Simulation of Metasurface. *IEEE Transactions on Antennas and Propagation*, **2018**, 66, 271-280	4.9	34
326	Multiple Beam Forming using Spherical Metasurfaces **2018**,		1
325	Extending the Brewster Effect to Arbitrary Angle and Polarization using Bianisotropic Metasurfaces **2018**,		1
324	Guest Editorial Special Cluster on Magnetless Nonreciprocity in Electromagnetics. *IEEE Antennas and Wireless Propagation Letters*, **2018**, 17, 1931-1937	3.8	8
323	Electromagnetic Nonreciprocity. *Physical Review Applied*, **2018**, 10,	4.3	198
322	Real-Time Spectrum Sniffer for Cognitive Radio Based on Rotman Lens Spectrum Decomposer. *IEEE Access*, **2018**, 6, 52366-52373	3.5	5
321	. *IEEE Journal on Multiscale and Multiphysics Computational Techniques*, **2018**, 3, 37-49	1.5	38
320	Space-Wave Routing via Surface Waves Using a Metasurface System. *Scientific Reports*, **2018**, 8, 7549	4.9	10
319	Flexible-Resolution, Arbitrary-Input, and Tunable Rotman Lens Spectrum Decomposer. *IEEE Transactions on Antennas and Propagation*, **2018**, 66, 3936-3947	4.9	5
318	Design, concepts, and applications of electromagnetic metasurfaces. *Nanophotonics*, **2018**, 7, 1095-1116	6.3	86
317	. *IEEE Transactions on Antennas and Propagation*, **2017**, 65, 442-452	4.9	96
316	Finite-Element Modeling of Metasurfaces With Generalized Sheet Transition Conditions. *IEEE Transactions on Antennas and Propagation*, **2017**, 65, 2413-2420	4.9	29
315	Nonreciprocal Nongyrotropic Magnetless Metasurface. *IEEE Transactions on Antennas and Propagation*, **2017**, 65, 3589-3597	4.9	76
314	A guided tour in metasurface land: Discontinuity conditions, design and applications **2017**,		1
313	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
312	Dispersive Feeding Network for Arbitrary Frequency Beam Scanning in Array Antennas. *IEEE Transactions on Antennas and Propagation*, **2017**, 65, 3033-3040	4.9	7

311	Broadside Dual-Channel Orthogonal-Polarization Radiation Using a Double-Asymmetric Periodic Leaky-Wave Antenna. *IEEE Transactions on Antennas and Propagation*, **2017**, 65, 2855-2864	4.9	23
310	Optical isolation based on space-time engineered asymmetric photonic band gaps. *Physical Review B*, **2017**, 96,	3.3	60
309	Sub/Super-luminal space-time slab: Fundamental scattering symmetries **2017**,		1
308	Real-Time Electromagnetic Signal Processing: Principles and Illustrations **2017**,		1
307	Simultaneous enhancement of light extraction and spontaneous emission using a partially reflecting metasurface cavity. *Physical Review A*, **2017**, 95,	2.6	14
306	Nonreciprocal electromagnetic scattering from a periodically space-time modulated slab and application to a quasisonic isolator. *Physical Review B*, **2017**, 96,	3.3	83
305	Loss-Gain Equalized Reconfigurable C-Section Analog Signal Processor. *IEEE Transactions on Microwave Theory and Techniques*, **2017**, 65, 555-564	4.1	9
304	Dielectric Resonator Metasurface for Dispersion Engineering. *IEEE Transactions on Antennas and Propagation*, **2017**, 65, 673-680	4.9	28
303	Metasurface solar sail **2017**,		5
302	Towards space-time metamaterials **2017**,		1
301	Efficient Analysis of Metasurfaces in Terms of Spectral-Domain GSTC Integral Equations. *IEEE Transactions on Antennas and Propagation*, **2017**, 65, 5340-5347	4.9	21
300	Scattering in superluminal space-time (ST) modulated electromagnetic crystals **2017**,		1
299	One-Port Coupling Matrix Synthesis for Reflection-Type Devices. *IEEE Microwave and Wireless Components Letters*, **2017**, 27, 1086-1088	2.6	1
298	Controllable angular scattering with a bianisotropic metasurface **2017**,		2
297	Mathematical synthesis and analysis of a second-order magneto-electrically nonlinear metasurface. *Optics Express*, **2017**, 25, 19013-19022	3.3	4
296	Temporal and Spatial Dispersion Engineering Using Metamaterial Concepts and Structures **2017**, 165-204		
295	Simulation of Metasurfaces in Finite Difference Techniques. *IEEE Transactions on Antennas and Propagation*, **2016**, 64, 4753-4759	4.9	46
294	SurfaceWave routing of beams by a transparent birefringent metasurface **2016**,		2

293	Nonreciprocal metamaterials: A global perspective **2016**,		1
292	Frequency generation in moving photonic crystals. *Journal of the Optical Society of America B: Optical Physics*, **2016**, 33, 1616	1.7	4
291	Ten applications of metamaterials **2016**,		2
290	Localized Waves: Theory, Techniques, and Applications **2016**, 567-618		1
289	Dispersion code modulation for enhanced spectral efficiency in wireless communications **2016**,		3
288	Shunt-Stub and Stepped-Impedance Broadband Reflective Phasers. *IEEE Microwave and Wireless Components Letters*, **2016**, 26, 807-809	2.6	6
287	Perfect Dispersive Medium for Real-Time Signal Processing. *IEEE Transactions on Antennas and Propagation*, **2016**, 64, 5299-5308	4.9	6
286	Metasurface Spatial Processor for Electromagnetic Remote Control. *IEEE Transactions on Antennas and Propagation*, **2016**, 64, 1759-1767	4.9	31
285	Spacetime processing metasurfaces: GSTC synthesis and prospective applications **2016**,		7
284	Comparison of two synthesis methods for birefringent metasurfaces. *Journal of Applied Physics*, **2016**, 120, 235305	2.5	16
283	Spacetime metasurfaces **2016**,		1
282	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
281	Graphene transverse electric surface plasmon detection using nonreciprocity modal discrimination. *Physical Review B*, **2016**, 94,	3.3	16
280	. *IEEE Transactions on Antennas and Propagation*, **2015**, 63, 2977-2991	4.9	217
279	Compact Reflection-Type Phaser Using Quarter-Wavelength Transmission Line Resonators. *IEEE Microwave and Wireless Components Letters*, **2015**, 25, 391-393	2.6	9
278	Generalized Coupled-Line All-Pass Phasers. *IEEE Transactions on Microwave Theory and Techniques*, **2015**, 63, 1007-1018	4.1	19
277	Space-time modulated nonreciprocal mixing, amplifying and scanning leaky-wave antenna system **2015**,		12
276	Real-time 2-D spectral-decomposition using a leaky-wave antenna array with dispersive feeding network **2015**,		3

275	Phaser-based feeding network for uniformly scanning antenna arrays **2015**,		5
274	Birefringent “generalized refractive” metasurface **2015**,		1
273	Bit-error-rate (BER) performance in dispersion code multiple access (DCMA) **2015**,		10
272	Temporal photonic crystals: Causality versus periodicity **2015**,		1
271	Scattering in spatiotemporal media **2015**,		1
270	Coupling Matrix Synthesis of Nonreciprocal Lossless Two-Port Networks Using Gyrators and Inverters. *IEEE Transactions on Microwave Theory and Techniques*, **2015**, 63, 2782-2792	4.1	25
269	Electromagnetic Fields Radiated by a Circular Loop With Arbitrary Current. *IEEE Transactions on Antennas and Propagation*, **2015**, 63, 442-446	4.9	1
268	Field effect tuning of microwave Faraday rotation and isolation with large-area graphene. *Applied Physics Letters*, **2015**, 107, 093106	3.4	8
267	Synthesis of electromagnetic metasurfaces: principles and illustrations. *EPJ Applied Metamaterials*, **2015**, 2, 12	0.8	50
266	All-pass metasurfaces based on interconnected dielectric resonators as a spatial phaser for real-time analog signal processing **2015**,		4
265	Reconfigurable phaser using gain-loss C-sections for radio analog signal processing (R-ASP) **2015**,		5
264	Solving the broadside radiation issue in periodic leaky-wave antennas **2015**,		2
263	Single-Step Tunable Group Delay Phaser for Spectrum Sniffing. *IEEE Microwave and Wireless Components Letters*, **2015**, 25, 808-810	2.6	6
262	Electromagnetic metasurface performing up to four independent wave transformations **2015**,		2
261	Enhancement of Time-Reversal Subwavelength Wireless Transmission Using Pulse Shaping. *IEEE Transactions on Antennas and Propagation*, **2015**, 63, 4169-4174	4.9	8
260	Localized Waves: Theory, Techniques and Applications **2015**, 1-44		
259	Unveiling Magnetic Dipole Radiation in Phase-Reversal Leaky-Wave Antennas. *IEEE Antennas and Wireless Propagation Letters*, **2014**, 13, 786-789	3.8	
258	The symmetry secrets of periodic leaky-wave antennas **2014**,		1

257	Enhanced-SNR Impulse Radio Transceiver Based on Phasers. *IEEE Microwave and Wireless Components Letters*, **2014**, 24, 778-780	2.6	15
256	Reduced-permittivity meandered single-beam full-space scanning phase-reversal leaky-wave antenna **2014**,		3
255	Terahertz graphene magnetoplasmons: Non-reciprocity, tunability and gyrotropy **2014**,		1
254	Magnetoelectric Dipole Antenna Arrays. *IEEE Transactions on Antennas and Propagation*, **2014**, 62, 3613-3622	4.9	5
253	Circular Polarization of Periodic Leaky-Wave Antennas With Axial Asymmetry: Theoretical Proof and Experimental Demonstration. *IEEE Transactions on Antennas and Propagation*, **2014**, 62, 1817-1829	4.9	48
252	Transversal Asymmetry in Periodic Leaky-Wave Antennas for Bloch Impedance and Radiation Efficiency Equalization Through Broadside. *IEEE Transactions on Antennas and Propagation*, **2014**, 62, 5037-5054	4.9	63
251	All-pass dispersion synthesis using microwave C-sections. *International Journal of Circuit Theory and Applications*, **2014**, 42, 1228-1245	2	16
250	METASURFACE SYNTHESIS FOR TIME-HARMONIC WAVES: EXACT SPECTRAL AND SPATIAL METHODS (Invited Paper). *Progress in Electromagnetics Research*, **2014**, 149, 205-216	3.8	7
249	Metasurface synthesis using reduced susceptibility tensors **2014**,		2
248	Manipulating light at distance by a metasurface using momentum transformation. *Optics Express*, **2014**, 22, 14530-43	3.3	31
247	Vortex beam generation using circular leaky-wave antenna **2014**,		6
246	Hybrid-cascade coupled-line phasers for high-resolution radio-analog signal processing. *Microwave and Optical Technology Letters*, **2014**, 56, 2502-2504	1.2	2
245	Exact stability conditions in upwinding-scheme FDTD for the Boltzman transport equation. *International Journal of Numerical Modelling: Electronic Networks, Devices and Fields*, **2014**, 27, 238-258	1	1
244	Synthesis of broadband dispersive delay structures formed by commensurate C- and D-sections. *International Journal of RF and Microwave Computer-Aided Engineering*, **2014**, 24, 322-331	1.5	7
243	Non-uniform C-section phasers for enhanced design flexibility in Radio Analog Signal Processing **2014**,		3
242	Corrections to Surface Susceptibility Bianisotropic Matrix Model for Periodic Metasurfaces of Uniaxially Mono-Anisotropic Scatterers Under Oblique TE-Wave Incidence[[Dec 12 5753-5767]. *IEEE Transactions on Antennas and Propagation*, **2013**, 61, 4405-4405	4.9	1
241	Power Divider with Arbitrary Power Ratio and Arbitrary Ripple Level Using Filter Synthesis Techniques. *Microwave and Optical Technology Letters*, **2013**, 55, 1819-1820	1.2	3
240	Giant non-reciprocity at the subwavelength scale using angular momentum-biased metamaterials. *Nature Communications*, **2013**, 4, 2407	17.4	247

239	Analog Signal Processing: A Possible Alternative or Complement to Dominantly Digital Radio Schemes. *IEEE Microwave Magazine*, **2013**, 14, 87-103	1.2	93
238	Alternative Construction of the Coupling Matrix of Filters With Non-Paraconjugate Transmission Zeros. *IEEE Microwave and Wireless Components Letters*, **2013**, 23, 509-511	2.6	4
237	Terahertz magnetoplasmon energy concentration and splitting in Graphene PN Junctions. *Optics Express*, **2013**, 21, 25356-63	3.3	13
236	Design of Dispersive Delay Structures (DDSs) Formed by Coupled C-Sections Using Predistortion With Space Mapping. *IEEE Transactions on Microwave Theory and Techniques*, **2013**, 61, 4040-4051	4.1	9
235	Synthesis of Cross-Coupled Reduced-Order Dispersive Delay Structures (DDSs) With Arbitrary Group Delay and Controlled Magnitude. *IEEE Transactions on Microwave Theory and Techniques*, **2013**, 61, 1043-1052	4.1	33
234	Radiation Efficiency Issues in Planar Antennas on Electrically Thick Substrates and Solutions. *IEEE Transactions on Antennas and Propagation*, **2013**, 61, 4013-4025	4.9	8
233	Wave-Interference Explanation of Group-Delay Dispersion in Resonators [Education Column]. *IEEE Antennas and Propagation Magazine*, **2013**, 55, 212-227	1.7	9
232	Construction of Green's Functions for Multilayered Media Using Signal-Flow Graphs [Education Column]. *IEEE Antennas and Propagation Magazine*, **2013**, 55, 244-249	1.7	
231	Electromagnetic Modeling of a Magnetless Nonreciprocal Gyrotropic Metasurface. *IEEE Transactions on Antennas and Propagation*, **2013**, 61, 221-231	4.9	41
230	Generation of Bessel Beams by Two-Dimensional Antenna Arrays Using Sub-Sampled Distributions. *IEEE Transactions on Antennas and Propagation*, **2013**, 61, 1838-1849	4.9	52
229	Faraday rotation in magnetically biased graphene at microwave frequencies. *Applied Physics Letters*, **2013**, 102, 191901	3.4	50
228	Magnetless Nonreciprocal Metamaterial (MNM) Technology: Application to Microwave Components. *IEEE Transactions on Microwave Theory and Techniques*, **2013**, 61, 1030-1042	4.1	88
227	Comments on Theoretical Analysis and Practical Considerations for the Integrated Time-Stretching System Using Dispersive Delay Line (DDL) *IEEE Transactions on Microwave Theory and Techniques*, **2013**, 61, 1973-1973	4.1	1
226	Precision orbital angular momentum (OAM) multiplexing communication using a metasurface **2013**,		2
225	Non-reciprocal magnetoplasmon graphene coupler. *Optics Express*, **2013**, 21, 11248-56	3.3	34
224	Comparison of transmission and reflection all-pass phasers for analogue signal processing. *Electronics Letters*, **2013**, 49, 903-905	1.1	4
223	Enhanced-resolution folded C-section phaser **2013**,		1
222	Importance of transversal and longitudinal symmetry/asymmetry in the fundamental properties of periodic leaky-wave antennas **2013**,		6

221	Multilayer Broadside-Coupled Dispersive Delay Structures for Analog Signal Processing. *IEEE Microwave and Wireless Components Letters*, **2012**, 22, 1-3	2.6	23
220	Celebration of the 60th Anniversary of MTT-S. *IEEE Microwave Magazine*, **2012**, 13, 32-34	1.2	
219	Plenary and Closing Ceremonies at IMS2012. *IEEE Microwave Magazine*, **2012**, 13, 44-50	1.2	26
218	Gyrotropy and Nonreciprocity of Graphene for Microwave Applications. *IEEE Transactions on Microwave Theory and Techniques*, **2012**, 60, 901-914	4.1	147
217	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
216	Field theory of electromagnetic metamaterials and beyond **2012**,		1
215	Leaky-Wave Antennas. *Proceedings of the IEEE*, **2012**, 100, 2194-2206	14.3	269
214	Hybrid time-frequency RFID system **2012**,		4
213	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
212	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
211	Highly dispersive delay structure exploiting the tight coupling property of the CRLH-CRLH coupler for enhanced resolution analog signal processing **2012**,		2
210	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
209	Optically Transparent and Flexible Graphene Reciprocal and Nonreciprocal Microwave Planar Components. *IEEE Microwave and Wireless Components Letters*, **2012**, 22, 360-362	2.6	16
208	Surface Susceptibility Bianisotropic Matrix Model for Periodic Metasurfaces of Uniaxially Mono-Anisotropic Scatterers Under Oblique TE-Wave Incidence. *IEEE Transactions on Antennas and Propagation*, **2012**, 60, 5753-5767	4.9	29
207	Theoretical Investigation of Traveling-Wave Amplification in Metallic Carbon Nanotubes Biased by a DC Field. *IEEE Nanotechnology Magazine*, **2012**, 11, 463-471	2.6	4
206	Tunable magnet-less non-reciprocal metamaterial (MNM) and its application to an isolator **2012**,		2
205	Isolator utilizing artificial magnetic gyrotropy **2012**,		4
204	Faraday rotation by artificial electric gyrotropy in a transparent slot-ring metamaterial structure **2012**,		2

203	CRLH LWA with polarization diversity using equalized common and differential modes **2012**,		1
202	Non-reciprocal gyrotropy in graphene: New phenomena and applications **2012**,		2
201	Switchable Magnetless Nonreciprocal Metamaterial (MNM) and its Application to a Switchable Faraday Rotation Metasurface. *IEEE Antennas and Wireless Propagation Letters*, **2012**, 11, 1454-1457	3.8	13
200	A Tapered CRLH Interdigital/Stub Leaky-Wave Antenna With Minimized Sidelobe Levels. *IEEE Antennas and Wireless Propagation Letters*, **2012**, 11, 1214-1217	3.8	21
199	Radiation Efficiency of Longitudinally Symmetric and Asymmetric Periodic Leaky-Wave Antennas. *IEEE Antennas and Wireless Propagation Letters*, **2012**, 11, 612-615	3.8	39
198	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
197	Graphene for highly tunable non-reciprocal electromagnetic devices **2012**,		2
196	Recent advances in the modeling of periodic leaky-wave antennas scanning through broadside **2012**,		2
195	Complex frequency versus complex propagation constant modeling and Q-balancing in periodic structures **2012**,		2
194	Analog signal processing (ASP) for high-speed microwave and millimeter-wave systems **2012**,		4
193	Contactless impedance measurement of large-area high-quality graphene **2012**,		4
192	Broadband and low-beam squint leaky wave radiation from a uniaxially anisotropic grounded slab. *Radio Science*, **2011**, 46, n/a-n/a	1.4	8
191	Amplitude equalized transmission line dispersive delay structure for analog signal processing **2011**,		6
190	Artificial Faraday rotation using a ring metamaterial structure without static magnetic field. *Applied Physics Letters*, **2011**, 99, 031114	3.4	122
189	Double-Band Tunable Magnetic Conductor Realized by a Grounded Ferrite Slab Covered With Metal Strip Grating. *IEEE Microwave and Wireless Components Letters*, **2011**, 21, 231-233	2.6	1
188	Ferrite Based Non-Reciprocal Radome, Generalized Scattering Matrix Analysis and Experimental Demonstration. *IEEE Transactions on Antennas and Propagation*, **2011**, 59, 810-817	4.9	22
187	Graphene-based non-reciprocal spatial isolator **2011**,		8
186	Electromagnetic nonreciprocity and gyrotropy of graphene. *Applied Physics Letters*, **2011**, 98, 021911	3.4	71

185	Edge surface modes in magnetically biased chemically doped graphene strips. *Applied Physics Letters*, **2011**, 99, 231902	3.4	29
184	Nonreciprocal Magnetless CRLH Leaky-Wave Antenna Based on a Ring Metamaterial Structure. *IEEE Antennas and Wireless Propagation Letters*, **2011**, 10, 1551-1554	3.8	35
183	Performance-Enhanced and Symmetric Full-Space Scanning End-Switched CRLH LWA. *IEEE Antennas and Wireless Propagation Letters*, **2011**, 10, 709-712	3.8	4
182	Transmission Line Modeling and Asymptotic Formulas for Periodic Leaky-Wave Antennas Scanning Through Broadside. *IEEE Transactions on Antennas and Propagation*, **2011**, 59, 3695-3709	4.9	95
181	Chipless RFID System Based on Group Delay Engineered Dispersive Delay Structures. *IEEE Antennas and Wireless Propagation Letters*, **2011**, 10, 1366-1368	3.8	55
180	Analysis of the radiation efficiency of a horizontal electric dipole on a grounded dielectric slab **2011** ,		3
179	Monopulse comparator with frequency-independent delta-channel nulls for high-resolution tracking radar. *Electronics Letters*, **2011**, 47, 339	1.1	4
178	Ferromagnetic Nanowire Metamaterials: Theory and Applications. *IEEE Transactions on Microwave Theory and Techniques*, **2011**, 59, 2568-2586	4.1	65
177	TE210 mode balanced oscillator using substrate integrated waveguide resonator. *IET Microwaves, Antennas and Propagation*, **2011**, 5, 1188	1.6	8
176	Metamaterial Dispersion Engineering Concepts and Applications. *Proceedings of the IEEE*, **2011**, 99, 1711-1719	11.3	73
175	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
174	Next-generation metamaterials for unprecedented microwave systems **2011**,		4
173	Control of the sensitivity of CRLH interdigital microstrip balanced structures using a co-design genetic algorithm approach. *Applied Physics A: Materials Science and Processing*, **2011**, 103, 709-714	2.6	3
172	Size-independent zeroth order electric plasmonic cavity resonator. *Microwave and Optical Technology Letters*, **2011**, 53, 927-932	1.2	7
171	FET Frequency doubler with out-of-phase switchable output and application in balanced frequency doubler. *Microwave and Optical Technology Letters*, **2011**, 53, 2160-2164	1.2	1
170	Circular antenna array for microwave Bessel beam generation **2011**,		4
169	Field displacement in a traveling-wave ring resonator meta-structure **2011**,		5
168	Analog Direction of Arrival Estimation Using an Electronically-Scanned CRLH Leaky-Wave Antenna. *IEEE Transactions on Antennas and Propagation*, **2011**, 59, 1408-1412	4.9	51

167	110 GHz measurement of large-area graphene integrated in low-loss microwave structures. *Applied Physics Letters*, **2011**, 99, 153504	3.4	76
166	Radiation efficiency enhancement of a horizontal dipole on an electrically thick substrate by a PMC ground plane **2011**,		1
165	Power-Recycling Feedback System for Maximization of Leaky-Wave Antennas' Radiation Efficiency. *IEEE Transactions on Microwave Theory and Techniques*, **2010**, 58, 1641-1650	4.1	41
164	Dual-band integrated self-biased edge-mode isolator based on the double ferromagnetic resonance of a bistable nanowire substrate **2010**,		9
163	Greater Than the Sum of Its Parts. *IEEE Microwave Magazine*, **2010**, 11, 69-82	1.2	27
162	Design of a size-independent zero-permittivity rectangular resonator and possible antenna applications **2010**,		7
161	Compact Elongated Mushroom (EM)-EBG Structure for Enhancement of Patch Antenna Array Performances. *IEEE Transactions on Antennas and Propagation*, **2010**, 58, 1076-1086	4.9	68
160	Low-Profile Leaky Wave Electric Monopole Loop Antenna Using the $beta=0$ Regime of a Ferrite-Loaded Open Waveguide. *IEEE Transactions on Antennas and Propagation*, **2010**, 58, 3165-3174	4.9	9
159	Experimental Demonstration and Potential Applications of a Tunable NRI Ferrite-Wire Metamaterial. *IEEE Antennas and Wireless Propagation Letters*, **2010**, 9, 1022-1025	3.8	1
158	Integrated Leaky-Wave Antenna□Duplexer/Diplexer Using CRLH Uniform Ferrite-Loaded Open Waveguide. *IEEE Transactions on Antennas and Propagation*, **2010**, 58, 2508-2514	4.9	42
157	High-efficiency balanced phase-reversal antennas: Principle, bandwidth enhancement, frequency tuning, and beam scanning **2010**,		1
156	Wideband Phase-Reversal Antenna Using a Novel Bandwidth Enhancement Technique. *IEEE Transactions on Antennas and Propagation*, **2010**, 58, 2823-2830	4.9	10
155	Bandwidth enhancement and beam squint reduction of leaky modes in a uniaxially anisotropic meta-substrate **2010**,		12
154	Analog real-time Fourier transformer using a group delay engineered C-section all-pass network **2010**,		11
153	Metamaterial Antennas and Radiative Systems **2010**, 345-386		
152	Arbitrary Electromagnetic Conductor Boundaries Using Faraday Rotation in a Grounded Ferrite Slab. *IEEE Transactions on Microwave Theory and Techniques*, **2010**, 58, 2781-2793	4.1	30
151	Efficient time-domain analysis of highly dispersive linear and non-linear metamaterial waveguide and antenna structures operated in the impulse-regime. *IET Microwaves, Antennas and Propagation*, **2010**, 4, 1617	1.6	5
150	Broadband Compact 180 ^{circ} Hybrid Derived From the Wilkinson Divider. *IEEE Transactions on Microwave Theory and Techniques*, **2010**, 58, 1030-1037	4.1	13

149	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
148	Full-Space Scanning Periodic Phase-Reversal Leaky-Wave Antenna. *IEEE Transactions on Microwave Theory and Techniques*, **2010**, 58, 2619-2632	4.1	67
147	Novel power recycling schemes for enhanced radiation efficiency in leaky-wave antennas **2009**,		3
146	CRLH leaky-wave antenna based frequency division diplexing transceiver yes **2009**,		2
145	Dual-Band Full-Space Scanning Leaky-Wave Antenna Based on Ferrite-Loaded Open Waveguide. *IEEE Antennas and Wireless Propagation Letters*, **2009**, 8, 1202-1205	3.8	11
144	Double ferromagnetic resonance in nanowire arrays. *Applied Physics Letters*, **2009**, 95, 062504	3.4	35
143	Non-reciprocal ferrite antenna radome : The faradome. *Digest / IEEE Antennas and Propagation Society International Symposium*, **2009**,		6
142	A fast modeling of the wave propagation inside a rectangular room **2009**,		4
141	Tunable Talbot imaging distance using an array of beam-steered metamaterial leaky-wave antennas. *Journal of Applied Physics*, **2009**, 106, 084908	2.5	2
140	Lowpass filter with slow-wave rail coplanar stripline (R-CPS). *Electronics Letters*, **2009**, 45, 895	1.1	6
139	Magnetization Reversal in Arrays of Ni Nanowires With Different Diameters. *IEEE Transactions on Magnetics*, **2009**, 45, 4070-4073	2	20
138	Reflection-Type Artificial Dielectric Substrate Microstrip Dispersive Delay Line (DDL) for Analog Signal Processing. *IEEE Transactions on Microwave Theory and Techniques*, **2009**, 57, 1714-1723	4.1	11
137	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
136	Multiple access coding interferometers in wave radio. *IET Microwaves, Antennas and Propagation*, **2009**, 3, 1007	1.6	
135	Modeling and synthesis of the interdigital/stub composite right/left-handed artificial transmission line. *International Journal of RF and Microwave Computer-Aided Engineering*, **2009**, 19, 549-560	1.5	6
134	Perspectives on EM metamaterials. *Materials Today*, **2009**, 12, 12-20	21.8	49
133	Investigation on the Phenomenology of Impulse-Regime Metamaterial Transmission Lines. *IEEE Transactions on Antennas and Propagation*, **2009**, 57, 4010-4014	4.9	17
132	Metamaterials face-off [Speaker's Corner]. *IEEE Microwave Magazine*, **2009**, 10, 8-42	1.2	5

131	Effective permeability tensor and double resonance of interacting bistable ferromagnetic nanowires. *Physical Review B*, **2009**, 80,	3.3	42
130	Moldable Polymer/Ferrite Composite and Application to an Integrated CPW Tunable Phase Shifter. *IEEE Microwave and Wireless Components Letters*, **2009**, 19, 206-208	2.6	2
129	Uniform Ferrite-Loaded Open Waveguide Structure With CRLH Response and Its Application to a Novel Backfire-to-Endfire Leaky-Wave Antenna. *IEEE Transactions on Microwave Theory and Techniques*, **2009**, 57, 784-795	4.1	78
128	Leaky-wave antenna integrated duplexer using CRLH uniform ferrite-loaded open waveguide **2009**,		2
127	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
126	Highly Efficient Leaky-Wave Antenna Array Using a Power-Recycling Series Feeding Network. *IEEE Antennas and Wireless Propagation Letters*, **2009**, 8, 441-444	3.8	23
125	Edge Diffraction Suppression in Rectangular Dielectric Resonators for Quality Factor Enhancement Using Artificial Plasma. *IEEE Transactions on Antennas and Propagation*, **2009**, 57, 1336-1344	4.9	3
124	Impulse regime CRLH resonator for tunable pulse rate multiplication. *Radio Science*, **2009**, 44, n/a-n/a	1.4	1
123	Fixed-Beam Frequency-Tunable Phase-Reversal Coplanar Stripline Antenna Array. *IEEE Transactions on Antennas and Propagation*, **2009**, 57, 671-681	4.9	24
122	CRLH Metamaterial Antennas, Part I **2009**,		1
121	CRLH Metamaterial Antennas, Part II **2009**,		3
120	. *IEEE Antennas and Propagation Magazine*, **2008**, 50, 25-39	1.7	192
119	New-Wave Radio. *IEEE Microwave Magazine*, **2008**, 9, 89-100	1.2	26
118	Study and realisation of dual-composite right/left-handed coplanar waveguide metamaterial in MMIC technology. *IET Microwaves, Antennas and Propagation*, **2008**, 2, 731-736	1.6	20
117	CRLH Delay Line Pulse Position Modulation Transmitter. *IEEE Microwave and Wireless Components Letters*, **2008**, 18, 527-529	2.6	21
116	Dynamic radiation pattern diversity (DRPD) MIMO using CRLH leaky-wave antennas **2008**,		15
115	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
114	Characterization of pulse radiation by CRLH leaky-wave antennas using a time-domain Green's function approach **2008**,		1

113	Spatio-temporal Talbot phenomenon using metamaterial composite right/left-handed leaky-wave antennas. *Journal of Applied Physics*, **2008**, 104, 104901	2.5	7
112	Comparison of various ferrite-loaded CRLH leaky-wave antenna structures **2008**,		6
111	First- and Second-Order Differentiators Based on Coupled-Line Directional Couplers. *IEEE Microwave and Wireless Components Letters*, **2008**, 18, 791-793	2.6	9
110	Equivalent Circuit (EC) FDTD Method for the Modeling of Surface Plasmon Based Couplers. *Journal of Computational and Theoretical Nanoscience*, **2008**, 5, 690-703	0.3	9
109	CRLH leaky-wave real-time spectrum analyzer (RTSA) with unrestricted time-frequency resolution **2008**,		4
108	Equivalent Circuit (EC) FDTD Method for Dispersive Materials: Derivation, Stability Criteria and Application Examples. *Springer Proceedings in Physics*, **2008**, 211-238	0.2	2
107	A 3D Isotropic Left-Handed Metamaterial Based on the Rotated TLM Scheme. *Springer Proceedings in Physics*, **2008**, 239-262	0.2	3
106	Dual Composite Right/Left-Handed (D-CRLH) Transmission Line in GaAs MMIC Technology **2007**,		1
105	Circuital and Experimental Demonstration of a 3D Isotropic LH Metamaterial based on the rotated TLM scheme. *IEEE MTT-S International Microwave Symposium Digest IEEE MTT-S International Microwave Symposium*, **2007**,		6
104	Substrate Integrated Artificial Dielectric (SIAD) Structure for Miniaturized Microstrip Circuits. *IEEE Antennas and Wireless Propagation Letters*, **2007**, 6, 575-579	3.8	37
103	Simplified description of asymmetric right-handed composite right/left-handed coupler in microstrip chip technology. *Microwave and Optical Technology Letters*, **2007**, 49, 2063-2068	1.2	2
102	Dual composite right/left-handed (D-CRLH) leaky-wave antenna with low beam squinting and tunable group velocity. *Physica Status Solidi (B): Basic Research*, **2007**, 244, 1219-1226	1.3	18
101	Generalized Coupled-Mode Approach of Metamaterial Coupled-Line Couplers: Coupling Theory, Phenomenological Explanation, and Experimental Demonstration. *IEEE Transactions on Microwave Theory and Techniques*, **2007**, 55, 1029-1039	4.1	41
100	Novel broadband conventional- and dual-composite right/left-handed (C/D-CRLH) metamaterials: properties, implementation and double-band coupler application. *Applied Physics A: Materials Science and Processing*, **2007**, 87, 309-316	2.6	24
99	Double-Lorentz Transmission Line Metamaterial and its Application to Tri-Band Devices **2007**,		7
98	Differential Bi-directional CRLH Leaky-wave Antenna in CPS Technology **2007**,		2
97	Compact multilayer ultra-wideband six-port device for modulation/demodulation. *Electronics Letters*, **2007**, 43, 813	1.1	9
96	Ultra-Compact Power Splitter Based on Coupled Surface Plasmons **2007**,		2

95	Carrier frequency tunable impulse/continuous wave CRLH delay line system **2007**,		4
94	MIM CRLH Series Mode Zeroth Order Resonant Antenna (ZORA) implemented in LTCC Technology **2007**,		7
93	3D Composite Right-Left Handed Metamaterials with Lorentz-type Dispersive Elements **2007**,		4
92	Pencil-Beam Full-Space Scanning 2D CRLH Leaky-Wave Antenna Array **2007**,		18
91	Tunable arbitrary N-port CRLH infinite-wavelength series power divider. *Electronics Letters*, **2007**, 43, 1292	1.1	7
90	Highly Directive Resonator Antennas based on Composite Right/Left-Handed (CRLH) Transmission Lines **2007**,		9
89	Real-time digital beam-forming active leaky-wave antenna **2007**,		3
88	Dark and Bright Solitons in Left-Handed Nonlinear Transmission Line Metamaterials. *IEEE MTT-S International Microwave Symposium Digest IEEE MTT-S International Microwave Symposium*, **2007**,		10
87	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
86	A 3-D Isotropic Left-Handed Metamaterial Based on the Rotated Transmission-Line Matrix (TLM) Scheme. *IEEE Transactions on Microwave Theory and Techniques*, **2007**, 55, 2930-2941	4.1	46
85	Broadband and Compact Coupled Coplanar Stripline Filters With Impedance Steps. *IEEE Transactions on Microwave Theory and Techniques*, **2007**, 55, 2874-2886	4.1	17
84	Tri-band and dual-polarized antenna based on composite right/left-handed transmission line **2007**,		8
83	Broadband and Compact Double Stepped-Impedance CPS Filters with Coupled-Resonance Enhanced Selectivity. *IEEE MTT-S International Microwave Symposium Digest IEEE MTT-S International Microwave Symposium*, **2007**,		5
82	Analysis of a planarized 3D isotropic LH metamaterial based on the rotated TLM scheme **2007**,		1
81	Time-domain study of vortexlike interface mode in metamaterials. *Applied Physics Letters*, **2007**, 91, 221907	3.4	2
80	Dual-band CRLH branch-line coupler in MIM technology. *Microwave and Optical Technology Letters*, **2006**, 48, 2331-2333	1.2	6
79	Composite right/left-handed extended equivalent circuit (CRLH-EEC) FDTD: stability and dispersion analysis with examples. *International Journal of Numerical Modelling: Electronic Networks, Devices and Fields*, **2006**, 19, 141-172	1	7
78	Dual-band sub-harmonic quadrature mixer using composite right/left-handed transmission lines. *IET Microwaves Antennas and Propagation*, **2006**, 153, 365		21

77	Novel Passive and Active Transmission Line Metamaterial Devices. *Materials Research Society Symposia Proceedings*, **2006**, 919, 3		2
76	Metallic wire substrate (MWS) for miniaturization in planar microwave applications **2006**,		5
75	Dual-band composite right/left-handed ring antenna with linear/circular polarization capability **2006**,		8
74	Metallic wire substrate (MWS) microstrip structure: Characterization and application to a patch antenna **2006**,		1
73	CRLH zeroth order resonator (ZOR): Experimental demonstration of insensitivity to losses and to size **2006**,		5
72	Varactor-Tuned Dual-Band Quadrature Hybrid Coupler. *IEEE Microwave and Wireless Components Letters*, **2006**, 16, 603-605	2.6	34
71	EBG Superstrate for Gain Enhancement of a Circularly Polarized Patch Antenna **2006**,		14
70	Vertical microstrip transition for multilayer microwave circuits with decoupled passive and active layers. *IEEE Microwave and Wireless Components Letters*, **2006**, 16, 401-403	2.6	32
69	Extended composite right/left-handed (E-CRLH) metamaterial and its application as quadband quarter-wavelength transmission line **2006**,		28
68	Simple-Design and Compact MIM CRLH Microstrip 3-dB Coupled-Line Coupler **2006**,		11
67	Dual Composite Right/Left-Handed (D-CRLH) Transmission Line Metamaterial. *IEEE Microwave and Wireless Components Letters*, **2006**, 16, 585-587	2.6	120
66	Active composite right/left-handed leaky-wave antennas **2006**,		3
65	High-gain active composite right/left-handed leaky-wave antenna. *IEEE Transactions on Antennas and Propagation*, **2006**, 54, 2292-2300	4.9	88
64	Super-compact multilayered left-handed transmission line and diplexer application. *IEEE Transactions on Microwave Theory and Techniques*, **2005**, 53, 1527-1534	4.1	58
63	Narrow passband response of unbalanced CRLH transmission line structure composed of capacitively coupled dielectric resonators **2005**,		1
62	The challenge of homogenization in metamaterials. *New Journal of Physics*, **2005**, 7, 167-167	2.9	33
61	Metamaterials for High-Frequency Electronics. *Proceedings of the IEEE*, **2005**, 93, 1744-1752	14.3	38
60	Metamaterial-based electronically controlled transmission-line structure as a novel leaky-wave antenna with tunable radiation angle and beamwidth. *IEEE Transactions on Microwave Theory and Techniques*, **2005**, 53, 161-173	4.1	137

59	Near-field focusing by a nonuniform leaky-wave interface. *Microwave and Optical Technology Letters*, **2005**, 44, 416-418	1.2	10
58	Experimental demonstration of transparency in the ENG-MNG pair in a CRLH transmission-line implementation. *Microwave and Optical Technology Letters*, **2005**, 46, 476-481	1.2	29
57	Dual mode zeroth order ring resonator with tuning capability and selective mode excitation **2005**,		3
56	**2005**,		946
55	Wave interactions in a left-handed mushroom structure **2004**,		4
54	A compact enhanced-bandwidth hybrid ring using an artificial lumped-element left-handed transmission-line section. *IEEE Transactions on Microwave Theory and Techniques*, **2004**, 52, 798-804	4.1	146
53	A novel composite right-/left-handed coupled-line directional coupler with arbitrary coupling level and broad bandwidth. *IEEE Transactions on Microwave Theory and Techniques*, **2004**, 52, 980-992	4.1	311
52	Planar distributed structures with negative refractive index. *IEEE Transactions on Microwave Theory and Techniques*, **2004**, 52, 1252-1263	4.1	183
51	Metamaterial-based electronically controlled transmission-line structure as a novel leaky-wave antenna with tunable radiation angle and beamwidth. *IEEE Transactions on Microwave Theory and Techniques*, **2004**, 52, 2678-2690	4.1	177
50	Arbitrary dual-band components using composite right/left-handed transmission lines. *IEEE Transactions on Microwave Theory and Techniques*, **2004**, 52, 1142-1149	4.1	297
49	Characteristics and potential applications of nonlinear left-handed transmission lines. *Microwave and Optical Technology Letters*, **2004**, 40, 471-473	1.2	37
48	Analytical expression for a composite right/left-handed transmission line based on the Mittag-Leffler series expansion. *Microwave and Optical Technology Letters*, **2004**, 43, 26-29	1.2	
47	Lossy transmission line metamaterials. *Microwave and Optical Technology Letters*, **2004**, 43, 112-114	1.2	9
46	**2004**,		1
45	A simple and accurate model for microstrip structures with slotted ground plane. *IEEE Microwave and Wireless Components Letters*, **2004**, 14, 127-129	2.6	16
44	A reflectodirective system using a composite right/left-handed (CRLH) leaky-wave antenna and heterodyne mixing. *IEEE Microwave and Wireless Components Letters*, **2004**, 14, 183-185	2.6	37
43	Transmission line approach of left-handed (LH) materials and microstrip implementation of an artificial LH transmission line. *IEEE Transactions on Antennas and Propagation*, **2004**, 52, 1159-1166	4.9	311
42	Array factor approach of leaky-wave antennas and application to 1-D/2-D composite right/left-handed (CRLH) structures. *IEEE Microwave and Wireless Components Letters*, **2004**, 14, 274-276	2.6	74

41	A simple and accurate model for microstrip structures with slotted ground plane. *IEEE Microwave and Wireless Components Letters*, **2004**, 14, 133-135	2.6	65
40	Miniaturized MIM CRLH transmission line structure and application to backfire-to-endfire leaky-wave antenna **2004**,		4
39	Electronically scanned composite right/left handed microstrip leaky-wave antenna. *IEEE Microwave and Wireless Components Letters*, **2004**, 14, 277-279	2.6	90
38	Composite right/left-handed transmission line metamaterials. *IEEE Microwave Magazine*, **2004**, 5, 34-50	1.2	715
37	Characteristics of the composite right/left-handed transmission lines. *IEEE Microwave and Wireless Components Letters*, **2004**, 14, 68-70	2.6	226
36	A novel mixed conventional microstrip and composite right/left-handed backward-wave directional coupler with broadband and tight coupling characteristics. *IEEE Microwave and Wireless Components Letters*, **2004**, 14, 31-33	2.6	68
35	Existence and properties of microwave surface plasmons at the interface between a right-handed and a left-handed media **2004**,		5
34	A Novel Leaky-Wave Retrodirective Reflector Using Short/Matched Terminations **2003**,		2
33	Positive/negative refractive index anisotropic 2-D metamaterials. *IEEE Microwave and Wireless Components Letters*, **2003**, 13, 547-549	2.6	34
32	Microwave Circuits Based on Negative Refractive Index Material Structures **2003**,		4
31	Multilayer and anisotropic planar compact PBG structures for microstrip applications. *IEEE Transactions on Microwave Theory and Techniques*, **2002**, 50, 2206-2208	4.1	32
30	. *IEEE Transactions on Microwave Theory and Techniques*, **2002**, 50, 1380-1391	4.1	13
29	Dominant mode leaky-wave antenna with backfire-to-endfire scanning capability. *Electronics Letters* , **2002**, 38, 1414	1.1	341
28	Forward coupling phenomena between artificial left-handed transmission lines. *Journal of Applied Physics*, **2002**, 92, 5560-5565	2.5	107
27	Left-Handed Transmission Lines and Equivalent Metamaterials for Microwave and Millimeter-Wave Applications **2002**,		4
26	A compact circularly polarized subdivided microstrip patch antenna. *IEEE Microwave and Wireless Components Letters*, **2002**, 12, 18-19	2.6	14
25	Green's functions in a PCPPWG structure. *Microwave and Optical Technology Letters*, **2001**, 29, 405-408	1.2	
24	A Novel Anisotropic Uniplanar Compact Photonic Band-Gap (UC-PBG) Ground Plane **2001**,		3

23	Full-wave verification of the fundamental properties of left-handed materials in waveguide configurations. *Journal of Applied Physics*, **2001**, 90, 5483-5486	2.5	117
22	Electromagnetic radiation in two-dimensional photonic crystals with sinusoidal and sharp permittivity profiles. *Microwave and Optical Technology Letters*, **2000**, 24, 316-322	1.2	3
21	Comparison of two methods for the computation of Green's functions in photonic bandgap materials: The eigenmode-expansion method and the phased-array method. *Microwave and Optical Technology Letters*, **2000**, 27, 323-330	1.2	5
20	Slot antenna on a photonic crystal substrate: Green's function study **1999**,		3
19	Metamaterial-based dual-band six-port front-end for direct digital QPSK transceiver		2
18	A two-dimensional edge excited metamaterial-based leaky wave antenna		4
17	Enlarged half-wavelength resonator antenna with enhanced gain		5
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