

# CITATION REPORT

List of articles citing

Composite medium with simultaneously negative permeability and permittivity

DOI: 10.1103/physrevlett.84.4184

Physical Review Letters, 2000, 84, 4184-7.

**Source:** <https://exaly.com/paper-pdf/32006653/citation-report.pdf>

**Version:** 2024-04-24

This report has been generated based on the citations recorded by exaly.com for the above article. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

#	Paper	IF	Citations
2248	Pulsed and CW Gaussian beam interactions with double negative metamaterial slabs. <b>2003</b> , 11, 662		
2247	Pulsed and CW Gaussian beam interactions with double negative metamaterial slabs. <b>2003</b> , 11, 662		
2246	Pulsed and CW Gaussian beam interactions with double negative metamaterial slabs. <b>2003</b> , 11, 662		
2245	Pulsed and CW Gaussian beam interactions with double negative metamaterial slabs. <b>2003</b> , 11, 662		
2244	Pulsed and CW Gaussian beam interactions with double negative metamaterial slabs. <b>2003</b> , 11, 662		
2243	Pulsed and CW Gaussian beam interactions with double negative metamaterial slabs. <b>2003</b> , 11, 662		
2242	Pulsed and CW Gaussian beam interactions with double negative metamaterial slabs. <b>2003</b> , 11, 662		
2241	Pulsed and CW Gaussian beam interactions with double negative metamaterial slabs. <b>2003</b> , 11, 662		
2240	Experimental and theoretical verification of focusing in a large, periodically loaded transmission line negative refractive index metamaterial. <b>2003</b> , 11, 696		
2239	Spatial mapping of the internal and external electromagnetic fields of negative index metamaterials. <b>2006</b> , 14, 8694		
2238	Spatial mapping of the internal and external electromagnetic fields of negative index metamaterials. <b>2006</b> , 14, 8694		
2237	Spatial mapping of the internal and external electromagnetic fields of negative index metamaterials. <b>2006</b> , 14, 8694		
2236	Spatial mapping of the internal and external electromagnetic fields of negative index metamaterials. <b>2006</b> , 14, 8694		
2235	Spatial mapping of the internal and external electromagnetic fields of negative index metamaterials. <b>2006</b> , 14, 8694		
2234	Spatial mapping of the internal and external electromagnetic fields of negative index metamaterials. <b>2006</b> , 14, 8694		
2233	Spatial mapping of the internal and external electromagnetic fields of negative index metamaterials. <b>2006</b> , 14, 8694		
2232	Spatial mapping of the internal and external electromagnetic fields of negative index metamaterials. <b>2006</b> , 14, 8694		

2231 Nematicons across interfaces: anomalous refraction and reflection of solitons in liquid crystals. **2007**, 15, 8021

2230 Simulations and realizations of active right-handed metamaterials with negative refractive index. **2007**, 15, 10935

2229 Simulations and realizations of active right-handed metamaterials with negative refractive index. **2007**, 15, 10935

2228 Simulations and realizations of active right-handed metamaterials with negative refractive index. **2007**, 15, 10935

2227 Wave scattering and splitting by magnetic metamaterials. **2007**, 15, 11714

2226 Wave scattering and splitting by magnetic metamaterials. **2007**, 15, 11714

2225 Wave scattering and splitting by magnetic metamaterials. **2007**, 15, 11714

2224 Negative refraction in a prism made of stacked subwavelength hole arrays. **2008**, 16, 560

2223 Negative refraction in a prism made of stacked subwavelength hole arrays. **2008**, 16, 560

2222 Negative refraction in a prism made of stacked subwavelength hole arrays. **2008**, 16, 560

2221 Electroinductive waves role in left-handed stacked complementary split rings resonators. **2009**, 17, 1274

2220 Electroinductive waves role in left-handed stacked complementary split rings resonators. **2009**, 17, 1274

2219 Terahertz near-field imaging of electric and magnetic resonances of a planar metamaterial. **2009**, 17, 3826

2218 Terahertz near-field imaging of electric and magnetic resonances of a planar metamaterial. **2009**, 17, 3826

2217 Terahertz near-field imaging of electric and magnetic resonances of a planar metamaterial. **2009**, 17, 3826

2216 Terahertz near-field imaging of electric and magnetic resonances of a planar metamaterial. **2009**, 17, 3826

2215 Guiding light with conformal transformations. **2009**, 17, 14872

2214 An anisotropic negative refractive index medium operated at multiple-angle incidences. **2009**, 17, 24189

- 2213 An anisotropic negative refractive index medium operated at multiple-angle incidences. **2009**, 17, 24189
- 2212 Reconfigurable quantum metamaterials. **2011**, 19, 11018
- 2211 Reconfigurable quantum metamaterials. **2011**, 19, 11018
- 2210 Hiding in the corner. **2011**, 19, 20827
- 2209 Hiding in the corner. **2011**, 19, 20827
- 2208 Hiding in the corner. **2011**, 19, 20827
- 2207 Fabrication of three dimensional split ring resonators by stress-driven assembly method. **2012**, 20, 9415
- 2206 Optical isolation with epsilon-near-zero metamaterials. **2013**, 21, 3279
- 2205 Optical isolation with epsilon-near-zero metamaterials. **2013**, 21, 3279
- 2204 Optical isolation with epsilon-near-zero metamaterials. **2013**, 21, 3279
- 2203 A one-dimensional tunable magnetic metamaterial. **2013**, 21, 22540
- 2202 THz band-stop filter using metamaterials surfaced on LiNbO<sub>3</sub> sub-wavelength slab waveguide. **2015**, 23, 16042
- 2201 Nonlinear transmission and spatiotemporal solitons in metamaterials with negative refraction. **2005**, 13, 1291
- 2200 Nonlinear transmission and spatiotemporal solitons in metamaterials with negative refraction. **2005**, 13, 1291
- 2199 Pulsed and CW Gaussian beam interactions with double negative metamaterial slabs. **2003**, 11, 662
- 2198 Experimental and theoretical verification of focusing in a large, periodically loaded transmission line negative refractive index metamaterial. **2003**, 11, 696
- 2197 Spatial mapping of the internal and external electromagnetic fields of negative index metamaterials. **2006**, 14, 8694
- 2196 Simulations and realizations of active right-handed metamaterials with negative refractive index. **2007**, 15, 10935

2195 Wave scattering and splitting by magnetic metamaterials. **2007**, 15, 11714

2194 Probing negative refractive index of metamaterials by terahertz time-domain spectroscopy. **2008**, 16, 1354

2193 Hiding in the corner. **2011**, 19, 20827

2192 Optical isolation with epsilon-near-zero metamaterials. **2013**, 21, 3279

2191 Dual-band, double-negative, polarization-independent metamaterial for the visible spectrum. **2012**, 29, 2839

2190 Design and practice of small antennas I. 92-265

0

2189 Realization of band-pass filter based on LH transmission.

2188 Influence of spatial coherence of a laser field on the efficiency of two-photon absorption. **1976**, 6, 23-26

1

2187 Development of a highly stable optical frequency standard utilizing an atomic beam. **1978**, 8, 1053-1055

2186 Moduli of singularities of convex hulls. **1981**, 36, 175-176

1

2185 Multiplet-dependent magnetic dichroism in the atomic oxygen 2p spectrum. **1997**, 38, 19-24

11

2184 Extinction properties of a sphere with negative permittivity and permeability. **2000**, 116, 411-415

69

2183 Surface polaritons of a left-handed medium. **2000**, 277, 61-64

251

2182 Negative refraction makes a perfect lens. *Physical Review Letters*, **2000**, 85, 3966-9

7.4

8638

2181 Negative refractive index in left-handed materials. *Physical Review Letters*, **2000**, 85, 2933-6

7.4

830

2180 Electrodynamics of metal-dielectric composites and electromagnetic crystals. **2000**, 62, 8531-8539

44

2179 Direct calculation of permeability and permittivity for a left-handed metamaterial. **2000**, 77, 2246-2248

171

2178 Surface polaritons of a left-handed material slab. **2001**, 13, 1811-1818

162

2177	Ab initio numerical simulation of left-handed metamaterials: Comparison of calculations and experiments. <b>2001</b> , 90, 5419-5424	97
2176	Transmission studies of left-handed materials. <b>2001</b> , 65,	106
2175	Superluminal transmission of information through an electromagnetic metamaterial. <b>2001</b> , 63, 046604	133
2174	Microwave transmission through a two-dimensional, isotropic, left-handed metamaterial. <b>2001</b> , 78, 489-491	665
2173	Nanostructures in laser experiments. <b>2001</b> , 31, 120-126	1
2172	Superluminal but causal wave propagation. <b>2001</b> ,	0
2171	Microstructured magnetic materials for RF flux guides in magnetic resonance imaging. <b>2001</b> , 291, 849-51	364
2170	Full-wave verification of the fundamental properties of left-handed materials in waveguide configurations. <b>2001</b> , 90, 5483-5486	117
2169	Composite materials with negative permittivity and permeability properties: concept, analysis, and characterization.	6
2168	Scattering of electromagnetic waves from the random surface of a left-handed medium. <b>2001</b> ,	6
2167	Elastic and viscoelastic behavior of chiral materials. <b>2001</b> , 43, 1579-1589	98
2166	Experimental verification of a negative index of refraction. <b>2001</b> , 292, 77-9	6668
2165	Surface polaritons in composite media with time dispersion of permittivity and permeability. <b>2001</b> , 43, 2130-2135	14
2164	CANDIDATES FOR □ <b>2001</b> , 15, 3258-3265	23
2163	Poynting's theorem and luminal total energy transport in passive dielectric media. <b>2001</b> , 64, 046610	19
2162	Transmission losses in left-handed materials. <b>2002</b> , 66, 045601	28
2161	Microwire arrays with plasmonic response at microwave frequencies. <b>2002</b> , 81, 2896-2898	29
2160	Nanostructure fabrication by direct electron-beam writing of nanoparticles. <b>2002</b> , 20, 2768	29

2159	Efficient isotropic magnetic resonators. <b>2002</b> , 81, 939-941	78
2158	Negative refraction of modulated electromagnetic waves. <b>2002</b> , 81, 2713-2715	115
2157	Scattering properties of a cylinder fabricated from a left-handed material. <b>2002</b> , 66,	27
2156	Forward coupling phenomena between artificial left-handed transmission lines. <b>2002</b> , 92, 5560-5565	107
2155	Optomagnetic composite medium with conducting nanoelements. <b>2002</b> , 66,	79
2154	Numerical computation of the scattering matrix of an electromagnetic resonator. <b>2002</b> , 66, 026602	9
2153	All-angle negative refraction in a three-dimensionally periodic photonic crystal. <b>2002</b> , 81, 2352-2354	152
2152	THE RESONANT BEHAVIOR OF A MULTI-PHASE COMPOSITE MATERIAL. <b>2002</b> , 13, 405-417	1
2151	Left-Handed Transmission Lines and Equivalent Metamaterials for Microwave and Millimeter-Wave Applications. <b>2002</b> ,	4
2150	Refining the Perfect Lens: Layered Media and Optical gain. <b>2002</b> ,	
2149	Near-field lenses in two dimensions. <b>2002</b> , 14, 8463-8479	86
2148	.	1
2147	Interacting Magnetic Resonators for Left-Handed Metamaterials. <b>2002</b> ,	
2146	Layered chiral metallic meta-materials. <b>2002</b> ,	2
2145	Very-low-frequency magnetic plasma. <b>2002</b> , 14, 7409-7416	8
2144	The asymmetric lossy near-perfect lens. <b>2002</b> , 49, 1747-1762	127
2143	Structural composites with integrated electromagnetic functionality. <b>2002</b> , 4698, 237	5
2142	Organic Materials Science. <b>2002</b> , 27, 56-65	15

2141	Modelling and Microwave Properties of Artificial Materials with Negative Parameters. <b>2002</b> , 99-122	9
2140	Ideas for Potential Applications of Metamaterials with Negative Permittivity and Permeability. <b>2002</b> , 19-37	13
2139	Combined numerical and analytic approach for generalized models of complex bi-anisotropic materials. <b>2002</b> , 4806, 92	3
2138	Electromagnetics of complex media and metamaterials.	3
2137	All-angle negative refraction without negative effective index. <b>2002</b> , 65,	684
2136	Role of bianisotropy in negative permeability and left-handed metamaterials. <b>2002</b> , 65,	618
2135	Is there an experimental verification of a negative index of refraction yet?. <b>2002</b> , 27, 885-7	81
2134	An idea for thin subwavelength cavity resonators using metamaterials with negative permittivity and permeability. <b>2002</b> , 1, 10-13	404
2133	Calculations and measurements of wire and/or split-ring negative index media. <b>2002</b> , 66, 036613	35
2132	Negative refractive index metamaterials supporting 2-D waves.	112
2131	Photonic band-gap effects and magnetic activity in dielectric composites. <b>2002</b> , 14, 4035-4044	258
2130	Magnetoinductive waves in one, two, and three dimensions. <b>2002</b> , 92, 6252-6261	305
2129	Scattering-matrix analysis of linear periodic arrays. <b>2002</b> , 50, 1050-1064	41
2128	Numerical studies of left-handed materials and arrays of split ring resonators. <b>2002</b> , 65, 036622	168
2127	Effectively left-handed (negative index) composite material. <b>2002</b> , 81, 1753-1755	127
2126	Electrodynamics of metallic photonic crystals and the problem of left-handed materials. <i>Physical Review Letters</i> , <b>2002</b> , 89, 093901	7.4 108
2125	Effects of surface waves on the behavior of perfect lenses. <b>2002</b> , 66,	60
2124	Left-handed-media simulation and transmission of EM waves in subwavelength split-ring-resonator-loaded metallic waveguides. <i>Physical Review Letters</i> , <b>2002</b> , 89, 183901	7.4 348



2123	Experimental verification of backward-wave radiation from a negative refractive index metamaterial. <b>2002</b> , 92, 5930-5935	385
2122	Effect of the magnetic properties of the inclusions on the high-frequency dielectric response of diluted composites. <b>2002</b> , 66,	71
2121	Electrodynamics of Media with Simultaneously Negative Electric Permittivity and Magnetic Permeability. <b>2002</b> , 83-97	8
2120	Electromagnetic resonances in individual and coupled split-ring resonators. <b>2002</b> , 92, 2929-2936	298
2119	Transmission properties of composite metamaterials in free space. <b>2002</b> , 81, 120-122	168
2118	Plane wave scattering from frequency-selective surfaces by the finite-element method. <b>2002</b> , 38, 641-644	69
2117	Application of the transmission line theory of left-handed (LH) materials to the realization of a microstrip "LH line".	166
2116	Imaging properties of a metamaterial superlens.	6
2115	Applicability of ferrimagnetic hosts to nanostructured negative index of refraction (left-handed) materials. <b>2002</b> , 4806, 156	5
2114	Characteristics of electromagnetic wave propagation in uniaxially anisotropic left-handed materials. <b>2002</b> , 66,	142
2113	Two-dimensional electromagnetic crystals formed by reactively loaded wires. <b>2002</b> , 66, 036610	36
2112	Capacitively Loaded Loop as Basic Element of Negative Permeability Meta-material. <b>2002</b> ,	15
2111	Analytical investigation of periodic media with negative parameters.	0
2110	Anomalous mode coupling in guided-wave structures containing metamaterials with negative permittivity and permeability.	9
2109	Microwave transmission through metamaterials in free space.	1
2108	Simplified analysis of split ring resonator used in backward meta-material.	5
2107	PLASMON MODES IN METAL NANOWIRES AND LEFT-HANDED MATERIALS. <b>2002</b> , 11, 65-74	176
2106	Analysis of radiation forces in laser trapping and laser-guided direct writing applications. <b>2002</b> , 38, 131-141	36

2105	Wave refraction in negative-index media: always positive and very inhomogeneous. <i>Physical Review Letters</i> , <b>2002</b> , 88, 187401	7.4	247
2104	Lateral displacement of a Gaussian beam reflected from a grounded slab with negative permittivity and permeability. <b>2002</b> , 80, 2084-2086		127
2103	Photonic band gap structure containing metamaterial with negative permittivity and permeability. <b>2002</b> , 66, 036611		63
2102	Propagation of Electromagnetic Waves in a Slab with Negative Permittivity and Negative Permeability. <b>2002</b> , 35, 271-286		19
2101	. <b>2002</b> , 50, 2702-2712		952
2100	Reversal of Circular Bragg Phenomenon in Ferrocholesteric Materials with Negative Real Permittivities and Permeabilities. <b>2002</b> , 14, 447-449		10
2099	A unique lateral displacement of a Gaussian beam transmitted through a slab with negative permittivity and permeability. <b>2002</b> , 33, 136-139		52
2098	A new 2D isotropic left-handed metamaterial design: Theory and experiment. <b>2002</b> , 35, 405-408		66
2097	Radiation from a traveling-wave current sheet at the interface between a conventional material and a metamaterial with negative permittivity and permeability. <b>2002</b> , 35, 460-463		36
2096	A neural network approach to real-time dielectric characterization of materials. <b>2002</b> , 35, 463-465		5
2095	Microwave resonators with internal structure. <b>2002</b> , 85, 38-48		0
2094	Metallic photonic crystals. <b>2002</b> , 3, 79-88		19
2093	Wave channelling in compact multiport waveguides patterned in electromagnetic crystals. <b>2002</b> , 32, 145-151		6
2092	Electromagnetic energy density in a dispersive and absorptive material. <b>2002</b> , 299, 309-312		196
2091	Spontaneous emission of an excited atom placed near a left-handed sphere. <b>2002</b> , 211, 183-196		47
2090	Phonon-enhanced light matter interaction at the nanometre scale. <b>2002</b> , 418, 159-62		620
2089	Reversed Doppler effect under reflection from a shock electromagnetic wave. <b>2002</b> , 47, 1477-1480		25
2088	The negative index of refraction demystified. <b>2002</b> , 23, 353-359		167

2087	Determination of effective permittivity and permeability of metamaterials from reflection and transmission coefficients. <b>2002</b> , 65,		1916
2086	Brief Overview of Recent Developments on Negative Phase Velocity Mediums (alias Left Handed Materials). <b>2002</b> , 56, 407-410		33
2085	Near field imaging with negative dielectric constant lenses. <b>2002</b> , 80, 3286-3288		103
2084	Refraction in media with a negative refractive index. <i>Physical Review Letters</i> , <b>2003</b> , 90, 107402	7.4	304
2083	Guided modes with imaginary transverse wave number in a slab waveguide with negative permittivity and permeability. <b>2003</b> , 93, 9386-9388		144
2082	Development and simulation of microwave artificial magnetic composites utilizing nonmagnetic inclusions. <b>2003</b> , 258-259, 161-166		38
2081	Tailoring double-negative metamaterial responses to achieve anomalous propagation effects along microstrip transmission lines. <b>2003</b> , 51, 2306-2314		28
2080	Abnormal wave propagation in passive media. <b>2003</b> , 9, 30-39		44
2079	Intensity distribution inside scatterers with negative-real permittivity and permeability. <b>2003</b> , 36, 150-154		8
2078	Genetically engineered multiband high-impedance frequency selective surfaces. <b>2003</b> , 38, 400-403		23
2077	Bragg reflectors containing left-handed materials. <b>2003</b> , 38, 494-495		11
2076	Is Foster's reactance theorem satisfied in double-negative and single-negative media?. <b>2003</b> , 39, 11-14		8
2075	Near-field imaging by negative permittivity media. <b>2003</b> , 39, 282-286		10
2074	Analysis of discontinuities in double-negative (DNG) slab waveguides. <b>2003</b> , 39, 483-488		5
2073	Negative refractive index in composite medium with metallic magnetic inclusions. <b>2003</b> , 318, 592-599		8
2072	Refining the perfect lens. <b>2003</b> , 338, 329-332		70
2071	Left-handed surface waves in a photonic structure. <b>2003</b> , 338, 338-342		1
2070	Fractional duality and metamaterials with negative permittivity and permeability. <b>2003</b> , 227, 143-146		19

2069	Numerical investigation of negative refractive index metamaterials at infrared and optical frequencies. <b>2003</b> , 223, 331-337	34
2068	Computational electromagnetics and the rational design of new dielectric heterostructures. <b>2003</b> , 48, 373-456	134
2067	Enhancing photon tunnelling by a slab of uniaxially anisotropic left-handed material. <b>2003</b> , 308, 294-301	22
2066	Studies of imaging characteristics for a slab of a lossy left-handed material. <b>2003</b> , 309, 298-305	13
2065	Frequency range and explicit expressions for negative permittivity and permeability for an isotropic medium formed by a lattice of perfectly conducting particles. <b>2003</b> , 311, 254-263	122
2064	Simulating photons and plasmons in a three-dimensional lattice. <b>2003</b> , 338, 190-195	1
2063	Propagation of waves in metallic photonic crystals at low frequencies and some theoretical aspects of left-handed materials. <b>2003</b> , 338, 196-200	
2062	Topsy-turvy world of materials. <b>2003</b> , 6, 18-23	4
2061	On the possibility of creating artificial media simultaneously possessing negative permittivity and permeability. <b>2003</b> , 29, 32-34	4
2060	Self-focusing and other anomalous effects in media with backward waves. <b>2003</b> , 49, 236-238	2
2059	A composite medium with simultaneously negative permittivity and permeability. <b>2003</b> , 29, 230-232	2
2058	Optics: Positively negative. <b>2003</b> , 423, 22-3	93
2057	Genomics: Relative pathogenic values. <b>2003</b> , 423, 23-5	10
2056	100 and 50 years ago. <b>2003</b> , 423, 23-23	14
2055	Normal wake and reversed resonant radiation of a charge moving along a slow-wave system. <b>2003</b> , 508, 245-256	2
2054	Imaging properties of uniaxially anisotropic negative refractive index materials. <b>2003</b> , 313, 316-324	17
2053	Photonic band gap from a stack of positive and negative index materials. <i>Physical Review Letters</i> , <b>2003</b> , 90, 083901	7-4 435
2052	Causality and double-negative metamaterials. <b>2003</b> , 68, 026615	63

2051	Broadband Characterization of Complex Periodic EBG Structures: An FDTD/Prony Technique Based on the Split-Field Approach. <b>2003</b> , 23, 135-151		29
2050	Nonlinearity of a metamaterial arising from diode insertions into resonant conductive elements. <b>2003</b> , 67, 065601		152
2049	Properties of defect states in one-dimensional photonic crystals with structural defect layer made by left-handed material.		
2048	Electromagnetic wave propagation in media with indefinite permittivity and permeability tensors. <i>Physical Review Letters</i> , <b>2003</b> , 90, 077405	7.4	740
2047	. <b>2003</b> , 51, 2626-2640		249
2046	Resonant and antiresonant frequency dependence of the effective parameters of metamaterials. <b>2003</b> , 68, 065602		339
2045	Left-Handed Materials. <b>2003</b> , 308-329		
2044	Beam shaping by a periodic structure with negative refraction. <b>2003</b> , 82, 3820-3822		108
2043	Omnidirectional gap and defect mode of one-dimensional photonic crystals containing negative-index materials. <b>2003</b> , 83, 5386-5388		285
2042	Transmission line models for negative refractive index media and associated implementations without excess resonators. <b>2003</b> , 13, 51-53		152
2041	Strong spatial dispersion in wire media in the very large wavelength limit. <b>2003</b> , 67,		435
2040	Pairing an epsilon-negative slab with a mu-negative slab: resonance, tunneling and transparency. <b>2003</b> , 51, 2558-2571		444
2039	. <b>2003</b> , 51, 2550-2557		87
2038	On aspects of the physical realizability of perfectly matched absorbers for electromagnetic waves. <b>2003</b> , 38, n/a-n/a		17
2037	Waveguide containing a backward-wave slab. <b>2003</b> , 38, n/a-n/a		26
2036	Surface-wave suppression in a double-negative metamaterial grounded slab. <b>2003</b> , 2, 269-272		26
2035	Measurement of the permeability tensor in nanophases of granular metal oxides and field-induced magnetic anisotropy. <b>2003</b> , 68,		32
2034	.		1

2033	Observation of the inverse Doppler effect. <b>2003</b> , 302, 1537-40	239
2032	Lens based on the use of left-handed materials. <b>2003</b> , 42, 5701-5	15
2031	Miniaturized coplanar waveguide stop band filters based on multiple tuned split ring resonators. <b>2003</b> , 13, 511-513	175
2030	Comparative analysis of edge- and broadside- coupled split ring resonators for metamaterial design - theory and experiments. <b>2003</b> , 51, 2572-2581	549
2029	Absorption losses in periodic arrays of thin metallic wires. <b>2003</b> , 28, 846-8	21
2028	Numerical study of electromagnetic waves interacting with negative index materials. <b>2003</b> , 11, 640-8	54
2027	Pulsed and CW Gaussian beam interactions with double negative metamaterial slabs. <b>2003</b> , 11, 662-81	151
2026	Regenerating evanescent waves from a silver superlens. <b>2003</b> , 11, 682-7	105
2025	Experimental and theoretical verification of focusing in a large, periodically loaded transmission line negative refractive index metamaterial. <b>2003</b> , 11, 696-708	98
2024	Cerenkov radiation in materials with negative permittivity and permeability. <b>2003</b> , 11, 723-34	109
2023	Negative refraction without negative index in metallic photonic crystals. <b>2003</b> , 11, 746-54	99
2022	On unusual narrow transmission bands for a multi-layered periodic structure containing left-handed materials. <b>2003</b> , 11, 1283-90	47
2021	Losses in left-handed materials. <b>2003</b> , 11, 2397-402	35
2020	Guided modes in channel waveguides with a negative index of refraction. <b>2003</b> , 11, 2502-10	41
2019	Novel microwave devices and structures based on the transmission line approach of meta-materials.	60
2018	A double negative (DNG) composite medium composed of magnetodielectric spherical particles embedded in a matrix. <b>2003</b> , 51, 2596-2603	288
2017	Guided modes in negative-refractive-index waveguides. <b>2003</b> , 67, 057602	259
2016	Removal of absorption and increase in resolution in a near-field lens via optical gain. <b>2003</b> , 67,	206

2015	Numerical study of a Gaussian beam propagating in media with negative permittivity and permeability by using a bidirectional beam propagation method. <b>2003</b> , 37, 292-296		10
2014	Periodically loaded transmission line with effective negative refractive index and negative group velocity. <b>2003</b> , 51, 2619-2625		175
2013	Periodic analysis of a 2-D negative refractive index transmission line structure. <b>2003</b> , 51, 2604-2611		134
2012	Subwavelength resolution in a two-dimensional photonic-crystal-based superlens. <i>Physical Review Letters</i> , <b>2003</b> , 91, 207401	7.4	276
2011	Compact linear lead/lag metamaterial phase shifters for broadband applications. <b>2003</b> , 2, 103-106		246
2010	Imaging properties of a metamaterial superlens. <b>2003</b> , 82, 161-163		237
2009	Electrodynamics of materials with negative index of refraction. <b>2003</b> , 173, 790		37
2008	Nonlinear properties of left-handed metamaterials. <i>Physical Review Letters</i> , <b>2003</b> , 91, 037401	7.4	425
2007	Backward wave region and negative material parameters of a structure formed by lattices of wires and split-ring resonators. <b>2003</b> , 51, 2582-2591		71
2006	Distributed-circuit-element description of guided-wave structures and cavities involving double-negative or single-negative media. <b>2003</b> ,		5
2005	Anisotropy and oblique total transmission at a planar negative-index interface. <b>2003</b> , 68,		48
2004	Band structure for a one-dimensional photonic crystal containing left-handed materials. <b>2003</b> , 67,		81
2003	Collective modes of interacting dielectric spheres. <b>2003</b> , 68,		17
2002	Experimental results on metamaterial simulation using SRR-loaded waveguides.		1
2001	Total negative refraction in real crystals for ballistic electrons and light. <i>Physical Review Letters</i> , <b>2003</b> , 91, 157404	7.4	137
2000	Dispersion analysis of a microstrip-based negative refractive index periodic structure. <b>2003</b> , 13, 155-157		40
1999	Imaging the near field. <b>2003</b> , 50, 1419-1430		238
1998	Existence and design of trans-vacuum-speed metamaterials. <b>2003</b> , 68, 026612		5

1997	The synthesis of metamaterial ferrites for RF applications using electromagnetic bandgap structures.	3
1996	A branch-line coupler with two arbitrary operating frequencies using left-handed transmission lines.	4
1995	A planar negative-refractive-index medium without resonant elements.	25
1994	Influence of the dispersive properties of metals on the transmission characteristics of left-handed materials. <b>2003</b> , 68, 016611	27
1993	Split ring resonator-based left-handed coplanar waveguide. <b>2003</b> , 83, 4652-4654	276
1992	Negative refraction and left-handed behavior in two-dimensional photonic crystals. <b>2003</b> , 67,	201
1991	Negative phase velocity composites employing magnetic hosts. <b>2003</b> ,	4
1990	Experimental observations of a left-handed material that obeys Snell's law. <i>Physical Review Letters</i> , <b>2003</b> , 90, 137401	7-4 560
1989	Electromagnetic-field quantization and spontaneous decay in left-handed media. <b>2003</b> , 68,	135
1988	Cerenkov radiation in photonic crystals. <b>2003</b> , 299, 368-71	215
1987	A negative reflective/refractive "meta-interface" using a bi-directional phase-conjugating array.	4
1986	Microwave Circuits Based on Negative Refractive Index Material Structures. <b>2003</b> ,	4
1985	Characterisation of negative meta materials based on generalised periodic structure concept.	
1984	Book Reviews. <b>2003</b> , 45, 591-624	
1983	Spatial filtering using media with indefinite permittivity and permeability tensors. <b>2003</b> , 82, 2215-2217	75
1982	Analysis of double negative media with magneto-electric coupling using a novel dispersive FDTD formulation.	1
1981	Tailoring double negative metamaterial responses to achieve anomalous propagation effects along microstrip transmission lines.	1
1980	Effects Due to and Derived from Spontaneous Ordering in III-V Semiconductor Alloys. <b>2003</b> , 794, 31	1



1979	Dispersive FDTD modeling on multi-layer left-handed meta-materials for near/far field imaging at microwave frequencies.		
1978	Universal features of the time evolution of evanescent modes in a left-handed perfect lens. <i>Physical Review Letters</i> , <b>2003</b> , 90, 077401	7-4	91
1977	Electromagnetic waves focused by a negative-index planar lens. <b>2003</b> , 67, 025602		64
1976	Photonic approach to making a material with a negative index of refraction. <b>2003</b> , 67,		119
1975	Metamaterials with negative permittivity and permeability: background, salient features, and new trends.		7
1974	Subwavelength imaging in photonic crystals. <b>2003</b> , 68,		325
1973	Transverse Fresnel-Fizeau drag effects in strongly dispersive media. <b>2003</b> , 68,		24
1972	Left-Handed Metamaterials based on Split Ring Resonators for Microstrip Applications. <b>2003</b> ,		1
1971	Comment on [Electromagnetic resonances in individual and coupled split-ring resonators][J. Appl. Phys. 92, 2929 (2002)]. <b>2003</b> , 94, 2770-2770		3
1970	Evaluation of lensing in photonic crystal slabs exhibiting negative refraction. <b>2003</b> , 68,		133
1969	Origin of dissipative losses in negative index of refraction materials. <b>2003</b> , 82, 2356-2358		40
1968	Numerical study of wave propagation in uniaxially anisotropic Lorentzian backward-wave slabs. <b>2003</b> , 68, 026602		40
1967	T-junction waveguide experiment to characterize left-handed properties of metamaterials. <b>2003</b> , 94, 3712-3716		17
1966	Phase conjugation and perfect lensing. <b>2003</b> , 94, 4241-4243		86
1965	Subwavelength imaging by a left-handed material superlens. <b>2003</b> , 68, 067601		83
1964	Nanoring formation by direct-write inorganic electron-beam lithography. <b>2003</b> , 83, 551-553		40
1963	A compact enhanced-bandwidth hybrid ring using a left-handed transmission line section.		9
1962	Backward-wave meta-materials-a brief review.		

1961	A broadband left-handed (LH) coupled-line backward coupler with arbitrary coupling level.	13
1960	Backward wave region and negative material parameters of a structure formed by lattices of wires and split-ring resonators.	
1959	Investigation periodic multilayered metamaterial structures by the modernised translation matrix method. <b>2003</b> ,	
1958	Anti-Shielding Effect and Negative Temperature in Instantaneously Reversed Electric Fields and Left-Handed Media. <b>2003</b> , 68, 87-97	6
1957	Novel light beam propagation through optical potential well <b>2003</b> , 63, 28-34	11
1956	Backward-wave waveguide based on uniaxial anisotropic negative permeability meta-material.	4
1955	Reverted resonant "wakefield".	
1954	Some electrodynamic features of metamaterials.	
1953	.	2
1952	Dispersion characteristics of magneto-inductive waves: comparison between theory and experiment. <b>2003</b> , 39, 215	111
1951	Microwave circuits based on negative refractive index material structures.	2
1950	Coherent scattering of an electromagnetic wave from, and its transmission through, a slab of a left-handed medium with a randomly rough illuminated surface. <b>2003</b> ,	5
1949	Left-handed metamaterials based on split ring resonators for microstrip applications. <b>2003</b> ,	
1948	Compact, linear, lead/lag phase shifters using negative refractive index metamaterials.	
1947	Electromagnetic properties of three-dimensional wire arrays: photons, plasmons, and equivalent circuits. <b>2003</b> ,	10
1946	Tunable High-Frequency Dielectric Response of Diluted Ferromagnetic Composites. <b>2003</b> , 23, 629-636	1
1945	Applications of surface plasmon and phonon polaritons to developing left-handed materials and nano-lithography. <b>2003</b> , 5221, 124	9
1944	Time-domain modeling on wave propagation through single/multilayer left-handed meta-materials slabs. <b>2003</b> ,	0

1943	Self-healing structural composites with electromagnetic functionality. <b>2003</b> , 5054, 372	15
1942	An Introduction to Photonic Band Gap (PBG) Materials. <b>2003</b> , 41, 1-20	36
1941	Electromagnetic Scattering by a Conducting Cylinder Coated with Metamaterials. <b>2003</b> , 42, 91-105	66
1940	On the Group Front and Group Velocity in a Dispersive Medium Upon Refraction From a Nondispersive Medium. <b>2004</b> , 126, 244-249	11
1939	Frequency-independent effective rest mass of photons in the two time derivative Lorentz material model. <b>2004</b> , 6, 239-245	3
1938	Behaviour of Hexagon Split Ring Resonators and Left-Handed Metamaterials. <b>2004</b> , 21, 1330-1332	33
1937	Transmission Characteristics of Smiling Pattern Resonators. <b>2004</b> , 43, L669-L672	2
1936	Electromagnetic resonance in deformed split ring resonators of left-handed meta-materials. <b>2004</b> , 96, 1979-1982	16
1935	Electromagnetic field quantization in a linear isotropic permeable dielectric medium. <b>2004</b> , 70,	27
1934	Left- and right-handed transmission peaks near the magnetic resonance frequency in composite metamaterials. <b>2004</b> , 70,	48
1933	Physics of propagation in left-handed guided wave structures at microwave and millimeter-wave frequencies. <i>Physical Review Letters</i> , <b>2004</b> , 92, 053901	7-4 25
1932	Optical properties of an ideal homogeneous causal left-handed material slab. <b>2004</b> , 70, 036605	29
1931	Superlensing effect in liquid surface waves. <b>2004</b> , 69, 030201	115
1930	Negative index lens aberrations. <b>2004</b> , 70, 065601	52
1929	A novel dispersive FDTD formulation for modeling transient propagation in chiral metamaterials. <b>2004</b> , 52, 2267-2276	20
1928	Stability and quality factor of a one-dimensional subwavelength cavity resonator containing a left-handed material. <b>2004</b> , 69,	22
1927	Spectral negative refraction and focusing analysis of a two-dimensional left-handed photonic crystal lens. <b>2004</b> , 70,	60
1926	Wave fields measured inside a negative refractive index metamaterial. <b>2004</b> , 85, 4564-4566	29

1925	Electromagnetic scattering by spherical negative-refractive-index particles: Low-frequency resonance and localization parameters. <b>2004</b> , 69, 016619	14
1924	Submicron imaging with a planar silver lens. <b>2004</b> , 84, 4403-4405	109
1923	Photonic crystal assembled from nonmagnetic wire split rings. <b>2004</b> , 85, 338-340	0
1922	Analytical and numerical studies of wire-mesh metallic photonic crystals. <b>2004</b> , 69,	7
1921	Angle resolved microwave spectrometer for metamaterial studies. <b>2004</b> , 75, 820-825	6
1920	Oblique plane wave scattering by an array of dielectric and metamaterial cylinders.	
1919	Subluminal and superluminal pulse propagation in a left-handed/right-handed periodic structure. <b>2004</b> , 6, 756-761	14
1918	Optoelectronic Simulation of the Klein Paradox based on Negative Refraction Phenomenon. <b>2004</b> , 817, 106	
1917	Linear and Nonlinear Transmission of Surface Plasmon Polaritons in an Optical Nanowire. <b>2004</b> , 846, DD5.6.1	
1916	Design of composites with artificial permeability. <b>2004</b> ,	3
1915	Polariton-enhanced near field lithography and imaging with infrared light. <b>2004</b> , 820, 243	7
1914	Physics and applications of photonic nanocrystals. <b>2004</b> , 1, 379	12
1913	An experimental verification of spatial harmonics effects on negative refraction. <b>2004</b> ,	
1912	Negative phase velocity in a uniformly moving, homogeneous, isotropic, dielectric-magnetic medium. <b>2004</b> , 37, 5697-5711	22
1911	Experimental verification of 2-D periodically loaded transmission line metamaterial.	
1910	Surface polaritons and extinction properties of a left-handed material cylinder. <b>2004</b> , 16, 5991-5998	28
1909	NEGATIVE REFRACTION AND SUBWAVELENGTH FOCUSING USING PHOTONIC CRYSTALS. <b>2004</b> , 18, 1275-12914	
1908	PHONON POLARITON MODES IN QUANTUM DOT SUPERLATTICES. <b>2004</b> , 18, 105-112	6

1907	Quality of focusing electromagnetic radiation by a plane-parallel slab with a negative index of refraction. <b>2004</b> , 49, 5-10	10
1906	Anomalies of radiation absorption and superluminal propagation of light: I. An isotropic layer. <b>2004</b> , 96, 877-886	10
1905	Dispersive FDTD characterisation of no phase-delay radio transmission over layered left-handed meta-materials structure. <b>2004</b> , 151, 403-406	11
1904	A compact enhanced-bandwidth hybrid ring using an artificial lumped-element left-handed transmission-line section. <b>2004</b> , 52, 798-804	146
1903	A hybrid method for the efficient calculation of the band structure of 3-D metallic crystals. <b>2004</b> , 52, 889-902	32
1902	A novel composite right-/left-handed coupled-line directional coupler with arbitrary coupling level and broad bandwidth. <b>2004</b> , 52, 980-992	311
1901	Planar distributed structures with negative refractive index. <b>2004</b> , 52, 1252-1263	183
1900	Time-domain measurement of negative group delay in negative-refractive-index transmission-line metamaterials. <b>2004</b> , 52, 1449-1454	75
1899	Metamaterial-based electronically controlled transmission-line structure as a novel leaky-wave antenna with tunable radiation angle and beamwidth. <b>2004</b> , 52, 2678-2690	177
1898	Positive and Negative Goos-Hauml;nchen Shifts and Negative Phase-Velocity Mediums (alias Left-Handed Materials). <b>2004</b> , 58, 229-231	62
1897	Diamagnetic properties of metamaterials: a magnetostatic analogy. <b>2004</b> , 41, 307-312	8
1896	A chiral route to negative refraction. <b>2004</b> , 306, 1353-5	1107
1895	Terahertz magnetic response from artificial materials. <b>2004</b> , 303, 1494-6	1170
1894	Magnetic response of metamaterials at 100 terahertz. <b>2004</b> , 306, 1351-3	1192
1893	Nonlinear surface waves in left-handed materials. <b>2004</b> , 69, 016617	228
1892	Metamaterials and negative refractive index. <b>2004</b> , 305, 788-92	2893
1891	Near-perfect imaging in a focusing system based on a left-handed-material plate. <i>Physical Review Letters</i> , <b>2004</b> , 92, 077401	7-4 141
1890	Artificial magnetic metamaterial design by using spiral resonators. <b>2004</b> , 69,	279

1889	Lateral shift of the transmitted light beam through a left-handed slab. <b>2004</b> , 69, 066617		77
1888	Effective medium theory of left-handed materials. <i>Physical Review Letters</i> , <b>2004</b> , 93, 107402	7.4	260
1887	Arbitrary dual-band components using composite right/left-handed transmission lines. <b>2004</b> , 52, 1142-1149		297
1886	Babinet principle applied to the design of metasurfaces and metamaterials. <i>Physical Review Letters</i> , <b>2004</b> , 93, 197401	7.4	596
1885	Experimental study of composite medium with simultaneously negative permeability and permittivity. <b>2004</b> , 47, 64-78		2
1884	Theoretical investigation of negative refraction in metallic and ferromagnetic composites. <b>2004</b> , 9, 459-462		
1883	Possible existence of left-handed materials in metallic magnetic thin films. <b>2004</b> , 271, 180-183		18
1882	Exploitation of Localized Surface Plasmon Resonance. <b>2004</b> , 16, 1685-1706		2023
1881	Coplanar waveguide structures loaded with split-ring resonators. <b>2004</b> , 40, 3-6		57
1880	Crossover between the cell size and wavelength of the incident radiation in a metamaterial. <b>2004</b> , 40, 269-272		1
1879	Folded-loop antenna with a reflector for mobile handsets at 2.0 GHz. <b>2004</b> , 40, 272-275		21
1878	An enhanced prediction of negative refraction from EBG-like structures. <b>2004</b> , 41, 258-261		6
1877	Effect of losses and dispersion on the focusing properties of left-handed media. <b>2004</b> , 41, 290-294		26
1876	A study of waveguides filled with anisotropic metamaterials. <b>2004</b> , 41, 426-431		20
1875	Stop-band and band-pass characteristics in coplanar waveguides coupled to spiral resonators. <b>2004</b> , 42, 386-388		20
1874	Microstripline fed dual-frequency dielectric resonator antenna. <b>2004</b> , 42, 388-390		7
1873	A limitation of the Bruggeman formalism for homogenization. <b>2004</b> , 234, 35-42		58
1872	Extinction properties of a coated sphere containing a left-handed material. <b>2004</b> , 239, 25-31		9

1871	Omnidirectional reflection from a slab of uniaxially anisotropic negative refractive index materials. <b>2004</b> , 240, 19-27	11
1870	GHz magnetic response of split ring resonators. <b>2004</b> , 2, 155-159	19
1869	Physics and applications of photonic crystals. <b>2004</b> , 2, 87-95	31
1868	Nonlinear guided waves and symmetry breaking in left-handed waveguides. <b>2004</b> , 2, 175-180	20
1867	Macroscopic Lagrangian formulation of poroelasticity with porosity dynamics. <b>2004</b> , 52, 2801-2839	44
1866	Study of lossy effects on the propagation of propagating and evanescent waves in left-handed materials. <b>2004</b> , 323, 484-494	39
1865	Left-handed material containing spherical and nonspherical metallic and magnetic particles. <b>2004</b> , 328, 225-231	6
1864	Phase compensating effect in left-handed materials. <b>2004</b> , 332, 449-455	15
1863	Zero- photonic band gap in a quasiperiodic stacking of positive and negative refractive index materials. <b>2004</b> , 332, 461-468	53
1862	Size-dependent elastic fields of embedded inclusions in isotropic chiral solids. <b>2004</b> , 41, 6317-6333	27
1861	Metamaterial configurations in coplanar waveguide technology. <b>2004</b> ,	
1860	Backward waves in uniaxial materials and subwavelength waveguides formed by resonant scatterers.	
1859	Field focusing in the presence of the metamaterial plate.	
1858	Is the 3D-wire medium isotropic?. <b>2004</b> ,	
1857	Electromagnetically induced left-handedness in a dense gas of three-level atoms. <b>2004</b> , 70,	114
1856	Nonlinear TM surface waves in a single interface of antiferromagnet and left-handed metamaterial structure.	
1855	Experimental investigation of two-dimensional backward wave meta-material based on parallel-plate waveguide filled with double ring resonators.	
1854	Finite-difference and pseudospectral time-domain methods applied to backward-wave metamaterials. <b>2004</b> , 52, 2955-2962	32

1853	Delay-time investigation of electromagnetic waves through homogeneous medium and photonic crystal left-handed materials. <b>2004</b> , 85, 1125-1127	9
1852	Planar magnetoinductive wave transducers: Theory and applications. <b>2004</b> , 85, 4439	78
1851	Performance of a negative index of refraction lens. <b>2004</b> , 84, 3232-3234	103
1850	Negative refraction of acoustic waves in two-dimensional phononic crystals. <b>2004</b> , 85, 341-343	357
1849	Perfectly matched layer behavior in negative refractive index materials. <b>2004</b> , 3, 172-175	47
1848	Electric coupling to the magnetic resonance of split ring resonators. <b>2004</b> , 84, 2943-2945	348
1847	Plane waves with negative phase velocity in Faraday chiral mediums. <b>2004</b> , 69, 026602	87
1846	Magneto-inductive waves supported by metamaterial elements: components for a one-dimensional waveguide. <b>2004</b> , 37, 362-367	66
1845	A new miniaturized annular ring patch resonator partially loaded by a metamaterial ring with negative permeability and permittivity. <b>2004</b> , 3, 19-22	45
1844	Fabrication and characterization of a negative-refractive-index composite metamaterial. <b>2004</b> , 70,	65
1843	Toward creating isotropic microwave composites with negative refraction. <b>2004</b> , 39, n/a-n/a	17
1842	Lumped element models of double negative metamaterial-based transmission lines. <b>2004</b> , 39, n/a-n/a	8
1841	Nonlinear transmission lines in left-handed media.	2
1840	Robust method to retrieve the constitutive effective parameters of metamaterials. <b>2004</b> , 70, 016608	1251
1839	Double-negative acoustic metamaterial. <b>2004</b> , 70, 055602	700
1838	Experimental investigation of subwavelength resonator based on backward-wave meta-material. <b>2004</b> ,	6
1837	Transmission line approach of left-handed (LH) materials and microstrip implementation of an artificial LH transmission line. <b>2004</b> , 52, 1159-1166	311
1836	Green functions and integral equations for photonic crystals.	



1835	Properties of one-dimensional photonic crystals containing single-negative materials. <b>2004</b> , 69, 066607	228
1834	Omnidirectional gap and defect mode of one-dimensional photonic crystals with single-negative materials. <b>2004</b> , 70,	204
1833	Partial focusing of radiation by a slab of indefinite media. <b>2004</b> , 84, 2244-2246	174
1832	Varactor-loaded split ring resonators for tunable notch filters at microwave frequencies. <b>2004</b> , 40, 1347	111
1831	~ Brenkov radiation in a causal permeable medium. <b>2004</b> , 70,	9
1830	Image resolution depending on slab thickness and object distance in a two-dimensional photonic-crystal-based superlens. <b>2004</b> , 70,	63
1829	Absolute negative refraction and imaging of unpolarized electromagnetic waves by two-dimensional photonic crystals. <b>2004</b> , 70,	55
1828	Properties of a metamaterial element: Analytical solutions and numerical simulations for a singly split double ring. <b>2004</b> , 95, 3778-3784	65
1827	Analytical solution of the almost-perfect-lens problem. <b>2004</b> , 84, 1290-1292	135
1826	Split-ring resonators and localized modes. <b>2004</b> , 70,	93
1825	Influence of the surface termination to the point imaging by a photonic crystal slab with negative refraction. <b>2004</b> , 85, 4269	85
1824	. <b>2004</b> , 52, 199-210	180
1823	Fields, Networks, Computational Methods, and Systems in Modern Electrodynamics. <b>2004</b> ,	
1822	Negative refraction. <b>2004</b> , 45, 191-202	357
1821	GREEN DYADIC AND DIPOLE RADIATION IN AN ELECTRICAL-MAGNETIC COUPLED COMPOSITE MATERIAL. <b>2004</b> , 18, 381-386	1
1820	Enhanced diffraction from a grating on the surface of a negative-index metamaterial. <i>Physical Review Letters</i> , <b>2004</b> , 93, 137405	7-4 33
1819	Three-wave coupling of microwaves in metamaterial with nonlinear resonant conductive elements. <b>2004</b> , 70, 066601	42
1818	Double Split-Ring Resonators: Analytical Modeling and Numerical Simulations. <b>2004</b> , 24, 317-338	84

1817	Negative effective permeability in polaritonic photonic crystals. <b>2004</b> , 85, 543-545	94
1816	Comment on "Electrodynamics of metallic photonic crystals and the problem of left-handed materials". <i>Physical Review Letters</i> , <b>2004</b> , 92, 059401	7-4 18
1815	Left handed coplanar waveguide band pass filters based on bi-layer split ring resonators. <b>2004</b> , 14, 10-12	68
1814	Characteristics of waves guided by a grounded "left-handed" material slab of finite extent. <b>2004</b> , 70, 066606	11
1813	Two theorems on electromagnetic bistatic scattering. <b>2004</b> , 21, 1438-44	1
1812	Scattering properties of an impedance-matched, ideal, homogeneous, causal "left-handed" sphere. <b>2004</b> , 21, 2311-9	13
1811	Negative refraction in indefinite media. <b>2004</b> , 21, 1032	209
1810	Experimental observation of true left-handed transmission peaks in metamaterials. <b>2004</b> , 29, 2623-5	138
1809	Effective negative-/spl epsiv/ stopband microstrip lines based on complementary split ring resonators. <b>2004</b> , 14, 280-282	505
1808	A new LC series element for compact bandpass filter design. <b>2004</b> , 14, 210-212	88
1807	A via-free microstrip left-handed transmission line.	25
1806	Characteristics of the composite right/left-handed transmission lines. <b>2004</b> , 14, 68-70	226
1805	Time domain TLM modelling of metamaterials with negative refractive index.	3
1804	Existence and properties of microwave surface plasmons at the interface between a right-handed and a left-handed media. <b>2004</b> ,	5
1803	Spherical perfect lens: Solutions of Maxwell's equations for spherical geometry. <b>2004</b> , 69,	48
1802	Focusing properties of a photonic crystal slab with negative refraction. <b>2004</b> , 70,	62
1801	Time-domain electromagnetic energy in a frequency-dispersive left-handed medium. <b>2004</b> , 70,	66
1800	Modeling of materials with negative refractive index using TLM 3D SCN node and inter-cell networks. <b>2004</b> ,	0

- 1799 Implementation of the circuit showing the characteristics of the double negative materials. **2004,**
- 1798 Transverse electromagnetic waves in periodic wire arrays. **2004,** 3
- 1797 Homogenization giving rise to unusual metamaterials. **2004,** 2
- 1796 Implementation of negative  $\epsilon$  medium in coplanar waveguide technology. **2004,** 1
- 1795 Analysis of electrically-small metamaterials with lumped tuning elements through a time domain coupled EM-circuit solver. **2004,**
- 1794 Realization of quasi uniform left-handed medium based on LH transmission line. **2004,** 3
- 1793 Radiation characteristics of an infinite line source surrounded by concentric shells of metamaterials. **2004,** 3
- 1792 Novel optical phenomena with photonic crystals. **2004,** 3
- 1791 A miniaturized ring resonator using a left-handed transmission line section. **2004,**
- 1790 An advanced method based on FDTD to extract the indices of composite meta-material.
- 1789 Photonic band structure of 2D lattices with left-handed materials.
- 1788 Metamaterial-based transmission line: the fin line approach. **2005,** 1
- 1787 Characteristics of the guided modes in a channel waveguide with negative refractive index medium. **2005,**
- 1786 Miniaturized open-ended radiator based on waveguide filled with uniaxial negative permeability metamaterial. 2
- 1785 Fields and Poynting vector in and near the focal plane of a slab with index of refraction close to -1 for a line source. 1
- 1784 Negative refraction in periodic and random photonic crystals. **2005,** 7, 159-159 31
- 1783 Effective refractive index of nanocomposite media in view of retardation effects. **2005,**
- 1782 Electromagnetic structures containing negative refractive index metamaterials. 2

- 1781 Negative permeability of split ring resonator in the optical frequency region. **2005,**
- 1780 An efficient algorithm for accurate simulation of split-ring resonators using a modified sub-entire domain basis function method.
- 1779 Analytical model for the optical propagation in a nonlinear left-handed material. **2005,** 5955, 205 5
- 1778 Optical transmission properties of Bragg microcavity containing left handed materials. **2005,**
- 1777 Electromagnetic wave propagation through aperiodic superlattices composed of left- and right-handed materials. **2005,**
- 1776 Dispersion Engineering: The Use of Abnormal Velocities and Negative Index of Refraction to Control Dispersive Effects. **2005,** 381-411 2
- 1775 Polarimetric scattering from a layer of spatially oriented metamaterial small spheroids. **2005,** 31, 3-9 2
- 1774 Imaging of extended objects by a negative refractive index slab. **2005,** 7, 160-160 2
- 1773 Minimization of losses in a structure having a negative index of refraction. **2005,** 7, 161-161 12
- 1772 Sub-diffraction imaging with compensating bilayers. **2005,** 7, 162-162 42
- 1771 Reducing losses and dispersion effects in multilayer metamaterial tunnelling devices. **2005,** 7, 166-166 17
- 1770 The challenge of homogenization in metamaterials. **2005,** 7, 167-167 33
- 1769 Imaging quality of a lossy left-handed material slab. 0
- 1768 Nanostructured non-magnetic left-handed composites.
- 1767 Numerical study and parameter estimation for double-negative metamaterials with Hilbert-curve inclusions. 7
- 1766 Spectral peculiarities of electromagnetic wave scattered by Veselago's cylinders. **2005,** 5955, 151
- 1765 Negative refractive index of layered nonmagnetic/magnetic composites. **2005,** 285, 155-163 5
- 1764 Negative refraction at the interface of uniaxial anisotropic media. **2005,** 246, 429-435 32

1763	Amphoteric refraction at the interface between isotropic and anisotropic media. <b>2005</b> , 254, 353-360	29
1762	Effective negative refractive index of graded granular composites with metallic magnetic particles. <b>2005</b> , 334, 422-428	21
1761	Surface modes and extinction properties of a doubly dispersive spherical shell. <b>2005</b> , 337, 135-140	2
1760	Active lens realized by two-dimensional photonic crystal. <b>2005</b> , 337, 457-462	2
1759	The tunable negative refractive index in granular composite. <b>2005</b> , 339, 123-130	
1758	Solitons and decoherence in left-handed metamaterials. <b>2005</b> , 341, 231-234	29
1757	Modification of thermal radiation by periodical structures containing negative refractive index metamaterials. <b>2005</b> , 342, 497-503	18
1756	Optical refractive index of massive particles and physical meanings of left-handed media. <b>2005</b> , 344, 144-148	15
1755	Defect effect of split ring resonators in left-handed metamaterials. <b>2005</b> , 346, 87-91	45
1754	Plasma response of nanostructured gradient index materials. <b>2005</b> , 346, 174-178	
1753	FDTD study of subwavelength imaging by a photonic crystal slab. <b>2005</b> , 3, 19-24	9
1752	Characteristics of band structures in 1D photonic crystals containing alternate left-right handed materials. <b>2005</b> , 136, 495-498	7
1751	Positive and negative refraction of magnetoinductive waves in two dimensions. <b>2005</b> , 46, 301-308	28
1750	Omnidirectional reflection from the one-dimensional photonic crystal containing anisotropic left-handed material. <b>2005</b> , 48, 29-36	20
1749	Casimir-Polder interaction of atoms with magnetodielectric bodies. <b>2005</b> , 35, 15-30	21
1748	Electromagnetic parameter retrieval from inhomogeneous metamaterials. <b>2005</b> , 71, 036617	1748
1747	Three-dimensional array of dielectric spheres with an isotropic negative permeability at infrared frequencies. <b>2005</b> , 72,	170
1746	FDTD study of resonance Processes in metamaterials. <b>2005</b> , 53, 1477-1487	53

1745	Equivalent-circuit models for split-ring resonators and complementary split-ring resonators coupled to planar transmission lines. <b>2005</b> , 53, 1451-1461	966
1744	Fabrication and optical measurements of nanoscale meta-materials: terahertz and beyond.	0
1743	Metamaterials for High-Frequency Electronics. <b>2005</b> , 93, 1744-1752	38
1742	Retrieval of the effective constitutive parameters of bianisotropic metamaterials. <b>2005</b> , 71, 046610	182
1741	Nonlinear left-handed metamaterials. <b>2005</b> , 40, n/a-n/a	16
1740	On the optical properties of anisotropic media in the presence of negative components of dielectric and (or) magnetic tensors. <b>2005</b> , 50, 465-470	7
1739	Interference of co-and counterpropagating waveguide modes in a planar structure. <b>2005</b> , 50, 1474	3
1738	Fedorov lateral shift at the interface between left-handed and right-handed media. <b>2005</b> , 99, 793	1
1737	Nanofabricated media with negative permeability at visible frequencies. <b>2005</b> , 438, 335-8	487
1736	Sub and superluminal propagation through stratified media. <b>2005</b> , 152, 527	2
1735	Effective medium approach of left-handed material using a dispersive FDTD method. <b>2005</b> , 41, 1484-1487	14
1734	Left-handed transmission characteristics of rectangular waveguides periodically loaded with ferrite. <b>2005</b> , 41, 3532-3537	22
1733	Nonlinear wave propagation phenomena in left-handed transmission-line media. <b>2005</b> , 53, 238-245	58
1732	Metamaterial-based electronically controlled transmission-line structure as a novel leaky-wave antenna with tunable radiation angle and beamwidth. <b>2005</b> , 53, 161-173	137
1731	Properties of left-handed metamaterials: transmission, backward phase, negative refraction, and focusing. <b>2005</b> , 53, 2956-2967	35
1730	. <b>2005</b> , 53, 3298-3304	60
1729	Analysis, modeling, and applications of coaxial waveguide-based left-handed transmission lines. <b>2005</b> , 53, 3489-3497	10
1728	. <b>2005</b> , 47, 853-865	241

1727	The preparation of mesoscopic rings in colloidal crystal templates. <b>2005</b> , 44, 2084-8	51
1726	Herstellung mesoskopischer Ringe durch kontrollierte Benetzung von Kolloid-Kristallen. <b>2005</b> , 117, 2121-2125	8
1725	Resonant frequencies of a split-ring resonator: Analytical solutions and numerical simulations. <b>2005</b> , 44, 133-136	51
1724	Comparison of electromagnetic band gap and split-ring resonator microstrip lines as stop band structures. <b>2005</b> , 44, 376-379	33
1723	A new element design for an axis-independent, tunable, negative-permeability artificial meta-material. <b>2005</b> , 44, 530-533	10
1722	On potential applications of metamaterials for the design of broadband phase shifters. <b>2005</b> , 45, 98-102	42
1721	Nonradiative dielectric waveguide embedded in metamaterial with negative permittivity or permeability. <b>2005</b> , 45, 207-210	5
1720	Calculation of the dispersion diagrams of LHM using the 3D FDTD method. <b>2005</b> , 45, 394-397	5
1719	Compact coplanar waveguide band-pass filter at the S-band. <b>2005</b> , 46, 33-35	15
1718	Complementary split-ring resonator for compact waveguide filter design. <b>2005</b> , 46, 88-92	29
1717	Two-stage S-band erbium-doped fiber amplifier using a depressed-cladding fiber. <b>2005</b> , 46, 92-94	2
1716	PIFA loaded with artificial magnetic material: Practical example for two utilization strategies. <b>2005</b> , 46, 205-210	17
1715	Ultra wide band pass filters (UWBPF) based on complementary split rings resonators. <b>2005</b> , 46, 283-286	35
1714	Application of complementary split-ring resonators to the design of compact narrow band-pass structures in microstrip technology. <b>2005</b> , 46, 508-512	51
1713	Optical bistability in periodic nonlinear structures containing left handed materials. <b>2005</b> , 46, 528-530	22
1712	Novel propagation features of double negative H-guides and H-guide couplers. <b>2005</b> , 47, 185-190	8
1711	A novel theoretical formulation for the analysis of the propagation of finite-bandwidth signals in a double-negative slab. <b>2005</b> , 47, 434-439	2
1710	Some remarks regarding electrodynamics of materials with negative refraction. <b>2005</b> , 81, 403-407	18

1709	Evanescent Plane Waves in Multilayer Structures. <b>2005</b> , 26, 347-362	4
1708	Unconditionally Stable Z-Transform ADI-PML Algorithm for Lorentzian Double Negative Meta-Materials. <b>2005</b> , 26, 1757-1770	3
1707	Some Features of the Electrodynamics of Anisotropic Metamaterials. <b>2005</b> , 48, 136-141	7
1706	Features of electrodynamics of fine-structured resonant metamaterials. <b>2005</b> , 48, 871-881	3
1705	Anomalous frequency range of effective parameters of resonant negative refractive index metamaterials. <b>2005</b> ,	0
1704	Preface. <b>2005</b> , ix-x	
1703	Introduction. <b>2005</b> , 1-18	1
1702	Applications of electronic composites. <b>2005</b> , 19-68	1
1701	Foundations of modeling. <b>2005</b> , 69-125	
1700	Models for electronic composites based on effective medium theory. <b>2005</b> , 126-162	
1699	Resistor network model for electrical and thermal conduction problems. <b>2005</b> , 163-172	
1698	Percolation model. <b>2005</b> , 173-207	
1697	Lamination model. <b>2005</b> , 208-270	
1696	Engineering problems. <b>2005</b> , 271-324	
1695	Eshelby tensors. <b>2005</b> , 325-337	
1694	Physical constants and properties of materials. <b>2005</b> , 338-341	
1693	References. <b>2005</b> , 342-351	
1692	ANOMALOUS PROPERTIES OF SCATTERING FROM CAVITIES PARTIALLY LOADED WITH DOUBLE-NEGATIVE OR SINGLE-NEGATIVE METAMATERIALS. <b>2005</b> , 51, 49-63	19



1691	GUIDED WAVES IN UNIAXIAL WIRE MEDIUM SLAB. <b>2005</b> , 51, 167-185	14
1690	MACROSCOPIC PERFORMANCE ANALYSIS OF METAMATERIALS SYNTHESIZED FROM MICROSCOPIC 2-D ISOTROPIC CROSS SPLIT-RING RESONATOR ARRAY. <b>2005</b> , 51, 197-217	21
1689	. <b>2005</b> ,	551
1688	THE EXPERIMENTAL STUDY OF $\lambda/4$ MONOPOLE ANTENNAS IN META-MATERIAL. <b>2005</b> , 51, 281-293	9
1687	GENERALIZED SURFACE PLASMON RESONANCE SENSORS USING METAMATERIALS AND NEGATIVE INDEX MATERIALS. <b>2005</b> , 51, 139-152	90
1686	EXPERIMENTAL STUDY ON SEVERAL LEFT-HANDED MATAMATERIALS. <b>2005</b> , 51, 249-279	71
1685	A STUDY OF USING METAMATERIALS AS ANTENNA SUBSTRATE TO ENHANCE GAIN. <b>2005</b> , 51, 295-328	179
1684	Zero-permeability materials: an artifact of losses in LHM left-handed media. <b>2005</b> , 152, 465	2
1683	A thin wire array and magnetic host structure with n. <b>2005</b> , 97, 10Q101	29
1682	Photonic band structure of the quasi-one-dimensional photonic quasicrystals. <b>2005</b> ,	
1681	A negative dielectric constant in nano-particle materials under an electric field at very low frequencies. <b>2005</b> ,	13
1680	Photon tunnelling in one-dimensional metamaterial photonic crystals. <b>2005</b> , 7, 519-524	6
1679	A Photonic Bandgap Filter Using Metallic Hilbert Curves. <b>2005</b> , 22, 1439-1442	
1678	Anomalous Positive Refraction in an Anisotropic Left-Handed Medium. <b>2005</b> , 22, 2069-2072	0
1677	Simulation of resonant behavior and negative refraction of metal nanowire composites. <b>2005</b> ,	
1676	Multi-Imaging by Photonic Crystal Slab Using Negative Refraction. <b>2005</b> , 22, 949-951	26
1675	Nonlinear transmission properties of left-handed metamaterial slab.	
1674	Research on the macro effect of the thin wire array in metamaterial by equivalent circuit method.	

1673	Imaging by Photonic Crystal Using Reflection and Negative Refraction. <b>2005</b> , 22, 2674-2676	4
1672	Verification and Calculation of Negative Refractive Indices of a Meta-Material by Numerical Method. <b>2005</b> , 22, 2073-2076	1
1671	Band gaps from ring resonators and structural periodicity. <b>2005</b> , 38, 590-595	5
1670	Resonance and cross-polarization effects in conventional and complementary split ring resonators periodic screens.	3
1669	Left-handed coplanar waveguide. <b>2005</b> ,	5
1668	Analysis and design of Superconducting left-handed transmission lines. <b>2005</b> , 15, 996-999	21
1667	A new realization of left-handed transmission lines employing a coaxial waveguide structure. <b>2005</b> ,	3
1666	Tunable non-near-field focus and imaging of an unpolarized electromagnetic wave. <b>2005</b> , 71,	19
1665	Imaging properties of an elliptical-rod photonic-crystal slab lens. <b>2005</b> , 72,	27
1664	Electromagnetic wave transmission through subwavelength metallic meshes sandwiched between split rings. <b>2005</b> , 87, 201114	14
1663	Far-field detection of the super-lensing effect in the mid-infrared: theory and experiment. <b>2005</b> , 52, 2351-2364	4
1662	Slab lenses from simple anisotropic media. <b>2005</b> , 72,	34
1661	Electromagnetic wave propagation in anisotropic metamaterials created by a set of periodic inductor-capacitor circuit networks. <b>2005</b> , 72,	20
1660	Tunable negative refraction in a two-dimensional active magneto-optical photonic crystal. <b>2005</b> , 71,	19
1659	Subwavelength far-field resolution in a square two-dimensional photonic crystal. <b>2005</b> , 71, 037601	22
1658	Subwavelength metallic waveguides loaded by uniaxial resonant scatterers. <b>2005</b> , 72, 036618	52
1657	Enhancement of specific absorption rate in lossy dielectric objects using a slab of left-handed material. <b>2005</b> , 72, 061911	6
1656	Determining the effective electromagnetic properties of negative-refractive-index metamaterials from internal fields. <b>2005</b> , 72,	38

1655	Experimental characterization of magnetic surface plasmons on metamaterials with negative permeability. <b>2005</b> , 71,	63
1654	Effects of disorder on subwavelength lensing in two-dimensional photonic crystal slabs. <b>2005</b> , 71,	24
1653	On the resonances and polarizabilities of split ring resonators. <b>2005</b> , 98, 033103	98
1652	Tunable plasma response of a metal/ferromagnetic composite material. <b>2005</b> , 72,	13
1651	Coupling of electromagnetic waves and superlattice vibrations in a piezomagnetic superlattice: Creation of a polariton through the piezomagnetic effect. <b>2005</b> , 71,	17
1650	Localization of electromagnetic energy using a left-handed-medium slab. <b>2005</b> , 71,	50
1649	Observation of negative refraction and negative phase velocity in left-handed metamaterials. <b>2005</b> , 86, 124102	84
1648	High-directivity and high-power emission of a line source through conducting gratings backed with a slab of left-handed material. <b>2005</b> , 72,	4
1647	Multifocal flat lens with left-handed metamaterial. <b>2005</b> , 86, 021113	14
1646	Effective negative refraction index in periodic metal/ferromagnetic metal film composite. <b>2005</b> , 97, 076105	38
1645	. <b>2005</b> , 53, 915-921	27
1644	Experimental confirmation of negative phase change in negative index material planar samples. <b>2005</b> , 86, 241908	4
1643	Negative Refraction and Imaging Using 12-fold-Symmetry Quasicrystals. <i>Physical Review Letters</i> , <b>2005</b> , 94,	7.4 93
1642	Exact solution to line source scattering by an ideal left-handed wedge. <b>2005</b> , 72, 056606	8
1641	Self-collimation in liquid surface waves propagating over a bottom with periodically drilled holes. <b>2005</b> , 71, 036301	26
1640	Time domain models of negative refractive index metamaterials.	
1639	Focusing properties of a rectangular-rod photonic-crystal slab. <b>2005</b> , 98, 063102	16
1638	Electromagnetic wave localization using a left-handed transmission-line superlens. <b>2005</b> , 72,	18

1637	Surface polaritons on left-handed cylinders: A complex angular momentum analysis. <b>2005</b> , 72,	16
1636	Far-field imaging of acoustic waves by a two-dimensional sonic crystal. <b>2005</b> , 71,	109
1635	. <b>2005</b> , 53, 3673-3683	25
1634	Dual localizations for second-harmonic generations using left-handed materials. <b>2005</b> , 87, 251104	3
1633	Phonon-like dispersion curves of magnetoinductive waves. <b>2005</b> , 87, 072501	60
1632	Left-handed properties of disordered metamaterials.	
1631	Ground-state van der Waals forces in planar multilayer magnetodielectrics. <b>2005</b> , 72,	46
1630	Large positive and negative Goos-Hänchen shifts from a weakly absorbing left-handed slab. <b>2005</b> , 98, 043522	48
1629	Miniaturization of metamaterials-based waveguide structures. <b>2005</b> ,	
1628	Ab initio analysis of frequency selective surfaces based on conventional and complementary split ring resonators. <b>2005</b> , 7, S38-S43	37
1627	Photonic Crystals. <b>2005</b> ,	
1626	TE and TM guided modes in an air waveguide with negative-index-material cladding. <b>2005</b> , 71, 046603	23
1625	Negative refraction in a photonic crystal with a metallic cross lattice basis. <b>2005</b> , 71,	7
1624	Negative magnetic permeability in the visible light region. <i>Physical Review Letters</i> , <b>2005</b> , 95, 237401	7.4 131
1623	Left-handed and right-handed metamaterials composed of split ring resonators and strip wires. <b>2005</b> , 71, 066605	12
1622	Electric and magnetic properties of sub-wavelength plasmonic crystals. <b>2005</b> , 7, S23-S31	42
1621	TOTAL AND NEGATIVE REFRACTION OF ELECTROMAGNETIC WAVES. <b>2005</b> , 19, 21-33	16
1620	REVERSAL OF INTERFERENCE IN LEFT HANDED MEDIUM. <b>2005</b> , 14, 245-257	1

1619	Theoretical formulation for an electrically small microstrip patch antenna loaded with negative index materials.	3
1618	COMPARISONS OF NEGATIVE REFRACTION IN LEFT-HANDED MATERIALS AND PHOTONIC CRYSTALS. <b>2005</b> , 19, 3547-3561	1
1617	Existence of complex modes in gratings composed of left-handed materials.	0
1616	Plasmonic Nanowire Metamaterials. <b>2005</b> , 313-337	3
1615	A novel quasi lumped-element resonator using a left-handed transmission line section. <b>2005</b> ,	
1614	Investigation on relationship of electromagnetic bandgap structures and left/right handed structures.	1
1613	Realization of arbitrary dual-band components using an improved CRLH transmission-line model.	
1612	Beam-squint minimization in microstrip series-fed array antenna using circuit of double negative materials.	
1611	Left-handed and right-handed metamaterials composed of split ring resonators and strip wires.	
1610	Coplanar waveguide transmitting a left-handed wave. <b>2005</b> ,	0
1609	Polaritonics for silicon nanophotonics (Invited Paper). <b>2005</b> , 6050, 167	1
1608	Signal explanation to the dispersion of left-handed materials.	
1607	On the propagation of a Gaussian pulse in a double-negative slab. <b>2005</b> ,	1
1606	New bulk metamaterial. <b>2005</b> ,	
1605	A parallel-grid-enabled variable-mesh FDTD approach for the analysis of slabs of double-negative metamaterials.	1
1604	Modeling on dispersive metamaterials slab using FDTD.	
1603	Band pass filters for ultra wideband systems.	
1602	Left-handed material composed of shunt capacitances in a waveguide. <b>2005</b> ,	

1601	Linear to circular polarization conversion using a metamaterial with helical inclusions.		0
1600	Equivalent circuit representation of left-handed media in coplanar waveguide technology. <b>2005,</b>		0
1599	DBR active optical filters incorporating negative refractive index metamaterials.		0
1598	Terahertz response of a microfabricated rod-split-ring-resonator electromagnetic metamaterial. <i>Physical Review Letters</i> , <b>2005</b> , 94, 063901	7.4	184
1597	Analysis of 2D- and 3D-isotropic split ring resonators. <b>2005,</b>		
1596	Modeling of metamaterials with negative refractive index using 2-D shunt and 3-D SCN TLM networks. <b>2005</b> , 53, 1496-1505		29
1595	Negative refraction in ferromagnet-superconductor superlattices. <i>Physical Review Letters</i> , <b>2005</b> , 95, 247009	116	
1594	A positive future for double-negative metamaterials. <b>2005</b> , 53, 1535-1556		260
1593	Experimental analysis of true left-handed behaviour and transmission properties of composite metamaterials. <b>2005</b> , 3, 75-78		6
1592	Impact of inherent periodic structure on effective medium description of left-handed and related metamaterials. <b>2005</b> , 71,		219
1591	Impedance, bandwidth, and Q of antennas. <b>2005</b> , 53, 1298-1324		499
1590	Improved superlensing in two-dimensional photonic crystals with a basis. <b>2005</b> , 86, 061105		20
1589	Forward and backward leaky wave radiation with large effective aperture from an electronically tunable textured surface. <b>2005</b> , 53, 236-247		98
1588	Propagating and evanescent modes in two-dimensional wire media. <b>2005</b> , 71, 046612		35
1587	Effect of interface and disorder on the far-field image in a two-dimensional photonic-crystal-based flat lens. <b>2005</b> , 71,		26
1586	Metaferrites: using electromagnetic bandgap structures to synthesize metamaterial ferrites. <b>2005</b> , 53, 1382-1389		41
1585	Coupling between plane waves and Bloch waves in photonic crystals with negative refraction. <b>2005</b> , 71,		38
1584	Negative refraction of acoustic waves in two-dimensional sonic crystals. <b>2005</b> , 72,		76

1583	Left-handed leaky wave antenna for millimeter-wave applications.	7
1582	Effective plasma frequency in one-dimensional metallic-dielectric photonic crystals. <b>2005</b> , 86, 091112	44
1581	Microwave/millimeter wave metamaterial development using the design of experiments technique.	
1580	. <b>2005</b> ,	2
1579	. <b>2005</b> , 53, 1591-1599	11
1578	Left-handed properties of disordered metamaterials.	
1577	Superresolution effects obtained by negative refraction lens. <b>2005</b> , 52, 1871-1883	4
1576	Electromagnetic wave propagation in two-dimensional photonic crystals: A study of anomalous refractive effects. <b>2005</b> , 72,	112
1575	The influence of complex material coverings on the quality factor of simple radiating systems. <b>2005</b> , 53, 965-970	25
1574	Role of evanescent waves in the positive and negative Goos-Hänchen shifts with left-handed material slabs. <b>2005</b> , 98, 094905	10
1573	Dual-Polarized Frequency-Tunable Composite Left-Handed Slab. <b>2005</b> , 19, 1907-1918	11
1572	A new uniaxial perfectly matched layer absorbing boundary condition for chiral metamaterials. <b>2005</b> , 4, 51-54	2
1571	Linear and Nonlinear Homogenized Composite Mediums as Metamaterials. <b>2005</b> , 25, 461-481	30
1570	Gap solitons in microstructured metamaterials.	
1569	An uniaxial perfectly matched layer for chiral metamaterials.	
1568	Experimental observation of true left-handed metamaterial.	
1567	Resonant properties of dielectric metamaterials.	0
1566	. <b>2005</b> ,	

1565	Analysis and Design of Waveguides Loaded with Split-Ring Resonators. <b>2005</b> , 19, 1407-1421	10
1564	Left-Handed Rectangular Waveguides Periodically Filled with Ferrite. <b>2005</b> ,	
1563	Transmission of evanescent wave modes through a slab of DNG material. <b>2005</b> , 53, 270-274	7
1562	Negative refraction in a metamaterial composed of pairs of nanowires.	
1561	Negative-refraction imaging with two-dimensional phononic crystals. <b>2005</b> , 72,	122
1560	Introduction. <b>2005</b> , 1-26	2
1559	The preparation of submicrometer-sized rings by embedding and selective etching of spherical silica particles. <b>2005</b> , 5, 295-9	25
1558	The Future of MTMs. <b>2005</b> , 316-346	1
1557	Investigation of magnetic resonances for different split-ring resonator parameters and designs. <b>2005</b> , 7, 168-168	214
1556	Piezoelectricpiezomagnetic multilayer with simultaneously negative permeability and permittivity. <b>2005</b> , 86, 102904	10
1555	Optically uniaxial left-handed materials. <b>2005</b> , 72,	19
1554	Suppression of spontaneous emission and superradiance over macroscopic distances in media with negative refraction. <b>2005</b> , 71,	60
1553	Multiple-spot parallel processing for laser micronanofabrication. <b>2005</b> , 86, 044102	190
1552	Superconducting metamaterials. <b>2005</b> , 87, 034102	137
1551	Tunable negative refractions in two-dimensional photonic crystals with superconductor constituents. <b>2005</b> , 97, 073104	34
1550	Isotropic three-dimensional left-handed metamaterials. <b>2005</b> , 71,	105
1549	Effect of rotational invariance on the monostatic characteristics of matched bodies. <b>2005</b> , 22, 1035-41	1
1548	Study of the surface and bulk polaritons with a negative index metamaterial. <b>2005</b> , 22, 1016	75



1547	Surface plasmon polaritons at interfaces associated with artificial composite materials. <b>2005</b> , 22, 2686	24
1546	Backpropagating modes of surface polaritons on a cross-negative interface. <b>2005</b> , 13, 417-27	6
1545	Nonlinear transmission and spatiotemporal solitons in metamaterials with negative refraction. <b>2005</b> , 13, 1291-8	46
1544	Electromagnetic wave propagation through doubly dispersive subwavelength metamaterial hole. <b>2005</b> , 13, 3653-65	21
1543	Focusing by a slab of chiral medium. <b>2005</b> , 13, 4974-9	80
1542	Three-dimensional photonic crystal flat lens by full 3D negative refraction. <b>2005</b> , 13, 5592-9	15
1541	Super-compact multilayered left-handed transmission line and diplexer application. <b>2005</b> , 53, 1527-1534	58
1540	Near-sighted superlens. <b>2005</b> , 30, 75-7	213
1539	Magnetic response of split-ring resonators in the far-infrared frequency regime. <b>2005</b> , 30, 1348-50	169
1538	Tunable positive and negative refraction in optically induced photonic lattices. <b>2005</b> , 30, 2293-5	27
1537	Resolving the wave vector in negative refractive index media. <b>2005</b> , 30, 2626-8	31
1536	Metamaterials in microstrip technology for filter applications.	13
1535	Characterization of a volumetric metamaterial realization of an artificial magnetic conductor for antenna applications. <b>2005</b> , 53, 160-172	153
1534	Negative Refraction in Perspective. <b>2005</b> , 25, 365-389	68
1533	Negative refraction and focusing of circularly polarized waves in optically active media. <i>Physical Review Letters</i> , <b>2005</b> , 95, 123904	7.4 129
1532	Nonlinear propagation of electromagnetic waves in negative-refraction-index composite materials. <b>2005</b> , 72, 016626	84
1531	Physics of negative refractive index materials. <b>2005</b> , 68, 449-521	684
1530	Negative refractive index metamaterials from inherently non-magnetic materials for deep infrared to terahertz frequency ranges. <b>2005</b> , 17, 3717-34	154

1529 Planar metamaterials and applications in directive antennas.

1528 Coupled nonlinear Schrodinger field equations for electromagnetic wave propagation in nonlinear left-handed materials. **2005**, 71, 036614 147

1527 Fundamental modal properties of surface waves on metamaterial grounded slabs. **2005**, 53, 1431-1442 52

1526 Strongly anisotropic media: the THz perspectives of left-handed materials. **2005**, 52, 2343-2349 34

1525 Left-handed metamaterials: detailed numerical studies of the transmission properties. **2005**, 7, S12-S22 92

1524 The design synthesis of multiband artificial magnetic conductors using high impedance frequency selective surfaces. **2005**, 53, 8-17 222

1523 Microwave filters with improved stopband based on sub-wavelength resonators. **2005**, 53, 1997-2006 137

1522 Electromagnetic Properties of Materials. **2005**, 1-36 1

1521 Strongly anisotropic waveguide as a nonmagnetic left-handed system. **2005**, 71, 235

1520 Waveguide miniaturization using uniaxial negative permeability metamaterial. **2005**, 53, 110-119 179

1519 Simulation and testing of a graded negative index of refraction lens. **2005**, 87, 091114 88

1518 Negative-Refractive-Index Transmission-Line Metamaterials. **2005**, 1-52 7

1517 Gaussian Beam Interactions with Double-Negative (DNG) Metamaterials. **2005**, 171-211 2

1516 A negative index of refraction metamaterial based on a wire array embedded in ferrite. **2005**, 0

1515 A theory of metamaterials based on periodically loaded transmission lines: Interaction between magnetoinductive and electromagnetic waves. **2005**, 97, 064909 87

1514 Tunable split rings resonators for reconfigurable metamaterial transmission lines. **2005**, 5

1513 Midinfrared resonant magnetic nanostructures exhibiting a negative permeability. *Physical Review Letters*, **2005**, 94, 037402 7-4 219

1512 Suppression of left-handed properties in disordered metamaterials. **2005**, 97, 113906 33

1511	Effective parameters of resonant negative refractive index metamaterials: Interpretation and validity. <b>2005</b> , 98, 063505		42
1510	Split rings resonators: key particles for microwave device design.		3
1509	Resonant light interaction with plasmonic nanowire systems. <b>2005</b> , 7, S32-S37		84
1508	Experimental verification of surface waves of metamaterials. <b>2005</b> ,		
1507	Imperfect perfect lens. <b>2005</b> , 5, 339-43		73
1506	A directive patch antenna with a metamaterial cover.		1
1505	Saturation of the magnetic response of split-ring resonators at optical frequencies. <i>Physical Review Letters</i> , <b>2005</b> , 95, 223902	7.4	467
1504	Homogenization of 3-D-connected and nonconnected wire metamaterials. <b>2005</b> , 53, 1418-1430		98
1503	Guided modes in negative-refractive-index fibres. <b>2005</b> , 7, S51-S56		27
1502	Design of ring resonator mode spacing and bandwidth using the phase response of composite right/left handed transmission lines. <b>2005</b> ,		4
1501	Cherenkov radiation by an electron bunch that moves in a vacuum above a left-handed material. <b>2005</b> , 72,		38
1500	Gradient index metamaterials. <b>2005</b> , 71, 036609		225
1499	Homogenization of electromagnetic crystals formed by uniaxial resonant scatterers. <b>2005</b> , 72, 026615		118
1498	Compact size highly directive antennas based on the SRR metamaterial medium. <b>2005</b> , 7, 223-223		50
1497	Periodically loaded transmission line media/materials with infinite extent on coplanar waveguide: Guided- wave performances. <b>2006</b> ,		
1496	The Design of High Gain Omni Directional Monopole Based on Conformal Metamaterial Cover. <b>2006</b> ,		1
1495	Dual band filter with split-ring resonators. <b>2006</b> ,		18
1494	All-angle broadband negative refraction of metal waveguide arrays in the visible range: theoretical analysis and numerical demonstration. <i>Physical Review Letters</i> , <b>2006</b> , 97, 073901	7.4	121

1493	Dynamical Metamaterials at Terahertz Frequencies. <b>2006,</b>			1
1492	Negative Refraction in a Cut-Off Parallel-Plate Waveguide Loaded with Two-Dimensional Lattice of Dielectric Resonators. <b>2006,</b>			14
1491	Study on High Gain Patch Antenna with Metamaterial Cover. <b>2006,</b>			3
1490	Negative refraction and focusing analysis in a left-handed material slab and realization with a 3D photonic crystal structure. <b>2006, 8, 199-204</b>			2
1489	Discrete breathers in nonlinear magnetic metamaterials. <i>Physical Review Letters</i> , <b>2006, 97, 157406</b>	7-4		84
1488	Circuit elements at optical frequencies from first principles: A synthesis of electronic structure and circuit theories. <b>2006, 100, 034305</b>			2
1487	Introduction, History, and Selected Topics in Fundamental Theories of Metamaterials. 1-41			10
1486	Magnetic and electronic resonances for different metamaterial resonator geometries. <b>2006,</b>			
1485	. <b>2006, 54, 1451-1457</b>			18
1484	Role of ferrites in negative index metamaterials. <b>2006,</b>			
1483	Metamaterial with randomized patterns for negative refraction of electromagnetic waves. <b>2006, 88, 031908</b>			24
1482	Sub-wavelength metallic waveguides loaded by uniaxial resonant scatterers.			1
1481	A Harmonic Suppression Antenna Using Split Ring Resonators Coupled with Microstrip Line. <b>2006,</b>			7
1480	Resonance and Cross-Polarization Effects in Conventional and Complementary Split Ring Resonator Periodic Screens. <b>2006, 26, 247-260</b>			24
1479	. <b>2006,</b>			
1478	Modelling complementary-split-rings-resonator (CSRR) left-handed lines with inter-resonator's coupling.			1
1477	Engineering the imaging properties of a metallic photonic-crystal slab lens. <b>2006, 88, 031104</b>			14
1476	Electromagnetic scattering properties in a multilayered metamaterial cylinder.			

1475	Focusing Efficiency Analysis and Performance Optimization of Arbitrarily Sized DNG Metamaterial Slabs With Losses. <b>2006</b> , 54, 4111-4121		6
1474	Microwave circuit theory-based models for predicting the resonant frequencies of a class of ring resonators.		
1473	NanoElectromagnetic Metamaterials Approaching Telecommunications Frequencies.		
1472	Aperture Coupling and Dipole Excitation in Planar Waveguide Partially Filled With Left-Handed Material. <b>2006</b> , 54, 2605-2614		0
1471	A Study on High Gain Circular Waveguide Array Antenna Using Metamaterial Structure.		2
1470	Cut-Through Metal Slit Array as an Anisotropic Metamaterial Film. <b>2006</b> , 12, 1116-1122		41
1469	An Open Wedge Cavity Based on the Negative Refraction of a Photonic Crystal. <b>2006</b> , 16, 582-584		
1468	Experimental demonstration of negative index of refraction. <b>2006</b> , 88, 221103		132
1467	Shrinking dimensions of the unit cell of thin-wire-based ENG metamaterial by inductive loading. <b>2006</b> ,		3
1466	Conjugate Left- and Right-handed Material Bilayered Substrates Qualify the Subwavelength Cavity Resonator Microstrip Antennas as Sensors. <b>2006</b> , 20, 2113-2122		8
1465	. <b>2006</b> , 48, 38-54		13
1464	Electromagnetically induced left handedness in optically excited four-level atomic media. <i>Physical Review Letters</i> , <b>2006</b> , 96, 053601	7.4	106
1463	. <b>2006</b> ,		1
1462	Electrically small antenna elements using negative permittivity resonators. <b>2006</b> , 54, 1644-1653		88
1461	Modelling and simulation of dielectric heterostructures: a physical survey from an historical perspective. <b>2006</b> , 39, 1277-1294		149
1460	Ultrashort solitons and kinetic effects in nonlinear metamaterials. <b>2006</b> , 73, 037601		53
1459	Slow propagation of electromagnetic waves in a dielectric slab waveguide with a left-handed material substrate. <b>2006</b> , 16, 96-98		47
1458	Negative-Index Metamaterials: Going Optical. <b>2006</b> , 12, 1106-1115		97

1457	Effective medium theory for magnetodielectric composites: Beyond the long-wavelength limit. <b>2006</b> , 74,		158
1456	Additional boundary condition for the wire medium. <b>2006</b> , 54, 1766-1780		101
1455	Nanowire metamaterials with extreme optical anisotropy. <b>2006</b> , 89, 261102		180
1454	A novel compact microstrip bandstop filter based on complementary split-ring resonators. <b>2006</b> ,		
1453	Tunneling of electromagnetic energy through subwavelength channels and bends using epsilon-near-zero materials. <i>Physical Review Letters</i> , <b>2006</b> , 97, 157403	7-4	888
1452	Emittance and absorptance tailoring by negative refractive index metamaterial-based Cantor multilayers. <b>2006</b> , 8, 355-362		25
1451	Miniaturized microstrip and CPW filters using coupled metamaterial resonators. <b>2006</b> , 54, 2628-2635		71
1450	Review of Electromagnetic Theory in Left-handed Materials. <b>2006</b> , 20, 2137-2151		70
1449	Extraction of Constitutive Relation Tensor Parameters of SRR Structures using Transmission Line Theory. <b>2006</b> , 20, 13-25		22
1448	. <b>2006</b> , 16, 1893-1897		18
1447	Broadband double negative material from ferrite-loaded metallic waveguides. <b>2006</b> , 42, 4		8
1446	Finite-difference time-domain analysis of the tunneling and growing exponential in a pair of epsilon-negative and mu-negative slabs. <b>2006</b> , 74, 016604		14
1445	Accurate circuit analysis of resonant-type left handed transmission lines with inter-resonator coupling. <b>2006</b> , 100, 074908		19
1444	Microstrip Antennas with Left-Handed Materials Substrates. <b>2006</b> , 20, 1221-1233		28
1443	Negative-refractive-index fibres: TEM modes. <b>2006</b> , 8, 864-866		12
1442	Modulation instability in nonlinear negative-index material. <b>2006</b> , 73, 036617		127
1441	Acoustic backward-wave negative refractions in the second band of a sonic crystal. <i>Physical Review Letters</i> , <b>2006</b> , 96, 014301	7-4	107
1440	Refraction control of acoustic waves in a square-rod-constructed tunable sonic crystal. <b>2006</b> , 73,		33

1439	Fabrication of 2D and 3D Electromagnetic Metamaterials for the Terahertz Range.. <b>2006</b> , 34, 885-890		16
1438	Negative index materials using simple short wire pairs. <b>2006</b> , 73,		303
1437	Numerical simulation of a new kind of metamaterial with negative refraction property. <b>2006</b> ,		
1436	Free-space microwave focusing by a negative-index gradient lens. <b>2006</b> , 88, 081101		97
1435	Magnetic plasmon propagation along a chain of connected subwavelength resonators at infrared frequencies. <i>Physical Review Letters</i> , <b>2006</b> , 97, 243902	7-4	136
1434	Doppler radiation emitted by an oscillating dipole moving inside a photonic band-gap crystal. <i>Physical Review Letters</i> , <b>2006</b> , 96, 043903	7-4	20
1433	Negative Index of Refraction in Anisotropic Nonmagnetic Materials. <b>2006</b> , 338, 195-203		6
1432	Transmission properties of terahertz pulses through subwavelength double split-ring resonators. <b>2006</b> , 31, 634-6		120
1431	Negative refractive index in artificial metamaterials. <b>2006</b> , 31, 2483-5		28
1430	Unifying approach to left-handed material design. <b>2006</b> , 31, 3620-2		313
1429	Tunable metamaterial transmission lines based on varactor-loaded split-ring resonators. <b>2006</b> , 54, 2665-2674		122
1428	Artificial Left-handed Transmission Lines for Small Size Microwave Components: Application to Power Dividers. <b>2006</b> ,		8
1427	Exact solution to plane-wave scattering by an ideal "left-handed" wedge. <b>2006</b> , 23, 339-48		2
1426	Focusing concave lens using photonic crystals with magnetic materials. <b>2006</b> , 23, 956-9		9
1425	Homogenization of metamaterials by field averaging (invited paper). <b>2006</b> , 23, 391		427
1424	Spectroscopy of metamaterials from infrared to optical frequencies. <b>2006</b> , 23, 404		48
1423	Negative refraction through an impedance-matched left-handed metamaterial slab. <b>2006</b> , 23, 415		23
1422	Enhanced near-field resolution in midinfrared using metamaterials. <b>2006</b> , 23, 468		45

1421	Nonmagnetic nanocomposites for optical and infrared negative-refractive-index media. <b>2006, 23, 498</b>	128
1420	Zero- $n$ bandgap in photonic crystal superlattices. <b>2006, 23, 506</b>	47
1419	Second-harmonic generation in nonlinear left-handed metamaterials. <b>2006, 23, 529</b>	152
1418	Volumetric layered transmission-line metamaterial exhibiting a negative refractive index. <b>2006, 23, 553</b>	25
1417	Total transmission of electromagnetic waves at interfaces associated with an indefinite medium. <b>2006, 23, 904</b>	16
1416	Bianisotropic response of microfabricated metamaterials in the terahertz region. <b>2006, 23, 1174</b>	32
1415	Linear and nonlinear propagation in negative index materials. <b>2006, 23, 2348</b>	17
1414	Backward wave propagation in left-handed media with isotropic and anisotropic permittivity tensors. <b>2006, 23, 2377</b>	11
1413	Numerical simulations of long-range plasmons. <b>2006, 14, 1611-25</b>	74
1412	Perfect lens makes a perfect trap. <b>2006, 14, 2228-35</b>	9
1411	Optimization of optical transmittance of a layered metamaterial on active pairs of nanowires. <b>2006, 14, 3389-95</b>	2
1410	Optical impedance of metallic nano-structures. <b>2006, 14, 7709-22</b>	12
1409	Group front evolution of Gaussian beam refracted from a right- to left-handed medium. <b>2006, 14, 8232-9</b>	1
1408	Pairs of metallic crosses as a left-handed metamaterial with improved polarization properties. <b>2006, 14, 8257-62</b>	27
1407	Spatial mapping of the internal and external electromagnetic fields of negative index metamaterials. <b>2006, 14, 8694-705</b>	88
1406	On the reinterpretation of resonances in split-ring-resonators at normal incidence. <b>2006, 14, 8827-36</b>	240
1405	Tunable split-ring resonators for nonlinear negative-index metamaterials. <b>2006, 14, 9344-9</b>	204
1404	Layered superlensing in two-dimensional photonic crystals. <b>2006, 14, 11178-83</b>	9



1403	Characterization of a planar artificial magnetic metamaterial surface. <b>2006</b> , 74, 036604	27
1402	Low-order aberration corrections of multilayer flat lenses using negative-index materials. <b>2006</b> , 45, 6925-31	3
1401	Novel SRR Loaded Waveguide Bandstop Filters. <b>2006</b> ,	3
1400	. <b>2006</b> , 54, 1017-1030	131
1399	Composite Right/Left-Handed Transmission Lines Based on Conductor-Backed Coplanar Strips for Antenna Application. <b>2006</b> ,	10
1398	Reduction of the Peak SAR in the Human Head With Metamaterials. <b>2006</b> , 54, 3763-3770	91
1397	Tuned Spiral Resonators for Composite Metamaterials. <b>2006</b> ,	2
1396	Composite Right/Left-Handed Transmission Line With Wire Bonded Interdigital Capacitor. <b>2006</b> , 16, 624-626	12
1395	Experimental verification of the key properties of a three-dimensional isotropic transmission-line superlens. <b>2006</b> , 99, 124910	43
1394	GROUP THEORY BASED DESIGN OF ISOTROPIC NEGATIVE REFRACTIVE INDEX METAMATERIALS. <b>2006</b> , 63, 295-310	25
1393	STUDY ON HIGH GAIN CIRCULAR WAVEGUIDE ARRAY ANTENNA WITH METAMATERIAL STRUCTURE. <b>2006</b> , 60, 207-219	38
1392	A STUDY OF USING THE DOUBLE NEGATIVE STRUCTURE TO ENHANCE THE GAIN OF RECTANGULAR WAVEGUIDE ANTENNA ARRAYS. <b>2006</b> , 65, 275-286	14
1391	ABSORBING PROPERTIES OF A NEGATIVE PERMITTIVITY LAYER PLACED ON A REFLECTING GRATING. <b>2006</b> , 64, 135-148	10
1390	PLANAR METAMATERIALS SUPPORTING MULTIPLE LEFT-HANDED MODES. <b>2006</b> , 66, 239-251	33
1389	Novel Electrically Resonant Terahertz Metamaterials. <b>2006</b> , ThA5	0
1388	Subwavelength Imaging by Full 3D Negative Refraction Using a 3D Photonic Crystal. <b>2006</b> , ThA2	
1387	. <b>2006</b> ,	897
1386	ANALYSIS OF GUIDED MODES IN ASYMMETRIC LEFT-HANDED SLAB WAVEGUIDES. <b>2006</b> , 62, 203-215	27

- 1385 COMPLETE MODE SPECTRUM OF A GROUNDED DIELECTRIC SLAB WITH DOUBLE NEGATIVE METAMATERIALS. **2006**, 65, 103-123 20
- 1384 Retardation effects in optical properties of nanocomposite media. **2006**,
- 1383 Microwave Coupler and Resonator Applications of NRI Planar Structures. 191-210
- 1382 Review of Theory, Fabrication, and Applications of High-Impedance Ground Planes. 285-311 3
- 1381 Waveguide Experiments to Characterize Properties of SNG and DNG Metamaterials. 87-111 4
- 1380 Space-Filling Curve High-Impedance Ground Planes. 377-402 0
- 1379 Refraction Experiments in Waveguide Environments. 113-140 2
- 1378 Magnetic plasmon resonance. **2006**, 3-13 2
- 1377 Femtosecond laser fabrication of three-dimensional metallic micro-nanostructures. **2006**, 2, 289-304
- 1376 Strategies for minimizing losses in negative phase velocity metamaterials. **2006**,
- 1375 An adaptive Fourier Bessel split-step method and variational techniques applied to nonlinear propagation in negative index materials. **2006**,
- 1374 Frequency dependence of the magnetic response of split-ring resonators. **2006**,
- 1373 Applications of hardware-based simulation platforms to negative-index material analysis. **2006**,
- 1372 Two-dimensional Left-handed Metamaterial with a Negative Refractive Index. **2006**, 36, 6-11 6
- 1371 Toward the modulation of negative index materials (NIM) by photoconductive coupling. **2006**, 6373, 74
- 1370 Open cavities using photonic crystals with negative refraction. **2006**, 6343, 1140 1
- 1369 Spectral peculiarities of electromagnetic wave scattering by Veselago's cylinders. **2006**,
- 1368 Focusing slabs made of negative index materials based on inhomogeneous dielectric rods. **2006**, 203, R48-R50 7

1367	Negative refractive index metamaterials. <b>2006</b> , 9, 28-35	239
1366	Narrowband Microwave Dielectric Resonance and Negative Permittivity Behavior in Hydrogen-Fired Al <sub>2</sub> O <sub>3</sub> /TiO <sub>2</sub> Composites. <b>2006</b> , 89, 3865-3867	14
1365	Ultrasonic metamaterials with negative modulus. <b>2006</b> , 5, 452-6	1288
1364	Photonics: metamaterials in the sunshine. <b>2006</b> , 5, 599-600	64
1363	Active terahertz metamaterial devices. <b>2006</b> , 444, 597-600	1584
1362	Radiation of multiple-scattered charged particle. <b>2006</b> , 563, 364-367	3
1361	Negative magnetic permeability of split ring resonators in the visible light region. <b>2006</b> , 258, 300-305	27
1360	Veselago's lens consisting of left-handed materials with arbitrary index of refraction. <b>2006</b> , 264, 130-134	19
1359	Focusing and phase compensation of paraxial beams by a left-handed material slab. <b>2006</b> , 266, 327-331	15
1358	Imaging properties of triangular lattice photonic crystal at the lowest band. <b>2006</b> , 348, 405-409	4
1357	Perfect antireflection via negative refraction. <b>2006</b> , 349, 281-284	3
1356	Wave propagation inside one-dimensional photonic crystals with single-negative materials. <b>2006</b> , 350, 410-415	20
1355	Surface polaritons and slow propagation related to chiral media supporting backward waves. <b>2006</b> , 351, 354-358	20
1354	Effectively negatively refractive material made of negative-permittivity and negative-permeability bilayer. <b>2006</b> , 351, 391-397	8
1353	Field propagation of a metallic grid slab that acts as a metamaterial. <b>2006</b> , 353, 171-178	2
1352	Photonic-resonant left-handed medium. <b>2006</b> , 357, 54-60	23
1351	Near-field enhancement and imaging in double cylindrical polariton-resonant structures: Enlarging superlens. <b>2006</b> , 357, 397-400	21
1350	Unusual transmission properties of wave in one-dimensional random system containing left-handed-material. <b>2006</b> , 359, 542-546	28

1349	Radiation of a relativistic charged particle in matter. <b>2006</b> , 75, 832-836	1
1348	CAD of one-layer frequency selected surfaces with metamaterials properties. <b>2006</b> , 26, 2199-2203	4
1347	Nanofabrication of negative refractive index metasurfaces. <b>2006</b> , 83, 1786-1791	4
1346	Basic materials research programs at the U.S. Air Force Office of Scientific Research. <b>2006</b> , 132, 2-7	13
1345	Anomalous wave propagation in quasiisotropic media. <b>2006</b> , 267, 271-277	5
1344	Nonlinear magnetoinductive waves and domain walls in composite metamaterials. <b>2006</b> , 4, 69-74	43
1343	Magnetic response of dendritic structures at infrared frequencies. <b>2006</b> , 140, 9-13	14
1342	Fresnel equations and the refractive index of active media. <b>2006</b> , 73, 026605	63
1341	Leaky wave radiation from left-handed transmission lines composed of a cut-off parallel-plate waveguide loaded with dielectric resonators. <b>2006</b> ,	3
1340	A power divider based on a new kind of composite right/left-handed transmission line (CRLH TL) unit. <b>2006</b> , 7, 1-4	6
1339	Broad-bandwidth and low-loss metamaterials: Theory, design and realization. <b>2006</b> , 7, 5-23	9
1338	From electromagnetic bandgap to left-handed metamaterials: Modelling and applications. <b>2006</b> , 7, 34-40	1
1337	Left-handed materials in magnetized metallic magnetic thin films. <b>2006</b> , 7, 71-75	4
1336	Transmission line realization of subwavelength resonator formed by a pair of conventional and LHM slabs. <b>2006</b> , 7, 76-80	1
1335	Bragg reflectors based on alternate RHTL-LHTL structures. <b>2006</b> , 7, 81-84	
1334	Novel resonator based on composite right/left-handed transmission lines. <b>2006</b> , 7, 85-88	1
1333	Analytical solution for electromagnetic scattering from a sphere of uniaxial left-handed material. <b>2006</b> , 7, 99-104	9
1332	Magnetic plasmon resonance. <b>2006</b> , 73, 036609	80

1331	Nano-scale Metamaterials: Fabrication and Optical Measurements from THz towards visible. <b>2006</b> ,	
1330	Artificial dielectric medium possessing simultaneously negative permittivity and magnetic permeability. <b>2006</b> , 32, 429-433	31
1329	Magnetostatic surface waves in a ferrite/dielectric/metal-strip-grating structure. <b>2006</b> , 51, 311-315	1
1328	A left-handed composite medium based on waveguiding structures with a bianisotropic filling. <b>2006</b> , 51, 484-497	4
1327	Modelling of isotropic double negative media for microwave applications. <b>2006</b> , 14,	40
1326	A review of size and geometrical factors influencing resonant frequencies in metamaterials. <b>2006</b> , 14,	8
1325	Identifying magnetic response of split-ring resonators at microwave frequencies. <b>2006</b> , 14,	23
1324	Methods of crystal optics for studying electromagnetic phenomena in metamaterials: Review. <b>2006</b> , 51, 1048-1062	4
1323	Making and measuring nanostructures: Nanoscience and technology at the Singapore synchrotron light source. <b>2006</b> , 51, S170-S182	4
1322	Inverted (negative) refraction of an electromagnetic wave in an anisotropic medium. <b>2006</b> , 103, 354-359	4
1321	Omnidirectional zero- $(\bar{n})$ gap in symmetrical Fibonacci sequences composed of positive and negative refractive index materials. <b>2006</b> , 52, 37-40	5
1320	Anomalous lateral beam shift and total absorption due to excitation of surface waves in materials with negative refraction. <b>2006</b> , 39, 295-301	7
1319	Controlling electromagnetic fields. <b>2006</b> , 312, 1780-2	5883
1318	On the electrical characteristics of complementary metamaterial resonators. <b>2006</b> , 16, 543-545	158
1317	Novel microstrip bandpass filters based on complementary split-ring resonators. <b>2006</b> , 54, 265-271	207
1316	Dynamical electric and magnetic metamaterial response at terahertz frequencies. <i>Physical Review Letters</i> , <b>2006</b> , 96, 107401	7.4 616
1315	Coated nonmagnetic spheres with a negative index of refraction at infrared frequencies. <b>2006</b> , 73,	144
1314	Review of Left-Handed Metamaterials: Evolution from Theoretical and Numerical Studies to Potential Applications. <b>2006</b> , 20, 2053-2064	60

1313	Photonic crystals: Green's functions, integro-differential equations, and simulation results. <b>2006</b> , 49, 134-146	6
1312	Surface waves guided by magnetic metamaterials. <b>2006</b> , 49, 557-563	4
1311	Singularity index of the electromagnetic field on the edge in the presence of the Veselago medium. <b>2006</b> , 49, 853-856	1
1310	Complementary split rings resonators (CSRRs): Towards the miniaturization of microwave device design. <b>2006</b> , 5, 193-197	21
1309	Resonances of split-ring resonator metamaterials in the near infrared. <b>2006</b> , 84, 219-227	138
1308	Evaluation of gold nanowire pairs as a potential negative index material. <b>2006</b> , 84, 139-148	30
1307	Negative refraction and focusing of electromagnetic wave through two-dimensional photonic crystals. <b>2006</b> , 1, 396-404	5
1306	Analysis of left-handed rectangular waveguides with dielectric-filled corrugations using the asymptotic corrugation boundary conditions. <b>2006</b> , 153, 221	11
1305	Role of Ferrites in Negative Index Metamaterials. <b>2006</b> , 42, 2852-2854	28
1304	Design of microstrip resonators using balanced and unbalanced composite right/left-handed transmission lines. <b>2006</b> , 54, 3104-3112	16
1303	Arbitrarily dual-band components using simplified structures of conventional CRLH TLs. <b>2006</b> , 54, 2902-2909	37
1302	Design of Composite Right/Left-Handed Coplanar-Waveguide Bandpass and Dual-Passband Filters. <b>2006</b> , 54, 3543-3549	17
1301	Integral-Equation Analysis of 3-D Metallic Objects Arranged in 2-D Lattices Using the Ewald Transformation. <b>2006</b> , 54, 3688-3697	43
1300	Photonic band gap from a stack of single-negative materials. <b>2006</b> , 301, 371-377	22
1299	Possible existence of a new type of left-handed materials in coupled ferromagnetic bilayer films. <b>2006</b> , 302, 368-374	11
1298	Properties of magnetically coupled metamaterial elements. <b>2006</b> , 300, 38-43	34
1297	Gyrotropic left-handed media: Energy flux and circular dichroism. <b>2006</b> , 300, e67-e69	7
1296	Focusing of waves at low microwave frequencies using metallic wire media. <b>2006</b> , 48, 133-138	0

1295	Suppression of spurious radiations of patch antennas using split-ring resonators (SRRs). <b>2006</b> , 48, 283-287	10
1294	Artificial magnetic conductor using split ring resonators and its applications to antennas. <b>2006</b> , 48, 329-334	17
1293	Calculation of the negative refractive index of a LHM slab by the free-space mapping of the laterally shifted refracted beam. <b>2006</b> , 48, 593-596	1
1292	Left-handed rectangular waveguide bandstop filters. <b>2006</b> , 48, 846-848	12
1291	Novel microstrip backward coupler with metamaterial cells for fully planar fabrication techniques. <b>2006</b> , 48, 1205-1209	15
1290	Effective complex permittivity and permeability of composite planar left-handed transmission-line metamaterials on CPW. <b>2006</b> , 48, 1050-1052	2
1289	Spiral inductors fabricated on multi-layered Bragg reflector for Si-based RF IC applications. <b>2006</b> , 48, 1296-1298	
1288	Backward-wave directional coupler with complete coupling and broadband using conventional microstrip and 1D mushroom structure. <b>2006</b> , 48, 1293-1296	5
1287	A dual-layered wideband microstrip reflectarray antenna with variable polarization. <b>2006</b> , 48, 1427-1429	6
1286	SRR loaded waveguide band rejection filter with adjustable bandwidth. <b>2006</b> , 48, 1427-1429	18
1285	Strong localization of EM waves using open cavities made of left-handed transmission-line media. <b>2006</b> , 48, 1662-1665	0
1284	Beam-squint minimization in series-slotted waveguide array antennas using double negative materials. <b>2006</b> , 48, 1789-1792	
1283	Phase verification of compact multilayered low temperature co-fired ceramic composite right-/left-handed transmission line. <b>2006</b> , 48, 1792-1795	3
1282	Novel filter using composite right/left-handed transmission line. <b>2006</b> , 48, 2013-2015	4
1281	A 3D hybrid implicit-explicit FDTD scheme with weakly conditional stability. <b>2006</b> , 48, 2291-2294	63
1280	Electromagnetic energy in absorptive and dispersive medium based on the assembly of atomic oscillators. <b>2006</b> , 48, 2288-2291	0
1279	Self-pulsing dynamics of high-power Yb-doped fiber lasers. <b>2006</b> , 48, 2282-2285	6
1278	Transmission properties of microstrip lines loaded with split ring resonators as superstrate. <b>2006</b> , 48, 2280-2282	2

1277	S-parameter measurements for oblique angles of incidence and Brewster angle studies for metamaterial samples. <b>2006</b> , 48, 2619-2624	1
1276	Designing materials with desired electromagnetic properties. <b>2006</b> , 48, 2611-2615	6
1275	Experimental investigation of radiation properties of an antenna embedded in low permittivity thin-wire-based metamaterial. <b>2006</b> , 48, 2581-2586	16
1274	Verification of impedance matching at the surface of left-handed materials. <b>2006</b> , 48, 2548-2552	5
1273	Negative refraction makes photonic crystal as super-concave-mirror. <b>2006</b> , 3, 216-219	1
1272	Second harmonic generation in left-handed metamaterials. <b>2006</b> , 3, 293-297	62
1271	On the transmission properties of left-handed microstrip lines implemented by complementary split rings resonators. <b>2006</b> , 19, 87-103	37
1270	Wave scattering by metamaterial wedges and interfaces. <b>2006</b> , 19, 105-117	23
1269	Wave properties of computational TLM models of metamaterials with negative refractive index. <b>2006</b> , 19, 119-139	
1268	Composite right/left-handed extended equivalent circuit (CRLH-EEC) FDTD: stability and dispersion analysis with examples. <b>2006</b> , 19, 141-172	7
1267	Off-normal incidence simulations of metamaterials using FDTD. <b>2006</b> , 19, 215-228	8
1266	Negative-Index Materials: New Frontiers in Optics. <b>2006</b> , 18, 1941-1952	161
1265	Optical Properties of Layered Metamaterial Composed of Pairs of Nanowires. <b>2006</b> ,	
1264	Amphoteric refraction at the isotropic-anisotropic biaxial media interface: an alternative treatment. <b>2006</b> , 8, 1067-1073	7
1263	Stopband Phenomena in the Passband of Left-Handed Metamaterials. <b>2006</b> , 23, 99-102	9
1262	Vector beams as the superposition of cylindrical partial waves in bianisotropic media. <b>2006</b> , 39, 13355-13369	3
1261	Negative index meta-materials based on two-dimensional metallic structures. <b>2006</b> , 8, S122-S130	38
1260	Compact left-handed metamaterial based on double-layer planar metal strip arrays. <b>2006</b> , TuB7	



1259 Near-field image transfer through a plasmonic nanorod-array. **2006**, TuA5

1258 Broadband left-handed materials made of thin soft ferromagnetic films with in-plane uniaxial anisotropy. **2006**, 18, 6421-6428 6

1257 Resolution Ability and Surface Bright Spots of a Lossy Left-handed Material Slab. **2006**, 23, 470-473

1256 Transmission Loss due to Modes Conversion Caused by Random Surface Imperfections in Left-Handed-Material Slab Waveguides. **2006**, 23, 1826-1829 1

1255 Low-loss magneto-inductive waveguides. **2006**, 39, 3945-3951 72

1254 Bounds for the refractive indices of metamaterials. **2006**, 39, 1226-1229 12

1253 Ultra-Compact, Subwavelength and Single-Mode Cavity Resonator. **2006**, 23, 1600-1602 3

1252 Negative refraction and partial focusing in an anisotropic metamaterial realized by a loaded transmission line network. **2006**, 39, 213-219 7

1251 Optical transmission spectra in quasiperiodic multilayered photonic structure. **2006**, 18, 8737-8747 29

1250 Anomalous reflection and refraction in anisotropic metamaterial realized by periodically loaded transmission line network. **2006**, 100, 114901 8

1249 Dual-band sub-harmonic quadrature mixer using composite right-left-handed transmission lines. **2006**, 153, 365 21

1248 Ferromagnetic wire lattice with a tunable negative index of refraction for microwaves using an external magnetic field. **2006**, 75, 737-742 8

1247 Field-induced giant static dielectric constant in nano-particle aggregates at room temperature. **2006**, 86, 2393-2398 6

1246 Negative refraction device with electrically controllable permittivity and negative permeability. **2006**, 42, 223 2

1245 Enhancement of Electric Field inside Metallodielectric Metamaterial. **2006**, 11-12, 117-120

1244 Experimental demonstration of negative refraction and subwavelength imaging by left-handed composite metamaterials. **2006**, 919, 6

1243 Electromagnetic wave focusing from sources inside a two-dimensional left-handed material superlens. **2006**, 8, 221-221 13

1242 A DoD Perspective on Left Handed Negative Index Materials and Potential Applications. **2006**, 919, 1 1

1241	(3+1)-dimensional nonlinear propagation equation for ultrashort pulsed beam in left-handed material. <b>2006</b> , 15, 2970-2976	6
1240	Observation of Negative Refraction and Negative Phase Velocity in True Left-Handed Metamaterials. <b>2006</b> ,	3
1239	Chemical Route Fabricated Magnetic Structure Exhibiting a Negative Permeability at Infrared Frequencies. <b>2006</b> , 919, 8	1
1238	Excitation of surface waves in a photonic crystal with negative refraction: The role of surface termination. <b>2006</b> , 74,	20
1237	Backward coupling waveguide coupler using left-handed material. <b>2006</b> , 88, 211903	18
1236	Optical properties of two-dimensional negative-phase-velocity-medium photonic crystals. <b>2006</b> , 73, 066625	4
1235	Imaging properties of finite-size left-handed material slabs. <b>2006</b> , 74, 046615	7
1234	Uniaxial crystal slabs as amphoteric-reflecting media. <b>2006</b> , 73,	6
1233	Negatively refracting atomic vapour. <b>2006</b> , 53, 2195-2205	20
1232	Experimental demonstration of non-near-field image formed by negative refraction. <b>2006</b> , 73,	21
1231	Negative index of refraction: A subclass of electromagnetically metamorphic materials. <b>2006</b> , 89, 144109	4
1230	Omnidirectional Reflection from Thue-morse Aperiodic One-dimensional Photonic Crystal With Dispersive Negative Materials. <b>2006</b> ,	
1229	Negative refraction of spintronics and spin beam splitter. <b>2006</b> , 88, 052114	30
1228	Tailoring the near-field guiding properties of magnetic metamaterials with two resonant elements per unit cell. <b>2006</b> , 73,	51
1227	Experimental demonstration of a left-handed metamaterial operating at 100GHz. <b>2006</b> , 73,	78
1226	Unattenuated light transmission through the interface between two materials with different indices of refraction using magnetic metamaterials. <b>2006</b> , 73,	48
1225	Three-dimensional Hilbert space-filling-curve plasmonics. <b>2006</b> ,	
1224	A perfect lens makes a perfect trap. <b>2006</b> ,	

1223	Electromagnetic Scattering from a 2-D Array of 3-D Metallic Objects. <b>2006,</b>	
1222	Imaging properties of anisotropy-based negative index composites. <b>2006,</b>	
1221	Electrically small isotropic three-dimensional magnetic resonators for metamaterial design. <b>2006,</b> 88, 134108	39
1220	Experimental demonstration of negative magnetic permeability in the far-infrared frequency regime. <b>2006,</b> 89, 084103	42
1219	A polarization independent negative-refractive-index metamaterial for incident plane waves. <b>2006,</b>	1
1218	Eigenmodes of metallic ring systems: A rigorous approach. <b>2006,</b> 74,	36
1217	Optical Negative-Index Metamaterials: from low to no-loss and from linear to nonlinear optics. <b>2006,</b>	
1216	Artificial magnetic reflector based on spiral resonators. <b>2006,</b>	3
1215	Calculation and measurement of bianisotropy in a split ring resonator metamaterial. <b>2006,</b> 100, 024507	70
1214	Subwavelength imaging: Resolution enhancement using metal wire gratings. <b>2006,</b> 73,	24
1213	Negative Refractive Index in a Four-Level Atomic System. <b>2006,</b> 23, 1769-1772	11
1212	Interaction effects between electromagnetic bandgap structures and split ring resonators in microstrip technology.	2
1211	Gaussian pulse expansion of modulated signals in a double-negative slab. <b>2006,</b> 54, 2755-2761	4
1210	Observation of an inverse Doppler shift from left-handed dipolar spin waves. <b>2006,</b> 74,	25
1209	Metamaterials Realized by Novel Compact Structures. <b>2006,</b>	
1208	Simple Experimental Determination of Complex Permittivity or Complex Permeability of SNG Metamaterials. <b>2006,</b>	9
1207	. <b>2006,</b>	
1206	The properties of photon tunneling through the asymmetry structure with left-handed materials. <b>2006,</b>	

1205	Series Transmission Line Network Representation of Planar Left-handed Materials. <b>2006,</b>		
1204	Toward Artificial Magnetism Using Terahertz Split Ring Resonator Metamaterials. <b>2006,</b>		1
1203	A 2-D Composite Medium Exhibiting Broadband Negative Permittivity and Permeability. <b>2006,</b>		6
1202	Forbidden resonant transmission through a metallic Fabry-Perot cavity with the left handed material. <b>2006,</b>		
1201	Transmission properties of various split-ring resonator systems. <b>2006,</b>		
1200	Retroreflective effect on a right angle left-handed media prism. <b>2006, 73, 036620</b>		2
1199	Three-dimensional focusing of broadband microwave beams by a layered photonic structure. <i>Physical Review Letters</i> , <b>2006, 96, 207402</b>	7.4	6
1198	Backward Tamm states in left-handed metamaterials. <b>2006, 89, 114104</b>		56
1197	Experimental study of photonic crystals consisting of E-negative and mu-negative materials. <b>2006, 74, 056615</b>		58
1196	Spontaneous emission field of a two-level atom embedded in one-dimensional left-handed- and right-handed-material photonic crystals. <b>2006, 73, 016604</b>		9
1195	All-angle negative refraction for surface plasmon waves using a metal-dielectric-metal structure. <i>Physical Review Letters</i> , <b>2006, 96, 073907</b>	7.4	158
1194	Enhanced localization of Dyakonov-like surface waves in left-handed materials. <b>2006, 74,</b>		20
1193	Influence of the layer thickness on the magnetic response in perforated metal/dielectric/metal trilayer metamaterial. <b>2006,</b>		
1192	Negative refraction and focusing by a left-handed material slab in free space. <b>2006,</b>		
1191	Interactions of Left-Handed Medium Slab with Three-Dimensional Horizontal Electric Dipoles. <b>2006,</b>		
1190	Influence of surface termination morphologies on the imaging properties of a composite two-dimensional photonic crystal lens. <b>2006, 100, 053702</b>		7
1189	Measurement of negative permittivity and permeability from experimental transmission and reflection with effects of cell misalignment. <b>2006, 99, 123114</b>		7
1188	Negative-index imaging by an index-matched photonic crystal slab. <b>2006, 73,</b>		45

1187	Plasmonic resonances in an $\epsilon$ -negative host medium: metamaterials at optical frequencies for nano-optics and nanotechnology. <b>2006,</b>	1
1186	Numerical Characterization of Left-Handed Metamaterials using Hardware-Based Simulation Platforms. <b>2006,</b>	
1185	TE and TM bandgap in the metamaterial slab waveguide. <b>2006,</b>	
1184	Compact Composite Right/Left-handed Coplanar Waveguide Filters with Arbitrary Passband and Stopband Responses. <b>2006,</b>	2
1183	. <b>2006,</b>	
1182	Left-handed wave propagation in rod media. <b>2006,</b>	1
1181	Superluminal group velocity in an anisotropic metamaterial. <b>2006,</b> 74, 1081-1087	20
1180	The analyses of negative refraction in finite one-dimensional photonic crystals. <b>2006,</b>	
1179	Parallel conductor particle for artificial magnetic material in microwave frequency. <b>2006,</b>	1
1178	Orthogonally Polarised Dipole Antenna using Left Handed Transmission Lines. <b>2006,</b>	6
1177	An left handed material on Si CMOS chip with wafer level package process. <b>2006,</b>	
1176	Improvement of Characteristics of Dielectric Circular Resonator and Its Filter Application. <b>2006,</b>	2
1175	Dielectric response of perforated two-dimensional lossy heterostructures: A finite-element approach. <b>2006,</b> 100, 094103	27
1174	ISOTROPIC NEGATIVELY-REFRACTING ATOMIC-VAPOR MEDIUM. <b>2007,</b> 21, 717-728	5
1173	Effective Parameters for Metamorphic Materials and Metamaterials Through a Resonant Inverse Scattering Approach. <b>2007,</b> 55, 254-267	25
1172	Artificial Magnetic Material Composed of Step Impedance Resonators. <b>2007,</b>	1
1171	Design of a novel planar LHM with broadband and double negative medium. <b>2007,</b>	
1170	Ultra-wideband Power Splitting/combining Technique using Zero-degree Left-handed Transmission Lines. <b>2007,</b> 21, 1109-1118	9

1169	Broadband antenna with frequency notch characteristic based on complementary split-ring resonators. <b>2007,</b>	3
1168	. <b>2007,</b>	
1167	Fundamental causality and a criterion of negative refraction with low optical losses. <b>2007,</b>	1
1166	A Novel Design of Frequency Tripler Using Composite Right/Left Handed Transmission Line. <b>2007,</b>	4
1165	Design of EM Shielding MTM Concrete Block using 3-D Parallel Resonator. <b>2007,</b>	
1164	Properties of Novel Terahertz Electric Metamaterials. <b>2007,</b>	1
1163	Microfabricated Left-handed Transmission Line Operating at 50 GHz. <b>2007,</b>	1
1162	Nonreciprocal left-handed transmission characteristics of microstriplines on ferrite substrate. <b>2007,</b> 1, 349	19
1161	Experimental verification of apparent negative refraction in low-epsilon material in the microwave regime. <b>2007,</b> 101, 086103	2
1160	Superlens from complementary anisotropic metamaterials. <b>2007,</b> 102, 116101	13
1159	Negative index materials based on rods with refractive index profile. <b>2007,</b> TuB34	
1158	The properties of photon tunnelling in a frustrated total internal reflection structure with an indefinite metamaterial slab. <b>2007,</b> 9, 253-259	4
1157	Metamaterials and the Control of Electromagnetic Fields. <b>2007,</b> CMB2	7
1156	Terahertz metamaterials for active, tunable, and dynamic devices. <b>2007,</b>	1
1155	Gyrotropic Effect on Surface Polariton Propagation. <b>2007,</b> 76, 064005	3
1154	Parametric amplification in coupled magnetoinductive waveguides. <b>2007,</b> 40, 6879-6887	28
1153	Thermal radiation in quasiperiodic photonic crystals with negative refractive index. <b>2007,</b> 19, 496212	9
1152	Matrix approach for light scattering by bianisotropic cylindrical particles. <b>2007,</b> 19, 086213	2

1151	Metamaterials driven by gain and special configurations. <b>2007,</b>	2
1150	Effect of rotational randomness on focusing in a two-dimensional photonic-crystal flat lens. <b>2007,</b> 9, 101-107	9
1149	Zero-bar n gaps of photonic crystals consisting of positive and negative index materials in microstrip transmission lines. <b>2007,</b> 40, 2579-2583	17
1148	Metamaterial-based low-pass spatial filters for high-power lasers. <b>2007,</b> 6823, 114	
1147	Metamaterials and their THz applications. <b>2007,</b>	
1146	Planar sub-wavelength cavity resonator containing a bilayer of anisotropic metamaterials. <b>2007,</b> 40, 1821-18266	
1145	Frequency Response of Multilayer Media Comprised of Double-Negative and Double-Positive Slabs. <b>2007,</b> 24, 1242-1244	3
1144	Analysis of Planar Distributed Two-dimensional(2-D) Left-handed (LH) Structures. <b>2007,</b>	
1143	Tunable plasmonic-crystal superlens for subwavelength imaging. <b>2007,</b> 76,	4
1142	Full wave simulations of coated spheres with negative index of refraction at infrared frequencies. <b>2007,</b>	
1141	Low-effective index of refraction medium using metallic wire array. <b>2007,</b>	
1140	Surface polaritons on left-handed spheres. <b>2007,</b> 76,	8
1139	Self-tuning mechanisms of nonlinear split-ring resonators. <b>2007,</b> 91, 144107	80
1138	Influence of unit cell rotated on the focusing in a two-dimensional photonic-crystal-based flat lens. <b>2007,</b> 101, 123112	1
1137	Theoretical and experimental investigations of planar metamaterials at radio frequencies for magnetic resonance imaging. <b>2007,</b>	
1136	Composites with tuned effective magnetic permeability. <b>2007,</b> 102, 014901	2
1135	Scattering of electromagnetic waves in metamaterial superlattices. <b>2007,</b> 90, 201919	20
1134	Tunable negative refraction without absorption via electromagnetically induced chirality. <i>Physical Review Letters,</i> <b>2007,</b> 99, 073602	7.4 114

1133	Low loss planar negative index metamaterials for the mid-infrared based on frequency selective surfaces. <b>2007,</b>		1
1132	3D Composite Right-Left Handed Metamaterials with Lorentz-type Dispersive Elements. <b>2007,</b>		4
1131	Wideband backward coupling based on anisotropic left-handed metamaterial. <b>2007, 90,</b> 043506		10
1130	Frequency response in photonic heterostructures consisting of single-negative materials. <b>2007,</b> 101, 013111		21
1129	Large finite-difference time domain simulations of a left-handed metamaterial lens with wires and resonators. <b>2007, 91,</b> 154102		3
1128	Compact left-handed microstrip line based on multiple layered step impedance resonators. <b>2007,</b> 94, 381-389		
1127	Construction of a polarization insensitive lens from a quasi-isotropic metamaterial slab. <b>2007, 75,</b> 026601		19
1126	Metamaterial of rod pairs standing on gold plate and its negative refraction property in the far-infrared frequency regime. <b>2007, 75,</b> 016604		31
1125	Coupling of surface plasmons in nanostructured metal/dielectric multilayers with subwavelength hole arrays. <b>2007, 76,</b>		62
1124	Metamaterial with simultaneously negative bulk modulus and mass density. <i>Physical Review Letters,</i> <b>2007, 99,</b> 093904	7.4	385
1123	Design of an artificial three-dimensional composite metamaterial with magnetic resonances in the visible range of the electromagnetic spectrum. <i>Physical Review Letters,</i> <b>2007, 99,</b> 017401	7.4	105
1122	Imaging and Localization Properties of LHM Superlens Excited by 3D Horizontal Electric Dipoles. <b>2007, 21,</b> 35-46		8
1121	Local-field effects in magnetodielectric media: Negative refraction and absorption reduction. <b>2007,</b> 76,		19
1120	Towards a systematic design of isotropic bulk magnetic metamaterials using the cubic point groups of symmetry. <b>2007, 76,</b>		61
1119	Omnidirectional negative refraction with wide bandwidth introduced by magnetic coupling in a tri-rod structure. <b>2007, 76,</b>		10
1118	Design of negative-refractive-index materials on the basis of rods with a gradient of the dielectric constant. <b>2007, 91,</b> 081103		8
1117	Resonance-antiresonance electromagnetic behavior in a disordered dielectric composite. <b>2007, 90,</b> 142907		69
1116	Metamaterials-based Routing Devices for Space Applications. <b>2007,</b>		1



1115	Subwavelength resolution with a negative-index metamaterial superlens. <b>2007</b> , 90, 254102	150
1114	Electromagnetic characterization of planar metamaterials by oblique angle spectroscopic measurements. <b>2007</b> , 75,	40
1113	Left-handed materials made of dilute ferromagnetic wire arrays with gyrotropic tensors. <b>2007</b> , 102, 023106	10
1112	Intrinsic electrostatic resonances of heterostructures with negative permittivity from finite-element calculations: Application to core-shell inclusions. <b>2007</b> , 102, 094104	12
1111	Isotropic Epsilon-Negative Particles. <b>2007</b> ,	2
1110	Negative-index metamaterials from nanoapertures. <b>2007</b> , 76,	11
1109	Focusing properties of near-field time reversal. <b>2007</b> , 76,	30
1108	A Novel Compact Left-Handed Transmission Line With Improved Split-Ring Resonators. <b>2007</b> ,	3
1107	Electromagnetic transmission through one-dimensional gratings with left-handed materials. <b>2007</b> , 75,	8
1106	Non-left-handed transmission and bianisotropic effect in a E-shaped metallic metamaterial. <b>2007</b> , 75,	41
1105	Imaging properties of a metallic photonic crystal. <b>2007</b> , 101, 113105	2
1104	A Left-Handed Transmission Line Using a Magnetic Symmetrical Plane. <b>2007</b> ,	1
1103	. <b>2007</b> ,	
1102	Metamaterials for Novel Terahertz and Millimeter Wave Devices. <b>2007</b> ,	
1101	Negative permeability of magnetic nanocomposite films for designing left-handed metamaterials. <b>2007</b> , 91, 223104	27
1100	Power transmission enhancement by means of planar meta-surfaces. <b>2007</b> , 9, S308-S314	6
1099	Plasmon-assisted photonics at the nanoscale. <b>2007</b> , 1, 012501	55
1098	Existing conditions of full bandgaps and absolute negative refraction in metallic-dielectric photonic crystal. <b>2007</b> , 16, 1057-1061	6

- 1097 Experimental study of subwavelength focusing by left-handed metamaterials with a negative refractive index. **2007**, 1, 011695 1
- 1096 Frequency bands of negative refraction in finite one-dimensional photonic crystals. **2007**, 16, 173-178 12
- 1095 Three-Dimensional Electromagnetic Metamaterials with Non-Maxwellian Effective Fields. **2007**, 1014, 1
- 1094 Surface Deformation of Metal Films Under Controlled Pressure for Generating Ultra-flat Metal Surfaces. **2007**, 990, 1
- 1093 Negative permeability using planar-patterned metallic multilayer structures. **2007**, 9, S385-S388 1
- 1092 Water Surface Wave in a Trough with Periodical Topographic Bottom. **2007**, 24, 2285-2288 4
- 1091 Simultaneous negative permittivity and permeability in a coherent atomic vapour. **2007**, 16, 1976-1985 4
- 1090 Bilayer metamaterial: analysis of left-handed transmission and retrieval of effective medium parameters. **2007**, 9, S361-S365 17
- 1089 Double negative metamaterials for subsurface detection. **2007**, 2007, 3485-8 7
- 1088 The Electrodynamics of Left-Handed Media. 1-41
- 1087 Synthesis of Bulk Metamaterials. 43-118
- 1086 Negative refraction of a three-dimensional metallic photonic crystal. **2007**, 39, 27-32 3
- 1085 Figure-of-merit analysis of resonant particles for construction of practical metamaterials. **2007**,
- 1084 Frequency dependence of Bloch impedance in left-handed transmission line. **2007**,
- 1083 Efficient software tool for the analysis of planar-based metamaterial structures. **2007**,
- 1082 Microstrip patch antenna incorporating negative permittivity metamaterial for harmonic suppression. **2007**, 1
- 1081 Photomodulation of metamaterial: an integrated approach. **2007**,
- 1080 Terahertz metamaterial devices. **2007**, 3

1079	Echo response of nonlinear thin film of meta-atoms. <b>2007,</b>	
1078	New photonic bandgap of single negative materials. <b>2007,</b>	
1077	Goos-Hänchen shift in anisotropic left-handed materials. <b>2007,</b>	
1076	The effects of dispersion, diffraction, and nonlinearity management in negative index materials. <b>2007,</b>	
1075	Dispersion relations for negative index materials and slow light. <b>2007,</b>	1
1074	Complex modes in negative-refractive-index fibers. <b>2007,</b>	
1073	Tunable negative refraction based on the Pockels effect in two-dimensional photonic crystals composed of electro-optic crystals. <b>2007,</b> 101, 013516	15
1072	. <b>2007,</b> 17, 292-294	4
1071	Study of the field emitted by a source placed inside a two-dimensional left-handed metamaterial. <b>2007,</b> 32, 850-2	1
1070	Metamaterial transmission lines based on broad-side coupled spiral resonators. <b>2007,</b> 43, 530	19
1069	Negative propagation of vector Bessel beams. <b>2007,</b> 24, 2844-9	78
1068	A periodic structure mimics a metamaterial. <b>2007,</b> 24, A60-5	2
1067	Two-frequency radiative transfer: Maxwell equations in random dielectrics. <b>2007,</b> 24, 3680-90	2
1066	Frequency dependence of the magnetic response of split-ring resonators. <b>2007,</b> 24, 510	36
1065	Omnidirectional gaps of one-dimensional photonic crystals containing indefinite metamaterials. <b>2007,</b> 24, 2033	28
1064	Spatial and spatiotemporal solitary waves and their stabilization in nonlinear negative index materials. <b>2007,</b> 24, A69	16
1063	Design of resonators using materials with negative refractive index. <b>2007,</b> 24, 2791	2
1062	Complementary planar terahertz metamaterials. <b>2007,</b> 15, 1084-95	247

1061	Evaluation and illustration of the properties of Metamaterials using field summation. <b>2007</b> , 15, 1096-106	15
1060	Extraordinary transmission and left-handed propagation in miniaturized stacks of doubly periodic subwavelength hole arrays. <b>2007</b> , 15, 1107-14	54
1059	Modulating and tuning the response of metamaterials at the unit cell level. <b>2007</b> , 15, 1115-27	104
1058	Group theoretical description of artificial electromagnetic metamaterials. <b>2007</b> , 15, 1639-46	74
1057	Refocusing of backscattered microwaves in target detection by using LHM flat lens. <b>2007</b> , 15, 3312-7	21
1056	Collimations and negative refractions by slabs of 2D photonic crystals with periodically-aligned tube-type air holes. <b>2007</b> , 15, 3519-30	7
1055	Comparison of negative refractive index materials with circular, elliptical and rectangular holes. <b>2007</b> , 15, 4515-22	28
1054	Nematicons across interfaces: anomalous refraction and reflection of solitons in liquid Crystals. <b>2007</b> , 15, 8021-8	28
1053	Calculation of effective permittivity, permeability, and surface impedance of negative-refraction photonic crystals. <b>2007</b> , 15, 8340-5	25
1052	The origin of magnetic polarizability in metamaterials at optical frequencies - an electrodynamic approach. <b>2007</b> , 15, 8871-83	58
1051	Forward- and backward-propagating Cerenkov radiation in strong chiral media. <b>2007</b> , 15, 9793-8	6
1050	Simulations and realizations of active right-handed metamaterials with negative refractive index. <b>2007</b> , 15, 10935-46	6
1049	Wave scattering and splitting by magnetic metamaterials. <b>2007</b> , 15, 11714-22	12
1048	Resonance hybridization in double split-ring resonator metamaterials. <b>2007</b> , 15, 12095-101	81
1047	Dependence of the magnetic-resonance frequency on the cut-wire width of cut-wire pair medium. <b>2007</b> , 15, 16651-6	32
1046	Realization of a High Coupling Efficiency by Employing a Concave Lens Based on Two-Dimensional Photonic Crystals With a Negative Refractive Index. <b>2007</b> , 25, 3168-3174	17
1045	Forward and backward leaky wave radiation in split-ring-resonator-based metamaterials. <b>2007</b> , 1, 65	22
1044	. <b>2007</b> , 55, 2258-2267	225

1043	Metamaterials - A Challenge for Contemporary Advanced Technology. <b>2007,</b>	0
1042	Left-handed metamaterials: The fishnet structure and its variations. <b>2007, 75,</b>	277
1041	Achieving transparency and maximizing scattering with metamaterial-coated conducting cylinders. <b>2007, 76, 056603</b>	28
1040	Using of CSRR and its Equivalent Circuit Model in Size Reduction of Microstrip Antenna. <b>2007,</b>	5
1039	Dual effect of surface plasmons in light transmission through perforated metal films. <b>2007, 75,</b>	42
1038	Compensated circuit with characteristics of lossless double negative materials and its application to array antennas. <b>2007, 1, 29</b>	41
1037	Experimental study of a bi-periodic magnetoinductive waveguide: comparison with theory. <b>2007, 1, 80</b>	18
1036	Miniaturisation of planar microwave circuits by using resonant-type left-handed transmission lines. <b>2007, 1, 73</b>	43
1035	Contemporary notes on metamaterials. <b>2007, 1, 3</b>	91
1034	Broadband transmission below the cutoff frequency of a waveguide loaded with resonant scatterer arrays. <b>2007, 1, 165</b>	13
1033	Evanescent surface-wave modes in a slab with application to miniaturised waveguide components. <b>2007, 1, 144</b>	1
1032	Nonlinear Josephson left-handed transmission lines. <b>2007, 1, 69</b>	8
1031	Stability of surface integral equation for left-handed materials. <b>2007, 1, 84</b>	13
1030	Left-handed L-band notch bandstop filter with significantly reduced size. <b>2007, 1, 45</b>	4
1029	Confining light with negative refraction in checkerboard metamaterials and photonic crystals. <b>2007, 75,</b>	24
1028	Negative refraction and cross polarization effects in metamaterial realized with bianisotropic S-ring resonator. <b>2007, 76,</b>	28
1027	A consideration of the use of metamaterials for sensing applications: field fluctuations and ultimate performance. <b>2007, 9, S377-S384</b>	43
1026	Experimental investigation of reflection characteristics of left-handed metamaterials in free space. <b>2007, 1, 89</b>	8

1025	On the dispersion characteristics of metamaterial transmission lines. <b>2007</b> , 102, 074911	5
1024	Metamaterial homogenization approach with application to the characterization of microstructured composites with negative parameters. <b>2007</b> , 75,	168
1023	Role of phase matching in pulsed second-harmonic generation: Walk-off and phase-locked twin pulses in negative-index media. <b>2007</b> , 76,	53
1022	Optical Control of Metamaterial Unit Cells at Microwave Frequencies. <b>2007</b> ,	4
1021	Beyond 3G: Metamaterials application to the air interface. <b>2007</b> ,	3
1020	Electrically small split ring resonator antennas. <b>2007</b> , 101, 083104	113
1019	Surface Plasmon Nanophotonics. <b>2007</b> ,	220
1018	Magnetic plasmonic metamaterials in actively pumped host medium and plasmonic nanolaser. <b>2007</b> , 75,	83
1017	Propagation characteristics of a circular waveguide coated inside with a metamaterial. <b>2007</b> , 94, 935-942	4
1016	A Metamaterial T-Junction Power Divider. <b>2007</b> , 17, 172-174	22
1015	Surface plasmons and gain media. <b>2007</b> , 141-169	6
1014	Extending the bandwidth of electromagnetic cloaks. <b>2007</b> , 76,	108
1013	Superlensing effect without obvious negative refraction. <b>2007</b> , 1, 013518	3
1012	Temporal characteristics of resonant surface polaritons in superlensing planar double-negative slabs: development of analytical schemes and numerical models. <b>2007</b> , 76, 046606	5
1011	Focal length modulation based on a metallic slit surrounded with grooves in curved depths. <b>2007</b> , 91, 093111	74
1010	Generalized Lorentz-Lorenz formulas for microstructured materials. <b>2007</b> , 76,	64
1009	Miniaturized negative permeability materials. <b>2007</b> , 91, 071121	41
1008	Metamaterials for Microwave Photonics. <b>2007</b> ,	

1007	Negative index material composed of electric and magnetic resonators. <b>2007</b> , 90, 263504	83
1006	Negative index of refraction observed in a single layer of closed ring magnetic dipole resonators. <b>2007</b> , 91, 253119	12
1005	A Multilayer Negative-Refractive-Index Transmission-Line (NRI-TL) Metamaterial Free-Space Lens at X-Band. <b>2007</b> , 55, 2746-2753	39
1004	On the study of CWP dual band left handed propagation with reciprocal and nonreciprocal characteristics over ferrite substrates. <b>2007</b> ,	7
1003	Towards three-dimensional and multilayer rod-split-ring metamaterial structures by means of deep x-ray lithography. <b>2007</b> , 90, 254106	32
1002	Ag nanoshell-induced dual-frequency electromagnetic wave absorption of Ni nanoparticles. <b>2007</b> , 90, 193102	88
1001	Diffraction from grating surfaces of a negative index metamaterial. <b>2007</b> ,	
1000	The myth and mysteries of Metamaterials [Separating the facts from fiction?]. <b>2007</b> ,	
999	Acoustic metamaterials for sound focusing and confinement. <b>2007</b> , 9, 399-399	222
998	Effective medium theory for elastic metamaterials in two dimensions. <b>2007</b> , 76,	139
997	Photonic band structure of one-dimensional aperiodic superlattices composed of negative refraction metamaterials. <b>2007</b> ,	1
996	Lorentz model for metamaterials: Optical frequency resonance circuits. <b>2007</b> , 75,	35
995	The dispersion characteristics of sonic crystals consisting of elliptic cylinders. <b>2007</b> , 40, 7579-7583	19
994	Fundamental guided electromagnetic dispersion characteristics in lossless dispersive metamaterial clad circular air-hole waveguides. <b>2007</b> , 9, 1062-1069	14
993	Left-Handed Magnetostatic Surface Waves. <b>2007</b> ,	
992	Simulations for a Novel Magnetic Resonator with V-Shaped Structures. <b>2007</b> ,	
991	Modeling and Analysis of Composite Antenna Superstrates Consisting on Grids of Loaded Wires. <b>2007</b> , 55, 2692-2700	19
990	Design of parallel resonators using LTCC process for realization of EM shielding concrete block. <b>2007</b> ,	

989	Numerical calculations of the intrinsic electrostatic resonances of artificial dielectric heterostructures. <b>2007</b> , 101, 084109	32
988	All-angle negative refraction imaging effect with complex two-dimensional hexagonal photonic crystals. <b>2007</b> , 102, 073538	13
987	Applying Negative Permittivity Media to Microstrip Patch Antennas for Harmonic Suppression. <b>2007</b> ,	2
986	Midinfrared metamaterials fabricated by nanoimprint lithography. <b>2007</b> , 90, 063107	56
985	Novel millimetre wave metawaveguide resonators and filters. <b>2007</b> ,	1
984	EM-Based Simulation Tools for Signal and Systems Analysis. <b>2007</b> ,	
983	Controllable effective complex permittivity of functionally graded composite materials: A numerical investigation. <b>2007</b> , 102, 094105	11
982	Chamfered band based on metamaterial unit cell. <b>2007</b> ,	
981	The effect of shifting on wires and split ring resonators. <b>2007</b> ,	
980	Miniaturization and Optimization of Planar Microwave Filters Based on Metamaterials. <b>2007</b> ,	7
979	Magnetic Coupling Effect of the Square Split-Ring Resonators Array using Microstrip Line. <b>2007</b> ,	1
978	Ferroelectric based tuneable SRR based metamaterial for microwave applications. <b>2007</b> ,	2
977	MLFMA solutions of transmission problems involving realistic metamaterial walls. <b>2007</b> ,	
976	. <b>2007</b> , 17, 568-570	7
975	Performance enhancement of small antennas using metamaterials – challenges and future directions. <b>2007</b> ,	2
974	Numerical and experimental investigation of horn antenna with embedded ENZ metamaterial lens. <b>2007</b> ,	5
973	MoM/RCWA analysis of frequency selective surfaces with inhomogeneous, periodic substrates. <b>2007</b> ,	
972	Waveguide filters based on conventional and complementary split ring resonators for microwave and millimetre-wave wireless applications. <b>2007</b> ,	



971	Design of left-handed metamaterials using hexagonal split ring resonator at S-band frequencies. <b>2007,</b>		2
970	Why Periodic Structures May Not Be Able to Synthesize Negative Indices of Refraction. <b>2007,</b>		1
969	An investigation of square split-ring resonator as antenna operating at Terahertz frequency. <b>2007,</b>		0
968	Simulations of ferrite-dielectric-wire composite negative index materials. <i>Physical Review Letters</i> , <b>2007</b> , 99, 057202	7.4	42
967	High-pass filter characteristic of Bloch impedance in a left-handed transmission line. <b>2007,</b>		
966	EM-Based Space Mapping Optimization of Left-handed Coplanar Waveguide Filters with Split Ring Resonators. <b>2007,</b>		5
965	Negative refraction observed in a metallic ferromagnet in the gigahertz frequency range. <i>Physical Review Letters</i> , <b>2007</b> , 98, 197401	7.4	77
964	Bandwidth Enhancement of Microstrip Antennas with Metamaterial Bilayered Substrates. <b>2007</b> , 21, 2321-2330 <sub>14</sub>		
963	Characterization of Metamaterial Interconnects. <b>2007,</b>		0
962	Development of Chiral Negative Refractive Index Metamaterials for the Terahertz Frequency Regime. <b>2007</b> , 55, 3052-3062		32
961	Characteristics of surface waves in anisotropic left-handed materials. <b>2007</b> , 16, 1959-1962		8
960	Electromagnetic Wave Propagation in a Multilayered Periodic Structure Containing Negative Index Material. <b>2007,</b>		
959	Magnetic plasmon hybridization and optical activity at optical frequencies in metallic nanostructures. <b>2007</b> , 76,		189
958	Metamaterials with negative permeability and negative refractive index: experiments and simulations. <b>2007</b> , 9, S301-S307		41
957	Plasmonic crystal demultiplexer and multiports. <b>2007</b> , 7, 1697-700		100
956	. <b>2007,</b>		1
955	Metamaterials at zero frequency. <b>2007</b> , 19, 076208		129
954	Transmission characteristics of bianisotropic metamaterials based on omega shaped metallic inclusions. <b>2007</b> , 9, 326-326		35

- 953 On the definition of effective permittivity and permeability for thin composite layers. **2007**, 101, 114910 23
- 952 Simulated resonant characteristics of embedded metamaterial patch antenna. **2007**,
- 951 A Novel Design of Frequency Multipliers Using Composite Right/Left Handed Transmission Line and Defected Ground Structure. **2007**, 2
- 950 Microstrip Patch Antenna with Harmonic Suppression using Complementary Split Ring Resonators. **2007**, 2
- 949 Electrically resonant terahertz metamaterials: Theoretical and experimental investigations. **2007**, 75, 264
- 948 Development of Negative Index of Refraction Metamaterials with Split Ring Resonators and Wires for RF Lens Applications. **2007**, 261-329 5
- 947 Manipulating electromagnetic wave polarizations by anisotropic metamaterials. *Physical Review Letters*, **2007**, 99, 063908 7.4 521
- 946 Negative Refraction and Subwavelength Focusing in Two-Dimensional Photonic Crystals. **2007**, 149-165 1
- 945 Negative Refraction and Imaging with Quasicrystals. **2007**, 167-182
- 944 Nonlinear Effects in Left-Handed Metamaterials. **2007**, 331-371 1
- 943 Experiments and Simulations of Microwave Negative Refraction in Split Ring and Wire Array Negative Index Materials, 2D Split-Ring Resonator and 2D Metallic Disk Photonic Crystals. **2007**, 217-250 2
- 942 Enhanced Gain by Double-Periodic Stacked Subwavelength Hole Array. **2007**, 17, 831-833 16
- 941 Band-Pass Filtering by Below-Cut-off Waveguides Loaded with Split-Ring Resonators: Relevance to Lefthandedness. **2007**, 2
- 940 Dissipative structures in left-handed material cavity optics. **2007**, 17, 037116 31
- 939 Reversal of wave momentum in isotropic left-handed media. **2007**, 75, 49
- 938 Surface Modes in One Dimensional Photonic Crystals That Include Left Handed Materials. **2007**, 21, 485-499 32
- 937 Two-dimensional complete photonic gaps from layered periodic structures containing anisotropic left-handed metamaterials. **2007**, 75, 066602 23
- 936 Spontaneous decay process of a two-level atom embedded in a one-dimensional structure containing left-handed material. **2007**, 76, 13

935	Band structures of one-dimensional subwavelength photonic crystals containing metamaterials. <b>2007</b> , 75, 046601	25
934	Photonic band gaps in quasiperiodic photonic crystals with negative refractive index. <b>2007</b> , 76,	51
933	An effective medium description of Swiss Rolls—a magnetic metamaterial. <b>2007</b> , 19, 456216	17
932	Capacitor-loaded split ring resonators as tunable metamaterial components. <b>2007</b> , 101, 024911	122
931	A Negative-Refractive-Index Metamaterial for Incident Plane Waves of Arbitrary Polarization. <b>2007</b> , 6, 28-32	15
930	Opto-electronic control of terahertz metamaterials. <b>2007</b> ,	
929	Effects of Microstructure Variations on Macroscopic Terahertz Metafilm Properties. <b>2007</b> , 2007, 1-10	33
928	Anisotropic Left-Handed and Negative Slab Waveguides: Physics and Device Applications. <b>2007</b> , 2007, 1-7	
927	Magnetism in high-contrast dielectric photonic crystals. <b>2007</b> ,	
926	Novel metawaveguide bandpass filters. <b>2007</b> ,	
925	DESIGN AND EXPERIMENT OF ONE DIMENSION AND TWO DIMENSION METAMATERIAL STRUCTURES FOR DIRECTIVE EMISSION. <b>2007</b> , 70, 199-209	14
924	CHARACTERISTICS OF ELECTROMAGNETIC WAVE PROPAGATION IN BIAXIAL ANISOTROPIC LEFT-HANDED MATERIALS. <b>2007</b> , 70, 37-52	18
923	ONDAS ELECTROMAGNÉTICAS EN EL PLANO FRONTERA ENTRE DOS MEDIOS QUIRALES. <b>2007</b> , 15,	
922	Far-Field Focus and Dispersionless Anticrossing Bands in Two-Dimensional Photonic Crystals. <b>2007</b> , 2007, 1-8	
921	HOMOGENIZATION OF METAMATERIAL-LOADED SUBSTRATES AND SUPERSTRATES FOR ANTENNAS. <b>2007</b> , 71, 129-147	25
920	Thin metal-dielectric nanocomposites with a negative index of refraction. <b>2007</b> , 271-308	
919	Review of experimental studies on microwave left-handed metamaterials. <b>2007</b> ,	
918	. <b>2007</b> ,	121

917	Photonic Glass: A Novel Random Material for Light. <b>2007</b> , 19, 2597-2602	187
916	Plasmon Hybridization in Stacked Cut-Wire Metamaterials. <b>2007</b> , 19, 3628-3632	181
915	Templated Synthesis of Composite Rings Using Core-Shell Toroids. <b>2007</b> , 28, 1122-1127	7
914	Fabrication of a novel micron scale Y-structure-based chiral metamaterial: Simulation and experimental analysis of its chiral and negative index properties in the terahertz and microwave regimes. <b>2007</b> , 70, 497-505	10
913	Use of specific Green's functions for solving direct problems involving a heterogeneous rigid frame porous medium slab solicited by acoustic waves. <b>2007</b> , 30, 91-122	11
912	Miniaturized rectangular waveguide filters. <b>2007</b> , 17, 398-403	3
911	Modal analysis of the microwave frequency response and composite right-/left-handed operation of a rectangular waveguide loaded with double positive and double negative materials. <b>2007</b> , 17, 435-445	5
910	Transmission peak at low frequencies by a fractal distribution of metamaterials layers in free space. <b>2007</b> , 49, 105-109	
909	A directive patch antenna with metamaterial structure. <b>2007</b> , 49, 456-459	22
908	Band-stop filter based on a substrate embedded with metamaterials. <b>2007</b> , 49, 530-534	4
907	Guided modes in a grounded slab waveguide of uniaxially anisotropic left-handed material. <b>2007</b> , 49, 1644-1648	6
906	Wideband microstrip bandpass filter based on intercoupled split-ring resonator. <b>2007</b> , 49, 1809-1813	1
905	Novel left-handed transmission lines based on grounded spirals. <b>2007</b> , 49, 2561-2567	2
904	An architecture for active metamaterial particles and experimental validation at RF. <b>2007</b> , 49, 2574-2577	27
903	Left-handed behavior in a microstrip line loaded with squared split-ring resonators and an EBG pattern. <b>2007</b> , 49, 2689-2692	5
902	Coupled-mode theory for spun four-lobe stress region fibers. <b>2007</b> , 49, 2814-2817	2
901	Nonreciprocal left handed coplanar waveguide over ferrite substrate with only shunt inductive load. <b>2007</b> , 49, 2810-2814	19
900	A compact ultra-wideband slot antenna with multiple notch frequency bands. <b>2007</b> , 49, 3056-3060	87

899	Structure and properties of electromagnetic metamaterials. <b>2007</b> , 1, 249-259	17
898	Flat superlens by using negative refraction in two-dimensional phononic crystals. <b>2007</b> , 142, 177-180	30
897	Some new band gaps and defect modes of 1D photonic crystals composed of metamaterials. <b>2007</b> , 143, 217-222	24
896	Strong optical transport of a square-lattice photonic crystal due to the self-collimation effect and negative refraction effect. <b>2007</b> , 144, 282-287	0
895	Focusing a beam of light with left-handed metamaterials. <b>2007</b> , 51, 1381-1386	3
894	Two- and three-field formulations for wave transmission between media with opposite sign dielectric constants. <b>2007</b> , 204, 408-417	27
893	Error analysis of mixed finite element methods for wave propagation in double negative metamaterials. <b>2007</b> , 209, 81-96	16
892	Double-negative metamaterial research for accelerator applications. <b>2007</b> , 579, 915-923	12
891	The coexistence of TE <sub>m</sub> M surface waves in uniaxially anisotropic left-handed materials. <b>2007</b> , 276, 196-199	4
890	Alternative methods for ray tracing in uniaxial media. Application to negative refraction. <b>2007</b> , 118, 103-109	3
889	Higher order interactions in magneto-inductive waveguides. <b>2007</b> , 1, 44-51	25
888	Electromagnetic behaviour of left-handed materials. <b>2007</b> , 394, 148-154	6
887	Dynamic mass density and acoustic metamaterials. <b>2007</b> , 394, 256-261	91
886	Metamaterials: How the subject started. <b>2007</b> , 1, 12-18	80
885	Electric and magnetic losses and gains in determining the sign of refractive index. <b>2007</b> , 270, 455-464	13
884	Total reflection of electromagnetic waves propagating from an isotropic medium to an indefinite metamaterial. <b>2007</b> , 274, 248-253	8
883	Strong birefringence in left-handed metallic metamaterials. <b>2007</b> , 280, 213-216	18
882	Photonic quantum-well structures containing negative-index materials. <b>2007</b> , 280, 221-224	17

881	A wide band left handed material with high transmission. <b>2007</b> , 5, 21-28	3
880	Magnetoinductive waves in arrays of split-ring resonators. <b>2007</b> , 394, 180-183	50
879	Negative refraction of complex lattices of dielectric cylinders. <b>2007</b> , 360, 461-466	9
878	Optics of subwavelength gradient nanofilms. <b>2007</b> , 452, 33-88	36
877	Microwave properties of ferromagnetic composites and metamaterials. <b>2007</b> , 27, 1029-1033	21
876	Negative permeability around 630 nm in nanofabricated vertical meander metamaterials. <b>2007</b> , 204, 3886-3900	19
875	Magnetic response of split ring resonators at terahertz frequencies. <b>2007</b> , 244, 1181-1187	34
874	Planar bilayer metamaterial with left-handed transmission and negative refraction at microwave frequencies. <b>2007</b> , 244, 1188-1191	2
873	Radiation properties of a split ring resonator and monopole composite. <b>2007</b> , 244, 1192-1196	57
872	Experimental and numerical analyses of the resonances of split ring resonators. <b>2007</b> , 244, 1197-1201	8
871	Transmission, refraction, and focusing properties of labyrinth based left-handed metamaterials. <b>2007</b> , 244, 1202-1210	6
870	Dual composite right/left-handed (D-CRLH) leaky-wave antenna with low beam squinting and tunable group velocity. <b>2007</b> , 244, 1219-1226	18
869	Radio frequency (RF) metamaterials. <b>2007</b> , 244, 1227-1236	38
868	Longitudinal capacitance design for optical left-handed metamaterials. <b>2007</b> , 244, 1243-1250	6
867	Optical Magnus effect in metamaterials fabricated from ferromagnetic microwires. <b>2007</b> , 85, 565-569	3
866	Quadratic solitons in media with negative refractive index. <b>2007</b> , 102, 90-97	15
865	Negative birefracton of acoustic waves in a sonic crystal. <b>2007</b> , 6, 744-8	146
864	Negative refraction in semiconductor metamaterials. <b>2007</b> , 6, 946-50	634

863	Semiconductors: a new class of metamaterials. <b>2007</b> , 6, 922-3	4
862	Optical negative-index metamaterials. <b>2007</b> , 1, 41-48	2136
861	Applications of polyaniline doubly doped with p-toluene sulphonic acid and dichloroacetic acid as microwave absorbing and shielding materials. <b>2007</b> , 104, 327-335	86
860	Wave refraction and backward magnon-plasmon polaritons in left-handed antiferromagnet/semiconductor superlattices. <b>2007</b> , 312, 6-15	13
859	Tunable negative index metamaterial using yttrium iron garnet. <b>2007</b> , 313, 187-191	68
858	Determination of Generalized Permeability Function and Field Energy Density in Artificial Magnetics Using the Equivalent-Circuit Method. <b>2007</b> , 55, 92-99	19
857	Design and Analysis of Super-Wide Bandpass Filters Using a Novel Compact Meta-Structure. <b>2007</b> , 55, 747-753	27
856	Left-Handed Metamaterial Coplanar Waveguide Components and Circuits in GaAs MMIC Technology. <b>2007</b> , 55, 1794-1800	11
855	Negative optical refraction in crystals with strong birefringence. <b>2007</b> , 52, 793-795	4
854	Surface oscillations in media with natural and artificial inhomogeneity. <b>2007</b> , 52, 1101-1105	1
853	Pixelated phase masks and their synthesis. <b>2007</b> , 62, 174-178	
852	Resonant nano-and microstructured media: Left-handed properties and negative refraction of electromagnetic waves. <b>2007</b> , 71, 43-47	
851	Acoustic wave focusing by two-dimensional lattice of cylinders in air. <b>2007</b> , 15, 126-129	6
850	The singularity of the electromagnetic field on the edge of a wedge-shaped structure containing media with negative permittivities and permeabilities. <b>2007</b> , 52, 991-995	3
849	Electromagnetic wave propagation through frequency-dispersive and lossy double-negative slab. <b>2007</b> , 15,	26
848	Demonstration of Negative Refraction in a Cutoff Parallel-Plate Waveguide Loaded With 2-D Square Lattice of Dielectric Resonators. <b>2007</b> , 55, 1280-1287	31
847	NUMERICAL SIMULATIONS OF LONG-RANGE PLASMONIC TRANSMISSION LINES. <b>2007</b> , 55-71	
846	Criterion for Negative Refraction with Low Optical Losses from a Fundamental Principle of Causality. <i>Physical Review Letters</i> , <b>2007</b> , 98,	7.4 169

845	Experimental observation of left-handed behavior in an array of standard dielectric resonators. <i>Physical Review Letters</i> , <b>2007</b> , 98, 157403	7.4	238
844	Surface Plasmon Amplification in Planar Metal Films. <b>2007</b> , 43, 1104-1108		28
843	Improved patch antenna performance by using a metamaterial cover. <b>2007</b> , 8, 192-196		3
842	Physics. Negative refractive index at optical wavelengths. <b>2007</b> , 315, 47-9		73 <sup>1</sup>
841	Enhanced Directivity From Subwavelength Infrared/Optical Nano-Antennas Loaded With Plasmonic Materials or Metamaterials. <b>2007</b> , 55, 3027-3039		42
840	Photonic band structure and symmetry properties of electromagnetic modes in photonic crystals. <b>2007</b> , 75, 026607		33
839	The influence on atomic decay by inserting a LHM layer into an ordinary one dimensional multi-layer structure. <b>2007</b> , 41, 403-411		4
838	Description and explanation of electromagnetic behaviors in artificial metamaterials based on effective medium theory. <b>2007</b> , 76, 026606		149
837	Photon tunneling in a frustrated total internal reflection structure with a lossy indefinite metamaterial barrier. <b>2007</b> , 87, 251-257		2
836	Wave propagation in an anisotropic metamaterial with single-sheeted hyperboloid dispersion relation. <b>2007</b> , 87, 245-249		14
835	Left-handed metamaterial based superlens for subwavelength imaging of electromagnetic waves. <b>2007</b> , 87, 137-141		22
834	An approach for small omnidirectional microstrip antennas based on the backward waves of double negative metamaterials. <b>2007</b> , 87, 193-198		4
833	Subwavelength imaging with two symmetrical interfaces by dielectric-tube photonic crystals. <b>2007</b> , 87, 223-225		
832	Enhanced transmission of electromagnetic waves through metamaterials. <b>2007</b> , 87, 217-221		7
831	Negative and positive Goos-Hänchen shifts of a light beam transmitted from an indefinite medium slab. <b>2007</b> , 87, 285-290		35
830	Negative permeability in a E-type three-level atomic vapor. <b>2007</b> , 87, 291-295		6
829	Negative index and indefinite media waveguide couplers. <b>2007</b> , 87, 321-328		14
828	Ultra-smooth metal surfaces generated by pressure-induced surface deformation of thin metal films. <b>2007</b> , 87, 187-192		28



827	Symmetric and antisymmetric modes of electromagnetic resonators. <b>2007</b> , 87, 171-174	15
826	Properties of near and far fields for the electric line source illumination of a lossless metamaterial covered conductor cylinder. <b>2007</b> , 87, 335-341	6
825	Switching between positive and negative permeability by photoconductive coupling for modulation of electromagnetic radiation. <b>2007</b> , 87, 209-216	13
824	High-Q filters based on one-dimensional photonic crystals using epsilon-negative materials. <b>2007</b> , 86, 587-591	27
823	Construct a polarizing beam splitter by an anisotropic metamaterial slab. <b>2007</b> , 87, 283-287	23
822	Negative refraction and energy flow. <b>2007</b> , 89, 241-243	
821	Infrared response of a metamaterial made of gold wires and split ring resonators deposited on silicon. <b>2007</b> , 39, 273-284	6
820	Parametrical study of left-handed or right-handed propagation by stacking hole arrays. <b>2007</b> , 39, 285-293	4
819	Excitation of surface and volume electromagnetic waves in left-handed media by an electron bunch. <b>2007</b> , 50, 370-380	
818	MICROWAVE PROPAGATION IN ROUND GUIDING STRUCTURES BASED ON DOUBLE NEGATIVE METAMATERIALS. <b>2007</b> , 27, 1227-1239	3
817	DESIGN OF A NOVEL 2-D UNIPLANAR CRLH-TL STRUCTURE. <b>2007</b> , 27, 1539-1552	
816	A New Approach for the Analysis of Planar Distributed Two-Dimensional (2-D) Left-Handed (Lh) Structures. <b>2007</b> , 28, 393-402	1
815	Omnidirectional Single-negative Gap and in Fibonacci Sequences Composed of Single-negative Materials. <b>2007</b> , 28, 671-676	2
814	Sol-gel nanocomposites as metamaterials: preparation and optical measurements. <b>2007</b> , 18, 435-438	7
813	Finite Element Analysis for Wave Propagation in Double Negative Metamaterials. <b>2007</b> , 32, 263-286	42
812	Building Left-Handed Transmission Lines Using High-Temperature Superconductors. <b>2007</b> , 20, 21-24	4
811	A Non-Energy-Concentrating Lens Using Left-Handed Material. <b>2007</b> , 14, 395-400	
810	Novel characteristics of power propagation in the left-handed material fiber. <b>2007</b> , 3, 257-259	1

809	TM modes in asymmetric slab waveguides with left-handed material. <b>2007</b> , 11, 391-395	
808	Study on relationships of electromagnetic band gap structures and left/right handed structures. <b>2007</b> , 50, 251-260	2
807	A novel approach to design microwave medium of negative refractive index and simulation verification. <b>2007</b> , 52, 433-439	8
806	Experimental study of the hybridizing effect of different left-handed metamaterials. <b>2007</b> , 363, 492-496	1
805	Transmission spectra in photonic band-gap Fibonacci nanostructures. <b>2007</b> , 601, 4492-4496	3
804	Alternative method for wave propagation within bounded linear media: Conceptual and practical implications. <b>2008</b> , 119, 340-348	1
803	Light transmission along a slab waveguide with a core of anisotropic metamaterial. <b>2008</b> , 119, 591-595	6
802	Excitation of guided waves in materials with negative refraction. <b>2008</b> , 30, 1121-1126	2
801	Lamellar model of the left-handed metamaterials composed of metallic split-ring resonators and wires. <b>2008</b> , 372, 4667-4670	0
800	The Property of the Horizontal Dipole Radiating in the Presence of a Single Lossless Metamaterial Sphere. <b>2008</b> , 29, 157-166	
799	Properties of Near and Far Fields for the Electric Line Source Illumination of a Lossy Metamaterial Covered Dielectric Cylinder. <b>2008</b> , 29, 373-384	1
798	Electromagnetic induction in metamaterials. <b>2008</b> , 93, 107-110	4
797	Isotropic negative permeability composite based on Mie resonance of the BST-MgO dielectric medium. <b>2008</b> , 53, 3272-3276	8
796	Propagation properties for five-layer symmetric slab waveguides including left-handed materials. <b>2008</b> , 4, 165-167	1
795	Fast and accurate simulations of transmission-line metamaterials using transmission-matrix method. <b>2008</b> , 1, 10	3
794	Design and negative refraction investigation of a compact left-handed metamaterial. <b>2008</b> , 3, 599-603	
793	Slow waves in magnetic metamaterials: history, fundamentals and applications. <b>2008</b> , 245, 1471-1482	17
792	Plasmonic nanostructures in aperture-less scanning near-field optical microscopy (aSNOM). <b>2008</b> , 245, 2255-2260	19

791	A periodic porous-nanostructured left-handed material slab at optical frequencies. <b>2008</b> , 50, 216-220	6
790	Effective permeability of inner ring shorted split ring resonator. <b>2008</b> , 50, 624-627	4
789	Linearity-optimized GaN HEMT Doherty amplifiers using derivative superposition technique for WCDMA applications. <b>2008</b> , 50, 701-705	9
788	A novel bandpass filter based on complementary split rings resonators and substrate integrated waveguide. <b>2008</b> , 50, 699-701	29
787	Strategies for the miniaturization of metamaterial resonators. <b>2008</b> , 50, 1263-1270	19
786	Miniaturized rectangular cavity resonator based on anisotropic metamaterials bilayer. <b>2008</b> , 50, 2016-2020	5
785	Soft-lithography defined coaxial-like transmission line with 2.5 dimensional features. <b>2008</b> , 50, 2827-2830	
784	Metamaterial multiresonances in waveguide and metasurfaces. <b>2008</b> , 50, 2825-2827	5
783	Novel diplexer using composite right/left-handed transmission lines. <b>2008</b> , 50, 2970-2973	4
782	Photonic metamaterials. <b>2008</b> , 5, 411-420	41
781	Study on transmission characteristics in photonic crystals with negative effective index of refraction. <b>2008</b> , 43, 200-204	1
780	Multiple Pass-Band Optical Left-Handed Metamaterials Based on Random Dendritic Cells. <b>2008</b> , 18, 3523-3528	71
779	Fabrication of Infrared Left-Handed Metamaterials via Double Template-Assisted Electrochemical Deposition. <b>2008</b> , 20, 2050-2054	93
778	Plasmonic Building Blocks for Magnetic Molecules in Three-Dimensional Optical Metamaterials. <b>2008</b> , 20, 3859-3865	137
777	Growth of $Tl_2Ba_2CaCu_2O_8$ superconducting thin films on curved substrates for metamaterials applications. <b>2008</b> , 310, 4081-4087	0
776	Optical properties of subwavelength metallic dielectric multilayers. <b>2008</b> , 372, 730-734	7
775	Strongly frequency-dependent negative refraction of a two-dimensional sonic crystal wedge. <b>2008</b> , 372, 721-724	5
774	Relativistic energy loss and induced photon emission in the interaction of a left-handed sphere with an external electron beam. <b>2008</b> , 372, 1129-1134	4

773	Additional signals due to negative refraction in acoustic microscopy of anisotropic plates. <b>2008</b> , 372, 4718-4721	2
772	Metal direct nanoimprinting for photonics. <b>2008</b> , 85, 419-424	44
771	Microfabricated V-band left-handed transmission lines. <b>2008</b> , 2, 26-35	6
770	Three-frequency parametric amplification in magneto-inductive ring resonators. <b>2008</b> , 2, 122-134	47
769	A covariant theory of negative phase velocity propagation. <b>2008</b> , 2, 92-100	13
768	Analytical modelling of double-negative composites. <b>2008</b> , 2, 169-185	38
767	Polarization-sensitive propagation in an anisotropic metamaterial with double-sheeted hyperboloid dispersion relation. <b>2008</b> , 281, 501-507	2
766	Experimental study of quasi-one-dimensional comb-like photonic crystals containing left-handed material. <b>2008</b> , 281, 3681-3685	6
765	Negative refraction and imaging beyond the diffraction limit by a two-dimensional left-handed metamaterial. <b>2008</b> , 6, 108-115	10
764	A planar metamaterial: Polarization independent fishnet structure. <b>2008</b> , 6, 102-107	55
763	Cavity formation in split ring resonators. <b>2008</b> , 6, 200-204	0
762	Dispersion characteristics of negative refraction sonic crystals. <b>2008</b> , 403, 3599-3603	14
761	Metamaterials for optical and radio communications. <b>2008</b> , 9, 31-40	11
760	Photonic crystals and metamaterials. <b>2008</b> , 9, 4-15	15
759	Mathematical and numerical study of wave propagation in negative-index materials. <b>2008</b> , 197, 3976-3987	21
758	Slow wave propagation in nonradiative dielectric waveguides with bianisotropic split ring resonator metamaterials. <b>2008</b> , 51, 555-558	4
757	Optical magnetism and negative refraction in plasmonic metamaterials. <b>2008</b> , 146, 208-220	43
756	Negative refraction in 1D photonic crystals. <b>2008</b> , 147, 157-160	12

755	Experimental and numerical study of omega type bianisotropic metamaterials combined with a negative permittivity medium. <b>2008</b> , 6, 116-121	15
754	A candidate three-dimensional GHz left-handed metamaterial composed of coplanar magnetic and electric resonators. <b>2008</b> , 6, 183-187	18
753	Negative refraction of a one-dimensional multilayer periodic composite based on the three-layer unit cell. <b>2008</b> , 403, 3658-3662	
752	Guided modes in left-handed waveguides. <b>2008</b> , 281, 1500-1509	13
751	Abrupt change of reflectivity from the strongly anisotropic metamaterial. <b>2008</b> , 281, 1941-1944	7
750	Characteristics of guided waves in indefinite-medium waveguides. <b>2008</b> , 281, 2819-2825	15
749	Optical bistability at angular incidence in a one-dimensional photonic crystal containing single negative materials. <b>2008</b> , 281, 3177-3182	3
748	Intense Focusing of Light Using Metals. <b>2001</b> , 329-349	
747	Electrodynamic Modeling of Metamaterials with Negative Refractive Index. <b>2004</b> , 3-12	
746	Nonlinear effects in a periodic structure with alternating positive and negative index materials.. <b>2004</b> ,	
745	Non-magnetic left handed nanostructured material. <b>2004</b> ,	
744	Nonlinear modes and phase singularities of left-handed (Veselago) waveguides. <b>2004</b> ,	
743	Plasmonic Nanoantennas. <b>2004</b> , 135-135	
742	Propagation of surface polaritons at the interface of metal and left-handed metamaterial. <b>2004</b> , 15, 89-99	
741	Negative Refractive Index Materials. <b>2004</b> , 489-522	
740	New Optics Using Negative Refraction. <b>2005</b> ,	
739	Negative refraction in Si-based 2-dimensional slab photonic crystal structures. <b>2006</b> ,	
738	Chapter 5 Surface plasmons and gain media. <b>2006</b> , 141-169	

- 737 Negative Refraction and Subdiffraction Imaging. **2006**, 483-491
- 736 Dynamical Electric Metamaterial Response at Terahertz Frequencies. **2006**,
- 735 Lumped circuit model for an active right-handed medium with negative refractive index. **2006**,
- 734 Terahertz Transmission Properties of Split Ring Resonator Arrays. **2006**,
- 733 Chapter 9 Thin metal-dielectric nanocomposites with a negative index of refraction. **2006**, 271-308
- 732 Zero-n Photonic Band-Gaps in Binary Photonic Crystal Superlattices. **2006**,
- 731 Radiative and Nonradiative Decay of Near-Infrared Excitations in Split-Ring Resonator Metamaterials. **2006**,
- 730 Chemical route prepared magnetic structure at infrared frequencies. **2006**,
- 729 Dynamical Electric Metamaterial Response at Terahertz Frequencies. **2006**,
- 728 Guided waves in a bilayer film made of right- and left-handed materials. **2006**, ○
- 727 Solitary Wave Propagation and Stabilization in Negative Index Materials. **2007**,
- 726 Nonlinearities in Negative Refractive Index Media. **2007**,
- 725 Novel Terahertz Electric Metamaterials. **2007**,
- 724 Accelerated Design Tools for Nanophotonic Devices and Applications. **2007**, 29-1-29-22
- 723 Defect and Band Gap Analysis of Real One-Dimensional Layers of Right and Left Handed Photonic Crystals. **2007**, 7, 3499-3505
- 722 References. **2008**, 413-479
- 721 A subwavelength near-infrared negative index material. **2008**,
- 720 Electromagnetic wave scattering on imperfect cloaking devices. **2008**, 40, 245-250

- 719 Flexible, large-area metamaterials fabricated on thin silicon nitride membranes. **2008**, o
- 718 THz polarimetric metamaterials. **2008**,
- 717 Flexible Terahertz Metamaterials On Polyimide Substrates. **2009**,
- 716 Active Terahertz Metamaterials. **2009**,
- 715 Plasmon-polariton effects in nanostructured metal-dielectric photonic crystals and metamaterials. **2009**, 179, 1003
- 714 Active Terahertz Metamaterials. **2009**,
- 713 Progress in Metamaterials for Optical Devices. **2009**,
- 712 Dynamic Metamaterials at Terahertz Frequencies. **2009**, 645-647
- 711 Vector frequency-comb Fourier-transform spectrometer measuring artificial dielectrics. **2009**,
- 710 Controlled zero- $n$  bandgaps in negative refraction photonic superlattices for wavefront control and open resonances. **2009**,
- 709 A Model-Order Reduction Approach to Parametric Electromagnetic Inversion. **2009**, 1-19
- 708 Propagation of Light. **2009**,
- 707 IMAGE QUALITY EVALUATION METRICS BASED ON HWD. **2009**, 28, 72-76 1
- 706 General Theory on Artificial Metamaterials. **2010**, 49-59 o
- 705 Rapid Design for Metamaterials. **2010**, 61-85
- 704 The Dynamical Study of the Metamaterial Systems. **2010**, 183-214
- 703 Compensated Anisotropic Metamaterials: Manipulating Sub-wavelength Images. **2010**, 155-181
- 702 Broadband and Low-Loss Non-Resonant Metamaterials. **2010**, 87-97 1

- 701 Wideband and Low-Loss Metamaterials for Microwave and RF Applications: Fast Algorithm and Antenna Design. **2010**, 293-319
- 700 Analysis and design of novel broadband metamaterial structure. **2009**, 2009, 27-31
- 699 Development and Application of Metamaterials. **2010**, 130, 98-101
- 698 Wave localization in one-dimensional periodic-on-average disordered system composed of single-negative metamaterials. **2010**, 59, 7066 4
- 697 Passbands of bianisotropic and waveguide bianisotropic metamaterials based on planar double split rings. **2010**, 53, 1
- 696 Efficient Modelling Method for Artificial Materials Using Digital Filtering Techniques and EMC Applications. **2010**, E93-B, 1760-1767 1
- 695 Transmission line analogy model of left-handed metamaterials microstructure configuration. **2010**, 59, 8566 4
- 694 Miniaturized electric resonance metamaterial. **2010**, 59, 4715 1
- 693 Mutual coupling suppressing based on a new type electric resonant SRRs in microstrip array. **2010**, 59, 1851 2
- 692 Octagonal split resonant rings composite metal-wires to realize negative refraction. **2010**, 59, 5444 1
- 691 Fabrication of Cubic Micron-Scale 3D Metamaterial Resonators. **2010**,
- 690 Search for Negative Refraction in the Visible Region of Light by Fluorescent Microscopy of Quantum Dots Infiltrated into Regular and Inverse Synthetic Opals. **2010**, 65-76
- 689 Planar focus effect of visible light metamaterials. **2010**, 59, 4023 2
- 688 Numerical study on 2-D photonic crystal with negative refractive index at multiple frequency bands. **2010**, 59, 5553 2
- 687 Design and experimental verification of a new type left-handed metamaterial structure. **2010**, 59, 4602 0
- 686 Design and simulation of a simple two-dimensional left-handed metamaterials. **2010**, 59, 8584 3
- 685 Design and experimental verification of left-handed metamaterials based on inter-unit-cell coupling. **2010**, 59, 4018
- 684 Solitary waves in a nonlinear oppositely directed coupler. **2010**, 104, 253



683 Photonic crystals. **2010**, 53, 121

682 Split Ring Resonator-Based Bandstop Filter with an Enhanced Bandwidth. **2010**, 21, 544-552

681 Experimental Investigation of  $R(\omega)$ ,  $T(\omega)$  and  $L(\omega)$  for Multi-Layer SRRs and Wires Metamaterials. **2010**, 10, 186-189

1

680 Controlling Dispersion and Nonlinearities in Mesoscopic Silicon Photonic Crystals. **2010**, 60001-60009

679 Experimental characterization of the dispersive behavior in a uniaxial metamaterial around plasma frequency. **2010**, 18, 21528

678 A Compact Tunable Bandpass Filter Using Coupled Metamaterial Resonators with Varactor Diode. **2010**, 8, 484-488

677 Anomalous rotation characteristics of circularly polarized beam in left-handed materials. **2011**, 60, 074208

2

676 Quantized Energy Momentum and Wave for an Electromagnetic Pulse A Single Photon inside Negative Refractive Indexed Media. **2011**, 02, 1507-1522

675 Negative refractive index metamaterials based on high-permittivity substrates and metallic structure: design, simulation and experiment. **2011**, 60, 054103

674 A two-dimensional broad pass-band left-handed metamaterial based on single-sided metallic structure. **2011**, 60, 024101

8

673 Controlling Nonlinearity with Structured Metamaterials. **2011**,

672 Development of a Dual Composite Right / Left Handed (D-CRLH) Differential Transmission Line Common Mode Filter. **2011**, 131, 517-522

671 Investigation on strong optical activity and negative refractive index in double-layer metallic wires planar chiral structure. **2011**, 60, 124202

670 Electric tunability of microwave permeability dispersion behaviors of metamaterials. **2011**, 60, 117501

669 Investigation of Negative Refraction Phenomenon for Au Nanowires Array Tuning with Index of Filling Material. **2011**, 02, 1429-1435

668 Terahertz Metamaterial Structures Fabricated by PolyMUMPs. **2011**, 145-150

667 A novel dual-band evolved split ring magnetic resonance metamaterial. **2011**, 60, 064101

666 Sub-wavelength imaging of the two-dimensional photonic crystal with effective index close to -1. **2011**, 60, 054201

1

- 665 The design of a quasi-omnidirectional tabulate metamaterial absorber. **2011**, 60, 037801
- 664 MEMS integrated metamaterials with variable resonance operating at RF frequencies. **2011**, 159-166 1
- 663 Resonance tunneling through photonic double quantum well system. **2011**, 60, 074225 2
- 662 Frequency properties of the defect mode inside a photonic crystal band-gap with zero average refractive index. **2011**, 60, 084218
- 661 Design and simulation of chiral negative refractive structure based on folded-wire. **2011**, 60, 114101 3
- 660 Study on double incidence left-handed material composed of double Z-shaped metal strips. **2011**, 60, 034101 5
- 659 PMC-Based Waveguide-Fed Slot Array. **2011**, 2011, 1-5
- 658 Appendix C: Spherical Shell of Eng Metamaterial Surrounding a Dipole Antenna. 279-306
- 657 Design and optimization of left-handed materials with specific frequency bands. **2012**, 61, 054103
- 656 Design and simulation of a single-sided left-handed material in THz regime. **2012**, 61, 124102 3
- 655 Metamaterials. **2012**, 569-610
- 654 Chiral Current in a Graphene Battery. **2012**, 04, 426-431 2
- 653 Zero-index metamaterial based on double-negative structure. **2012**, 61, 084102 9
- 652 . **2012**, 02, 28-33
- 651 Electromagnetically induced negative refraction induced by microwave field driving hyperfine levels transition. **2012**, 61, 044202 3
- 650 Basics of Meta-materials. **2012**, 78, 767-772 3
- 649 Propagation characteristics of time reversal pulsed electromagnetic waves in double negative materials. **2012**, 61, 074102 3
- 648 Broadband and low-loss left-handed metamaterial composed of oblique triangular open-loop pairs resonator. **2012**, 61, 154102 3

647	Influence of left-handed materials on the spontaneous emission spectrum of V-type three-level atom. <b>2012</b> , 61, 043203	2
646	A microstrip antenna with single square ring structured left-handed metamaterial. <b>2012</b> , 61, 014102	3
645	Analysis of symmetrical, periodic negative-permeability metamaterial using interdigital capacitance loading. <b>2012</b> , 61, 124103	3
644	Theoretical Study on Creation Mechanism of Self-resonance Occurred in Unit Cells of Multilayer CRLH Transmission Lines. <b>2012</b> , 132, 1310-1316	0
643	Terahertz wave filter based on metamaterial. <b>2012</b> ,	
642	Dual-band Metamaterial Absorber based on Asymmetrical Snowflake-Shaped Resonators. <b>2012</b> ,	
641	SRR and CSRR Loaded UWB Antenna with Tri-Band Notch Capability. <b>2012</b> , 23, 320-327	3
640	Design of a wide-band and quasi-omnidirectional tabulate metamaterial absorber in the terahertz regime. <b>2012</b> , 30, 350-353	0
639	Resonance Properties of Metallic Ring Systems: More Complex Structures. <b>2013</b> , 29-43	
638	Resonance Properties of Metallic Ring Systems: A Single Ring. <b>2013</b> , 7-28	
637	Electromagnetic Waves in Metallic Wire Structures. <b>2013</b> , 1-6	
636	Analysis and Design of Low Pass Filter using Unit Cell based on CRLH Transmission Line. <b>2012</b> , 8, 100-104	1
635	The Green Function and Optical Field Enhancement in a Multilayered Microsphere with Metamaterial. <b>2013</b> , 57-72	
634	Discontinuous Galerkin Methods for Metamaterials. <b>2013</b> , 127-150	
633	Study of Power Coefficient and Insertion Phase Shift for Organic Magnetic Slab. <b>2012</b> , 1, 277-282	
632	Multiscale models of electromagnetic and plasmonic metamaterials. <b>2013</b> , 19-71	
631	Two-dimensional incident left-handed metamaterial composed of double $\square$ shaped metal strips. <b>2013</b> , 62, 074102	1
630	Quantum Breathers in Nonlinear Metamaterials. <b>2013</b> , 539-544	

- 629 A large NA structured lens with different substrate. **2013**,
- 628 Simulation and experiment demonstration of a polarization-independent dual-directional absorption metamaterial absorber. **2013**, 62, 013701 6
- 627 Research of metamaterial absorbers and their rectangular waveguide matching terminal applications based on the electric resonators. **2013**, 62, 087801 1
- 626 Analysis and Design of an Obstacle Detection Radar Transceiver for ISM Band. **2013**, 01, 1-8 0
- 625 Simple Method to Change the Magnetic Resonant Frequencies of Short Wire Pairs. **2013**, 05, 162-165
- 624 Deterministic Amorphous Metamaterials and Their Optical Far-Field Response. **2013**, 143-167
- 623 New Negative Refractive Index Material Composed of Dielectric Prisms with Metal Patterns. **2013**, E96.C, 1273-1280 1
- 622 Review of Electromagnetic Waves. 49-76
- 621 Micromechanics of Elastic Metamaterials. **2013**,
- 620 Creating Illusion Effects Using Transformation Optics. **2014**, 139-165
- 619 Invisibility Cloak at Optical Frequencies. **2014**, 289-314
- 618 Design of Reconfigurable Resonator with Cross Polarized SRR. **2013**, 14, 3450-3453
- 617 The electromagnetic propagation properties of metamaterials with double-inductance loading in unit cell. **2013**, 79-84
- 616 What Is the Universe Made of?. **2014**, 43-79
- 615 2D Electronic Beam Steering Phased Array. **2014**, 47-105
- 614 Ultra Wideband Bandpass Filter Design using the CRLH Transmission Line. **2013**, 17, 2233-2238
- 613 Modeling and simulation on an IR absorbing structure with the cascaded transmission line model. **2013**, 62, 1725-1729
- 612 Simulation analysis of the depth of field characteristic of negative refraction flat lens. **2014**, 63, 134202

611	The study of the fundamental nature and electromagnetic parameter retrieval of reverse nested Split-ring resonators. <b>2014,</b>	
610	Giant Refractive Index. <b>2014,</b> 73-84	
609	A novel dual-band left-handed metamaterials composed of multi-defects hexagonal structure. <b>2014,</b> 63, 014103	4
608	Design and preparation of a low frequency absorber based on hollowed-out cross-shaped meta-material structure. <b>2014,</b> 63, 184101	2
607	Research of the characteristics of photonic crystals based on air holes sub-wavelength imaging. <b>2014,</b> 63, 154212	0
606	Design and Fabrication of Wideband High Pass Filter Using Left-Handed Transmission Line. <b>2014,</b> 18, 260-267	
605	Design and Fabrication of Deep Attenuation LPF using Meander Microstrip Transmission Line. <b>2014,</b> 15, 1734-1739	
604	Background. <b>2015,</b> 3-17	
603	LTCC-Based Multilayer Composite Right/Left-Handed Transmission Lines for Super-Compact Distributed Circuits. <b>2015,</b> 57-83	
602	Unlocking Metamaterial Properties through Multiscale Design.	
601	Design of shared aperture metamaterial and its applications for high gain and low radar cross section antenna. <b>2015,</b> 64, 054101	
600	From plasmon to nanoplasmonics-the frontiers of modern photonics and the role of liquid crystals in tuneable nanoplasmonics. <b>2015,</b> 64, 124214	3
599	Double cross-shape broadband low-loss and small units left-handed metamaterials based design and experimental verification. <b>2015,</b> 64, 024102	2
598	Metamaterials and Antennas. <b>2015,</b> 1-28	
597	Resonant modes in photonic double quantum well structures with single-negative materials. <b>2015,</b> 64, 064207	
596	Dirac-like cones at $k=0$ . <b>2015,</b> 64, 184208	1
595	Performance analysis of double incidence derivative metamaterial based on double-triangular structure. <b>2015,</b> 64, 034102	1
594	A Review on Miniaturized Microstrip Technology along with Metamaterial for Low Pass filter application. <b>2015,</b> 5, 1-6	

- 593 A Survey on Microstrip Patch Antenna Using Split Ring Resonators for Wireless Applications. **2015**, 4, 1-7
- 592 High Pass Filter Design Using Folded Coplanar Waveguide CRLH Transmission Line. **2015**, 11, 63-68
- 591 Oppositely Directional Coupler: Example of the Forward Backward Waves Interaction in the Metamaterials. **2016**, 181-195
- 590 Bibliography. **2015**, 341-352
- 589 Design and analysis of a new type of wideband low-loss and small size left-handed materials. **2016**, 65, 094101
- 588 Nonreciprocal Composite Right/Left Handed (CRLH) Metamaterials. **2016**, 44, 47
- 587 Soft-Computing-Based Optimization of Low Return Loss Multiband Microstrip Patch Antenna. **2016**, 583-617 1
- 586 Composite Right/Left-Handed Microwave Metamaterials. **2016**, 44, 32
- 585 Broadband and low-loss left-handed materials based on multi-opening cross shape structures. **2016**, 65, 164101
- 584 Magnetic response of split nanotube type metamaterial at near infrared frequency. **2016**,
- 583 Optical Negative-Index Metamaterial Using CSRR by Incidenting the Light Horizontally at Near-Infrared Domain. **2016**, 08, 56-61
- 582 Enhanced Microstrip Patch Antenna Using Metamaterial for DECT and Aircraft Wireless System Applications. **2016**, 171-177
- 581 Introduction to Exotic World of Metamaterials. **2016**, 44, 5
- 580 Three-dimensional Metamaterials and Their Fabrication Techniques. **2016**, 44, 15
- 579 Frequency Response of Split-Ring Resonators at Different Types of Excitations in Ka-Band. **2016**, 61, 44-49 0
- 578 Introduction. **2016**, 1-5
- 577 Microwaves in Structured Metamaterials: Supeluminal, Slow, and Backward Waves. **2016**, 61, 125-133 1
- 576 D-CRLH Based Band Rejection Filter using a Concavo-Convex Coupled CPW Transmission Line. **2016**, 11, 463-469

575 Spatial Dispersion and Effective Constitutive Parameters of Electromagnetic Metamaterials. **2016**, 271-306

574 Analysis of Magnetic Permeability Spectra of Metamaterials Composed of Cut Wire Pairs by Circuit Theory. **2016**, 21, 187-191

573 Using of Scattering Bond Graph Methodology for a Physical Characteristics Analysis of D-CRLH Transmission Line. **2016**, 11, 943-950

572 Índice de refração, esse desconhecido (parte I). **2016**, 4,

571 EMR of Metallic Nanoparticles. **2017**, 79-90

2

570 Simulation study of ENG based metamaterial structures. **2016**,

1

569 Patch Antenna Miniaturization Using CSRR. **2017**, 05, 132-150

0

568 Electron screening lengths and plasma spectrum in single layer MoS<sub>2</sub>. **2017**, 66, 247701

2

567 III-V dielectric metasurfaces: enhanced nonlinearities and emission control. **2017**,

566 Analysis on the Application of Two Dimensional Negative Refraction Photonic Crystals in Micro/Nano Optoelectronic Devices. **2017**, 07, 103-110

565 Subwavelength electromagnetics below the diffraction limit. **2017**, 66, 144101

7

564 A random metasurface for an all polarizations flat lens. **2017**,

563 Ferroic Nanometamaterials and Composites. **2017**, 193-214

562 Electromagnetic Wave Propagation in Waveguide Loaded by Split Ring Resonator of Negative Permeability. **2017**, 09, 113-121

561 Exploring Lens Geometry for Superlensing in an Electrostatic Pendry Lens. **2017**,

560 Research of the metamaterial on the Chinese map. **2017**,

559 Metamelike Based Sensor Design and Application for Fuel Sector. **2017**, 9, 86-91

558 Nanoparticle-Assisted Stimulated Emission Depletion (STED) Super-Resolution Nanoscopy. **2017**, 247-298

0

557 Novel concepts of negative-n optics in masterB level educational courses. **2017**, 20, 235-239

556 Silicon metamaterials for infrared applications. **2017**, 347-372

555 Introduction. **2018**, 1-45

554 Influence of asymmetric structures on electromagnetic response characteristics of terahertz metamaterials. **2017**,

553 Chapter 10: Multisolitons in SRR-based Metamaterials in Klein-Gordon Lattices. **2017**, 273-308

552 Metamaterials. **2018**, 305-383

551 Introduction. **2018**, 5-35

550 Electromagnetic Behavior of the Relativistic Fermi Gas. **2018**,

549 Introduction. **2018**, 1-44

548 Tunable Electromagnetically Induced Transparency in Ge<sub>2</sub>Sb<sub>2</sub>Te<sub>5</sub>-Based Infrared Metasurfaces. **2018**,

547 Novel materials and devices bring new opportunities for holographic display. **2018**, 67, 024213

546 Plasmonics and Metamaterials. **2018**, 45-75

545 Dynamics of the optical field in the ring cavity with nonlinear metamaterial and time-delayed feedback. **2018**,

544 Microwave Generation Using a Two Spiral Metamaterial Slow Wave Structure Driven by an Electron Beam. **2018**,

543 Analysis of THz Response of Frame Structures for Achieving Thin-film-type Metamaterials. **2018**, 138, 281-286

542 Sinyal Emici Metamalzeme Tabanl~ Fonksiyonel Bas~ n~ Ve Yo~ unluk Sens~ f~ Tasar~ m~ -**2018**, 33, 1-30 1

541 Demonstration of terahertz ferroelectric metasurface using a simple and scalable fabrication method. **2018**, 26, 27917-27930 1

540 Resonance coupling and optical modulation properties in terahertz asymmetric double-wire structures. **2018**,



- 539 Microsphere-Assisted Interference Microscopy. **2019**, 443-469 3
- 538 Considerably Enhanced Second-Harmonic Generation in Resonant U-Shaped Nano-Structures. **2019**, 13, 13-22
- 537 General Introduction. **2019**, 3-16
- 536 Optical coatings for metamaterials. **2019**,
- 535 What Is the Universe Made of? (Matter, Energy, and Interactions). **2019**, 57-107 1
- 534 Modern Insights into Macroscopic Electromagnetic Fields. **2019**, 1-4 0
- 533 Negative Refractive Index Materials Composed of Metal Patterns and the Applications. **2019**, 131-149
- 532 Design of New Reconfigurable and Miniature Microstrip Planar Antennas. **2019**, 223-257
- 531 Control of magnetic dipole emission with surface plasmon polaritons. **2019**, 2, 1342 0
- 530 Homogeneous external cloak with arbitrarily symmetric or asymmetric structures. **2019**, 2, 1259 2
- 529 Radiation field of an ideal thin Gaussian bunch moving in a periodic conducting wire structure. **2019**, 22, 1 1
- 528 Direct retrieval method of the effective permittivity and permeability of bulk semi-infinite metamaterials by variable-angle spectroscopic ellipsometry. **2019**, 2, 1762 2
- 527 Broadband circular polarizer based on twisted plasmonic nano-disks. **2019**, 58, 4846-4852
- 526 SRR Metamaterial Lens Design. 759-770
- 525 Estudio de la aplicaci3n de los metamateriales en el dise1o de antenas textiles. **2019**, 15, 108-127
- 524 Design of Left-Handed Material Microstrip Antenna. **2019**,
- 523 Generalized Veselago-Pendry lenses via complex transformation optics. **2019**, 27, 25670-25677 1
- 522 Terahertz multiple modes defined by fractal symmetry in complementary meta-atoms. **2019**, 9, 4138

- 521 Metamaterial Based Radome Applied to a Microstrip Antenna. **2019**,
- 520 Reversible composite terahertz modulator based on VO<sub>2</sub> phase transition. **2019**, 1
- 519 Study on the spectral and polarization properties of split circular terahertz resonators. **2019**,
- 518 Reflection and Transmission Control Devices of Electromagnetic Wave Using Metamaterials. **2019**, 70, 560-564 1
- 517 A Metamaterial Based RF Absorber Electronically Reconfigure for an Efficient DC Low Power Generation. **2019**, 0
- 516 Metamateriales nanoestructurados: avances en el c culo de sus propiedades  pticas. **2019**, 13, 1e-18e
- 515 Design of Ultrathin Dual-Directional Partially-Transparent Polarization Independent Metamaterial Absorber. **2019**,
- 514 Double-layer Terahertz Absorber Based on the Vanadium Dioxide and Cavity Resonance. **2019**,
- 513 Electromagnetic Scattering From Two Crossed Ferromagnetic Microwires. **2020**, 495-502
- 512 A Review on UWB Metamaterial Antenna. **2020**, 271-277
- 511 Analysis and design of new chiral metamaterials with asymmetric transmission characteristics. **2020**, 69, 214101
- 510 Effects of Split Ring Resonator (SRR) Metamaterial on the Radiation Pattern and Variation of the Heating Focus Point of the Microstrip Patch Antenna. **2020**, 5, 307-316
- 509 Materials for Electromagnetic Purpose: The Case of a Microstrip Patch Antenna Characteristics Improvement by Additions of Metals as Spherical Inclusions Into the Substrate. **2020**, 17, 11-16
- 508 Waveguide gratings with metamaterial films. **2020**, 37, 2353
- 507 Inhomogeneous metasurface to enlarge cloaking bandwidth. **2020**,
- 506 Dependence of the elastic band structure of a helical medium on thermal dilatation. **2020**, 32, 445701
- 505 . **2020**, 68, 3547-3557 2
- 504 Asymmetric Single Split Resonator for RFID Applications. **2020**,

503	Waveguide Structures with Magnetic Walls on the Basis of the Mushroom-shaped Metamaterials. <b>2020,</b>	0
502	A Broadband Metasurface Antenna Based on Staggered Patch Array. <b>2020,</b>	
501	Limits and possibilities of refractive index in atomic systems. <b>2021,</b> 127583	0
500	Metasurface Photoelectrodes for Enhanced Solar Fuel Generation. <b>2021,</b> 11, 2102877	4
499	Mechanically stretchable metamaterial with tunable mid-infrared optical properties. <b>2021,</b> 29, 37368-37375	4
498	3D Metamaterial Multilayer Structures. <b>2020,</b> 81-98	
497	Broadband gain enhancement of an UWB antenna using conformal wideband NRI metamaterial. <b>2021,</b> 75, 117-134	
496	Energy Distribution Models at the Interface in Dense Energy Fields of the Solar Concentrator System. <b>2020,</b> 42, 34-55	1
495	Design of flexible EBG loaded wideband antenna for 2.4GHz WLAN applications. <b>2020,</b>	
494	Negative index materials: at the frontier of macroscopic electromagnetism. <b>2020,</b> 21, 343-366	1
493	Ballistic metamaterials. <b>2020,</b> 7, 1773	1
492	All-dielectric bulk isotropic double-negative metamaterials. <b>2021,</b> 38, 159	1
491	Planar Lens Based on Dielectric Resonators and Printed Continuous Metal Strips. <b>2020,</b>	0
490	Slow Electromagnetic Waves in a Left-Handed Medium Based on Magnetoactive Plasma Metamaterial. <b>2020,</b> 46, 1241-1244	
489	T <sup>-</sup> İNYUM N <sup>-</sup> İR <sup>-</sup> İ NANO İBUK TABANLI GRAFEN İE AYARLANAB İ R ORTA-KIZIL İTES İ METAMALZEMELER. <b>2020,</b> 8, 1269-1277	
488	Decagonal C-Shaped CSRR Textile-Based Metamaterial for Microwave Applications. <b>2022,</b> 71, 1677-1693	1
487	Polarization Insensitive Broadband Zero Indexed Nano-Meta Absorber for Optical Region Applications. <b>2022,</b> 71, 993-1009	1
486	Left-Handed Characteristics Tunable C-Shaped Varactor Loaded Textile Metamaterial for Microwave Applications. <b>2022,</b> 71, 611-628	1

- 485 Refractive index and group velocity of electromagnetic modes in a relativistic Fermi gas at finite temperatures. **2020**, 37, 211 1
- 484 Modeling of a sensitive element on a planar mushroom-shaped metamaterial for non-destructive testing and searching for inhomogeneities in technological media. **2020**, 54-59
- 483 Metamaterial Resonator Antennas. **2020**, 133-146
- 482 A Novel Meta-material Based Mirco-strip Patch Antenna. **2020**, 230-236
- 481 Versatile architecture of ultra-narrow band absorbing photonic nanostructure. **2020**, 238, 05005 1
- 480 Introduction. **2020**, 1-27
- 479 Research progress of information metamaterials. **2020**, 69, 158101 4
- 478 Design and Analysis of a Dual Spilt-Ring Based Metamaterial Absorber. **2021**, 0
- 477 A Survey of Metamaterial Applications in Antenna Loading. **2020**,
- 476 4D printing with smart materials and structures. **2020**, 23, 27-37
- 475 Analogues of gravity-induced instabilities in anisotropic metamaterials. **2020**, 2, 0
- 474 Gain Enhancement of Dual-Band Microstrip - Fed Antenna with complementary split ring resonators and rectangular slots embedded in Patch for Wireless Applications using Metamaterial Cell-Based Superstrate. **2021**,
- 473 Hierarchical geometric designs for Fe-based amorphous materials with tunable soft magnetic properties. **2021**, 162628 0
- 472 Graphene-based terahertz metamirror with wavefront reconfiguration. **2021**, 29, 39574-39585 4
- 471 The transverse electric plasmonic modes in a negative refractive index black phosphorene waveguide structure.
- 470 Comparative analysis of metasurface array-based solar absorber for visible region. **2021**, 53, 1 15
- 469 Realizing Generalized Brewster Effect by Generalized Kerker Effect. **2021**, 16, 2
- 468 Metamaterial Sensor Design With Split Ring Resonators. **2020**, 1

- 467 On Computing the Constitutive Parameters of a Lossless Double Positive Dielectric Layer with Branch Compensation from Frequency Tracking. **2020**,
- 466 Polarization-independent absorption enhancement in graphene for light incidence in conical mounting. **2020**, 14, 1 1
- 465 Electromagnetics of Complex Particulate Media. **2006**, 341-381
- 464 Application of Wire Media in Antenna Technology. **2009**, 139-151 6
- 463 Dispersion and Losses in Metamaterial DNG H-Guides. **2009**, 289-298 0
- 462 Wideband and polarisation-independent antireflection coating using metamaterials. **2020**, 14, 266-273 2
- 461 Influence of micro-structure on modulation properties in VO composite terahertz memory metamaterials. **2020**, 28, 31436-31445 1
- 460 Properties of split ring resonators metamaterials terahertz sensor on flexible substrates. **2020**,
- 459 Ultrathin Compact Triple-Band Polarization-Insensitive Metamaterial Microwave Absorber. **2021**, 607-617
- 458 Microstrip coupled high sensitivity sensor for water ethanol mixture characterization. **2021**, 75, 1-7 0
- 457 Optically transparent metasurfaces based on ITO: Numerical design and measurements in THz domain. **2020**, 13, 102002 1
- 456 Metagrating in ancient Luoyang Bridge. **2020**, 132, 24003
- 455 Analytic Sinusoidal Steady-State Electromagnetic Field Expressions for the Ideal Veselago Lens. **2021**, 2, 1057-1070 1
- 454 From functional units to material design: A review on recent advancement of programmable microwire metacomposites. **2022**, 153, 106734 2
- 453 Metamaterial absorbers towards broadband, polarization insensitivity and tunability. **2022**, 147, 107627 1
- 452 A Four-beam Antenna Based on Square Patch Metasurface1. **2021**,
- 451 Invisible Spherical Objects Made of Isotropic Materials. **2021**, 64, 126-139
- 450 Analysis of Metamaterial Walls Reverberation Chamber by Using Modal Expansion Theory. **2021**,

- 449 Nonreciprocity in millimeter wave devices using a magnetic grating metamaterial. **2021**, 5, 0
- 448 Differential microwave sensor based on microstrip lines loaded with a split-ring resonator for dielectric characterization of materials. **2021**, 2118, 012004
- 447 Communication Tunable Negative Permittivity of Cobalt and Epoxy Composites at 3 kHz ~ 1 MHz Frequency Regions.
- 446 E-Textile Metamaterials: Stop Band Pass Filter. **2021**, 11, 10930 1
- 445 Optical meta-waveguides for integrated photonics and beyond. **2021**, 10, 235 32
- 444 Small Split-Ring Resonators as Efficient Antennas for Remote LoRa IOT Systems-A Path to Reduce Physical Interference. **2021**, 21, 1
- 443 The Prediction of Chiral Metamaterial Resonance using Convolutional Neural Networks and Conventional Machine Learning Algorithms. **2021**, 7, 156-163 11
- 442 Exciting Magnetic Dipole Mode of Split-Ring Plasmonic Nano-Resonator by Photonic Crystal Nanocavity. **2021**, 14, 1
- 441 Graphene-Based Tunable Broadband Polarizer for Infrared Frequency. **2022**, 52, 1 0
- 440 Numerical study of an efficient light focusing nano-coupler based on C-shaped waveguides. **2021**, 127, 1
- 439 Tunable ultra-broadband terahertz perfect absorber based on vanadium oxide metamaterial. **2021**, 29, 41222 4
- 438 Similarity of the Properties of Conventional Periodic Structures with Metamaterial Slow Wave Structures. **2021**, 157-184
- 437 Natural Negative-Refractive-Index Materials.. *Physical Review Letters*, **2021**, 127, 237401 7.4 2
- 436 Scientific Background. **2022**, 7-56
- 435 Chirality-selective all-dielectric metasurface structural color display. **2021**, 29, 41258 2
- 434 Dispersion Engineering for Slow-Wave Structure Design. **2021**, 87-126
- 433 Design of a perfect and multi-resonant metamaterial absorber for electromagnetic energy harvesting applications. **2021**, 2118, 012005
- 432 Composite Metamaterials: Classification, Design, Laws and Future Applications.

431	Design and research of dual-wavelength polarization multiplexing multifocal metalens based on superimposed nano-antenna array. <b>2021</b> , 8, 115802	0
430	Recent progress in acoustic metamaterials and active piezoelectric acoustic metamaterials - A review. <b>2021</b> , 26, 101260	4
429	Introduction and Overview of the Book. <b>2021</b> , 1-16	
428	Ultrawideband fractal metamaterial absorber made of Nickel operating in UV to IR spectrum.	17
427	Weak epsilon-negative silver nanowires/polyimide metacomposites with extremely low losses. <b>2021</b> , 153, 106755	0
426	Symmetric plasmonic nanoparticle clusters: Synthesis and novel optical properties. <b>2021</b> ,	0
425	Compact Multiband Metamaterial Filter. <b>2021</b> , 1-34	
424	On the Design of Ultra-low Profile Broadband Absorber Based on Non-Foster Circuit. <b>2021</b> , 1-1	1
423	The 2021 magnetic hyperbolic polaritons roadmap. <b>2021</b> , 72, 83-91	1
422	The MTM-EBG as a Rigorous Multiconductor Model of the UC-EBG and Approaches for Miniaturization. <b>2021</b> , 1-1	
421	Inkjet Printed Metamaterial Loaded Antenna for WLAN/WiMAX Applications. <b>2022</b> , 71, 2271-2284	1
420	Digital metasurface for selective information distribution in the spatial domain in the THz region.. <b>2022</b> , 61, 1624-1631	
419	Reflective and transmissive cross-polarization converter for terahertz wave in a switchable metamaterial. <b>2022</b> , 97, 015501	2
418	Multifocal flat lens using thin anisotropic surface in visible light spectrum. <b>2022</b> , 33, 105185	
417	Design and analysis of a polarization-independent and incident angle insensitive triple-band metamaterial absorber. <b>2022</b> , 138, 115131	2
416	Moore Curve Fractal Shaped SRR as Miniaturized Stop Band Elements. <b>2020</b> ,	
415	Non-Lorentzian Resonance Characteristics of Metamaterial Cells in a Waveguide. <b>2020</b> ,	1
414	Metamaterials and Negative Refraction. <b>2020</b> ,	2

413	Terahertz Transverse Magnetism in Subwavelength Grating-Coupled Hybrid Plasmonic Systems. <b>2021,</b>	
412	Coarsely Discretized Huygens' Metasurface: Manipulating EM Waves with Simplicity. <b>2021,</b>	0
411	Design of a Dual-band Terahertz Planar Double-Negative Metamaterial with Near Zero Refractive Index Property. <b>2021,</b>	
410	Development and Characterisation of Compact Wide-band Rejection Metamaterial Filters Using Triangular and Elliptic Split-Ring Resonators. <b>2021,</b>	0
409	Characteristics of A Circular Optical Waveguide Made of Chiral Metamaterial. <b>2021,</b>	
408	Exploring the Potential of Cellulose Nanofibrils for Humidity Sensing Using an Organic Microwave Resonator. <b>2021,</b>	1
407	Design of Integrated Antenna for 3-D Direction Finding in RADAR Applications. <b>2021,</b>	
406	Parity-Time Symmetry and Exceptional Points [Electromagnetic Perspectives]. <b>2021,</b> 63, 110-121	1
405	Origin of nonlinear force distributions in a composite system.. <b>2022,</b> 12, 632	0
404	Negative refractive index in a Doppler broadened three-level Etype atomic medium. <b>2022,</b> 97, 025503	0
403	Lossy Frequency-Selective Surface Metamaterials Based on Silicon Slice with Broadband Microwave Absorption at Elevated Temperature. 2100629	2
402	Tunable liquid crystal metamaterial filter with polarization-insensitive characteristic. 1-9	1
401	Broadband polarization-insensitive and oblique-incidence terahertz metamaterial absorber with multi-layered graphene. <b>2022,</b> 12, 811	6
400	Programmable Terahertz Metamaterials with Non-Volatile Memory. 2100472	4
399	Ultra-thin, wide-angle and bandwidth-enhanced linear and circular metasurface-based reflection-type polarization converter at X-band microwave frequency. 1-13	3
398	Free-form optimization of nanophotonic devices: from classical methods to deep learning. <b>2021,</b>	8
397	Metamaterials and Metasurfaces for Wireless Power Transfer and Energy Harvesting. <b>2022,</b> 110, 31-55	6
396	Dual-Polarized Reconfigurable Metasurface for Multifunctional Control of Electromagnetic Waves. <b>2022,</b> 1-1	4



395	Acoustic Metamaterials for Noise Reduction: A Review. 2100698	18
394	Temperature and Frequency Dependence of Negative Capacitance, Dielectric and Electric Properties in La <sub>0.57</sub> Nd <sub>0.13</sub> Sr <sub>0.13</sub> Ag <sub>0.2</sub> MnO <sub>3</sub> Ceramic. <b>2022</b> , 206, 250-268	0
393	Metamaterial-Inspired Electrically Compact Triangular Antennas Loaded with CSRR and 3 $\square$ Cross-Slots for 5G Indoor Distributed Antenna Systems.. <b>2022</b> , 13,	2
392	Ceramic-based dielectric metamaterials. <b>2022</b> , 1, 11-27	3
391	Polarization insensitive symmetrical structured double negative (DNG) metamaterial absorber for Ku-band sensing applications.. <b>2022</b> , 12, 479	6
390	Compact reversed Cherenkov radiation oscillator with high efficiency. <b>2022</b> , 120, 053501	3
389	Reflection Characteristics Improvement of Wideband Coupled Line Power Divider Using SRR. <b>2022</b> , 15-28	
388	Photonic crystals with split ring unit cells for subwavelength light confinement.. <b>2022</b> , 47, 661-664	0
387	TransmissionReflection-Integrated Quadratic Phase Metasurface for Multifunctional Electromagnetic Manipulation in Full Space. 2102111	4
386	Optically Left-Handed Nanoparticle Beads with Inductance-Capacitance Circuits at Visible-Near-Infrared Frequencies Based on Scalable Methods.. <b>2022</b> , 14, 7121-7129	0
385	A novel terahertz metasurface based on a single-walled carbon nanotube film for sensing application. <b>2022</b> , 10, 1780-1787	3
384	Polarization-controllable and angle-insensitive multiband Yagi-Uda-shaped metamaterial absorber in the microwave regime. <b>2022</b> , 12, 798	4
383	Simulation of electromagnetic wave propagations in negative index materials by the localized RBF-collocation method. <b>2022</b> , 136, 204-212	0
382	A high-order spectral algorithm for the numerical simulation of layered media with uniaxial hyperbolic materials. <b>2022</b> , 453, 110961	
381	Graphene-Based Tunable Metamaterial-FSS RAS. <b>2022</b> , 1-39	
380	Recent Progress of Magnetically Actuated DNA Micro/Nanorobots. <b>2022</b> , 2022, 1-12	1
379	Metastructures: From physics to application. <b>2022</b> , 120, 060401	0
378	Graphene-based tunable short band absorber for infrared wavelength. <b>2022</b> , 128, 1	28

- 377 Reconstructions of effective parameters for a metamaterial antenna via 3D-printed components. 1-19
- 376 Broadband terahertz metamaterial absorber and modulator based on hybrid graphene-gold pattern. **2022**, 140, 115142 1
- 375 GEOMETRICAL ANALYSIS OF WAVE PROPAGATION IN LEFT-HANDED METAMATERIALS. PART II. **2008**, 4, 85-102 1
- 374 GEOMETRICAL ANALYSIS OF WAVE PROPAGATION IN LEFT-HANDED METAMATERIALS.PART I. **2008**, 4, 103-119 1
- 373 Bending the rules, naturally.. **2022**, 21, 2
- 372 Terahertz Metamaterial Absorbers. 2101171 2
- 371 Imaging with metamaterials. **2022**, 4, 85-100 10
- 370 Miniaturized Multiband Metamaterial Antenna for 5G Applications. **2022**, 143-159
- 369 Ultrawideband RCS Reduction of Planar and Conformal Surfaces Using Ultrathin Polarization Conversion Metasurface. **2022**, 1-1 2
- 368 Mechanically tunable PDMS-based polyHIPE acoustic materials. 0
- 367 Construction of New Surface Wave Solutions of the Modified KdV Equation. **2022**, 12, 196-215 1
- 366 Ferromagnetic Microwire Metacomposites. **2022**,
- 365 Overview of Planar Antenna Loading Metamaterials for Gain Performance Enhancement: The Two Decades of Progress. **2022**, 10, 27381-27403 1
- 364 Facile and Efficient Negative Permittivity Realization of Copper Microwire Polymer Metacomposites at X-Band Frequency. **2022**, 51, 2107-2113 0
- 363 Wide Band Folded Coupled Line Power Divider Using Metamaterial for Mobile Application. 1
- 362 Topological Engineering of the Iso-Frequency Contours in Connection-Type Metamaterials. **2022**, 10, 10,
- 361 Analysis of Evolution of Coupled Lorentz Resonances and Their Sensing Properties in Terahertz Metamaterials. **2022**, 10, 0
- 360 Design Method of Reusable Reciprocal Invisibility and Phantom Device.

- 359 Creating hot spots within air for better sensitivity through design of oblique-wire-bundle metamaterial perfect absorbers.. **2022**, 12, 3557
- 358 Transmission Spectra in One-dimensional Defective Photonic Crystal Integrating Metamaterial and Superconductor. 1 0
- 357 Progress in water-based metamaterial absorbers: a review. **2022**, 12, 1461 3
- 356 Dynamical characteristics of ultrashort terahertz pulse in metamaterials. **2022**, 19, 056001
- 355 Rotational Kirigami Tessellation Metasurface for Tunable Chirality. 2101706
- 354 An optimization-based methodology to design waveguides with metamaterial walls.
- 353 Lagrangian formulation to investigate the effect of coupling on resonant microstrip transmission line. 1-13 0
- 352 Stabilization of light bullets in nonlinear metamaterial waveguides. **2022**, 105, 0
- 351 Optimization of plotter printing for sub-terahertz metallic metasurfaces fabrication on ultra-thin substrate. **2022**, 32, 055002 1
- 350 Three cases of discontinuous refractive index in metamaterial study.. **2022**, 12, 3558 0
- 349 Broadband stop filters for THz waves using H-shaped metamaterials with dual electronic-plasmonic functionality. **2022**, 61, SD1007 2
- 348 Double-layered transformation cavities: Crossover between local and global transformations. **2022**, 105,
- 347 Dual Band Electrically Small Complementary Double Negative Structure Loaded Metamaterial Inspired Circular Microstrip Patch Antenna for WLAN Applications. **2022**, 12, 3035
- 346 Soliton-like surface waves propagating along the interface between a metamaterial and an antiferromagnet. **2022**, 131, 105302
- 345 Resonant absorption of electromagnetic waves by an induced inhomogeneity in a liquid metamaterial. **2022**, 39, 1307
- 344 Terahertz Metastructures for Noninvasive Biomedical Sensing and Characterization in Future Health Care [Bioelectromagnetics]. **2022**, 64, 60-70 2
- 343 Ferroelectric composite artificially-structured functional material: multifield control for tunable functional devices. **2022**, 55, 303002 0
- 342 Backward- and forward-wave soliton coexistence due to second-neighbor coupling in a left-handed transmission line. 1 0

- 341 Multi-functional thermal-mechanical anisotropic metasurface with shape memory alloy actuators. **2022**, 216, 110569 1
- 340 Calculation of Transmission Characteristics of Shielded Microstrip Lines Filled with Anisotropic Left-Handed and Right-Handed Materials. **2021**, 16, 1610-1617
- 339 Dual Band Microstrip Patch Antenna and its Gain Enhancement for X Band and Ku Band Application Using Metamaterial. **2021**,
- 338 Manipulations and Applications of Electromagnetic Waves Based on Anisotropic Coding Metasurfaces. **2021**,
- 337 Patch Antenna Gain Improvement with Metamaterial Structures. **2021**,
- 336 Wide Band Gain Enhancement of a mm Wave Conical Horn Antenna with a Metamaterial Lens. **2021**,
- 335 RCS reduction by 1-bit coding metasurface. **2021**,
- 334 Polarization-Insensitive Metasurface based Switchable Absorber/ Risorber. **2021**,
- 333 A mechanical metamaterial with reprogrammable logical functions.. **2021**, 12, 7234 7
- 332 Design and Simulation of a Water based Polarization-insensitive and Wide incidence Dielectric Metasurface Absorber for X-, Ku- and K-band. **2021**,
- 331 Design and Analysis of a Compact CSRR Loaded Defected Ground Plane Antenna for Ultra-wideband Applications. **2021**,
- 330 An AFSS-based Multipattern Reconfigurable 5G Antenna. **2021**,
- 329 Design and Simulation of Metamaterial based Patch Array Antenna with Lens. **2021**,
- 328 An Extended k-Surface Framework for Electromagnetic Fields in Artificial Media.. **2021**, 14, 1 1
- 327 Four-Channel Kaleidoscopic Metasurfaces Enabled by a Single-Layered Single-Cell Quad-Band Meta-Atom. **2022**, 5, 2100301 1
- 326 Vector-Field Visualization of the Total Reflection of the EM Wave by an SRR Structure at the Magnetic Resonance. **2022**, 15, 111 0
- 325 Overview on metamaterial: History, types and applications. **2021**, 2
- 324 Polarization- and Incident-Angle Independent Negative-Permittivity Metamaterial. **2021**,

323	Metamaterials-Based Photoelectric Conversion: From Microwave to Optical Range. <b>2022</b> , 16, 2100458	1
322	A simple configuration of beam steering substrate integrated waveguide aperture antenna loaded with metamaterials. <b>2022</b> , 64, 744-749	0
321	Single / Dual Broad Band Reflective Type Linear Cross Polarization Converters With Slotted Meander Lines for X / Ku / K Band Applications. <b>2021</b> ,	
320	Implementation of Resonant Electric Based Metamaterials for Electromagnetic Wave Manipulation at Microwave Frequencies.. <b>2021</b> , 21,	0
319	Novel 5-bit Phase Shifter using CRLH Transmission Line with Interdigital Capacitor and Shorted Stubs. <b>2021</b> ,	
318	Double E-Shaped Reflection Type Polarization Converter For Radar Cross Section Reduction. <b>2021</b> ,	0
317	Design and Simulation of a Polarization-Independent Switchable Metasurface Resorber/Absorber. <b>2021</b> ,	
316	On the Sign of the Refractive Index for Metamaterials. <b>2021</b> , 64, 1560-1565	
315	Material-structure integrated design for ultra-broadband all-dielectric metamaterial absorber.. <b>2021</b> ,	2
314	Low-Cost CSRR Based Sensor for Determination of Dielectric Constant of Liquid Samples. <b>2021</b> , 21, 27450-27457	
313	A Dual-Band High-Gain Subwavelength Cavity Antenna with Artificial Magnetic Conductor Metamaterial Microstructures.. <b>2021</b> , 13,	1
312	Design and Optimization of All-Dielectric Fluorescence Enhancing Metasurfaces: Towards Advanced Metasurface-Assisted Optodes. <b>2022</b> , 12, 264	1
311	Photonic Dirac nodal-line semimetals realized by a hypercrystal. <b>2022</b> , 4,	0
310	Plasmonic Biosensors: Review. <b>2022</b> , 11, 621	3
309	Ultra-Narrowband Anisotropic Perfect Absorber Based on $\epsilon$ MoO Metamaterials in the Visible Light Region.. <b>2022</b> , 12,	4
308	I-Shaped Metamaterial Using SRR for Multi-Band Wireless Communication. <b>2022</b> , 12, 559	2
307	Cross-polar Reflective Linear Polarization Rotator Using Anisotropic Ultrathin Metamaterial. <b>2022</b> , 169121	0
306	Broadband and wide-angle solar absorber for the visible and near-infrared frequencies. <b>2022</b> , 238, 78-83	4

305	Novel materials in magnetic resonance imaging: high permittivity ceramics, metamaterials, metasurfaces and artificial dielectrics.. <b>2022</b> , 1	1
304	Metamaterials for Antenna Applications. <b>2022</b> , 1-47	
303	Design of High-Gain Antenna Incorporated with Left-Handed Material for Satellite Applications. <b>2022</b> , 209-216	
302	Designing and analysis of ultrathin metamaterial absorber for W band biomedical sensing application. <b>2022</b> , 1-1	2
301	Reconfigurable intelligent surface-aided wireless communications: An overview. <b>2022</b> , 3, 33-63	0
300	High-Sensitivity Multiband Detection Based on the Local Enhancement Effect of an Electric Field at Terahertz Frequency. <b>2022</b> , 2022, 1-13	1
299	Metamaterial sensor based on rectangular enclosed adjacent triple circle split ring resonator with good quality factor for microwave sensing application.. <b>2022</b> , 12, 6792	2
298	eGraphite based metamaterial for high frequency applications. <b>2022</b> , 169410	
297	Design of three-dimensional isotropic negative-refractive-index metamaterials with wideband response based on an effective-medium approach. <b>2022</b> , 128, 1	
296	A Review on Metamaterial Absorbers: Microwave to Optical. <b>2022</b> , 10,	1
295	Intelligent metasurfaces: control, communication and computing. <b>2022</b> , 2,	22
294	Dual-band selective circular dichroism in mid-infrared chiral metasurfaces.	4
293	Ultra-broadband nanostructured metamaterial absorber based on stacked square-layers of TiN/TiO <sub>2</sub>	6
292	Interfacial wave between acoustic media with Willis coupling. <b>2022</b> , 102922	0
291	Multifunctional analysis and verification of lightning-type electromagnetic metasurfaces. <b>2022</b> , 30, 17008	2
290	Design of a wideband metamaterial absorber for optical wavelength applications based on the quantum-inspired Hadamard matrix. <b>2022</b> , 12, 2102	1
289	Chiral metasurface design with highly efficient and controllable asymmetric transmission and perfect polarization conversion of linearly polarized electromagnetic waves in the THz range. <b>2022</b> , 55, 295303	1
288	The circularly bent split ring resonator with a high effective medium ratio for multi frequency satellite band applications. <b>2022</b> , 169464	0

287	Modified Coptic Cross Shaped Split-Ring Resonator Based Negative Permittivity Metamaterial for Quad Band Satellite Applications with High Effective Medium Ratio.. <b>2022</b> , 15,	1
286	Broadband mechanical metamaterial absorber enabled by fused filament fabrication 3D printing. <b>2022</b> , 55, 102856	0
285	Complementary Split Square Ring Resonator-Based Double Negative Metamaterial for C, X, and Ku bands Satellite Applications. <b>2021</b> ,	
284	Patch Antenna Gain Improvement with Metamaterials. <b>2021</b> ,	
283	Design and PCR calculation of Triangular Ring Resonator (TRR) metamaterial for wide range of applications. <b>2021</b> ,	0
282	Autonomous Wireless Sensors via Graded Elastic Metamaterials. <b>2022</b> , 55-66	
281	All-Dielectric Nonlinear Meta-Optics. <b>2022</b> , 89-124	
280	Evaluation of ceiling fan dust as an indicator of indoor PCBs pollution in selected cities of Punjab, Pakistan: implication on human health. <b>2022</b> , 15, 1	1
279	Learning the Physics of All-Dielectric Metamaterials with Deep Lorentz Neural Networks. 2200097	2
278	Graphene-based metasurface solar absorber design for the visible and near-infrared region with behavior prediction using Polynomial Regression. <b>2022</b> , 169298	4
277	Return loss & Gain Enhancement in RMPA by Rectangle cut Shaped Meta Material Structure Using at 2.097GHz. <b>2014</b> , 2, 32-35	0
276	Compact Patch Antenna Parameters Integrating Using Left-Handed Meta Material at 2.41GHz. <b>2014</b> , 2, 21-24	1
275	Substrate Height and Dielectric Constant Dependent Performance of Rectangular Micro Strip Patch Antenna. <b>2014</b> , 2, 36-39	
274	Analysis and Design of Rectangular Resonant Microstrip Patch Antenna Loaded with SLOTTED RHOMBUS Shaped Left-Handed Inspired Metamaterial Structure. <b>2015</b> , 3, 27-30	
273	Potential Parameters Enhancement of Compact Microstrip Antenna by Using SLOTTED SRR Shaped Metamaterial Structure. <b>2015</b> , 3, 23-26	0
272	Metamaterial CSRR Loaded T-Junction Phase Shifting Power Divider Operating at 2.4 GHz. <b>2022</b> , 339-345	
271	Band structure of a rotating helical phononic crystal. <b>2022</b> , 105,	
270	Dual square split ring enclosed spiral shaped hybrid metamaterial resonator with size miniaturisation for microwave wireless applications.. <b>2022</b> , 12, 8028	0

- 269 Acoustic Beam Splitting and Cloaking Based on a Compressibility-Near-Zero Medium. **2022**, 17, 0
- 268 A New Inverted-L-Shaped EMR Obeying Meta-Atom for C-Band Applications. **2022**,
- 267 Analysis of Conformal and Metamaterial Based Microstrip Bandpass Filter for Wi-MAX, WBAN and ISM Band Applications. **2022**, 67, 443-455
- 266 Performance Analysis of Metamaterial-Inspired Structure Loaded Antennas for Narrow Range Wireless Communication. **2022**, 2022, 1-17 3
- 265 Renovation of dual-band to quad-band polarization-insensitive and wide incident angle perfect absorber based on the extra graphene layer. **2022**, 207261 0
- 264 Microwave Liquid Crystal Technology. **2022**, 265-414
- 263 Broadband metamaterial absorber in the visible region using a petal-shaped resonator for solar cell applications. **2022**, 142, 115327 1
- 262 Decoupling Analysis of Structural Parameters in the Robust Design of Metamaterial Absorber. **2022**, 1-10
- 261 A Novel Pixelated Approach for Synthesis of Wideband Metamaterial Cross Polarizer Using Wind-Driven Optimization Algorithm. **2022**, 651-659
- 260 Selective mode excitations and spontaneous emission engineering in quantum emitter-photonic structure coupled systems. **2022**, 30, 21103
- 259 Developing momentum in vanishing index photonics. **2022**, 11,
- 258 A Complementary Split-Ring Resonator (CSRR)-Based 2D Displacement Sensor. **2022**, 14, 1116 0
- 257 Introduction and Motivation. **2022**, 1-42
- 256 Design of metamaterial leaky-wave antenna with continuous beam scanning capability for sensing applications.
- 255 Polarization Independent Metamaterial Absorber with Anti-Reflection Coating Nanoarchitectonics for Visible and Infrared Window Applications. **2022**, 15, 3733 1
- 254 Metamaterial Eigenmodes beyond Homogenization. 0
- 253 Metamaterial sensor based on reflected mirror rectangular split ring resonator for the application of microwave sensing. **2022**, 198, 111416 0
- 252 Overview of Metamaterials-Integrated Antennas for Beam Manipulation Applications: The Two Decades of Progress. **2022**, 1-1 0



- 251 Development of Resistive-Ink Based Planar and Conformal Metasurfaces for RCS Reduction. **2022**, 10, 61472-61483
- 250 Overview of Approaches for Compensating Inherent Metamaterials Losses. **2022**, 1-1
- 249 Dynamically Tunable Electromagnetic Stealth Metasurface. **2022**,
- 248 A Theory of Signal Conversion in the Radio Optics of Metamaterials. **2022**, 86, 579-583
- 247 Six band terahertz absorption in metamaterial for designing optical filters, and sensors. **2022**, 54, ○
- 246 Tunable liquid crystal metasurface with polarization selection characteristic.
- 245 Optical Magnetism-Induced Dual Anisotropy in Dielectric Nanoantennas. 2200303
- 244 Development of Double C-Shaped Left-Handed Metamaterial for Dual-Band Wi-Fi and Satellite Communication Application with High Effective Medium Ratio and Wide Bandwidth. **2022**, 12, 836 ○
- 243 Design and Analysis of Band Stop Filter Using Hexagonal Split Ring Resonator for Wireless Application. **2023**, 181-188
- 242 Wave attenuation study on a wide-band seismic metasurface using capped pillars. **2022**, 350, 237-254
- 241 Ultra-broadband, wide-angle plus-shape slotted metamaterial solar absorber design with absorption forecasting using machine learning. **2022**, 12, 3
- 240 The Heterogeneous Multiscale Method for Dispersive Maxwell Systems. **2022**, 20, 769-797
- 239 Electromagnetic energy density in hyperbolic metamaterials. **2022**, 12,
- 238 Nonlinear waves propagating in a hollow metamaterial waveguide. **2022**, 12, 065014
- 237 Sensitivity Enhancement and Probiotic Detection of Microfluidic Chips Based on Terahertz Radiation Combined with Metamaterial Technology. **2022**, 13, 904
- 236 Demonstration of dipole-induced transparency using mirrored split-ring resonator metasurface for microwave applications.
- 235 Perfect selective metamaterial absorber with thin-film of GaAs layer in the visible region for solar cell applications. **2022**, 54, ○
- 234 Analysis and design of double negative metamaterial offering seven operating bands with minimum frequency ratio. 1-17

233	High-gain UWB antenna with optimized metamaterial lens layer via particle swarm optimization algorithm for satellite communication applications.	
232	Terahertz Metamaterial Sensor for Sensitive Detection of Citrate Salt Solutions. <b>2022</b> , 12, 408	5
231	Experimental demonstration of thermal cloaking metastructures designed by topology optimization. <b>2022</b> , 194, 123093	0
230	Flexible and biocompatible poly (vinyl alcohol)/multi-walled carbon nanotubes hydrogels with epsilon-near-zero properties. <b>2022</b> , 131, 91-99	0
229	Impact of Free Energy of Polymers on Polymorphism of Polymer-Grafted Nanoparticles.	
228	Design of Broadband Antenna Based on Super Surface Technology. <b>2022</b> , 10, 47-58	
227	Metamaterial Absorbers for IoT Applications. <b>2022</b> ,	
226	Experimental Verification For Magnon and Photon Generation using YIG-Loaded Planar Resonator. <b>2022</b> ,	
225	Optical Sensing by Metamaterials and Metasurfaces: From Physics to Biomolecule Detection. 2200500	1
224	A Dual-Band High-Sensitivity THz Metamaterial Sensor Based on Split Metal Stacking Ring. <b>2022</b> , 12, 471	1
223	Quantitative exploration of the absorber behavior of metal-insulator-metal metamaterials within terahertz via an asymmetric peak model. <b>2022</b> , 137,	
222	Design and Characterization of Wideband Terahertz Metamaterial Stop-Band Filter. <b>2022</b> , 13, 1034	
221	Split-ring resonator coupling-induced tunable acoustic second-order topological insulators. <b>2022</b> , 106,	0
220	The Dawn of Metadevices: From Contemporary Designs to Exotic Applications. <b>2022</b> , 2022, 1-24	3
219	Broadband Sound Insulation and Dual Equivalent Negative Properties of Acoustic Metamaterial with Distributed Piezoelectric Resonators. <b>2022</b> , 15, 4907	1
218	Topological sensor on a silicon chip. <b>2022</b> , 121, 011101	9
217	Absorption-based ultra-sensitive RI sensor based on the flower-shaped graphene resonator for early detection of cancer. <b>2022</b> , 128775	0
216	Well-Ordered Nanonetwork Metamaterials from Block Copolymer Templated Syntheses.	2

- 215 The temperature control polarization converter to switch transmission and reflection modes simply. **2022**,
- 214 Wooden Mechanical Metamaterials: towards tunable wood plates. **2022**, 110952 ○
- 213 Multitasking Device Regulated by the Gravity Field: Broadband Anapole-Excited Absorber and Linear Polarization Converter. 2200175 ○
- 212 Controlling the dispersion of metamaterials in three dimensions. **2022**, 478,
- 211 Metamaterials: From fundamental physics to intelligent design. ○
- 210 Resonant absorption in an inhomogeneous disordered metamaterial: First-principles simulation. **2022**, 106,
- 209 Mutual coupling reduction between the cylindrical dielectric resonator antenna using split ring resonator based structure. **2022**, 154, 154305 ○
- 208 Low-loss percolative epsilon-negative composites derived from the ultra-low percolation threshold.
- 207 Reflective Terahertz Metasurfaces Based on Non-Volatile Phase Change Material for Switchable Manipulation. **2022**, 9, 508 1
- 206 Novel properties of wave propagation in biaxially anisotropic left-handed materials. **2004**, 516, 335-356
- 205 Fast Electromagnetic Waves on Metamaterial Boundary: Modeling of Gain. **2021**, 145-150 1
- 204 Design and realization of frequency and mode electronically reconfigurable metamaterial stopband filter for wireless communication systems. **2022**, 42, 266-277 ○
- 203 Design and Implementation of a Compact Four-Band Bandpass Filter on Metamaterial. **2022**,
- 202 Quasi-dark resonances with antiferromagnetic order in silicon metasurfaces. **2022**, 12, 1 ○
- 201 Ultra-Thin/Wide-Band Polarization Conversion Metasurface and Its Applications in Anomalous Reflection and RCS Reduction. **2022**, 12, 7696 ○
- 200 Study on Miniaturization of Antenna Using Metamaterials.
- 199 A 2040 GHz High Gain Antipodal Tapered Slot Antenna with Metamaterial Loaded on Isosceles Trapezoid-Shaped Dielectric Lens.
- 198 Investigation of Frequency-Selective Surfaces Based on Graphite in the Absorption of Electromagnetic Waves. ○

- 197 Forward and Backward Multibeam Scanning Controlled by a Holographic Acoustic Metasurface. **2022**, 18, 0
- 196 High-Performance Ultra-Broadband Absorber for Polarized Long-Wavelength Infrared Light Trapping. **2022**, 12, 1194 0
- 195 Enhanced radiation characteristics of regular dodecagon split ring resonator (D-SRR)-based microstrip patch antenna employing dielectric superstrate for THz applications. **2022**, 69,
- 194 Symmetric Engineered High Polarization-Insensitive Double Negative Metamaterial Reflector for Gain and Directivity Enhancement of Sub-6 GHz 5G Antenna. **2022**, 15, 5676 1
- 193 Single and coupled Helmholtz resonators for low frequency sound manipulation. **2022**, 132, 064505 2
- 192 Meta-Antennas: From Academic Research to Industrial Applications of Mobile Terminals [Industry Activities]. **2022**, 64, 167-170
- 191 Active and tunable nanophotonic metamaterials. **2022**, 11, 3769-3803 2
- 190 A Dual-Band Guided Laser Absorber Based on Plasmonic Resonance and Fabry-Pérot Resonance. **2022**, 12, 2751
- 189 A metasurface composed of orifice-type unit cells for the redirection of acoustic waves. **2022**, 12,
- 188 Pressure induced modulations in the optoelectronic properties of Hg<sub>2</sub>Cl<sub>2</sub> compound: Insights from the first-principle calculations. **2022**, 284, 115903
- 187 Target driven design of electromagnetic metamaterial for dual-band Wi-Fi energy harvester. **2022**, 345, 113815
- 186 Double negative circular shaped inductively coupled metamaterial power splitter for the C-, X band applications. **2022**, 267, 169702 0
- 185 Polarization insensitive metamaterial based electromagnetic multiband absorber in the long-wave infrared (LWIR) region. **2022**, 156, 108511
- 184 All-dielectric magneto-photonic metasurfaces. **2022**, 132, 100902 1
- 183 Metasurfaces for Sensing Applications: Gas, Bio and Chemical. **2022**, 22, 6896 5
- 182 Transmission Properties of Electromagnetic Waves in Magneto-Electro-Elastic Piezoelectric Electromagnetic Metamaterials. **2022**, 14, 1942 0
- 181 Simulation results for the PV cell based on the photonic crystal. **2022**, 270, 169966 0
- 180 Design and experimental measurements of single/dual mode tunable metasurfaces. **2022**, 133, 112932 0

179	Reconfigurable Half Mode SIW Band-Pass Filter Based on Circular C-SRR Using Varicap Diodes for WLAN Applications. <b>2022,</b>	0
178	Metamaterial-FSS for the Design of High-Performance Radome. <b>2022,</b> 1-61	0
177	Optical properties of obliquely deposited silver on a periodically structured surface. <b>2022,</b>	0
176	Micromachined Terahertz Metamaterials. <b>2022,</b> 243-252	0
175	Reverse design of metamaterial absorbers based on an equivalent circuit. <b>2022,</b> 24, 20390-20399	0
174	Modeling of a Negative Refractive Index Metamaterial Unit-Cell and Array for Aircraft Surveillance Applications. <b>2022,</b> 10, 99790-99812	1
173	An Ultra-Thin Octad-Band THz Metamaterial Absorber with Polarization-Insensitivity for Sensor Applications. <b>2022,</b> 19-40	0
172	Vibration Resonance and Dynamic Characteristics of Pillared Phononic Crystals and Acoustic Metamaterials. <b>2022,</b>	0
171	Bagley Polygon Power Divider using Simplified Composite Right/Left Handed Transmission Line. <b>2022,</b>	0
170	Multi-bandgaps metamaterial plate design using complex mass-beam resonator. <b>2022,</b> 107742	2
169	A wide angle polarization insensitive multi-band metamaterial absorber for L, C, S and X band applications.	0
168	Silver mirror for enhancing the magnetic plasmon resonance and sensing performance in plasmonic metasurface. <b>2022,</b> 15, 102003	0
167	Broadband continuous supersymmetric transformation: a new paradigm for transformation optics. <b>2022,</b> 2,	0
166	Thermally induced phase transforming cellular lattice driven by bimetal beams.	0
165	Co-planar waveguide ferromagnetic resonance spectroscopy of cobalt/platinum superlattice metamaterials.	0
164	Pulse-Driven Self-Reconfigurable Meta-Antennas.	0
163	Frequency-Variation Sensors. <b>2022,</b> 65-118	0
162	Electromagnetic composites: From effective medium theories to metamaterials. <b>2022,</b> 132, 101101	1

161	Body-Centered Double-Square Split-Ring Enclosed Nested Meander-Line-Shaped Metamaterial-Loaded Microstrip-Based Resonator for Sensing Applications. <b>2022</b> , 15, 6186	0
160	Potential protective effects of Thyme ( <i>Thymus vulgaris</i> ) essential oil on growth, hematology, immune responses, and antioxidant status of <i>Oncorhynchus mykiss</i> exposed to Malathion. <b>2022</b> ,	0
159	Design of a 2-Bit wide-angle coding metasurface for bistatic RCS reduction. 9,	0
158	Nickel-Based High-Bandwidth Nanostructured Metamaterial Absorber for Visible and Infrared Spectrum. <b>2022</b> , 12, 3356	3
157	Flexible Magnetic Metasurface with Defect Cavity for Wireless Power Transfer System. <b>2022</b> , 15, 6583	0
156	Single/Dual/Triple Broadband Metasurface Based Polarisation Converter with High Angular Stability for Terahertz Applications. <b>2022</b> , 13, 1547	1
155	Resonant Toroidal metasurface as a platform for thinfilm and biomaterial sensing.	0
154	Wideband polarization-insensitive metamaterial perfect absorber based on bilayer graphene metasurface. <b>2022</b> , 54,	0
153	Analysis of quad-band polarization- and incident-angle independent low profile metamaterial absorber. <b>2022</b> ,	0
152	Analysis and Design of Microstrip Patch Antenna with Two Different Metamaterial Unit Cells. <b>2023</b> , 577-588	0
151	AC electrical properties of CNF/PTFE composite. <b>2022</b> ,	0
150	A new design of a tunable broadband ultra-thin THz metamaterial absorber basing on vanadium dioxide.	0
149	Theory for Negative Thermal Transport: Complex Thermal Conductivity. <b>2023</b> , 263-275	0
148	Metasurface Terahertz Perfect Absorber with Strong Multi-Frequency Selectivity.	0
147	Molecular Plasmonics with Metamaterials.	3
146	Propagation of adjustable anomalous hollow Gaussian beams in the cascade of left-handed and right-handed media. <b>2022</b> , 270, 170024	0
145	Closed-form solutions for attenuation peaks and band boundaries of general monocoupled systems. <b>2022</b> , 541, 117318	1
144	Scientific Replicability: Two Cases of Study in Laser Physics. <b>2022</b> , 12, 510-522	0

143	Metamaterial Lens for Nondestructive Evaluation of Composites. <b>2022</b> , 1-28	0
142	Switchable Terahertz Metasurfaces Based on Patterned Vanadium Dioxide and Graphene. <b>2022</b> , 17, 663-673	0
141	Modern Advances in Magnetic Materials of Wireless Power Transfer Systems: A Review and New Perspectives. <b>2022</b> , 12, 3662	1
140	Simple design of metamaterial sensor for biomedical sensing.	0
139	An Application-Based Study on Electromagnetic Absorber Using Metamaterial.	0
138	Transmittance properties of one-dimensional metamaterial nanocomposite photonic crystal in GHz range. <b>2022</b> , 12,	0
137	Focusing of Optical Radiation by Metal Photonic Crystals. <b>2022</b> , 86, 1139-1143	0
136	Polarization-insensitive broadband perfect metamaterial absorber in the optical region. <b>2022</b> , 1263, 012016	0
135	Investigation of reflection bands of 1D annular photonic crystal containing double negative index material and non-magnetized plasma. <b>2022</b> , 62,	0
134	Design and fabrication of reconfigurable, broadband and high gain complementary split-ring resonator microstrip-based radiating structure for 5G and WiMAX applications. 1-31	1
133	Highly Sensitive Dual-Band Terahertz Metamaterial Absorber for Biomedical Applications: Simulation and Experiment. <b>2022</b> , 7, 38094-38104	0
132	Far-field ultrasonic imaging using hyperlenses. <b>2022</b> , 12,	0
131	Gradient Index Metasurface Lens for Microwave Imaging. <b>2022</b> , 22, 8319	0
130	Towards Integrated Metadevices for Terahertz Silicon Plasmonics: A Review of Recent Progress. <b>2022</b> , 100030	0
129	Design of Wideband Metamaterial Absorber for X-Band Application. <b>2023</b> , 343-350	0
128	Improved circuit model for plasmonic resonance of single split-ring resonators. <b>2022</b> , 12, 115304	0
127	Vectorial metasurface holography. <b>2022</b> , 9, 011311	4
126	Contemporary Material Modeling in EMC Applications. <b>2008</b> , 199-235	0

125	A Miniaturized Wireless Passive Frequency Selective Surface Sensor for High Temperature Applications. <b>2022</b> , 1-1	0
124	Bi-channel Switchable Broadband Terahertz Metamaterial Absorber. <b>2022</b> , 1-1	1
123	A THz metasurface sensor based on carbon nanotubes film. <b>2022</b> ,	0
122	Review of foundational concepts and emerging directions in metamaterial research: design, phenomena, and applications.	0
121	Review on Panoramic Imaging and Its Applications in Scene Understanding. <b>2022</b> , 1-1	3
120	Novel Metamaterial Lined Probe for High Precision Planar Near Field Measurements. <b>2022</b> , 1-1	0
119	Multiscale topology optimization of electromagnetic metamaterials using a high-contrast homogenization method. <b>2023</b> , 403, 115728	0
118	A Design of Thin-Layer Frequency Selective Surface with Wideband Tunability and Incidence Stability. <b>2022</b> ,	0
117	On the Performance of a Composite Right Left Hand Electromagnetic Bandgap Structure. <b>2022</b> ,	0
116	Design and Analysis of Metamaterial Waveguide Antenna for Broadband Applications. <b>2023</b> , 417-423	0
115	Reconfigurable broadband metasurfaces with nearly perfect absorption and high efficiency polarization conversion in THz range. <b>2022</b> , 12,	0
114	A critical review on wireless power transfer systems using metamaterials. <b>2022</b> , 60, 587-613	0
113	Cone-shaped resonator-based highly efficient broadband polarization- independent metamaterial absorber for solar energy harvesting.	0
112	Tailoring Structure-Borne Sound through Bandgap Engineering in Phononic Crystals and Metamaterials: A Comprehensive Review. 2206309	5
111	Metasurface-Based Optical Analog Computing: From Fundamentals to Applications. <b>2022</b> , 2022,	0
110	Large-area and wide-angle perfect absorbers based on array of nanospheres. <b>2023</b> ,	0
109	High electromagnetic absorption ratio in TiB <sub>2</sub> /AZ80 composite. <b>2023</b> , 37, 101447	0
108	On-chip SRR and CSRR for millimeter-wave integrated systems: Review and applications. <b>2023</b> , 131, 105664	0



107	Temperature-Adaptive reconfigurable chiral metamaterial for tailoring circular dichroism based on shape memory alloy. <b>2023</b> , 225, 111496	0
106	Metamaterials simulation for thermal diffusers. <b>2022</b> , 9, 19	0
105	Method of Analysing a Metamaterial Unit Cell with Square and Hexagonal Shaped Waveguide Setup for Accuracy. <b>2022</b> ,	0
104	Compact Metamaterial Antenna for WLAN Applications. <b>2022</b> ,	0
103	One dimensional photonic crystal structure comprising a hyperbolic metamaterial for optical filtering purpose. <b>2023</b> , 55,	0
102	Electromagnetic analogs of quantum mechanical tunneling. <b>2022</b> , 132, 200901	0
101	A numerical investigation study on tunable graphene-squared pixel array-based infrared polarizer. <b>2023</b> , 129,	0
100	Applications of Metamaterials and Metasurfaces.	1
99	Shielding Materials. <b>2022</b> , 33-60	0
98	Study on the optically tunable negative refractive terahertz metamaterials. <b>2022</b> ,	0
97	Nanoengineered nickel-based ultrathin metamaterial absorber for the visible and short-infrared spectrum. <b>2023</b> , 13, 28	1
96	Application of machine-learning techniques for characteristic analysis of refractory materials. <b>2022</b> ,	0
95	Resonance Control of VO <sub>2</sub> Thin-Film-Based THz Double-Split Rectangular Metamaterial According to Aspect Ratio. <b>2022</b> , 9, 966	0
94	Plasmonic Nanostructures for Broadband Solar Absorption Based on Synergistic Effect of Multiple Absorption Mechanisms. <b>2022</b> , 12, 4456	0
93	Virtual Metasurfaces: Reshaping Electromagnetic Waves in Distance.	0
92	Birefringence of Single Polarization for Flexural-Wave Metamaterials. <b>2022</b> , 18,	0
91	Deep-learning enabled modeling tool Meta-Magus for metadvice optimization and design. <b>2023</b> ,	0
90	Improved biomolecular detection sensitivity based on concave metamaterial structure. <b>2023</b> , 128, 104524	0

- 89 ENZ metamaterial for X-band in the microwave regime. **2022**, ○
- 88 Graphene-Based Tunable Metamaterial-FSS RAS. **2022**, 109-147 ○
- 87 Metamaterial Lens for Nondestructive Evaluation of Composites. **2022**, 327-354 ○
- 86 Tunable plasmonic terahertz filter based on a suspended monolayer graphene on a ring resonator. **2023**, 55, ○
- 85 Elastodynamical resonances and cloaking of negative material structures beyond quasistatic approximation. ○
- 84 A Compact Passive Quad-Band Negative Group Delay Circuit With Stepped Impedance Resonator and Defected Microstrip Structure. **2023**, 58, ○
- 83 Transmission properties in Fibonacci quasi-periodic photonic crystal containing negative-zero-positive index metamaterials. ○
- 82 Reconfigurable meta-devices platform based on stimuli-responsive materials. **2023**, ○
- 81 A fish-skeleton-like metastructure isolator for low-frequency vibration isolation. **2023**, 203, 109224 ○
- 80 Design for the reconfigurable polarization rotator by inhibiting Fano resonance with graphene-metal grating structures. 1-29 ○
- 79 Metamaterial Applications in Modern Antennas. ○
- 78 Mechanically tunable dual-band metamaterial absorber at ultra-high frequency. **2022**, 93-100 ○
- 77 Nonreciprocal negative refraction in a dense hot atomic medium. ○
- 76 Broadband Polarization-Reconfigurable Converter Using Active Metasurfaces. **2023**, 1-1 ○
- 75 Emerging topics in nanophononics and elastic, acoustic, and mechanical metamaterials: an overview. **2023**, 1 ○
- 74 Quantum dispersion properties of eigenmodes in semiconductor nanotubes with dielectric filling in dc magnetic field. **2023**, 49, 3-14 ○
- 73 Recent Advances in Reconfigurable Metasurfaces: Principle and Applications. **2023**, 13, 534 ○
- 72 Lumped-Element models of THz Metasurfaces Based on Split-ring Resonators and Their Complementary Form. ○

- 71 Magnetic plasmons in plasmonic nanostructures: An overview. **2023**, 133, 030902 ○
- 70 Modified multipoles in photonics. **2023**, 107, ○
- 69 Geometric-phase metalens to be used for tunable optical tweezers in microfluidics. 1-11 ○
- 68 Review of Broadband Metamaterial Absorbers: From Principles, Design Strategies, and Tunable Properties to Functional Applications. 2213818 ○
- 67 High-Sensitivity Sensing in All-Dielectric Metasurface Driven by Quasi-Bound States in the Continuum. **2023**, 13, 505 ○
- 66 Investigation of High-Power Ring-Bar Traveling Wave Tube With Metamaterial Absorber. **2023**, 1-7 ○
- 65 Novel Uniplanar Electromagnetic Bandgap Structure for High Gain Antenna and Filter Designs. **2022**, ○
- 64 Broad Band Polarization Insensitive Metamaterial Absorber for K Band Application. **2022**, ○
- 63 ??????????????????????????????. **2023**, 52, 20220377 ○
- 62 A dual-band, polarization-insensitive, wide-angle metasurface array for electromagnetic energy harvesting and wireless power transfer. **2023**, 46, 106261 ○
- 61 Tunable metasurface for independent controlling radar stealth properties via geometric and propagation phase modulation. **2023**, 31, 11760 ○
- 60 Simulation of a Self-Referenced Meta-Grating Sensor With High Figure of Merit in NIR Communication Window. **2023**, 23, 8344-8351 ○
- 59 Dual-band detection based on metamaterial sensor at terahertz frequency. ○
- 58 Two-phase topology optimization for metamaterials with negative Poisson's ratio. **2023**, 311, 116800 ○
- 57 A review: Advancement in metamaterial based RF and microwave absorbers. **2023**, 354, 114283 ○
- 56 Design and analysis of wavelength tunable metamaterial reflector. **2023**, 10, 100366 ○
- 55 Nanoscale Characterization of Individual Three-Dimensional Split Ring Resonator Systems. **2023**, 1, 607-614 1
- 54 Design and modelling of wide incidence angle double-band metamaterial absorbers for applications in the X frequency bands. **2022**, ○

- 53 Design and construct full invisible band metamaterial-based coating with layer-by-layer structure in the microwave range from 8 to 10 GHz. **2023**, 56, 175401 ○
- 52 Pulse-driven self-reconfigurable meta-antennas. **2023**, 14, ○
- 51 Synthetic Axion Response with Space-Time Crystals. **2023**, 19, ○
- 50 Wideband 5G Antenna Gain Enhancement Using a Compact Single-Layer Millimeter Wave Metamaterial Lens. **2023**, 11, 14928-14942 ○
- 49 Cone-shaped resonator-based highly efficient broadband metamaterial absorber. ○
- 48 Metamaterial Based Anisotropic Metasurface for Broadband Cross Polarization Conversion. **2022**, ○
- 47 Terahertz Metasurfaces, Metawaveguides, and Applications. **2023**, 127-156 ○
- 46 A double negative (DNG) metamaterial based on parallel double-E square split resonators for multi-band applications: Simulation and experiment. **2023**, 46, 106302 ○
- 45 Metasuperficies en el diseo de antenas: una introduccin. **2022**, 32, 145-170 ○
- 44 A new class of spatial harmonic magnetrons with potentials for CW and sub-THz operation. 1-11 ○
- 43 Perspective on Meta-Boundaries. ○
- 42 MTM-EBG Loaded Circular Patch Antenna for ISM Band Applications. **2022**, ○
- 41 A NRI-TL Metamaterial Based Dual-band Phase Shifter. **2022**, ○
- 40 Wave Propagation Properties of a One-Dimensional Photonic Crystal with Double Negative Metamaterial. **2023**, 407, ○
- 39 Maximizing electro-momentum coupling in generalized 2D Willis Metamaterials. **2023**, 101981 ○
- 38 The SHI irradiation induced transition to negative dielectric constant phase in K<sub>2</sub>Bi<sub>4</sub>Ti<sub>4</sub>WO<sub>18</sub>. 11, ○
- 37 Cold-Test Characterization of Metamaterial-Assisted Side Coupled Cavity. **2023**, 70, 1956-1961 ○
- 36 On the CSRR Loaded Microstrip Patch Antennas: A Class of Metamaterial-inspired Radiators. **2022**, ○

- 35 Light-Induced Diffraction Gratings on Liquid Metamaterial Metasurfaces. **2022**, 135, 808-812 ○
- 34 ??????????3D?????. **2023**, 66, 1283-1312 ○
- 33 Band reduplication of perfect metamaterial terahertz absorber with an added layer: cross symmetry concept. **2023**, 55, ○
- 32 Nondestructive Evaluation of Fiber-Reinforced Polymer Using Microwave Techniques: A Review. **2023**, 13, 590 ○
- 31 Negative refraction in multilayered metal-dielectric metamaterials with ellipse-like isofrequency surfaces. **2023**, 98, 045512 ○
- 30 Design of a metamaterial chipless RFID sensor tag for high temperature. **2023**, 13, 035218 ○
- 29 Design of a Metamaterial Chipless RFID Sensor Tag for High Temperature. **2022**, ○
- 28 Design of metasurface radome with large angle stability in Ku-band. **2023**, ○
- 27 A Focusing Meta-surface with High Transmittance and Low Profile for Millimeter-wave Lens Antennas. **2023**, ○
- 26 Deep neural network-aided design of terahertz bifunctional metasurface. **2023**, 47, 106333 ○
- 25 Three-band tunable metamaterial absorber based on varactor diode. **2022**, ○
- 24 Multiscale optimal design method of acoustic metamaterials using topology optimization. ○
- 23 High-performance terahertz refractive index sensor for cancer cells detection. **2023**, 46, ○
- 22 Plasmonic and metamaterial biosensors: a game-changer for virus detection. ○
- 21 Clustering analysis for elastodynamic homogenization. ○
- 20 Investigation of the microwave chiral metamaterial based on a uniform set of C-shaped conductive inclusions. **2023**, 26, 79-92 ○
- 19 Advances in Meta-Optics and Metasurfaces: Fundamentals and Applications. **2023**, 13, 1235 ○
- 18 Low-frequency noise mitigation and bandgap engineering using seismic metamaterials for terrestrial gravitational wave observatories. **2023**, 2023, ○

- 17 Fractal shape split ring resonator properties used in electrodynamics and communication systems. **2023**, ○
- 16 Terahertz Metasurface Modulators Based on Photosensitive Silicon. ○
- 15 Dynamical behavior and modulation instability of optical solitons in nonlinear directional couplers. ○
- 14 A Transparent broadband all-dielectric water-based metamaterial absorber based on laser cutting. **2023**, 98, 055516 ○
- 13 Designing with Simulation Results for Magnetically-/Electrically-tunable Dual-band and Triple-band Microwave Filters. **2023**, ○
- 12 Mode-splitting Phenomena and Enhanced Notch Depth in Microstrip Transmission Line Loaded with Two Similar Square-shaped Split Ring Resonators. **2023**, ○
- 11 Accurate inverse design for high-efficiency and broadband terahertz devices by co-simulation with genetic algorithms. ○
- 10 S-shaped Metamaterial Absorber for K-band Applications. **2023**, ○
- 9 Electromagnetic Metamaterials: From Classical to Quantum. **2023**, 1, 1-33 ○
- 8 Design of polarization conversion metasurface for arbitrary polarized wave. **2023**, 129529 ○
- 7 Reconfigurable Elastic Metamaterials: Engineering Dispersion with Beyond Nearest Neighbors. **2023**, 19, ○
- 6 Molecularly Resonant Metamaterials for Broad-Band Electromagnetic Stealth. ○
- 5 Metamaterials for Antenna Applications. **2022**, 555-600 ○
- 4 Metamaterial-FSS for the Design of High-Performance Radome. **2022**, 3-62 ○
- 3 A Low-Profile Programmable Metasurface Excited by Fabry-Perot Cavity for Beam Steering. **2022**, ○
- 2 Millimeter-Wave On-Chip Composite Right/Left-Handed Transmission Line Using Integrated Passive Device Process. **2022**, ○
- 1 Selective 3-dimensional patterning during phase separation of a continuously laminated layer. **2023**, 622, 128834 ○