Ilya Shadrivov

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246 9,197 4.3 6.3 L-index

#	Paper	IF	Citations
177	Wide-band negative permeability of nonlinear metamaterials. Scientific Reports, 2012, 2, 1-4	4.9	781
176	Nonlinear properties of left-handed metamaterials. <i>Physical Review Letters</i> , 2003 , 91, 037401	7.4	425
175	Colloquium: Nonlinear metamaterials. <i>Reviews of Modern Physics</i> , 2014 , 86, 1093-1123	40.5	274
174	Guided modes in negative-refractive-index waveguides. <i>Physical Review E</i> , 2003 , 67, 057602	2.4	259
173	Nonlinear surface waves in left-handed materials. <i>Physical Review E</i> , 2004 , 69, 016617	2.4	228
172	Hyperbolic metamaterials based on multilayer graphene structures. <i>Physical Review B</i> , 2013 , 87,	3.3	224
171	Giant Goos-Hāchen effect at the reflection from left-handed metamaterials. <i>Applied Physics Letters</i> , 2003 , 83, 2713-2715	3.4	207
170	Tunable split-ring resonators for nonlinear negative-index metamaterials. <i>Optics Express</i> , 2006 , 14, 934	4 3 93	204
169	Experimental realization of a terahertz all-dielectric metasurface absorber. <i>Optics Express</i> , 2017 , 25, 19	1 ₃ 291	197
168	Magnetoelastic metamaterials. <i>Nature Materials</i> , 2011 , 11, 30-3	27	187
167	Second-harmonic generation in nonlinear left-handed metamaterials. <i>Journal of the Optical Society of America B: Optical Physics</i> , 2006 , 23, 529	1.7	152
166	Goos-Hilchen and Imbert-Fedorov shifts of polarized vortex beams. <i>Optics Letters</i> , 2009 , 34, 389-91	3	116
165	Structural tunability in metamaterials. <i>Applied Physics Letters</i> , 2009 , 95, 084105	3.4	113
164	Liquid crystal based nonlinear fishnet metamaterials. <i>Applied Physics Letters</i> , 2012 , 100, 121113	3.4	111
163	Bistable diode action in left-handed periodic structures. <i>Physical Review E</i> , 2005 , 71, 037602	2.4	109
162	Beam shaping by a periodic structure with negative refraction. <i>Applied Physics Letters</i> , 2003 , 82, 3820-3	83.4	108
161	Metamaterial tuning by manipulation of near-field interaction. <i>Physical Review B</i> , 2010 , 82,	3.3	107

160	Plasmonic Airy beam manipulation in linear optical potentials. <i>Optics Letters</i> , 2011 , 36, 1164-6	3	101
159	Tunable transmission and harmonic generation in nonlinear metamaterials. <i>Applied Physics Letters</i> , 2008 , 93, 161903	3.4	99
158	Nonlinear nanofocusing in tapered plasmonic waveguides. <i>Physical Review Letters</i> , 2010 , 105, 116804	7.4	94
157	Complete band gaps in one-dimensional left-handed periodic structures. <i>Physical Review Letters</i> , 2005 , 95, 193903	7.4	94
156	Self-focusing and spatial plasmon-polariton solitons. <i>Optics Express</i> , 2009 , 17, 21732-7	3.3	91
155	Nonlinear plasmonic slot waveguides. <i>Optics Express</i> , 2008 , 16, 21209-14	3.3	89
154	Electromagnetic wave analogue of an electronic diode. New Journal of Physics, 2011, 13, 033025	2.9	87
153	Nonlinear magnetic metamaterials. <i>Optics Express</i> , 2008 , 16, 20266-71	3.3	87
152	Metamaterials controlled with light. <i>Physical Review Letters</i> , 2012 , 109, 083902	7.4	85
151	Self-tuning mechanisms of nonlinear split-ring resonators. <i>Applied Physics Letters</i> , 2007 , 91, 144107	3.4	80
150	Tunable fishnet metamaterials infiltrated by liquid crystals. <i>Applied Physics Letters</i> , 2010 , 96, 193103	3.4	76
149	Suppression of Anderson localization in disordered metamaterials. <i>Physical Review Letters</i> , 2007 , 99, 193902	7.4	68
148	Nonlinear switching with a graphene coupler. <i>Physical Review B</i> , 2013 , 88,	3.3	67
147	Nonlinear electric metamaterials. <i>Applied Physics Letters</i> , 2009 , 95, 084102	3.4	64
146	Excitation of guided waves in layered structures with negative refraction. <i>Optics Express</i> , 2005 , 13, 481	-93 3	63
145	Effect of microscopic disorder on magnetic properties of metamaterials. <i>Physical Review E</i> , 2006 , 73, 056605	2.4	62
144	Dynamic bound states in the continuum. <i>Optica</i> , 2019 , 6, 169	8.6	60
143	Tunable transmission and bistability in left-handed band-gap structures. <i>Applied Physics Letters</i> , 2004 , 85, 1451-1453	3.4	59

142	Dissipative plasmon-solitons in multilayer graphene. Laser and Photonics Reviews, 2014, 8, 291-296	8.3	58
141	Second-harmonic generation by a graphene nanoparticle. <i>Physical Review B</i> , 2014 , 90,	3.3	58
140	Near-field interaction of twisted split-ring resonators. <i>Physical Review B</i> , 2011 , 83,	3.3	57
139	Cloaking and enhanced scattering of core-shell plasmonic nanowires. <i>Optics Express</i> , 2013 , 21, 10454-9	3.3	56
138	Backward Tamm states in left-handed metamaterials. <i>Applied Physics Letters</i> , 2006 , 89, 114104	3.4	56
137	Huygens[Metadevices for Parametric Waves. <i>Physical Review X</i> , 2018 , 8,	9.1	56
136	Superscattering of light optimized by a genetic algorithm. <i>Applied Physics Letters</i> , 2014 , 105, 011109	3.4	52
135	Ultrathin tunable terahertz absorber based on MEMS-driven metamaterial. <i>Microsystems and Nanoengineering</i> , 2017 , 3, 17033	7.7	51
134	Spontaneous chiral symmetry breaking in metamaterials. <i>Nature Communications</i> , 2014 , 5, 4441	17.4	51
133	Magnetoinductive waves in arrays of split-ring resonators. <i>Physica B: Condensed Matter</i> , 2007 , 394, 180-	1288	50
132	Flexible helices for nonlinear metamaterials. Advanced Materials, 2013, 25, 3409-12	24	49
131	Bistability of anderson localized States in nonlinear random media. <i>Physical Review Letters</i> , 2010 , 104, 123902	7.4	49
130	Broadband chiral metamaterials with large optical activity. <i>Physical Review B</i> , 2014 , 89,	3.3	48
129	Nonlinear transmission and spatiotemporal solitons in metamaterials with negative refraction. <i>Optics Express</i> , 2005 , 13, 1291-8	3.3	46
128	Plasmons in waveguide structures formed by two graphene layers. <i>JETP Letters</i> , 2013 , 97, 535-539	1.2	45
127	Subwavelength imaging with opaque nonlinear left-handed lenses. <i>Applied Physics Letters</i> , 2005 , 87, 091104	3.4	44
126	Quadratic phase matching in nonlinear plasmonic nanoscale waveguides. <i>Optics Express</i> , 2009 , 17, 2006	3383	43
125	Nonlinear magnetoinductive waves and domain walls in composite metamaterials. <i>Photonics and Nanostructures - Fundamentals and Applications</i> , 2006 , 4, 69-74	2.6	43

124	Metamaterials and metaoptics. NPG Asia Materials, 2011, 3, 100-108	10.3	42
123	Tilted response of fishnet metamaterials at near-infrared optical wavelengths. <i>Physical Review B</i> , 2010 , 81,	3.3	42
122	Spatial solitons in nonlinear left-handed metamaterials. <i>Journal of Optics</i> , 2005 , 7, S68-S72		42
121	Strong terahertz absorption in all-dielectric Huygens' metasurfaces. <i>Nanotechnology</i> , 2016 , 27, 424003	3.4	42
120	Metamaterials with conformational nonlinearity. Scientific Reports, 2011, 1, 138	4.9	39
119	Loss compensation in metal-dielectric layered metamaterials. <i>Physical Review B</i> , 2013 , 87,	3.3	38
118	All-dielectric multilayer cylindrical structures for invisibility cloaking. Scientific Reports, 2015, 5, 9574	4.9	37
117	Enhanced parametric processes in binary metamaterials. <i>Applied Physics Letters</i> , 2006 , 88, 071912	3.4	37
116	Circular dichroism of four-wave mixing in nonlinear metamaterials. <i>Physical Review B</i> , 2013 , 88,	3.3	35
115	Surface Bloch waves in metamaterial and metal-dielectric superlattices. <i>Applied Physics Letters</i> , 2009 , 95, 041902	3.4	35
114	Nonlinear response via intrinsic rotation in metamaterials. <i>Physical Review B</i> , 2013 , 87,	3.3	33
113	Dispersionless optical activity in metamaterials. <i>Applied Physics Letters</i> , 2013 , 102, 201121	3.4	33
112	Backward and forward modes guided by metal-dielectric-metal plasmonic waveguides. <i>Journal of Nanophotonics</i> , 2010 , 4, 043509	1.1	33
111	Suppression of left-handed properties in disordered metamaterials. <i>Journal of Applied Physics</i> , 2005 , 97, 113906	2.5	33
110	Tunable hybrid surface waves supported by a graphene layer. JETP Letters, 2013, 97, 249-252	1.2	32
109	Optical activity and coupling in twisted dimer meta-atoms. <i>Applied Physics Letters</i> , 2012 , 100, 111114	3.4	32
108	Plasmonic Bloch oscillations in chirped metal-dielectric structures. <i>Applied Physics Letters</i> , 2009 , 94, 161	13045	30
107	Dynamics of optical spatial solitons near the interface between two quadratically nonlinear media. <i>Journal of the Optical Society of America B: Optical Physics</i> , 2002 , 19, 596	1.7	30

106	Deeply subwavelength electromagnetic Tamm states in graphene metamaterials. <i>Physical Review B</i> , 2014 , 89,	3.3	29
105	Tunable Meta-Liquid Crystals. <i>Advanced Materials</i> , 2016 , 28, 1553-8	24	29
104	Multilayer graphene waveguides. <i>JETP Letters</i> , 2014 , 99, 456-460	1.2	28
103	Anderson localization in metamaterials and other complex media (Review Article). <i>Low Temperature Physics</i> , 2012 , 38, 570-602	0.7	28
102	Asymmetric parametric amplification in nonlinear left-handed transmission lines. <i>Applied Physics Letters</i> , 2009 , 94, 084105	3.4	28
101	Purcell effect in active diamond nanoantennas. <i>Nanoscale</i> , 2018 , 10, 8721-8727	7.7	27
100	Excitation of backward Tamm states at an interface between a periodic photonic crystal and a left-handed metamaterial. <i>Physical Review A</i> , 2007 , 75,	2.6	27
99	Temperature Control of Terahertz Metamaterials With Liquid Crystals. <i>IEEE Transactions on Terahertz Science and Technology</i> , 2013 , 3, 827-831	3.4	26
98	Controlling split-ring resonators with light. <i>Applied Physics Letters</i> , 2011 , 99, 251914	3.4	26
97	Defect modes and transmission properties of left-handed bandgap structures. <i>Physical Review E</i> , 2004 , 70, 046615	2.4	26
96	Anderson localization of classical waves in weakly scattering metamaterials. <i>Physical Review B</i> , 2010 , 81,	3.3	25
95	Transmission and Anderson localization in dispersive metamaterials. <i>Physical Review B</i> , 2012 , 85,	3.3	24
94	Terahertz focusing of multiple wavelengths by graphene metasurfaces. <i>Applied Physics Letters</i> , 2016 , 108, 031106	3.4	24
93	Polarization-Induced Chirality in Metamaterials via Optomechanical Interaction. <i>Advanced Optical Materials</i> , 2017 , 5, 1600760	8.1	23
92	Soliton generation in active nonlinear metamaterials. <i>Applied Physics Letters</i> , 2014 , 104, 084105	3.4	23
91	Wave scattering by metamaterial wedges and interfaces. <i>International Journal of Numerical Modelling: Electronic Networks, Devices and Fields</i> , 2006 , 19, 105-117	1	23
90	Inside-out electromagnetic cloaking. Optics Express, 2008, 16, 4615-20	3.3	21
89	Mie-Resonant Membrane Huygens' Metasurfaces. <i>Advanced Functional Materials</i> , 2020 , 30, 1906851	15.6	21

88	Superabsorption of light by multilayer nanowires. <i>Nanoscale</i> , 2015 , 7, 17658-63	7.7	20
87	Discrete dissipative localized modes in nonlinear magnetic metamaterials. <i>Optics Express</i> , 2011 , 19, 265	090 3 6	20
86	Scattering of electromagnetic waves in metamaterial superlattices. <i>Applied Physics Letters</i> , 2007 , 90, 201919	3.4	20
85	Nonlinear guided waves and symmetry breaking in left-handed waveguides. <i>Photonics and Nanostructures - Fundamentals and Applications</i> , 2004 , 2, 175-180	2.6	20
84	Polychromatic nanofocusing of surface plasmon polaritons. <i>Physical Review B</i> , 2011 , 83,	3.3	19
83	Birefringent left-handed metamaterials and perfect lenses for vectorial fields. <i>New Journal of Physics</i> , 2005 , 7, 220-220	2.9	19
82	Time-varying Metasurfaces for Broadband Spectral Camouflage. <i>Physical Review Applied</i> , 2019 , 12,	4.3	19
81	Self-oscillations in nonlinear torsional metamaterials. New Journal of Physics, 2013, 15, 073036	2.9	18
80	Nonlinear Tamm states in nanostructured plasmonic metamaterials. <i>Physical Review A</i> , 2012 , 86,	2.6	18
79	Effects of polarization on the transmission and localization of classical waves in weakly scattering metamaterials. <i>Physical Review B</i> , 2010 , 82,	3.3	18
78	Nonlinear control of invisibility cloaking. <i>Optics Express</i> , 2012 , 20, 14954-9	3.3	18
77	Metamaterials with tunable nonlinearity. <i>JETP Letters</i> , 2012 , 95, 613-617	1.2	17
<i>7</i> 6	Symmetry breaking in plasmonic waveguides with metal nonlinearities. <i>Optics Letters</i> , 2011 , 36, 930-2	3	17
75	Nonlinear interaction of meta-atoms through optical coupling. <i>Applied Physics Letters</i> , 2014 , 104, 01410)4 3.4	16
74	Optical Metacages. Physical Review Letters, 2015, 115, 215501	7.4	16
73	Self-focusing of femtosecond surface plasmon polaritons. <i>Optics Express</i> , 2013 , 21, 1121-7	3.3	16
72	Cut-wire-pair structures as two-dimensional magnetic metamaterials. <i>Optics Express</i> , 2008 , 16, 15185-9	03.3	16
71	Nonlinear left-handed metamaterials. <i>Radio Science</i> , 2005 , 40, n/a-n/a	1.4	16

70	Electromagnetic tuning of resonant transmission in magnetoelastic metamaterials. <i>Applied Physics Letters</i> , 2014 , 104, 161117	3.4	15
69	Hiding in the corner. <i>Optics Express</i> , 2011 , 19, 20827-32	3.3	15
68	Nonreciprocal Anderson localization in magneto-optical random structures. <i>Physical Review B</i> , 2012 , 85,	3.3	15
67	Bloch oscillations in chirped layered structures with metamaterials. <i>Optics Express</i> , 2008 , 16, 3299-304	3.3	15
66	Light scattering by nonlinear cylindrical multilayer structures. <i>Journal of the Optical Society of America B: Optical Physics</i> , 2014 , 31, 1595	1.7	14
65	Post-processing approach for tuning multi-layered metamaterials. <i>Applied Physics Letters</i> , 2014 , 105, 151102	3.4	14
64	Optimal tapers for compensating losses in plasmonic waveguides. <i>Physica Status Solidi - Rapid Research Letters</i> , 2010 , 4, 277-279	2.5	14
63	Second harmonic generation in graphene-coated nanowires. <i>Optics Letters</i> , 2016 , 41, 3623-6	3	14
62	Directional excitation of surface plasmons by dielectric resonators. <i>Physical Review B</i> , 2015 , 91,	3.3	13
61	Deeply Subwavelength Metasurface Resonators for Terahertz Wavefront Manipulation. <i>Advanced Optical Materials</i> , 2019 , 7, 1900736	8.1	13
60	Hysteresis of switching waves and dissipative solitons in nonlinear magnetic metamaterials. <i>JETP Letters</i> , 2011 , 93, 743-746	1.2	13
59	Engineering scattering patterns with asymmetric dielectric nanorods. <i>Optics Express</i> , 2018 , 26, 32624-3	2630	13
58	Strong Magnetic Response of Optical Nanofibers. ACS Photonics, 2016, 3, 972-978	6.3	13
57	Strong Broadband Terahertz Optical Activity through Control of the Blaschke Phase with Chiral Metasurfaces. <i>Physical Review Applied</i> , 2017 , 8,	4.3	12
56	Competing nonlinearities with metamaterials. <i>Applied Physics Letters</i> , 2012 , 101, 231904	3.4	12
55	Beam oscillations and curling in chirped periodic structures with metamaterials. <i>Physical Review A</i> , 2009 , 79,	2.6	12
54	Mode transformation in waveguiding plasmonic structures. <i>Photonics and Nanostructures - Fundamentals and Applications</i> , 2011 , 9, 207-212	2.6	12
53	Dispersion extraction with near-field measurements in periodic waveguides. <i>Optics Express</i> , 2009 , 17, 3716-21	3.3	12

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52	Wave scattering and splitting by magnetic metamaterials. <i>Optics Express</i> , 2007 , 15, 11714-22	3.3	12
51	Electrically tunable terahertz metamaterials with embedded large-area transparent thin-film transistor arrays. <i>Scientific Reports</i> , 2016 , 6, 23486	4.9	12
50	Superabsorption of light by nanoparticles. <i>Nanoscale</i> , 2015 , 7, 18897-901	7.7	11
49	Pure nonlinear optical activity in metamaterials. <i>Applied Physics Letters</i> , 2012 , 101, 041911	3.4	11
48	Electroactive Tuning of Double-Layered Metamaterials Based on Econjugated Polymer Actuators. <i>Advanced Optical Materials</i> , 2016 , 4, 135-140	8.1	11
47	Elastic metamaterials for tuning circular polarization of electromagnetic waves. <i>Scientific Reports</i> , 2016 , 6, 28273	4.9	10
46	Guided modes in non-Hermitian optical waveguides. <i>Physical Review A</i> , 2017 , 96,	2.6	10
45	Tuning the nonlinear response of coupled split-ring resonators. <i>Applied Physics Letters</i> , 2012 , 100, 0811	13.4	10
44	Multistability in nonlinear left-handed transmission lines. <i>Applied Physics Letters</i> , 2008 , 92, 264104	3.4	10
43	Second harmonic generation with zero phase velocity waves. <i>Applied Physics Letters</i> , 2011 , 98, 161111	3.4	9
42	Chiral meta-atoms rotated by light. <i>Applied Physics Letters</i> , 2012 , 101, 031105	3.4	9
41	Cavity-enhanced absorption and Fano resonances in graphene nanoribbons. <i>Physical Review B</i> , 2013 , 88,	3.3	8
40	A Terahertz Controlled-NOT Gate Based on Asymmetric Rotation of Polarization in Chiral Metamaterials. <i>Advanced Optical Materials</i> , 2017 , 5, 1700108	8.1	8
39	Nonlinear Tamm states in layered metaldielectric metamaterials. <i>Physica Status Solidi - Rapid Research Letters</i> , 2012 , 6, 43-45	2.5	8
38	Double-nonlinear metamaterials. Applied Physics Letters, 2010 , 97, 231114	3.4	8
37	Ideal and nonideal invisibility cloaks. <i>Optics Express</i> , 2008 , 16, 21369-74	3.3	8
36	Interaction of vector solitons with a nonlinear interface. Optics Communications, 2003, 216, 47-54	2	8
35	Infrared all-dielectric Kerker metasurfaces. <i>Optics Express</i> , 2021 , 29, 10518-10526	3.3	8

34	Nonlinear coupling in graphene-coated nanowires. Scientific Reports, 2016, 6, 38924	4.9	8
33	Pneumatically switchable graded index metamaterial lens. <i>Applied Physics Letters</i> , 2013 , 102, 031904	3.4	7
32	Polarization-Sensitive Dielectric Membrane Metasurfaces. Advanced Optical Materials, 2020, 8, 2000555	5 8.1	7
31	Observation of tunneling of slow and fast electromagnetic modes in coupled periodic waveguides. <i>Applied Physics Letters</i> , 2011 , 98, 061909	3.4	6
30	Dual-Region Resonant Meander Metamaterial. Advanced Optical Materials, 2020, 8, 1901658	8.1	5
29	Plasmonic crystal waveguides. <i>Applied Physics A: Materials Science and Processing</i> , 2011 , 103, 615-617	2.6	5
28	Nonlinear plasmonic slot waveguides: erratum. <i>Optics Express</i> , 2009 , 17, 4833	3.3	5
27	Enhanced terahertz magnetic dipole response by subwavelength fiber. <i>APL Photonics</i> , 2018 , 3, 051701	5.2	4
26	Grading plasmonic nanoparticles with light. <i>Physical Review A</i> , 2016 , 93,	2.6	4
25	Publisher Note: Hyperbolic metamaterials based on multilayer graphene structures [Phys. Rev. B 87, 075416 (2013)]. <i>Physical Review B</i> , 2013 , 88,	3.3	4
24	Circularly polarized antenna for coherent manipulation of NV-centers in diamond. <i>Journal of Physics: Conference Series</i> , 2018 , 1092, 012168	0.3	4
23	Tunable focusing by a flexible metasurface. <i>Photonics and Nanostructures - Fundamentals and Applications</i> , 2017 , 26, 62-68	2.6	3
22	Control of spontaneous emission rate in luminescent resonant diamond particles. <i>Journal of Physics: Conference Series</i> , 2018 , 961, 012007	0.3	3
21	Wave scattering by metal-dielectric multilayer structures with gain. <i>JETP Letters</i> , 2015 , 100, 731-736	1.2	2
20	Tunable Metamaterials. World Scientific Series in Nanoscience and Nanotechnology, 2017, 387-418	0.1	2
19	Bouncing plasmonic waves in half-parabolic potentials. <i>Physical Review A</i> , 2011 , 84,	2.6	2
18	One-dimensional periodic structures with complete spectral gap 2005 , 6038, 200		2
17	Optimization of cloaking in all dielectric multi-layer structures 2014,		1

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16	Hyperbolic metamaterials for terahertz applications 2013,		1
15	Photonic metadevices: introduction. <i>Journal of the Optical Society of America B: Optical Physics</i> , 2017 , 34, PM1	1.7	1
14	Light-controllable magnetic metamaterials based on loaded split-ring resonators 2012,		1
13	Manipulation of Airy plasmon beams by linear optical potentials 2011,		1
12	Interaction of twisted split ring resonators 2011 ,		1
11	Switchable graded index microwave metamaterial lens design using pneumatic actuation 2012,		1
10	Nonlinear Effects in Left-Handed Metamaterials. <i>Springer Series in Materials Science</i> , 2007 , 331-371	0.9	1
9	Nonlinear Metamaterials. Springer Series in Optical Sciences, 2010 , 241-257	0.5	1
8	Electrically tunable terahertz metamaterials with embedded large-area transparent thin-film transistor arrays		1
7	Transverse optical forces for manipulating nanoparticles. <i>Physical Review A</i> , 2016 , 94,	2.6	1
6	Graphene metasurfaces for arbitrary wavefront control 2016,		1
5	Reply to Comment on P lasmons in Waveguide Structures Formed by Two Graphene Layers[] <i>JETP Letters</i> , 2019 , 109, 770-770	1.2	O
4	Mid-infrared cylindrical vector beams enabled by dielectric metasurfaces. APL Materials, 2021, 9, 12111	3 5.7	O
3	Microscopic disorder in metamaterials 2006 , WD2		
2	Low-loss volume modes in a lamellar hyperbolic metamaterial slab. <i>Journal of the Optical Society of America B: Optical Physics</i> , 2020 , 37, 1065	1.7	
1	Parametric Emission of Radiation at Spatial Solitons Interaction 2001 , 257-260		