

# Mikhail Lapine

## List of Publications by Year in descending order

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Version: 2024-02-01

71  
papers

3,713  
citations

236833

25  
h-index

214721

47  
g-index

73  
all docs

73  
docs citations

73  
times ranked

5260  
citing authors

#	ARTICLE	IF	CITATIONS
1	Tailoring spontaneous infrared emission of HgTe quantum dots with laser-printed plasmonic arrays. Light: Science and Applications, 2020, 9, 16.	7.7	45
2	Boundary conditions for the effective-medium description of subwavelength multilayered structures. Physical Review B, 2020, 101, .	1.1	26
3	Ultra-Fast Laser Printing of IR-Resonant Plasmonic Metasurfaces. , 2019, , .		0
4	Direct laser printing of tunable IR resonant nanoantenna arrays. Applied Surface Science, 2019, 469, 514-520.	3.1	25
5	10-million-elements-per-second printing of infrared-resonant plasmonic arrays by multiplexed laser pulses. Optics Letters, 2019, 44, 283.	1.7	32
6	Nonlinear symmetry breaking in photometamaterials. Physical Review B, 2018, 97, .	1.1	7
7	New degrees of freedom in nonlinear metamaterials. Physica Status Solidi (B): Basic Research, 2017, 254, 1600462.	0.7	15
8	Enhanced acousto-optic properties in layered media. Physical Review B, 2017, 96, .	1.1	5
9	Directional Optical Sorting of Silicon Nanoparticles. ACS Photonics, 2017, 4, 2312-2319.	3.2	35
10	Metamaterials for opto-acoustic interactions. AIP Conference Proceedings, 2017, , .	0.3	0
11	Stimulated Brillouin scattering enhancement in silicon inverse opal waveguides. Optics Express, 2016, 24, 25148.	1.7	3
12	Stimulated Brillouin scattering in metamaterials. Journal of the Optical Society of America B: Optical Physics, 2016, 33, 2162.	0.9	11
13	Suppression of stimulated Brillouin scattering in composite media. , 2016, , .		0
14	Strong boundary effects in microwave metamaterial samples. , 2016, , .		0
15	Metamaterial control of stimulated Brillouin scattering. Optics Letters, 2016, 41, 2338.	1.7	29
16	On the deviation of metamaterial spheres from effective medium. , 2016, , .		0
17	Nonlocal homogenization for nonlinear metamaterials. Physical Review B, 2016, 93, .	1.1	19
18	Slow convergence to effective medium in finite discrete metamaterials. Physical Review B, 2016, 93, .	1.1	9

#	ARTICLE	IF	CITATIONS
19	Elastic modelling of electrostriction in dielectric composite materials. , 2016, , .		0
20	Coupled Electromagnetic and Elastic Dynamics in Metamaterials. Springer Series in Materials Science, 2015, , 59-87.	0.4	0
21	New aspects of artificial diamagnetics. , 2015, , .		0
22	Mesoscopic effects in discretised metamaterial spheres. , 2015, , .		0
23	New avenues for phase matching in nonlinear hyperbolic metamaterials. Scientific Reports, 2015, 5, 8983.	1.6	34
24	Electrostriction enhancement in metamaterials. Physical Review B, 2015, 91, .	1.1	20
25	Structural tricks for enhanced metamaterial properties. , 2014, , .		0
26	Nonlinear interaction of meta-atoms through optical coupling. Applied Physics Letters, 2014, 104, 014104.	1.5	19
27	Applicability of nonresonant artificial diamagnetics. Physical Review B, 2014, 90, .	1.1	4
28	Spontaneous chiral symmetry breaking in metamaterials. Nature Communications, 2014, 5, 4441.	5.8	64
29	<i>Colloquium</i>: Nonlinear metamaterials. Reviews of Modern Physics, 2014, 86, 1093-1123.	16.4	348
30	Nonlinear response via intrinsic rotation in metamaterials. Physical Review B, 2013, 87, .	1.1	36
31	Broadband isotropic $\hat{1}/4$ -near-zero metamaterials. Applied Physics Letters, 2013, 103, .	1.5	20
32	Photosensitive SRR-metamaterials. , 2013, , .		1
33	Self-oscillations in nonlinear torsional metamaterials. New Journal of Physics, 2013, 15, 073036.	1.2	22
34	Broadband diamagnetism in anisotropic metamaterials. Physical Review B, 2013, 87, .	1.1	21
35	Flexible Helices for Nonlinear Metamaterials. Advanced Materials, 2013, 25, 3409-3412.	11.1	61
36	Mechanical nonlinearities in electromagnetic metamaterials. , 2013, , .		0

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37	Dynamic optical activity and self-oscillation in torsional metamaterials. , 2013, , .		0
38	Tailoring lattice parameters for broadband artificial diamagnetism. , 2013, , .		0
39	Novel nonlinear chiral metamaterials. , 2013, , .		0
40	Light coupling in microwave metamaterials. , 2013, , .		1
41	Focus issue: hyperbolic metamaterials. Optics Express, 2013, 21, 14895.	1.7	59
42	Twists and shifts make nonlinear metamaterials. , 2013, , .		0
43	Surface mesoscopic effects in finite metamaterials. Optics Express, 2012, 20, 18297.	1.7	19
44	Magnetoelastic metamaterials. Nature Materials, 2012, 11, 30-33.	13.3	229
45	Nonlinear spiral metamaterials. , 2012, , .		0
46	Wide-band negative permeability of nonlinear metamaterials. Scientific Reports, 2012, 2, 1-4.	1.6	1,152
47	Analysis of the resolution of split-ring metamaterial lenses with application in parallel magnetic resonance imaging. Applied Physics Letters, 2011, 98, .	1.5	30
48	Metamaterials with conformational nonlinearity. Scientific Reports, 2011, 1, 138.	1.6	49
49	Bulk Metamaterials Made of Resonant Rings. Proceedings of the IEEE, 2011, 99, 1660-1668.	16.4	27
50	Active and tunable metamaterials. Laser and Photonics Reviews, 2011, 5, 287-307.	4.4	189
51	Magnetoelastic metamaterials. , 2011, , .		5
52	On the applications of metamaterial lenses for magnetic resonance imaging. Journal of Magnetic Resonance, 2010, 203, 81-90.	1.2	95
53	Exact modelling method for discrete finite metamaterial lens. IET Microwaves, Antennas and Propagation, 2010, 4, 1132.	0.7	25
54	Analysing and manipulating near-field interaction in metamaterials. , 2010, , .		0

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55	Realistic metamaterial lenses: Limitations imposed by discrete structure. Physical Review B, 2010, 82, .	1.1	25
56	Tuning methods for metamaterials. Proceedings of SPIE, 2010, , .	0.8	0
57	Tilted response of fishnet metamaterials at near-infrared optical wavelengths. Physical Review B, 2010, 81, .	1.1	49
58	Metamaterial tuning by manipulation of near-field interaction. Physical Review B, 2010, 82, .	1.1	126
59	Ab initio experimental analysis of realistic resonant ring metamaterial lenses. , 2010, , .		1
60	Metamaterial Tuning Using near-Field Interaction. , 2010, , .		0
61	Structural tunability in metamaterials. Applied Physics Letters, 2009, 95, .	1.5	144
62	Contemporary notes on metamaterials. IET Microwaves, Antennas and Propagation, 2007, 1, 3.	0.7	125
63	Microwave devices with enhanced phase-compensation principle. , 2006, , .		0
64	Methods of crystal optics for studying electromagnetic phenomena in metamaterials: Review. Crystallography Reports, 2006, 51, 1048-1062.	0.1	8
65	Artificial lines with exotic dispersion for phase shifters and delay lines. , 2006, , .		9
66	VECTOR CIRCUIT THEORY FOR SPATIALLY DISPERSIVE UNIAXIAL MAGNETO-DIELECTRIC SLABS. Progress in Electromagnetics Research, 2006, 63, 279-294.	1.6	3
67	Three-wave coupling of microwaves in metamaterial with nonlinear resonant conductive elements. Physical Review E, 2004, 70, 066601.	0.8	49
68	Tuning of a nonlinear metamaterial band gap by an external magnetic field. Physical Review B, 2004, 70, .	1.1	54
69	Nonlinearity of a metamaterial arising from diode insertions into resonant conductive elements. Physical Review E, 2003, 67, 065601.	0.8	182
70	Effective magnetic properties of a composite material with circular conductive elements. European Physical Journal B, 2002, 28, 263-269.	0.6	121
71	Detection of the local H <sup>+</sup> gradients on the internal mitochondrial membrane. FEBS Letters, 1998, 440, 223-225.	1.3	18