

# Eric Plum

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/3138604/publications.pdf>

Version: 2024-02-01

77  
papers

4,608  
citations

101384

36  
h-index

123241

61  
g-index

79  
all docs

79  
docs citations

79  
times ranked

4345  
citing authors

#	ARTICLE	IF	CITATIONS
1	Dielectric Metasurfaces for Complete Control of Phase, Amplitude, and Polarization. <i>Advanced Optical Materials</i> , 2022, 10, 2101223.	3.6	53
2	Non-contact optical magnetic field sensor based on metamaterial nanomechanics. <i>APL Photonics</i> , 2022, 7, .	3.0	7
3	Defect-induced nonlinearity in 2D nanoparticles. <i>Optics Express</i> , 2022, 30, 7162.	1.7	3
4	Thermal Fluctuations of the Optical Properties of Nanomechanical Photonic Metamaterials. <i>Advanced Optical Materials</i> , 2022, 10, .	3.6	8
5	Electrogyration in Metamaterials: Chirality and Polarization Rotatory Power that Depend on Applied Electric Field. <i>Advanced Optical Materials</i> , 2021, 9, 2001826.	3.6	16
6	Temperature- Controlled Optical Activity and Negative Refractive Index. <i>Advanced Functional Materials</i> , 2021, 31, 2010249.	7.8	58
7	Second harmonic generation in amorphous silicon-on-silica metamaterial. <i>APL Photonics</i> , 2021, 6, .	3.0	8
8	Active Control of Nanodielectric-Induced THz Quasi-BIC in Flexible Metasurfaces: A Platform for Modulation and Sensing. <i>Advanced Materials</i> , 2021, 33, e2100836.	11.1	117
9	Visualization of Subatomic Movements in Nanostructures. <i>Nano Letters</i> , 2021, 21, 7746-7752.	4.5	3
10	Integrated Terahertz Generator-Manipulators Using Epsilon-near-Zero-Hybrid Nonlinear Metasurfaces. <i>Nano Letters</i> , 2021, 21, 7699-7707.	4.5	52
11	Toy model of harmonic and sum frequency generation in 2D dielectric nanostructures. <i>Scientific Reports</i> , 2021, 11, 20120.	1.6	2
12	Optomechanical metamaterial nanobolometer. <i>APL Photonics</i> , 2021, 6, .	3.0	10
13	Switchable Chiral Mirrors. <i>Advanced Optical Materials</i> , 2020, 8, 2000247.	3.6	45
14	Lattice-Enhanced Fano Resonances from Bound States in the Continuum Metasurfaces. <i>Advanced Optical Materials</i> , 2020, 8, 1901572.	3.6	69
15	Toy model of second harmonic generation due to structuring of centrosymmetric films. <i>Optics Express</i> , 2020, 28, 33346.	1.7	3
16	Surface Lattice Resonances in THz Metamaterials. <i>Photonics</i> , 2019, 6, 75.	0.9	34
17	Cryptography in coherent optical information networks using dissipative metamaterial gates. <i>APL Photonics</i> , 2019, 4, 046102.	3.0	7
18	Temperature-Controlled Asymmetric Transmission of Electromagnetic Waves. <i>Scientific Reports</i> , 2019, 9, 4097.	1.6	60

#	ARTICLE	IF	CITATIONS
19	Nonlinear control of coherent absorption and its optical signal processing applications. APL Photonics, 2019, 4, 106109.	3.0	1
20	Direct polarization measurement using a multiplexed Pancharatnamâ€Berry metahologram. Optica, 2019, 6, 1190.	4.8	100
21	Fibre-optic metadvice for all-optical signal modulation based on coherent absorption. Nature Communications, 2018, 9, 182.	5.8	73
22	All-optical dynamic focusing of light via coherent absorption in a plasmonic metasurface. Light: Science and Applications, 2018, 7, 17157-17157.	7.7	42
23	Lattice induced strong coupling and line narrowing of split resonances in metamaterials. Applied Physics Letters, 2018, 112, .	1.5	46
24	Reflective chiral meta-holography: multiplexing holograms for circularly polarized waves. Light: Science and Applications, 2018, 7, 25.	7.7	212
25	Picosecond all-optical switching and dark pulse generation in a fibre-optic network using a plasmonic metamaterial absorber. Applied Physics Letters, 2018, 113, .	1.5	15
26	Optical bistability in shape-memory nanowire metamaterial array. Applied Physics Letters, 2018, 113, .	1.5	22
27	Optical addressing of nanomechanical metamaterials with subwavelength resolution. Applied Physics Letters, 2018, 113, .	1.5	9
28	All-Optical Pattern Recognition and Image Processing on a Metamaterial Beam Splitter. ACS Photonics, 2017, 4, 217-222.	3.2	37
29	Controlling the Optical Response of 2D Matter in Standing Waves. ACS Photonics, 2017, 4, 3000-3011.	3.2	28
30	Electro-mechanical light modulator based on controlling the interaction of light with a metasurface. Scientific Reports, 2017, 7, 5405.	1.6	15
31	Polarization and Frequency Multiplexed Terahertz MetaâHolography. Advanced Optical Materials, 2017, 5, 1700277.	3.6	54
32	Merging Photonic Metamaterial and Optical Fiber Technologies. , 2017, , .		0
33	Giant Nonlinearity of an Optically Reconfigurable Plasmonic Metamaterial. Advanced Materials, 2016, 28, 729-733.	11.1	82
34	Nanoâand MicroâAuxetic Plasmonic Materials. Advanced Materials, 2016, 28, 5176-5180.	11.1	32
35	Random access actuation of nanowire grid metamaterial. Nanotechnology, 2016, 27, 485206.	1.3	16
36	Coherent control of light-matter interactions in polarization standing waves. Scientific Reports, 2016, 6, 31141.	1.6	35

#	ARTICLE	IF	CITATIONS
37	Specular optical activity of achiral metasurfaces. Applied Physics Letters, 2016, 108, .	1.5	29
38	Invited Article: All-optical multichannel logic based on coherent perfect absorption in a plasmonic metamaterial. APL Photonics, 2016, 1, .	3.0	47
39	Metadevice for intensity modulation with sub-wavelength spatial resolution. Scientific Reports, 2016, 6, 37109.	1.6	15
40	Extrinsic chirality: Tunable optically active reflectors and perfect absorbers. Applied Physics Letters, 2016, 108, .	1.5	56
41	Two-dimensional control of light with light on metasurfaces. Light: Science and Applications, 2016, 5, e16070-e16070.	7.7	106
42	Spatial optical phase-modulating metadevice with subwavelength pixelation. Optics Express, 2016, 24, 18790.	1.7	16
43	Roadmap on optical metamaterials. Journal of Optics (United Kingdom), 2016, 18, 093005.	1.0	118
44	Reconfigurable nanomechanical photonic metamaterials. Nature Nanotechnology, 2016, 11, 16-22.	15.6	273
45	All-optical Image Recognition and Processing with Plasmonic Metasurfaces. , 2016, , .		1
46	Shape Memory Photonic Metamaterial. , 2016, , .		1
47	Playing a Metamaterial Guitar with Light: Optically Addressable Nanomechanical Metamaterial. , 2016, , .		0
48	Chiral mirrors. Applied Physics Letters, 2015, 106, .	1.5	166
49	Reconfigurable and coherently controlled photonic metamaterials: A platform for optical properties on demand. , 2015, , .		0
50	Coherent control of optical polarization effects in metamaterials. Scientific Reports, 2015, 5, 8977.	1.6	54
51	A magneto-electro-optical effect in a plasmonic nanowire material. Nature Communications, 2015, 6, 7021.	5.8	118
52	Reconfiguring photonic metamaterials with currents and magnetic fields. Applied Physics Letters, 2015, 106, .	1.5	38
53	Lorentz Force Metamaterial with Giant Optical Magnetolectric Response. , 2014, , .		1
54	Coherent control of Snell's law at metasurfaces. Optics Express, 2014, 22, 21051.	1.7	84

#	ARTICLE	IF	CITATIONS
55	Metamaterial NEMS: Giant optical nonlinearity and magnetoelectrical effect. , 2014, , .		0
56	Controlling Light with Light in a Plasmonic Nanooptomechanical Metamaterial. , 2014, , .		1
57	Coherent control of birefringence and optical activity. Applied Physics Letters, 2014, 105, .	1.5	45
58	Coherent Control of Birefringence and Optical Activity. , 2014, , .		0
59	An electromechanically reconfigurable plasmonic metamaterial operating in the near-infrared. Nature Nanotechnology, 2013, 8, 252-255.	15.6	331
60	Fabrication of three dimensional split ring resonators by stress-driven assembly method. Optics Express, 2012, 20, 9415.	1.7	54
61	Coherent Light Emission from Planar Plasmonic Metamaterials. , 2012, , .		1
62	Giant nonlinear optical activity in a plasmonic metamaterial. Nature Communications, 2012, 3, 833.	5.8	182
63	From Nonlinear Optics to Nonlinear Plasmonics: Giant Nonlinear Polarization Effects in Metamaterials. , 2012, , .		0
64	Nanostructured Plasmonic Medium for Terahertz Bandwidth All-Optical Switching. Advanced Materials, 2011, 23, 5540-5544.	11.1	169
65	Negative index in chiral metamaterials. , 2011, , .		2
66	Metamaterial polarization spectral filter: Isolated transmission line at any prescribed wavelength. Applied Physics Letters, 2011, 99, .	1.5	63
67	Reconfigurable nanostructured photonic metamaterials. , 2011, , .		0
68	Reconfigurable Photonic Metamaterials. , 2011, , .		1
69	Multifold Enhancement of Quantum Dot Luminescence in Plasmonic Metamaterials. Physical Review Letters, 2010, 105, 227403.	2.9	224
70	Highly tunable optical activity in planar achiral terahertz metamaterials. Optics Express, 2010, 18, 13425.	1.7	160
71	Towards the lasing spaser: controlling metamaterial optical response with semiconductor quantum dots. Optics Express, 2009, 17, 8548.	1.7	197
72	Planar metamaterial with transmission and reflection that depend on the direction of incidence. Applied Physics Letters, 2009, 94, .	1.5	151

#	ARTICLE	IF	CITATIONS
73	Optical Activity in Achiral Metamaterials. , 2009, , .		0
74	Optical activity in extrinsically chiral metamaterial. Applied Physics Letters, 2008, 93, .	1.5	239
75	Optical Activity without Chirality: A New Way to Negative Index Metamaterials. , 2008, , .		0
76	Giant optical gyrotropy due to electromagnetic coupling. Applied Physics Letters, 2007, 90, 223113.	1.5	283
77	Chirality and anisotropy of planar metamaterials. , 0, , 94-157.		6