

# Andrei Lavrinenko

## List of Publications by Year in descending order

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253  
papers

6,674  
citations

66343

42  
h-index

76900

74  
g-index

257  
all docs

257  
docs citations

257  
times ranked

6384  
citing authors

#	ARTICLE	IF	CITATIONS
1	Strained silicon as a new electro-optic material. <i>Nature</i> , 2006, 441, 199-202.	27.8	599
2	Graphene metamaterials based tunable terahertz absorber: effective surface conductivity approach. <i>Optics Express</i> , 2013, 21, 9144.	3.4	555
3	Photonic crystal waveguides with semi-slow light and tailored dispersion properties. <i>Optics Express</i> , 2006, 14, 9444.	3.4	392
4	Transition from Optical Bound States in the Continuum to Leaky Resonances: Role of Substrate and Roughness. <i>ACS Photonics</i> , 2017, 4, 723-727.	6.6	221
5	Comprehensive FDTD modelling of photonic crystal waveguide components. <i>Optics Express</i> , 2004, 12, 234.	3.4	176
6	Water: Promising Opportunities For Tunable All-dielectric Electromagnetic Metamaterials. <i>Scientific Reports</i> , 2015, 5, 13535.	3.3	176
7	Transparent conducting oxides for electro-optical plasmonic modulators. <i>Nanophotonics</i> , 2015, 4, 165-185.	6.0	141
8	Towards CMOS-compatible nanophotonics: Ultra-compact modulators using alternative plasmonic materials. <i>Optics Express</i> , 2013, 21, 27326.	3.4	125
9	Photonic spin Hall effect in hyperbolic metamaterials at visible wavelengths. <i>Optics Letters</i> , 2018, 43, 4602.	3.3	104
10	Optics with hyperbolic materials [Invited]. <i>Journal of the Optical Society of America B: Optical Physics</i> , 2019, 36, F38.	2.1	92
11	Photonic surface waves on metamaterial interfaces. <i>Journal of Physics Condensed Matter</i> , 2017, 29, 463001.	1.8	86
12	Graphene hyperlens for terahertz radiation. <i>Physical Review B</i> , 2012, 86, .	3.2	84
13	Direct Amplitude-Phase Near-Field Observation of Higher-Order Anapole States. <i>Nano Letters</i> , 2017, 17, 7152-7159.	9.1	79
14	Resonant add-drop filter based on a photonic quasicrystal. <i>Optics Express</i> , 2005, 13, 826.	3.4	76
15	Material-Independent and Size-Independent Tractor Beams for Dipole Objects. <i>Physical Review Letters</i> , 2012, 109, 023902.	7.8	73
16	Metamaterial polarization converter analysis: limits of performance. <i>Applied Physics B: Lasers and Optics</i> , 2013, 112, 143-152.	2.2	72
17	Ultrathin, Ultrasmooth Gold Layer on Dielectrics without the Use of Additional Metallic Adhesion Layers. <i>ACS Applied Materials &amp; Interfaces</i> , 2015, 7, 5797-5802.	8.0	69
18	Experimental demonstration of water based tunable metasurface. <i>Applied Physics Letters</i> , 2016, 109, .	3.3	68

#	ARTICLE	IF	CITATIONS
19	Ultra-thin films for plasmonics: a technology overview. <i>Nanotechnology Reviews</i> , 2015, 4, .	5.8	66
20	Direct experimental and numerical determination of extremely high group indices in photonic crystal waveguides. <i>Optics Express</i> , 2005, 13, 7861.	3.4	65
21	Boosting Local Field Enhancement by on-Chip Nanofocusing and Impedance-Matched Plasmonic Antennas. <i>Nano Letters</i> , 2015, 15, 8148-8154.	9.1	65
22	Large-scale high aspect ratio Al-doped ZnO nanopillars arrays as anisotropic metamaterials. <i>Optical Materials Express</i> , 2017, 7, 1606.	3.0	65
23	Experimental Demonstration of Effective Medium Approximation Breakdown in Deeply Subwavelength All-Dielectric Multilayers. <i>Physical Review Letters</i> , 2015, 115, 177402.	7.8	62
24	Enhanced Electron Photoemission by Collective Lattice Resonances in Plasmonic Nanoparticle-Array Photodetectors and Solar Cells. <i>Plasmonics</i> , 2014, 9, 283-289.	3.4	60
25	Photonic-band-gap engineering for volume plasmon polaritons in multiscale multilayer hyperbolic metamaterials. <i>Physical Review A</i> , 2014, 90, .	2.5	58
26	Midinfrared Surface Waves on a High Aspect Ratio Nanotrench Platform. <i>ACS Photonics</i> , 2017, 4, 2899-2907.	6.6	57
27	Nanopillars photonic crystal waveguides. <i>Optics Express</i> , 2004, 12, 617.	3.4	56
28	Bloch-mode analysis for retrieving effective parameters of metamaterials. <i>Physical Review B</i> , 2012, 86, .	3.2	53
29	From surface to volume plasmons in hyperbolic metamaterials: General existence conditions for bulk high- $k$ waves in metal-dielectric and graphene-dielectric multilayers. <i>Physical Review B</i> , 2014, 90, .	3.2	53
30	A new method for obtaining transparent electrodes. <i>Optics Express</i> , 2012, 20, 22770.	3.4	52
31	Ultrabroadband terahertz spectroscopy of chalcogenide glasses. <i>Applied Physics Letters</i> , 2012, 100, .	3.3	52
32	Internal photoemission from plasmonic nanoparticles: comparison between surface and volume photoelectric effects. <i>Nanoscale</i> , 2014, 6, 4716.	5.6	52
33	Chirality Driven by Magnetic Dipole Response for Demultiplexing of Surface Waves. <i>Laser and Photonics Reviews</i> , 2017, 11, 1700168.	8.7	52
34	Operator approach to effective medium theory to overcome a breakdown of Maxwell Garnett approximation. <i>Physical Review B</i> , 2016, 94, .	3.2	51
35	Existence Conditions of High- $k$ Modes in Finite Hyperbolic Metamaterials. <i>Laser and Photonics Reviews</i> , 2019, 13, 1800253.	8.7	51
36	Switchable Lasing in Multimode Microcavities. <i>Physical Review Letters</i> , 2007, 99, 073902.	7.8	49

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37	Terahertz field enhancement to the MV/cm regime in a tapered parallel plate waveguide. Optics Express, 2012, 20, 8344.	3.4	48
38	Terahertz-induced Kerr effect in amorphous chalcogenide glasses. Applied Physics Letters, 2013, 103, .	3.3	48
39	Ultrasensitive terahertz/infrared waveguide modulators based on multilayer graphene metamaterials. Laser and Photonics Reviews, 2014, 8, 916-923.	8.7	48
40	High Aspect Ratio Plasmonic Nanotrench Structures with Large Active Surface Area for Label-Free Mid-Infrared Molecular Absorption Sensing. ACS Applied Nano Materials, 2018, 1, 1212-1218.	5.0	48
41	Direct Characterization of Plasmonic Slot Waveguides and Nanocouplers. Nano Letters, 2014, 14, 3925-3929.	9.1	46
42	High-Quality Ultrathin Gold Layers with an APTMS Adhesion for Optimal Performance of Surface Plasmon Polariton-Based Devices. ACS Applied Materials & Interfaces, 2017, 9, 25049-25056.	8.0	46
43	Compact dipole nanoantenna coupler to plasmonic slot waveguide. Optics Letters, 2012, 37, 1124.	3.3	44
44	Homogenization of resonant chiral metamaterials. Physical Review B, 2010, 82, .	3.2	43
45	Plasmonic modulator optimized by patterning of active layer and tuning permittivity. Optics Communications, 2012, 285, 5500-5507.	2.1	43
46	$\langle \text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"} \rangle \langle \text{mml:mi mathvariant="script"} \rangle \text{PT} \langle \text{mml:mi} \rangle \langle \text{mml:math} \rangle$ symmetry breaking in multilayers with resonant loss and gain locks light propagation direction. Physical Review B, 2018, 98, .	3.2	42
47	Imprinted silicon-based nanophotonics. Optics Express, 2007, 15, 1261.	3.4	40
48	Optical waveguide mode control by nanoslit-enhanced terahertz field. Optics Letters, 2012, 37, 3903.	3.3	39
49	Ultrabroadband terahertz conductivity of highly doped ZnO and ITO. Optical Materials Express, 2015, 5, 566.	3.0	39
50	Light Outcoupling from Quantum Dot-Based Microdisk Laser via Plasmonic Nanoantenna. ACS Photonics, 2017, 4, 275-281.	6.6	39
51	Non-resonant terahertz field enhancement in periodically arranged nanoslits. Journal of Applied Physics, 2012, 112, .	2.5	38
52	Photo-driven Super Absorber as an Active Metamaterial with a Tunable Molecular Plasmonic Coupling. Advanced Optical Materials, 2014, 2, 705-710.	7.3	38
53	Fabrication of high aspect ratio TiO <sub>2</sub> and Al <sub>2</sub> O <sub>3</sub> nanogratings by atomic layer deposition. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2016, 34, .	2.1	37
54	Polarization-Dependent All-Dielectric Metasurface for Single-Shot Quantitative Phase Imaging. Nano Letters, 2021, 21, 3820-3826.	9.1	36

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55	Slow-light dispersion in coupled periodic waveguides. Journal of the Optical Society of America B: Optical Physics, 2008, 25, C65.	2.1	34
56	Investigation of effective media applicability for ultrathin multilayer structures. Nanoscale, 2019, 11, 12582-12588.	5.6	34
57	Anomalous effective medium approximation breakdown in deeply subwavelength all-dielectric photonic multilayers. Nanotechnology, 2015, 26, 184001.	2.6	33
58	Wave propagation retrieval method for metamaterials: Unambiguous restoration of effective parameters. Physical Review B, 2009, 80, .	3.2	31
59	Comparative Study of FDTD-Adopted Numerical Algorithms for Kerr Nonlinearities. IEEE Antennas and Wireless Propagation Letters, 2011, 10, 143-146.	4.0	31
60	Effective surface conductivity of optical hyperbolic metasurfaces: from far-field characterization to surface wave analysis. Scientific Reports, 2018, 8, 14135.	3.3	31
61	Photon absorption and photocurrent in solar cells below semiconductor bandgap due to electron photoemission from plasmonic nanoantennas. Progress in Photovoltaics: Research and Applications, 2014, 22, 422-426.	8.1	30
62	Highly doped InP as a low loss plasmonic material for mid-IR region. Optics Express, 2016, 24, 29077.	3.4	30
63	Dispersionless tunneling of slow light in antisymmetric photonic crystal couplers. Optics Express, 2008, 16, 1104.	3.4	29
64	Plasmonic modulator based on gain-assisted metal-semiconductor-metal waveguide. Photonics and Nanostructures - Fundamentals and Applications, 2012, 10, 389-399.	2.0	29
65	Polarization-resolved characterization of plasmon waves supported by an anisotropic metasurface. Optics Express, 2017, 25, 32631.	3.4	28
66	Photoluminescence control by hyperbolic metamaterials and metasurfaces: a review. Opto-Electronic Advances, 2021, 4, 210031-210031.	13.3	28
67	Optically active Babinet planar metamaterial film for terahertz polarization manipulation. Laser and Photonics Reviews, 2013, 7, 810-817.	8.7	27
68	Nonlinear Dynamics of Ultrashort Long-Range Surface Plasmon Polariton Pulses in Gold Strip Waveguides. ACS Photonics, 2016, 3, 2324-2329.	6.6	27
69	Experimental Observation of Dyakonov Plasmons in the Mid-Infrared. Semiconductors, 2018, 52, 442-446.	0.5	27
70	Water-based devices for advanced control of electromagnetic waves. Applied Physics Reviews, 2021, 8, .	11.3	26
71	Plasmonic finite-thickness metal-semiconductor-metal waveguide as ultra-compact modulator. Photonics and Nanostructures - Fundamentals and Applications, 2013, 11, 323-334.	2.0	25
72	Dark-field hyperlens: Super-resolution imaging of weakly scattering objects. Optics Express, 2015, 23, 25350.	3.4	25

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73	Large-bandwidth planar photonic crystal waveguides. <i>Optics Communications</i> , 2002, 203, 263-270.	2.1	24
74	Bismuth ferrite as low-loss switchable material for plasmonic waveguide modulator. <i>Optics Express</i> , 2014, 22, 28890.	3.4	24
75	Metamaterial composite bandpass filter with an ultra-broadband rejection bandwidth of up to 240 terahertz. <i>Applied Physics Letters</i> , 2014, 104, 191103.	3.3	24
76	Design of one-dimensional optical pulse-shaping filters by time-domain topology optimization. <i>Applied Physics Letters</i> , 2009, 95, .	3.3	23
77	High symmetry versus optical isotropy of a negative-index metamaterial. <i>Physical Review B</i> , 2010, 81, .	3.2	23
78	Photonic and Plasmonic Guided Modes in Graphene–Silicon Photonic Crystals. <i>ACS Photonics</i> , 2015, 2, 1552-1558.	6.6	23
79	Homogenization of metasurfaces formed by random resonant particles in periodical lattices. <i>Physical Review B</i> , 2016, 93, .	3.2	23
80	Photonic Spin Hall Effect: Contribution of Polarization Mixing Caused by Anisotropy. <i>Quantum Reports</i> , 2020, 2, 489-500.	1.3	23
81	Engineering Nanoparticles with Pure High-Order Multipole Scattering. <i>ACS Photonics</i> , 2020, 7, 1067-1075.	6.6	23
82	Plasmonic nanojet: an experimental demonstration. <i>Optics Letters</i> , 2020, 45, 3244.	3.3	23
83	Third-order susceptibility of gold for ultrathin layers. <i>Optics Letters</i> , 2016, 41, 317.	3.3	22
84	Numerical characterization of nanopillar photonic crystal waveguides and directional couplers. <i>Optical and Quantum Electronics</i> , 2005, 37, 331-341.	3.3	21
85	Slow light in quantum dot photonic crystal waveguides. <i>Applied Physics Letters</i> , 2009, 94, .	3.3	21
86	Surface waves on multilayer hyperbolic metamaterials: Operator approach to effective medium approximation. <i>Physical Review B</i> , 2018, 97, .	3.2	21
87	A Water-Based Huygens Dielectric Resonator Antenna. <i>IEEE Open Journal of Antennas and Propagation</i> , 2020, 1, 493-499.	3.7	21
88	Influence of imperfections on the insulating and guiding properties of finite Si-inverted opal crystals. <i>Optics Express</i> , 2009, 17, 747.	3.4	20
89	Rough metal and dielectric layers make an even better hyperbolic metamaterial absorber. <i>Optics Express</i> , 2014, 22, 14975.	3.4	20
90	Matter-Wave Tractor Beams. <i>Physical Review Letters</i> , 2017, 118, 180401.	7.8	20

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91	Numerical Methods in Photonics. , 0, , .		20
92	Cryogenic characterization of titanium nitride thin films. Optical Materials Express, 2019, 9, 2117.	3.0	20
93	Slow-light vortices in periodic waveguides. Journal of Optics, 2009, 11, 094016.	1.5	18
94	Microscopic model of the THz field enhancement in a metal nanoslit. Optics Communications, 2011, 284, 5495-5500.	2.1	18
95	Coupled plasmon-exciton induced transparency and slow light in plexcitonic metamaterials. Journal of the Optical Society of America B: Optical Physics, 2012, 29, 2297.	2.1	18
96	Photoswitchable molecular dipole antennas with tailored coherent coupling in glassy composite. Light: Science and Applications, 2015, 4, e316-e316.	16.6	18
97	Water-Based Metasurfaces for Effective Switching of Microwaves. IEEE Antennas and Wireless Propagation Letters, 2018, 17, 571-574.	4.0	18
98	Near-Zero Index Photonic Crystals with Directive Bound States in the Continuum. Laser and Photonics Reviews, 2021, 15, 2000559.	8.7	18
99	Hyperbolic metamaterials based on quantum-dot plasmon-resonator nanocomposites. Optics Express, 2014, 22, 18290.	3.4	17
100	Transmission enhancement in loss-gain multilayers by resonant suppression of reflection. Physical Review B, 2017, 96, .	3.2	17
101	Benchmarking five numerical simulation techniques for computing resonance wavelengths and quality factors in photonic crystal membrane line defect cavities. Optics Express, 2018, 26, 11366.	3.4	16
102	Modeling of Nanophotonic Resonators With the Finite-Difference Frequency-Domain Method. IEEE Transactions on Antennas and Propagation, 2011, 59, 4155-4161.	5.1	15
103	Near-field characterization of bound plasmonic modes in metal strip waveguides. Optics Express, 2016, 24, 4582.	3.4	15
104	Epsilon-Near-Zero Grids for On-chip Quantum Networks. Scientific Reports, 2019, 9, 6053.	3.3	15
105	Guided-mode resonance on pedestal and half-buried high-contrast gratings for biosensing applications. Nanophotonics, 2021, 10, 4289-4296.	6.0	15
106	Sensitivity of imaging properties of metal-dielectric layered flat lens to fabrication inaccuracies. Opto-electronics Review, 2010, 18, .	2.4	14
107	Non-invasive terahertz field imaging inside parallel plate waveguides. Applied Physics Letters, 2011, 99, .	3.3	14
108	Giant Photogalvanic Effect in Noncentrosymmetric Plasmonic Nanoparticles. Physical Review X, 2014, 4, .	8.9	14

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109	Pulling cylindrical particles using a soft-nonparaxial tractor beam. <i>Scientific Reports</i> , 2017, 7, 652.	3.3	14
110	Mid-IR optical properties of silicon doped InP. <i>Optical Materials Express</i> , 2017, 7, 2260.	3.0	14
111	Direct Imaging of Isofrequency Contours of Guided Modes in Extremely Anisotropic All-Dielectric Metasurface. <i>ACS Photonics</i> , 2019, 6, 510-515.	6.6	14
112	Thickness-dependent optical properties of aluminum nitride films for mid-infrared wavelengths. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2021, 39, .	2.1	14
113	Boundary-Induced Embedded Eigenstate in a Single Resonator for Advanced Sensing. <i>ACS Photonics</i> , 2022, 9, 1936-1943.	6.6	13
114	Selective lasing in multimode periodic and non-periodic nanopillar waveguides. <i>Physica Status Solidi (B): Basic Research</i> , 2007, 244, 1211-1218.	1.5	12
115	Electron photoemission in plasmonic nanoparticle arrays: analysis of collective resonances and embedding effects. <i>Applied Physics A: Materials Science and Processing</i> , 2014, 116, 929-940.	2.3	12
116	Tailoring Spectral Properties of Binary PT-Symmetric Gratings by Duty-Cycle Methods. <i>IEEE Journal of Selected Topics in Quantum Electronics</i> , 2016, 22, 35-41.	2.9	12
117	Experimental verification of a plasmonic hook in a dielectric Janus particle. <i>Applied Physics Letters</i> , 2021, 118, 131107.	3.3	12
118	Acceleration of radiative recombination in quasi-2D perovskite films on hyperbolic metamaterials. <i>Applied Physics Letters</i> , 2021, 118, .	3.3	12
119	Out-of-phase coupled periodic waveguides: a "couplonic" approach. <i>Optical and Quantum Electronics</i> , 2007, 39, 837-847.	3.3	11
120	Optical reconfiguration and polarization control in semi-continuous gold films close to the percolation threshold. <i>Nanoscale</i> , 2017, 9, 12014-12024.	5.6	11
121	Fabrication of hollow coaxial Al <sub>2</sub> O <sub>3</sub> /ZnAl <sub>2</sub> O <sub>4</sub> high aspect ratio freestanding nanotubes based on the Kirkendall effect. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2020, 38, .	2.1	11
122	Hydrogen gas sensing using aluminum doped ZnO metasurfaces. <i>Nanoscale Advances</i> , 2020, 2, 3452-3459.	4.6	11
123	Momentum considerations inside near-zero index materials. <i>Light: Science and Applications</i> , 2022, 11, 110.	16.6	11
124	Nested structures approach in designing an isotropic negative-index material for infrared. <i>Journal of the European Optical Society-Rapid Publications</i> , 0, 4, .	1.9	10
125	Surface plasmon polariton modulator with optimized active layer. , 2012, , .		10
126	Capacity analysis for high-speed terahertz wireless communications. , 2012, , .		10



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127	FIELD APPROACH IN THE TRANSFORMATION OPTICS CONCEPT. Progress in Electromagnetics Research, 2012, 129, 485-515.	4.4	10
128	Mapping the broadband polarization properties of linear 2D SOI photonic crystal waveguides. Optics Express, 2007, 15, 15603.	3.4	9
129	Coupled nanopillar waveguides optical properties and applications. Physica Status Solidi (A) Applications and Materials Science, 2007, 204, 3647-3661.	1.8	9
130	Cavity mode control in side-coupled periodic waveguides: Theory and experiment. Photonics and Nanostructures - Fundamentals and Applications, 2010, 8, 310-317.	2.0	9
131	Nonlinear optical model for strip plasmonic waveguides. Journal of the Optical Society of America B: Optical Physics, 2016, 33, 1341.	2.1	9
132	Electrically Small Water-Based Hemispherical Dielectric Resonator Antenna. Applied Sciences (Switzerland), 2019, 9, 4848.	2.5	9
133	Controlled Ag Electroless Deposition in Bulk Structures with Complex Three-Dimensional Profiles. Journal of the Electrochemical Society, 2010, 157, K284.	2.9	8
134	Time-resolved terahertz spectroscopy of charge carrier dynamics in the chalcogenide glass As <sub>30</sub> Se <sub>30</sub> Te <sub>40</sub> [Invited]. Photonics Research, 2016, 4, A22.	7.0	8
135	A plasmonic modulator based on metal-insulator-metal waveguide with barium titanate core. Photonics Letters of Poland, 2013, 5, .	0.4	8
136	Wave propagation retrieval method for chiral metamaterials. Optics Express, 2010, 18, 15498.	3.4	7
137	Paired modes of heterostructure cavities in photonic crystal waveguides with split band edges. Optics Express, 2010, 18, 25693.	3.4	7
138	Observation of tunneling of slow and fast electromagnetic modes in coupled periodic waveguides. Applied Physics Letters, 2011, 98, .	3.3	7
139	Selective Electroless Silver Deposition on Graphene Edges. Journal of the Electrochemical Society, 2015, 162, D213-D217.	2.9	7
140	Spherically symmetric inhomogeneous bianisotropic media: Wave propagation and light scattering. Physical Review A, 2017, 95, .	2.5	7
141	Refraction enhancement in plasmonics by coherent control of plasmon resonances. Physical Review B, 2019, 100, .	3.2	7
142	Hyperbolic surface waves on anisotropic materials without hyperbolic dispersion. Optics Express, 2020, 28, 33176.	3.4	7
143	Microspherical nanoscopy: is it a reliable technique?. OSA Continuum, 2020, 3, 10.	1.8	7
144	Enhanced broadband optical transmission in metallized woodpiles. Applied Physics A: Materials Science and Processing, 2011, 103, 749-753.	2.3	6

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145	Metamaterial-based design for a half-wavelength plate in the terahertz range. Applied Physics A: Materials Science and Processing, 2015, 119, 467-473.	2.3	6
146	Broadband infrared absorption enhancement by electroless-deposited silver nanoparticles. Nanophotonics, 2017, 6, 289-297.	6.0	6
147	Enhancing Optical Forces in InP-Based Waveguides. Scientific Reports, 2017, 7, 3106.	3.3	6
148	Subwavelength Hyperlens Resolution With Perfect Contrast Function. Annalen Der Physik, 2018, 530, 1700300.	2.4	6
149	Dichroism, chirality, and polarization eigenstates in Babinet nanoslot-dimer membrane metamaterials. Photonics and Nanostructures - Fundamentals and Applications, 2013, 11, 353-361.	2.0	5
150	Ultrafast nonlinear dynamics of thin gold films due to an intrinsic delayed nonlinearity. Journal of Optics (United Kingdom), 2017, 19, 094004.	2.2	5
151	Pseudocanalization regime for magnetic dark-field hyperlenses. Physical Review B, 2017, 96, .	3.2	5
152	Method of lines for the analysis of tunable plasmonic devices composed of graphene-dielectric stack arrays. Optics Express, 2021, 29, 28787.	3.4	5
153	Tunable water-based metasurface for anomalous wave reflection. Journal Physics D: Applied Physics, 2020, 53, 505104.	2.8	5
154	Chemical Vapor-Deposited Graphene on Ultraflat Copper Foils for van der Waals Hetero-Assembly. ACS Omega, 2022, 7, 22626-22632.	3.5	5
155	ARROW-based silicon-on-insulator photonic crystal waveguides with reduced losses. Optical and Quantum Electronics, 2007, 38, 815-826.	3.3	4
156	Free-Space Squeezing Assists Perfectly Matched Layers in Simulations on a Tight Domain. IEEE Antennas and Wireless Propagation Letters, 2010, 9, 389-392.	4.0	4
157	Finite-thickness metal-semiconductor-metal waveguide as plasmonic modulator. , 2012, , .		4
158	Applicability of point-dipoles approximation to all-dielectric metamaterials. Physical Review B, 2015, 92, .	3.2	4
159	Double resonant excitation of the second harmonic of terahertz radiation in dielectric-graphene layered metamaterials. Journal of Optics (United Kingdom), 2017, 19, 095104.	2.2	4
160	Near-Field Observation of Guided-Mode Resonances on a Metasurface via Dielectric Nanosphere Excitation. ACS Photonics, 2018, 5, 4238-4243.	6.6	4
161	Mode-resolved directional enhancement of spontaneous emission inside/outside finite multilayer hyperbolic metamaterials. Materials Today Communications, 2020, 23, 100859.	1.9	4
162	Wave Front Tuning of Coupled Hyperbolic Surface Waves on Anisotropic Interfaces. Photonics, 2020, 7, 34.	2.0	4

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163	Pedestal High-Contrast Gratings for Biosensing. <i>Nanomaterials</i> , 2022, 12, 1748.	4.1	4
164	Low Index Asymmetric Bound States in the Continuum for Low Loss Integrated Photonics. , 2020, , .		3
165	Topology-optimized and dispersion-tailored photonic crystal slow-light devices. <i>Proceedings of SPIE</i> , 2007, , .	0.8	2
166	Slow light pulse propagation in dispersive media. <i>Comptes Rendus Physique</i> , 2009, 10, 957-963.	0.9	2
167	Surface Plasmon Polariton Modulator with Periodic Patterning of Indium Tin Oxide Layers. , 2011, , .		2
168	Improving plasmonic waveguides coupling efficiency using nanoantennas. , 2012, , .		2
169	Plasmonic modulator based on thin metal-semiconductor-metal waveguide with gain core. <i>Proceedings of SPIE</i> , 2013, , .	0.8	2
170	Plasmonic modulator using CMOS-compatible material platform. , 2014, , .		2
171	Graphene-Enhanced Metamaterials for THz Applications. <i>NATO Science for Peace and Security Series B: Physics and Biophysics</i> , 2016, , 145-169.	0.3	2
172	2D steering of surface plasmon polaritons with silicon nanoantennas. <i>Journal of Physics: Conference Series</i> , 2018, 1092, 012140.	0.4	2
173	Nanopillar coupled periodic waveguides: from basic properties to applications. , 2006, , .		1
174	Passive integrated circuits utilizing slow light in photonic crystal waveguides. , 2006, 6389, 118.		1
175	Slow light based on material and waveguide dispersion. , 2009, , .		1
176	Coupled cavities and band-edge slow-light effects in periodic waveguides. , 2010, , .		1
177	Two-dimensional fractal metamaterials for applications in THz. , 2011, , .		1
178	Engineering the propagation of high-k bulk plasmonic waves in multilayer hyperbolic metamaterials by multiscale structuring. , 2013, , .		1
179	CMOS Compatible Ultra-Compact Modulator. , 2014, , .		1
180	Ultra-thin metal and dielectric layers for nanophotonic applications. , 2015, , .		1

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181	Nanophotonic Modulator with Bismuth Ferrite as Low-loss Switchable Material. , 2015, , .		1
182	Surface waves on metal-dielectric metamaterials. , 2016, , .		1
183	Benchmarking five computational methods for analyzing large photonic crystal membrane cavities. , 2017, , .		1
184	Tunable microwave metamaterials based on ordinary water. , 2017, , .		1
185	Epsilon-Near-Zero Systems for Quantum Optics Applications. , 2018, , .		1
186	Scattering Properties of High-Permittivity Dielectric Resonators Embedded with Impedance Sheets. , 2022, , .		1
187	Optical characterisation of photonic wire and photonic crystal waveguides fabricated using nanoimprint lithography. , 2006, , .		0
188	Peculiarities of Light Propagation in Photonic Crystal Waveguides in the Slow Light Regime. , 2006, , .		0
189	Experimental observation of slow light tunneling in coupled periodic waveguides. , 2008, , .		0
190	Photonic crystal waveguides in artificial opals. , 2008, , .		0
191	Control of cavity modes in coupled periodic waveguides. , 2009, , .		0
192	Slow-light vortices in periodic waveguides. Proceedings of SPIE, 2009, , .	0.8	0
193	Coupling of cavities: the way to impose control over their modes. Proceedings of SPIE, 2010, , .	0.8	0
194	Review of the results of the COST MP0702 exercise on the sensitivity of metal-dielectric layered flat lens to fabrication inaccuracies. , 2011, , .		0
195	Metamaterials modelling, fabrication, and characterisation techniques. Proceedings of SPIE, 2012, , .	0.8	0
196	Graphene wire medium: Homogenization and application. , 2012, , .		0
197	Bloch-mode analysis for effective parameters restoration. , 2012, , .		0
198	Reflectors and resonators for high-k bulk Bloch plasmonic waves in multilayer hyperbolic metamaterials. , 2012, , .		0

#	ARTICLE	IF	CITATIONS
199	A new mechanism to design transparent electrodes: THz realizations. , 2012, , .		0
200	Metal membrane with dimer slots as a universal polarizer. Proceedings of SPIE, 2014, , .	0.8	0
201	Plasmonic Antennas Nanocoupler for Telecom Range: Simulation, Fabrication and Near-Field Characterization. , 2014, , .		0
202	Bismuth ferrite for active control of surface plasmon polariton modes. , 2014, , .		0
203	Plasmonic nanocone arrays as photoconductive and photovoltaic metamaterials. , 2014, , .		0
204	Bulk photovoltaic effect in photoconductive metamaterials based on cone-shaped nanoparticles. Proceedings of SPIE, 2014, , .	0.8	0
205	Existence conditions for bulk large-wavevector waves in metal-dielectric and graphene-dielectric multilayer hyperbolic metamaterials. , 2014, , .		0
206	Ultrasensitive terahertz waveguide modulators using graphene metamaterials. , 2014, , .		0
207	Ultrabroadband terahertz characterization of highly doped ZnO and ITO. , 2015, , .		0
208	Optical nano-antennae as compact and efficient couplers from free-space to waveguide modes. , 2015, , .		0
209	Modeling, fabrication and high power optical characterization of plasmonic waveguides. , 2015, , .		0
210	Dark-field hyperlens for high-contrast sub-wavelength imaging. , 2016, , .		0
211	Resonant excitations of the giant second harmonic in dielectric-graphene metamaterials. , 2016, , .		0
212	Nonlinear propagation of surface plasmon-polaritons in gold stripe waveguides. , 2016, , .		0
213	Broadband terahertz spectroscopy of chalcogenide glass As<math>\infty</math>30</math>/<math>\infty</math>Se<math>\infty</math>30</math>/<math>\infty</math>Te<math>\infty</math>40</math>/<math>\infty</math>. , 2016, , .		0
214	Effective medium approximation for deeply subwavelength all-dielectric multilayers: when does it break down?. Proceedings of SPIE, 2016, , .	0.8	0
215	Fabrication of deep-profile Al-doped ZnO one- and two-dimensional lattices as plasmonic elements. , 2016, , .		0
216	Design, fabrication and SNOM investigation of plasmonic devices. , 2016, , .		0

#	ARTICLE	IF	CITATIONS
217	Nonlinear effects in propagation of long-range surface plasmon polaritons in gold strip waveguides. , 2016, , .		0
218	Comparison of five computational methods for computing Q factors in photonic crystal membrane cavities. , 2017, , .		0
219	Demultiplexing surface waves with silicon nanoantennas. AIP Conference Proceedings, 2017, , .	0.4	0
220	Advanced fabrication of hyperbolic metamaterials. AIP Conference Proceedings, 2017, , .	0.4	0
221	Highly ordered transparent conductive oxide nanopillar metamaterials for mid-infrared plasmonics. , 2017, , .		0
222	Tunable water-based microwave metasurface. , 2017, , .		0
223	Nonlinear optical response of chalcogenide glassy semiconductors in the IR and THz ranges studied with the femtosecond resolution in time. , 2017, , .		0
224	Compensation of loss-induced beam broadening in HMMs by a $\hat{1}/4$ -negative HMM. , 2017, , .		0
225	Non-diffractive tractor beams. , 2017, , .		0
226	Comparison of five numerical methods for computing quality factors and resonance wavelengths in photonic crystal membrane cavities. , 2017, , .		0
227	Experimental verification of the intrinsic ultrafast delayed nonlinearity of gold. , 2017, , .		0
228	Numerical simulations of nanostructured gold films. , 2017, , .		0
229	Which Computational Methods Are Good for Analyzing Large Photonic Crystal Membrane Cavities?. , 2018, , .		0
230	Initial Investigation for the Fabrication of Hyperbolic Metamaterials Based on Ultra-Thin Au Layers. , 2018, , .		0
231	High Aspect Plasmonic Nanotrench Structures as Sensors in the Near- and Mid-IR Frequency Range. , 2018, , .		0
232	Pseudocanalization regime for surface waves. , 2018, , .		0
233	Investigation of the Lower Limit of the Applicability of Effective Medium Approximation for Hyperbolic Metamaterials. , 2019, , .		0
234	Lamellas Metamaterials: Properties and Potential Applications. , 2019, , .		0

#	ARTICLE	IF	CITATIONS
235	Fundamental Properties of Mie Resonances in Water Cylinders – TM and TE Case Studies. , 2019, , .		0
236	First Experimental Observation of Photonic Spin Hall Effect in Hyperbolic Metamaterials at Visible Wavelengths. , 2019, , .		0
237	Investigation of the optical properties of Al-doped Ag Layers. , 2021, , .		0
238	A Simple Water-Based Huygens Antenna. , 2021, , .		0
239	Fabrication and Characterization of Hyperbolic Metamaterials. Metamaterials Science and Technology, 2021, , 1-21.	0.1	0
240	TO-phonon anisotropies in a highly doped InP (001) grating structure. Applied Physics Letters, 2021, 119, 141102.	3.3	0
241	Enhanced slow light in quantum dot photonic crystal waveguides. , 2008, , .		0
242	Coherent matrix of plasmonic beams. Photonics Letters of Poland, 2013, 5, .	0.4	0
243	Plasmonics. Photonics Letters of Poland, 2013, 5, .	0.4	0
244	Refractive Index Sensing by High Aspect Ratio Titanium Nitride Trench Structures. , 2018, , .		0
245	Pseudocanalizing propagation with hyperbolic surface waves. , 2018, , .		0
246	Aluminum-doped Zinc Oxide Trench Hyperbolic Metamaterial as a Mid-infrared Sensing Platform. , 2018, , .		0
247	Plasmonic anisotropic metasurfaces: from far-field measurements to near-field properties. , 2018, , .		0
248	Benchmarking state-of-the-art numerical simulation techniques for analyzing large photonic crystal membrane line defect cavities. , 2018, , .		0
249	High-quality ultrathin gold layers for use in plasmonic and metamaterials applications. , 2018, , .		0
250	Fundamental Properties of Mie Resonances in Water Spheres. , 2019, , .		0
251	Fabrication of 20-nm period multilayer metal-dielectric structures and initial patterning tests. AIP Conference Proceedings, 2020, , .	0.4	0
252	Improved Sensitivity of Subwavelength Silicon Gratings for Protein Detection. , 2021, , .		0

#	ARTICLE	IF	CITATIONS
253	Comparative study of PEALD-deposited and sputtered AlN's optical properties for mid-infrared wavelengths. , 2021, , .		0