

Viktor A Podolskiy

List of Publications by Year in Descending Order

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

122
papers

7,205
citations

39
h-index

84
g-index

189
ext. papers

8,186
ext. citations

5.2
avg, IF

5.81
L-index

#	Paper	IF	Citations
122	Extending plasmonic response to the mid-wave infrared with all-epitaxial composites.. <i>Optics Letters</i> , 2022 , 47, 973-976	3	0
121	Angle-insensitive plasmonic nanorod metamaterial-based band-pass optical filters. <i>Optics Express</i> , 2021 , 29, 11562-11569	3.3	0
120	Machine Learning-Based Diffractive Image Analysis with Subwavelength Resolution. <i>ACS Photonics</i> , 2021 , 8, 1448-1456	6.3	3
119	Stimulated emission in vicinity of the critical angle. <i>Applied Physics Letters</i> , 2021 , 119, 031102	3.4	0
118	Efficient radiational outcoupling of electromagnetic energy from hyperbolic metamaterial resonators. <i>Scientific Reports</i> , 2020 , 10, 21854	4.9	1
117	Enhanced emission from ultra-thin long wavelength infrared superlattices on epitaxial plasmonic materials. <i>Applied Physics Letters</i> , 2020 , 116, 021102	3.4	9
116	Machine Learning-based Diffractive Imaging with Subwavelength Resolution 2020 ,		1
115	Enhanced room temperature infrared LEDs using monolithically integrated plasmonic materials. <i>Optica</i> , 2020 , 7, 1355	8.6	6
114	Engineering the Berreman mode in mid-infrared polar materials. <i>Optics Express</i> , 2020 , 28, 28590-28599	3.3	7
113	Ballistic metamaterials. <i>Optica</i> , 2020 , 7, 1773	8.6	1
112	Subdiffraction Limited Photonic Funneling of Light. <i>Advanced Optical Materials</i> , 2020 , 8, 2001321	8.1	0
111	Photonic Funnel: Subdiffraction Limited Photonic Funneling of Light (Advanced Optical Materials 24/2020). <i>Advanced Optical Materials</i> , 2020 , 8, 2070098	8.1	0
110	Magneto-Optical Metamaterials: Nonreciprocal Transmission and Faraday Effect Enhancement. <i>Advanced Optical Materials</i> , 2019 , 7, 1801420	8.1	17
109	Singlet-Triplet Transition Rate Enhancement inside Hyperbolic Metamaterials. <i>Laser and Photonics Reviews</i> , 2019 , 13, 1900101	8.3	8
108	Electrically Injected Parity Time-Symmetric Single Transverse-Mode Lasers. <i>Laser and Photonics Reviews</i> , 2019 , 13, 1800154	8.3	9
107	Low-frequency nonlocal and hyperbolic modes in corrugated wire metamaterials. <i>Optics Express</i> , 2018 , 26, 17541-17548	3.3	10
106	Directional emission of rhodamine 6G on top of a silver grating. <i>Optics Letters</i> , 2018 , 43, 2668-2671	3	2

105	Structural second-order nonlinearity in plasmonic metamaterials. <i>Optica</i> , 2018 , 5, 1502	8.6	10
104	Single-transverse-mode broadband InAs quantum dot superluminescent light emitting diodes by parity-time symmetry. <i>Optics Express</i> , 2018 , 26, 30588-30595	3.3	0
103	Spontaneous Emission in Nonlocal Metamaterials with Spatial Dispersion. <i>Springer Series in Solid-state Sciences</i> , 2017 , 237-277	0.4	1
102	Spontaneous emission in non-local materials. <i>Light: Science and Applications</i> , 2017 , 6, e16273	16.7	61
101	Rigorous diffraction interface theory. <i>Applied Physics Letters</i> , 2017 , 110, 171108	3.4	3
100	Control of the Stokes Shift with Strong Coupling. <i>Advanced Optical Materials</i> , 2017 , 5, 1600941	8.1	17
99	Nonlocal Effects in Transition Hyperbolic Metamaterials. <i>ACS Photonics</i> , 2017 , 4, 2470-2478	6.3	28
98	Mid-infrared epsilon-near-zero modes in ultra-thin phononic films. <i>Applied Physics Letters</i> , 2017 , 111, 091105	3.4	24
97	Geometry Defines Ultrafast Hot-Carrier Dynamics and Kerr Nonlinearity in Plasmonic Metamaterial Waveguides and Cavities. <i>Advanced Optical Materials</i> , 2017 , 5, 1700299	8.1	22
96	Metasurface-enhanced transparency. <i>Journal of the Optical Society of America B: Optical Physics</i> , 2017 , 34, D42	1.7	4
95	Interscale mixing microscopy: far-field imaging beyond the diffraction limit. <i>Optica</i> , 2016 , 3, 803	8.6	7
94	Homogenization of nanowire-based composites with anisotropic unit-cell and layered substructure. <i>MRS Communications</i> , 2016 , 6, 23-29	2.7	4
93	Enhanced Optical Transmission through MacEtch-Fabricated Buried Metal Gratings. <i>Advanced Materials</i> , 2016 , 28, 1441-8	24	16
92	Optical Transmission: Enhanced Optical Transmission through MacEtch-Fabricated Buried Metal Gratings (Adv. Mater. 7/2016). <i>Advanced Materials</i> , 2016 , 28, 1440-1440	24	
91	Epsilon-Near-Zero Photonics Wires. <i>ACS Photonics</i> , 2016 , 3, 1045-1052	6.3	24
90	Applications of plasmonics: general discussion. <i>Faraday Discussions</i> , 2015 , 178, 435-66	3.6	11
89	Plasmonic and new plasmonic materials: general discussion. <i>Faraday Discussions</i> , 2015 , 178, 123-49	3.6	13
88	Surface plasmon enhanced spectroscopies and time and space resolved methods: general discussion. <i>Faraday Discussions</i> , 2015 , 178, 253-79	3.6	2

87	Diffractive interface theory: nonlocal susceptibility approach to the optics of metasurfaces. <i>Optics Express</i> , 2015 , 23, 2764-76	3.3	23
86	Interscale mixing microscopy: numerically stable imaging of wavelength- scale objects with sub-wavelength resolution and far field measurements. <i>Optics Express</i> , 2015 , 23, 2753-63	3.3	8
85	Light emission in nonlocal plasmonic metamaterials. <i>Faraday Discussions</i> , 2015 , 178, 61-70	3.6	21
84	Purcell effect in hyperbolic metamaterial resonators. <i>Physical Review B</i> , 2015 , 92,	3.3	54
83	Refractive index sensing with hyperbolic metamaterials: strategies for biosensing and nonlinearity enhancement. <i>Optics Express</i> , 2015 , 23, 14329-43	3.3	60
82	Enhanced light transmission through a subwavelength slit. <i>Physical Review B</i> , 2014 , 89,	3.3	18
81	Looking into meta-atoms of plasmonic nanowire metamaterial. <i>Nano Letters</i> , 2014 , 14, 4971-6	11.5	44
80	Nonlocal optics of plasmonic nanowire metamaterials. <i>Physical Review B</i> , 2014 , 89,	3.3	56
79	Toward parametric amplification in plasmonic systems: second harmonic generation enhanced by surface plasmon polaritons. <i>Optics Express</i> , 2014 , 22, 7773-82	3.3	12
78	Metamaterials-based Salisbury screens with reduced angular sensitivity. <i>Applied Physics Letters</i> , 2014 , 105, 161105	3.4	6
77	Engineering absorption and blackbody radiation in the far-infrared with surface phonon polaritons on gallium phosphide. <i>Applied Physics Letters</i> , 2014 , 104, 131105	3.4	33
76	Ultrasensitive non-resonant detection of ultrasound with plasmonic metamaterials. <i>Advanced Materials</i> , 2013 , 25, 2351-6	24	39
75	Near-field infrared absorption of plasmonic semiconductor microparticles studied using atomic force microscope infrared spectroscopy. <i>Applied Physics Letters</i> , 2013 , 102, 152110	3.4	22
74	Diffractive imaging route to sub-wavelength pixels. <i>Applied Physics Letters</i> , 2013 , 102, 241115	3.4	3
73	Hyperbolic and plasmonic properties of silicon/Ag aligned nanowire arrays. <i>Optics Express</i> , 2013 , 21, 14962-74	3.4	35
72	Hyperbolic metamaterials: new physics behind a classical problem. <i>Optics Express</i> , 2013 , 21, 15048-64	3.3	214
71	Focus issue: hyperbolic metamaterials. <i>Optics Express</i> , 2013 , 21, 14895-7	3.3	49
70	Towards nano-scale photonics with micro-scale photons: the opportunities and challenges of mid-infrared plasmonics. <i>Nanophotonics</i> , 2013 , 2, 103-130	6.3	132

69	Nonlocal Response of Plasmonic Nanorod Metamaterials 2012 ,		3
68	Control of reflectance and transmittance in scattering and curvilinear hyperbolic metamaterials. <i>Applied Physics Letters</i> , 2012 , 101, 091105	3.4	30
67	Strong Coupling of Molecular and Mid-Infrared Perfect Absorber Resonances. <i>IEEE Photonics Technology Letters</i> , 2012 , 24, 31-33	2.2	52
66	Homogeneous Hyperbolic Systems for Terahertz and Far-Infrared Frequencies. <i>Advances in OptoElectronics</i> , 2012 , 2012, 1-6	0.5	39
65	Low-diffraction beaming in plasmonic crystals. <i>Optics Letters</i> , 2012 , 37, 2976-8	3	5
64	Terahertz transmission ellipsometry of vertically aligned multi-walled carbon nanotubes. <i>Applied Physics Letters</i> , 2012 , 101, 111107	3.4	13
63	Funneling light through a subwavelength aperture with epsilon-near-zero materials. <i>Physical Review Letters</i> , 2011 , 107, 133901	7.4	122
62	Multiscale beam evolution and shaping in corrugated plasmonic systems. <i>Optics Express</i> , 2011 , 19, 9269-81	3.3	10
61	Enhanced bandwidth and reduced dispersion through stacking multiple optical metamaterials. <i>Optics Express</i> , 2011 , 19, 14990-8	3.3	3
60	Collective phenomena in photonic, plasmonic and hybrid structures. <i>Optics Express</i> , 2011 , 19, 22024-8	3.3	16
59	Designed ultrafast optical nonlinearity in a plasmonic nanorod metamaterial enhanced by nonlocality. <i>Nature Nanotechnology</i> , 2011 , 6, 107-11	28.7	357
58	Transparent conductive oxides: Plasmonic materials for telecom wavelengths. <i>Applied Physics Letters</i> , 2011 , 99, 021101	3.4	158
57	ENZ-enhanced transmission through subwavelength slits 2011 ,		1
56	Stimulated emission of surface plasmon polaritons in a microcylinder cavity. <i>Physical Review Letters</i> , 2011 , 106, 183903	7.4	41
55	Asymmetric reflectance and cluster size effects in silver percolation films. <i>Physical Review B</i> , 2011 , 84,	3.3	1
54	Plasmonic mid-infrared beam steering. <i>Applied Physics Letters</i> , 2010 , 96, 201112	3.4	14
53	Analytical technique for subwavelength far field imaging. <i>Applied Physics Letters</i> , 2010 , 97, 101103	3.4	10
52	Plasmonic nanorod metamaterials for biosensing. <i>Nature Materials</i> , 2009 , 8, 867-71	27	1272

51	Hypergratings: nanophotonics in planar anisotropic metamaterials. <i>Optics Letters</i> , 2009 , 34, 890-2	3	64
50	Optical nonlocalities and additional waves in epsilon-near-zero metamaterials. <i>Physical Review Letters</i> , 2009 , 102, 127405	7.4	201
49	Quasi-planar optics: computing light propagation and scattering in planar waveguide arrays. <i>Journal of the Optical Society of America B: Optical Physics</i> , 2009 , 26, B102	1.7	18
48	Midinfrared semiconductor optical metamaterials. <i>Journal of Applied Physics</i> , 2009 , 105, 122411	2.5	41
47	Optical nonlocalities and additional waves in epsilon-near-zero metamaterials 2009 ,		1
46	Stimulated emission of surface plasmon polaritons. <i>Physical Review Letters</i> , 2008 , 101, 226806	7.4	230
45	Enhancement of dispersion modulation in nanoscale waveguides. <i>Journal of the Optical Society of America B: Optical Physics</i> , 2008 , 25, C127	1.7	1
44	Compensation of loss in propagating surface plasmon polariton by gain in adjacent dielectric medium. <i>Optics Express</i> , 2008 , 16, 1385-92	3.3	216
43	Sub-diffraction negative and positive index modes in mid-infrared waveguides. <i>Optics Express</i> , 2008 , 16, 16404-9	3.3	6
42	Scattering-free plasmonic optics with anisotropic metamaterials. <i>Physical Review Letters</i> , 2008 , 100, 066402	7.4	69
41	Comment on All-Angle Broadband Negative Refraction of Metal Waveguide Arrays in the Visible Range: Theoretical Analysis and Numerical Demonstration <i>Physical Review Letters</i> , 2007 , 98,	7.4	2
40	Nonlocal effects in effective-medium response of nanolayered metamaterials. <i>Applied Physics Letters</i> , 2007 , 90, 191109	3.4	178
39	Active metamaterials: Sign of refractive index and gain-assisted dispersion management. <i>Applied Physics Letters</i> , 2007 , 91, 191103	3.4	59
38	Highly confined optical modes in nanoscale metal-dielectric multilayers. <i>Physical Review B</i> , 2007 , 75,	3.3	157
37	Plasmonic Nanolayer Composites: Coupled Plasmon Polaritons, Effective-Medium Response, and Subdiffraction Light Manipulation. <i>Journal of Nanomaterials</i> , 2007 , 2007, 1-8	3.2	21
36	Level spacing distribution in systems with partially chaotic classical dynamics. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 2007 , 362, 412-416	2.3	8
35	Negative refraction in semiconductor metamaterials. <i>Nature Materials</i> , 2007 , 6, 946-50	27	634
34	Far-field imaging by a planar lens: Diffraction versus superresolution. <i>Physical Review B</i> , 2007 , 76,	3.3	7

33	Compensation of loss by optical gain in propagating surface plasmons 2007 ,		2
32	Metamaterial coatings for broadband asymmetric mirrors. <i>Optics Letters</i> , 2007 , 32, 1770-2	3	5
31	Chaos-assisted tunneling and dynamical localization in dielectric microdisk resonators. <i>IEEE Journal of Selected Topics in Quantum Electronics</i> , 2006 , 12, 40-51	3.8	10
30	. <i>IEEE Journal of Selected Topics in Quantum Electronics</i> , 2006 , 12, 66-70	3.8	5
29	Gain-assisted slow to superluminal group velocity manipulation in nanowaveguides. <i>Physical Review Letters</i> , 2006 , 97, 223902	7.4	34
28	Metamaterial photonic funnels for subdiffraction light compression and propagation. <i>Physical Review B</i> , 2006 , 73,	3.3	88
27	CHAOTIC MICROLASERS BASED ON DYNAMICAL LOCALIZATION. <i>International Journal of Bifurcation and Chaos in Applied Sciences and Engineering</i> , 2006 , 16, 1835-1839	2	
26	Sub-diffraction light propagation in fibres with anisotropic dielectric cores. <i>Journal of Modern Optics</i> , 2006 , 53, 2315-2324	1.1	6
25	Nanowire metamaterials with extreme optical anisotropy. <i>Applied Physics Letters</i> , 2006 , 89, 261102	3.4	180
24	Nonmagnetic nanocomposites for optical and infrared negative-refractive-index media. <i>Journal of the Optical Society of America B: Optical Physics</i> , 2006 , 23, 498	1.7	128
23	Dynamical localization in microdisk lasers. <i>Optics Express</i> , 2005 , 13, 5641-52	3.3	15
22	Near-sighted superlens. <i>Optics Letters</i> , 2005 , 30, 75-7	3	213
21	Chaos-assisted tunneling in dielectric microcavities. <i>Optics Letters</i> , 2005 , 30, 474-6	3	45
20	Strongly anisotropic media: the THz perspectives of left-handed materials. <i>Journal of Modern Optics</i> , 2005 , 52, 2343-2349	1.1	34
19	Strongly anisotropic waveguide as a nonmagnetic left-handed system. <i>Physical Review B</i> , 2005 , 71,	3.3	235
18	Resonant light interaction with plasmonic nanowire systems. <i>Journal of Optics</i> , 2005 , 7, S32-S37		84
17	A proof of superlensing in the quasistatic regime, and limitations of superlenses in this regime due to anomalous localized resonance. <i>Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences</i> , 2005 , 461, 3999-4034	2.4	102
16	Optimizing the superlens: Manipulating geometry to enhance the resolution. <i>Applied Physics Letters</i> , 2005 , 87, 231113	3.4	50

15	Chaotic microlasers based on dynamical localization. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2004 , 101, 10498-500	11.5	29
14	The limitedness problem on distance automata: Hashiguchi's method revisited. <i>Theoretical Computer Science</i> , 2004 , 310, 147-158	1.1	21
13	Optical properties of metal nanowires 2003 ,		4
12	Plasmon modes and negative refraction in metal nanowire composites. <i>Optics Express</i> , 2003 , 11, 735-45	3.3	219
11	Semiclassical description of chaos-assisted tunneling. <i>Physical Review Letters</i> , 2003 , 91, 263601	7.4	49
10	Discrete spectrum of anti-Stokes emission from metal particle-adsorbate complexes in a microcavity 2002 ,		1
9	Low-threshold lasing and broad-band multiphoton-excited light emission from Ag aggregate-adsorbate complexes in microcavity. <i>Journal of Modern Optics</i> , 2002 , 49, 645-662	1.1	20
8	PLASMON MODES IN METAL NANOWIRES AND LEFT-HANDED MATERIALS. <i>Journal of Nonlinear Optical Physics and Materials</i> , 2002 , 11, 65-74	0.8	176
7	Resonance transmittance through a metal film with subwavelength holes. <i>IEEE Journal of Quantum Electronics</i> , 2002 , 38, 956-963	2	29
6	Plasmon-enhanced absorption by optical phonons in metal-dielectric composites. <i>Europhysics Letters</i> , 2001 , 53, 364-370	1.6	18
5	Near-field optical studies of semicontinuous metal films. <i>Physical Review B</i> , 2001 , 64,	3.3	68
4	Large local optical activity in fractal aggregates of nanoparticles. <i>Journal of the Optical Society of America B: Optical Physics</i> , 2001 , 18, 1896	1.7	44
3	Experimental observation of percolation-enhanced nonlinear light scattering from semicontinuous metal films. <i>Physical Review B</i> , 2001 , 64,	3.3	51
2	PERCOLATION AND FRACTAL COMPOSITES: OPTICAL STUDIES. <i>Journal of Nonlinear Optical Physics and Materials</i> , 2000 , 09, 105-116	0.8	25
1	CoPhy -PGNN: Learning Physics-guided Neural Networks with Competing Loss Functions for Solving Eigenvalue Problems. <i>ACM Transactions on Intelligent Systems and Technology</i> ,	8	1