A Yu Nikitin

List of Publications by Year
in descending order

90	7,008	57758	58581
papers	citations	44 h-index	82 g-index

93	93	93	5375
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Active and Passive Tuning of Ultranarrow Resonances in Polaritonic Nanoantennas. Advanced Materials, 2022, 34, e2104954.	21.0	13
2	Active Tuning of Highly Anisotropic Phonon Polaritons in Van der Waals Crystal Slabs by Gated Graphene. ACS Photonics, 2022, 9, 383-390.	6.6	37
3	Real-space nanoimaging of THz polaritons in the topological insulator Bi2Se3. Nature Communications, 2022, 13, 1374.	12.8	33
4	Real-space observation of vibrational strong coupling between propagating phonon polaritons and organic molecules. Nature Photonics, 2021, 15, 197-202.	31.4	90
5	Nanoscaleâ€Confined Terahertz Polaritons in a van der Waals Crystal. Advanced Materials, 2021, 33, e2005777.	21.0	53
6	Optical magnetic lens: towards actively tunable terahertz optics. Nanoscale, 2021, 13, 108-116.	5.6	4
7	Extracting the Infrared Permittivity of SiO2 Substrates Locally by Near-Field Imaging of Phonon Polaritons in a van der Waals Crystal. Nanomaterials, 2021, 11, 120.	4.1	7
8	Giant optical anisotropy in transition metal dichalcogenides for next-generation photonics. Nature Communications, 2021, 12, 854.	12.8	154
9	Photothermal twistronics. Nature Nanotechnology, 2021, 16, 489-490.	31.5	0
10	Enabling propagation of anisotropic polaritons along forbidden directions via a topological transition. Science Advances, 2021, 7, .	10.3	53
11	Interband plasmon polaritons in magnetized charge-neutral graphene. Communications Physics, 2021, 4, .	5.3	2
12	Planar refraction and lensing of highly confined polaritons in anisotropic media. Nature Communications, 2021, 12, 4325.	12.8	48
13	Hyperspectral Nanoimaging of van der Waals Polaritonic Crystals. Nano Letters, 2021, 21, 7109-7115.	9.1	13
14	Focusing of in-plane hyperbolic polaritons in van der Waals crystals with tailored infrared nanoantennas. Science Advances, 2021, 7, eabj0127.	10.3	36
15	Bonding and Antibonding Modes in Metalâ€“Dielectricâ€“Metal Plasmonic Antennas for Dualâ€Band Applications. Advanced Optical Materials, 2020, 8, 1900942.	7.3	9
16	Van der Waals Semiconductors: Infrared Permittivity of the Biaxial van der Waals Semiconductor Î±â€MoO‹sub›3‹/sub› from Nearâ€and Farâ€Field Correlative Studies (Adv. Mater. 29/2020). Advanced Materials, 2020, 32, 2070220.	21.0	5
17	Extremely Confined Acoustic Phonon Polaritons in Monolayer-hBN/Metal Heterostructures for Strong Lightâ€“Matter Interactions. ACS Photonics, 2020, 7, 2610-2617.	6.6	33
18	Twisted Nano-Optics: Manipulating Light at the Nanoscale with Twisted Phonon Polaritonic Slabs. Nano Letters, 2020, 20, 5323-5329.	9.1	126

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19	Infrared Permittivity of the Biaxial van der Waals Semiconductor Î±â€MoO₃ from Nearâ€•and Farâ€Field Correlative Studies. Advanced Materials, 2020, 32, e1908176.	21.0	99
20	Broadband optical properties of monolayer and bulk MoS2. Npj 2D Materials and Applications, 2020, 4, .	7.9	112
21	Nanoscale Guiding of Infrared Light with Hyperbolic Volume and Surface Polaritons in van der Waals Material Ribbons. Advanced Materials, 2020, 32, e1906530.	21.0	29
22	Broad spectral tuning of ultra-low-loss polaritons in a van der Waals crystal by intercalation. Nature Materials, 2020, 19, 964-968.	27.5	129
23	Nanofocusing of acoustic graphene plasmon polaritons for enhancing mid-infrared molecular fingerprints. Nanophotonics, 2020, 9, 2089-2095.	6.0	12
24	Launching of hyperbolic phonon-polaritons in h-BN slabs by resonant metal plasmonic antennas. Nature Communications, 2019, 10, 3242.	12.8	56
25	Matter manipulation with extreme terahertz light: Progress in the enabling THz technology. Physics Reports, 2019, 836-837, 1-74.	25.6	147
26	Fast and Sensitive Terahertz Detection Using an Antenna-Integrated Graphene pn Junction. Nano Letters, 2019, 19, 2765-2773.	9.1	144
27	Analytical approximations for the dispersion of electromagnetic modes in slabs of biaxial crystals. Physical Review B, 2019, 100, .	3.2	67
28	Deeply subwavelength phonon-polaritonic crystal made of a van der Waals material. Nature Communications, 2019, 10, 42.	12.8	51
29	Infrared hyperbolic metasurface based on nanostructured van der Waals materials. Science, 2018, 359, 892-896.	12.6	344
30	Boron nitride nanoresonators for phonon-enhanced molecular vibrational spectroscopy at the strong coupling limit. Light: Science and Applications, 2018, 7, 17172-17172.	16.6	257
31	Telecom meets terahertz. Nature Photonics, 2018, 12, 3-4.	31.4	6
32	Controlling surface charge and spin density oscillations by Dirac plasmon interaction in thin topological insulators. Physical Review B, 2018, 97, .	3.2	8
33	In-plane anisotropic and ultra-low-loss polaritons in a natural van der Waals crystal. Nature, 2018, 562, 557-562.	27.8	506
34	Addressing Vibrational Excitations in Van der Waals Materials and Molecular Layers Within Electron Energy Loss Spectroscopy. Microscopy and Microanalysis, 2018, 24, 408-409.	0.4	0
35	Electrically controlled terahertz magneto-optical phenomena in continuous and patterned graphene. Nature Communications, 2017, 8, 14626.	12.8	93
36	Optical Nanoimaging of Hyperbolic Surface Polaritons at the Edges of van der Waals Materials. Nano Letters, 2017, 17, 228-235.	9.1	107

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37	Nanoimaging of resonating hyperbolic polaritons in linear boron nitride antennas. Nature Communications, 2017, 8, 15624.	12.8	121
38	Acoustic Graphene Plasmon Nanoresonators for Field-Enhanced Infrared Molecular Spectroscopy. ACS Photonics, 2017, 4, 3089-3097.	6.6	43
39	Terahertz Nanofocusing with Cantilevered Terahertz-Resonant Antenna Tips. Nano Letters, 2017, 17, 6526-6533.	9.1	84
40	Probing low-energy hyperbolic polaritons in van der Waals crystals with an electron microscope. Nature Communications, 2017, 8, 95.	12.8	111
41	Graphene Plasmon Reflection by Corrugations. ACS Photonics, 2017, 4, 3081-3088.	6.6	30
42	Graphene Plasmonics. World Scientific Series in Nanoscience and Nanotechnology, 2017, , 307-338.	0.1	4
43	Acoustic terahertz graphene plasmons revealed by photocurrent nanoscopy. Nature Nanotechnology, 2017, 12, 31-35.	31.5	257
44	Nanofocusing of Hyperbolic Phonon Polaritons in a Tapered Boron Nitride Slab. ACS Photonics, 2016, 3, 924-929.	6.6	44
45	Real-space mapping of tailored sheet and edge plasmons in graphene nanoresonators. Nature Photonics, 2016, 10, 239-243.	31.4	167
46	Stacking Structures of Few-Layer Graphene Revealed by Phase-Sensitive Infrared Nanoscopy. ACS Nano, 2015, 9, 6765-6773.	14.6	35
47	Plasmons in Cylindrical 2D Materials as a Platform for Nanophotonic Circuits. ACS Photonics, 2015, 2, 280-286.	6.6	58
48	Direct observation of ultraslow hyperbolic polariton propagation with negative phase velocity. Nature Photonics, 2015, 9, 674-678.	31.4	268
49	Plasmons in graphene on uniaxial substrates. Applied Physics Letters, 2014, 104, 011111.	3.3	11
50	Controlling graphene plasmons with resonant metal antennas and spatial conductivity patterns. Science, 2014, 344, 1369-1373.	12.6	292
51	Efficient Coupling of Light to Graphene Plasmons by Compressing Surface Polaritons with Tapered Bulk Materials. Nano Letters, 2014, 14, 2896-2901.	9.1	80
52	Anomalous reflection phase of graphene plasmons and its influence on resonators. Physical Review B, 2014, 90, .	3.2	97
53	Giant Enhancement of Transmitted Light and Its Localization Due to Elastic Surface Plasmonâ€“Polariton Scattering by a Thin Dielectric Diffraction Grating. Plasmonics, 2014, 9, 219-226.	3.4	1
54	Faraday Rotation Due to Excitation of Magnetoplasmons in Graphene Microribbons. ACS Nano, 2013, 7, 9780-9787.	14.6	106

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55	Strong Plasmon Reflection at Nanometer-Size Gaps in Monolayer Graphene on SiC. Nano Letters, 2013, 13, 6210-6215.	9.1	121
56	Graphene supports the propagation of subwavelength optical solitons. Laser and Photonics Reviews, 2013, 7, L7.	8.7	117
57	Scattering of Graphene Plasmons by Defects in the Graphene Sheet. ACS Nano, 2013, 7, 4988-4994.	14.6	99
58	Analytical Expressions for the Electromagnetic Dyadic Greenâ€™s Function in Graphene and Thin Layers. IEEE Journal of Selected Topics in Quantum Electronics, 2013, 19, 4600611-4600611.	2.9	44
59	Special issue on graphene nanophotonics. Journal of Optics (United Kingdom), 2013, 15, 110201.	2.2	5
60	Analytical solution for the diffraction of an electromagnetic wave by a graphene grating. Journal of Optics (United Kingdom), 2013, 15, 114008.	2.2	54
61	Resonant plasmonic effects in periodic graphene antidot arrays. Applied Physics Letters, 2012, 101, .	3.3	137
62	Superradiance mediated by graphene surface plasmons. Physical Review B, 2012, 85, .	3.2	80
63	Surface plasmon enhanced absorption and suppressed transmission in periodic arrays of graphene ribbons. Physical Review B, 2012, 85, .	3.2	373
64	Dyakonov surface wave resonant transmission. Optics Express, 2011, 19, 6339.	3.4	14
65	Fields radiated by a nanoemitter in a graphene sheet. Physical Review B, 2011, 84, .	3.2	188
66	Edge and waveguide terahertz surface plasmon modes in graphene microribbons. Physical Review B, 2011, 84, .	3.2	451
67	Oblique launching of optical surface waves by a subwavelength slit. Physical Review B, 2011, 83, .	3.2	4
68	Enhanced transmission of s-polarized light through a metal slit. , 2010, , .		0
69	Influence of the dielectric substrate on the field emitted by a subwavelength slit in a metal film. Physica Status Solidi - Rapid Research Letters, 2010, 4, 250-252.	2.4	7
70	Observation of enhanced transmission for s-polarized light through a subwavelength slit. Optics Express, 2010, 18, 9722.	3.4	30
71	Surface Electromagnetic Field Radiated by a Subwavelength Hole in a Metal Film. Physical Review Letters, 2010, 105, 073902.	7.8	77
72	Resonance effects due to the excitation of surface Josephson plasma waves in layered superconductors. Physical Review B, 2009, 79, .	3.2	16

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73	Opening the light extraction cone of high index substrates with plasmonic gratings: Light emitting diode applications. Applied Physics Letters, 2009, 95, 021101.	3.3	19
74	In the diffraction shadow: Norton waves versus surface plasmon polaritons in the optical region. New Journal of Physics, 2009, 11, 123020.	2.9	63
75	Extraordinary optical transmission through hole arrays in optically thin metal films. Optics Letters, 2009, 34, 4.	3.3	61
76	Polarization conversion spectroscopy of hybrid modes. Optics Letters, 2009, 34, 3911.	3.3	8
77	Enhanced optical transmission, beaming and focusing through a subwavelength slit under excitation of dielectric waveguide modes. Journal of Optics, 2009, 11, 125702.	1.5	21
78	Resonantly suppressed transmission and anomalously enhanced light absorption in periodically modulated ultrathin metal films. Physical Review B, 2009, 79, .	3.2	70
79	Intercoupling of free-space radiation to s-polarized confined modes via nanocavities. Applied Physics Letters, 2009, 94, 063119.	3.3	12
80	Electromagnetic wave transmission through a small hole in a perfect electric conductor of finite thickness. Physical Review B, 2008, 78, .	3.2	46
81	Scattering of surface plasmon polaritons by impedance barriers: Dependence on angle of incidence. Physical Review B, 2008, 77, .	3.2	17
82	Excitation of surface Josephson plasma waves in layered superconductors. Physical Review B, 2007, 76, .	3.2	23
83	Scattering coefficients of surface plasmon polaritons impinging at oblique incidence onto one-dimensional surface relief defects. Physical Review B, 2007, 75, .	3.2	12
84	Scattering of surface plasmon polaritons by one-dimensional inhomogeneities. Physical Review B, 2007, 75, .	3.2	53
85	Excitation of surface plasmon-polaritons in metal films with double periodic modulation: Anomalous optical effects. Physical Review B, 2007, 76, .	3.2	16
86	Polarization properties of a periodically-modulated metal film in regions of anomalous optical transparency. Physical Review B, 2005, 72, .	3.2	29
87	Analytical treatment of anomalous transparency of a modulated metal film due to surface plasmon-polariton excitation. Physical Review B, 2004, 70, .	3.2	25
88	<title>An analytical study of 2D photonic structures</title>. , 2004, 5477, 381.		2
89	Nonzeroth-order anomalous optical transparency in modulated metal films owing to excitation of surface plasmon polaritons: An analytic approach. JETP Letters, 2004, 79, 625-631.	1.4	8
90	Analytical investigation of the spectra of coupled polaritons on double periodic metal surfaces. , 2003, , .		7