Arseniy I Kuznetsov

List of Publications by Year
in descending order

103	11,099	66343	56724
papers	citations	42 h-index	83 g-index

105	105	105	7744
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Near unity transmission and full phase control with asymmetric Huygensâ€™ dielectric metasurfaces for holographic projections. Applied Optics, 2022, 61, B164.	1.8	4
2	Nanoscale mapping of optically inaccessible bound-states-in-the-continuum. Light: Science and Applications, 2022, 11, 20.	16.6	28
3	One-Dimensional High-Q Silicon Nanoparticle Chain Resonators for Refractive Index Sensing. ACS Applied Nano Materials, 2022, 5, 3170-3176.	5.0	4
4	High resolution multispectral spatial light modulators based on tunable Fabry-Perot nanocavities. Light: Science and Applications, 2022, 11, 141.	16.6	26
5	Roomâ€Temperature Multiâ€Beam, Multiâ€Wavelength Bound States in the Continuum Laser. Advanced Optical Materials, 2022, 10, .	7.3	4
6	Second harmonic generation in gallium phosphide nano-waveguides. Optics Express, 2021, 29, 10307.	3.4	22
7	Non-linear interferometry with infrared metasurfaces. Nanophotonics, 2021, 10, 1775-1784.	6.0	7
8	Imaging Properties of Large Field-of-View Quadratic Metalenses and Their Applications to Fingerprint Detection. ACS Photonics, 2021, 8, 1457-1468.	6.6	33
9	Silicon Nanoantenna Mix Arrays for a Trifecta of Quantum Emitter Enhancements. Nano Letters, 2021, 21, 4853-4860.	9.1	21
10	Gallium Phopshide Nanostructures on Transparent Substrates for Nonlinear and Ultrafast Nanophotonics. , 2021, , .		0
11	Generation of even and odd high harmonics in resonant metasurfaces using single and multiple ultra-intense laser pulses. Nature Communications, 2021, 12, 4185.	12.8	40
12	Largeâ€Scale Huygensâ€™ Metasurfaces for Holographic 3D Nearâ€Eye Displays. Laser and Photonics Reviews, 2021, 15, 2000538.	8.7	23
13	Dielectric Huygensâ€™ metasurfaces for holographic projection and 3D near-eye displays applications. , 2021, , .		0
14	Bound State in the Continuum in Nanoantenna-Coupled Slab Waveguide Enables Low-Threshold Quantum-Dot Lasing. Nano Letters, 2021, 21, 9754-9760.	9.1	30
15	Assembly of Miniature Nanoantenna Spatial Light Modulator. , 2021, , .		0
16	Active and Tunable Nanophotonics With Dielectric Nanoantennas. Proceedings of the IEEE, 2020, 108, 749-771.	21.3	36
17	Control of scattering by isolated dielectric nanoantennas. , 2020, , 73-108.		6
18	Control of LED Emission with Functional Dielectric Metasurfaces. Laser and Photonics Reviews, 2020, 14, 1900235.	8.7	52

#	Article	IF	Citations
19	Low loss waveguiding and slow light modes in coupled subwavelength silicon Mie resonators. Nanoscale, 2020, 12, 21713-21718.	5.6	13
20	Continuous Wave Second Harmonic Generation Enabled by Quasi-Bound-States in the Continuum on Gallium Phosphide Metasurfaces. Nano Letters, 2020, 20, 8745-8751.	9.1	134
21	Efficient ultrafast all-optical modulation in a nonlinear crystalline gallium phosphide nanodisk at the anapole excitation. Science Advances, 2020, 6, .	10.3	61
22	Lasing Action in Single Subwavelength Particles Supporting Supercavity Modes. ACS Nano, 2020, 14, 7338-7346.	14.6	75
23	Collective Mie Resonances for Directional On-Chip Nanolasers. Nano Letters, 2020, 20, 5655-5661.	9.1	37
24	Room-Temperature Lasing in Colloidal Nanoplatelets via Mie-Resonant Bound States in the Continuum. Nano Letters, 2020, 20, 6005-6011.	9.1	115
25	All-Optical Modulation in Chains of Silicon Nanoantennas. ACS Photonics, 2020, 7, 1001-1008.	6.6	21
26	High Harmonic Generation from a Large-gap Semiconductor Metasurface. , 2020, , .		0
27	Fabrication of Monodisperse Colloids of Resonant Spherical Silicon Nanoparticles: Applications in Optical Trapping and Printing. ACS Photonics, 2019, 6, 2141-2148.	6.6	13
28	Ultrahigh-efficiency aqueous flat nanocrystals of CdSe/CdS@Cd_{1â^'x}Zn_xS colloidal core/crown@alloyed-shell quantum wells. Nanoscale, 2019, 11, 301-310.	5.6	44
29	Efficient visible light modulation based on electrically tunable all dielectric metasurfaces embedded in thin-layer nematic liquid crystals. Scientific Reports, 2019, 9, 8673.	3.3	41
30	Phase-only transmissive spatial light modulator based on tunable dielectric metasurface. Science, 2019, 364, 1087-1090.	12.6	385
31	Alkoxysilane effect in hybrid material: A comparison of pHEMA-TiO2 and pMAPTMS-TiO2 nanoparticulate hybrids. Materials Research Bulletin, 2019, 114, 130-137.	5.2	5
32	A Metalens with a Near-Unity Numerical Aperture. Nano Letters, 2018, 18, 2124-2132.	9.1	324
33	Dynamic Beam Switching by Liquid Crystal Tunable Dielectric Metasurfaces. ACS Photonics, 2018, 5, 1742-1748.	6.6	248
34	Nanoscale Generation of White Light for Ultrabroadband Nanospectroscopy. Nano Letters, 2018, 18, 535-539.	9.1	52
35	Noninterleaved Metasurface for (2⁶-1) Spin- and Wavelength-Encoded Holograms. Nano Letters, 2018, 18, 8016-8024.	9.1	187
36	Plasmonic nanoparticle lithography: Fast resist-free laser technique for large-scale sub-50â€‰nm hole array fabrication. Applied Physics Letters, 2018, 112, .	3.3	6

#	Article	IF	Citations
37	Highly Directive Hybrid Metalâ€“Dielectric Yagi-Uda Nanoantennas. ACS Nano, 2018, 12, 8616-8624.	14.6	61
38	Directional lasing in resonant semiconductor nanoantenna arrays. Nature Nanotechnology, 2018, 13, 1042-1047.	31.5	367
39	Local Crystallization of a Resonant Amorphous Silicon Nanoparticle for the Implementation of Optical Nanothermometry. JETP Letters, 2018, 107, 699-704.	1.4	14
40	Using Metasurfaces to Control Random Light Emission. , 2018, , .		1
41	Traditional and emerging materials for optical metasurfaces. Nanophotonics, 2017, 6, 452-471.	6.0	97
42	Suppression of scattering for small dielectric particles: anapole mode and invisibility. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2017, 375, 20160069.	3.4	65
43	Resonant Light Guiding Along a Chain of Silicon Nanoparticles. Nano Letters, 2017, 17, 3458-3464.	9.1	80
44	Direct observation of resonance scattering patterns in single silicon nanoparticles. Applied Physics Letters, 2017, 110, .	3.3	19
45	Asymmetric Nanoantennas for Ultrahigh Angle Broadband Visible Light Bending. Nano Letters, 2017, 17, 6267-6272.	9.1	106
46	Quantum interference in the presence of a resonant medium. Scientific Reports, 2017, 7, 11444.	3.3	23
47	High-efficiency and low-loss gallium nitride dielectric metasurfaces for nanophotonics at visible wavelengths. Applied Physics Letters, 2017, 111, .	3.3	42
48	Printing Beyond sRGB Color Gamut by Mimicking Silicon Nanostructures in Free-Space. Nano Letters, 2017, 17, 7620-7628.	9.1	239
49	Hybrid anapole modes of high-index dielectric nanoparticles. Physical Review A, 2017, 95, .	2.5	111
50	Silicon Nanostructures for Bright Field Full Color Prints. ACS Photonics, 2017, 4, 1913-1919.	6.6	156
51	Dielectric metasurfaces for beam bending and near-unity numerical aperture lenses. , 2017, , .		0
52	Ultrafast quantum time-resolved spectroscopy. , 2017, , .		0
53	Enhanced photonic spin Hall effect with subwavelength topological edge states. Laser and Photonics Reviews, 2016, 10, 656-664.	8.7	44
54	Metasurfaces and nanoantenna devices based on resonant dielectric nanostructures. , 2016, , .		0

#	Article	IF	Citations
55	Polarization control over electric and magnetic dipole resonances of dielectric nanoparticles on metallic films. Laser and Photonics Reviews, 2016, 10, 799-806.	8.7	81
56	Optically resonant dielectric nanostructures. Science, 2016, 354, .	12.6	2,086
57	Generalized Brewster effect in dielectric metasurfaces. Nature Communications, 2016, 7, 10362.	12.8	218
58	Highâ€transmission dielectric metasurface with 2Ï€ phase control at visible wavelengths. Laser and Photonics Reviews, 2015, 9, 412-418.	8.7	538
59	Direct measurements of magnetic and electric optical responses from silicon nanoparticles. , 2015, , .		0
60	Magnetic and Electric Hotspots with Silicon Nanodimers. Nano Letters, 2015, 15, 2137-2142.	9.1	361
61	Optimum Forward Light Scattering by Spherical and Spheroidal Dielectric Nanoparticles with High Refractive Index. ACS Photonics, 2015, 2, 993-999.	6.6	171
62	Probing magnetic and electric optical responses of silicon nanoparticles. Applied Physics Letters, 2015, 106, .	3.3	62
63	Light manipulation by resonant dielectric nanostructures and metasurfaces (Presentation) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50		1
64	Nonradiating anapole modes in dielectric nanoparticles. Nature Communications, 2015, 6, 8069.	12.8	702
65	Silicon Nanoparticles for Waveguiding. , 2015, , .		1
66	Silicon NanoDimers for Magnetic and Electric Field Hotspots. , 2015, , .		0
67	All-Dielectric Optical Nanoantennas. , 2014, , .		8
68	Quantum Spectroscopy of Plasmonic Nanostructures. Physical Review X, 2014, 4, .	8.9	39
69	Beyond the Hybridization Effects in Plasmonic Nanoclusters: Diffractionâ€Induced Enhanced Absorption and Scattering. Small, 2014, 10, 576-583.	10.0	30
70	Split-ball resonator as a three-dimensional analogue of planar split-rings. Nature Communications, 2014, 5, 3104.	12.8	51
71	Directional visible light scattering by silicon nanoparticles. Nature Communications, 2013, 4, 1527.	12.8	908
72	Short laser pulse nanostructuring of metals: direct comparison of molecular dynamics modeling and experiment. Applied Physics A: Materials Science and Processing, 2013, 111, 675-687.	2.3	71

#	Article	IF	Citations
73	Fabrication of large-area 3D optical fishnet metamaterial by laser interference lithography. Applied Physics Letters, 2013, 103, .	3.3	15
74	Magnetic Light: Optical Magnetism of Dielectric Nanoparticles. Optics and Photonics News, 2012, 23, 35.	0.5	15
75	Characterization of localized field enhancements in laser fabricated gold needle nanostructures. Journal of the Optical Society of America B: Optical Physics, 2012, 29, 185.	2.1	2
76	Optical sensing elements based on ordered semiconductor and metal nanoparticle arrays and surface plasmons. , 2012, , .		0
77	Magnetic light. Scientific Reports, 2012, 2, 492.	3.3	939
78	Optical properties of spherical gold mesoparticles. Applied Physics B: Lasers and Optics, 2012, 106, 841-848.	2.2	28
79	Plasmonâ€Enhanced Subâ€Wavelength Laser Ablation: Plasmonic Nanojets. Advanced Materials, 2012, 24, OP29-35.	21.0	53
80	Plasmonics: Plasmon-Enhanced Sub-Wavelength Laser Ablation: Plasmonic Nanojets (Adv. Mater.) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50	21.0	0
81	Laser-induced jet formation and droplet ejection from thin metal films. Applied Physics A: Materials Science and Processing, 2012, 106, 479-487.	2.3	112
82	Laser Fabrication of Large-Scale Nanoparticle Arrays for Sensing Applications. ACS Nano, 2011, 5, 4843-4849.	14.6	224
83	Femtosecond laser ablation of polymeric substrates for the fabrication of microfluidic channels. Applied Surface Science, 2011, 257, 6243-6250.	6.1	156
84	Femtosecond laser fabrication of functional nanoparticle structures and their applications. , 2011, , .		0
85	Laser treatment of the heterolayers GeO 2 :Ge-QDs. , 2010, , .		2
86	Laser-Induced Transfer of Metal Nanoparticles. , 2010, , .		0
87	Laser fabrication of 2D and 3D metal nanoparticle structures and arrays. Optics Express, 2010, 18, 21198.	3.4	99
88	Theoretical modelling and leakage radiation microscopy of surface plasmon polariton excitation and scattering on laser fabricated surface structures. , 2010, , .		1
89	Channeling of microwave radiation in a double line containing a plasma filament produced by intense femtosecond laser pulses in air. Quantum Electronics, 2009, 39, 985-988.	1.0	19
90	Femtosecond laser-induced nanostructuring of gold films. , 2009, , .		0

#	Article	IF	Citations
91	Nanostructuring of thin gold films by femtosecond lasers. Applied Physics A: Materials Science and Processing, 2009, 94, 221-230.	2.3	117
92	Laser-induced transfer of metallic nanodroplets for plasmonics and metamaterial applications. Journal of the Optical Society of America B: Optical Physics, 2009, 26, B130.	2.1	49
93	Laser-induced backward transfer of gold nanodroplets. Optics Express, 2009, 17, 18820.	3.4	106
94	Laser-induced photopatterning of organicâ€“inorganic TiO2-based hybrid materials with tunable interfacial electron transfer. Physical Chemistry Chemical Physics, 2009, 11, 1248.	2.8	47
95	Supercontinuum assisted trapped electron accumulation in titanium oxide gel by femtosecond laser pulses. Optics Express, 2007, 15, 5782.	3.4	1
96	Chemical Activity of Photoinduced Ti3+Centers in Titanium Oxide Gels. Journal of Physical Chemistry B, 2006, 110, 435-441.	2.6	42
97	Extinction of photo-induced Ti3+ centres in titanium oxide gels and gel-based oxo-PHEMA hybrids. Chemical Physics Letters, 2006, 429, 523-527.	2.6	33
98	New hybrid organic-inorganic materials based on a poly(titanium oxide) gel with efficient UV-induced separation of charges. Doklady Physics, 2006, 51, 103-105.	0.7	4
99	Laser imprinting of 3D structures in gel-based titanium oxide organic-inorganic hybrids. Applied Physics A: Materials Science and Processing, 2006, 84, 27-30.	2.3	16
100	Kinetics of UV-induced darkening of titanium-oxide gels. Applied Surface Science, 2005, 248, 86-90.	6.1	32
101	Light-induced charge separation and storage in titanium oxide gels. Physical Review E, 2005, 71, 021403.	2.1	53
102	New photoactive hybrid organicâ€“inorganic materials based on titanium-oxo-PHEMA nanocomposites exhibiting mixed valence properties. Journal of Materials Chemistry, 2005, 15, 3380.	6.7	56
103	Use of harmonics for femtosecond micromachining in pure dielectrics. Journal of Applied Physics, 2003, 93, 1567-1576.	2.5	26