Arseniy I Kuznetsov

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/6043360/publications.pdf

Version: 2024-02-01

103 papers	11,099 citations	66234 42 h-index	56606 83 g-index
105 all docs	105 docs citations	105 times ranked	7744 citing authors

#	Article	IF	Citations
1	Optically resonant dielectric nanostructures. Science, 2016, 354, .	6.0	2,086
2	Magnetic light. Scientific Reports, 2012, 2, 492.	1.6	939
3	Directional visible light scattering by silicon nanoparticles. Nature Communications, 2013, 4, 1527.	5.8	908
4	Nonradiating anapole modes in dielectric nanoparticles. Nature Communications, 2015, 6, 8069.	5.8	702
5	Highâ€transmission dielectric metasurface with 2Ï€ phase control at visible wavelengths. Laser and Photonics Reviews, 2015, 9, 412-418.	4.4	538
6	Phase-only transmissive spatial light modulator based on tunable dielectric metasurface. Science, 2019, 364, 1087-1090.	6.0	385
7	Directional lasing in resonant semiconductor nanoantenna arrays. Nature Nanotechnology, 2018, 13, 1042-1047.	15.6	367
8	Magnetic and Electric Hotspots with Silicon Nanodimers. Nano Letters, 2015, 15, 2137-2142.	4.5	361
9	A Metalens with a Near-Unity Numerical Aperture. Nano Letters, 2018, 18, 2124-2132.	4.5	324
10	Dynamic Beam Switching by Liquid Crystal Tunable Dielectric Metasurfaces. ACS Photonics, 2018, 5, 1742-1748.	3.2	248
11	Printing Beyond sRGB Color Gamut by Mimicking Silicon Nanostructures in Free-Space. Nano Letters, 2017, 17, 7620-7628.	4.5	239
12	Laser Fabrication of Large-Scale Nanoparticle Arrays for Sensing Applications. ACS Nano, 2011, 5, 4843-4849.	7.3	224
13	Generalized Brewster effect in dielectric metasurfaces. Nature Communications, 2016, 7, 10362.	5.8	218
14	Noninterleaved Metasurface for (2⁶-1) Spin- and Wavelength-Encoded Holograms. Nano Letters, 2018, 18, 8016-8024.	4.5	187
15	Optimum Forward Light Scattering by Spherical and Spheroidal Dielectric Nanoparticles with High Refractive Index. ACS Photonics, 2015, 2, 993-999.	3.2	171
16	Femtosecond laser ablation of polymeric substrates for the fabrication of microfluidic channels. Applied Surface Science, 2011, 257, 6243-6250.	3.1	156
17	Silicon Nanostructures for Bright Field Full Color Prints. ACS Photonics, 2017, 4, 1913-1919.	3.2	156
18	Continuous Wave Second Harmonic Generation Enabled by Quasi-Bound-States in the Continuum on Gallium Phosphide Metasurfaces. Nano Letters, 2020, 20, 8745-8751.	4.5	134

#	Article	IF	Citations
19	Nanostructuring of thin gold films by femtosecond lasers. Applied Physics A: Materials Science and Processing, 2009, 94, 221-230.	1.1	117
20	Room-Temperature Lasing in Colloidal Nanoplatelets via Mie-Resonant Bound States in the Continuum. Nano Letters, 2020, 20, 6005-6011.	4.5	115
21	Laser-induced jet formation and droplet ejection from thin metal films. Applied Physics A: Materials Science and Processing, 2012, 106, 479-487.	1.1	112
22	Hybrid anapole modes of high-index dielectric nanoparticles. Physical Review A, 2017, 95, .	1.0	111
23	Laser-induced backward transfer of gold nanodroplets. Optics Express, 2009, 17, 18820.	1.7	106
24	Asymmetric Nanoantennas for Ultrahigh Angle Broadband Visible Light Bending. Nano Letters, 2017, 17, 6267-6272.	4.5	106
25	Laser fabrication of 2D and 3D metal nanoparticle structures and arrays. Optics Express, 2010, 18, 21198.	1.7	99
26	Traditional and emerging materials for optical metasurfaces. Nanophotonics, 2017, 6, 452-471.	2.9	97
27	Polarization control over electric and magnetic dipole resonances of dielectric nanoparticles on metallic films. Laser and Photonics Reviews, 2016, 10, 799-806.	4.4	81
28	Resonant Light Guiding Along a Chain of Silicon Nanoparticles. Nano Letters, 2017, 17, 3458-3464.	4.5	80
29	Lasing Action in Single Subwavelength Particles Supporting Supercavity Modes. ACS Nano, 2020, 14, 7338-7346.	7.3	75
30	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.	1.1	71
31	Suppression of scattering for small dielectric particles: anapole mode and invisibility. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2017, 375, 20160069.	1.6	65
32	Probing magnetic and electric optical responses of silicon nanoparticles. Applied Physics Letters, 2015, 106, .	1.5	62
33	Highly Directive Hybrid Metalâ€“Dielectric Yagi-Uda Nanoantennas. ACS Nano, 2018, 12, 8616-8624.	7.3	61
34	Efficient ultrafast all-optical modulation in a nonlinear crystalline gallium phosphide nanodisk at the anapole excitation. Science Advances, 2020, 6, .	4.7	61
35	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
36	Light-induced charge separation and storage in titanium oxide gels. Physical Review E, 2005, 71, 021403.	0.8	53

#	Article	IF	Citations
37	Plasmonâ€Enhanced Subâ€Wavelength Laser Ablation: Plasmonic Nanojets. Advanced Materials, 2012, 24, OP29-35.	11.1	53
38	Nanoscale Generation of White Light for Ultrabroadband Nanospectroscopy. Nano Letters, 2018, 18, 535-539.	4.5	52
39	Control of LED Emission with Functional Dielectric Metasurfaces. Laser and Photonics Reviews, 2020, 14, 1900235.	4.4	52
40	Split-ball resonator as a three-dimensional analogue of planar split-rings. Nature Communications, 2014, 5, 3104.	5.8	51
41	Laser-induced transfer of metallic nanodroplets for plasmonics and metamaterial applications. Journal of the Optical Society of America B: Optical Physics, 2009, 26, B130.	0.9	49
42	Laser-induced photopatterning of organicâ€“inorganic TiO2-based hybrid materials with tunable interfacial electron transfer. Physical Chemistry Chemical Physics, 2009, 11, 1248.	1.3	47
43	Enhanced photonic spin Hall effect with subwavelength topological edge states. Laser and Photonics Reviews, 2016, 10, 656-664.	4.4	44
44	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.	2.8	44
45	Chemical Activity of Photoinduced Ti3+Centers in Titanium Oxide Gels. Journal of Physical Chemistry B, 2006, 110, 435-441.	1.2	42
46	High-efficiency and low-loss gallium nitride dielectric metasurfaces for nanophotonics at visible wavelengths. Applied Physics Letters, 2017, 111, .	1.5	42
47	Efficient visible light modulation based on electrically tunable all dielectric metasurfaces embedded in thin-layer nematic liquid crystals. Scientific Reports, 2019, 9, 8673.	1.6	41
48	Generation of even and odd high harmonics in resonant metasurfaces using single and multiple ultra-intense laser pulses. Nature Communications, 2021, 12, 4185.	5.8	40
49	Quantum Spectroscopy of Plasmonic Nanostructures. Physical Review X, 2014, 4, .	2.8	39
50	Collective Mie Resonances for Directional On-Chip Nanolasers. Nano Letters, 2020, 20, 5655-5661.	4.5	37
51	Active and Tunable Nanophotonics With Dielectric Nanoantennas. Proceedings of the IEEE, 2020, 108, 749-771.	16.4	36
52	Extinction of photo-induced Ti3+ centres in titanium oxide gels and gel-based oxo-PHEMA hybrids. Chemical Physics Letters, 2006, 429, 523-527.	1.2	33
53	Imaging Properties of Large Field-of-View Quadratic Metalenses and Their Applications to Fingerprint Detection. ACS Photonics, 2021, 8, 1457-1468.	3.2	33
54	Kinetics of UV-induced darkening of titanium-oxide gels. Applied Surface Science, 2005, 248, 86-90.	3.1	32

#	Article	IF	Citations
55	Beyond the Hybridization Effects in Plasmonic Nanoclusters: Diffractionâ€Induced Enhanced Absorption and Scattering. Small, 2014, 10, 576-583.	5.2	30
56	Bound State in the Continuum in Nanoantenna-Coupled Slab Waveguide Enables Low-Threshold Quantum-Dot Lasing. Nano Letters, 2021, 21, 9754-9760.	4.5	30
57	Optical properties of spherical gold mesoparticles. Applied Physics B: Lasers and Optics, 2012, 106, 841-848.	1.1	28
58	Nanoscale mapping of optically inaccessible bound-states-in-the-continuum. Light: Science and Applications, 2022, 11, 20.	7.7	28
59	Use of harmonics for femtosecond micromachining in pure dielectrics. Journal of Applied Physics, 2003, 93, 1567-1576.	1.1	26
60	High resolution multispectral spatial light modulators based on tunable Fabry-Perot nanocavities. Light: Science and Applications, 2022, 11, 141.	7.7	26
61	Quantum interference in the presence of a resonant medium. Scientific Reports, 2017, 7, 11444.	1.6	23
62	Largeâ€Scale Huygensâ€™ Metasurfaces for Holographic 3D Nearâ€Eye Displays. Laser and Photonics Reviews, 2021, 15, 2000538.	4.4	23
63	Second harmonic generation in gallium phosphide nano-waveguides. Optics Express, 2021, 29, 10307.	1.7	22
64	All-Optical Modulation in Chains of Silicon Nanoantennas. ACS Photonics, 2020, 7, 1001-1008.	3.2	21
65	Silicon Nanoantenna Mix Arrays for a Trifecta of Quantum Emitter Enhancements. Nano Letters, 2021, 21, 4853-4860.	4.5	21
66	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.	0.3	19
67	Direct observation of resonance scattering patterns in single silicon nanoparticles. Applied Physics Letters, 2017, 110, .	1.5	19
68	Laser imprinting of 3D structures in gel-based titanium oxide organic-inorganic hybrids. Applied Physics A: Materials Science and Processing, 2006, 84, 27-30.	1.1	16
69	Magnetic Light: Optical Magnetism of Dielectric Nanoparticles. Optics and Photonics News, 2012, 23, 35.	0.4	15
70	Fabrication of large-area 3D optical fishnet metamaterial by laser interference lithography. Applied Physics Letters, 2013, 103, .	1.5	15
71	Local Crystallization of a Resonant Amorphous Silicon Nanoparticle for the Implementation of Optical Nanothermometry. JETP Letters, 2018, 107, 699-704.	0.4	14
72	Fabrication of Monodisperse Colloids of Resonant Spherical Silicon Nanoparticles: Applications in Optical Trapping and Printing. ACS Photonics, 2019, 6, 2141-2148.	3.2	13

#	Article	IF	Citations
73	Low loss waveguiding and slow light modes in coupled subwavelength silicon Mie resonators. Nanoscale, 2020, 12, 21713-21718.	2.8	13
74	All-Dielectric Optical Nanoantennas. , 2014, , .		8
75	Non-linear interferometry with infrared metasurfaces. Nanophotonics, 2021, 10, 1775-1784.	2.9	7
76	Plasmonic nanoparticle lithography: Fast resist-free laser technique for large-scale sub-50â€‰nm hole array fabrication. Applied Physics Letters, 2018, 112, .	1.5	6
77	Control of scattering by isolated dielectric nanoantennas. , 2020, , 73-108.		6
78	Alkoxysilane effect in hybrid material: A comparison of pHEMA-TiO2 and pMAPTMS-TiO2 nanoparticulate hybrids. Materials Research Bulletin, 2019, 114, 130-137.	2.7	5
79	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.	0.2	4
80	Near unity transmission and full phase control with asymmetric Huygensâ€™ dielectric metasurfaces for holographic projections. Applied Optics, 2022, 61, B164.	0.9	4
81	One-Dimensional High-Q Silicon Nanoparticle Chain Resonators for Refractive Index Sensing. ACS Applied Nano Materials, 2022, 5, 3170-3176.	2.4	4
82	Roomâ€Temperature Multiâ€Beam, Multiâ€Wavelength Bound States in the Continuum Laser. Advanced Optical Materials, 2022, 10, .	3.6	4
83	Laser treatment of the heterolayers GeO 2 :Ge-QDs. , 2010, , .		2
84	Characterization of localized field enhancements in laser fabricated gold needle nanostructures. Journal of the Optical Society of America B: Optical Physics, 2012, 29, 185.	0.9	2
85	Supercontinuum assisted trapped electron accumulation in titanium oxide gel by femtosecond laser pulses. Optics Express, 2007, 15, 5782.	1.7	1
86	Theoretical modelling and leakage radiation microscopy of surface plasmon polariton excitation and scattering on laser fabricated surface structures. , 2010, , .		1
87	Light manipulation by resonant dielectric nanostructures and metasurfaces (Presentation) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50		1
88	Silicon Nanoparticles for Waveguiding. , 2015, , .		1
89	Using Metasurfaces to Control Random Light Emission. , 2018, , .		1
90	Femtosecond laser-induced nanostructuring of gold films. , 2009, , .		0

#	Article	IF	Citations
91	Laser-Induced Transfer of Metal Nanoparticles. , 2010, , .		0
92	Femtosecond laser fabrication of functional nanoparticle structures and their applications. , 2011, , .		0
93	Optical sensing elements based on ordered semiconductor and metal nanoparticle arrays and surface plasmons. , 2012, , .		0
94	Plasmonics: Plasmon-Enhanced Sub-Wavelength Laser Ablation: Plasmonic Nanojets (Adv. Mater.) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50	11.1	0
95	Direct measurements of magnetic and electric optical responses from silicon nanoparticles. , 2015, , .		0
96	Metasurfaces and nanoantenna devices based on resonant dielectric nanostructures. , 2016, , .		0
97	Dielectric metasurfaces for beam bending and near-unity numerical aperture lenses. , 2017, , .		0
98	Ultrafast quantum time-resolved spectroscopy. , 2017, , .		0
99	Gallium Phopshide Nanostructures on Transparent Substrates for Nonlinear and Ultrafast Nanophotonics. , 2021, , .		0
100	Silicon NanoDimers for Magnetic and Electric Field Hotspots. , 2015, , .		0
101	High Harmonic Generation from a Large-gap Semiconductor Metasurface. , 2020, , .		0
102	Dielectric Huygensâ€™ metasurfaces for holographic projection and 3D near-eye displays applications. , 2021, , .		0
103	Assembly of Miniature Nanoantenna Spatial Light Modulator. , 2021, , .		0