Alexey P Slobozhanyuk

List of Publications by Year
in descending order

101 papers	3,361 citations	159525 30 h-index	143943 57 g-index
103 all docs	103 docs citations	103 times ranked	2842 citing authors

#	Article	IF	Citations
1	Higher-order topological states in photonic kagome crystals with long-range interactions. Nature Photonics, 2020, 14, 89-94.	15.6	266
2	Three-dimensional all-dielectric photonic topological insulator. Nature Photonics, 2017, 11, 130-136.	15.6	257
3	Nonlinear light generation in topological nanostructures. Nature Nanotechnology, 2019, 14, 126-130.	15.6	187
4	An antenna model for the Purcell effect. Scientific Reports, 2015, 5, 12956.	1.6	160
5	Enhancement of Magnetic Resonance Imaging with Metasurfaces. Advanced Materials, 2016, 28, 1832-1838.	11.1	160
6	Subwavelength Topological Edge States in Optically Resonant Dielectric Structures. Physical Review Letters, 2015, 114, 123901.	2.9	144
7	Topological Majorana States in Zigzag Chains of Plasmonic Nanoparticles. ACS Photonics, 2014, 1, 101-105.	3.2	138
8	Far-field probing of leaky topological states in all-dielectric metasurfaces. Nature Communications, 2018, 9, 909.	5.8	127
9	Experimental verification of the concept of all-dielectric nanoantennas. Applied Physics Letters, 2012, 100, .	1.5	119
10	Nonlinear Control of Electromagnetic Topological Edge States. Physical Review Letters, 2018, 121, 163901.	2.9	107
11	Broadband and Thin Linear-to-Circular Polarizers Based on Self-Complementary Zigzag Metasurfaces. IEEE Transactions on Antennas and Propagation, 2017, 65, 4124-4133.	3.1	98
12	Spin- and valley-polarized one-way Klein tunneling in photonic topological insulators. Science Advances, 2018, 4, eaap8802.	4.7	93
13	Self-complementary metasurfaces for linear-to-circular polarization conversion. Physical Review B, 2015, 92, .	1.1	84
14	Flexible and compact hybrid metasurfaces for enhanced ultra high field in vivo magnetic resonance imaging. Scientific Reports, 2017, 7, 1678.	1.6	81
15	Subwavelength waveguides composed of dielectric nanoparticles. Physical Review B, 2014, 89, .	1.1	79
16	Mapping plasmonic topological states at the nanoscale. Nanoscale, 2015, 7, 11904-11908.	2.8	78
17	Edge States and Topological Phase Transitions in Chains of Dielectric Nanoparticles. Small, 2017, 13, 1603190.	5.2	77
18	Experimental demonstration of topological effects in bianisotropic metamaterials. Scientific Reports, 2016, 6, 22270.	1.6	73

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19	Near-field mapping of Fano resonances in all-dielectric oligomers. Applied Physics Letters, 2014, 104, .	1.5	64
20	Purcell effect in hyperbolic metamaterial resonators. Physical Review B, 2015, 92, .	1.1	62
21	Flexible Helices for Nonlinear Metamaterials. Advanced Materials, 2013, 25, 3409-3412.	11.1	61
22	Fano resonances in antennas: General control over radiation patterns. Physical Review B, 2013, 88, .	1.1	54
23	Circular dichroism enhancement in plasmonic nanorod metamaterials. Optics Express, 2018, 26, 17841.	1.7	52
24	Enhanced photonic spin Hall effect with subwavelength topological edge states. Laser and Photonics Reviews, 2016, 10, 656-664.	4.4	44
25	Hyperbolic transmission-line metamaterials. Journal of Applied Physics, 2012, 112, .	1.1	42
26	Near-field imaging of spin-locked edge states in all-dielectric topological metasurfaces. Applied Physics Letters, 2019, 114, .	1.5	41
27	Locally Enhanced Image Quality with Tunable Hybrid Metasurfaces. Physical Review Applied, 2018, 9, .	1.5	40
28	Magnetic Purcell factor in wire metamaterials. Applied Physics Letters, 2014, 104, .	1.5	33
29	Experimental investigation of a metasurface resonator for in vivo imaging at 1.5â€¯T. Journal of Magnetic Resonance, 2018, 286, 78-81.	1.2	32
30	High permittivity ceramics improve the transmit field and receive efficiency of a commercial extremity coil at 1.5 Tesla. Journal of Magnetic Resonance, 2019, 299, 59-65.	1.2	31
31	Ceramic resonators for targeted clinical magnetic resonance imaging of the breast. Nature Communications, 2020, 11, 3840.	5.8	29
32	Doubleâ€shell metamaterial coatings for plasmonic cloaking. Physica Status Solidi - Rapid Research Letters, 2012, 6, 46-48.	1.2	28
33	Long-Range Miniaturized Ceramic RFID Tags. IEEE Transactions on Antennas and Propagation, 2021, 69, 3125-3131.	3.1	25
34	An artificial dielectric slab for ultra high-field MRI: Proof of concept. Journal of Magnetic Resonance, 2020, 320, 106835.	1.2	23
35	Impact of wire metasurface eigenmode on the sensitivity enhancement of MRI system. Applied Physics Letters, 2018, 112, .	1.5	22
36	Metamaterials with tunable nonlinearity. JETP Letters, 2012, 95, 613-617.	0.4	21

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37	Adjustable Subwavelength Metasurfaceâ€Inspired Resonator for Magnetic Resonance Imaging. Physica Status Solidi (A) Applications and Materials Science, 2018, 215, 1700788.	0.8	21
38	Novel materials in magnetic resonance imaging: high permittivity ceramics, metamaterials, metasurfaces and artificial dielectrics. Magnetic Resonance Materials in Physics, Biology, and Medicine, 2022, 35, 875-894.	1.1	21
39	Broadband isotropic Î¼-near-zero metamaterials. Applied Physics Letters, 2013, 103, .	1.5	20
40	Photonic Jackiw-Rebbi states in all-dielectric structures controlled by bianisotropy. Physical Review B, 2019, 99, .	1.1	20
41	Nonlinear interaction of meta-atoms through optical coupling. Applied Physics Letters, 2014, 104, 014104.	1.5	19
42	Competing nonlinearities with metamaterials. Applied Physics Letters, 2012, 101, 231904.	1.5	16
43	A new quadrature annular resonator for 3â€T MRI based on artificial-dielectrics. Journal of Magnetic Resonance, 2018, 291, 47-52.	1.2	16
44	Multipole engineering for enhanced backscattering modulation. Physical Review B, 2020, 102, .	1.1	15
45	Control of the magnetic near-field pattern inside MRI machine with tunable metasurface. Applied Physics Letters, 2019, 115, 061604.	1.5	14
46	Chipless wireless temperature sensor based on quasi-BIC resonance. Applied Physics Letters, 2021, 119, .	1.5	14
47	Topological transition in coated wire medium. Physica Status Solidi - Rapid Research Letters, 2016, 10, 900-904.	1.2	13
48	Experimental realization of invisibility cloaking. Physics-Uspekhi, 2015, 58, 167-190.	0.8	10
49	Hardware RFID Security for Preventing Far-Field Attacks. IEEE Transactions on Antennas and Propagation, 2022, 70, 2199-2204.	3.1	9
50	Anomalous polarization conversion in arrays of ultrathin ferromagnetic nanowires. Physical Review B, 2015, 92, .	1.1	8
51	Coupled very-high permittivity dielectric resonators for clinical MRI. Applied Physics Letters, 2020, 117, .	1.5	8
52	Visualization of Metasurface Eigenmodes with Magnetic Resonance Imaging. Physical Review Applied, 2021, 16, .	1.5	8
53	Photonic spin Hall effect mediated by bianisotropy. Optics Letters, 2019, 44, 1694.	1.7	8
54	Experimental verification of enhancement of evanescent waves inside a wire medium. Applied Physics Letters, 2013, 103, .	1.5	7

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55	An endoscope based on extremely anisotropic metamaterials for applications in magnetic resonance imaging. Journal of Communications Technology and Electronics, 2014, 59, 562-570.	0.2	7
56	Capacitively-loaded metasurfaces and their application in magnetic resonance imaging. , 2015, , .		7
57	Nonlinear symmetry breaking in photometamaterials. Physical Review B, 2018, 97, .	1.1	7
58	Self-aligning roly-poly RFID tag. Scientific Reports, 2022, 12, 2140.	1.6	7
59	Microwave platform as a valuable tool for characterization of nanophotonic devices. Scientific Reports, 2016, 6, 35516.	1.6	5
60	Anapole-enabled RFID security against far-field attacks. Nanophotonics, 2021, 10, 4409-4418.	2.9	5
61	Control of the near magnetic field pattern uniformity inside metamaterial-inspired volumetric resonators. Photonics and Nanostructures - Fundamentals and Applications, 2022, 48, 100989.	1.0	4
62	Temperature control of electromagnetic topological edge states. Applied Physics Letters, 2022, 120, .	1.5	4
63	Linear to circular polarization converters based on self-complementary metasurfaces. , 2014, , .		3
64	Tunable hybrid metasurfaces for MRI applications. AIP Conference Proceedings, 2017, , .	0.3	3
65	Enhancement of magnetic resonance imaging with metasurfaces: From concept to human trials. , 2017, , .		3
66	In vivo magnetic resonance imaging of human knee with metasurface. , 2017, , .		3
67	Wire metamaterial for the improvement of magnetic resonance imaging. , 2013, , .		2
68	Metasurfaces: Enhancement of Magnetic Resonance Imaging with Metasurfaces (Adv. Mater. 9/2016). Advanced Materials, 2016, 28, 1831-1831.	11.1	2
69	Mode hopping in arrays of resonant thin wires over a dielectric interface. Physical Review B, 2018, 98, .	1.1	2
70	Magnetic Resonance Spectroscopy at 1.5 T with a Hybrid Metasurface. JETP Letters, 2018, 108, 423-427.	0.4	2
71	Third-Harmonic Generation from Photonic Topological States in Zigzag Arrays of Silicon Nanodisks. , 2017, , .		2
72	Energy-Harvesting Coil for Circularly Polarized Fields in Magnetic Resonance Imaging. Physical Review Applied, 2022, 17, .	1.5	2

#	Article	IF	Citations
73	Superdirective magnetic nanoantennas with effect of light steering: Theory and experiment. , 2013, , .		1
74	Photosensitive SRR-metamaterials. , 2013, , .		1
75	Ultracompact all-dielectric superdirective antennas: Theory and experiment. , 2013, , .		1
76	Wire metamaterial: Enhancement of evanescent waves and application for improvement of magnetic resonance imaging. , 2013, , .		1
77	Light coupling in microwave metamaterials. , 2013, , .		1
78	Self-complementary zig-zag metasurfaces for designing circular polarizing beam splitters. , 2015, , .		1
79	Advanced electromagnetic materials for magnetic resonance imaging. , 2016, , .		1
80	Metasurfaces provide a new way for building magnetic resonance imaging scanners. , 2016, , .		1
81	Experimental Realization of Three-Dimensional All-Dielectric Photonic Topological Insulators. , 2018, , .		1
82	Nonlinear spiral metamaterials. , 2012, , .		0
83	Superdirective nanoantennas: Theory and experiment. , 2013, , .		0
84	Enhancement of evanescent waves inside a wire metamaterial endoscope. , 2013, , .		0
85	Manipulation the near field with wire metamaterials. , 2013, , .		0
86	Novel nonlinear chiral metamaterials. , 2013, , .		0
87	Experimental investigation of magnetic Purcell factor in wire metamaterials. , 2014, , .		0
88	Usage of meta-resonators for improvement of magnetic resonance imaging. , 2015, , .		0
89	Input impedance of small antenna provides Purcell factor. , 2015, , .		0
90	Annular wire metamaterial resonators for Magnetic Resonance Imaging. , 2015, , .		0

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91	Experimental characterization of microwave self-complimentary metasurfaces for linear-to-circular polarization transform. , 2016, , .		0
92	Safety aspects of the metamaterial resonator for application in magnetic resonance imaging. , 2016, , .		0
93	Photonic topological edge states in metallic and all-dielectric structures. , 2017, , .		0
94	Tunable hybrid metasurfaces for image quality enhancement. , 2017, , .		0
95	Metasurface-based wireless coils for magnetic resonance imaging. , 2017, , .		0
96	Nonlocal homogenization of coated wire medium. , 2017, , .		0
97	Metasurfaces for Improvement Magnetic Resonance Imaging Characteristics: Novel Designs and in Vivo Studies. , 2018, , .		0
98	Metasurfaces: From Fundamental Ideas of Topological Photonics to Applications in Magnetic Resonance Imaging. , 2018, , .		0
99	Surface coil based on a dielectric resonator tuned to the higher-order modes. Photonics and Nanostructures - Fundamentals and Applications, 2020, 41, 100803.	1.0	0
100	Nonlinear Unidirectional Topological States in Zigzag Arrays of Bianisotropic Dielectric Nanoparticles. , 2018, , .		0
101	Coupled ceramic resonators for clinical MRI applications. AIP Conference Proceedings, 2020, , .	0.3	0