

Alexey P Slobozhanyuk

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/4633449/publications.pdf>

Version: 2024-02-01

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	Hardware RFID Security for Preventing Far-Field Attacks. IEEE Transactions on Antennas and Propagation, 2022, 70, 2199-2204.	3.1	9
2	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
3	Self-aligning roly-poly RFID tag. Scientific Reports, 2022, 12, 2140.	1.6	7
4	Energy-Harvesting Coil for Circularly Polarized Fields in Magnetic Resonance Imaging. Physical Review Applied, 2022, 17, .	1.5	2
5	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
6	Temperature control of electromagnetic topological edge states. Applied Physics Letters, 2022, 120, .	1.5	4
7	Long-Range Miniaturized Ceramic RFID Tags. IEEE Transactions on Antennas and Propagation, 2021, 69, 3125-3131.	3.1	25
8	Visualization of Metasurface Eigenmodes with Magnetic Resonance Imaging. Physical Review Applied, 2021, 16, .	1.5	8
9	Chipless wireless temperature sensor based on quasi-BIC resonance. Applied Physics Letters, 2021, 119, .	1.5	14
10	Anapole-enabled RFID security against far-field attacks. Nanophotonics, 2021, 10, 4409-4418.	2.9	5
11	Higher-order topological states in photonic kagome crystals with long-range interactions. Nature Photonics, 2020, 14, 89-94.	15.6	266
12	An artificial dielectric slab for ultra high-field MRI: Proof of concept. Journal of Magnetic Resonance, 2020, 320, 106835.	1.2	23
13	Coupled very-high permittivity dielectric resonators for clinical MRI. Applied Physics Letters, 2020, 117, .	1.5	8
14	Ceramic resonators for targeted clinical magnetic resonance imaging of the breast. Nature Communications, 2020, 11, 3840.	5.8	29
15	Multipole engineering for enhanced backscattering modulation. Physical Review B, 2020, 102, .	1.1	15
16	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
17	Coupled ceramic resonators for clinical MRI applications. AIP Conference Proceedings, 2020, , .	0.3	0
18	Control of the magnetic near-field pattern inside MRI machine with tunable metasurface. Applied Physics Letters, 2019, 115, 061604.	1.5	14

#	ARTICLE	IF	CITATIONS
19	Near-field imaging of spin-locked edge states in all-dielectric topological metasurfaces. Applied Physics Letters, 2019, 114, .	1.5	41
20	Photonic Jackiw-Rebbi states in all-dielectric structures controlled by bianisotropy. Physical Review B, 2019, 99, .	1.1	20
21	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
22	Nonlinear light generation in topological nanostructures. Nature Nanotechnology, 2019, 14, 126-130.	15.6	187
23	Photonic spin Hall effect mediated by bianisotropy. Optics Letters, 2019, 44, 1694.	1.7	8
24	Nonlinear symmetry breaking in photometamaterials. Physical Review B, 2018, 97, .	1.1	7
25	Far-field probing of leaky topological states in all-dielectric metasurfaces. Nature Communications, 2018, 9, 909.	5.8	127
26	Impact of wire metasurface eigenmode on the sensitivity enhancement of MRI system. Applied Physics Letters, 2018, 112, .	1.5	22
27	Locally Enhanced Image Quality with Tunable Hybrid Metasurfaces. Physical Review Applied, 2018, 9, .	1.5	40
28	Adjustable Subwavelength Metasurface-Inspired Resonator for Magnetic Resonance Imaging. Physica Status Solidi (A) Applications and Materials Science, 2018, 215, 1700788.	0.8	21
29	A new quadrature annular resonator for 3T MRI based on artificial-dielectrics. Journal of Magnetic Resonance, 2018, 291, 47-52.	1.2	16
30	Experimental investigation of a metasurface resonator for in vivo imaging at 1.5T. Journal of Magnetic Resonance, 2018, 286, 78-81.	1.2	32
31	Metasurfaces for Improvement Magnetic Resonance Imaging Characteristics: Novel Designs and in Vivo Studies. , 2018, , .		0
32	Experimental Realization of Three-Dimensional All-Dielectric Photonic Topological Insulators. , 2018, , .		1
33	Mode hopping in arrays of resonant thin wires over a dielectric interface. Physical Review B, 2018, 98, .	1.1	2
34	Metasurfaces: From Fundamental Ideas of Topological Photonics to Applications in Magnetic Resonance Imaging. , 2018, , .		0
35	Nonlinear Control of Electromagnetic Topological Edge States. Physical Review Letters, 2018, 121, 163901.	2.9	107
36	Magnetic Resonance Spectroscopy at 1.5 T with a Hybrid Metasurface. JETP Letters, 2018, 108, 423-427.	0.4	2

#	ARTICLE	IF	CITATIONS
37	Circular dichroism enhancement in plasmonic nanorod metamaterials. Optics Express, 2018, 26, 17841.	1.7	52
38	Spin- and valley-polarized one-way Klein tunneling in photonic topological insulators. Science Advances, 2018, 4, eaap8802.	4.7	93
39	Nonlinear Unidirectional Topological States in Zigzag Arrays of Bianisotropic Dielectric Nanoparticles. , 2018, , .		0
40	Edge States and Topological Phase Transitions in Chains of Dielectric Nanoparticles. Small, 2017, 13, 1603190.	5.2	77
41	Flexible and compact hybrid metasurfaces for enhanced ultra high field in vivo magnetic resonance imaging. Scientific Reports, 2017, 7, 1678.	1.6	81
42	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
43	Three-dimensional all-dielectric photonic topological insulator. Nature Photonics, 2017, 11, 130-136.	15.6	257
44	Tunable hybrid metasurfaces for MRI applications. AIP Conference Proceedings, 2017, , .	0.3	3
45	Enhancement of magnetic resonance imaging with metasurfaces: From concept to human trials. , 2017, , .		3
46	Photonic topological edge states in metallic and all-dielectric structures. , 2017, , .		0
47	Tunable hybrid metasurfaces for image quality enhancement. , 2017, , .		0
48	Metasurface-based wireless coils for magnetic resonance imaging. , 2017, , .		0
49	In vivo magnetic resonance imaging of human knee with metasurface. , 2017, , .		3
50	Nonlocal homogenization of coated wire medium. , 2017, , .		0
51	Third-Harmonic Generation from Photonic Topological States in Zigzag Arrays of Silicon Nanodisks. , 2017, , .		2
52	Enhancement of Magnetic Resonance Imaging with Metasurfaces. Advanced Materials, 2016, 28, 1832-1838.	11.1	160
53	Enhanced photonic spin Hall effect with subwavelength topological edge states. Laser and Photonics Reviews, 2016, 10, 656-664.	4.4	44
54	Advanced electromagnetic materials for magnetic resonance imaging. , 2016, , .		1

#	ARTICLE	IF	CITATIONS
55	Experimental characterization of microwave self-complementary metasurfaces for linear-to-circular polarization transform. , 2016, , .		0
56	Experimental demonstration of topological effects in bianisotropic metamaterials. Scientific Reports, 2016, 6, 22270.	1.6	73
57	Topological transition in coated wire medium. Physica Status Solidi - Rapid Research Letters, 2016, 10, 900-904.	1.2	13
58	Microwave platform as a valuable tool for characterization of nanophotonic devices. Scientific Reports, 2016, 6, 35516.	1.6	5
59	Metasurfaces provide a new way for building magnetic resonance imaging scanners. , 2016, , .		1
60	Safety aspects of the metamaterial resonator for application in magnetic resonance imaging. , 2016, , .		0
61	Metasurfaces: Enhancement of Magnetic Resonance Imaging with Metasurfaces (Adv. Mater. 9/2016). Advanced Materials, 2016, 28, 1831-1831.	11.1	2
62	Purcell effect in hyperbolic metamaterial resonators. Physical Review B, 2015, 92, .	1.1	62
63	Anomalous polarization conversion in arrays of ultrathin ferromagnetic nanowires. Physical Review B, 2015, 92, .	1.1	8
64	Self-complementary metasurfaces for linear-to-circular polarization conversion. Physical Review B, 2015, 92, .	1.1	84
65	An antenna model for the Purcell effect. Scientific Reports, 2015, 5, 12956.	1.6	160
66	Mapping plasmonic topological states at the nanoscale. Nanoscale, 2015, 7, 11904-11908.	2.8	78
67	Self-complementary zig-zag metasurfaces for designing circular polarizing beam splitters. , 2015, , .		1
68	Usage of meta-resonators for improvement of magnetic resonance imaging. , 2015, , .		0
69	Input impedance of small antenna provides Purcell factor. , 2015, , .		0
70	Annular wire metamaterial resonators for Magnetic Resonance Imaging. , 2015, , .		0
71	Capacitively-loaded metasurfaces and their application in magnetic resonance imaging. , 2015, , .		7
72	Subwavelength Topological Edge States in Optically Resonant Dielectric Structures. Physical Review Letters, 2015, 114, 123901.	2.9	144

#	ARTICLE	IF	CITATIONS
73	Experimental realization of invisibility cloaking. Physics-Usppekhi, 2015, 58, 167-190.	0.8	10
74	Near-field mapping of Fano resonances in all-dielectric oligomers. Applied Physics Letters, 2014, 104, .	1.5	64
75	Experimental investigation of magnetic Purcell factor in wire metamaterials. , 2014, , .		0
76	Nonlinear interaction of meta-atoms through optical coupling. Applied Physics Letters, 2014, 104, 014104.	1.5	19
77	Magnetic Purcell factor in wire metamaterials. Applied Physics Letters, 2014, 104, .	1.5	33
78	Topological Majorana States in Zigzag Chains of Plasmonic Nanoparticles. ACS Photonics, 2014, 1, 101-105.	3.2	138
79	Subwavelength waveguides composed of dielectric nanoparticles. Physical Review B, 2014, 89, .	1.1	79
80	Linear to circular polarization converters based on self-complementary metasurfaces. , 2014, , .		3
81	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
82	Experimental verification of enhancement of evanescent waves inside a wire medium. Applied Physics Letters, 2013, 103, .	1.5	7
83	Fano resonances in antennas: General control over radiation patterns. Physical Review B, 2013, 88, .	1.1	54
84	Broadband isotropic $\hat{1}/4$ -near-zero metamaterials. Applied Physics Letters, 2013, 103, .	1.5	20
85	Superdirective magnetic nanoantennas with effect of light steering: Theory and experiment. , 2013, , .		1
86	Wire metamaterial for the improvement of magnetic resonance imaging. , 2013, , .		2
87	Superdirective nanoantennas: Theory and experiment. , 2013, , .		0
88	Photosensitive SRR-metamaterials. , 2013, , .		1
89	Ultracompact all-dielectric superdirective antennas: Theory and experiment. , 2013, , .		1
90	Wire metamaterial: Enhancement of evanescent waves and application for improvement of magnetic resonance imaging. , 2013, , .		1

#	ARTICLE	IF	CITATIONS
91	Enhancement of evanescent waves inside a wire metamaterial endoscope. , 2013, , .		0
92	Manipulation the near field with wire metamaterials. , 2013, , .		0
93	Flexible Helices for Nonlinear Metamaterials. Advanced Materials, 2013, 25, 3409-3412.	11.1	61
94	Novel nonlinear chiral metamaterials. , 2013, , .		0
95	Light coupling in microwave metamaterials. , 2013, , .		1
96	Competing nonlinearities with metamaterials. Applied Physics Letters, 2012, 101, 231904.	1.5	16
97	Double-Shell metamaterial coatings for plasmonic cloaking. Physica Status Solidi - Rapid Research Letters, 2012, 6, 46-48.	1.2	28
98	Hyperbolic transmission-line metamaterials. Journal of Applied Physics, 2012, 112, .	1.1	42
99	Metamaterials with tunable nonlinearity. JETP Letters, 2012, 95, 613-617.	0.4	21
100	Nonlinear spiral metamaterials. , 2012, , .		0
101	Experimental verification of the concept of all-dielectric nanoantennas. Applied Physics Letters, 2012, 100, .	1.5	119