Yangyang Fu

List of Publications by Year
in descending order

86	2,018	236925 25	302126 39
papers	citations	h-index	g-index

86	86	86	1259
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Asymmetric Generation of Acoustic Vortex Using Dual-Layer Metasurfaces. Physical Review Letters, 2022, 128, 104501.	7.8	33
2	Observation of electron runaway in a tip-plane air gap under negative nanosecond pulse voltage by PIC/MCC simulation. Plasma Sources Science and Technology, 2022, 31, 045027.	3.1	15
3	Perfect retroreflection assisted by evanescent guided modes in acoustic metagratings. Applied Physics Letters, 2022, 120, .	3.3	11
4	Asymmetric nonlinear-mode-conversion in an optical waveguide with PT symmetry. Frontiers of Physics, 2022, 17, .	5.0	5
5	Reconfigurable chiral exceptional point and tunable non-reciprocity in a non-Hermitian system with phase-change material. Optics Express, 2022, 30, 27812.	3.4	0
6	Benchmark of the KGMf with a coupled Boltzmann equation solver. Computer Physics Communications, 2021, 260, 107748.	7.5	5
7	Extraordinary wave modes in purely imaginary metamaterials beyond the critical angle. Optics Express, 2021, 29, 2874.	3.4	3
8	Transition characteristics and electron kinetics in microhollow cathode discharges. Journal of Applied Physics, 2021, 129, .	2.5	10
9	Comparison of 1D and 2D particle-in-cell simulations for DC magnetron sputtering discharges. Physics of Plasmas, 2021, 28, .	1.9	10
10	Electron dynamics in radio frequency magnetron sputtering argon discharges with a dielectric target. Plasma Sources Science and Technology, 2021, 30, 035019.	3.1	23
11	New mechanism for optical super-resolution via anisotropic near-zero index metamaterials. Journal of Optics (United Kingdom), 2021, 23, 055101.	2.2	1
12	Direct current microplasma formation around microstructure arrays. Applied Physics Letters, 2021, 118, .	3.3	9
13	Scattering of Light with Orbital Angular Momentum from a Metallic Meta-Cylinder with Engineered Topological Charge. ACS Photonics, 2021, 8, 2027-2032.	6.6	10
14	Enhanced and unidirectional photonic spin Hall effect in a plasmonic metasurface with S₄ symmetry. Optics Letters, 2021, 46, 2537.	3.3	20
15	Breakdown, discharge modes, and gaseous recovery of atmospheric air with repetitive 10 ns pulses. Physics of Plasmas, 2021, 28, .	1.9	11
16	Geometry symmetry-free and higher-order optical bound states in the continuum. Nature Communications, 2021, 12, 4390.	12.8	25
17	Critical Coupling and Perfect Absorption Using Î±â€MoO₃ Multilayers in the Midâ€Infrared. Annalen Der Physik, 2021, 533, 2000512.	2.4	10
18	Similarity properties in capacitive radio frequency plasmas with nonlinear collision processes. Plasma Sources Science and Technology, 2021, 30, 115009.	3.1	8

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19	Generalizing Similarity Laws for Radio-Frequency Discharge Plasmas across Nonlinear Transition Regimes. Physical Review Applied, 2021, 16, .	3.8	11
20	Observation of multilayer-structured discharge in plasma ionization breakdown. Applied Physics Letters, 2021, 119, .	3.3	13
21	Sound vortex diffraction via topological charge in phase gradient metagratings. Science Advances, 2020, 6, .	10.3	73
22	Similarity law and frequency scaling in low-pressure capacitive radio frequency plasmas. Applied Physics Letters, 2020, 117, .	3.3	19
23	Transitions between electron emission and gas breakdown mechanisms across length and pressure scales. Journal of Applied Physics, 2020, 128, .	2.5	48
24	Similarity of capacitive radio-frequency discharges in nonlocal regimes. Physics of Plasmas, 2020, 27, 113501.	1.9	15
25	Influence of metastable atoms in low pressure magnetized radio-frequency argon discharges. Journal Physics D: Applied Physics, 2020, 53, 435201.	2.8	19
26	Broadband unidirectional near-zero reflection induced by logical combination of parity-time symmetric photonic crystal. Optics Communications, 2020, 474, 126123.	2.1	2
27	Controllably asymmetric beam splitting via gap-induced diffraction channel transition in dual-layer binary metagratings. Frontiers of Physics, 2020, 15, 1.	5.0	45
28	Enhancing the Faraday rotation in the monolayer phosphorus base of magneto-photonic crystals. Optical Materials, 2020, 102, 109809.	3.6	13
29	Electrical breakdown from macro to micro/nano scales: a tutorial and a review of the state of the art. Plasma Research Express, 2020, 2, 013001.	0.9	66
30	Phase-Gradient Metasurfaces Based on Local Fabryâ€“PÃ©rot Resonances. Chinese Physics Letters, 2020, 37, 097801.	3.3	10
31	High-energy ballistic electrons in low-pressure radio-frequency plasmas. Plasma Sources Science and Technology, 2020, 29, 09LT01.	3.1	30
32	Enhancing the Faraday rotation of monolayer black phosphorus by the optical Tamm state at the photonic crystal interface. Applied Optics, 2020, 59, 9607.	1.8	10
33	Polarization beam splitter based on extremely anisotropic black phosphorus ribbons. Optics Express, 2020, 28, 8371.	3.4	10
34	Enhanced third-harmonic generation induced by nonlinear field resonances in plasmonic-graphene metasurfaces. Optics Express, 2020, 28, 13234.	3.4	23
35	3D broadband waveguide cloak and light squeezing in terahertz regime. Optics Letters, 2020, 45, 652.	3.3	2
36	Switchable bifunctional metasurfaces: nearly perfect retroreflection and absorption at the terahertz regime. Optics Letters, 2020, 45, 3989.	3.3	23

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37	Transition of low-temperature plasma similarity laws from low to high ionization degree regimes. Plasma Sources Science and Technology, 2019, 28, 095012.	3.1	8
38	Mechanism Behind Angularly Asymmetric Diffraction in Phase-Gradient Metasurfaces. Physical Review Applied, 2019, 12, .	3.8	34
39	Photonic spin Hall effect in PT symmetric metamaterials. Frontiers of Physics, 2019, 14, 1.	5.0	44
40	Gas breakdown and its scaling law in microgaps with multiple concentric cathode protrusions. Applied Physics Letters, 2019, 114, .	3.3	31
41	Reversal of transmission and reflection based on acoustic metagratings with integer parity design. Nature Communications, 2019, 10, 2326.	12.8	135
42	Giant Goos-HÃnchen shift induced by bounded states in optical PT-symmetric bilayer structures. Optics Express, 2019, 27, 7857.	3.4	38
43	Multifunctional reflection in acoustic metagratings with simplified design. Applied Physics Letters, 2019, 114, .	3.3	53
44	Spatio-temporal dynamics of pulsed gas breakdown in microgaps. Physics of Plasmas, 2019, 26, 014506.	1.9	24
45	Temporal single-surface multipactor dynamics under obliquely incident linearly polarized electric field. Physics of Plasmas, 2019, 26, .	1.9	23
46	Gas Breakdown in Microgaps With a Surface Protrusion On the Electrode. IEEE Transactions on Plasma Science, 2019, 47, 2011-2019.	1.3	14
47	On the Similarities of Low-Temperature Plasma Discharges. IEEE Transactions on Plasma Science, 2019, 47, 1994-2003.	1.3	29
48	Designing a nearly perfect infrared absorber in monolayer black phosphorus. Applied Optics, 2019, 58, 3862.	1.8	22
49	Tunable THz reflection-type polarizer based on monolayer phosphorene. Applied Optics, 2019, 58, 9643.	1.8	4
50	Design of a hybrid on-chip waveguide with giant backward stimulated Brillouin scattering. Optics Express, 2019, 27, 24953.	3.4	11
51	Effect of surface protrusion on plasma sheath properties in atmospheric microdischarges. Physics of Plasmas, 2018, 25, .	1.9	19
52	Characterizing the dominant ions in low-temperature argon plasmas in the range of 1â€“800 Torr. Physics of Plasmas, 2018, 25, .	1.9	12
53	Coherent perfect absorption and laser modes in a cylindrical structure of conjugate metamaterials. New Journal of Physics, 2018, 20, 013015.	2.9	10
54	Acoustic Imaging with Metamaterial Luneburg Lenses. Scientific Reports, 2018, 8, 16188.	3.3	51

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55	Evaluating microgap breakdown mode transition with electric field non-uniformity. Plasma Sources Science and Technology, 2018, 27, 095014.	3.1	25
56	Gas breakdown in atmospheric pressure microgaps with a surface protrusion on the cathode. Applied Physics Letters, 2018, 112, .	3.3	27
57	Paschen's curve in microgaps with an electrode surface protrusion. Applied Physics Letters, 2018, 113, .	3.3	35
58	Compact acoustic retroreflector based on a mirrored Luneburg lens. Physical Review Materials, 2018, 2, .	2.4	41
59	Effect of distribution of electric field on low-pressure gas breakdown. Physics of Plasmas, 2017, 24, .	1.9	29
60	Design of zero index metamaterials with PT symmetry using epsilon-near-zero media with defects. Journal of Applied Physics, 2017, 121, 094503.	2.5	26
61	Perfect waveguide mode conversion via zero index metamaterials. Journal of Optics (United Kingdom), 2017, 19, 015102.	2.2	1
62	Asymmetric effects in waveguide systems using PT symmetry and zero index metamaterials. Scientific Reports, 2017, 7, 12476.	3.3	11
63	Coherent perfect absorber and laser modes in purely imaginary metamaterials. Physical Review A, 2017, 96, .	2.5	18
64	Investigation on the similarity law of low-pressure glow discharges based on the light intensity distributions in geometrically similar gaps. Physics of Plasmas, 2017, 24, .	1.9	7
65	Transition characteristics of low-pressure discharges in a hollow cathode. Physics of Plasmas, 2017, 24, 083516.	1.9	20
66	Determination of the cathode layer thickness in the normal glow discharge. Physics of Plasmas, 2017, 24, .	1.9	11
67	Pressure effect on a tandem hollow cathode discharge in argon. Physics of Plasmas, 2017, 24, .	1.9	16
68	Investigation on the effect of nonlinear processes on similarity law in high-pressure argon discharges. Physics of Plasmas, 2017, 24, 113518.	1.9	13
69	Electromagnetic wave propagations in conjugate metamaterials. Optics Express, 2017, 25, 4952.	3.4	19
70	Investigation of the Similarity Law in Discharges at High Pressure Using A Kinetic Global Model. , 2017, , .		0
71	Intersection of Paschen's curves for argon. Physics of Plasmas, 2016, 23, .	1.9	26
72	Total omnidirectional reflection by sub-wavelength gradient metallic gratings. Europhysics Letters, 2016, 114, 34003.	2.0	18

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73	Planar gradient metamaterials. Nature Reviews Materials, 2016, 1, .	48.7	153
74	Similarity of gas discharge in lowâ€pressure argon gaps between two planeâ€parallel electrodes. High Voltage, 2016, 1, 86-89.	4.7	30
75	Zero index metamaterials with PT symmetry in a waveguide system. Optics Express, 2016, 24, 1648.	3.4	61
76	Applications of gradient index metamaterials in waveguides. Scientific Reports, 2015, 5, 18223.	3.3	20
77	Additional modes in a waveguide system of zero-index-metamaterials with defects. Scientific Reports, 2015, 4, 6428.	3.3	26
78	Cathode fall thickness of abnormal glow discharges between parallel-plane electrodes in different radii at low pressure. Physics of Plasmas, 2015, 22, .	1.9	14
79	Steering light by a sub-wavelength metallic grating from transformation optics. Scientific Reports, 2015, 5, 12219.	3.3	48
80	Inhomogeneous field in cavities of zero index metamaterials. Scientific Reports, 2015, 5, 11217.	3.3	16
81	Total transmission through a sub-wavelength slit based on Fabryâ€“PÃ©rot resonance and zero-index metamaterials. Journal of Optics (United Kingdom), 2015, 17, 105602.	2.2	12
82	Validity of the similarity law for the glow discharges in non-plane-parallel gaps. Plasma Sources Science and Technology, 2014, 23, 065035.	3.1	15
83	Unidirectional transmission using array of zero-refractive-index metamaterials. Applied Physics Letters, 2014, 104, 193509.	3.3	53
84	Online Measurement of Pulsed Electric Field of Insulator Surface in Vacuum Based on Kerr Effect. IEEE Transactions on Plasma Science, 2014, 42, 2986-2990.	1.3	5
85	Distortion of the Electric Field Near Insulator Surface Observed With Electro-Optical Technique Measuring Kerr Effect. IEEE Transactions on Plasma Science, 2014, 42, 2574-2575.	1.3	0
86	Research on Similarity Law of Glow Discharge in Argon at Low Pressure by Numerical Simulation. IEEE Transactions on Plasma Science, 2014, 42, 1544-1551.	1.3	19