Fei Ding

List of Publications by Year
in descending order

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133 papers	8,506 citations	57719 44 h-index	45285 90 g-index
136 all docs	136 docs citations	136 times ranked	8907 citing authors

#	Article	IF	Citations
1	Ultra-broadband microwave metamaterial absorber. Applied Physics Letters, 2012, 100, .	1.5	837
2	Versatile Approach for Integrative and Functionalized Tubes by Strain Engineering of Nanomembranes on Polymers. Advanced Materials, 2008, 20, 4085-4090.	11.1	608
3	Plasmonic and metamaterial structures as electromagnetic absorbers. Laser and Photonics Reviews, 2014, 8, 495-520.	4.4	489
4	Broadband High-Efficiency Half-Wave Plate: A Supercell-Based Plasmonic Metasurface Approach. ACS Nano, 2015, 9, 4111-4119.	7.3	387
5	Gradient metasurfaces: a review of fundamentals and applications. Reports on Progress in Physics, 2018, 81, 026401.	8.1	374
6	Ultra-broadband terahertz metamaterial absorber. Applied Physics Letters, 2014, 105, .	1.5	368
7	Stretchable Graphene: A Close Look at Fundamental Parameters through Biaxial Straining. Nano Letters, 2010, 10, 3453-3458.	4.5	328
8	A review of gap-surface plasmon metasurfaces: fundamentals and applications. Nanophotonics, 2018, 7, 1129-1156.	2.9	250
9	Broadband near-infrared metamaterial absorbers utilizing highly lossy metals. Scientific Reports, 2016, 6, 39445.	1.6	247
10	Vanadium Dioxide Integrated Metasurfaces with Switchable Functionalities at Terahertz Frequencies. Advanced Optical Materials, 2018, 6, 1701204.	3.6	202
11	Active control of anapole states by structuring the phase-change alloy Ge2Sb2Te5. Nature Communications, 2019, 10, 396.	5.8	162
12	Hierarchically Designed SiOx/SiOy Bilayer Nanomembranes as Stable Anodes for Lithium Ion Batteries. Advanced Materials, 2014, 26, 4527-4532.	11.1	141
13	Bifunctional gap-plasmon metasurfaces for visible light: polarization-controlled unidirectional surface plasmon excitation and beam steering at normal incidence. Light: Science and Applications, 2018, 7, 17178-17178.	7.7	140
14	Dynamic Metasurfaces Using Phaseâ€Change Chalcogenides. Advanced Optical Materials, 2019, 7, 1801709.	3.6	139
15	Enhancement of Immunoassayâ€™s Fluorescence and Detection Sensitivity Using Three-Dimensional Plasmonic Nano-Antenna-Dots Array. Analytical Chemistry, 2012, 84, 4489-4495.	3.2	132
16	Ultrabroadband strong light absorption based on thin multilayered metamaterials. Laser and Photonics Reviews, 2014, 8, 946-953.	4.4	125
17	Tunable Pseudocapacitance in 3D TiO_{2â^'Î´} Nanomembranes Enabling Superior Lithium Storage Performance. ACS Nano, 2017, 11, 821-830.	7.3	124
18	Highly-efficient extraction of entangled photons from quantum dots using a broadband optical antenna. Nature Communications, 2018, 9, 2994.	5.8	123

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19	MoS₂ nanosheets decorated with gold nanoparticles for rechargeable Liâ€“O₂ batteries. Journal of Materials Chemistry A, 2015, 3, 14562-14566.	5.2	107
20	High yield and ultrafast sources of electrically triggered entangled-photon pairs based on strain-tunable quantum dots. Nature Communications, 2015, 6, 10067.	5.8	106
21	Multilayer tungsten-alumina-based broadband light absorbers for high-temperature applications. Optical Materials Express, 2016, 6, 2704.	1.6	101
22	Rolled-Up Optical Microcavities with Subwavelength Wall Thicknesses for Enhanced Liquid Sensing Applications. ACS Nano, 2010, 4, 3123-3130.	7.3	100
23	Wavelength-tunable entangled photons from silicon-integrated IIIâ€“V quantum dots. Nature Communications, 2016, 7, 10387.	5.8	99
24	Versatile Polarization Generation and Manipulation Using Dielectric Metasurfaces. Laser and Photonics Reviews, 2020, 14, 2000116.	4.4	97
25	Beam-Size-Invariant Spectropolarimeters Using Gap-Plasmon Metasurfaces. ACS Photonics, 2017, 4, 943-949.	3.2	90
26	Nitrogen Doping Improves the Immobilization and Catalytic Effects of Co₉S₈ in Liâ€S Batteries. Advanced Functional Materials, 2020, 30, 2002462.	7.8	86
27	Solid-state ensemble of highly entangled photon sources at rubidium atomic transitions. Nature Communications, 2017, 8, 15501.	5.8	82
28	Switchable multifunctional terahertz metasurfaces employing vanadium dioxide. Scientific Reports, 2019, 9, 5454.	1.6	79
29	Lithography-free, broadband, omnidirectional, and polarization-insensitive thin optical absorber. Applied Physics Letters, 2015, 106, .	1.5	77
30	Metasurfaceâ€Enabled Generation of Circularly Polarized Single Photons. Advanced Materials, 2020, 32, e1907832.	11.1	76
31	A Flexible PMNâ€PT Ribbonâ€Based Piezoelectricâ€Pyroelectric Hybrid Generator for Humanâ€Activity Energy Harvesting and Monitoring. Advanced Electronic Materials, 2017, 3, 1600540.	2.6	75
32	Plasmonic nano-arrays for ultrasensitive bio-sensing. Nanophotonics, 2018, 7, 1517-1531.	2.9	68
33	Dynamic piezoelectric MEMS-based optical metasurfaces. Science Advances, 2021, 7, .	4.7	68
34	Tungsten based anisotropic metamaterial as an ultra-broadband absorber. Optical Materials Express, 2017, 7, 606.	1.6	65
35	High-efficiency broadband vortex beam generator based on transmissive metasurface. Optics Express, 2019, 27, 4281.	1.7	57
36	Gapâ€Surface Plasmon Metasurfaces for Broadband Circularâ€toâ€Linear Polarization Conversion and Vector Vortex Beam Generation. Advanced Optical Materials, 2019, 7, 1801414.	3.6	55

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37	Focused vortex-beam generation using gap-surface plasmon metasurfaces. Nanophotonics, 2020, 9, 371-378.	2.9	55
38	Gap-surface plasmon metasurfaces for linear-polarization conversion, focusing, and beam splitting. Photonics Research, 2020, 8, 707.	3.4	55
39	LIGHT ABSORBER WITH AN ULTRA-BROAD FLAT BAND BASED ON MULTI-SIZED SLOW-WAVE HYPERBOLIC METAMATERIAL THIN-FILMS (Invited Paper). Progress in Electromagnetics Research, 2014, 147, 69-79.	1.6	54
40	An artificial Rb atom in a semiconductor with lifetime-limited linewidth. Physical Review B, 2015, 92, .	1.1	54
41	Addressable and Colorâ€Tunable Piezophotonic Lightâ€Emitting Stripes. Advanced Materials, 2017, 29, 1605165.	11.1	54
42	Entanglement Swapping with Semiconductor-Generated Photons Violates Bellâ€™s Inequality. Physical Review Letters, 2019, 123, 160502.	2.9	53
43	Telecom wavelength single photon sources. Journal of Semiconductors, 2019, 40, 071901.	2.0	51
44	Scalable single crystalline PMN-PT nanobelts sculpted from bulk for energy harvesting. Nano Energy, 2017, 31, 239-246.	8.2	49
45	Recent Advances in Polarizationâ€Encoded Optical Metasurfaces. Advanced Photonics Research, 2021, 2, 2000173.	1.7	46
46	Room-temperature on-chip orbital angular momentum single-photon sources. Science Advances, 2022, 8, eabk3075.	4.7	46
47	Self-assembled quantum dots with tunable thickness of the wetting layer: Role of vertical confinement on interlevel spacing. Physical Review B, 2009, 80, .	1.1	44
48	Random-phase metasurfaces at optical wavelengths. Scientific Reports, 2016, 6, 28448.	1.6	43
49	Controlling the exciton energy of a nanowire quantum dot by strain fields. Applied Physics Letters, 2016, 108, .	1.5	42
50	Epitaxial quantum dots in stretchable optical microcavities. Optics Express, 2009, 17, 22452.	1.7	41
51	Deterministic Approach to Achieve Full-Polarization Cloak. Research, 2021, 2021, 6382172.	2.8	39
52	Recent progress in metasurface-enabled optical waveplates. Nanophotonics, 2022, 11, 2219-2244.	2.9	39
53	Rationally engineered amorphous TiOx/Si/TiOx nanomembrane as an anode material for high energy lithium ion battery. Energy Storage Materials, 2018, 12, 23-29.	9.5	38
54	Metasurface-Based Polarimeters. Applied Sciences (Switzerland), 2018, 8, 594.	1.3	38

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55	Metasurface-enabled broadband beam splitters integrated with quarter-wave plate functionality. Nanoscale, 2020, 12, 14106-14111.	2.8	38
56	Vertical microcavities with high<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi>Q</mml:mi></mml:math>and strong lateral mode confinement. Physical Review B, 2013, 87, .	1.1	37
57	Significantly enhanced second-harmonic generations with all-dielectric antenna array working in the quasi-bound states in the continuum and excited by linearly polarized plane waves. Nanophotonics, 2021, 10, 1189-1196.	2.9	37
58	Functional Metasurface Quarter-Wave Plates for Simultaneous Polarization Conversion and Beam Steering. ACS Nano, 2021, 15, 18532-18540.	7.3	37
59	Optical Gap-Surface Plasmon Metasurfaces for Spin-Controlled Surface Plasmon Excitation and Anomalous Beam Steering. ACS Photonics, 2020, 7, 1849-1856.	3.2	33
60	Full-range birefringence control with piezoelectric MEMS-based metasurfaces. Nature Communications, 2022, 13, 2071.	5.8	33
61	TERAHERTZ METAMATERIAL MODULATORS BASED ON ABSORPTION. Progress in Electromagnetics Research, 2011, 119, 449-460.	1.6	32
62	A Review of Unidirectional Surface Plasmon Polariton Metacouplers. IEEE Journal of Selected Topics in Quantum Electronics, 2019, 25, 1-11.	1.9	32
63	Direct Characterization of Near-Field Coupling in Gap Plasmon-Based Metasurfaces. Nano Letters, 2018, 18, 6265-6270.	4.5	31
64	Multifunctional Metamirrors for Broadband Focused Vectorâ€Beam Generation. Advanced Optical Materials, 2019, 7, 1900724.	3.6	31
65	Single Photons On-Demand from Light-Hole Excitons in Strain-Engineered Quantum Dots. Nano Letters, 2015, 15, 422-427.	4.5	28
66	A Nanomembrane-Based Wavelength-Tunable High-Speed Single-Photon-Emitting Diode. Nano Letters, 2013, 13, 5808-5813.	4.5	27
67	Highâ€Capacity, Dendriteâ€Free, and Ultrahighâ€Rate Lithiumâ€Metal Anodes Based on Monodisperse Nâ€Doped Hollow Carbon Nanospheres. Small, 2020, 16, e2004770.	5.2	27
68	Monolithically Integrated Microelectromechanical Systems for On-Chip Strain Engineering of Quantum Dots. Nano Letters, 2016, 16, 5785-5791.	4.5	26
69	Thinning and functionalization of few-layer graphene sheets by CF4 plasma treatment. Nanoscale Research Letters, 2012, 7, 268.	3.1	24
70	Fundamentals and applications of spin-decoupled Pancharatnamâ€"Berry metasurfaces. Frontiers of Optoelectronics, 2021, 14, 134-147.	1.9	24
71	Electric-Field-Induced Energy Tuning of On-Demand Entangled-Photon Emission from Self-Assembled Quantum Dots. Nano Letters, 2017, 17, 501-507.	4.5	21
72	Spinâ€"Orbit Controlled Excitation of Quantum Emitters in Hybrid Plasmonic Nanocircuits. Advanced Optical Materials, 2020, 8, 2000854.	3.6	21

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73	Dualâ€Functional Optical Waveplates Based on Gapâ€Surface Plasmon Metasurfaces. Advanced Optical Materials, 2021, 9, 2002253.	3.6	21
74	A Biomassâ€Based Integral Approach Enables Liâ€S Full Pouch Cells with Exceptional Power Density and Energy Density. Advanced Science, 2021, 8, e2101182.	5.6	21
75	Spectrally selective emitters based on 3D Mo nanopillars for thermophotovoltaic energy harvesting. Materials Today Physics, 2021, 21, 100503.	2.9	20
76	Frequency feedback for two-photon interference from separate quantum dots. Physical Review B, 2018, 98, .	1.1	19
77	Electrical Tuning of Fresnel Lens in Reflection. ACS Photonics, 2021, 8, 1576-1581.	3.2	19
78	Unveiling the morphology of buried In(Ga)As nanostructures by selective wet chemical etching: From quantum dots to quantum rings. Applied Physics Letters, 2007, 90, 173104.	1.5	18
79	Ultrabroadband super-Planckian radiative heat transfer with artificial continuum cavity states in patterned hyperbolic metamaterials. Physical Review B, 2017, 95, .	1.1	18
80	Dual-Band Metasurfaces Using Multiple Gap-Surface Plasmon Resonances. ACS Applied Materials & Interfaces, 2020, 12, 1250-1256.	4.0	18
81	On-demand semiconductor source of 780-nm single photons with controlled temporal wave packets. Physical Review B, 2018, 97, .	1.1	17
82	Directional off-Normal Photon Streaming from Hybrid Plasmon-Emitter Coupled Metasurfaces. ACS Photonics, 2020, 7, 1111-1116.	3.2	17
83	Carrier channels of multimodal-sized quantum dots: A surface-mediated adatom migration picture. Physical Review B, 2007, 76, .	1.1	16
84	Quantum dot-based broadband optical antenna for efficient extraction of single photons in the telecom O-band. Optics Express, 2020, 28, 19457.	1.7	16
85	Integrated vertical microcavity using a nano-scale deformation for strong lateral confinement. Applied Physics Letters, 2013, 103, .	1.5	15
86	High-efficiency focused optical vortex generation with geometric gap-surface plasmon metalenses. Applied Physics Letters, 2020, 117, .	1.5	15
87	Detection of internal fields in double-metal terahertz resonators. Applied Physics Letters, 2017, 110, .	1.5	14
88	Maximally entangled and gigahertz-clocked on-demand photon pair source. Physical Review B, 2021, 103, .	1.1	14
89	Bendable, ultra-black absorber based on a graphite nanocone nanowire composite structure. Optics Express, 2015, 23, 20115.	1.7	13
90	On-Chip Spectropolarimetry by Fingerprinting with Random Surface Arrays of Nanoparticles. ACS Photonics, 2018, 5, 1703-1710.	3.2	13

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91	Phase-change metasurface for switchable vector vortex beam generation. Optics Express, 2021, 29, 42762.	1.7	13
92	Confined Growth of ZIFâ€8 Nanocrystals with Tunable Structural Colors. Advanced Materials Interfaces, 2018, 5, 1701270.	1.9	11
93	Demonstration of > 2Ï€ reflection phase range in optical metasurfaces based on detuned gap-surface plasmon resonators. Scientific Reports, 2020, 10, 19031.	1.6	11
94	Helicity-dependent continuous varifocal metalens based on bilayer dielectric metasurfaces. Optics Express, 2021, 29, 39461.	1.7	11
95	Polarization-selective dual-wavelength gap-surface plasmon metasurfaces. Optics Express, 2018, 26, 23760.	1.7	10
96	Multifunctional all-dielectric metasurface quarter-wave plates for polarization conversion and wavefront shaping. Optics Letters, 2022, 47, 2478.	1.7	10
97	Large-area, lithography-free, low-cost SERS sensor with good flexibility and high performance. Nanotechnology, 2016, 27, 385205.	1.3	9
98	Temperature-Dependent Coercive Field Measured by a Quantum Dot Strain Gauge. Nano Letters, 2017, 17, 7864-7868.	4.5	9
99	Angle-insensitive narrowband optical absorption based on high-Q localized resonance. Scientific Reports, 2018, 8, 15240.	1.6	8
100	Strain tunable quantum dot based non-classical photon sources. Journal of Semiconductors, 2020, 41, 011901.	2.0	7
101	Heralded preparation of spin qubits in droplet-etched GaAs quantum dots using quasiresonant excitation. Physical Review B, 2021, 104, .	1.1	7
102	Band-Emission Evolutions from Magic-sized Clusters to Nanosized Quantum Dots of Cd₃As₂ in the Hot-Bubbling Synthesis. Journal of Physical Chemistry C, 2015, 119, 16390-16395.	1.5	6
103	Entangled-photons generation with quantum dots. Chinese Physics B, 2018, 27, 020307.	0.7	6
104	Ultra-broadband microwave metasurfaces for polarizer and beam splitting. Europhysics Letters, 2019, 128, 47003.	0.7	6
105	Strain-modulated photoelectric properties of self-rolled GaAs/Al_{0.26}Ga_{0.74}As quantum well nanomembrane. Applied Physics Express, 2019, 12, 065003.	1.1	5
106	Plasmon Metasurfaces: Gapâ€Surface Plasmon Metasurfaces for Broadband Circularâ€toâ€Linear Polarization Conversion and Vector Vortex Beam Generation (Advanced Optical Materials 9/2019). Advanced Optical Materials, 2019, 7, 1970033.	3.6	4
107	Single photon emission from ODT passivated near-surface GaAs quantum dots. Applied Physics Letters, 2021, 118, 221107.	1.5	3
108	Ultra-broadband metamaterial absorber in terahertz regime. , 2012, , .		2

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109	Patterning of graphite nanocones for broadband solar spectrum absorption. AIP Advances, 2015, 5, 067139.	0.6	2
110	Energy-tunable single-photon light-emitting diode by strain fields. Applied Physics B: Lasers and Optics, 2016, 122, 1.	1.1	2
111	Special Issue on â€œMetasurfaces: Physics and Applicationsâ€• Applied Sciences (Switzerland), 2018, 8, 1727.	1.3	2
112	Energy band modulation of GaAs/Al0.26Ga0.74As quantum well in 3D self-assembled nanomembranes. Physics Letters, Section A: General, Atomic and Solid State Physics, 2019, 383, 2938-2942.	0.9	2
113	Ultra-broadband metamaterial absorber in terahertz regime. , 2012, , .		2
114	Ultra-broadband near-infrared metamaterial absorber. , 2012, , .		2
115	Quantum Hybrid Plasmonic Nanocircuits for Versatile Polarized Photon Generation. Advanced Optical Materials, 2022, 10, 2101596.	3.6	2
116	Upconversion photoluminescence of epitaxial Yb3+/Er3+ codoped ferroelectric Pb(Zr,Ti)O3 films on silicon substrates. Thin Solid Films, 2016, 607, 32-35.	0.8	1
117	Publisher's Note: An artificial Rb atom in a semiconductor with lifetime-limited linewidth [Phys. Rev. B92, 245439 (2015)]. Physical Review B, 2016, 93, .	1.1	1
118	Near-field phase characterization of gradient gap plasmon-based metasurfaces. , 2018, , .		1
119	Photoneutralization of charges in GaAs quantum dot based entangled photon emitters. Physical Review B, 2022, 105, .	1.1	1
120	Unidirectional Surface Plasmon Polariton Coupler in the Visible Using Metasurfaces. , 2014, , .		0
121	Broadband High-Efficiency Half-Wave Plate Using Plasmonic Metasurface. , 2015, , .		0
122	Ultra-broad Flat Band Light Absorber Based on Multi-sized Slow-wave Hyperbolic Metamaterial Thin-films. , 2015, , .		0
123	Ultrafast electrically-triggered sources of single photons and entangled-photon pairs based on strain-tunable quantum dots LEDs. , 2016, , .		0
124	Spectroscopy and mapping of resonant fields in terahertz plasmonic resonators. , 2017, , .		0
125	Bifunctional Gap-Plasmon Metasurfaces for Visible Light. , 2018, , .		0
126	Gap-surface Plasmon Metasurfaces for Structured Beams Generation. , 2019, , .		0

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127	Preface to the Special Issue on the Celebration of the 60th Anniversary of Dedicating to Scientific Research of Prof. Zhanguo Wang. Journal of Semiconductors, 2020, 41, 010101.	2.0	0
128	Ultra-broadband near-infrared metamaterial absorber. , 2012, , .		0
129	Chip-size Plasmonic Spectropolarimeters. , 2017, , .		0
130	Polarization Entangled Photons from Semiconductor Quantum Dots. Nano-optics and Nanophotonics, 2017, , 235-266.	0.2	0
131	Bifunctional Gap-Plasmon Metasurfaces for Visible Light. , 2018, , .		0
132	Gap-surface Plasmon Metasurfaces for Focused Structured-beams Generation. , 2019, , .		0
133	Manipulating Circularly Polarized Emission of Classical and Nonclassical Light with Plasmonic Metasurfaces. , 2020, , .		0