

Nicholas X. Fang

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/341493/publications.pdf>

Version: 2024-02-01

269
papers

28,671
citations

10351

72
h-index

5101

166
g-index

275
all docs

275
docs citations

275
times ranked

24424
citing authors

#	ARTICLE	IF	CITATIONS
1	Sub-Diffraction-Limited Optical Imaging with a Silver Superlens. <i>Science</i> , 2005, 308, 534-537.	6.0	3,613
2	Ultrasonic metamaterials with negative modulus. <i>Nature Materials</i> , 2006, 5, 452-456.	13.3	1,608
3	Ultralight, ultrastiff mechanical metamaterials. <i>Science</i> , 2014, 344, 1373-1377.	6.0	1,592
4	Terahertz Magnetic Response from Artificial Materials. <i>Science</i> , 2004, 303, 1494-1496.	6.0	1,437
5	Polaritons in layered two-dimensional materials. <i>Nature Materials</i> , 2017, 16, 182-194.	13.3	963
6	Ultrabroadband Light Absorption by a Sawtooth Anisotropic Metamaterial Slab. <i>Nano Letters</i> , 2012, 12, 1443-1447.	4.5	864
7	Hydraulic hydrogel actuators and robots optically and sonically camouflaged in water. <i>Nature Communications</i> , 2017, 8, 14230.	5.8	760
8	Multimaterial 4D Printing with Tailorable Shape Memory Polymers. <i>Scientific Reports</i> , 2016, 6, 31110.	1.6	751
9	Broadband Acoustic Cloak for Ultrasound Waves. <i>Physical Review Letters</i> , 2011, 106, 024301.	2.9	706
10	Projection micro-stereolithography using digital micro-mirror dynamic mask. <i>Sensors and Actuators A: Physical</i> , 2005, 121, 113-120.	2.0	686
11	Multiscale metallic metamaterials. <i>Nature Materials</i> , 2016, 15, 1100-1106.	13.3	584
12	Plasmonic Nanolithography. <i>Nano Letters</i> , 2004, 4, 1085-1088.	4.5	536
13	Focusing Ultrasound with an Acoustic Metamaterial Network. <i>Physical Review Letters</i> , 2009, 102, 194301.	2.9	498
14	Mechanical Metamaterials and Their Engineering Applications. <i>Advanced Engineering Materials</i> , 2019, 21, 1800864.	1.6	493
15	Highly Stretchable and UV Curable Elastomers for Digital Light Processing Based 3D Printing. <i>Advanced Materials</i> , 2017, 29, 1606000.	11.1	480
16	Far-Field Optical Superlens. <i>Nano Letters</i> , 2007, 7, 403-408.	4.5	372
17	Application of Plasmonic Bowtie Nanoantenna Arrays for Optical Trapping, Stacking, and Sorting. <i>Nano Letters</i> , 2012, 12, 796-801.	4.5	359
18	Lightweight Mechanical Metamaterials with Tunable Negative Thermal Expansion. <i>Physical Review Letters</i> , 2016, 117, 175901.	2.9	337

#	ARTICLE	IF	CITATIONS
19	Fast-Response, Stiffness-Tunable Soft Actuator by Hybrid Multimaterial 3D Printing. <i>Advanced Functional Materials</i> , 2019, 29, 1806698.	7.8	292
20	Ultrasoother Silver Thin Films Deposited with a Germanium Nucleation Layer. <i>Nano Letters</i> , 2009, 9, 178-182.	4.5	279
21	Ice Templated Free-Standing Hierarchically WS ₂ /CNT-rGO Aerogel for High-Performance Rechargeable Lithium and Sodium Ion Batteries. <i>Advanced Energy Materials</i> , 2016, 6, 1601057.	10.2	276
22	Imaging properties of a metamaterial superlens. <i>Applied Physics Letters</i> , 2003, 82, 161-163.	1.5	266
23	Tunable Light-Matter Interaction and the Role of Hyperbolicity in Graphene-hBN System. <i>Nano Letters</i> , 2015, 15, 3172-3180.	4.5	260
24	A thin film broadband absorber based on multi-sized nanoantennas. <i>Applied Physics Letters</i> , 2011, 99, .	1.5	250
25	Reprocessable thermosets for sustainable three-dimensional printing. <i>Nature Communications</i> , 2018, 9, 1831.	5.8	249
26	Broadband Light Management with Thermochromic Hydrogel Microparticles for Smart Windows. <i>Joule</i> , 2019, 3, 290-302.	11.7	248
27	3D printing of highly stretchable hydrogel with diverse UV curable polymers. <i>Science Advances</i> , 2021, 7, .	4.7	233
28	Large positive and negative lateral optical beam displacements due to surface plasmon resonance. <i>Applied Physics Letters</i> , 2004, 85, 372-374.	1.5	230
29	High-Performance Single-Crystalline Perovskite Thin-Film Photodetector. <i>Advanced Materials</i> , 2018, 30, 1704333.	11.1	225
30	One-step volumetric additive manufacturing of complex polymer structures. <i>Science Advances</i> , 2017, 3, eaao5496.	4.7	219
31	Projection micro stereolithography based 3D printing and its applications. <i>International Journal of Extreme Manufacturing</i> , 2020, 2, 022004.	6.3	213
32	Design and optimization of a light-emitting diode projection micro-stereolithography three-dimensional manufacturing system. <i>Review of Scientific Instruments</i> , 2012, 83, 125001.	0.6	205
33	First jump of microgel; actuation speed enhancement by elastic instability. <i>Soft Matter</i> , 2010, 6, 4342.	1.2	204
34	Nano-kirigami with giant optical chirality. <i>Science Advances</i> , 2018, 4, eaat4436.	4.7	203
35	Nonlithographic Patterning and Metal-Assisted Chemical Etching for Manufacturing of Tunable Light-Emitting Silicon Nanowire Arrays. <i>Nano Letters</i> , 2010, 10, 1582-1588.	4.5	201
36	Surface resonant states and superlensing in acoustic metamaterials. <i>Physical Review B</i> , 2007, 75, .	1.1	200

#	ARTICLE	IF	CITATIONS
37	Terahertz plasmonic high pass filter. Applied Physics Letters, 2003, 83, 201-203.	1.5	197
38	The Metastability of an Electrochemically Controlled Nanoscale Machine on Gold Surfaces. ChemPhysChem, 2004, 5, 111-116.	1.0	175
39	Highly stretchable hydrogels for UV curing based high-resolution multimaterial 3D printing. Journal of Materials Chemistry B, 2018, 6, 3246-3253.	2.9	173
40	Nonlinear Optical Response from Arrays of Au Bowtie Nanoantennas. Nano Letters, 2011, 11, 61-65.	4.5	170
41	Rapid growth of evanescent wave by a silver superlens. Applied Physics Letters, 2003, 83, 5184-5186.	1.5	162
42	Tunable Localized Surface Plasmon-Enabled Broadband Light-Harvesting Enhancement for High-Efficiency Panchromatic Dye-Sensitized Solar Cells. Nano Letters, 2013, 13, 637-642.	4.5	162
43	A micro methanol fuel cell operating at near room temperature. Applied Physics Letters, 2003, 83, 4056-4058.	1.5	160
44	Breaking the barriers: advances in acoustic functional materials. National Science Review, 2018, 5, 159-182.	4.6	153
45	Magnetoactive Acoustic Metamaterials. Advanced Materials, 2018, 30, e1706348.	11.1	142
46	Harnessing Deformation to Switch On and Off the Propagation of Sound. Advanced Materials, 2016, 28, 1631-1635.	11.1	140
47	Microarchitected Stretching-Dominated Mechanical Metamaterials with Minimal Surface Topologies. Advanced Engineering Materials, 2018, 20, 1800029.	1.6	138
48	Infrared Topological Plasmons in Graphene. Physical Review Letters, 2017, 118, 245301.	2.9	132
49	Mechanically Robust and UV-Curable Shape-Memory Polymers for Digital Light Processing Based 4D Printing. Advanced Materials, 2021, 33, e2101298.	11.1	129
50	A reconfigurable plasmofluidic lens. Nature Communications, 2013, 4, 2305.	5.8	127
51	Thermal conductivity of silicon nanowire arrays with controlled roughness. Journal of Applied Physics, 2012, 112, .	1.1	120
52	Enabling Ideal Selective Solar Absorption with 2D Metallic Dielectric Photonic Crystals. Advanced Materials, 2014, 26, 8041-8045.	11.1	120
53	Liquid-Crystal-Elastomer-Based Dissipative Structures by Digital Light Processing 3D Printing. Advanced Materials, 2020, 32, e2000797.	11.1	120
54	Imaging of Plasmonic Modes of Silver Nanoparticles Using High-Resolution Cathodoluminescence Spectroscopy. ACS Nano, 2009, 3, 2965-2974.	7.3	119

#	ARTICLE	IF	CITATIONS
55	Interaction of a Contact Resonance of Microspheres with Surface Acoustic Waves. <i>Physical Review Letters</i> , 2013, 111, 036103.	2.9	116
56	Regenerating evanescent waves from a silver superlens. <i>Optics Express</i> , 2003, 11, 682.	1.7	115
57	Anisotropically Fatigue-Resistant Hydrogels. <i>Advanced Materials</i> , 2021, 33, e2102011.	11.1	114
58	A digital light processing 3D printer for fast and high-precision fabrication of soft pneumatic actuators. <i>Sensors and Actuators A: Physical</i> , 2018, 273, 285-292.	2.0	109
59	Near-field two-photon nanolithography using an apertureless optical probe. <i>Applied Physics Letters</i> , 2002, 81, 3663-3665.	1.5	108
60	Topological magnetoplasmon. <i>Nature Communications</i> , 2016, 7, 13486.	5.8	108
61	High-Efficiency High-Resolution Multimaterial Fabrication for Digital Light Processing-Based Three-Dimensional Printing. <i>3D Printing and Additive Manufacturing</i> , 2018, 5, 185-193.	1.4	106
62	Rapid multi-material 3D printing with projection micro-stereolithography using dynamic fluidic control. <i>Additive Manufacturing</i> , 2019, 27, 606-615.	1.7	106
63	Anisotropic Complementary Acoustic Metamaterial for Canceling out Aberrating Layers. <i>Physical Review X</i> , 2014, 4, .	2.8	104
64	Structural multi-colour invisible inks with submicron 4D printing of shape memory polymers. <i>Nature Communications</i> , 2021, 12, 112.	5.8	102
65	Realization of optical superlens imaging below the diffraction limit. <i>New Journal of Physics</i> , 2005, 7, 255-255.	1.2	100
66	Fe ₃ O ₄ quantum dot decorated MoS ₂ nanosheet arrays on graphite paper as free-standing sodium-ion battery anodes. <i>Journal of Materials Chemistry A</i> , 2017, 5, 9122-9131.	5.2	95
67	Optical and acoustic metamaterials: superlens, negative refractive index and invisibility cloak. <i>Journal of Optics (United Kingdom)</i> , 2017, 19, 084007.	1.0	94
68	Miniature Pneumatic Actuators for Soft Robots by High-Resolution Multimaterial 3D Printing. <i>Advanced Materials Technologies</i> , 2019, 4, 1900427.	3.0	91
69	Versatile Three-Dimensional Virus-Based Template for Dye-Sensitized Solar Cells with Improved Electron Transport and Light Harvesting. <i>ACS Nano</i> , 2013, 7, 6563-6574.	7.3	84
70	3D Printed Compressible Quasi-Solid-State Nickel-Iron Battery. <i>ACS Nano</i> , 2020, 14, 9675-9686.	7.3	80
71	A smooth optical superlens. <i>Applied Physics Letters</i> , 2010, 96, 043102.	1.5	78
72	Numerical study of a near-zero-index acoustic metamaterial. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 2012, 376, 2834-2837.	0.9	78

#	ARTICLE	IF	CITATIONS
73	Dynamic thermal camouflage via a liquid-crystal-based radiative metasurface. <i>Nanophotonics</i> , 2020, 9, 855-863.	2.9	73
74	Skin-electrode iontronic interface for mechanosensing. <i>Nature Communications</i> , 2021, 12, 4731.	5.8	72
75	Electrochemical Nanoimprinting with Solid-State Superionic Stamps. <i>Nano Letters</i> , 2007, 7, 446-451.	4.5	71
76	Chiral plasmon in gapped Dirac systems. <i>Physical Review B</i> , 2016, 93, .	1.1	71
77	Promoting polysulfide conversion by catalytic ternary Fe ₃ O ₄ /carbon/graphene composites with ordered microchannels for ultrahigh-rate lithium-sulfur batteries. <i>Journal of Materials Chemistry A</i> , 2019, 7, 25078-25087.	5.2	68
78	Engineered 3D-printed artificial axons. <i>Scientific Reports</i> , 2018, 8, 478.	1.6	67
79	Midinfrared metamaterials fabricated by nanoimprint lithography. <i>Applied Physics Letters</i> , 2007, 90, 063107.	1.5	64
80	Photopolymer formulation to minimize feature size, surface roughness, and stair-stepping in digital light processing-based three-dimensional printing. <i>Additive Manufacturing</i> , 2018, 24, 627-638.	1.7	64
81	Assembly of a Bacteriophage-Based Template for the Organization of Materials into Nanoporous Networks. <i>Advanced Materials</i> , 2014, 26, 3398-3404.	11.1	63
82	Diffusion-limited photopolymerization in scanning micro-stereolithography. <i>Applied Physics A: Materials Science and Processing</i> , 2004, 79, 1839-1842.	1.1	62
83	Ultrafast Three-Dimensional Printing of Optically Smooth Microlens Arrays by Oscillation-Assisted Digital Light Processing. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 40662-40668.	4.0	62
84	Electromechanically reconfigurable optical nano-kirigami. <i>Nature Communications</i> , 2021, 12, 1299.	5.8	61
85	Silicon nanowires with controlled sidewall profile and roughness fabricated by thin-film dewetting and metal-assisted chemical etching. <i>Nanotechnology</i> , 2013, 24, 225305.	1.3	60
86	Functional Molecularly Imprinted Polymer Microstructures Fabricated Using Microstereolithography. <i>Advanced Materials</i> , 2003, 15, 1541-1544.	11.1	59
87	Computational modelling of process-structure-property-performance relationships in metal additive manufacturing: a review. <i>International Materials Reviews</i> , 2022, 67, 1-46.	9.4	56
88	Prescribed Pattern Transformation in Swelling Gel Tubes by Elastic Instability. <i>Physical Review Letters</i> , 2012, 108, 214304.	2.9	51
89	Stiction problems in releasing of 3D microstructures and its solution. <i>Sensors and Actuators A: Physical</i> , 2006, 128, 109-115.	2.0	49
90	Quantum-Spillover-Enhanced Surface-Plasmonic Absorption at the Interface of Silver and High-Index Dielectrics. <i>Physical Review Letters</i> , 2015, 115, 193901.	2.9	49

#	ARTICLE	IF	CITATIONS
91	Fractal-Based Stretchable Circuits via Electric-Field-Driven Microscale 3D Printing for Localized Heating of Shape Memory Polymers in 4D Printing. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 41414-41423.	4.0	49
92	Bioinspired Ultra-Low Adhesive Energy Interface for Continuous 3D Printing: Reducing Curing Induced Adhesion. <i>Research</i> , 2018, 2018, 4795604.	2.8	49
93	Elastic wave propagation in finitely deformed layered materials. <i>Journal of the Mechanics and Physics of Solids</i> , 2017, 98, 390-410.	2.3	48
94	Continuous 3D printing from one single droplet. <i>Nature Communications</i> , 2020, 11, 4685.	5.8	47
95	Sub-100 nm lithography using ultrashort wavelength of surface plasmons. <i>Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena</i> , 2004, 22, 3475.	1.6	44
96	Terahertz plasmonics in ferroelectric-gated graphene. <i>Applied Physics Letters</i> , 2013, 102, .	1.5	44
97	Formation of fine near-field scanning optical microscopy tips. Part I. By static and dynamic chemical etching. <i>Review of Scientific Instruments</i> , 2003, 74, 3679-3683.	0.6	43
98	Localized Surface Plasmon-Enhanced Ultrathin Film Broadband Nanoporous Absorbers. <i>Advanced Optical Materials</i> , 2016, 4, 1255-1264.	3.6	42
99	Three-Dimensional Soundproof Acoustic Metacage. <i>Physical Review Letters</i> , 2021, 127, 084301.	2.9	41
100	Employing the Biology of Successful Fracture Repair to Heal Critical Size Bone Defects. <i>Current Topics in Microbiology and Immunology</i> , 2012, 367, 113-132.	0.7	39
101	Color-Changeable Four-Dimensional Printing Enabled with Ultraviolet-Curable and Thermochromic Shape Memory Polymers. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 18120-18127.	4.0	39
102	Position-sensitive spectral splitting with a plasmonic nanowire on silicon chip. <i>Scientific Reports</i> , 2013, 3, 3095.	1.6	38
103	Extraordinary focusing of sound above a soda can array without time reversal. <i>New Journal of Physics</i> , 2015, 17, 042001.	1.2	36
104	Manufacturing at Nanoscale: Top-Down, Bottom-up and System Engineering. <i>Journal of Nanoparticle Research</i> , 2004, 6, 125-130.	0.8	35
105	Near-Perfect Ultrathin Nanocomposite Absorber with Self-Formed Topping Plasmonic Nanoparticles. <i>Advanced Optical Materials</i> , 2017, 5, 1700222.	3.6	35
106	Hydrovoltaic energy harvesting from moisture flow using an ionic polymer-hydrogel-carbon composite. <i>Energy and Environmental Science</i> , 2022, 15, 2489-2498.	15.6	35
107	Solvent-Free Upcycling Vitrimers through Digital Light Processing-Based 3D Printing and Bond Exchange Reaction. <i>Advanced Functional Materials</i> , 2022, 32, .	7.8	33
108	Polymeric micromechanical components with tunable stiffness. <i>Applied Physics Letters</i> , 2001, 79, 1700-1702.	1.5	32

#	ARTICLE	IF	CITATIONS
109	Far-field acoustic subwavelength imaging and edge detection based on spatial filtering and wave vector conversion. <i>Nature Communications</i> , 2019, 10, 204.	5.8	32
110	3D microfabricated bioreactor with capillaries. <i>Biomedical Microdevices</i> , 2009, 11, 1309-1315.	1.4	31
111	Molding acoustic, electromagnetic and water waves with a single cloak. <i>Scientific Reports</i> , 2015, 5, 10678.	1.6	31
112	Invited Article: Nano-kirigami metasurfaces by focused-ion-beam induced close-loop transformation. <i>APL Photonics</i> , 2018, 3, .	3.0	31
113	Metagel with Broadband Tunable Acoustic Properties Over Airâ€™Waterâ€™Solid Ranges. <i>Advanced Functional Materials</i> , 2019, 29, 1903699.	7.8	31
114	Bioinspired metagel with broadband tunable impedance matching. <i>Science Advances</i> , 2020, 6, .	4.7	31
115	Bifunctional acoustic metamaterial lens designed with coordinate transformation. <i>Applied Physics Letters</i> , 2017, 110, .	1.5	30
116	Effective dielectric constants and spectral density analysis of plasmonic nanocomposites. <i>Journal of Applied Physics</i> , 2016, 120, 163103.	1.1	29
117	Shaping soft materials via digital light processing-based 3D printing: A review. <i>Forces in Mechanics</i> , 2022, 6, 100074.	1.3	29
118	Design of 3D Printed Programmable Horseshoe Lattice Structures Based on a Phase-Evolution Model. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 22146-22156.	4.0	27
119	On the interplay between physical and content priors in deep learning for computational imaging. <i>Optics Express</i> , 2020, 28, 24152.	1.7	27
120	General One-Pot Method for Preparing Highly Water-Soluble and Biocompatible Photoinitiators for Digital Light Processing-Based 3D Printing of Hydrogels. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 55507-55516.	4.0	27
121	Optical torque from enhanced scattering by multipolar plasmonic resonance. <i>Nanophotonics</i> , 2014, 3, 343-350.	2.9	26
122	Reproducibility of sound-absorbing periodic porous materials using additive manufacturing technologies: Round robin study. <i>Additive Manufacturing</i> , 2020, 36, 101564.	1.7	26
123	Additive Manufacturing of Functional Microarchitected Reactors for Energy, Environmental, and Biological Applications. <i>International Journal of Precision Engineering and Manufacturing - Green Technology</i> , 2021, 8, 303-326.	2.7	26
124	Polytope Sector-Based Synthesis and Analysis of Microstructural Architectures With Tunable Thermal Conductivity and Expansion. <i>Journal of Mechanical Design, Transactions of the ASME</i> , 2016, 138, .	1.7	25
125	Time-domain imaging of gigahertz surface waves on an acoustic metamaterial. <i>New Journal of Physics</i> , 2018, 20, 013026.	1.2	25
126	Influence of treating parameters on thermomechanical properties of recycled epoxy-acid vitrimers. <i>Soft Matter</i> , 2020, 16, 1668-1677.	1.2	24

#	ARTICLE	IF	CITATIONS
127	Influences of processing conditions on mechanical properties of recycled epoxy-epoxyanhydride vitrimers. <i>Journal of Applied Polymer Science</i> , 2020, 137, 49246.	1.3	23
128	Projection lithography patterned high-resolution quantum dots/thiol-ene photo-polymer pixels for color down conversion. <i>Optics Express</i> , 2019, 27, 30864.	1.7	23
129	Multiband plasmonic absorber based on transverse phase resonances. <i>Optics Express</i> , 2012, 20, 17552.	1.7	22
130	Muscle-fiber array inspired, multiple-mode, pneumatic artificial muscles through planar design and one-step rolling fabrication. <i>National Science Review</i> , 2021, 8, nwab048.	4.6	22
131	Solvent-driven polymeric micro beam device. <i>Journal of Micromechanics and Microengineering</i> , 2010, 20, 085030.	1.5	21
132	A broadband polygonal cloak for acoustic wave designed with linear coordinate transformation. <i>Journal of the Acoustical Society of America</i> , 2016, 140, 95-101.	0.5	21
133	The nonequilibrium behaviors of covalent adaptable network polymers during the topology transition. <i>Soft Matter</i> , 2021, 17, 2104-2119.	1.2	21
134	Solid-state electrochemical nanoimprinting of copper. <i>Journal of Vacuum Science & Technology B</i> , 2007, 25, 2419-2424.	1.3	20
135	Direct metal nano-imprinting using an embossed solid electrolyte stamp. <i>Nanotechnology</i> , 2011, 22, 155302.	1.3	20
136	Micro 3D Printing Using a Digital Projector and its Application in the Study of Soft Materials Mechanics. <i>Journal of Visualized Experiments</i> , 2012, , e4457.	0.2	20
137	Electron-photon scattering mediated by localized plasmons: A quantitative analysis by eigen-response theory. <i>Physical Review B</i> , 2014, 89, .	1.1	20
138	Physical modeling and validation of porpoises'™ directional emission via hybrid metamaterials. <i>National Science Review</i> , 2019, 6, 921-928.	4.6	20
139	Photosynthesis-assisted remodeling of three-dimensional printed structures. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2021, 118, .	3.3	20
140	Formation of fine near-field scanning optical microscopy tips. Part II. By laser-heated pulling and bending. <i>Review of Scientific Instruments</i> , 2003, 74, 3684-3688.	0.6	19
141	Chemomechanics of dual-stage reprocessable thermosets. <i>Journal of the Mechanics and Physics of Solids</i> , 2019, 126, 168-186.	2.3	19
142	Three-Dimensional Stretchable Microelectronics by Projection Microstereolithography (PµSL). <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 8901-8908.	4.0	19
143	Foreshadowing elastic instabilities by negative group velocity in soft composites. <i>Applied Physics Letters</i> , 2018, 113, .	1.5	18
144	Dual-stage thermosetting photopolymers for advanced manufacturing. <i>Chemical Engineering Journal</i> , 2021, 411, 128466.	6.6	18

#	ARTICLE	IF	CITATIONS
145	Hydrogel-elastomer-based stretchable strain sensor fabricated by a simple projection lithography method. <i>International Journal of Smart and Nano Materials</i> , 2021, 12, 256-268.	2.0	17
146	Scalable 3D printing of aperiodic cellular structures by rotational stacking of integral image formation. <i>Science Advances</i> , 2021, 7, eabh1200.	4.7	17
147	Smart structures with embedded flexible sensors fabricated by fused deposition modeling-based multimaterial 3D printing. <i>International Journal of Smart and Nano Materials</i> , 2022, 13, 447-464.	2.0	17
148	Experimental study of transmission enhancement of evanescent waves through silver films assisted by surface plasmon excitation. <i>Applied Physics A: Materials Science and Processing</i> , 2005, 80, 1315-1325.	1.1	16
149	New Frontiers of Metamaterials: Design and Fabrication. <i>MRS Bulletin</i> , 2008, 33, 915-920.	1.7	16
150	Fully three-dimensional microfabrication with a grayscale polymeric self-sacrificial structure. <i>Journal of Micromechanics and Microengineering</i> , 2009, 19, 115029.	1.5	16
151	Zeeman splitting of photonic angular momentum states in a gyromagnetic cylinder. <i>Physical Review B</i> , 2011, 84, .	1.1	16
152	Computational inverse design of non-intuitive illumination patterns to maximize optical force or torque. <i>Optics Express</i> , 2017, 25, 6757.	1.7	16
153	Electromagnetic and Chemical Enhancements of Surface-Enhanced Raman Scattering Spectra from Cu ₂ O Hexagonal Nanoplates. <i>Advanced Materials Interfaces</i> , 2019, 6, 1900534.	1.9	16
154	Shape-Deformed Mushroom-like Reentrant Structures for Robust Liquid-Repellent Surfaces. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 33618-33626.	4.0	15
155	Constructing Multifunctional Virus-Templated Nanoporous Composites for Thin Film Solar Cells: Contributions of Morphology and Optics to Photocurrent Generation. <i>Journal of Physical Chemistry C</i> , 2015, , 150610114441003.	1.5	14
156	Nonlocal description of sound propagation through an array of Helmholtz resonators. <i>Comptes Rendus - Mecanique</i> , 2015, 343, 656-669.	2.1	14
157	Ultrafast fluorescent decay induced by metal-mediated dipole-dipole interaction in two-dimensional molecular aggregates. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017, 114, 10017-10022.	3.3	14
158	Topological kink plasmons on magnetic-domain boundaries. <i>Nature Communications</i> , 2019, 10, 4565.	5.8	14
159	Adhesion force of polymeric three-dimensional microstructures fabricated by microstereolithography. <i>Applied Physics Letters</i> , 2002, 81, 3963-3965.	1.5	13
160	Optimal Nanoparticle Forces, Torques, and Illumination Fields. <i>ACS Photonics</i> , 2019, 6, 395-402.	3.2	13
161	Voxel design of additively manufactured digital material with customized thermomechanical properties. <i>Materials and Design</i> , 2021, 197, 109205.	3.3	13
162	3D direct printing of mechanical and biocompatible hydrogel meta-structures. <i>Bioactive Materials</i> , 2022, 10, 48-55.	8.6	13

#	ARTICLE	IF	CITATIONS
163	Excitation and imaging of resonant optical modes of Au triangular nanoantennas using cathodoluminescence spectroscopy. <i>Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics</i> , 2010, 28, C6C21-C6C25.	0.6	12
164	High resolution stereolithography fabrication of perfusable scaffolds to enable long-term meso-scale hepatic culture for disease modeling. <i>Biofabrication</i> , 2021, 13, 045024.	3.7	12
165	Scalable visible light 3D printing and bioprinting using an organic light-emitting diode microdisplay. <i>IScience</i> , 2021, 24, 103372.	1.9	12
166	SERS EM field enhancement study through fast Raman mapping of Sierpinski carpet arrays. <i>Journal of Raman Spectroscopy</i> , 2010, 41, 1124-1130.	1.2	11
167	Solid-state superionic stamping with silver iodide-silver metaphosphate glass. <i>Nanotechnology</i> , 2011, 22, 425301.	1.3	11
168	Exciting multiple plasmonic resonances by a double-layered metallic nanostructure. <i>Journal of the Optical Society of America B: Optical Physics</i> , 2011, 28, 2827.	0.9	11
169	Wide-Angle Broadband Nonreflecting Acoustic Metamaterial Fence. <i>Physical Review Applied</i> , 2020, 13, .	1.5	11
170	<i>Xenopus Laevis</i> as a Novel Model to Study Long Bone Critical-Size Defect Repair by Growth Factor-Mediated Regeneration. <i>Tissue Engineering - Part A</i> , 2011, 17, 691-701.	1.6	10
171	Broadband light absorption by silver nanoparticle decorated silica nanospheres. <i>RSC Advances</i> , 2016, 6, 107951-107959.	1.7	10
172	Nonlocal dynamics of dissipative phononic fluids. <i>Physical Review B</i> , 2017, 95, .	1.1	10
173	Exciton-plasmon polariton coupling and hot carrier generation in two-dimensional SiB semiconductors: a first-principles study. <i>Nanophotonics</i> , 2020, 9, 337-349.	2.9	10
174	Ultradense gold nanostructures fabricated using hydrogen silsesquioxane resist and applications for surface-enhanced Raman spectroscopy. <i>Journal of Vacuum Science & Technology B</i> , 2009, 27, 2640.	1.3	9
175	Switching Acoustic Propagation via Underwater Metasurface. <i>Physical Review Applied</i> , 2020, 13, .	1.5	9
176	High Temperature Mid-IR Polarizer via Natural In-Plane Hyperbolic Van der Waals Crystals. <i>Advanced Optical Materials</i> , 2022, 10, .	3.6	9
177	Transformation optics scheme for two-dimensional materials. <i>Optics Letters</i> , 2014, 39, 2113.	1.7	8
178	Mediated Growth of Zinc Chalcogen Shells on Gold Nanoparticles by Free-Base Amino Acids. <i>Chemistry of Materials</i> , 2017, 29, 6993-7001.	3.2	8
179	Programmable shape-shifting 3D structures via frontal photopolymerization. <i>Materials and Design</i> , 2021, 198, 109381.	3.3	8
180	Microstructured Surfaces for Reducing Chances of Fomite Transmission via Virus-Containing Respiratory Droplets. <i>ACS Nano</i> , 2021, 15, 14049-14060.	7.3	8

#	ARTICLE	IF	CITATIONS
181	Grayscale stencil lithography for patterning multispectral color filters. <i>Optica</i> , 2020, 7, 1154.	4.8	8
182	Photon emission rate engineering using graphene nanodisc cavities. <i>Optics Express</i> , 2014, 22, 6400.	1.7	7
183	Biomimetic on-chip filtration enabled by direct micro-3D printing on membrane. <i>Scientific Reports</i> , 2022, 12, 8178.	1.6	7
184	High-precision broadband measurement of refractive index by picosecond real-time interferometry. <i>Applied Optics</i> , 2016, 55, 6625.	2.1	6
185	Poly(HDDA)-Based Polymers for Microfabrication and Mechanobiology. <i>MRS Advances</i> , 2017, 2, 1315-1321.	0.5	6
186	Bimodal hybrid lightweight sound-absorbing material with high stiffness. <i>Applied Physics Express</i> , 2019, 12, 035002.	1.1	6
187	Recurrent neural network reveals transparent objects through scattering media. <i>Optics Express</i> , 2021, 29, 5316.	1.7	6
188	Brownian motion of suspended particles in an anisotropic medium. , 2000, 126, 401-406.		5
189	Comment on "Submicron imaging with a planar silver lens" [Appl. Phys. Lett. 84, 4403 (2004)]. <i>Applied Physics Letters</i> , 2005, 86, 126101.	1.5	5
190	Molecular Scale Imaging with a Multilayer Superlens. <i>Materials Research Society Symposia Proceedings</i> , 2006, 919, 7.	0.1	5
191	Exploiting transport of guest metal ions in a host ionic crystal lattice for nanofabrication: Cu nanopatterning with Ag ₂ S. <i>Applied Physics A: Materials Science and Processing</i> , 2009, 97, 863-868.	1.1	5
192	Sub-diffraction-limited far-field imaging in infrared. <i>Frontiers of Physics in China</i> , 2010, 5, 324-329.	1.0	5
193	Subwavelength image manipulation through an oblique layered system. <i>Optics Express</i> , 2011, 19, 16809.	1.7	5
194	Addendum: Multiscale metallic metamaterials. <i>Nature Materials</i> , 2017, 16, 497-497.	13.3	5
195	Plasmonic nanofluids enhanced solar thermal transfer liquid. <i>AIP Conference Proceedings</i> , 2017, , .	0.3	5
196	Characterization of an underwater metamaterial made of aluminum honeycomb panels at low frequencies. <i>Journal of the Acoustical Society of America</i> , 2021, 149, 1829-1837.	0.5	5
197	Tunable plasmonic wires at terahertz frequencies. , 2004, , .		4
198	Infrared spectroscopy and ellipsometry of magnetic metamaterials. , 2005, , .		4

#	ARTICLE	IF	CITATIONS
199	Plasmon-Assisted Optical Curtains. Plasmonics, 2010, 5, 369-374.	1.8	4
200	Controlled directional growth of silver microwires on a solid electrolyte surface. Applied Physics Letters, 2010, 96, .	1.5	4
201	A study on the spectral characteristics of surface enhanced Raman scattering based on far-field extinction and near-field electromagnetic field intensity of 2D nanostructures. Journal of Raman Spectroscopy, 2015, 46, 59-63.	1.2	4
202	Echoes of fluid spin. National Science Review, 2020, 7, 2-3.	4.6	4
203	Acoustic Angle-Selective Transmission Based on Binary Phase Gratings. Physical Review Applied, 2020, 14, .	1.5	4
204	Additive manufacturing of high aspect-ratio structures with self-focusing photopolymerization. Light Advanced Manufacturing, 2022, 3, 542.	2.2	4
205	Near-field multiphoton nanolithography using an apertureless optical probe. , 2003, , .		3
206	Theory of optical imaging beyond the diffraction limit with a far-field superlens. , 2006, 6323, 207.		3
207	Optical Curtain Effect: Extraordinary Optical Transmission Enhanced by Antireflection. Plasmonics, 2013, 8, 1087-1093.	1.8	3
208	Electrical Resistivity & Thermal Stability of Smooth Silver Thin Film for Nanoscale Optoelectronic Devices. , 2008, , .		2
209	Direct Metal Nano-patterning Using Embossed Solid Electrolyte. Materials Research Society Symposia Proceedings, 2009, 1156, 1.	0.1	2
210	Acoustic Switches: Harnessing Deformation to Switch On and Off the Propagation of Sound (Adv.) Tj ETQqO 0 0 rgBT /Overlock 10 Tf 50	11.1	2
211	Integrated Computational Materials Engineering (ICME) Approaches to the Design and Fabrication of Architected Materials. , 2017, , .		2
212	Ultrathin platelet antennas mediated light-matter interaction in monolayer MoS ₂ . Optics Express, 2017, 25, 10261.	1.7	2
213	Hydrogels: Metagel with Broadband Tunable Acoustic Properties Over Air-Water-Solid Ranges (Adv.) Tj ETQq1_1 0.7843_2 rgBT (O	7.8	2
214	Soft Robotics: Miniature Pneumatic Actuators for Soft Robots by High-Resolution Multimaterial 3D Printing (Adv. Mater. Technol. 10/2019). Advanced Materials Technologies, 2019, 4, 1970054.	3.0	2
215	Plasmonic Sensors Based on Rayleigh Anomaly. , 2012, , .		2
216	Reconfigurable Plasmofluidic Lenses. , 2014, , .		2

#	ARTICLE	IF	CITATIONS
217	Technology and Applications of Graphene Oxide Membranes. , 2021, , 379-422.		2
218	Low Heat Capacity 3D Hollow Microarchitected Reactors for Thermal and Fluid Applications. Energies, 2022, 15, 4073.	1.6	2
219	A pathway to subwavelength imaging using a metamaterial superlens. , 2003, 5221, 116.		1
220	Enhancing Light Coupling With Plasmonic Optical Antennas. , 2010, , 271-291.		1
221	Mapping of surface plasmon polaritons on nanostructured thin film disks using cathodoluminescence imaging. , 2011, , .		1
222	Complex Polarizability of an Isolated Subwavelength Plasmonic Hole in a Thin Metal Film. , 2013, , .		1
223	Plasmonic angular momentum on metal-dielectric nano-wedges in a sectorial indefinite metamaterial. Optics Express, 2013, 21, 28344.	1.7	1
224	Report on the Seventh U.S.â€“Japan Joint Seminar on Nanoscale Transport Phenomenaâ€“ Science and Engineering. Nanoscale and Microscale Thermophysical Engineering, 2013, 17, 25-49.	1.4	1
225	Lightweight micro lattices with nanoscale features fabricated from Projection Microstereolithography. , 2014, , .		1
226	Modeling of charge-mass transport in solid electrolyte-based electrochemical nanomanufacturing process. Journal of Manufacturing Processes, 2015, 18, 60-66.	2.8	1
227	Acoustic Metamaterial. World Scientific Series in Nanoscience and Nanotechnology, 2017, , 57-129.	0.1	1
228	Enhancing Visible Light Photocatalysis with Hydrogenated Titanium Dioxide for Anti-Fouling Applications. MRS Advances, 2018, 3, 3181-3187.	0.5	1
229	Metric for Quantifying Switching Variability in Resistive Switching Devices. IEEE Electron Device Letters, 2019, 40, 1546-1549.	2.2	1
230	Designing a Thin Film Blackbody Based on Plasmonic Anisotropic metamaterials. , 2012, , .		1
231	Multiband electromagnetic absorbers based on a metal/dielectric multilayer stack. , 2012, , .		1
232	(Invited) Printing Optical Materials. ECS Meeting Abstracts, 2020, MA2020-02, 1738-1738.	0.0	1
233	Stiction problems in releasing 3D microstructures and the solution. , 2003, , .		0
234	Optical Silver Superlens Imaging Below the Diffraction Limit. Materials Research Society Symposia Proceedings, 2006, 919, 1.	0.1	0

#	ARTICLE	IF	CITATIONS
235	Fabrication of Optical Meta-structure at Infrared Rang using Nanoimprint Lithography. , 2006, , .		0
236	Smooth Ag Film Deposited Using e-beam Evaporated Ge as an Intermediate Layer for Applications in Nanoscale Devices and Optical Superlens. Materials Research Society Symposia Proceedings, 2007, 990, 1.	0.1	0
237	Design of Acoustic Metamaterials for Super-Resolution Ultrasound Imaging. , 2007, , 1169.		0
238	Molecular Scale Imaging with A Smooth Superlens. , 2007, , WB3.		0
239	Solid-state Electrochemical Stamping of Functional Metallic Nanostructures. , 2007, , .		0
240	Design of Acoustic Cloak by Transmission Line Approach. , 2008, , .		0
241	Biomimetic Microactuator Powered by Polymer Swelling. , 2008, , .		0
242	Fabrication and Optical Characterization of Bowtie Antennas. , 2008, , .		0
243	Fresnel Lenses Design by Acoustic Transmission Line. , 2008, , .		0
244	Transforming light and sound with metamaterials. , 2011, , .		0
245	Investigations on Plasmonic Modes of Noble Metal Nano-Disks Using High-Resolution Cathodoluminescence Imaging Spectroscopy. Materials Research Society Symposia Proceedings, 2011, 1294, 48701.	0.1	0
246	Characterizing the Role of Deformation during Electrochemical Etching of Metallic Films. Materials Research Society Symposia Proceedings, 2011, 1297, 175.	0.1	0
247	Investigation of the nonlinear optical response from arrays of Au bowtie nanoantennas. , 2011, , .		0
248	Fabrication and characterization of thin-film nanostructured Lüneburg lens. , 2013, , .		0
249	Nanoporous Networks: Assembly of a Bacteriophage-Based Template for the Organization of Materials into Nanoporous Networks (Adv. Mater. 21/2014). Advanced Materials, 2014, 26, 3568-3568.	11.1	0
250	Quest for an Optical Circuit Probe. Microscopy and Microanalysis, 2015, 21, 1251-1252.	0.2	0
251	Polytope Sector-Based Synthesis and Analysis of Microarchitected Materials With Tunable Thermal Conductivity and Expansion. , 2015, , .		0
252	Multiscale Structures Aggregated by Imprinted Nanofibers for Functional Surfaces. Journal of Visualized Experiments, 2018, , .	0.2	0

#	ARTICLE	IF	CITATIONS
253	Shape-Memory Polymers: Mechanically Robust and UV-Curable Shape-Memory Polymers for Digital Light Processing Based 4D Printing (Adv. Mater. 27/2021). Advanced Materials, 2021, 33, 2170210.	11.1	0
254	Design and Microfabrication of Terahertz Magnetic Metamaterials. , 2003, , .		0
255	Artificial Plasmonic Metamaterial Fabricated by Micro-Stereolithography. , 2003, , .		0
256	Towards High-Speed Near-Field Scanning Optical Microscope. , 2004, , .		0
257	Direct Nanopatterning With Solid Ionic Stamping. , 2006, , .		0
258	Enhanced Mass Transport Through Permeable Polymer Microcirculatory Networks. , 2006, , .		0
259	3D Polymeric Devices Driven by Surface Micro Fluidic Capillaries. , 2008, , .		0
260	Flow Inside Microchannels With Liquid-Walls. , 2008, , .		0
261	Confocal Microscopy Measurement of Light Squeezed in Sub-wavelength Plasmonic Hole on Thin Metal Film. , 2009, , .		0
262	Cathodoluminescence Imaging of Plasmonic Modes of Ag Nanostructures. , 2010, , .		0
263	Coupled Non-Fickian Diffusion and Large Deformation of Hydrogels. Conference Proceedings of the Society for Experimental Mechanics, 2011, , 25-28.	0.3	0
264	Efficient plasmonic trapping using bowtie nanoantennas. , 2011, , .		0
265	Plasmonic nano-bubble cavity probed by cathodoluminescence. , 2011, , .		0
266	Designing a Thin Film Blackbody Based on Plasmonic Anisotropic Metamaterials. , 2012, , .		0
267	Quantum Electromechanical Processes in Plasmonic Nanostructures. , 2014, , .		0
268	Material Deposition with Spatial Thickness Variation for Reflective Color Filter. , 2020, , .		0
269	Quantum Dots Color Converters for microLEDs: Material Composite and Patterning Technology. , 2020, , .		0