Nicholas X. Fang

List of Publications by Year in descending order

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

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269 papers

28,671 citations

72 h-index 166

275 all docs

275 docs citations

times ranked

275

24424 citing authors

g-index

#	Article	IF	CITATIONS
1	Computational modelling of process–structure–property–performance relationships in metal additive manufacturing: a review. International Materials Reviews, 2022, 67, 1-46.	19.3	56
2	3D direct printing of mechanical and biocompatible hydrogel meta-structures. Bioactive Materials, 2022, 10, 48-55.	15.6	13
3	Shaping soft materials via digital light processing-based 3D printing: A review. Forces in Mechanics, 2022, 6, 100074.	2.8	29
4	Solventâ€Free Upcycling Vitrimers through Digital Light Processingâ€Based 3D Printing and Bond Exchange Reaction. Advanced Functional Materials, 2022, 32, .	14.9	33
5	High Temperature Midâ€IR Polarizer via Natural Inâ€Plane Hyperbolic Van der Waals Crystals. Advanced Optical Materials, 2022, 10, .	7.3	9
6	Hydrovoltaic energy harvesting from moisture flow using an ionic polymer–hydrogel–carbon composite. Energy and Environmental Science, 2022, 15, 2489-2498.	30.8	35
7	Additive manufacturing of high aspect-ratio structures with self-focusing photopolymerization. Light Advanced Manufacturing, 2022, 3, 542.	5.1	4
8	Biomimetic on-chip filtration enabled by direct micro-3D printing on membrane. Scientific Reports, 2022, 12, 8178.	3.3	7
9	Low Heat Capacity 3D Hollow Microarchitected Reactors for Thermal and Fluid Applications. Energies, 2022, 15, 4073.	3.1	2
10	Smart structures with embedded flexible sensors fabricated by fused deposition modeling-based multimaterial 3D printing. International Journal of Smart and Nano Materials, 2022, 13, 447-464.	4.2	17
11	Voxel design of additively manufactured digital material with customized thermomechanical properties. Materials and Design, 2021, 197, 109205.	7.0	13
12	Additive Manufacturing of Functional Microarchitected Reactors for Energy, Environmental, and Biological Applications. International Journal of Precision Engineering and Manufacturing - Green Technology, 2021, 8, 303-326.	4.9	26
13	The nonequilibrium behaviors of covalent adaptable network polymers during the topology transition. Soft Matter, 2021, 17, 2104-2119.	2.7	21
14	Programmable shape-shifting 3D structures via frontal photopolymerization. Materials and Design, 2021, 198, 109381.	7.0	8
15	3D printing of highly stretchable hydrogel with diverse UV curable polymers. Science Advances, 2021, 7, .	10.3	233
16	Structural multi-colour invisible inks with submicron 4D printing of shape memory polymers. Nature Communications, 2021, 12, 112.	12.8	102
17	Recurrent neural network reveals transparent objects through scattering media. Optics Express, 2021, 29, 5316.	3.4	6
18	Electromechanically reconfigurable optical nano-kirigami. Nature Communications, 2021, 12, 1299.	12.8	61

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19	Three-Dimensional Stretchable Microelectronics by Projection Microstereolithography (PμSL). ACS Applied Materials & Samp; Interfaces, 2021, 13, 8901-8908.	8.0	19
20	Characterization of an underwater metamaterial made of aluminum honeycomb panels at low frequencies. Journal of the Acoustical Society of America, 2021, 149, 1829-1837.	1.1	5
21	Fractal-Based Stretchable Circuits via Electric-Field-Driven Microscale 3D Printing for Localized Heating of Shape Memory Polymers in 4D Printing. ACS Applied Materials & Interfaces, 2021, 13, 41414-41423.	8.0	49
22	Muscle-fiber array inspired, multiple-mode, pneumatic artificial muscles through planar design and one-step rolling fabrication. National Science Review, 2021, 8, nwab048.	9.5	22
23	Color-Changeable Four-Dimensional Printing Enabled with Ultraviolet-Curable and Thermochromic Shape Memory Polymers. ACS Applied Materials & Shape Memory Polymers. ACS Applied Materials & Shape Memory Polymers.	8.0	39
24	Dual-stage thermosetting photopolymers for advanced manufacturing. Chemical Engineering Journal, 2021, 411, 128466.	12.7	18
25	Mechanically Robust and UVâ€Curable Shapeâ€Memory Polymers for Digital Light Processing Based 4D Printing. Advanced Materials, 2021, 33, e2101298.	21.0	129
26	Anisotropically Fatigueâ€Resistant Hydrogels. Advanced Materials, 2021, 33, e2102011.	21.0	114
27	Shapeâ€Memory Polymers: Mechanically Robust and UVâ€Curable Shapeâ€Memory Polymers for Digital Light Processing Based 4D Printing (Adv. Mater. 27/2021). Advanced Materials, 2021, 33, 2170210.	21.0	0
28	Hydrogel-elastomer-based stretchable strain sensor fabricated by a simple projection lithography method. International Journal of Smart and Nano Materials, 2021, 12, 256-268.	4.2	17
29	Shape-Deformed Mushroom-like Reentrant Structures for Robust Liquid-Repellent Surfaces. ACS Applied Materials & Defenses, 2021, 13, 33618-33626.	8.0	15
30	Three-Dimensional Soundproof Acoustic Metacage. Physical Review Letters, 2021, 127, 084301.	7.8	41
31	Skin-electrode iontronic interface for mechanosensing. Nature Communications, 2021, 12, 4731.	12.8	72
32	Microstructured Surfaces for Reducing Chances of Fomite Transmission via Virus-Containing Respiratory Droplets. ACS Nano, 2021, 15, 14049-14060.	14.6	8
33	Scalable 3D printing of aperiodic cellular structures by rotational stacking of integral image formation. Science Advances, 2021, 7, eabh1200.	10.3	17
34	High resolution stereolithography fabrication of perfusable scaffolds to enable long-term meso-scale hepatic culture for disease modeling. Biofabrication, 2021, 13, 045024.	7.1	12
35	Photosynthesis-assisted remodeling of three-dimensional printed structures. Proceedings of the National Academy of Sciences of the United States of America, $2021, 118, \ldots$	7.1	20
36	Technology and Applications of Graphene Oxide Membranes. , 2021, , 379-422.		2

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37	Scalable visible light 3D printing and bioprinting using an organic light-emitting diode microdisplay. IScience, 2021, 24, 103372.	4.1	12
38	General One-Pot Method for Preparing Highly Water-Soluble and Biocompatible Photoinitiators for Digital Light Processing-Based 3D Printing of Hydrogels. ACS Applied Materials & Samp; Interfaces, 2021, 13, 55507-55516.	8.0	27
39	Echoes of fluid spin. National Science Review, 2020, 7, 2-3.	9.5	4
40	Influence of treating parameters on thermomechanical properties of recycled epoxy-acid vitrimers. Soft Matter, 2020, 16, 1668-1677.	2.7	24
41	Reproducibility of sound-absorbing periodic porous materials using additive manufacturing technologies: Round robin study. Additive Manufacturing, 2020, 36, 101564.	3.0	26
42	Bioinspired metagel with broadband tunable impedance matching. Science Advances, 2020, 6, .	10.3	31
43	Continuous 3D printing from one single droplet. Nature Communications, 2020, 11, 4685.	12.8	47
44	Acoustic Angle-Selective Transmission Based on Binary Phase Gratings. Physical Review Applied, 2020, 14, .	3.8	4
45	Wide-Angle Broadband Nonreflecting Acoustic Metamaterial Fence. Physical Review Applied, 2020, 13, .	3.8	11
46	Liquidâ€Crystalâ€Elastomerâ€Based Dissipative Structures by Digital Light Processing 3D Printing. Advanced Materials, 2020, 32, e2000797.	21.0	120
47	Dynamic thermal camouflage via a liquid-crystal-based radiative metasurface. Nanophotonics, 2020, 9, 855-863.	6.0	73
48	Influences of processing conditions on mechanical properties of recycled epoxyâ€anhydride vitrimers. Journal of Applied Polymer Science, 2020, 137, 49246.	2.6	23
49	3D Printed Compressible Quasi-Solid-State Nickel–Iron Battery. ACS Nano, 2020, 14, 9675-9686.	14.6	80
50	Exciton-plasmon polariton coupling and hot carrier generation in two-dimensional SiB semiconductors: a first-principles study. Nanophotonics, 2020, 9, 337-349.	6.0	10
51	Projection micro stereolithography based 3D printing and its applications. International Journal of Extreme Manufacturing, 2020, 2, 022004.	12.7	213
52	Switching Acoustic Propagation via Underwater Metasurface. Physical Review Applied, 2020, 13, .	3.8	9
53	Design of 3D Printed Programmable Horseshoe Lattice Structures Based on a Phase-Evolution Model. ACS Applied Materials & Design of 3D Printed Programmable Horseshoe Lattice Structures Based on a Phase-Evolution Model.	8.0	27
54	On the interplay between physical and content priors in deep learning for computational imaging. Optics Express, 2020, 28, 24152.	3.4	27

#	Article	IF	Citations
55	Grayscale stencil lithography for patterning multispectral color filters. Optica, 2020, 7, 1154.	9.3	8
56	Material Deposition with Spatial Thickness Variation for Reflective Color Filter., 2020,,.		0
57	Quantum Dots Color Converters for microLEDs: Material Composite and Patterning Technology. , 2020, , .		0
58	(Invited) Printing Optical Materials. ECS Meeting Abstracts, 2020, MA2020-02, 1738-1738.	0.0	1
59	Miniature Pneumatic Actuators for Soft Robots by Highâ€Resolution Multimaterial 3D Printing. Advanced Materials Technologies, 2019, 4, 1900427.	5.8	91
60	Metagel with Broadband Tunable Acoustic Properties Over Air–Water–Solid Ranges. Advanced Functional Materials, 2019, 29, 1903699.	14.9	31
61	Electromagnetic and Chemical Enhancements of Surfaceâ€Enhanced Raman Scattering Spectra from Cu ₂ O Hexagonal Nanoplates. Advanced Materials Interfaces, 2019, 6, 1900534.	3.7	16
62	Topological kink plasmons on magnetic-domain boundaries. Nature Communications, 2019, 10, 4565.	12.8	14
63	Hydrogels: Metagel with Broadband Tunable Acoustic Properties Over Air–Water–Solid Ranges (Adv.) Tj ETC	Qq1 ₁ 1,9.78	343 <u>1</u> 4 rgBT /
64	Soft Robotics: Miniature Pneumatic Actuators for Soft Robots by Highâ€Resolution Multimaterial 3D Printing (Adv. Mater. Technol. 10/2019). Advanced Materials Technologies, 2019, 4, 1970054.	5.8	2
65	Physical modeling and validation of porpoises' directional emission via hybrid metamaterials. National Science Review, 2019, 6, 921-928.	9.5	20
66	Metric for Quantifying Switching Variability in Resistive Switching Devices. IEEE Electron Device Letters, 2019, 40, 1546-1549.	3.9	1
67	Ultrafast Three-Dimensional Printing of Optically Smooth Microlens Arrays by Oscillation-Assisted Digital Light Processing. ACS Applied Materials & Digital Light Processing.	8.0	62
68	Bimodal hybrid lightweight sound-absorbing material with high stiffness. Applied Physics Express, 2019, 12, 035002.	2.4	6
69	Rapid multi-material 3D printing with projection micro-stereolithography using dynamic fluidic control. Additive Manufacturing, 2019, 27, 606-615.	3.0	106
70	Mechanical Metamaterials and Their Engineering Applications. Advanced Engineering Materials, 2019, 21, 1800864.	3.5	493
71	Chemomechanics of dual-stage reprocessable thermosets. Journal of the Mechanics and Physics of Solids, 2019, 126, 168-186.	4.8	19
72	Promoting polysulfide conversion by catalytic ternary Fe ₃ O ₄ /carbon/graphene composites with ordered microchannels for ultrahigh-rate lithium–sulfur batteries. Journal of Materials Chemistry A, 2019, 7, 25078-25087.	10.3	68

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73	Optimal Nanoparticle Forces, Torques, and Illumination Fields. ACS Photonics, 2019, 6, 395-402.	6.6	13
74	Broadband Light Management with Thermochromic Hydrogel Microparticles for Smart Windows. Joule, 2019, 3, 290-302.	24.0	248
75	Far-field acoustic subwavelength imaging and edge detection based on spatial filtering and wave vector conversion. Nature Communications, 2019, 10, 204.	12.8	32
76	Fastâ€Response, Stiffnessâ€Tunable Soft Actuator by Hybrid Multimaterial 3D Printing. Advanced Functional Materials, 2019, 29, 1806698.	14.9	292
77	Projection lithography patterned high-resolution quantum dots/thiol-ene photo-polymer pixels for color down conversion. Optics Express, 2019, 27, 30864.	3.4	23
78	A digital light processing 3D printer for fast and high-precision fabrication of soft pneumatic actuators. Sensors and Actuators A: Physical, 2018, 273, 285-292.	4.1	109
79	Highly stretchable hydrogels for UV curing based high-resolution multimaterial 3D printing. Journal of Materials Chemistry B, 2018, 6, 3246-3253.	5.8	173
80	Magnetoactive Acoustic Metamaterials. Advanced Materials, 2018, 30, e1706348.	21.0	142
81	Time-domain imaging of gigahertz surface waves on an acoustic metamaterial. New Journal of Physics, 2018, 20, 013026.	2.9	25
82	Engineered 3D-printed artificial axons. Scientific Reports, 2018, 8, 478.	3.3	67
83	Highâ€Performance Singleâ€Crystalline Perovskite Thinâ€Film Photodetector. Advanced Materials, 2018, 30, 1704333.	21.0	225
84	Breaking the barriers: advances in acoustic functional materials. National Science Review, 2018, 5, 159-182.	9.5	153
85	Multiscale Structures Aggregated by Imprinted Nanofibers for Functional Surfaces. Journal of Visualized Experiments, 2018, , .	0.3	0
86	Photopolymer formulation to minimize feature size, surface roughness, and stair-stepping in digital light processing-based three-dimensional printing. Additive Manufacturing, 2018, 24, 627-638.	3.0	64
87	High-Efficiency High-Resolution Multimaterial Fabrication for Digital Light Processing-Based Three-Dimensional Printing. 3D Printing and Additive Manufacturing, 2018, 5, 185-193.	2.9	106
88	Invited Article: Nano-kirigami metasurfaces by focused-ion-beam induced close-loop transformation. APL Photonics, 2018, 3, .	5.7	31
89	Enhancing Visible Light Photocatalysis with Hydrogenated Titanium Dioxide for Anti-Fouling Applications. MRS Advances, 2018, 3, 3181-3187.	0.9	1
90	Nano-kirigami with giant optical chirality. Science Advances, 2018, 4, eaat4436.	10.3	203

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91	Foreshadowing elastic instabilities by negative group velocity in soft composites. Applied Physics Letters, 2018, 113, .	3.3	18
92	Reprocessable thermosets for sustainable three-dimensional printing. Nature Communications, 2018, 9, 1831.	12.8	249
93	Microarchitected Stretchingâ€Dominated Mechanical Metamaterials with Minimal Surface Topologies. Advanced Engineering Materials, 2018, 20, 1800029.	3.5	138
94	Bioinspired Ultra-Low Adhesive Energy Interface for Continuous 3D Printing: Reducing Curing Induced Adhesion. Research, 2018, 2018, 4795604.	5.7	49
95	Hydraulic hydrogel actuators and robots optically and sonically camouflaged in water. Nature Communications, 2017, 8, 14230.	12.8	760
96	Integrated Computational Materials Engineering (ICME) Approaches to the Design and Fabrication of Architected Materials., 2017,,.		2
97	Highly Stretchable and UV Curable Elastomers for Digital Light Processing Based 3D Printing. Advanced Materials, 2017, 29, 1606000.	21.0	480
98	Poly(HDDA)-Based Polymers for Microfabrication and Mechanobiology. MRS Advances, 2017, 2, 1315-1321.	0.9	6
99	Fe ₃ O ₄ quantum dot decorated MoS ₂ nanosheet arrays on graphite paper as free-standing sodium-ion battery anodes. Journal of Materials Chemistry A, 2017, 5, 9122-9131.	10.3	95
100	Addendum: Multiscale metallic metamaterials. Nature Materials, 2017, 16, 497-497.	27.5	5
101	Bifunctional acoustic metamaterial lens designed with coordinate transformation. Applied Physics Letters, 2017, 110, .	3.3	30
102	Ultrafast fluorescent decay induced by metal-mediated dipole–dipole interaction in two-dimensional molecular aggregates. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 10017-10022.	7.1	14
103	Plasmonic nanofluids enhanced solar thermal transfer liquid. AIP Conference Proceedings, 2017, , .	0.4	5
104	Optical and acoustic metamaterials: superlens, negative refractive index and invisibility cloak. Journal of Optics (United Kingdom), 2017, 19, 084007.	2.2	94
105	Mediated Growth of Zinc Chalcogen Shells on Gold Nanoparticles by Free-Base Amino Acids. Chemistry of Materials, 2017, 29, 6993-7001.	6.7	8
106	Nearâ€Perfect Ultrathin Nanocomposite Absorber with Selfâ€Formed Topping Plasmonic Nanoparticles. Advanced Optical Materials, 2017, 5, 1700222.	7.3	35
107	One-step volumetric additive manufacturing of complex polymer structures. Science Advances, 2017, 3, eaao5496.	10.3	219
108	Acoustic Metamaterial. World Scientific Series in Nanoscience and Nanotechnology, 2017, , 57-129.	0.1	1

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109	Nonlocal dynamics of dissipative phononic fluids. Physical Review B, 2017, 95, .	3.2	10
110	Infrared Topological Plasmons in Graphene. Physical Review Letters, 2017, 118, 245301.	7.8	132
111	Elastic wave propagation in finitely deformed layered materials. Journal of the Mechanics and Physics of Solids, 2017, 98, 390-410.	4.8	48
112	Polaritons in layered two-dimensional materials. Nature Materials, 2017, 16, 182-194.	27.5	963
113	Computational inverse design of non-intuitive illumination patterns to maximize optical force or torque. Optics Express, 2017, 25, 6757.	3.4	16
114	Ultrathin platelet antennas mediated light-matter interaction in monolayer MoS_2. Optics Express, 2017, 25, 10261.	3.4	2
115	Localized Surface Plasmonâ€Enhanced Ultrathin Film Broadband Nanoporous Absorbers. Advanced Optical Materials, 2016, 4, 1255-1264.	7. 3	42
116	Topological magnetoplasmon. Nature Communications, 2016, 7, 13486.	12.8	108
117	Effective dielectric constants and spectral density analysis of plasmonic nanocomposites. Journal of Applied Physics, 2016, 120, 163103.	2.5	29
118	A broadband polygonal cloak for acoustic wave designed with linear coordinate transformation. Journal of the Acoustical Society of America, 2016, 140, 95-101.	1.1	21
119	Acoustic Switches: Harnessing Deformation to Switch On and Off the Propagation of Sound (Adv.) Tj ETQq1 1 0.	.784314 rş 21.0	gBŢ /Overloc
120	Ice Templated Freeâ€Standing Hierarchically WS ₂ /CNTâ€rGO Aerogel for Highâ€Performance Rechargeable Lithium and Sodium Ion Batteries. Advanced Energy Materials, 2016, 6, 1601057.	19.5	276
121	High-precision broadband measurement of refractive index by picosecond real-time interferometry. Applied Optics, 2016, 55, 6625.	2.1	6
122	Multiscale metallic metamaterials. Nature Materials, 2016, 15, 1100-1106.	27.5	584
123	Chiral plasmon in gapped Dirac systems. Physical Review B, 2016, 93, .	3.2	71
124	Broadband light absorption by silver nanoparticle decorated silica nanospheres. RSC Advances, 2016, 6, 107951-107959.	3.6	10
125	Multimaterial 4D Printing with Tailorable Shape Memory Polymers. Scientific Reports, 2016, 6, 31110.	3.3	751
126	Lightweight Mechanical Metamaterials with Tunable Negative Thermal Expansion. Physical Review Letters, 2016, 117, 175901.	7.8	337

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127	Harnessing Deformation to Switch On and Off the Propagation of Sound. Advanced Materials, 2016, 28, 1631-1635.	21.0	140
128	Polytope Sector-Based Synthesis and Analysis of Microstructural Architectures With Tunable Thermal Conductivity and Expansion. Journal of Mechanical Design, Transactions of the ASME, 2016, 138, .	2.9	25
129	A study on the spectral characteristics of surface enhanced Raman scattering based on farâ€field extinction and nearâ€field electromagnetic field intensity of 2D nanostructures. Journal of Raman Spectroscopy, 2015, 46, 59-63.	2.5	4
130	Quest for an Optical Circuit Probe. Microscopy and Microanalysis, 2015, 21, 1251-1252.	0.4	0
131	Extraordinary focusing of sound above a soda can array without time reversal. New Journal of Physics, 2015, 17, 042001.	2.9	36
132	Constructing Multifunctional Virus-Templated Nanoporous Composites for Thin Film Solar Cells: Contributions of Morphology and Optics to Photocurrent Generation. Journal of Physical Chemistry C, 2015, , 150610114441003.	3.1	14
133	Quantum-Spillover-Enhanced Surface-Plasmonic Absorption at the Interface of Silver and High-Index Dielectrics. Physical Review Letters, 2015, 115, 193901.	7.8	49
134	Polytope Sector-Based Synthesis and Analysis of Microarchitectured Materials With Tunable Thermal Conductivity and Expansion. , $2015, \dots$		0
135	Modeling of charge-mass transport in solid electrolyte-based electrochemical nanomanufacturing process. Journal of Manufacturing Processes, 2015, 18, 60-66.	5.9	1
136	Molding acoustic, electromagnetic and water waves with a single cloak. Scientific Reports, 2015, 5, 10678.	3.3	31
137	Nonlocal description of sound propagation through an array of Helmholtz resonators. Comptes Rendus - Mecanique, 2015, 343, 656-669.	2.1	14
138	Tunable Light–Matter Interaction and the Role of Hyperbolicity in Graphene–hBN System. Nano Letters, 2015, 15, 3172-3180.	9.1	260
139	Transformation optics scheme for two-dimensional materials. Optics Letters, 2014, 39, 2113.	3.3	8
140	Lightweight micro lattices with nanoscale features fabricated from Projection Microstereolithography. , 2014, , .		1
141	Anisotropic Complementary Acoustic Metamaterial for Canceling out Aberrating Layers. Physical Review X, 2014, 4, .	8.9	104
142	Photon emission rate engineering using graphene nanodisc cavities. Optics Express, 2014, 22, 6400.	3.4	7
143	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.	21.0	0
144	Assembly of a Bacteriophageâ€Based Template for the Organization of Materials into Nanoporous Networks. Advanced Materials, 2014, 26, 3398-3404.	21.0	63

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145	Electron-photon scattering mediated by localized plasmons: A quantitative analysis by eigen-response theory. Physical Review B, 2014, 89, .	3.2	20
146	Enabling Ideal Selective Solar Absorption with 2D Metallic Dielectric Photonic Crystals. Advanced Materials, 2014, 26, 8041-8045.	21.0	120
147	Ultralight, ultrastiff mechanical metamaterials. Science, 2014, 344, 1373-1377.	12.6	1,592
148	Optical torque from enhanced scattering by multipolar plasmonic resonance. Nanophotonics, 2014, 3, 343-350.	6.0	26
149	Reconfigurable Plasmofluidic Lenses. , 2014, , .		2
150	Quantum Electromechanical Processes in Plasmonic Nanostructures., 2014,,.		0
151	Optical Curtain Effect: Extraordinary Optical Transmission Enhanced by Antireflection. Plasmonics, 2013, 8, 1087-1093.	3.4	3
152	Versatile Three-Dimensional Virus-Based Template for Dye-Sensitized Solar Cells with Improved Electron Transport and Light Harvesting. ACS Nano, 2013, 7, 6563-6574.	14.6	84
153	A reconfigurable plasmofluidic lens. Nature Communications, 2013, 4, 2305.	12.8	127
154	Interaction of a Contact Resonance of Microspheres with Surface Acoustic Waves. Physical Review Letters, 2013, 111, 036103.	7.8	116
155	Fabrication and characterization of thin-film nanostructured Lüneburg lens. , 2013, , .		0
156	Tunable Localized Surface Plasmon-Enabled Broadband Light-Harvesting Enhancement for High-Efficiency Panchromatic Dye-Sensitized Solar Cells. Nano Letters, 2013, 13, 637-642.	9.1	162
157	Silicon nanowires with controlled sidewall profile and roughness fabricated by thin-film dewetting and metal-assisted chemical etching. Nanotechnology, 2013, 24, 225305.	2.6	60
158	Terahertz plasmonics in ferroelectric-gated graphene. Applied Physics Letters, 2013, 102, .	3.3	44
159	Position-sensitive spectral splitting with a plasmonic nanowire on silicon chip. Scientific Reports, 2013, 3, 3095.	3.3	38
160	Complex Polarizability of an Isolated Subwavelength Plasmonic Hole in a Thin Metal Film., 2013,,.		1
161	Plasmonic angular momentum on metal-dielectric nano-wedges in a sectorial indefinite metamaterial. Optics Express, 2013, 21, 28344.	3.4	1
162	Report on the Seventh U.S.–Japan Joint Seminar on Nanoscale Transport Phenomena—Science and Engineering. Nanoscale and Microscale Thermophysical Engineering, 2013, 17, 25-49.	2.6	1

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163	Thermal conductivity of silicon nanowire arrays with controlled roughness. Journal of Applied Physics, 2012, 112, .	2.5	120
164	Micro 3D Printing Using a Digital Projector and its Application in the Study of Soft Materials Mechanics. Journal of Visualized Experiments, 2012, , e4457.	0.3	20
165	Ultrabroadband Light Absorption by a Sawtooth Anisotropic Metamaterial Slab. Nano Letters, 2012, 12, 1443-1447.	9.1	864
166	Multiband plasmonic absorber based on transverse phase resonances. Optics Express, 2012, 20, 17552.	3.4	22
167	Application of Plasmonic Bowtie Nanoantenna Arrays for Optical Trapping, Stacking, and Sorting. Nano Letters, 2012, 12, 796-801.	9.1	359
168	Prescribed Pattern Transformation in Swelling Gel Tubes by Elastic Instability. Physical Review Letters, 2012, 108, 214304.	7.8	51
169	Employing the Biology of Successful Fracture Repair to Heal Critical Size Bone Defects. Current Topics in Microbiology and Immunology, 2012, 367, 113-132.	1.1	39
170	Numerical study of a near-zero-index acoustic metamaterial. Physics Letters, Section A: General, Atomic and Solid State Physics, 2012, 376, 2834-2837.	2.1	78
171	Design and optimization of a light-emitting diode projection micro-stereolithography three-dimensional manufacturing system. Review of Scientific Instruments, 2012, 83, 125001.	1.3	205
172	Plasmonic Sensors Based on Rayleigh Anomaly. , 2012, , .		2
173	Designing a Thin Film Blackbody Based on Plasmonic Anisotropic metamaterials. , 2012, , .		1
174	Designing a Thin Film Blackbody Based on Plasmonic Anisotropic Metamaterials. , 2012, , .		0
175	Multiband electromagnetic absorbers based on a metal/dielectric multilayer stack. , 2012, , .		1
176	Transforming light and sound with metamaterials., 2011,,.		0
177	Xenopus Laevis as a Novel Model to Study Long Bone Critical-Size Defect Repair by Growth Factor-Mediated Regeneration. Tissue Engineering - Part A, 2011, 17, 691-701.	3.1	10
178	Nonlinear Optical Response from Arrays of Au Bowtie Nanoantennas. Nano Letters, 2011, 11, 61-65.	9.1	170
179	A thin film broadband absorber based on multi-sized nanoantennas. Applied Physics Letters, 2011, 99, .	3.3	250
180	Broadband Acoustic Cloak for Ultrasound Waves. Physical Review Letters, 2011, 106, 024301.	7.8	706

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181	Direct metal nano-imprinting using an embossed solid electrolyte stamp. Nanotechnology, 2011, 22, 155302.	2.6	20
182	Solid-state superionic stamping with silver iodide–silver metaphosphate glass. Nanotechnology, 2011, 22, 425301.	2.6	11
183	Exciting multiple plasmonic resonances by a double-layered metallic nanostructure. Journal of the Optical Society of America B: Optical Physics, 2011, 28, 2827.	2.1	11
184	Subwavelength image manipulation through an oblique layered system. Optics Express, 2011, 19, 16809.	3.4	5
185	Zeeman splitting of photonic angular momentum states in a gyromagnetic cylinder. Physical Review B, 2011, 84, .	3.2	16
186	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
187	Characterizing the Role of Deformation during Electrochemical Etching of Metallic Films. Materials Research Society Symposia Proceedings, 2011, 1297, 175.	0.1	0
188	Mapping of surface plasmon polaritons on nanostructured thin film disks using cathodoluminescence imaging. , 2011, , .		1
189	Investigation of the nonlinear optical response from arrays of Au bowtie nanoantennas. , 2011, , .		0
190	Coupled Non-Fickian Diffusion and Large Deformation of Hydrogels. Conference Proceedings of the Society for Experimental Mechanics, 2011, , 25-28.	0.5	0
191	Efficient plasmonic trapping using bowtie nanoantennas. , 2011, , .		0
192	Plasmonic nano-bubble cavity probed by cathodoluminescence. , 2011, , .		0
193	Sub-diffraction-limited far-field imaging in infrared. Frontiers of Physics in China, 2010, 5, 324-329.	1.0	5
194	Plasmon-Assisted Optical Curtains. Plasmonics, 2010, 5, 369-374.	3.4	4
195	SERS EM field enhancement study through fast Raman mapping of Sierpinski carpet arrays. Journal of Raman Spectroscopy, 2010, 41, 1124-1130.	2.5	11
196	Controlled directional growth of silver microwires on a solid electrolyte surface. Applied Physics Letters, 2010, 96, .	3.3	4
197	Solvent-driven polymeric micro beam device. Journal of Micromechanics and Microengineering, 2010, 20, 085030.	2.6	21
198	Nonlithographic Patterning and Metal-Assisted Chemical Etching for Manufacturing of Tunable Light-Emitting Silicon Nanowire Arrays. Nano Letters, 2010, 10, 1582-1588.	9.1	201

#	Article	IF	Citations
199	Excitation and imaging of resonant optical modes of Au triangular nanoantennas using cathodoluminescence spectroscopy. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2010, 28, C6C21-C6C25.	1.2	12
200	Enhancing Light Coupling With Plasmonic Optical Antennas. , 2010, , 271-291.		1
201	A smooth optical superlens. Applied Physics Letters, 2010, 96, 043102.	3.3	78
202	First jump of microgel; actuation speed enhancement by elastic instability. Soft Matter, 2010, 6, 4342.	2.7	204
203	Cathodoluminescence Imaging of Plasmonic Modes of Ag Nanostructures. , 2010, , .		0
204	Imaging of Plasmonic Modes of Silver Nanoparticles Using High-Resolution Cathodoluminescence Spectroscopy. ACS Nano, 2009, 3, 2965-2974.	14.6	119
205	Ultradense gold nanostructures fabricated using hydrogen silsesquioxane resist and applications for surface-enhanced Raman spectroscopy. Journal of Vacuum Science & Technology B, 2009, 27, 2640.	1.3	9
206	Direct Metal Nano-patterning Using Embossed Solid Electrolyte. Materials Research Society Symposia Proceedings, 2009, 1156, 1.	0.1	2
207	3D microfabricated bioreactor with capillaries. Biomedical Microdevices, 2009, 11, 1309-1315.	2.8	31
208	Exploiting transport of guest metal ions in a host ionic crystal lattice for nanofabrication: Cu nanopatterning with Ag2S. Applied Physics A: Materials Science and Processing, 2009, 97, 863-868.	2.3	5
209	Fully three-dimensional microfabrication with a grayscale polymeric self-sacrificial structure. Journal of Micromechanics and Microengineering, 2009, 19, 115029.	2.6	16
210	Ultrasmooth Silver Thin Films Deposited with a Germanium Nucleation Layer. Nano Letters, 2009, 9, 178-182.	9.1	279
211	Focusing Ultrasound with an Acoustic Metamaterial Network. Physical Review Letters, 2009, 102, 194301.	7.8	498
212	Confocal Microscopy Measurement of Light Squeezed in Sub-wavelength Plasmonic Hole on Thin Metal Film., 2009,,.		0
213	New Frontiers of Metamaterials: Design and Fabrication. MRS Bulletin, 2008, 33, 915-920.	3.5	16
214	Design of Acoustic Cloak by Transmission Line Approach. , 2008, , .		0
215	Biomimetic Microactuator Powered by Polymer Swelling. , 2008, , .		0
216	Fabrication and Optical Characterization of Bowtie Antennas. , 2008, , .		0

#	Article	IF	CITATIONS
217	Electrical Resistivity & Thermal Stability of Smooth Silver Thin Film for Nanoscale Optoelectronic Devices., 2008,,.		2
218	Fresnel Lenses Design by Acoustic Transmission Line. , 2008, , .		0
219	3D Polymeric Devices Driven by Surface Micro Fluidic Capillaries. , 2008, , .		0
220	Flow Inside Microchannels With Liquid-Walls. , 2008, , .		0
221	Surface resonant states and superlensing in acoustic metamaterials. Physical Review B, 2007, 75, .	3.2	200
222	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
223	Design of Acoustic Metamaterials for Super-Resolution Ultrasound Imaging. , 2007, , 1169.		0
224	Molecular Scale Imaging with A Smooth Superlens. , 2007, , WB3.		0
225	Far-Field Optical Superlens. Nano Letters, 2007, 7, 403-408.	9.1	372
226	Electrochemical Nanoimprinting with Solid-State Superionic Stamps. Nano Letters, 2007, 7, 446-451.	9.1	71
227	Solid-state electrochemical nanoimprinting of copper. Journal of Vacuum Science & Technology B, 2007, 25, 2419-2424.	1.3	20
228	Midinfrared metamaterials fabricated by nanoimprint lithography. Applied Physics Letters, 2007, 90, 063107.	3.3	64
229	Solid-state Electrochemical Stamping of Functional Metallic Nanostructures. , 2007, , .		0
230	Theory of optical imaging beyond the diffraction limit with a far-field superlens., 2006, 6323, 207.		3
231	Ultrasonic metamaterials with negative modulus. Nature Materials, 2006, 5, 452-456.	27.5	1,608
232	Stiction problems in releasing of 3D microstructures and its solution. Sensors and Actuators A: Physical, 2006, 128, 109-115.	4.1	49
233	Optical Silver Superlens Imaging Below the Diffraction Limit. Materials Research Society Symposia Proceedings, 2006, 919, 1.	0.1	0
234	Molecular Scale Imaging with a Multilayer Superlens. Materials Research Society Symposia Proceedings, 2006, 919, 7.	0.1	5

#	Article	IF	CITATIONS
235	Fabrication of Optical Meta-structure at Infrared Rang using Nanoimprint Lithography. , 2006, , .		O
236	Direct Nanopatterning With Solid Ionic Stamping. , 2006, , .		0
237	Enhanced Mass Transport Through Permeable Polymer Microcirculatory Networks. , 2006, , .		0
238	Infrared spectroscopy and ellipsometry of magnetic metamaterials., 2005,,.		4
239	Projection micro-stereolithography using digital micro-mirror dynamic mask. Sensors and Actuators A: Physical, 2005, 121, 113-120.	4.1	686
240	Sub-Diffraction-Limited Optical Imaging with a Silver Superlens. Science, 2005, 308, 534-537.	12.6	3,613
241	Experimental study of transmission enhancement of evanescent waves through silver films assisted by surface plasmon excitation. Applied Physics A: Materials Science and Processing, 2005, 80, 1315-1325.	2.3	16
242	Comment on "Submicron imaging with a planar silver lens―[Appl. Phys. Lett. 84, 4403 (2004)]. Applied Physics Letters, 2005, 86, 126101.	3.3	5
243	Realization of optical superlens imaging below the diffraction limit. New Journal of Physics, 2005, 7, 255-255.	2.9	100
244	Sub-100 nm lithography using ultrashort wavelength of surface plasmons. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 2004, 22, 3475.	1.6	44
245	Terahertz Magnetic Response from Artificial Materials. Science, 2004, 303, 1494-1496.	12.6	1,437
246	Manufacturing at Nanoscale: Top-Down, Bottom-up and System Engineering. Journal of Nanoparticle Research, 2004, 6, 125-130.	1.9	35
247	Plasmonic Nanolithography. Nano Letters, 2004, 4, 1085-1088.	9.1	536
248	Diffusion-limited photopolymerization in scanning micro-stereolithography. Applied Physics A: Materials Science and Processing, 2004, 79, 1839-1842.	2.3	62
249	The Metastability of an Electrochemically Controlled Nanoscale Machine on Gold Surfaces. ChemPhysChem, 2004, 5, 111-116.	2.1	175
250	Tunable plasmonic wires at terahertz frequencies. , 2004, , .		4
251	Large positive and negative lateral optical beam displacements due to surface plasmon resonance. Applied Physics Letters, 2004, 85, 372-374.	3.3	230
252	Towards High-Speed Near-Field Scanning Optical Microscope. , 2004, , .		0

#	Article	IF	CITATIONS
253	Functional Molecularly Imprinted Polymer Microstructures Fabricated Using Microstereolithography. Advanced Materials, 2003, 15, 1541-1544.	21.0	59
254	Terahertz plasmonic high pass filter. Applied Physics Letters, 2003, 83, 201-203.	3.3	197
255	Regenerating evanescent waves from a silver superlens. Optics Express, 2003, 11, 682.	3.4	115
256	Rapid growth of evanescent wave by a silver superlens. Applied Physics Letters, 2003, 83, 5184-5186.	3.3	162
257	Imaging properties of a metamaterial superlens. Applied Physics Letters, 2003, 82, 161-163.	3.3	266
258	A pathway to subwavelength imaging using a metamaterial superlens., 2003, 5221, 116.		1
259	A micro methanol fuel cell operating at near room temperature. Applied Physics Letters, 2003, 83, 4056-4058.	3.3	160
260	Formation of fine near-field scanning optical microscopy tips. Part I. By static and dynamic chemical etching. Review of Scientific Instruments, 2003, 74, 3679-3683.	1.3	43
261	Formation of fine near-field scanning optical microscopy tips. Part II. By laser-heated pulling and bending. Review of Scientific Instruments, 2003, 74, 3684-3688.	1.3	19
262	Stiction problems in releasing 3D microstructures and the solution. , 2003, , .		0
263	Near-field multiphoton nanolithography using an apertureless optical probe. , 2003, , .		3
264	Design and Microfabrication of Terahertz Magnetic Metamaterials., 2003,,.		0
265	Artificial Plasmonic Metamaterial Fabricated by Micro-Stereolithography. , 2003, , .		0
266	Adhesion force of polymeric three-dimensional microstructures fabricated by microstereolithography. Applied Physics Letters, 2002, 81, 3963-3965.	3.3	13
267	Near-field two-photon nanolithography using an apertureless optical probe. Applied Physics Letters, 2002, 81, 3663-3665.	3.3	108
268	Polymeric micromechanical components with tunable stiffness. Applied Physics Letters, 2001, 79, 1700-1702.	3.3	32
269	Brownian motion of suspended particles in an anisotropic medium., 2000, 126, 401-406.		5