Nicholas X. Fang

List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

21,063 64 235 144 h-index g-index citations papers 8.6 25,069 275 7.05 L-index avg, IF ext. papers ext. citations

#	Paper	IF	Citations
235	Shaping soft materials via digital light processing-based 3D printing: A review. <i>Forces in Mechanics</i> , 2022 , 6, 100074	1.5	5
234	3D direct printing of mechanical and biocompatible hydrogel meta-structures <i>Bioactive Materials</i> , 2022 , 10, 48-55	16.7	1
233	High Temperature Mid-IR Polarizer via Natural In-Plane Hyperbolic Van der Waals Crystals. <i>Advanced Optical Materials</i> , 2022 , 10, 2101919	8.1	2
232	Additive manufacturing of high aspect-ratio structures with self-focusing photopolymerization. Light Advanced Manufacturing, 2022 , 3, 1	1	0
231	Biomimetic on-chip filtration enabled by direct micro-3D printing on membrane <i>Scientific Reports</i> , 2022 , 12, 8178	4.9	
230	Low Heat Capacity 3D Hollow Microarchitected Reactors for Thermal and Fluid Applications. <i>Energies</i> , 2022 , 15, 4073	3.1	0
229	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 & Digital</i> 30, 13, 55507-55516	9.5	4
228	Technology and Applications of Graphene Oxide Membranes 2021 , 379-422		1
227	Scalable visible light 3D printing and bioprinting using an organic light-emitting diode microdisplay. <i>IScience</i> , 2021 , 24, 103372	6.1	2
226	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 & Description</i> 13, 41414-41423	9.5	15
225	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	10.8	6
224	Color-Changeable Four-Dimensional Printing Enabled with Ultraviolet-Curable and Thermochromic Shape Memory Polymers. <i>ACS Applied Materials & District States</i> , 2021, 13, 18120-18127	9.5	16
223	Dual-stage thermosetting photopolymers for advanced manufacturing. <i>Chemical Engineering Journal</i> , 2021 , 411, 128466	14.7	3
222	Mechanically Robust and UV-Curable Shape-Memory Polymers for Digital Light Processing Based 4D Printing. <i>Advanced Materials</i> , 2021 , 33, e2101298	24	38
221	Anisotropically Fatigue-Resistant Hydrogels. <i>Advanced Materials</i> , 2021 , 33, e2102011	24	33
220	Shape-Memory Polymers: Mechanically Robust and UV-Curable Shape-Memory Polymers for Digital Light Processing Based 4D Printing (Adv. Mater. 27/2021). <i>Advanced Materials</i> , 2021 , 33, 2170210	24	
219	Voxel design of additively manufactured digital material with customized thermomechanical properties. <i>Materials and Design</i> , 2021 , 197, 109205	8.1	8

(2020-2021)

218	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	3.8	11
217	The nonequilibrium behaviors of covalent adaptable network polymers during the topology transition. <i>Soft Matter</i> , 2021 , 17, 2104-2119	3.6	8
216	Programmable shape-shifting 3D structures via frontal photopolymerization. <i>Materials and Design</i> , 2021 , 198, 109381	8.1	2
215	3D printing of highly stretchable hydrogel with diverse UV curable polymers. <i>Science Advances</i> , 2021 , 7,	14.3	70
214	Structural multi-colour invisible inks with submicron 4D printing of shape memory polymers. <i>Nature Communications</i> , 2021 , 12, 112	17.4	42
213	Recurrent neural network reveals transparent objects through scattering media. <i>Optics Express</i> , 2021 , 29, 5316-5326	3.3	1
212	Electromechanically reconfigurable optical nano-kirigami. <i>Nature Communications</i> , 2021 , 12, 1299	17.4	19
211	Three-Dimensional Stretchable Microelectronics by Projection Microstereolithography (PBL). <i>ACS Applied Materials & Applied & </i>	9.5	5
21 0	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	2.2	2
209	Shape-Deformed Mushroom-like Reentrant Structures for Robust Liquid-Repellent Surfaces. <i>ACS Applied Materials & District Materials & D</i>	9.5	3
208	Three-Dimensional Soundproof Acoustic Metacage. <i>Physical Review Letters</i> , 2021 , 127, 084301	7.4	14
207	Skin-electrode iontronic interface for mechanosensing. <i>Nature Communications</i> , 2021 , 12, 4731	17.4	19
206	Microstructured Surfaces for Reducing Chances of Fomite Transmission via Virus-Containing Respiratory Droplets. <i>ACS Nano</i> , 2021 , 15, 14049-14060	16.7	1
205	Scalable 3D printing of aperiodic cellular structures by rotational stacking of integral image formation. <i>Science Advances</i> , 2021 , 7, eabh1200	14.3	5
204	High resolution stereolithography fabrication of perfusable scaffolds to enable long-term meso-scale hepatic culture for disease modeling. <i>Biofabrication</i> , 2021 , 13,	10.5	1
203	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,	11.5	6
202	Wide-Angle Broadband Nonreflecting Acoustic Metamaterial Fence. <i>Physical Review Applied</i> , 2020 , 13,	4.3	6
201	Liquid-Crystal-Elastomer-Based Dissipative Structures by Digital Light Processing 3D Printing. Advanced Materials, 2020 , 32, e2000797	24	57

200	Dynamic thermal camouflage via a liquid-crystal-based radiative metasurface. <i>Nanophotonics</i> , 2020 , 9, 855-863	6.3	38
199	Influences of processing conditions on mechanical properties of recycled epoxy-anhydride vitrimers. <i>Journal of Applied Polymer Science</i> , 2020 , 137, 49246	2.9	10
198	3D Printed Compressible Quasi-Solid-State Nickel-Iron Battery. ACS Nano, 2020, 14, 9675-9686	16.7	32
197	Exciton-plasmon polariton coupling and hot carrier generation in two-dimensional SiB semiconductors: a first-principles study. <i>Nanophotonics</i> , 2020 , 9, 337-349	6.3	3
196	Projection micro stereolithography based 3D printing and its applications. <i>International Journal of Extreme Manufacturing</i> , 2020 , 2, 022004	7.9	76
195	Switching Acoustic Propagation via Underwater Metasurface. <i>Physical Review Applied</i> , 2020 , 13,	4.3	5
194	Design of 3D Printed Programmable Horseshoe Lattice Structures Based on a Phase-Evolution Model. <i>ACS Applied Materials & Design Structures</i> , 2020 , 12, 22146-22156	9.5	12
193	On the interplay between physical and content priors in deep learning for computational imaging. <i>Optics Express</i> , 2020 , 28, 24152-24170	3.3	13
192	Grayscale stencil lithography for patterning multispectral color filters. <i>Optica</i> , 2020 , 7, 1154	8.6	5
191	Echoes of fluid spin. <i>National Science Review</i> , 2020 , 7, 2-3	10.8	3
191 190	Echoes of fluid spin. <i>National Science Review</i> , 2020 , 7, 2-3 Influence of treating parameters on thermomechanical properties of recycled epoxy-acid vitrimers. <i>Soft Matter</i> , 2020 , 16, 1668-1677	10.8	3
	Influence of treating parameters on thermomechanical properties of recycled epoxy-acid vitrimers.		
190	Influence of treating parameters on thermomechanical properties of recycled epoxy-acid vitrimers. Soft Matter, 2020, 16, 1668-1677 Reproducibility of sound-absorbing periodic porous materials using additive manufacturing	3.6	12
190 189	Influence of treating parameters on thermomechanical properties of recycled epoxy-acid vitrimers. <i>Soft Matter</i> , 2020 , 16, 1668-1677 Reproducibility of sound-absorbing periodic porous materials using additive manufacturing technologies: Round robin study. <i>Additive Manufacturing</i> , 2020 , 36, 101564	3.6	12
190 189 188	Influence of treating parameters on thermomechanical properties of recycled epoxy-acid vitrimers. <i>Soft Matter</i> , 2020 , 16, 1668-1677 Reproducibility of sound-absorbing periodic porous materials using additive manufacturing technologies: Round robin study. <i>Additive Manufacturing</i> , 2020 , 36, 101564 Bioinspired metagel with broadband tunable impedance matching. <i>Science Advances</i> , 2020 , 6,	3.6 6.1 14.3	12 13 5
190 189 188	Influence of treating parameters on thermomechanical properties of recycled epoxy-acid vitrimers. <i>Soft Matter</i> , 2020 , 16, 1668-1677 Reproducibility of sound-absorbing periodic porous materials using additive manufacturing technologies: Round robin study. <i>Additive Manufacturing</i> , 2020 , 36, 101564 Bioinspired metagel with broadband tunable impedance matching. <i>Science Advances</i> , 2020 , 6, Continuous 3D printing from one single droplet. <i>Nature Communications</i> , 2020 , 11, 4685 Soft Robotics: Miniature Pneumatic Actuators for Soft Robots by High-Resolution Multimaterial 3D	3.6 6.1 14.3 17.4 6.8	12 13 5 20
190 189 188 187	Influence of treating parameters on thermomechanical properties of recycled epoxy-acid vitrimers. <i>Soft Matter</i> , 2020 , 16, 1668-1677 Reproducibility of sound-absorbing periodic porous materials using additive manufacturing technologies: Round robin study. <i>Additive Manufacturing</i> , 2020 , 36, 101564 Bioinspired metagel with broadband tunable impedance matching. <i>Science Advances</i> , 2020 , 6, Continuous 3D printing from one single droplet. <i>Nature Communications</i> , 2020 , 11, 4685 Soft Robotics: Miniature Pneumatic Actuators for Soft Robots by High-Resolution Multimaterial 3D Printing (Adv. Mater. Technol. 10/2019). <i>Advanced Materials Technologies</i> , 2019 , 4, 1970054 Physical modeling and validation of porpoises' directional emission via hybrid metamaterials.	3.6 6.1 14.3 17.4 6.8	12 13 5 20 2

(2018-2019)

182	Bimodal hybrid lightweight sound-absorbing material with high stiffness. <i>Applied Physics Express</i> , 2019 , 12, 035002	2.4	3
181	Rapid multi-material 3D printing with projection micro-stereolithography using dynamic fluidic control. <i>Additive Manufacturing</i> , 2019 , 27, 606-615	6.1	64
180	Mechanical Metamaterials and Their Engineering Applications. <i>Advanced Engineering Materials</i> , 2019 , 21, 1800864	3.5	234
179	Miniature Pneumatic Actuators for Soft Robots by High-Resolution Multimaterial 3D Printing. <i>Advanced Materials Technologies</i> , 2019 , 4, 1900427	6.8	52
178	Metagel with Broadband Tunable Acoustic Properties Over Air Water Bolid Ranges. <i>Advanced Functional Materials</i> , 2019 , 29, 1903699	15.6	15
177	Electromagnetic and Chemical Enhancements of Surface-Enhanced Raman Scattering Spectra from Cu2O Hexagonal Nanoplates. <i>Advanced Materials Interfaces</i> , 2019 , 6, 1900534	4.6	5
176	Topological kink plasmons on magnetic-domain boundaries. <i>Nature Communications</i> , 2019 , 10, 4565	17.4	7
175	Hydrogels: Metagel with Broadband Tunable Acoustic Properties Over Air Water Bolid Ranges (Adv. Funct. Mater. 38/2019). <i>Advanced Functional Materials</i> , 2019 , 29, 1970264	15.6	O
174	Projection lithography patterned high-resolution quantum dots/thiol-ene photo-polymer pixels for color down conversion. <i>Optics Express</i> , 2019 , 27, 30864-30874	3.3	10
173	Chemomechanics of dual-stage reprocessable thermosets. <i>Journal of the Mechanics and Physics of Solids</i> , 2019 , 126, 168-186	5	13
172	Promoting polysulfide conversion by catalytic ternary Fe3O4/carbon/graphene composites with ordered microchannels for ultrahigh-rate lithium ulfur batteries. <i>Journal of Materials Chemistry A</i> , 2019 , 7, 25078-25087	13	43
171	Optimal Nanoparticle Forces, Torques, and Illumination Fields. ACS Photonics, 2019, 6, 395-402	6.3	9
170	Broadband Light Management with Thermochromic Hydrogel Microparticles for Smart Windows. <i>Joule</i> , 2019 , 3, 290-302	27.8	129
169	Far-field acoustic subwavelength imaging and edge detection based on spatial filtering and wave vector conversion. <i>Nature Communications</i> , 2019 , 10, 204	17.4	21
168	Fast-Response, Stiffness-Tunable Soft Actuator by Hybrid Multimaterial 3D Printing. <i>Advanced Functional Materials</i> , 2019 , 29, 1806698	15.6	154
167	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	3.9	76
166	Highly stretchable hydrogels for UV curing based high-resolution multimaterial 3D printing. <i>Journal of Materials Chemistry B</i> , 2018 , 6, 3246-3253	7.3	96
165	Magnetoactive Acoustic Metamaterials. <i>Advanced Materials</i> , 2018 , 30, e1706348	24	94

164	Time-domain imaging of gigahertz surface waves on an acoustic metamaterial. <i>New Journal of Physics</i> , 2018 , 20, 013026	2.9	15
163	Engineered 3D-printed artificial axons. <i>Scientific Reports</i> , 2018 , 8, 478	4.9	50
162	High-Performance Single-Crystalline Perovskite Thin-Film Photodetector. <i>Advanced Materials</i> , 2018 , 30, 1704333	24	166
161	Breaking the barriers: advances in acoustic functional materials. <i>National Science Review</i> , 2018 , 5, 159-1	82 0.8	102
160	Enhancing Visible Light Photocatalysis with Hydrogenated Titanium Dioxide for Anti-Fouling Applications. <i>MRS Advances</i> , 2018 , 3, 3181-3187	0.7	1
159	Nano-kirigami with giant optical chirality. <i>Science Advances</i> , 2018 , 4, eaat4436	14.3	131
158	Foreshadowing elastic instabilities by negative group velocity in soft composites. <i>Applied Physics Letters</i> , 2018 , 113, 031901	3.4	12
157	Reprocessable thermosets for sustainable three-dimensional printing. <i>Nature Communications</i> , 2018 , 9, 1831	17.4	164
156	Microarchitected Stretching-Dominated Mechanical Metamaterials with Minimal Surface Topologies. <i>Advanced Engineering Materials</i> , 2018 , 20, 1800029	3.5	74
155	Bioinspired Ultra-Low Adhesive Energy Interface for Continuous 3D Printing: Reducing Curing Induced Adhesion. <i>Research</i> , 2018 , 2018, 4795604	7.8	28
154	4D Printing and Its Biomedical Applications 2018 , 343-372		1
153	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	6.1	43
152	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	4	62
151	Invited Article: Nano-kirigami metasurfaces by focused-ion-beam induced close-loop transformation. <i>APL Photonics</i> , 2018 , 3, 100803	5.2	18
150	Hydraulic hydrogel actuators and robots optically and sonically camouflaged in water. <i>Nature Communications</i> , 2017 , 8, 14230	17.4	519
149	Integrated Computational Materials Engineering (ICME) Approaches to the Design and Fabrication of Architected Materials 2017 ,		2
148	Highly Stretchable and UV Curable Elastomers for Digital Light Processing Based 3D Printing. <i>Advanced Materials</i> , 2017 , 29, 1606000	24	347
147	Poly(HDDA)-Based Polymers for Microfabrication and Mechanobiology. MRS Advances, 2017 , 2, 1315-13	3 2 517	2

(2016-2017)

146	Fe3O4 quantum dot decorated MoS2 nanosheet arrays on graphite paper as free-standing sodium-ion battery anodes. <i>Journal of Materials Chemistry A</i> , 2017 , 5, 9122-9131	13	74	
145	Addendum: Multiscale metallic metamaterials. <i>Nature Materials</i> , 2017 , 16, 497	27	3	
144	Bifunctional acoustic metamaterial lens designed with coordinate transformation. <i>Applied Physics Letters</i> , 2017 , 110, 113503	3.4	27	
143	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	11.5	13	
142	Plasmonic nanofluids enhanced solar thermal transfer liquid 2017,		5	
141	Optical and acoustic metamaterials: superlens, negative refractive index and invisibility cloak. <i>Journal of Optics (United Kingdom)</i> , 2017 , 19, 084007	1.7	60	
140	Mediated Growth of Zinc Chalcogen Shells on Gold Nanoparticles by Free-Base Amino Acids. <i>Chemistry of Materials</i> , 2017 , 29, 6993-7001	9.6	5	
139	Near-Perfect Ultrathin Nanocomposite Absorber with Self-Formed Topping Plasmonic Nanoparticles. <i>Advanced Optical Materials</i> , 2017 , 5, 1700222	8.1	27	
138	One-step volumetric additive manufacturing of complex polymer structures. <i>Science Advances</i> , 2017 , 3, eaao5496	14.3	134	
137	Acoustic Metamaterial. World Scientific Series in Nanoscience and Nanotechnology, 2017, 57-129	0.1		
136	Nonlocal dynamics of dissipative phononic fluids. <i>Physical Review B</i> , 2017 , 95,	3.3	8	
135	Infrared Topological Plasmons in Graphene. <i>Physical Review Letters</i> , 2017 , 118, 245301	7.4	92	
134	Elastic wave propagation in finitely deformed layered materials. <i>Journal of the Mechanics and Physics of Solids</i> , 2017 , 98, 390-410	5	43	
133	Polaritons in layered two-dimensional materials. <i>Nature Materials</i> , 2017 , 16, 182-194	27	665	
132	Computational inverse design of non-intuitive illumination patterns to maximize optical force or torque. <i>Optics Express</i> , 2017 , 25, 6757-6766	3.3	12	
131	Ultrathin platelet antennas mediated light-matter interaction in monolayer MoS2. <i>Optics Express</i> , 2017 , 25, 10261-10269	3.3	1	
130	Multiscale metallic metamaterials. <i>Nature Materials</i> , 2016 , 15, 1100-6	27	411	
129	Chiral plasmon in gapped Dirac systems. <i>Physical Review B</i> , 2016 , 93,	3.3	53	

128	Broadband light absorption by silver nanoparticle decorated silica nanospheres. <i>RSC Advances</i> , 2016 , 6, 107951-107959	3.7	7
127	Multimaterial 4D Printing with Tailorable Shape Memory Polymers. Scientific Reports, 2016, 6, 31110	4.9	530
126	Lightweight Mechanical Metamaterials with Tunable Negative Thermal Expansion. <i>Physical Review Letters</i> , 2016 , 117, 175901	7.4	225
125	Harnessing Deformation to Switch On and Off the Propagation of Sound. <i>Advanced Materials</i> , 2016 , 28, 1631-5	24	110
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,	3	20
123	Localized Surface Plasmon-Enhanced Ultrathin Film Broadband Nanoporous Absorbers. <i>Advanced Optical Materials</i> , 2016 , 4, 1255-1264	8.1	32
122	Topological magnetoplasmon. <i>Nature Communications</i> , 2016 , 7, 13486	17.4	68
121	Effective dielectric constants and spectral density analysis of plasmonic nanocomposites. <i>Journal of Applied Physics</i> , 2016 , 120, 163103	2.5	25
120	A broadband polygonal cloak for acoustic wave designed with linear coordinate transformation. Journal of the Acoustical Society of America, 2016 , 140, 95	2.2	20
119	Acoustic Switches: Harnessing Deformation to Switch On and Off the Propagation of Sound (Adv. Mater. 8/2016). <i>Advanced Materials</i> , 2016 , 28, 1630-1630	24	2
118	Ice Templated Free-Standing Hierarchically WS2/CNT-rGO Aerogel for High-Performance Rechargeable Lithium and Sodium Ion Batteries. <i>Advanced Energy Materials</i> , 2016 , 6, 1601057	21.8	223
117	High-precision broadband measurement of refractive index by picosecond real-time interferometry. <i>Applied Optics</i> , 2016 , 55, 6625-9	0.2	4
116	Molding acoustic, electromagnetic and water waves with a single cloak. Scientific Reports, 2015, 5, 1067	78 4.9	27
115	Nonlocal description of sound propagation through an array of Helmholtz resonators. <i>Comptes Rendus - Mecanique</i> , 2015 , 343, 656-669	2.1	13
114	Tunable Light-Matter Interaction and the Role of Hyperbolicity in Graphene-hBN System. <i>Nano Letters</i> , 2015 , 15, 3172-80	11.5	194
113	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. <i>Journal of Raman Spectroscopy</i> , 2015 , 46, 59-63	2.3	3
112	Quest for an Optical Circuit Probe. <i>Microscopy and Microanalysis</i> , 2015 , 21, 1251-1252	0.5	
111	Extraordinary focusing of sound above a soda can array without time reversal. <i>New Journal of Physics</i> , 2015 , 17, 042001	2.9	33

(2013-2015)

110	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	3.8	11
109	Quantum-Spillover-Enhanced Surface-Plasmonic Absorption at the Interface of Silver and High-Index Dielectrics. <i>Physical Review Letters</i> , 2015 , 115, 193901	7.4	34
108	Modeling of charge-mass transport in solid electrolyte-based electrochemical nanomanufacturing process. <i>Journal of Manufacturing Processes</i> , 2015 , 18, 60-66	5	1
107	Electron-photon scattering mediated by localized plasmons: A quantitative analysis by eigen-response theory. <i>Physical Review B</i> , 2014 , 89,	3.3	15
106	Enabling ideal selective solar absorption with 2D metallic dielectric photonic crystals. <i>Advanced Materials</i> , 2014 , 26, 8041-5	24	98
105	Ultralight, ultrastiff mechanical metamaterials. <i>Science</i> , 2014 , 344, 1373-7	33.3	1132
104	Optical torque from enhanced scattering by multipolar plasmonic resonance. <i>Nanophotonics</i> , 2014 , 3, 343-350	6.3	13
103	Transformation optics scheme for two-dimensional materials. <i>Optics Letters</i> , 2014 , 39, 2113-6	3	8
102	Lightweight micro lattices with nanoscale features fabricated from Projection Microstereolithography 2014 ,		1
101	Anisotropic Complementary Acoustic Metamaterial for Canceling out Aberrating Layers. <i>Physical Review X</i> , 2014 , 4,	9.1	85
100	Photon emission rate engineering using graphene nanodisc cavities. <i>Optics Express</i> , 2014 , 22, 6400-15	3.3	7
99	Nanoporous Networks: Assembly of a Bacteriophage-Based Template for the Organization of Materials into Nanoporous Networks (Adv. Mater. 21/2014). <i>Advanced Materials</i> , 2014 , 26, 3568-3568	24	
98	Assembly of a bacteriophage-based template for the organization of materials into nanoporous networks. <i>Advanced Materials</i> , 2014 , 26, 3398-404	24	55
97	Optical Curtain Effect: Extraordinary Optical Transmission Enhanced by Antireflection. <i>Plasmonics</i> , 2013 , 8, 1087-1093	2.4	3
96	Versatile three-dimensional virus-based template for dye-sensitized solar cells with improved electron transport and light harvesting. <i>ACS Nano</i> , 2013 , 7, 6563-74	16.7	72
95	A reconfigurable plasmofluidic lens. <i>Nature Communications</i> , 2013 , 4, 2305	17.4	105
94	Interaction of a contact resonance of microspheres with surface acoustic waves. <i>Physical Review Letters</i> , 2013 , 111, 036103	7.4	87
93	Tunable localized surface plasmon-enabled broadband light-harvesting enhancement for high-efficiency panchromatic dye-sensitized solar cells. <i>Nano Letters</i> , 2013 , 13, 637-42	11.5	147

92	Employing the biology of successful fracture repair to heal critical size bone defects. <i>Current Topics in Microbiology and Immunology</i> , 2013 , 367, 113-32	3.3	31
91	Silicon nanowires with controlled sidewall profile and roughness fabricated by thin-film dewetting and metal-assisted chemical etching. <i>Nanotechnology</i> , 2013 , 24, 225305	3.4	50
90	Terahertz plasmonics in ferroelectric-gated graphene. <i>Applied Physics Letters</i> , 2013 , 102, 201118	3.4	38
89	Position-sensitive spectral splitting with a plasmonic nanowire on silicon chip. <i>Scientific Reports</i> , 2013 , 3, 3095	4.9	34
88	Complex Polarizability of an Isolated Subwavelength Plasmonic Hole in a Thin Metal Film 2013,		1
87	Plasmonic angular momentum on metal-dielectric nano-wedges in a sectorial indefinite metamaterial. <i>Optics Express</i> , 2013 , 21, 28344-58	3.3	O
86	Report on the Seventh U.S.Dapan Joint Seminar on Nanoscale Transport Phenomena Cience and Engineering. <i>Nanoscale and Microscale Thermophysical Engineering</i> , 2013 , 17, 25-49	3.7	1
85	Ultrabroadband light absorption by a sawtooth anisotropic metamaterial slab. <i>Nano Letters</i> , 2012 , 12, 1443-7	11.5	712
84	Multiband plasmonic absorber based on transverse phase resonances. <i>Optics Express</i> , 2012 , 20, 17552-9	3.3	18
83	Application of plasmonic bowtie nanoantenna arrays for optical trapping, stacking, and sorting. <i>Nano Letters</i> , 2012 , 12, 796-801	11.5	283
82	Prescribed pattern transformation in swelling gel tubes by elastic instability. <i>Physical Review Letters</i> , 2012 , 108, 214304	7.4	48
81	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	2.3	70
80	Design and optimization of a light-emitting diode projection micro-stereolithography three-dimensional manufacturing system. <i>Review of Scientific Instruments</i> , 2012 , 83, 125001	1.7	159
79	Thermal conductivity of silicon nanowire arrays with controlled roughness. <i>Journal of Applied Physics</i> , 2012 , 112, 114306	2.5	105
78	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	1.6	16
77	Plasmonic Sensors Based on Rayleigh Anomaly 2012 ,		2
76	Xenopus laevis 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	3.9	10
75	Nonlinear optical response from arrays of Au bowtie nanoantennas. <i>Nano Letters</i> , 2011 , 11, 61-5	11.5	146

74	A thin film broadband absorber based on multi-sized nanoantennas. <i>Applied Physics Letters</i> , 2011 , 99, 253101	3.4	220
73	Broadband acoustic cloak for ultrasound waves. <i>Physical Review Letters</i> , 2011 , 106, 024301	7.4	558
72	Direct metal nano-imprinting using an embossed solid electrolyte stamp. <i>Nanotechnology</i> , 2011 , 22, 155	53,012	19
71	Solid-state superionic stamping with silver iodide-silver metaphosphate glass. <i>Nanotechnology</i> , 2011 , 22, 425301	3.4	8
70	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	1.7	9
69	Subwavelength image manipulation through an oblique layered system. <i>Optics Express</i> , 2011 , 19, 16809	-3.63	4
68	Zeeman splitting of photonic angular momentum states in a gyromagnetic cylinder. <i>Physical Review B</i> , 2011 , 84,	3.3	12
67	Investigations on Plasmonic Modes of Noble Metal Nano-Disks Using High-Resolution Cathodoluminescence Imaging Spectroscopy. <i>Materials Research Society Symposia Proceedings</i> , 2011 , 1294, 48701		
66	Characterizing the Role of Deformation during Electrochemical Etching of Metallic Films. <i>Materials Research Society Symposia Proceedings</i> , 2011 , 1297, 175		
65	Mapping of surface plasmon polaritons on nanostructured thin film disks using cathodoluminescence imaging 2011 ,		1
64	Coupled Non-Fickian Diffusion and Large Deformation of Hydrogels. <i>Conference Proceedings of the Society for Experimental Mechanics</i> , 2011 , 25-28	0.3	
63	Controlled directional growth of silver microwires on a solid electrolyte surface. <i>Applied Physics Letters</i> , 2010 , 96, 024101	3.4	3
62	Solvent-driven polymeric micro beam device. <i>Journal of Micromechanics and Microengineering</i> , 2010 , 20, 085030	2	18
61	Nonlithographic patterning and metal-assisted chemical etching for manufacturing of tunable light-emitting silicon nanowire arrays. <i>Nano Letters</i> , 2010 , 10, 1582-8	11.5	181
60	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	1.3	11
59	Enhancing Light Coupling With Plasmonic Optical Antennas 2010 , 271-291		1
58	A smooth optical superlens. <i>Applied Physics Letters</i> , 2010 , 96, 043102	3.4	70
57	First jump of microgel; actuation speed enhancement by elastic instability. <i>Soft Matter</i> , 2010 , 6, 4342	3.6	162

56	Sub-diffraction-limited far-field imaging in infrared. Frontiers of Physics in China, 2010, 5, 324-329		4
55	Plasmon-Assisted Optical Curtains. <i>Plasmonics</i> , 2010 , 5, 369-374	2.4	4
54	SERS EM field enhancement study through fast Raman mapping of Sierpinski carpet arrays. <i>Journal of Raman Spectroscopy</i> , 2010 , 41, 1124-1130	2.3	11
53	Imaging of plasmonic modes of silver nanoparticles using high-resolution cathodoluminescence spectroscopy. <i>ACS Nano</i> , 2009 , 3, 2965-74	16.7	98
52	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		9
51	Direct Metal Nano-patterning Using Embossed Solid Electrolyte. <i>Materials Research Society Symposia Proceedings</i> , 2009 , 1156, 1		2
50	3D microfabricated bioreactor with capillaries. <i>Biomedical Microdevices</i> , 2009 , 11, 1309-15	3.7	28
49	Exploiting transport of guest metal ions in a host ionic crystal lattice for nanofabrication: Cu nanopatterning with Ag2S. <i>Applied Physics A: Materials Science and Processing</i> , 2009 , 97, 863-868	2.6	3
48	Fully three-dimensional microfabrication with a grayscale polymeric self-sacrificial structure. <i>Journal of Micromechanics and Microengineering</i> , 2009 , 19, 115029	2	13
47	Ultrasmooth silver thin films deposited with a germanium nucleation layer. <i>Nano Letters</i> , 2009 , 9, 178-8	3 2 11.5	222
46	Focusing ultrasound with an acoustic metamaterial network. <i>Physical Review Letters</i> , 2009 , 102, 19430	I 7.4	415
45	New Frontiers of Metamaterials: Design and Fabrication. MRS Bulletin, 2008, 33, 915-920	3.2	10
44	Electrical Resistivity & Thermal Stability of Smooth Silver Thin Film for Nanoscale Optoelectronic Devices 2008 ,		1
43	Surface resonant states and superlensing in acoustic metamaterials. <i>Physical Review B</i> , 2007 , 75,	3.3	175
42	Smooth Ag Film Deposited Using e-beam Evaporated Ge as an Intermediate Layer for Applications in Nanoscale Devices and Optical Superlens. <i>Materials Research Society Symposia Proceedings</i> , 2007 , 990, 1		
41	Design of Acoustic Metamaterials for Super-Resolution Ultrasound Imaging 2007 , 1169		
40	Molecular Scale Imaging with A Smooth Superlens 2007 , WB3		

38	Electrochemical nanoimprinting with solid-state superionic stamps. <i>Nano Letters</i> , 2007 , 7, 446-51	11.5	63
37	Solid-state electrochemical nanoimprinting of copper. <i>Journal of Vacuum Science & Technology B</i> , 2007 , 25, 2419		17
36	Midinfrared metamaterials fabricated by nanoimprint lithography. <i>Applied Physics Letters</i> , 2007 , 90, 063	3 15047	56
35	Optical Silver Superlens Imaging Below the Diffraction Limit. <i>Materials Research Society Symposia Proceedings</i> , 2006 , 919, 1		
34	Molecular Scale Imaging with a Multilayer Superlens. <i>Materials Research Society Symposia Proceedings</i> , 2006 , 919, 7		4
33	Theory of optical imaging beyond the diffraction limit with a far-field superlens 2006 , 6323, 207		1
32	Ultrasonic metamaterials with negative modulus. <i>Nature Materials</i> , 2006 , 5, 452-6	27	1288
31	Stiction problems in releasing of 3D microstructures and its solution. <i>Sensors and Actuators A: Physical</i> , 2006 , 128, 109-115	3.9	45
30	Comment on Bubmicron imaging with a planar silver lens[Appl. Phys. Lett. 84, 4403 (2004)]. <i>Applied Physics Letters</i> , 2005 , 86, 126101	3.4	5
29	Realization of optical superlens imaging below the diffraction limit. <i>New Journal of Physics</i> , 2005 , 7, 255	5-2.55	78
29	Realization of optical superlens imaging below the diffraction limit. <i>New Journal of Physics</i> , 2005 , 7, 255 Infrared spectroscopy and ellipsometry of magnetic metamaterials 2005 ,	5-2.55	78
		3. 9	<i>'</i>
28	Infrared spectroscopy and ellipsometry of magnetic metamaterials 2005 , Projection micro-stereolithography using digital micro-mirror dynamic mask. <i>Sensors and Actuators</i>		3
28	Infrared spectroscopy and ellipsometry of magnetic metamaterials 2005 , Projection micro-stereolithography using digital micro-mirror dynamic mask. <i>Sensors and Actuators A: Physical</i> , 2005 , 121, 113-120	3.9	3 533
28 27 26	Infrared spectroscopy and ellipsometry of magnetic metamaterials 2005, Projection micro-stereolithography using digital micro-mirror dynamic mask. Sensors and Actuators A: Physical, 2005, 121, 113-120 Sub-diffraction-limited optical imaging with a silver superlens. Science, 2005, 308, 534-7 Experimental study of transmission enhancement of evanescent waves through silver films assisted	3.9	3 533 2990
28 27 26 25	Infrared spectroscopy and ellipsometry of magnetic metamaterials 2005, Projection micro-stereolithography using digital micro-mirror dynamic mask. Sensors and Actuators A: Physical, 2005, 121, 113-120 Sub-diffraction-limited optical imaging with a silver superlens. Science, 2005, 308, 534-7 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 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	3.9	3 533 2990 13
28 27 26 25 24	Infrared spectroscopy and ellipsometry of magnetic metamaterials 2005, Projection micro-stereolithography using digital micro-mirror dynamic mask. Sensors and Actuators A: Physical, 2005, 121, 113-120 Sub-diffraction-limited optical imaging with a silver superlens. Science, 2005, 308, 534-7 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 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	3.9 33.3 2.6	3 533 2990 13 41

20	Diffusion-limited photopolymerization in scanning micro-stereolithography. <i>Applied Physics A: Materials Science and Processing</i> , 2004 , 79, 1839-1842	2.6	51
19	The metastability of an electrochemically controlled nanoscale machine on gold surfaces. <i>ChemPhysChem</i> , 2004 , 5, 111-6	3.2	161
18	Tunable plasmonic wires at terahertz frequencies 2004,		3
17	Large positive and negative lateral optical beam displacements due to surface plasmon resonance. <i>Applied Physics Letters</i> , 2004 , 85, 372-374	3.4	192
16	Near-field multiphoton nanolithography using an apertureless optical probe 2003,		3
15	Functional Molecularly Imprinted Polymer Microstructures Fabricated Using Microstereolithography. <i>Advanced Materials</i> , 2003 , 15, 1541-1544	24	52
14	Terahertz plasmonic high pass filter. Applied Physics Letters, 2003, 83, 201-203	3.4	167
13	Regenerating evanescent waves from a silver superlens. <i>Optics Express</i> , 2003 , 11, 682-7	3.3	105
12	Rapid growth of evanescent wave by a silver superlens. <i>Applied Physics Letters</i> , 2003 , 83, 5184-5186	3.4	140
11	Imaging properties of a metamaterial superlens. <i>Applied Physics Letters</i> , 2003 , 82, 161-163	3.4	237
10	A micro methanol fuel cell operating at near room temperature. <i>Applied Physics Letters</i> , 2003 , 83, 4056	-490.58	144
9	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	1.7	37
8	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	1.7	16
7	Adhesion force of polymeric three-dimensional microstructures fabricated by microstereolithography. <i>Applied Physics Letters</i> , 2002 , 81, 3963-3965	3.4	12
6	Near-field two-photon nanolithography using an apertureless optical probe. <i>Applied Physics Letters</i> , 2002 , 81, 3663-3665	3.4	96
5	Polymeric micromechanical components with tunable stiffness. <i>Applied Physics Letters</i> , 2001 , 79, 1700-	1302	29
4	Brownian motion of suspended particles in an anisotropic medium 2000 , 126, 401-406		3
3	Hydrogel-elastomer-based stretchable strain sensor fabricated by a simple projection lithography method. <i>International Journal of Smart and Nano Materials</i> ,1-13	3.6	3

LIST OF PUBLICATIONS

2	Computational modelling of processEtructurePropertyPerformance relationships in metal additive manufacturing: a review. <i>International Materials Reviews</i> ,1-46	16.1 8
1	Solvent-Free Upcycling Vitrimers through Digital Light Processing-Based 3D Printing and Bond Exchange Reaction. <i>Advanced Functional Materials</i> ,2111030	15.6 3