Cheng Sun

List of Publications by Year
in descending order

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		44069	17592
141	16,119	48	121
papers	citations	h-index	g-index

143	143	143	13821
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Sub-Diffraction-Limited Optical Imaging with a Silver Superlens. Science, 2005, 308, 534-537.	12.6	3,613
2	Far-Field Optical Hyperlens Magnifying Sub-Diffraction-Limited Objects. Science, 2007, 315, 1686-1686.	12.6	1,895
3	Ultrasonic metamaterials with negative modulus. Nature Materials, 2006, 5, 452-456.	27.5	1,608
4	Optical Negative Refraction in Bulk Metamaterials of Nanowires. Science, 2008, 321, 930-930.	12.6	798
5	Projection micro-stereolithography using digital micro-mirror dynamic mask. Sensors and Actuators A: Physical, 2005, 121, 113-120.	4.1	686
6	Focusing Surface Plasmons with a Plasmonic Lens. Nano Letters, 2005, 5, 1726-1729.	9.1	539
7	Plasmonic Nanolithography. Nano Letters, 2004, 4, 1085-1088.	9.1	536
8	Method for retrieving effective properties of locally resonant acoustic metamaterials. Physical Review B, 2007, 76, .	3.2	398
9	Far-Field Optical Superlens. Nano Letters, 2007, 7, 403-408.	9.1	372
10	Flying plasmonic lens in the near field for high-speed nanolithography. Nature Nanotechnology, 2008, 3, 733-737.	31.5	298
11	Cloaking of Matter Waves. Physical Review Letters, 2008, 100, 123002.	7.8	296
12	Tunable assembly of graphene oxide surfactant sheets: wrinkles, overlaps and impacts on thin film properties. Soft Matter, 2010, 6, 6096.	2.7	206
13	Surface resonant states and superlensing in acoustic metamaterials. Physical Review B, 2007, 75, .	3.2	200
14	Development of optical hyperlens for imaging below the diffraction limit. Optics Express, 2007, 15, 15886.	3.4	192
15	Maskless Plasmonic Lithography at 22â€...nm Resolution. Scientific Reports, 2011, 1, 175.	3.3	158
16	A transparent broadband ultrasonic detector based on an optical micro-ring resonator for photoacoustic microscopy. Scientific Reports, 2014, 4, 4496.	3.3	158
17	Two-Dimensional Imaging by Far-Field Superlens at Visible Wavelengths. Nano Letters, 2007, 7, 3360-3365.	9.1	148
18	Controlling the Polarization State of Light with a Dispersion-Free Metastructure. Physical Review X, 2014, 4, .	8.9	139

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19	Patterned Growth of Vertically Aligned Organic Nanowire Waveguide Arrays. ACS Nano, 2010, 4, 1630-1636.	14.6	138
20	3Dâ€Printing Strong Highâ€Resolution Antioxidant Bioresorbable Vascular Stents. Advanced Materials Technologies, 2016, 1, 1600138.	5.8	138
21	Construction of a chiral metamaterial with a U-shaped resonator assembly. Physical Review B, 2010, 81, .	3.2	129
22	Optical Detection of Ultrasound in Photoacoustic Imaging. IEEE Transactions on Biomedical Engineering, 2017, 64, 4-15.	4.2	121
23	The influences of the material properties on ceramic micro-stereolithography. Sensors and Actuators A: Physical, 2002, 101, 364-370.	4.1	117
24	Flexible Ultrathin Single-Crystalline Perovskite Photodetector. Nano Letters, 2020, 20, 7144-7151.	9.1	117
25	Hiding a Realistic Object Using a Broadband Terahertz Invisibility Cloak. Scientific Reports, 2011, 1, 78.	3.3	113
26	Plasmonic Nearfield Scanning Probe with High Transmission. Nano Letters, 2008, 8, 3041-3045.	9.1	108
27	Design of mechanical metamaterials for simultaneous vibration isolation and energy harvesting. Applied Physics Letters, 2017, 111, .	3.3	105
28	Multiplexed RNAi therapy against brain tumor-initiating cells via lipopolymeric nanoparticle infusion delays glioblastoma progression. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, E6147-E6156.	7.1	102
29	Realization of optical superlens imaging below the diffraction limit. New Journal of Physics, 2005, 7, 255-255.	2.9	100
30	Highâ€Speed 3D Printing of Millimeterâ€Size Customized Aspheric Imaging Lenses with Sub 7 nm Surface Roughness. Advanced Materials, 2018, 30, e1705683.	21.0	98
31	Super-resolution spectroscopic microscopy via photon localization. Nature Communications, 2016, 7, 12290.	12.8	91
32	Highly Efficient Light-Trapping Structure Design Inspired By Natural Evolution. Scientific Reports, 2013, 3, 1025.	3.3	83
33	Photoacoustic probe using a microring resonator ultrasonic sensor for endoscopic applications. Optics Letters, 2014, 39, 4372.	3.3	80
34	Isometric multimodal photoacoustic microscopy based on optically transparent micro-ring ultrasonic detection. Optica, 2015, 2, 169.	9.3	79
35	Experimental studies of far-field superlens for sub-diffractional optical imaging. Optics Express, 2007, 15, 6947.	3.4	74
36	Additive Manufacturing of a 3D Terahertz Gradientâ€Refractive Index Lens. Advanced Optical Materials, 2016, 4, 1034-1040.	7.3	73

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37	Rapid fabrication of hierarchically structured supramolecular nanocomposite thin films in one minute. Nature Communications, 2014, 5, 4053.	12.8	72
38	Far-Red Photoactivatable BODIPYs for the Super-Resolution Imaging of Live Cells. Journal of the American Chemical Society, 2018, 140, 12741-12745.	13.7	71
39	Increased stiffness and flow resistance of the inner wall of Schlemmâ€™s canal in glaucomatous human eyes. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 26555-26563.	7.1	70
40	All Optical Interface for Parallel, Remote, and Spatiotemporal Control of Neuronal Activity. Nano Letters, 2007, 7, 3859-3863.	9.1	67
41	Nanopin Plasmonic Resonator Array and Its Optical Properties. Nano Letters, 2007, 7, 1076-1080.	9.1	67
42	Raman Enhancement Factor of a Single Tunable Nanoplasmonic Resonator. Journal of Physical Chemistry B, 2006, 110, 3964-3968.	2.6	64
43	Midinfrared metamaterials fabricated by nanoimprint lithography. Applied Physics Letters, 2007, 90, 063107.	3.3	64
44	Repurposing Blu-ray movie discs as quasi-random nanoimprinting templates for photon management. Nature Communications, 2014, 5, 5517.	12.8	57
45	Superresolution intrinsic fluorescence imaging of chromatin utilizing native, unmodified nucleic acids for contrast. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 9716-9721.	7.1	56
46	Fabricating customized hydrogel contact lens. Scientific Reports, 2016, 6, 34905.	3.3	56
47	Asymmetric photon transport in organic semiconductor nanowires through electrically controlled exciton diffusion. Science Advances, 2018, 4, eaap9861.	10.3	56
48	Disposable ultrasound-sensing chronic cranial window by soft nanoimprinting lithography. Nature Communications, 2019, 10, 4277.	12.8	52
49	High-speed on-demand 3D printed bioresorbable vascular scaffolds. Materials Today Chemistry, 2018, 7, 25-34.	3.5	50
50	A microfabricated platform probing cytoskeleton dynamics using multidirectional topographical cues. Biomedical Microdevices, 2007, 9, 523-531.	2.8	44
51	Switching the electric and magnetic responses in a metamaterial. Physical Review B, 2009, 80, .	3.2	44
52	3D Printing Customized Optical Lens in Minutes. Advanced Optical Materials, 2020, 8, 1901646.	7.3	41
53	Tuning the far-field superlens: from UV to visible. Optics Express, 2007, 15, 7095.	3.4	40
54	Time-Resolved Single-Step Protease Activity Quantification Using Nanoplasmonic Resonator Sensors. ACS Nano, 2010, 4, 978-984.	14.6	38

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55	Nonreciprocal resonant transmission/reflection based on a one-dimensional photonic crystal adjacent to the magneto-optical metal film. Optics Express, 2013, 21, 28933.	3.4	37
56	Numerical and experimental investigation of light trapping effect of nanostructured diatom frustules. Scientific Reports, 2015, 5, 11977.	3.3	36
57	Characterization and Design of Functional Quasi-Random Nanostructured Materials Using Spectral Density Function. Journal of Mechanical Design, Transactions of the ASME, 2017, 139, .	2.9	36
58	The Development of an All-polymer-based Piezoelectric Photocurable Resin for Additive Manufacturing. Procedia CIRP, 2017, 65, 157-162.	1.9	35
59	Quantifying melanin concentration in retinal pigment epithelium using broadband photoacoustic microscopy. Biomedical Optics Express, 2017, 8, 2851.	2.9	35
60	Multicolor super-resolution imaging using spectroscopic single-molecule localization microscopy with optimal spectral dispersion. Applied Optics, 2019, 58, 2248.	1.8	35
61	Near-field MoirÃ© effect mediated by surface plasmon polariton excitation. Optics Letters, 2007, 32, 629.	3.3	34
62	Super-Resolution Imaging by Random Adsorbed Molecule Probes. Nano Letters, 2008, 8, 1159-1162.	9.1	33
63	Subsurface Super-resolution Imaging of Unstained Polymer Nanostructures. Scientific Reports, 2016, 6, 28156.	3.3	31
64	Three-dimensional biplane spectroscopic single-molecule localization microscopy. Optica, 2019, 6, 709.	9.3	28
65	3D printed magnetically-actuating micro-gripper operates in air and water. Additive Manufacturing, 2021, 38, 101834.	3.0	27
66	Theoretical analysis of spectral precision in spectroscopic single-molecule localization microscopy. Review of Scientific Instruments, 2018, 89, 123703.	1.3	26
67	Symmetrically dispersed spectroscopic single-molecule localization microscopy. Light: Science and Applications, 2020, 9, 92.	16.6	26
68	Mechanical Simulation of a Diatom Frustule Structure. Journal of Bionic Engineering, 2015, 12, 98-108.	5.0	25
69	Distinct pathological signatures in human cellular models of myotonic dystrophy subtypes. JCI Insight, 2019, 4, .	5.0	25
70	Design of Non-Deterministic Quasi-random Nanophotonic Structures Using Fourier Space Representations. Scientific Reports, 2017, 7, 3752.	3.3	24
71	Longitudinal deep-brain imaging in mouse using visible-light optical coherence tomography through chronic microprism cranial window. Biomedical Optics Express, 2019, 10, 5235.	2.9	24
72	Quantitative Imaging of Rapidly Decaying Evanescent Fields Using Plasmonic Near-Field Scanning Optical Microscopy. Scientific Reports, 2013, 3, 2803.	3.3	20

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73	Parallel Three-Dimensional Tracking of Quantum Rods Using Polarization-Sensitive Spectroscopic Photon Localization Microscopy. ACS Photonics, 2017, 4, 1747-1752.	6.6	20
74	Topology optimization and fabrication of low frequency vibration energy harvesting microdevices. Smart Materials and Structures, 2015, 24, 025005.	3.5	19
75	Conformal Geometry and Multimaterial Additive Manufacturing through Freeform Transformation of Building Layers. Advanced Materials, 2021, 33, e2005672.	21.0	19
76	Ultrasonic near-field optical microscopy using a plasmonic nanofocusing probe. Journal of Applied Physics, 2013, 113, .	2.5	17
77	Rapid 3D Printing Magnetically Active Microstructures with High Solid Loading. Advanced Engineering Materials, 2020, 22, 1900911.	3.5	16
78	Theoretical and experimental studies of distance dependent response of micro-ring resonator-based ultrasonic detectors for photoacoustic microscopy. Journal of Applied Physics, 2014, 116, 144501.	2.5	15
79	Realization of negative refractive index with double-layered H-shaped resonator array. Applied Physics Letters, 2011, 99, .	3.3	14
80	Gigahertz All-Optical Modulation Using Reconfigurable Nanophotonic Metamolecules. Nano Letters, 2016, 16, 7690-7695.	9.1	14
81	Fabrication Speed Optimization for High-resolution 3D-printing of Bioresorbable Vascular Scaffolds. Procedia CIRP, 2017, 65, 131-138.	1.9	14
82	Method for Attaining Dimensionally Accurate Conditions for High-Resolution Three-Dimensional Printing Ceramic Composite Structures Using MicroCLIP Process. Journal of Micro and Nano-Manufacturing, 2019, 7, .	0.7	14
83	Adhesion force of polymeric three-dimensional microstructures fabricated by microstereolithography. Applied Physics Letters, 2002, 81, 3963-3965.	3.3	13
84	Artificial phonon-plasmon polariton at the interface of piezoelectric metamaterials and semiconductors. Physical Review B, 2007, 76, .	3.2	13
85	Super-Resolution Imaging of Self-Assembled Nanocarriers Using Quantitative Spectroscopic Analysis for Cluster Extraction. Langmuir, 2020, 36, 2291-2299.	3.5	13
86	Design, fabrication and characterization of a Far-field Superlens. Solid State Communications, 2008, 146, 202-207.	1.9	12
87	Investigating Single-Molecule Fluorescence Spectral Heterogeneity of Rhodamines Using High-Throughput Single-Molecule Spectroscopy. Journal of Physical Chemistry Letters, 2021, 12, 3914-3921.	4.6	12
88	Topology optimization for light-trapping structure in solar cells. Structural and Multidisciplinary Optimization, 2014, 50, 367-382.	3.5	11
89	Method to identify and minimize artifacts induced by fluorescent impurities in single-molecule localization microscopy. Journal of Biomedical Optics, 2018, 23, 1.	2.6	11
90	Scalable nanofabrication of U-shaped nanowire resonators with tunable optical magnetism. Optics Express, 2016, 24, 6367.	3.4	10

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91	Lasing-Mode Switch of a Hexagonal ZnO Pyramid Driven by Pressure within a Diamond Anvil Cell. Journal of Physical Chemistry Letters, 2019, 10, 610-616.	4.6	10
92	Optical Behaviors of a Microsized Single-Crystal MAPbI3 Plate under High Pressure. Journal of Physical Chemistry C, 2019, 123, 30221-30227.	3.1	10
93	Negative group velocity of surface plasmons on thin metallic films. , 2006, 6323, 224.		9
94	Dynamic near-field optical interaction between oscillating nanomechanical structures. Scientific Reports, 2015, 5, 10058.	3.3	9
95	Colposcopic imaging using visible-light optical coherence tomography. Journal of Biomedical Optics, 2017, 22, 056003.	2.6	9
96	Temperature-Dependent Lasing of CsPbI₃ Triangular Pyramid. Journal of Physical Chemistry Letters, 2019, 10, 7056-7061.	4.6	9
97	Maximizing Solar Energy Utilization through Multicriteria Pareto Optimization of Energy Harvesting and Regulating Smart Windows. Cell Reports Physical Science, 2020, 1, 100108.	5.6	9
98	Monolithic dual-wedge prism-based spectroscopic single-molecule localization microscopy. Nanophotonics, 2022, 11, 1527-1535.	6.0	9
99	3Dâ€Printed Electroactive Hydrogel Architectures with Subâ€100ÂÂµm Resolution Promote Myoblast Viability. Macromolecular Bioscience, 2022, 22, .	4.1	9
100	Optically nonactive assorted helix array with interchangeable magnetic/electric resonance. Applied Physics Letters, 2011, 98, 071901.	3.3	8
101	A realistic design of three-dimensional full cloak at terahertz frequencies. Applied Physics Letters, 2012, 101, .	3.3	8
102	Real-time Functional Analysis of Inertial Microfluidic Devices via Spectral Domain Optical Coherence Tomography. Scientific Reports, 2016, 6, 33250.	3.3	8
103	Microstereolithography of Three-Dimensional Polymeric Springs for Vibration Energy Harvesting. Smart Materials Research, 2012, 2012, 1-9.	0.5	7
104	Scaling the Artificial Polariton Bandgap at Infrared Frequencies Using Indium Tin Oxide Nanorod Arrays. Advanced Optical Materials, 2016, 4, 2077-2084.	7.3	7
105	Bendable disordered metamaterials for broadband terahertz invisibility. Optics Express, 2020, 28, 3552.	3.4	7
106	Design of Plasmonic Racetrack Resonators with a Trench Structure. Japanese Journal of Applied Physics, 2011, 50, 092201.	1.5	7
107	45% Periodicity Reduction in Nanocomposite Thin Films via Rapid Solvent Removal. Macromolecules, 2019, 52, 1803-1809.	4.8	6
108	RainbowSTORM: an open-source ImageJ plug-in for spectroscopic single-molecule localization microscopy (sSMLM) data analysis and image reconstruction. Bioinformatics, 2020, 36, 4972-4974.	4.1	6

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109	A Coupled Electromagnetic and Thermal Model for Picosecond and Nanometer Scale Plasmonic Lithography Process. Journal of Micro and Nano-Manufacturing, 2014, 2, .	0.7	5
110	Rapid 3D Printing Magnetically Active Microstructures with High Solid Loading. Advanced Engineering Materials, 2020, 22, 2070009.	3.5	5
111	Improving spatial precision and field-of-view in wavelength-tagged single-particle tracking using spectroscopic single-molecule localization microscopy. Applied Optics, 2021, 60, 3647.	1.8	5
112	Flying plasmonic lens at near field for high speed nanolithography. Proceedings of SPIE, 2010, , .	0.8	4
113	Design of Plasmonic Racetrack Resonators with a Trench Structure. Japanese Journal of Applied Physics, 2011, 50, 092201.	1.5	4
114	Spectroscopic analysis beyond the diffraction limit. International Journal of Biochemistry and Cell Biology, 2018, 101, 113-117.	2.8	4
115	Subâ€10â€‰nm Distance Measurements between Fluorophores using Photonâ€Accumulation Enhanced Reconstruction. Advanced Photonics Research, 2020, 1, 2000038.	3.6	4
116	Super-resolution imaging of flat-mounted whole mouse cornea. Experimental Eye Research, 2021, 205, 108499.	2.6	4
117	Optical detection of ultrasound using an apertureless near-field scanning optical microscopy system. AIP Conference Proceedings, 2013, , .	0.4	3
118	Shrinking the camera size. Nature Materials, 2017, 16, 11-12.	27.5	3
119	Lasing Behavior of a Single ZnO Nanowire Resonating in Fabryâ€“Perot Mode under Pressure. Journal of Physical Chemistry C, 2020, 124, 7523-7530.	3.1	3
120	Imaging endocervical mucus anatomy and dynamics in macaque female reproductive track using optical coherence tomography. Quantitative Imaging in Medicine and Surgery, 2015, 5, 40-5.	2.0	3
121	Magnifying Sub-diffraction-limited Objects by an Optical Metamaterials Hyperlens. , 2007, , .		3
122	Surface plasmon beats formed on thin metal films. , 2006, 6323, 215.		2
123	High-throughput 3D printing of customized imaging lens. , 2018, , .		2
124	Plasmonic nearfield scanning optical microscopy. , 2006, , .		1
125	Particle enhanced plasmonic NSOM. , 2007, , .		1
126	A Coupled Electromagnetic and Thermal Model for Picosecond and Nanometer Scale Plasmonic Lithography Process. , 2013, , .		1

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127	Understanding the nanophotonic light-trapping structure of diatom frustule for enhanced solar energy conversion: a theoretical and experimental study. , 2014, , .		1
128	Theoretical and experimental manipulation of plasmon-polariton bandgaps at infrared frequencies in indium-tin-oxide nanorod arrays. , 2016, , .		1
129	Hyperbolic Dispersion via Symmetric and Antisymmetric Orderings of Artificial Magnetic Dipole Array. ACS Photonics, 2018, 5, 4469-4475.	6.6	1
130	3D Printing: Conformal Geometry and Multimaterial Additive Manufacturing through Freeform Transformation of Building Layers (Adv. Mater. 11/2021). Advanced Materials, 2021, 33, 2170082.	21.0	1
131	Bulky Nanowire Metamaterials for Negative Refraction at Broadband Frequencies from Visible to NIR. , 2009, , .		1
132	Optical Silver Superlens Imaging Below the Diffraction Limit. Materials Research Society Symposia Proceedings, 2006, 919, 1.	0.1	0
133	Flying plasmonic lens at near field for high speed nano-lithography. , 2009, , .		0
134	High-speed Near Field Optical recording Using Plasmonic Flying Head. , 2011, , .		0
135	Three-dimensional invisibility cloaks functioning at terahertz frequencies. , 2014, , .		0
136	Engineering the meta-resonances toward functional terahertz devices. , 2015, , .		0
137	3D-printed bioresorbable vascular scaffolds: an important step towards personalizing vascular medical devices?. Expert Review of Precision Medicine and Drug Development, 2017, 2, 145-146.	0.7	0
138	Nanoscale Imaging of Chromatin with Labeled and Label-Free Super-Resolution Microscopy and Partial-Wave Spectroscopy. , 2018, , .		0
139	All Optical platform for Parallel and Spatiotemporal Control of Neuronal Activity. , 2008, , .		0
140	Optical Hyperlens Imaging with Resolution Go Beyond the Conventional Diffraction Limit. , 2009, , .		0
141	Terahertz Invisibility Cloaking. , 2012, , .		0