Minghui Hong

List of Publications by Citations

140 papers	7,891 citations	44 h-index	87 g-index
149 ext. papers	9,571 ext. citations	7.8 avg, IF	6.47 L-index

#	Paper	IF	Citations
140	Temporal full-colour tuning through non-steady-state upconversion. *Nature Nanotechnology*, **2015**, 10, 237-42	28.7	670
139	Sub-diffractional volume-confined polaritons in the natural hyperbolic material hexagonal boron nitride. *Nature Communications*, **2014**, 5, 5221	17.4	498
138	Optical virtual imaging at 50 nm lateral resolution with a white-light nanoscope. *Nature Communications*, **2011**, 2, 218	17.4	479
137	Catenary optics for achromatic generation of perfect optical angular momentum. *Science Advances*, **2015**, 1, e1500396	14.3	422
136	Multicolor 3D meta-holography by broadband plasmonic modulation. *Science Advances*, **2016**, 2, e1601102	14.3	370
135	Fano resonance in novel plasmonic nanostructures. *Laser and Photonics Reviews*, **2013**, 7, 329-349	8.3	223
134	Hybrid bilayer plasmonic metasurface efficiently manipulates visible light. *Science Advances*, **2016**, 2, e1501168	14.3	218
133	Toward Flexible Surface-Enhanced Raman Scattering (SERS) Sensors for Point-of-Care Diagnostics. *Advanced Science*, **2019**, 6, 1900925	13.6	218
132	Design and fabrication of broadband ultralow reflectivity black Si surfaces by laser micro/nanoprocessing. *Light: Science and Applications*, **2014**, 3, e185-e185	16.7	208
131	Tunable and reconfigurable metasurfaces and metadevices. *Opto-Electronic Advances*, **2018**, 1, 18000901-18000925	6.3	195
130	Switchable Ultrathin Quarter-wave Plate in Terahertz Using Active Phase-change Metasurface. *Scientific Reports*, **2015**, 5, 15020	4.9	189
129	Visible-to-NIR Photon Harvesting: Progressive Engineering of Catalysts for Solar-Powered Environmental Purification and Fuel Production. *Advanced Materials*, **2018**, 30, e1802894	24	158
128	Terahertz All-Dielectric Magnetic Mirror Metasurfaces. *ACS Photonics*, **2016**, 3, 1010-1018	6.3	142
127	Subgroup decomposition of plasmonic resonances in hybrid oligomers: modeling the resonance lineshape. *Nano Letters*, **2012**, 12, 2101-6	11.5	136
126	Microsphere-coupled scanning laser confocal nanoscope for sub-diffraction-limited imaging at 25 nm lateral resolution in the visible spectrum. *ACS Nano*, **2014**, 8, 1809-16	16.7	135
125	Fabrication of wheat grain textured TiO2/CuO composite nanofibers for enhanced solar H2 generation and degradation performance. *Nano Energy*, **2015**, 11, 28-37	17.1	132
124	Shaping a Subwavelength Needle with Ultra-long Focal Length by Focusing Azimuthally Polarized Light. *Scientific Reports*, **2015**, 5, 9977	4.9	124

123	Spoof Plasmon Surfaces: A Novel Platform for THz Sensing. *Advanced Optical Materials*, **2013**, 1, 543-548	8.1	123
122	Ultrahigh-capacity non-periodic photon sieves operating in visible light. *Nature Communications*, **2015**, 6, 7059	17.4	113
121	Spectral Tuning of Localized Surface Phonon Polariton Resonators for Low-Loss Mid-IR Applications. *ACS Photonics*, **2014**, 1, 718-724	6.3	109
120	An ultrathin terahertz quarter-wave plate using planar babinet-inverted metasurface. *Optics Express*, **2015**, 23, 11114-22	3.3	107
119	Ultrasensitive broadband probing of molecular vibrational modes with multifrequency optical antennas. *ACS Nano*, **2013**, 7, 669-75	16.7	106
118	Orbital Angular Momentum Multiplexing and Demultiplexing by a Single Metasurface. *Advanced Optical Materials*, **2017**, 5, 1600502	8.1	104
117	Engineering the phase front of light with phase-change material based planar lenses. *Scientific Reports*, **2015**, 5, 8660	4.9	100
116	A Supercritical Lens Optical Label-Free Microscopy: Sub-Diffraction Resolution and Ultra-Long Working Distance. *Advanced Materials*, **2017**, 29, 1602721	24	96
115	Hierarchical Assembly of SnO2/ZnO Nanostructures for Enhanced Photocatalytic Performance. *Scientific Reports*, **2015**, 5, 11609	4.9	83
114	Tunable near-infrared plasmonic perfect absorber based on phase-change materials. *Photonics Research*, **2015**, 3, 54	6	82
113	Uniaxially Stretched Flexible Surface Plasmon Resonance Film for Versatile Surface Enhanced Raman Scattering Diagnostics. *ACS Applied Materials & Interfaces*, **2017**, 9, 26341-26349	9.5	75
112	Extraordinary optical fields in nanostructures: from sub-diffraction-limited optics to sensing and energy conversion. *Chemical Society Reviews*, **2019**, 48, 2458-2494	58.5	67
111	Planar Diffractive Lenses: Fundamentals, Functionalities, and Applications. *Advanced Materials*, **2018**, 30, e1704556	24	67
110	Preparation and characterization of pore-suspending biomimetic membranes embedded with Aquaporin Z on carboxylated polyethylene glycol polymer cushion. *Soft Matter*, **2011**, 7, 7274	3.6	64
109	Hedgehog Inspired CuO Nanowires/Cu2O Composites for Broadband Visible-Light-Driven Recyclable Surface Enhanced Raman Scattering. *Advanced Optical Materials*, **2018**, 6, 1701167	8.1	63
108	Wettability transition of laser textured brass surfaces inside different mediums. *Applied Surface Science*, **2018**, 427, 369-375	6.7	63
107	Ag-CuO-ZnO metal-semiconductor multiconcentric nanotubes for achieving superior and perdurable photodegradation. *Nanoscale*, **2017**, 9, 11574-11583	7.7	63
106	Hybrid micro/nano-structure formation by angular laser texturing of Si surface for surface enhanced Raman scattering. *Optics Express*, **2016**, 24, 10352-8	3.3	63

105	Microsphere enhanced optical imaging and patterning: From physics to applications. *Applied Physics Reviews*, **2019**, 6, 021304	17.3	60
104	Subwavelength interference of light on structured surfaces. *Advances in Optics and Photonics*, **2018**, 10, 757	16.7	60
103	Graphene-Based Multilayered Metamaterials with Phototunable Architecture for on-Chip Photonic Devices. *ACS Photonics*, **2019**, 6, 1033-1040	6.3	57
102	Plasmonic Nanoantennas for Multispectral Surface-Enhanced Spectroscopies. *Journal of Physical Chemistry C*, **2013**, 117, 18620-18626	3.8	56
101	On-chip discrimination of orbital angular momentum of light with plasmonic nanoslits. *Nanoscale*, **2016**, 8, 2227-33	7.7	54
100	Functional Defective Metal-Organic Coordinated Network of Mesostructured Nanoframes for Enhanced Electrocatalysis. *Advanced Functional Materials*, **2018**, 28, 1704177	15.6	50
99	Nanophotonic-Engineered Photothermal Harnessing for Waste Heat Management and Pyroelectric Generation. *ACS Nano*, **2017**, 11, 10568-10574	16.7	49
98	In situ photo-assisted deposition and photocatalysis of ZnIn2S4/transition metal chalcogenides for enhanced degradation and hydrogen evolution under visible light. *Dalton Transactions*, **2016**, 45, 552-60	4.3	49
97	Resonant Enhancement of Second-Harmonic Generation in the Mid-Infrared Using Localized Surface Phonon Polaritons in Subdiffractional Nanostructures. *Nano Letters*, **2016**, 16, 6954-6959	11.5	47
96	Plasmon-induced optical anisotropy in hybrid graphene-metal nanoparticle systems. *Nano Letters*, **2015**, 15, 3458-64	11.5	40
95	Dynamic 3D meta-holography in visible range with large frame number and high frame rate. *Science Advances*, **2020**, 6, eaba8595	14.3	39
94	Super-focusing of center-covered engineered microsphere. *Scientific Reports*, **2016**, 6, 31637	4.9	37
93	A broadband acoustic metamaterial with impedance matching layer of gradient index. *Applied Physics Letters*, **2017**, 110, 241903	3.4	35
92	Nanosecond laser ablation for enhanced adhesion of CuO nanowires on copper substrate and its application for oil-water separation. *Applied Surface Science*, **2019**, 465, 995-1002	6.7	34
91	Tuning interior nanogaps of double-shelled Au/Ag nanoboxes for surface-enhanced Raman scattering. *Scientific Reports*, **2015**, 5, 8382	4.9	33
90	Enhancement of laser ablation via interacting spatial double-pulse effect. *Opto-Electronic Advances*, **2018**, 1, 18001401-18001406	6.5	33
89	Quasi-Talbot effect of orbital angular momentum beams for generation of optical vortex arrays by multiplexing metasurface design. *Nanoscale*, **2018**, 10, 666-671	7.7	33
88	Study of micro/nanostructures formed by a nanosecond laser in gaseous environments for stainless steel surface coloring. *Applied Surface Science*, **2015**, 328, 405-409	6.7	32

87	Surface coloring by laser irradiation of solid substrates. *APL Photonics*, **2019**, 4, 051101	5.2	31
86	Laser hybrid micro/nano-structuring of Si surfaces in air and its applications for SERS detection. *Scientific Reports*, **2014**, 4, 6657	4.9	31
85	Germanium n+þ junction formation by laser thermal process. *Applied Physics Letters*, **2005**, 87, 173507	3.4	31
84	Self-Organized Periodic Microholes Array Formation on Aluminum Surface via Femtosecond Laser Ablation Induced Incubation Effect. *Advanced Functional Materials*, **2019**, 29, 1903576	15.6	29
83	Creation of a longitudinally polarized photonic nanojet via an engineered microsphere. *Optics Letters*, **2017**, 42, 1444-1447	3	28
82	Recent advances in optical dynamic meta-holography. *Opto-Electronic Advances*, **2022**, 210030-210030	6.5	27
81	Realization of ~10 nm Features on Semiconductor Surfaces via Femtosecond Laser Direct Patterning in Far Field and in Ambient Air. *Nano Letters*, **2020**, 20, 4947-4952	11.5	26
80	Multiband Switchable Terahertz Quarter-Wave Plates via Phase-Change Metasurfaces. *IEEE Photonics Journal*, **2016**, 8, 1-8	1.8	26
79	Orbital angular momentum generation via a spiral phase microsphere. *Optics Letters*, **2018**, 43, 34-37	3	26
78	Evidences for redox reaction driven charge transfer and mass transport in metal-assisted chemical etching of silicon. *Scientific Reports*, **2016**, 6, 36582	4.9	26
77	Plasmon-Enhanced Fluorescence in Coupled Nanostructures and Applications in DNA Detection. *ACS Applied Bio Materials*, **2018**, 1, 118-124	4.1	26
76	Metamaterial and nanomaterial electromagnetic wave absorbers: structures, properties and applications. *Journal of Materials Chemistry C*, **2020**, 8, 12768-12794	7.1	25
75	A highly efficient CMOS nanoplasmonic crystal enhanced slow-wave thermal emitter improves infrared gas-sensing devices. *Scientific Reports*, **2015**, 5, 17451	4.9	25
74	Parallel Laser Micro/Nano-Processing for Functional Device Fabrication. *Laser and Photonics Reviews*, **2020**, 14, 1900062	8.3	24
73	Stacking of colors in exfoliable plasmonic superlattices. *Nanoscale*, **2016**, 8, 18228-18234	7.7	22
72	Terahertz particle-in-liquid sensing with spoof surface plasmon polariton waveguides. *APL Photonics*, **2017**, 2, 116102	5.2	21
71	. *IEEE Journal of Photovoltaics*, **2017**, 7, 493-501	3.7	20
70	Self-regulating reversible photocatalytic-driven chromism of a cavity enhanced optical field TiO2/CuO nanocomposite. *Journal of Materials Chemistry A*, **2017**, 5, 10909-10916	13	20

69	Highly flexible solution processable heterostructured zinc oxide nanowires mesh for environmental clean-up applications. *RSC Advances*, **2014**, 4, 27481-27487	3.7	20
68	Dual-Microstructured Porous, Anisotropic Film for Biomimicking of Endothelial Basement Membrane. *ACS Applied Materials & Interfaces*, **2015**, 7, 13445-56	9.5	20
67	Super-Resolution Long-Depth Focusing by Radially Polarized Light Irradiation Through Plasmonic Lens in Optical Meso-field. *Plasmonics*, **2014**, 9, 55-60	2.4	20
66	2D hydrated layered Ni(OH)2 structure with hollow TiO2 nanocomposite directed chromogenic and catalysis capabilities. *Journal of Materials Chemistry A*, **2016**, 4, 13307-13315	13	20
65	Selective excitation of resonances in gammadion metamaterials for terahertz wave manipulation. *Science China: Physics, Mechanics and Astronomy*, **2015**, 58, 1	3.6	19
64	Chiral Metafoils for Terahertz Broadband High-Contrast Flexible Circular Polarizers. *Physical Review Applied*, **2014**, 2,	4.3	19
63	Hybrid laser precision engineering of transparent hard materials: challenges, solutions and applications. *Light: Science and Applications*, **2021**, 10, 162	16.7	19
62	Direct Laser Microperforation of Bioresponsive Surface-Patterned Films with Through-Hole Arrays for Vascular Tissue-Engineering Application. *ACS Biomaterials Science and Engineering*, **2015**, 1, 1239-1249	5.5	16
61	Coupling effect of spiral-shaped terahertz metamaterials for tunable electromagnetic response. *Applied Physics A: Materials Science and Processing*, **2014**, 115, 25-29	2.6	15
60	Femtosecond Laser Precision Engineering: From Micron, Submicron, to Nanoscale. *Ultrafast Science*, **2021**, 2021, 1-22		15
59	Temperature-controlled photonic nanojet via VO2 coating. *Applied Optics*, **2016**, 55, 3751-6	0.2	15
58	High-aspect-ratio crack-free microstructures fabrication on sapphire by femtosecond laser ablation. *Optics and Laser Technology*, **2020**, 132, 106472	4.2	14
57	Enhancement of pulsed laser ablation assisted with continuous wave laser irradiation. *Science China: Physics, Mechanics and Astronomy*, **2019**, 62, 1	3.6	14
56	Improved optical limiting performance of laser-ablation-generated metal nanoparticles due to silica-microsphere-induced local field enhancement. *Beilstein Journal of Nanotechnology*, **2015**, 6, 1199-204	3	13
55	Enhancement of pulsed laser ablation in environmentally friendly liquid. *Optics Express*, **2014**, 22, 23875-83	3.5	13
54	Selective Wavelength Enhanced Photochemical and Photothermal H2 Generation of Classical Oxide Supported Metal Catalyst. *Advanced Functional Materials*, **2021**, 31, 2104750	15.6	13
53	Directional sliding of water: biomimetic snake scale surfaces. *Opto-Electronic Advances*, **2021**, 4, 210008[illegible]-210008[illegible]2	6.5	13
52	Femtosecond Laser Inscribed Y-Branch Waveguide in Nd:YAG Crystal: Fabrication and Continuous-Wave Lasing. *IEEE Journal of Selected Topics in Quantum Electronics*, **2016**, 22, 227-230	3.8	12

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50	Wavelength-tunable focusing via a Fresnel zone microsphere. *Optics Letters*, **2020**, 45, 852-855	3	11
49	Reliable laser fabrication: the quest for responsive biomaterials surface. *Journal of Materials Chemistry B*, **2018**, 6, 3612-3631	7.3	10
48	Hybrid structures of Fe3O4 and Ag nanoparticles on Si nanopillar arrays substrate for SERS applications. *Materials Chemistry and Physics*, **2018**, 214, 377-382	4.4	10
47	Ultralow broadband optical reflection of silicon nanostructured surfaces coupled with antireflection coating. *Journal of Materials Science*, **2012**, 47, 1594-1597	4.3	10
46	Quantification of a cardiac biomarker in human serum using extraordinary optical transmission (EOT). *PLoS ONE*, **2015**, 10, e0120974	3.7	10
45	Metasurface wave in planar nano-photonics. *Science Bulletin*, **2016**, 61, 112-113	10.6	10
44	Impact of Laser-Induced Oxidation on Silicon Wafer Solar Cells Performance. *IEEE Journal of Photovoltaics*, **2016**, 6, 617-623	3.7	10
43	Scaffold with Micro/Macro-Architecture for Myocardial Alignment Engineering into Complex 3D Cell Patterns. *Advanced Healthcare Materials*, **2019**, 8, e1901015	10.1	9
42	Superresolution microscopy imaging based on full-wave modeling and image reconstruction. *Optica* , **2016**, 3, 1339	8.6	9
41	Morphology and electrical characteristics of polymer: Fullerene films deposited by electrospray. *Solar Energy Materials and Solar Cells*, **2018**, 183, 137-145	6.4	8
40	Metasurface spatiotemporal dynamics and asymmetric photonic spin-orbit interactions mediated vector-polarization optical chaos. *Physical Review Research*, **2021**, 3,	3.9	8
39	One-step fabrication of metal nanoparticles on polymer film by femtosecond LIPAA method for SERS detection. *Talanta*, **2021**, 228, 122204	6.2	8
38	Fabrication of high hardness microarray diamond tools by femtosecond laser ablation. *Optics and Laser Technology*, **2021**, 140, 107014	4.2	8
37	The art of laser ablation in aeroengine: The crown jewel of modern industry. *Journal of Applied Physics*, **2020**, 127, 080902	2.5	7
36	Enhancement of femtosecond laser-induced surface ablation via temporal overlapping double-pulse irradiation. *Photonics Research*, **2020**, 8, 271	6	7
35	Total Reflection Metasurface with Pure Modulated Signal. *Advanced Optical Materials*, **2019**, 7, 1801130	8.1	7
34	Formation of a three-dimensional bottle beam via an engineered microsphere. *Photonics Research*, **2021**, 9, 1598	6	7

33	Inversion Symmetry Breaking in Lithium Intercalated Graphitic Materials. *ACS Applied Materials & Interfaces*, **2020**, 12, 28561-28567	9.5	6
32	Ultralong light focusing via negative axicon microsphere. *Engineering Research Express*, **2020**, 2, 015044	0.9	6
31	Tunable Picosecond Laser Pulses via the Contrast of Two Reverse Saturable Absorption Phases in a Waveguide Platform. *Scientific Reports*, **2016**, 6, 26176	4.9	6
30	Realization of adhesion enhancement of CuO nanowires growth on copper substrate by laser texturing. *Optics and Laser Technology*, **2019**, 119, 105612	4.2	6
29	Formation of polarization-dependent optical vortex beams via an engineered microsphere. *Optics Express*, **2021**, 29, 11121-11131	3.3	6
28	Sound energy enhancement via impedance-matched anisotropic metamaterial. *Materials and Design*, **2021**, 197, 109254	8.1	6
27	Wide bandwidth acoustic transmission via coiled-up metamaterial with impedance matching layers. *Science China: Physics, Mechanics and Astronomy*, **2019**, 62, 1	3.6	5
26	Tuning Optical Nonlinearity of Laser-Ablation-Synthesized Silicon Nanoparticles via Doping Concentration. *Journal of Nanomaterials*, **2014**, 2014, 1-7	3.2	5
25	Nanomaterials: Laser-Based Processing in Liquid Media **2012**, 317-494		5
24	Anisotropic Superhydrophobic Properties of Bioinspired Surfaces by Laser Ablation of Metal Substrate inside Water. *Advanced Materials Interfaces*, **2021**, 8, 2100555	4.6	5
23	Plasmonic bimetallic nanodisk arrays for DNA conformation sensing. *Nanoscale*, **2019**, 11, 19291-19296	7.7	4
22	Laser Nano-Patterning for Large Area Nanostructure Fabrication. *International Journal of Optomechatronics*, **2008**, 2, 382-389	3.5	4
21	Solar-Energy Capture: Visible-to-NIR Photon Harvesting: Progressive Engineering of Catalysts for Solar-Powered Environmental Purification and Fuel Production (Adv. Mater. 47/2018). *Advanced Materials*, **2018**, 30, 1870363	24	4
20	Broadband acoustic amplification via impedance-matched meta-structure resonator. *Applied Physics Express*, **2018**, 11, 117301	2.4	4
19	Enhancement of pulsed laser-induced silicon plasma-assisted quartz ablation by continuous wave laser irradiation. *Journal of Laser Applications*, **2020**, 32, 022064	2.1	3
18	Tunable Hierarchical Nanostructures on Micro-Conical Arrays of Laser Textured TC4 Substrate by Hydrothermal Treatment for Enhanced Anti-Icing Property. *Coatings*, **2020**, 10, 450	2.9	3
17	Diffractive Efficiency Optimization in Metasurface Design via Electromagnetic Coupling Compensation. *Materials*, **2019**, 12,	3.5	2
16	Inclined space-coiling metamaterials for highly efficient sound energy transmission at various incident angles. *Journal of Applied Physics*, **2020**, 127, 194901	2.5	2

15	Laser interaction with materials and its applications in precision engineering. *Scientia Sinica: Physica, Mechanica Et Astronomica*, **2017**, 47, 024201	1.5	2
14	Near-perfect microlenses based on graphene microbubbles. *Advanced Photonics*, **2020**, 2,	8.1	2
13	Surface Nano-fabrication by Laser Precision Engineering. *The Review of Laser Engineering*, **2008**, 36, 1184-1187		2
12	Tunable Coloring via Post-Thermal Annealing of Laser-Processed Metal Surface. *Applied Sciences (Switzerland)*, **2018**, 8, 1716	2.6	2
11	Fabrication of SERS substrates by femtosecond LIPAA for detection of contaminants in foods. *Optics and Laser Technology*, **2022**, 151, 107954	4.2	2
10	Using Extraordinary Optical Transmission to Quantify Cardiac Biomarkers in Human Serum. *Journal of Visualized Experiments*, **2017**,	1.6	1
9	Investigation on Terahertz waveplate at upper Terahertz band **2011**,		1
8	Hybrid Plasmonics and Two-Dimensional Materials: Theory and Applications. *Journal of Molecular and Engineering Materials*, **2020**, 08, 2030001	1.3	1
7	Realization of noncontact confocal optical microsphere imaging microscope. *Microscopy Research and Technique*, **2021**, 84, 2381-2387	2.8	1
6	Tissue Engineering: Scaffold with Micro/Macro-Architecture for Myocardial Alignment Engineering into Complex 3D Cell Patterns (Adv. Healthcare Mater. 22/2019). *Advanced Healthcare Materials*, **2019**, 8, 1970087	10.1	1
5	Synthetic Plasmonic Nanocircuits and the Evolution of Their Correlated Spatial Arrangement and Resonance Spectrum. *ACS Photonics*, **2021**, 8, 166-174	6.3	1
4	Enhancing SERS detection on a biocompatible metallic substrate for diabetes diagnosing. *Optics Letters*, **2021**, 46, 3801-3804	3	1
3	Optical Quality Laser Polishing of CVD Diamond by UV Pulsed Laser Irradiation. *Advanced Optical Materials*,2100537	8.1	1
2	Laser Surface Structuring of Semiconductors and Functionalization **2021**, 1017-1061		
1	Anisotropic Superhydrophobic Properties of Bioinspired Surfaces by Laser Ablation of Metal Substrate inside Water (Adv. Mater. Interfaces 16/2021). *Advanced Materials Interfaces*, **2021**, 8, 2170090	4.6	