Minghui Hong

List of Publications by Year
in descending order

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		36203	30848
147	11,033	51	102
papers	citations	h-index	g-index

149	149	149	11784
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Temporal full-colour tuning through non-steady-state upconversion. Nature Nanotechnology, 2015, 10, 237-242.	15.6	834
2	Sub-diffractional volume-confined polaritons in the natural hyperbolic material hexagonal boron nitride. Nature Communications, 2014, 5, 5221.	5.8	686
3	Optical virtual imaging at 50 nm lateral resolution with a white-light nanoscope. Nature Communications, 2011, 2, 218.	5.8	641
4	Catenary optics for achromatic generation of perfect optical angular momentum. Science Advances, 2015, 1, e1500396.	4.7	539
5	Multicolor 3D meta-holography by broadband plasmonic modulation. Science Advances, 2016, 2, e1601102.	4.7	481
6	Toward Flexible Surfaceâ€Enhanced Raman Scattering (SERS) Sensors for Pointâ€ofâ€Care Diagnostics. Advanced Science, 2019, 6, 1900925.	5.6	396
7	Hybrid bilayer plasmonic metasurface efficiently manipulates visible light. Science Advances, 2016, 2, e1501168.	4.7	278
8	Tunable and reconfigurable metasurfaces and metadevices. Opto-Electronic Advances, 2018, 1, 18000901-18000925.	6.4	272
9	Fano resonance in novel plasmonic nanostructures. Laser and Photonics Reviews, 2013, 7, 329-349.	4.4	261
10	Design and fabrication of broadband ultralow reflectivity black Si surfaces by laser micro/nanoprocessing. Light: Science and Applications, 2014, 3, e185-e185.	7.7	257
11	Switchable Ultrathin Quarter-wave Plate in Terahertz Using Active Phase-change Metasurface. Scientific Reports, 2015, 5, 15020.	1.6	238
12	Visibleâ€toâ€NIR Photon Harvesting: Progressive Engineering of Catalysts for Solarâ€Powered Environmental Purification and Fuel Production. Advanced Materials, 2018, 30, e1802894.	11.1	237
13	Microsphere-Coupled Scanning Laser Confocal Nanoscope for Sub-Diffraction-Limited Imaging at 25 nm Lateral Resolution in the Visible Spectrum. ACS Nano, 2014, 8, 1809-1816.	7.3	179
14	Terahertz All-Dielectric Magnetic Mirror Metasurfaces. ACS Photonics, 2016, 3, 1010-1018.	3.2	177
15	Spoof Plasmon Surfaces: A Novel Platform for THz Sensing. Advanced Optical Materials, 2013, 1, 543-548.	3.6	165
16	Fabrication of wheat grain textured TiO2/CuO composite nanofibers for enhanced solar H2 generation and degradation performance. Nano Energy, 2015, 11, 28-37.	8.2	157
17	Ultrahigh-capacity non-periodic photon sieves operating in visible light. Nature Communications, 2015, 6, 7059.	5.8	154
18	Shaping a Subwavelength Needle with Ultra-long Focal Length by Focusing Azimuthally Polarized Light. Scientific Reports, 2015, 5, 9977.	1.6	151

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19	Orbital Angular Momentum Multiplexing and Demultiplexing by a Single Metasurface. Advanced Optical Materials, 2017, 5, 1600502.	3.6	150
20	An ultrathin terahertz quarter-wave plate using planar babinet-inverted metasurface. Optics Express, 2015, 23, 11114.	1.7	145
21	Subgroup Decomposition of Plasmonic Resonances in Hybrid Oligomers: Modeling the Resonance Lineshape. Nano Letters, 2012, 12, 2101-2106.	4.5	144
22	A Supercritical Lens Optical Labelâ€Free Microscopy: Subâ€Diffraction Resolution and Ultraâ€Long Working Distance. Advanced Materials, 2017, 29, 1602721.	11.1	141
23	Spectral Tuning of Localized Surface Phonon Polariton Resonators for Low-Loss Mid-IR Applications. ACS Photonics, 2014, 1, 718-724.	3.2	134
24	Ultrasensitive Broadband Probing of Molecular Vibrational Modes with Multifrequency Optical Antennas. ACS Nano, 2013, 7, 669-675.	7.3	125
25	Engineering the Phase Front of Light with Phase-Change Material Based Planar lenses. Scientific Reports, 2015, 5, 8660.	1.6	114
26	Recent advances in optical dynamic meta-holography. Opto-Electronic Advances, 2021, 4, 210030-210030.	6.4	113
27	Tunable near-infrared plasmonic perfect absorber based on phase-change materials. Photonics Research, 2015, 3, 54.	3.4	111
28	Microsphere enhanced optical imaging and patterning: From physics to applications. Applied Physics Reviews, 2019, 6, .	5.5	106
29	Planar Diffractive Lenses: Fundamentals, Functionalities, and Applications. Advanced Materials, 2018, 30, e1704556.	11.1	105
30	Graphene-Based Multilayered Metamaterials with Phototunable Architecture for on-Chip Photonic Devices. ACS Photonics, 2019, 6, 1033-1040.	3.2	98
31	Agâ€“CuOâ€“ZnO metalâ€“semiconductor multiconcentric nanotubes for achieving superior and perdurable photodegradation. Nanoscale, 2017, 9, 11574-11583.	2.8	96
32	Hierarchical Assembly of SnO2/ZnO Nanostructures for Enhanced Photocatalytic Performance. Scientific Reports, 2015, 5, 11609.	1.6	94
33	Wettability transition of laser textured brass surfaces inside different mediums. Applied Surface Science, 2018, 427, 369-375.	3.1	93
34	Uniaxially Stretched Flexible Surface Plasmon Resonance Film for Versatile Surface Enhanced Raman Scattering Diagnostics. ACS Applied Materials & Interfaces, 2017, 9, 26341-26349.	4.0	91
35	Extraordinary optical fields in nanostructures: from sub-diffraction-limited optics to sensing and energy conversion. Chemical Society Reviews, 2019, 48, 2458-2494.	18.7	91
36	Femtosecond Laser Precision Engineering: From Micron, Submicron, to Nanoscale. Ultrafast Science, 2021, 2021, .	5.8	90

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37	Preparation and characterization of pore-suspending biomimetic membranes embedded with Aquaporin Z on carboxylated polyethylene glycol polymer cushion. Soft Matter, 2011, 7, 7274.	1.2	89
38	Hedgehog Inspired CuO Nanowires/Cu₂O Composites for Broadband Visibleâ€Lightâ€Driven Recyclable Surface Enhanced Raman Scattering. Advanced Optical Materials, 2018, 6, 1701167.	3.6	82
39	Hybrid laser precision engineering of transparent hard materials: challenges, solutions and applications. Light: Science and Applications, 2021, 10, 162.	7.7	82
40	Dynamic 3D meta-holography in visible range with large frame number and high frame rate. Science Advances, 2020, 6, eaba8595.	4.7	78
41	Hybrid micro/nano-structure formation by angular laser texturing of Si surface for surface enhanced Raman scattering. Optics Express, 2016, 24, 10352.	1.7	77
42	On-chip discrimination of orbital angular momentum of light with plasmonic nanoslits. Nanoscale, 2016, 8, 2227-2233.	2.8	76
43	Subwavelength interference of light on structured surfaces. Advances in Optics and Photonics, 2018, 10, 757.	12.1	76
44	Nanophotonic-Engineered Photothermal Harnessing for Waste Heat Management and Pyroelectric Generation. ACS Nano, 2017, 11, 10568-10574.	7.3	75
45	Plasmonic Nanoantennas for Multispectral Surface-Enhanced Spectroscopies. Journal of Physical Chemistry C, 2013, 117, 18620-18626.	1.5	71
46	Functional Defective Metalâ€Organic Coordinated Network of Mesostructured Nanoframes for Enhanced Electrocatalysis. Advanced Functional Materials, 2018, 28, 1704177.	7.8	68
47	Surface coloring by laser irradiation of solid substrates. APL Photonics, 2019, 4, 051101.	3.0	66
48	Parallel Laser Micro/Nanoâ€Processing for Functional Device Fabrication. Laser and Photonics Reviews, 2020, 14, 1900062.	4.4	64
49	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, 552-560.	1.6	61
50	Realization of â¼10 nm Features on Semiconductor Surfaces via Femtosecond Laser Direct Patterning in Far Field and in Ambient Air. Nano Letters, 2020, 20, 4947-4952.	4.5	55
51	Resonant Enhancement of Second-Harmonic Generation in the Mid-Infrared Using Localized Surface Phonon Polaritons in Subdiffractional Nanostructures. Nano Letters, 2016, 16, 6954-6959.	4.5	53
52	Quasi-Talbot effect of orbital angular momentum beams for generation of optical vortex arrays by multiplexing metasurface design. Nanoscale, 2018, 10, 666-671.	2.8	53
53	Laser Hybrid Micro/nano-structuring of Si Surfaces in Air and its Applications for SERS Detection. Scientific Reports, 2014, 4, 6657.	1.6	51
54	A broadband acoustic metamaterial with impedance matching layer of gradient index. Applied Physics Letters, 2017, 110, .	1.5	51

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55	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.	3.1	50
56	High-aspect-ratio crack-free microstructures fabrication on sapphire by femtosecond laser ablation. Optics and Laser Technology, 2020, 132, 106472.	2.2	50
57	Plasmon-Induced Optical Anisotropy in Hybrid Grapheneâ€“Metal Nanoparticle Systems. Nano Letters, 2015, 15, 3458-3464.	4.5	48
58	Selective Wavelength Enhanced Photochemical and Photothermal H₂ Generation of Classical Oxide Supported Metal Catalyst. Advanced Functional Materials, 2021, 31, 2104750.	7.8	46
59	Selfâ€Organized Periodic Microholes Array Formation on Aluminum Surface via Femtosecond Laser Ablation Induced Incubation Effect. Advanced Functional Materials, 2019, 29, 1903576.	7.8	45
60	Enhancement of laser ablation via interacting spatial double-pulse effect. Opto-Electronic Advances, 2018, 1, 18001401-18001406.	6.4	45
61	A highly efficient CMOS nanoplasmonic crystal enhanced slow-wave thermal emitter improves infrared gas-sensing devices. Scientific Reports, 2015, 5, 17451.	1.6	43
62	Study of micro/nanostructures formed by a nanosecond laser in gaseous environments for stainless steel surface coloring. Applied Surface Science, 2015, 328, 405-409.	3.1	43
63	Super-focusing of center-covered engineered microsphere. Scientific Reports, 2016, 6, 31637.	1.6	43
64	Directional sliding of water: biomimetic snake scale surfaces. Opto-Electronic Advances, 2021, 4, 210008-210008.	6.4	43
65	Plasmon-Enhanced Fluorescence in Coupled Nanostructures and Applications in DNA Detection. ACS Applied Bio Materials, 2018, 1, 118-124.	2.3	40
66	Metamaterial and nanomaterial electromagnetic wave absorbers: structures, properties and applications. Journal of Materials Chemistry C, 2020, 8, 12768-12794.	2.7	40
67	Tuning Interior Nanogaps of Double-shelled Au/Ag Nanoboxes for Surface-Enhanced Raman Scattering. Scientific Reports, 2015, 5, 8382.	1.6	35
68	Evidences for redox reaction driven charge transfer and mass transport in metal-assisted chemical etching of silicon. Scientific Reports, 2016, 6, 36582.	1.6	34
69	Multiband Switchable Terahertz Quarter-Wave Plates via Phase-Change Metasurfaces. IEEE Photonics Journal, 2016, 8, 1-8.	1.0	34
70	Orbital angular momentum generation via a spiral phase microsphere. Optics Letters, 2018, 43, 34.	1.7	34
71	Terahertz particle-in-liquid sensing with spoof surface plasmon polariton waveguides. APL Photonics, 2017, 2, .	3.0	33
72	Germanium n+âˆ•p junction formation by laser thermal process. Applied Physics Letters, 2005, 87, 173507.	1.5	32

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73	Creation of a longitudinally polarized photonic nanojet via an engineered microsphere. Optics Letters, 2017, 42, 1444.	1.7	30
74	Fabrication of high hardness microarray diamond tools by femtosecond laser ablation. Optics and Laser Technology, 2021, 140, 107014.	2.2	29
75	Super-Resolution Long-Depth Focusing by Radially Polarized Light Irradiation Through Plasmonic Lens in Optical Meso-field. Plasmonics, 2014, 9, 55-60.	1.8	28
76	Stacking of colors in exfoliable plasmonic superlattices. Nanoscale, 2016, 8, 18228-18234.	2.8	27
77	Dual-Microstructured Porous, Anisotropic Film for Biomimicking of Endothelial Basement Membrane. ACS Applied Materials & Interfaces, 2015, 7, 13445-13456.	4.0	26
78	Periodic Upright Nanopyramids for Light Management Applications in Ultrathin Crystalline Silicon Solar Cells. IEEE Journal of Photovoltaics, 2017, 7, 493-501.	1.5	26
79	Chiral Metafoils for Terahertz Broadband High-Contrast Flexible Circular Polarizers. Physical Review Applied, 2014, 2, .	1.5	25
80	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.	5.2	24
81	One-step fabrication of metal nanoparticles on polymer film by femtosecond LIPAA method for SERS detection. Talanta, 2021, 228, 122204.	2.9	24
82	Highly flexible solution processable heterostructured zinc oxide nanowires mesh for environmental clean-up applications. RSC Advances, 2014, 4, 27481-27487.	1.7	23
83	Self-regulating reversible photocatalytic-driven chromism of a cavity enhanced optical field TiO₂/CuO nanocomposite. Journal of Materials Chemistry A, 2017, 5, 10909-10916.	5.2	23
84	Microsphereâ€”Toward Future of Optical Microscopes. IScience, 2020, 23, 101211.	1.9	23
85	Enhancement of pulsed laser ablation assisted with continuous wave laser irradiation. Science China: Physics, Mechanics and Astronomy, 2019, 62, 1.	2.0	22
86	Selective excitation of resonances in gammadion metamaterials for terahertz wave manipulation. Science China: Physics, Mechanics and Astronomy, 2015, 58, 1.	2.0	21
87	Anisotropic Superhydrophobic Properties of Bioinspired Surfaces by Laser Ablation of Metal Substrate inside Water. Advanced Materials Interfaces, 2021, 8, 2100555.	1.9	21
88	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.	2.6	20
89	The art of laser ablation in aeroengine: The crown jewel of modern industry. Journal of Applied Physics, 2020, 127, .	1.1	20
90	Enhancement of femtosecond laser-induced surface ablation via temporal overlapping double-pulse irradiation. Photonics Research, 2020, 8, 271.	3.4	20

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91	Improved optical limiting performance of laser-ablation-generated metal nanoparticles due to silica-microsphere-induced local field enhancement. Beilstein Journal of Nanotechnology, 2015, 6, 1199-1204.	1.5	17
92	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.	1.9	17
93	Hybrid structures of Fe3O4 and Ag nanoparticles on Si nanopillar arrays substrate for SERS applications. Materials Chemistry and Physics, 2018, 214, 377-382.	2.0	17
94	Scaffold with Micro/Macroâ€Architecture for Myocardial Alignment Engineering into Complex 3D Cell Patterns. Advanced Healthcare Materials, 2019, 8, e1901015.	3.9	17
95	Optical Quality Laser Polishing of CVD Diamond by UV Pulsed Laser Irradiation. Advanced Optical Materials, 2021, 9, 2100537.	3.6	17
96	Sound energy enhancement via impedance-matched anisotropic metamaterial. Materials and Design, 2021, 197, 109254.	3.3	16
97	Wavelength-tunable focusing via a Fresnel zone microsphere. Optics Letters, 2020, 45, 852.	1.7	16
98	Coupling effect of spiral-shaped terahertz metamaterials for tunable electromagnetic response. Applied Physics A: Materials Science and Processing, 2014, 115, 25-29.	1.1	15
99	Temperature-controlled photonic nanojet via VO_2 coating. Applied Optics, 2016, 55, 3751.	2.1	15
100	Formation of a three-dimensional bottle beam via an engineered microsphere. Photonics Research, 2021, 9, 1598.	3.4	15
101	Reliable laser fabrication: the quest for responsive biomaterials surface. Journal of Materials Chemistry B, 2018, 6, 3612-3631.	2.9	14
102	Realization of adhesion enhancement of CuO nanowires growth on copper substrate by laser texturing. Optics and Laser Technology, 2019, 119, 105612.	2.2	14
103	Enhancement of pulsed laser ablation in environmentally friendly liquid. Optics Express, 2014, 22, 23875.	1.7	13
104	Metasurface spatiotemporal dynamics and asymmetric photonic spin-orbit interactions mediated vector-polarization optical chaos. Physical Review Research, 2021, 3, .	1.3	13
105	Superresolution microscopy imaging based on full-wave modeling and image reconstruction. Optica, 2016, 3, 1339.	4.8	12
106	Breaking the diffraction limit in far field by planar metalens. Science China: Physics, Mechanics and Astronomy, 2017, 60, 1.	2.0	12
107	Quantification of a Cardiac Biomarker in Human Serum Using Extraordinary Optical Transmission (EOT). PLoS ONE, 2015, 10, e0120974.	1.1	12
108	Tunable Hierarchical Nanostructures on Micro-Conical Arrays of Laser Textured TC4 Substrate by Hydrothermal Treatment for Enhanced Anti-Icing Property. Coatings, 2020, 10, 450.	1.2	12

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109	Ultralow broadband optical reflection of silicon nanostructured surfaces coupled with antireflection coating. Journal of Materials Science, 2012, 47, 1594-1597.	1.7	11
110	Metasurface wave in planar nano-photonics. Science Bulletin, 2016, 61, 112-113.	4.3	11
111	Tunable Picosecond Laser Pulses via the Contrast of Two Reverse Saturable Absorption Phases in a Waveguide Platform. Scientific Reports, 2016, 6, 26176.	1.6	11
112	Morphology and electrical characteristics of polymer: Fullerene films deposited by electrospray. Solar Energy Materials and Solar Cells, 2018, 183, 137-145.	3.0	11
113	Total Reflection Metasurface with Pure Modulated Signal. Advanced Optical Materials, 2019, 7, 1801130.	3.6	11
114	Formation of polarization-dependent optical vortex beams via an engineered microsphere. Optics Express, 2021, 29, 11121.	1.7	11
115	Impact of Laser-Induced Oxidation on Silicon Wafer Solar Cellsâ€™ Performance. IEEE Journal of Photovoltaics, 2016, 6, 617-623.	1.5	10
116	Plasmonic bimetallic nanodisk arrays for DNA conformation sensing. Nanoscale, 2019, 11, 19291-19296.	2.8	10
117	Near-perfect microlenses based on graphene microbubbles. Advanced Photonics, 2020, 2, .	6.2	10
118	Functional nonlinear optical nanoparticles synthesized by laser ablation. , 2022, 1, 210007-210007.		10
119	Tuning Optical Nonlinearity of Laser-Ablation-Synthesized Silicon Nanoparticles via Doping Concentration. Journal of Nanomaterials, 2014, 2014, 1-7.	1.5	9
120	Wide bandwidth acoustic transmission via coiled-up metamaterial with impedance matching layers. Science China: Physics, Mechanics and Astronomy, 2019, 62, 1.	2.0	9
121	Inversion Symmetry Breaking in Lithium Intercalated Graphitic Materials. ACS Applied Materials & Interfaces, 2020, 12, 28561-28567.	4.0	9
122	Solarâ€Energy Capture: Visibleâ€toâ€NIR Photon Harvesting: Progressive Engineering of Catalysts for Solarâ€Powered Environmental Purification and Fuel Production (Adv. Mater. 47/2018). Advanced Materials, 2018, 30, 1870363.	11.1	7
123	Realization of <scp>noncontact</scp> confocal optical microsphere imaging microscope. Microscopy Research and Technique, 2021, 84, 2381-2387.	1.2	7
124	Broadband acoustic amplification via impedance-matched meta-structure resonator. Applied Physics Express, 2018, 11, 117301.	1.1	6
125	Ultralong light focusing via negative axicon microsphere. Engineering Research Express, 2020, 2, 015044.	0.8	6
126	Enhancement of pulsed laser-induced silicon plasma-assisted quartz ablation by continuous wave laser irradiation. Journal of Laser Applications, 2020, 32, .	0.8	6

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127	Synthetic Plasmonic Nanocircuits and the Evolution of Their Correlated Spatial Arrangement and Resonance Spectrum. ACS Photonics, 2021, 8, 166-174.	3.2	6
128	Fabrication of SERS substrates by femtosecond LIPAA for detection of contaminants in foods. Optics and Laser Technology, 2022, 151, 107954.	2.2	6
129	Tunable Coloring via Post-Thermal Annealing of Laser-Processed Metal Surface. Applied Sciences (Switzerland), 2018, 8, 1716.	1.3	5
130	Diffractive Efficiency Optimization in Metasurface Design via Electromagnetic Coupling Compensation. Materials, 2019, 12, 1005.	1.3	5
131	Laser Nano-Patterning for Large Area Nanostructure Fabrication. International Journal of Optomechatronics, 2008, 2, 382-389.	3.3	4
132	Hybrid Plasmonics and Two-Dimensional Materials: Theory and Applications. Journal of Molecular and Engineering Materials, 2020, 08, 2030001.	0.9	4
133	Enhancing SERS detection on a biocompatible metallic substrate for diabetes diagnosing. Optics Letters, 2021, 46, 3801.	1.7	4
134	3D-Printed Regular-Porous Structure with Trapezoidal Multiple Microchannels as Combustion Reaction Support for the Autothermal Methanol Steam Reforming Microreactor for Hydrogen Production. Industrial & Engineering Chemistry Research, 2022, 61, 2443-2454.	1.8	4
135	Investigation on Terahertz waveplate at upper Terahertz band. , 2011, , .		3
136	Laser interaction with materials and its applications in precision engineering. Scientia Sinica: Physica, Mechanica Et Astronomica, 2017, 47, 024201.	0.2	3
137	Tissue Engineering: Scaffold with Micro/Macroâ€Architecture for Myocardial Alignment Engineering into Complex 3D Cell Patterns (Adv. Healthcare Mater. 22/2019). Advanced Healthcare Materials, 2019, 8, 1970087.	3.9	2
138	Inclined space-coiling metamaterials for highly efficient sound energy transmission at various incident angles. Journal of Applied Physics, 2020, 127, 194901.	1.1	2
139	Surface Nano-fabrication by Laser Precision Engineering. The Review of Laser Engineering, 2008, 36, 1184-1187.	0.0	2
140	Femtosecond laser irradiation for functional micro-/nanostructure fabrication. , 2009, , .		1
141	Using Extraordinary Optical Transmission to Quantify Cardiac Biomarkers in Human Serum. Journal of Visualized Experiments, 2017, , .	0.2	1
142	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.	1.9	1
143	Special issue on the 100th anniversary of Xiamen University. Light: Science and Applications, 2021, 10, 185.	7.7	1
144	Laser Surface Structuring of Semiconductors and Functionalization. , 2021, , 1017-1061.		1

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145	Frequency Controllable Metamaterial Absorber by an Added Dielectric Layer. , 2011, , .		0
146	Polarization splitter using horizontal slot waveguide. , 2012, , .		0
147	Graphene-based layered metamaterial platform for functional photonic devices. , 2019, , .		0