Wenjun Wang

List of Publications by Year
in descending order

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66	1,687	218677	302126
papers	citations	26 h-index	39 g-index

67	67	67	1300
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Pseudo-topotactic conversion of carbon nanotubes to T-carbon nanowires under picosecond laser irradiation in methanol. Nature Communications, 2017, 8, 683.	12.8	184
2	Laser-induced graphene: preparation, functionalization and applications. Materials Technology, 2018, 33, 340-356.	3.0	92
3	Artificial Compound Eyes Prepared by a Combination of Air-Assisted Deformation, Modified Laser Swelling, and Controlled Crystal Growth. ACS Nano, 2019, 13, 114-124.	14.6	89
4	Effect of the surface microstructure ablated by femtosecond laser on the bonding strength of EBCs for SiC/SiC composites. Optics Communications, 2018, 424, 137-144.	2.1	71
5	Formation of hierarchical porous graphene films with defects using a nanosecond laser on polyimide sheet. Applied Surface Science, 2017, 419, 893-900.	6.1	47
6	Nanospot welding of carbon nanotubes using near-field enhancement effect of AFM probe irradiated by optical fiber probe laser. RSC Advances, 2015, 5, 56677-56685.	3.6	45
7	Fabrication of broadband antireflective black metal surfaces with ultra-light-trapping structures by picosecond laser texturing and chemical fluorination. Applied Physics B: Lasers and Optics, 2016, 122, 1.	2.2	43
8	Ablation experiment and threshold calculation of titanium alloy irradiated by ultra-fast pulse laser. AIP Advances, 2014, 4, .	1.3	42
9	Recent Progress in the Preparation of Horizontally Ordered Carbon Nanotube Assemblies from Solution. Physica Status Solidi (A) Applications and Materials Science, 2018, 215, 1700719.	1.8	41
10	Fabrication of Artificial Compound Eye with Controllable Field of View and Improved Imaging. ACS Applied Materials & Interfaces, 2020, 12, 8870-8878.	8.0	41
11	Fabrication of superhydrophilic or superhydrophobic self-cleaning metal surfaces using picosecond laser pulses and chemical fluorination. Radiation Effects and Defects in Solids, 2016, 171, 461-473.	1.2	37
12	Ablation and morphological evolution of micro-holes in stainless steel with picosecond laser pulses. International Journal of Advanced Manufacturing Technology, 2015, 80, 1713-1720.	3.0	36
13	Fabrication of Hierarchical Micro/Nano Compound Eyes. ACS Applied Materials & Interfaces, 2019, 11, 34507-34516.	8.0	36
14	Investigating interfacial contact configuration and behavior of single-walled carbon nanotube-based nanodevice with atomistic simulations. Journal of Nanoparticle Research, 2017, 19, 1.	1.9	35
15	Nanoscale Electrodes for Flexible Electronics by Swelling Controlled Cracking. Advanced Materials, 2016, 28, 6337-6344.	21.0	34
16	Control of microstructure shape and morphology in femtosecond laser ablation of imprint rollers. International Journal of Advanced Manufacturing Technology, 2009, 41, 504-512.	3.0	33
17	Nanojoining of crossed Ag nanowires: a molecular dynamics study. Journal of Nanoparticle Research, 2016, 18, 1.	1.9	33
18	New optical near-field nanolithography with optical fiber probe laser irradiating atomic force microscopy probe tip. Integrated Ferroelectrics, 2016, 169, 124-132.	0.7	33

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19	An experimental investigation into the defects of laser-drilled holes in thermal barrier coated Inconel 718 superalloys. International Journal of Advanced Manufacturing Technology, 2018, 96, 1467-1481.	3.0	33
20	Nanofabrication with the thermal AFM metallic tip irradiated by continuous laser. Integrated Ferroelectrics, 2017, 179, 140-147.	0.7	32
21	Atomistic simulations on the axial nanowelding configuration and contact behavior between Ag nanowire and single-walled carbon nanotubes. Journal of Nanoparticle Research, 2017, 19, 1.	1.9	31
22	Process research on micro-machining diamond microgroove by femtosecond laser. Integrated Ferroelectrics, 2019, 198, 9-19.	0.7	31
23	Local Field Enhancement Characteristics in a Tapered Metal-Coated Optical Fiber Probe for Nanolithography. Integrated Ferroelectrics, 2015, 164, 90-97.	0.7	28
24	Near-field optical characteristics of Ag nanoparticle within the near-field scope of a metallic AFM tip irradiated by SNOM laser. Integrated Ferroelectrics, 2017, 178, 117-124.	0.7	28
25	Research on the mechanism of micromachining of CVD diamond by femtosecond laser. Ferroelectrics, 2019, 549, 266-275.	0.6	28
26	Broad-Band Ultra-Low-Reflectivity Multiscale Microâ€“Nano Structures by the Combination of Femtosecond Laser Ablation and In Situ Deposition. ACS Applied Materials & Interfaces, 2020, 12, 49265-49274.	8.0	28
27	Graphitized hierarchically porous carbon nanosheets derived from bakelite induced by high-repetition picosecond laser. Applied Surface Science, 2018, 450, 155-163.	6.1	27
28	Atomic-Scale Simulation of the Contact Behavior and Mechanism of the SWNTâ€“AgNW Heterostructure. Journal of Physical Chemistry C, 2019, 123, 19693-19703.	3.1	27
29	Water-assisted femtosecond laser drilling of 4H-SiC to eliminate cracks and surface material shedding. International Journal of Advanced Manufacturing Technology, 2021, 112, 553-562.	3.0	27
30	Experimental characterizations of burr deposition in Nd:YAG laser drilling: a parametric study. International Journal of Advanced Manufacturing Technology, 2015, 76, 1529-1542.	3.0	26
31	Fractal titanium oxide under inverse 10-ns laser deposition in air and water. Applied Physics A: Materials Science and Processing, 2017, 123, 1.	2.3	26
32	Nanomanipulation of Carbon Nanotubes with the Vector Scanning Mode of Atomic Force Microscope. Integrated Ferroelectrics, 2015, 163, 81-88.	0.7	25
33	3-D finite element calculation of electric field enhancement for nanostructures fabrication mechanism on silicon surface with AFM tip induced local anodic oxidation. Integrated Ferroelectrics, 2018, 190, 129-141.	0.7	25
34	A Molecular Dynamics Study on Selfâ€Assembly of Singleâ€Walled Carbon Nanotubes: From Molecular Morphology and Binding Energy. Advanced Materials Interfaces, 2019, 6, 1900983.	3.7	23
35	Research status and application prospects of manufacturing technology for microâ€“nano surface structures with low reflectivity. Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture, 2015, 229, 1877-1892.	2.4	22
36	Large-scale assembly of single-walled carbon nanotubes based on aqueous solution. Integrated Ferroelectrics, 2018, 190, 39-47.	0.7	21

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37	Rapid and low-cost laser synthesis of hierarchically porous graphene materials as high-performance electrodes for supercapacitors. Journal of Materials Science, 2019, 54, 5658-5670.	3.7	21
38	Effect of temporally modulated pulse on reducing recast layer in laser drilling. International Journal of Advanced Manufacturing Technology, 2016, 87, 1641-1652.	3.0	19
39	Simulation study of near-field enhancement on an Ag nanoparticle dimer system in a laser-induced nanowelding process. Integrated Ferroelectrics, 2018, 191, 72-79.	0.7	19
40	Interfacial Contact Behavior between CNTs and AgNW with Molecular Dynamics Simulation. Materials, 2020, 13, 1290.	2.9	17
41	Effect of Laser Shock Peening on Residual Stress, Microstructure and Hot Corrosion Behavior of Damage-Tolerant TC21 Titanium Alloy. Journal of Materials Engineering and Performance, 2018, 27, 4703-4713.	2.5	16
42	Femtosecond laser polishing of SiC/SiC composites: Effect of incident angle on surface topography and oxidation. Journal of Composite Materials, 2021, 55, 1437-1445.	2.4	14
43	Designable Ultratransparent and Superhydrophobic Surface of Embedded Artificial Compound Eye with Extremely Low Adhesion. ACS Applied Materials & Interfaces, 2020, 12, 53557-53567.	8.0	13
44	Superhydrophobic Artificial Compound Eye with High Transparency. ACS Applied Materials & Interfaces, 2021, 13, 35026-35037.	8.0	13
45	Simulation and experimental study on laser drillingof nickel-based alloy with thermal barrier coatings. International Journal of Advanced Manufacturing Technology, 2017, 90, 1871-1879.	3.0	12
46	Influence of Preheating on the Microstructure Evolution of Laser Re-Melting Thermal Barrier Coatings/Ni-Based Single Crystal Superalloy Multilayer System. Materials, 2019, 12, 3088.	2.9	10
47	Laser drilling of micro-holes with small diameter beyond the limits of focused spot by using a sieve plate or a cover plate. International Journal of Advanced Manufacturing Technology, 2016, 87, 2471-2484.	3.0	7
48	Effect of temporal control of air/water environment on laser drilling of nickel-based alloy with thermal barrier coatings. International Journal of Advanced Manufacturing Technology, 2018, 97, 3395-3405.	3.0	7
49	Forward scattering nanoparticles based nanostructure for light trapping over solar spectrum. AIP Advances, 2019, 9, 085119.	1.3	7
50	A combined model for formation mechanism of ripples induced by femtosecond laser on silicon carbide. Applied Physics A: Materials Science and Processing, 2020, 126, 1.	2.3	7
51	Recast layer removal using ultrafast laser in titanium alloy. International Journal of Advanced Manufacturing Technology, 2013, 68, 2321-2327.	3.0	5
52	Comparative experimental study of laser-induced transitions in crystalline silicon by femtosecond, picosecond, and millisecond laser ablation. Radiation Effects and Defects in Solids, 2014, 169, 194-203.	1.2	5
53	Fabrication of PCD Skiving Cutter by UV Nanosecond Laser. Materials, 2021, 14, 4027.	2.9	5
54	Sequential Combination of Femtosecond Laser Ablation and Induced Micro/Nano Structures for Marking Units with Highâ€Recognitionâ€Rate. Advanced Engineering Materials, 2019, 21, 1900350.	3.5	4

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55	Effects of Surface Wettability on the Dewetting Performance of Hydrophobic Surfaces. ACS Omega, 2020, 5, 28776-28783.	3.5	4
56	Recent Progress in Nearâ€Field Tip Enhancement (NFTE): Principles and Applications. Physica Status Solidi - Rapid Research Letters, 0, , .	2.4	4
57	Fabrication of 4Hâ€“SiC microvias using a femtosecond laser assisted by a protective layer. Optical Materials, 2022, 123, 111695.	3.6	4
58	Stable Nonwetting Artificial Compound Eye with Low Adhesion. ACS Applied Materials & Interfaces, 2021, 13, 45040-45049.	8.0	3
59	Demonstration of an Enhanced â€œInterconnect Topologyâ€•Based Superhydrophobic Surface on 2024 Aluminum Alloy by Femtosecond Laser Ablation and Temperature-Controlled Aging Treatment. Journal of Physical Chemistry C, 2021, 125, 24196-24210.	3.1	3
60	Nanoscale Electrodes: Nanoscale Electrodes for Flexible Electronics by Swelling Controlled Cracking (Adv. Mater. 30/2016). Advanced Materials, 2016, 28, 6516-6516.	21.0	2
61	In situ three-dimensional laser machining system integrating in situ measurement, reconstruction, parameterization, and texture mapping. International Journal of Advanced Manufacturing Technology, 2020, 111, 673-684.	3.0	2
62	Picosecond laser ablation of high-quality micro-grooves on CIGS (CuIn_(1-x)Ga₂Se _x) thin films. Radiation Effects and Defects in Solids, 2020, 175, 627-639.	1.2	1
63	Femtosecond Laser Fabrication of Micro and Nano-Structures on CIGS/ITO Bilayer Films for Thin-Film Solar Cells. Materials, 2021, 14, 2413.	2.9	1
64	Study on the thermal effects of femtosecond laser ablation on Ti-6A1–4V. , 2012, , .		0
65	The influence of pre-melting in laser drilling with temporally modulated pulse. Radiation Effects and Defects in Solids, 2016, 171, 474-491.	1.2	0
66	Carbon Nanotubes: A Molecular Dynamics Study on Selfâ€Assembly of Singleâ€Walled Carbon Nanotubes: From Molecular Morphology and Binding Energy (Adv. Mater. Interfaces 19/2019). Advanced Materials Interfaces, 2019, 6, 1970124.	3.7	0