

Nai-fei Ren

List of Publications by Year in descending order

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112
papers

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citations

361045

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433756

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113
all docs

113
docs citations

113
times ranked

1404
citing authors

#	ARTICLE	IF	CITATIONS
1	In-situ nitriding on the textured titanium alloy using femtosecond laser. Journal of Materials Research and Technology, 2022, 19, 466-471.	2.6	13
2	Laser drilling in nickel super-alloy sheets with and without ultrasonic assistance characterized by transient in-process detection with indirect characterization after hole-drilling. Optics and Laser Technology, 2021, 134, 106559.	2.2	14
3	Improving optical and electrical performances of aluminum-doped zinc oxide thin films with laser-etched grating structures. Ceramics International, 2021, 47, 7994-8003.	2.3	13
4	Photoelectric property enhancement of Ag/FTO thin films by fabricating antireflection grating structures using ultrasonic-vibration-assisted laser irradiation. Applied Surface Science, 2021, 541, 148449.	3.1	10
5	Preparation and Photoelectric Properties of Patterned Ag Nanoparticles on FTO/Glass Substrate by Laser Etching and Driving Layer Strategy. Acta Metallurgica Sinica (English Letters), 2021, 34, 973-985.	1.5	5
6	Magnet-assisted laser hole-cutting in magnesium alloys with and without water immersion. Journal of Manufacturing Processes, 2021, 61, 539-560.	2.8	12
7	Experimental investigation of femtosecond laser through-hole drilling of stainless steel with and without transverse magnetic assistance. Applied Optics, 2021, 60, 1399.	0.9	8
8	Experimental characterization and real-time monitoring for laser percussion drilling in titanium alloy using transverse electric field assistance and/or lateral air blowing. Journal of Manufacturing Processes, 2021, 62, 845-858.	2.8	21
9	Femtosecond laser selective ablation of Cu/Ag double-layer metal films for fabricating high-performance mesh-type transparent conductive electrodes and heaters. Optics Communications, 2021, 483, 126661.	1.0	12
10	Preparation and property optimization of silver-embedded FTO transparent conductive thin films by laser etching and coating AZO layer. Journal of Materials Science: Materials in Electronics, 2021, 32, 10644-10661.	1.1	3
11	Water-assisted femtosecond laser drilling of alumina ceramics. Ceramics International, 2021, 47, 11465-11473.	2.3	29
12	Ultrafast laser direct writing on PVP/FTO/Glass substrates to fabricate Ag mesh transparent conductive films. Ceramics International, 2021, 47, 14087-14096.	2.3	5
13	Fabrication of metal mesh flexible transparent electrodes and heaters by a cost-effective method based on ultrafast laser direct writing. Optics and Laser Technology, 2021, 138, 106867.	2.2	8
14	Real-time observation with metallurgical examination for laser percussion drilling in stainless steel sheets using simultaneous magnetic-ultrasonic assistance. Optics Communications, 2021, 493, 126869.	1.0	2
15	Morphology, structure and photoelectric properties of F-doped SnO ₂ films under flexible PET mask reinforced laser annealing. Materials Science in Semiconductor Processing, 2021, 131, 105853.	1.9	9
16	Transient thermal analysis for circular laser hole-cutting in stable stainless steel sheets using a novel rotational pulsed-laser heat source model. Optics and Laser Technology, 2021, 141, 107041.	2.2	5
17	Water-induced effect on femtosecond laser layered ring trepanning in silicon carbide ceramic sheets using low-to-high pulse repetition rate. Optics Communications, 2021, 496, 127040.	1.0	9
18	Characterization of micro hole on super alloy GH4037 and stainless steel 304 by millisecond-pulsed Nd:YAG laser processing. Materials Express, 2021, 11, 1975-1987.	0.2	1

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19	Factors influencing the tensile strength of carbon fiber reinforced plastic laminates for laser machining method and the underlined mechanisms. Journal of Laser Applications, 2020, 32, .	0.8	7
20	Effects of BN layer on photoelectric properties and stability of flexible Al/Cu/ZnO multilayer thin film. Ceramics International, 2020, 46, 14686-14696.	2.3	21
21	Simulation and experimental studies on process parameters, microstructure and mechanical properties of selective laser melting of stainless steel 316L. Journal of the Brazilian Society of Mechanical Sciences and Engineering, 2020, 42, 1.	0.8	18
22	Effect of Ag layer thickness and scan line spacing during laser annealing of Ag/F-doped SnO ₂ bilayer composite thin films under ultrasonic vibration assistance. Journal of Alloys and Compounds, 2020, 829, 154504.	2.8	17
23	Selective laser ablation and patterning on Ag thin films with width and depth control. Journal of Materials Science: Materials in Electronics, 2020, 31, 4943-4955.	1.1	14
24	Performance optimization of SnO ₂ :F thin films under quasi-vacuum laser annealing with covering a transparent PET sheet: A study using processing map. Applied Surface Science, 2020, 509, 145334.	3.1	22
25	Femtosecond laser layered ring trepanning of stainless steel sheets with and without transverse magnetic assistance. Optics and Laser Technology, 2020, 129, 106231.	2.2	13
26	A Condition-Based Maintenance Policy (CBM) of Repairable Multi-Component Deteriorating Systems Based on Quality Information. International Journal of Reliability, Quality and Safety Engineering, 2020, 27, 2050002.	0.4	3
27	Study on the mechanism of a femtosecond laser-induced breakdown of the deposited substrate mediated by aluminum nanoparticles in a vacuum. Optical Materials Express, 2020, 10, 3160.	1.6	0
28	Improving edge quality and optical transmittance of Ag films on glass substrates by selective nanosecond pulsed laser ablation using various scanning methods. Journal of Materials Science: Materials in Electronics, 2019, 30, 13729-13739.	1.1	10
29	Study on tooth profile error of cylindrical gears manufactured by flexible free-form milling. International Journal of Advanced Manufacturing Technology, 2019, 103, 4443-4451.	1.5	7
30	Influence of sensitive pose errors on tooth deviation of cylindrical gear in power skiving. Advances in Mechanical Engineering, 2019, 11, 168781401984375.	0.8	4
31	Effect of water-based ultrasonic vibration on the quality of laser trepanned microholes in nickel super-alloy workpieces. Journal of Materials Processing Technology, 2019, 272, 170-183.	3.1	20
32	Parameter optimization in femtosecond pulsed laser etching of fluorine-doped tin oxide films. Optics and Laser Technology, 2019, 116, 162-170.	2.2	23
33	An efficient tapered tool having multiple blades for manufacturing cylindrical gears with power skiving. International Journal of Advanced Manufacturing Technology, 2019, 102, 2823-2832.	1.5	11
34	Condition-Based Maintenance Strategy for Stochastic Degradation Systems Considering Spare Parts. , 2019, , .		0
35	Monitoring and analysis of millisecond laser drilling process and performance with and without longitudinal magnetic assistance and/or assist gas. Journal of Manufacturing Processes, 2019, 48, 297-312.	2.8	21
36	Influence of Al/Cu thickness ratio and deposition sequence on photoelectric property of ZnO/Al/Cu/ZnO multilayer film on PET substrate prepared by RF magnetron sputtering. Materials Science in Semiconductor Processing, 2019, 91, 73-80.	1.9	26

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37	Experimental investigation on effects of water-based ultrasonic vibrations, transverse magnetic field and water temperatures on percussion laser drilling performance. <i>Optics and Laser Technology</i> , 2019, 112, 395-408.	2.2	18
38	The effect of structural-acoustic coupling on the sound field in a trapezoidal enclosure. <i>Noise Control Engineering Journal</i> , 2019, 67, 180-189.	0.2	0
39	Phase field simulation of dendritic growth of copper films irradiated by ultrashort laser pulses. <i>Computational Materials Science</i> , 2018, 148, 60-68.	1.4	10
40	Influence of ultrasonic vibration on percussion drilling performance for millisecond pulsed Nd:YAG laser. <i>Optics and Laser Technology</i> , 2018, 104, 133-139.	2.2	30
41	Polarization-dependent fluorescence of CdSe/ZnS quantum dots coupling to a single gold-silver alloy nanotube. <i>Journal of Alloys and Compounds</i> , 2018, 731, 753-759.	2.8	11
42	Teaching reform and assessment system reconstruction of engineering professional courses based on CMPEMFM. , 2018, , .		0
43	The influence of illumination on two-photon absorption of quantum dots. <i>Journal of Nonlinear Optical Physics and Materials</i> , 2018, 27, 1850031.	1.1	0
44	Comparison of percussion laser drilling quality with and without water-based ultrasonic assistance. <i>Journal of Manufacturing Processes</i> , 2018, 36, 175-180.	2.8	12
45	Surface morphology and photoelectric properties of FTO ceramic thin films under a simple transparent cover-assisted laser annealing. <i>Materials Research Bulletin</i> , 2018, 108, 151-155.	2.7	18
46	Ultrasonic-vibration-assisted laser annealing of fluorine-doped tin oxide thin films for improving optical and electrical properties: Overlapping rate optimization. <i>Ceramics International</i> , 2018, 44, 22225-22234.	2.3	27
47	Effects of ultrasonic assistance on microhole drilling based on Nd:YAG laser trepanning. <i>Optics and Laser Technology</i> , 2018, 106, 451-460.	2.2	19
48	Influences of ultrasonic vibration on morphology and photoelectric properties of F-doped SnO ₂ thin films during laser annealing. <i>Applied Surface Science</i> , 2018, 458, 940-948.	3.1	18
49	Shockwave propagation and pressure in aluminum films induced by hot-electron-blast during femtosecond-pulsed laser irradiation. <i>Optik</i> , 2018, 172, 137-143.	1.4	0
50	Analytical model of terahertz metasurface for enhanced amplitude modulation. <i>Journal Physics D: Applied Physics</i> , 2018, 51, 345101.	1.3	4
51	Analysis for effects of ultrasonic power on ultrasonic vibration-assisted single-pulse laser drilling. <i>Optics and Lasers in Engineering</i> , 2018, 110, 279-287.	2.0	26
52	Theoretical study on femtosecond laser optical breakdown threshold in water mediated by aluminum nanoparticle coated with silica. <i>Optics Express</i> , 2018, 26, 34200.	1.7	3
53	Initial dislocation density effect on strain hardening in FCC aluminium alloy under laser shock peening. <i>Philosophical Magazine</i> , 2017, 97, 917-929.	0.7	16
54	Dynamic thermal response of aluminum films induced by femtosecond-pulsed lasers with temperature dependent optical properties. <i>Optik</i> , 2017, 142, 218-225.	1.4	4

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55	Performance optimization of fluorine-doped tin oxide thin films by introducing ultrasonic vibration during laser annealing. <i>Ceramics International</i> , 2017, 43, 7329-7337.	2.3	19
56	Influence of annealing temperature on formation and photoelectric properties of AZO nanosheet-coated FTO-based films. <i>Journal of Materials Science: Materials in Electronics</i> , 2017, 28, 4706-4712.	1.1	13
57	Ultrasound-assisted pulsed laser drilling for fabricating high quality microholes. , 2017, , .		0
58	Reliability analysis of crankshaft for high-speed punch based on Monte-Carlo method. <i>IOP Conference Series: Materials Science and Engineering</i> , 2017, 250, 012063.	0.3	1
59	Reliability optimization of crankshaft for high-speed punch based on genetic algorithm method. <i>IOP Conference Series: Materials Science and Engineering</i> , 2017, 250, 012065.	0.3	1
60	Influence of assist gases on pulsed laser drilling of nickel-based superalloy. , 2017, , .		3
61	Investigations on Reliability Growth for High-Speed Punch Based on Whole Life Cycle. <i>IOP Conference Series: Materials Science and Engineering</i> , 2017, 250, 012064.	0.3	0
62	Systematic Characterization of Micro Holes on Super Alloy Processed by Millisecond Pulsed Nd:YAG Laser. <i>Journal of Nanoelectronics and Optoelectronics</i> , 2017, 12, 480-489.	0.1	2
63	Microstructure Comparative Investigation of Deep Hole in Super Alloy by Trepanning and Percussion Laser Processing. <i>Nanoscience and Nanotechnology Letters</i> , 2017, 9, 407-415.	0.4	1
64	Hot spot assisted blinking suppression of CdSe quantum dots. <i>Chemical Physics Letters</i> , 2016, 652, 167-171.	1.2	7
65	Design and optimization of fundamental mode filters based on long-period fiber gratings. <i>Optical Fiber Technology</i> , 2016, 30, 89-94.	1.4	12
66	Broadband visible-light absorber via hybridization of propagating surface plasmon. <i>Optics Letters</i> , 2016, 41, 1965.	1.7	65
67	A facile of route of synthesizing Fe doped amorphous SiO ₂ film-containing crystal TiO ₂ on carbon steel by PEO. <i>International Journal of Hydrogen Energy</i> , 2016, 41, 15710-15716.	3.8	6
68	Broadening of absorption band by coupled gap plasmon resonances in a near-infrared metamaterial absorber. <i>Applied Physics Express</i> , 2016, 9, 072001.	1.1	9
69	Femtosecond pulsed laser textured titanium surfaces with stable superhydrophilicity and superhydrophobicity. <i>Applied Surface Science</i> , 2016, 389, 585-593.	3.1	114
70	Sub-nanometer linewidth perfect absorption in visible band induced by Bloch surface wave. <i>Optical Materials</i> , 2016, 62, 261-266.	1.7	7
71	Enhancing optical and electrical properties of Al-doped ZnO coated polyethylene terephthalate substrates by laser annealing using overlap rate controlling strategy. <i>Ceramics International</i> , 2016, 42, 7246-7252.	2.3	40
72	Superhydrophobic and anti-reflective ZnO nanorod-coated FTO transparent conductive thin films prepared by a three-step method. <i>Journal of Alloys and Compounds</i> , 2016, 674, 368-375.	2.8	36

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73	Laser ablation processing of zinc sheets in hydrogen peroxide solution for preparing hydrophobic microstructured surfaces. <i>Materials Letters</i> , 2016, 164, 384-387.	1.3	13
74	Reducing the pump power of optically controlled terahertz metamaterial via tailoring the resistance of the silicon gap region. <i>Journal of Optics (United Kingdom)</i> , 2015, 17, 105108.	1.0	5
75	Room temperature photoluminescence properties of CuO nanowire arrays. <i>Optical Materials</i> , 2015, 42, 544-547.	1.7	76
76	Effect of Annealing on the Morphology, Structure and Photoelectric Properties of AZO/Pt/FTO Trilayer Films. <i>Acta Metallurgica Sinica (English Letters)</i> , 2015, 28, 281-288.	1.5	15
77	Investigating the nano-tribological properties of chemical vapor deposition-grown single layer graphene on SiO ₂ substrates annealed in ambient air. <i>RSC Advances</i> , 2015, 5, 10058-10064.	1.7	12
78	Improving the performance of nickel-coated fluorine-doped tin oxide thin films by magnetic-field-assisted laser annealing. <i>Applied Surface Science</i> , 2015, 351, 113-118.	3.1	20
79	Ni/FTO bilayer thin films with high photoelectric properties optimized by magnetic-field-assisted laser annealing. <i>Materials Letters</i> , 2015, 140, 75-78.	1.3	9
80	The measurement and analysis of the nonequilibrium heat transport time of the electrons in the Co, Cr and Ag three kinds of metal films based on the transient reflection. <i>Optik</i> , 2015, 126, 2616-2618.	1.4	1
81	Two-step preparation of laser-textured Ni/FTO bilayer composite films with high photoelectric properties. <i>Journal of Alloys and Compounds</i> , 2015, 640, 376-382.	2.8	16
82	Investigating the effects of microstructure on optical properties of different kinds of polysilicon thin films. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 2015, 379, 1153-1160.	0.9	18
83	Properties of the fundamental TM waveguide mode in the narrow metal/dielectric/metal waveguide. <i>Optik</i> , 2015, 126, 630-634.	1.4	0
84	Surface modification of multilayer graphene using Ga ion irradiation. <i>Journal of Applied Physics</i> , 2015, 117, 165303.	1.1	11
85	Mode characteristics of few-mode optical fibers with assistant cores. <i>Optical Engineering</i> , 2015, 54, 106107.	0.5	1
86	Artificial magnetism of cross shaped metamaterial in green light frequencies. <i>Optical Materials</i> , 2015, 50, 123-127.	1.7	2
87	Label-free optical biosensor based on a dual-core microstructured polymer optical fiber. <i>Optik</i> , 2015, 126, 2930-2933.	1.4	2
88	Comparison of the simulation and experimental of hole characteristics during nanosecond-pulsed laser drilling of thin titanium sheets. <i>International Journal of Advanced Manufacturing Technology</i> , 2015, 76, 735-743.	1.5	37
89	Facile synthesis of Co ₂ P via the reduction of phosphate with KBH ₄ for nickel-based rechargeable batteries. <i>Journal of Alloys and Compounds</i> , 2015, 623, 140-145.	2.8	8
90	A comparative study of different M(M = Al, Ag, Cu)/FTO bilayer composite films irradiated with nanosecond pulsed laser. <i>Journal of Alloys and Compounds</i> , 2014, 617, 915-920.	2.8	13

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91	Manipulation of transport hysteresis on graphene field effect transistors with Ga ion irradiation. Applied Physics Letters, 2014, 105, 133506.	1.5	6
92	SUNKEN HOLLOW CARBON SPHERES SUPPORTED Pt ELECTROCATALYST FOR EFFICIENT METHANOL OXIDATION AND OXYGEN REDUCTION REACTION. Nano, 2014, 09, 1450079.	0.5	1
93	Improvement in overall photoelectric properties of Ag/FTO bilayer thin films using furnace/laser dual annealing. Materials Letters, 2014, 116, 405-407.	1.3	28
94	Surface morphology and photoelectric properties of fluorine-doped tin oxide thin films irradiated with 532nm nanosecond laser. Ceramics International, 2014, 40, 1627-1633.	2.3	35
95	Titanium dioxide-coated fluorine-doped tin oxide thin films for improving overall photoelectric property. Applied Surface Science, 2014, 290, 80-85.	3.1	19
96	Performance and breakdown behavior of graphene field-effect transistors with thin gate oxides. Journal of Micromechanics and Microengineering, 2014, 24, 045016.	1.5	5
97	Control of the distribution of surface plasmon local field by altering the surrounding material. Optik, 2014, 125, 6810-6813.	1.4	0
98	Effects of silicon dioxide surface roughness on Raman characteristics and mechanical properties of graphene. RSC Advances, 2014, 4, 55087-55093.	1.7	10
99	Ag nanoparticles decorated CuO nanowire arrays for efficient plasmon enhanced photoelectrochemical water splitting. Chemical Physics Letters, 2014, 609, 59-64.	1.2	47
100	Laser-assisted preparation and photoelectric properties of grating-structured Pt/FTO thin films. Applied Surface Science, 2014, 314, 208-214.	3.1	11
101	CuO/ZnO core/shell nanowire arrays and their photovoltaics application. Materials Letters, 2014, 132, 409-412.	1.3	19
102	Relation between substructure position of phase objects in optical axial direction and phase information in quantitative phase imaging. Optics Communications, 2014, 312, 137-142.	1.0	2
103	Introduction of Ag nanoparticles and AZO layer to prepare AZO/Ag/FTO trilayer films with high overall photoelectric properties. Ceramics International, 2014, 40, 8693-8699.	2.3	29
104	Effects of Ga ion-beam irradiation on monolayer graphene. Applied Physics Letters, 2013, 103, .	1.5	23
105	Reversible wettability control of ZnO thin films synthesized by hydrothermal process on different buffer layers. Materials Letters, 2013, 110, 160-163.	1.3	16
106	Morphology and wettability of ZnO nanostructures prepared by hydrothermal method on various buffer layers. Applied Surface Science, 2013, 286, 391-396.	3.1	21
107	Ultrafast dynamics in NiFe alloy thin films by two times of transient reflection. Optik, 2013, 124, 4667-4669.	1.4	1
108	Subsurface imaging by dual-medium quantitative phase measurement. Optik, 2013, 124, 4729-4733.	1.4	2

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109	Effects of position, thickness, and annealing temperature of Ag buffer layer on the shape of ZnO nanocrystals grown by a simple hydrothermal process. Journal of Materials Research, 2013, 28, 3384-3393.	1.2	0
110	Structure disorder degree of polysilicon thin films grown by different processing: Constant C from Raman spectroscopy. Journal of Applied Physics, 2013, 114, .	1.1	3
111	Simulation of simultaneous measurement for red blood cell thickness and refractive index. Optics and Lasers in Engineering, 2012, 50, 154-158.	2.0	12
112	Dual-medium quantitative measurement simulation on cells. Applied Optics, 2011, 50, 6440.	2.1	7