Zhuguo Li

List of Publications by Year
in descending order

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Version: 2024-02-01

172 papers	5,300 citations	81900 39 h-index	118850 62 g-index
174 all docs	174 docs citations	174 times ranked	3513 citing authors

#	Article	IF	Citations
1	Numerical modeling of microstructure evolution during laser additive manufacturing of a nickel-based superalloy. Acta Materialia, 2014, 77, 85-95.	7.9	307
2	Microstructure and corrosion properties of CrMnFeCoNi high entropy alloy coating. Applied Surface Science, 2017, 396, 1420-1426.	6.1	269
3	Dendritic microstructure and hot cracking of laser additive manufactured Inconel 718 under improved base cooling. Journal of Alloys and Compounds, 2016, 670, 312-321.	5.5	206
4	Characterization of heat affected zone liquation cracking in laser additive manufacturing of Inconel 718. Materials and Design, 2016, 90, 586-594.	7.0	205
5	Improved high-temperature hardness and wear resistance of Inconel 625 coatings fabricated by laser cladding. Journal of Materials Processing Technology, 2017, 243, 82-91.	6.3	145
6	Microstructural evolution and mechanical property of Ti-6Al-4V wall deposited by continuous plasma arc additive manufacturing without post heat treatment. Journal of the Mechanical Behavior of Biomedical Materials, 2017, 69, 19-29.	3.1	115
7	In situ synthesized high volume fraction WC reinforced Ni-based coating by laser cladding. Materials Letters, 2017, 195, 178-181.	2.6	104
8	Study on the element segregation and Laves phase formation in the laser metal deposited IN718 superalloy by flat top laser and gaussian distribution laser. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2019, 754, 339-347.	5.6	104
9	Formation and influence mechanism of keyhole-induced porosity in deep-penetration laser welding based on 3D transient modeling. International Journal of Heat and Mass Transfer, 2015, 90, 1143-1152.	4.8	92
10	Corrosion behavior of SS316L in simulated and accelerated PEMFC environments. International Journal of Hydrogen Energy, 2011, 36, 13032-13042.	7.1	79
11	Dilution effect on the formation of amorphous phase in the laser cladded Niâ€“Feâ€“Bâ€“Siâ€“Nb coatings after laser remelting process. Applied Surface Science, 2012, 258, 7956-7961.	6.1	75
12	Effect of Heat Treatment on Niobium Segregation of Laser-Cladded IN718 Alloy Coating. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2013, 44, 708-716.	2.2	72
13	Synthesis of Feâ€“Niâ€“Bâ€“Siâ€“Nb amorphous and crystalline composite coatings by laser cladding and remelting. Surface and Coatings Technology, 2011, 206, 1229-1236.	4.8	69
14	Microstructure and properties of in-situ synthesized (Ti3Alâ€¯+â€¯TiB)/Ti composites by laser cladding. Materials and Design, 2018, 157, 258-272.	7.0	65
15	3D reconstruction of complex spatial weld seam for autonomous welding by laser structured light scanning. Journal of Manufacturing Processes, 2019, 39, 200-207.	5.9	64
16	Effect of Cooling Rate on the Microstructure of Laser-Remelted INCONEL 718ÂCoating. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2013, 44, 5513-5521.	2.2	62
17	Modeling analysis of laser cladding of a nickel-based superalloy. Surface and Coatings Technology, 2014, 258, 1048-1059.	4.8	62
18	A Comparative Study of High-Power Diode Laser and CO2 Laser Surface Hardening of AISI 1045 Steel. Journal of Materials Engineering and Performance, 2014, 23, 3085-3091.	2.5	62

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19	Corrosion properties of laser cladded CrCoNi medium entropy alloy coating. Surface and Coatings Technology, 2020, 397, 126004.	4.8	62
20	A comparative study of laser beam welding and laserâ€“MIG hybrid welding of Tiâ€“Alâ€“Zrâ€“Fe titanium alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2011, 528, 1138-1142.	5.6	61
21	Structure and corrosion resistance properties of Niâ€“Feâ€“Bâ€“Siâ€“Nb amorphous composite coatings fabricated by laser processing. Journal of Alloys and Compounds, 2013, 580, 327-331.	5.5	58
22	Cryogenic deformation mechanism of CrMnFeCoNi high-entropy alloy fabricated by laser additive manufacturing process. International Journal of Lightweight Materials and Manufacture, 2018, 1, 33-39.	2.1	56
23	Study on the weldability, microstructure and mechanical properties of thick Inconel 617 plate using narrow gap laser welding method. Materials and Design, 2019, 175, 107823.	7.0	56
24	Microstructure and tribological properties of laser cladded self-lubricating nickel-base composite coatings containing nano-Cu and h-BN solid lubricants. Surface and Coatings Technology, 2019, 359, 485-494.	4.8	55
25	C/CrN multilayer coating for polymer electrolyte membrane fuel cell metallic bipolar plates. Journal of Power Sources, 2013, 222, 351-358.	7.8	54
26	Effect of the remelting scanning speed on the amorphous forming ability of Ni-based alloy using laser cladding plus a laser remelting process. Surface and Coatings Technology, 2014, 259, 725-731.	4.8	54
27	Laser powder deposition of carbon nanotube reinforced nickel-based superalloy Inconel 718. Carbon, 2016, 107, 361-370.	10.3	54
28	A comparative study on fiber laser and CO2 laser welding of Inconel 617. Materials & Design, 2015, 76, 207-214.	5.1	53
29	Investigation of dendritic growth and liquation cracking in laser melting deposited Inconel 718 at different laser input angles. Materials and Design, 2016, 105, 133-141.	7.0	52
30	Effect of bevel angle on microstructure and mechanical property of Al/steel butt joint using laser welding-brazing method. Materials and Design, 2016, 90, 468-477.	7.0	52
31	Cracking mechanism and mechanical properties of selective laser melted CoCrFeMnNi high entropy alloy using different scanning strategies. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2020, 789, 139672.	5.6	52
32	Porosity formation mechanism and its prevention in laser lap welding for T-joints. Journal of Materials Processing Technology, 2014, 214, 1658-1664.	6.3	50
33	Laser ablation in liquids for nanomaterial synthesis: diversities of targets and liquids. JPhys Photonics, 2021, 3, 042002.	4.6	50
34	Irregular LIPSS produced on metals by single linearly polarized femtosecond laser. International Journal of Extreme Manufacturing, 2022, 4, 015102.	12.7	50
35	Carbon coated stainless steel bipolar plates in polymer electrolyte membrane fuel cells. Diamond and Related Materials, 2010, 19, 1354-1361.	3.9	49
36	Liquation cracking in fiber laser welded joints of inconel 617. Journal of Materials Processing Technology, 2015, 226, 214-220.	6.3	48

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37	Tribological behaviors and wear mechanisms of ultrafine magnesium aluminum silicate powders as lubricant additive. Tribology International, 2015, 81, 199-208.	5.9	48
38	Microstructure and tribology behaviors of in-situ WC/Fe carbide coating fabricated by plasma transferred arc metallurgic reaction. Applied Surface Science, 2017, 423, 13-24.	6.1	47
39	Carbide and nitride precipitation during laser cladding of Inconel 718 alloy coatings. Optics and Laser Technology, 2013, 52, 30-36.	4.6	43
40	Corrosion behavior and electrical conductivity of niobium implanted 316L stainless steel used as bipolar plates in polymer electrolyte membrane fuel cells. Surface and Coatings Technology, 2010, 205, 85-91.	4.8	41
41	Effects of rod carbide size, content, loading and sliding distance on the friction and wear behaviors of (Cr,Fe)7C3-reinforced Î±-Fe based composite coating produced via PTA welding process. Surface and Coatings Technology, 2014, 248, 9-22.	4.8	40
42	Effect of LaB6 addition on the microstructure and properties of (Ti3Alâ€¯+â€¯TiB)/Ti composites by laser cladding. Materials and Design, 2019, 181, 107959.	7.0	39
43	Additively manufactured high strength and ductility CrCoNi medium entropy alloy with hierarchical microstructure. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2021, 820, 141545.	5.6	38
44	Improved corrosion resistance of stainless steel 316L by Ti ion implantation. Materials Letters, 2012, 68, 450-452.	2.6	37
45	Corrosion resistance and electrical properties of carbon/chromiumâ€“titaniumâ€“nitride multilayer coatings on stainless steel. Journal of Power Sources, 2014, 249, 299-305.	7.8	36
46	Growth mechanism of in-situ WC grain in Fe-Ni-W-C alloys system. Journal of Alloys and Compounds, 2018, 738, 379-393.	5.5	36
47	Nitrogen plasma-implanted titanium as bipolar plates in polymer electrolyte membrane fuel cells. Journal of Power Sources, 2010, 195, 6798-6804.	7.8	35
48	Microstructure correlation and fatigue crack growth behavior in dissimilar 9Cr/CrMoV welded joint. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2016, 651, 1018-1030.	5.6	35
49	Microstructure evolution of Fe-based nanostructured bainite coating by laser cladding. Materials & Design, 2014, 63, 100-108.	5.1	34
50	Toughening of Fe-based laser-clad alloy coating. Applied Surface Science, 2011, 257, 2184-2192.	6.1	33
51	Fiber laser butt joining of aluminum to steel using welding-brazing method. International Journal of Advanced Manufacturing Technology, 2016, 85, 2639-2650.	3.0	33
52	Enhanced wear resistance of laser cladded graphene nanoplatelets reinforced Inconel 625 superalloy composite coating. Surface and Coatings Technology, 2018, 335, 334-344.	4.8	33
53	Influence of heat input on the changes in the microstructure and fracture behavior of laser welded 800MPa grade high-strength low-alloy steel. Journal of Manufacturing Processes, 2020, 50, 132-141.	5.9	32
54	Hierarchical refinement of nickel-microalloyed titanium during additive manufacturing. Scripta Materialia, 2021, 195, 113727.	5.2	32

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55	Silver implanted 316L stainless steel as bipolar plates in polymer electrolyte membrane fuel cells. Materials Chemistry and Physics, 2011, 126, 6-11.	4.0	31
56	Effect of Ni-to-Fe ratio on structure and properties of Niâ€“Feâ€“Bâ€“Siâ€“Nb coatings fabricated by laser processing. Applied Surface Science, 2011, 257, 3554-3557.	6.1	31
57	Amorphous structure evolution of high power diode laser cladded Feâ€“Coâ€“Bâ€“Siâ€“Nb coatings. Applied Surface Science, 2012, 261, 896-901.	6.1	31
58	Fiber laser welding of thick AISI 304 plate in a horizontal (2G) butt joint configuration. Materials and Design, 2017, 118, 53-65.	7.0	31
59	The elimination of pores in laser welds of AISI 304 plate using different shielding gases. Journal of Materials Processing Technology, 2017, 248, 56-63.	6.3	31
60	Identification of the deviation of seam tracking and weld cross type for the derusting of ship hulls using a wall-climbing robot based on three-line laser structural light. Journal of Manufacturing Processes, 2018, 35, 295-306.	5.9	30
61	Dynamic features of plasma plume and molten pool in laser lap welding based on image monitoring and processing techniques. Optics and Laser Technology, 2019, 109, 168-177.	4.6	30
62	Quantitative relationship between weld defect characteristic and fatigue crack initiation life for high-cycle fatigue property. International Journal of Fatigue, 2019, 123, 238-247.	5.7	29
63	Effects of rare earth elements on the microstructure and wear properties of TiB2 reinforced aluminum matrix composite coatings: Experiments and first principles calculations. Applied Surface Science, 2020, 530, 147051.	6.1	29
64	Investigation of single-layer and multilayer coatings for aluminum bipolar plate in polymer electrolyte membrane fuel cell. International Journal of Hydrogen Energy, 2014, 39, 8421-8430.	7.1	28
65	Self-passivating carbon film as bipolar plate protective coating in polymer electrolyte membrane fuel cell. International Journal of Hydrogen Energy, 2016, 41, 5783-5792.	7.1	28
66	Effect of Cu Nanoparticles on the Tribological Performance of Attapulgite Base Grease. Tribology Transactions, 2015, 58, 1031-1038.	2.0	27
67	Femtosecond laser induced simultaneous functional nanomaterial synthesis, in situ deposition and hierarchical LIPSS nanostructuring for tunable antireflectance and iridescence applications. Journal of Materials Science and Technology, 2021, 89, 179-185.	10.7	27
68	Effect of Precipitation on the Microhardness Distribution of Diode Laser Epitaxially Deposited IN718 Alloy Coating. Journal of Materials Science and Technology, 2013, 29, 349-352.	10.7	26
69	Effect of MoO3 on the microstructure and tribological properties of laser-clad Ni60/nanoCu/h-BN/MoO3 composite coatings over wide temperature range. Surface and Coatings Technology, 2020, 387, 125477.	4.8	25
70	Improvement of corrosion resistance and electrical conductivity of 304 stainless steel using close field unbalanced magnetron sputtered carbon film. Journal of Power Sources, 2011, 196, 10032-10037.	7.8	24
71	In situ synthesised WC reinforced nickel coating by laser cladding. Surface Engineering, 2018, 34, 276-282.	2.2	24
72	Ex situ and in situ evaluation of carbon ion-implanted stainless steel bipolar plates in polymer electrolyte membrane fuel cells. Journal of Power Sources, 2012, 199, 207-213.	7.8	23

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73	Liquid vortexes and flows induced by femtosecond laser ablation in liquid governing formation of circular and crisscross LIPSS. Opto-Electronic Advances, 2022, 5, 210066-210066.	13.3	23
74	Fiber laser welding of HSLA steel by autogenous laser welding and autogenous laser welding with cold wire methods. Journal of Materials Processing Technology, 2020, 275, 116353.	6.3	22
75	Effect of gap on plasma and molten pool dynamics during laser lap welding for T-joints. International Journal of Advanced Manufacturing Technology, 2013, 69, 1105-1112.	3.0	21
76	Characterization of carbon ion implantation induced graded microstructure and phase transformation in stainless steel. Materials Characterization, 2015, 106, 11-19.	4.4	21
77	Investigation on the effects of shielding gas on porosity in fiber laser welding of T-joint steels. International Journal of Advanced Manufacturing Technology, 2015, 77, 1881-1888.	3.0	21
78	Preparation, characterization and wear behavior of carbon coated magnesium alloy with electroless plating nickel interlayer. Applied Surface Science, 2015, 327, 100-106.	6.1	21
79	A novel approach of in-situ synthesis of WC particulate-reinforced Fe-30Ni ceramic metal coating. Surface and Coatings Technology, 2017, 328, 256-265.	4.8	21
80	Effects of shielding gases on process stability of 10CrNi3MoV steel in hybrid laser-arc welding. Journal of Materials Processing Technology, 2019, 270, 37-46.	6.3	21
81	Effects of heat source arrangements on Laser-MAG hybrid welding characteristics and defect formation mechanism of 10CrNi3MoV steel. Journal of Manufacturing Processes, 2020, 58, 563-573.	5.9	21
82	Effect of the Rare Earth Oxide CeO2 on the Microstructure and Properties of the Nano-WC-Reinforced Ni-Based Composite Coating. Metals, 2020, 10, 383.	2.3	20
83	Enhancement of high-temperature strength of Ni-based films by addition of nano-multilayers and incorporation of W. Acta Materialia, 2017, 133, 55-67.	7.9	19
84	Study on the effect of Cu addition on the microstructure and properties of NiTi alloy fabricated by laser cladding. Materials Letters, 2018, 220, 148-151.	2.6	19
85	Tribological Performance of Attapulgite Nano-fiber/Spherical Nano-Ni as Lubricant Additive. Tribology Letters, 2014, 56, 531-541.	2.6	18
86	Corrosion behavior of carbon film coated magnesium alloy with electroless plating nickel interlayer. Journal of Materials Processing Technology, 2015, 219, 42-47.	6.3	18
87	Investigation of multi-coating process treated magnesium alloy as bipolar plate in polymer electrolyte membrane fuel cell. International Journal of Hydrogen Energy, 2016, 41, 6020-6028.	7.1	18
88	Effects of the long-time thermal exposure on the microstructure and mechanical properties of laser weldings of Inconel 617. Journal of Materials Processing Technology, 2017, 247, 296-305.	6.3	18
89	Microstructure and Softening of Laser-Welded 960ÂMPa Grade High Strength Steel Joints. Journal of Materials Engineering and Performance, 2014, 23, 538-544.	2.5	17
90	Dual Ti and C ion-implanted stainless steel bipolar plates in polymer electrolyte membrane fuel cells. Surface and Coatings Technology, 2012, 206, 2914-2921.	4.8	16

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91	Analysis of nucleation of carbide (Cr, Fe)7C3 in the Cr3C2/Fe-CrNiBSi composite coating. Surface and Coatings Technology, 2013, 228, 41-47.	4.8	16
92	Strength and ductility optimization of laser additive manufactured metastable Î² titanium alloy by tuning Î± phase by post heat treatment. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2022, 831, 142265.	5.6	16
93	Strengthening behavior analysis of weld metal of laser hybrid welding for microalloyed steel. Materials & Design, 2010, 31, 4876-4880.	5.1	15
94	The influence of various factors on the geometric profile of laser lap welded T-joints. International Journal of Advanced Manufacturing Technology, 2014, 74, 1625-1636.	3.0	15
95	Effects of isothermal heat treatment on nanostructured bainite morphology and microstructures in laser cladded coatings. Applied Surface Science, 2015, 357, 309-316.	6.1	15
96	Microstructure and mechanical properties of sputter deposited Ni/Ni3Al multilayer films at elevated temperature. Applied Surface Science, 2016, 378, 408-417.	6.1	15
97	Microstructure characterization and HCF fracture mode transition for modified 9Cr-1Mo dissimilarly welded joint at different elevated temperatures. Journal of Materials Science and Technology, 2017, 33, 1610-1620.	10.7	15
98	Microstructure and friction behavior of LaF3 doped Ti-MoS2 composite thin films deposited by unbalanced magnetron sputtering. Surface and Coatings Technology, 2019, 359, 334-341.	4.8	15
99	Precipitation and crystallographic relationships of nanosized Î·/Î·â€™ precipitates at S-Al interface in Al-Zn-Mg-Cu alloy. Scripta Materialia, 2022, 214, 114643.	5.2	15
100	Structure and Properties of Tiâ€“Siâ€“N Films Deposited by dc Magnetron Cosputtering on Positively Biased Substrates. Japanese Journal of Applied Physics, 2003, 42, 7510-7515.	1.5	14
101	Effects of heat treatments on laser welded Mg-rare earth alloy NZ30K. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2011, 529, 401-405.	5.6	14
102	Investigation of C/Alâ€“Crâ€“N multilayer coatings for stainless steel bipolar plate in polymer electrolyte membrane fuel cells. Surface and Coatings Technology, 2014, 258, 1068-1074.	4.8	14
103	Fracture surface characterization of laser welding processed Ti alloy to stainless steel joints. Welding in the World, Le Soudage Dans Le Monde, 2018, 62, 947-960.	2.5	14
104	Improving wear resistance and friction stability of FeNi matrix coating by in-situ multi-carbide WC-TiC via PTA metallurgical reaction. Surface and Coatings Technology, 2019, 378, 124957.	4.8	14
105	Interlayer thickening for development of laser-welded Ti-SS joint strength. Optics and Laser Technology, 2019, 112, 379-394.	4.6	14
106	Suppression of intergranular corrosion by surface grain boundary engineering of 304 austenitic stainless steel using laser peening plus annealing. Materials Today Communications, 2020, 25, 101572.	1.9	14
107	Effect of microstructure of TiN film on properties as bipolar plate coatings in polymer electrolyte membrane fuel cell prepared by inductively coupled plasma assisted magnetron sputtering. Thin Solid Films, 2013, 544, 224-229.	1.8	13
108	Enhancement of hardness and thermal stability of W-doped Ni3Al thin films at elevated temperature. Materials and Design, 2016, 111, 575-583.	7.0	13

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109	Effects of in-situ synthesized TiB2 on crystallographic orientation, grain size and nanohardness of AA6061 alloy by laser surface alloying. Materials Letters, 2019, 253, 213-217.	2.6	13
110	Influence of Welding Parameters on Weld Formation and Microstructure of Dual-Laser Beams Welded T-Joint of Aluminum Alloy. Advances in Materials Science and Engineering, 2011, 2011, 1-6.	1.8	12
111	Properties of carbon film deposited on stainless steel by close field unbalanced magnetron sputter ion plating. Thin Solid Films, 2013, 531, 320-327.	1.8	12
112	Effect of Al2Gd on microstructure and properties of laser clad Mgâ€“Alâ€“Gd coatings. Applied Surface Science, 2015, 330, 393-404.	6.1	12
113	An adaptive slicing algorithm for laser cladding remanufacturing of complex components. International Journal of Advanced Manufacturing Technology, 2019, 101, 2873-2887.	3.0	12
114	Influence of in-situ synthesized carboborides on microstructure evolution and the wear resistance of laser clad Fe-base composite coatings. Materials Characterization, 2020, 164, 110326.	4.4	12
115	Mechanism of Zn Coating on the Wettability, Spreadability, and Microstructure of Al/Steel with the Laser Weldingâ€“Brazing Method. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2020, 51, 1677-1688.	2.2	12
116	Femtosecond Laser Generated Hierarchical Macropore/LIPSS Metasurfaces and Their Ultrabroadband Absorbance, Photothermal Properties, and Thermal-Induced Reflectance Oscillation. ACS Applied Electronic Materials, 2022, 4, 990-1001.	4.3	12
117	Role of stress in the high cycle fatigue behavior of advanced 9Cr/CrMoV dissimilarly welded joint. Journal of Materials Research, 2016, 31, 292-301.	2.6	11
118	Residual stress distribution and wear behavior in multi-pass laser cladded Fe-based coating reinforced by M3(C, B). Journal of Materials Research and Technology, 2021, 15, 5597-5607.	5.8	11
119	Plasma Properties and Ion Energy Distribution in DC Magnetron Sputtering Assisted by Inductively Coupled RF Plasma. Japanese Journal of Applied Physics, 2003, 42, 7086-7090.	1.5	10
120	Phase constituents and growth mechanism of laser in situ synthesized WC reinforced composite coating with Wâ€“Câ€“Ni system. Journal of Materials Research, 2017, 32, 557-565.	2.6	10
121	Experimental Study of the Microstructure and Micromechanical Properties of Laser Cladded Ni-based Amorphous Composite Coatings. Journal of Materials Engineering and Performance, 2018, 27, 80-88.	2.5	10
122	Characterization of high-gradient welded microstructure and its failure mode in fatigue test. International Journal of Fatigue, 2018, 113, 1-10.	5.7	10
123	Adaptive control for laser welding with filler wire of marine high strength steel with tight butt joints for large structures. Journal of Manufacturing Processes, 2018, 36, 434-441.	5.9	10
124	A method for evaluating the crack resistance and predicting the preheating temperature of high hardness coating prepared by laser cladding. Surface and Coatings Technology, 2022, 432, 128076.	4.8	10
125	The characteristics and reduction of porosity in high-power laser welds of thick AISI 304 plate. International Journal of Advanced Manufacturing Technology, 2017, 93, 3517-3530.	3.0	9
126	Effect of relative position in low-power pulsed-laserâ€“tungsten-inert-gas hybrid welding on laser-arc interaction. Journal of Manufacturing Processes, 2018, 36, 426-433.	5.9	9

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127	Microstructure and wear performance of high volume fraction carbide M7C3 reinforced Fe-based composite coating fabricated by plasma transferred arc welding. Journal Wuhan University of Technology, Materials Science Edition, 2014, 29, 1028-1035.	1.0	8
128	Relationships among Charpy impact toughness, microstructure and fracture behavior in 10CrNi3MoV steel weld joint. Materials Letters, 2020, 281, 128328.	2.6	8
129	Autonomous programming and adaptive filling of lap joint based on three-dimensional welding-seam model by laser scanning. Journal of Manufacturing Processes, 2020, 53, 396-405.	5.9	8
130	Microstructure transition and mechanical properties of friction stir processed CoCrFeMnNi high entropy alloy fabricated by laser powder bed fusion. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2022, 845, 143254.	5.6	8
131	Diverse nanomaterials synthesized by laser ablation of pure metals in liquids. Science China: Physics, Mechanics and Astronomy, 2022, 65, .	5.1	8
132	The effect of humping on residual stress and distortion in high-speed laser welding using coupled CFD-FEM model. Optics and Laser Technology, 2018, 104, 201-205.	4.6	7
133	Characterization on the Microstructure Evolution and Toughness of TIG Weld Metal of 25Cr2Ni2MoV Steel after Post Weld Heat Treatment. Metals, 2018, 8, 160.	2.3	7
134	Investigation of intrinsic correlation between microstructure evolution and mechanical properties for nickel-based weld metal. Materials and Design, 2019, 165, 107595.	7.0	7
135	Effect of Low-Energy Ion Flux Irradiation on Synthesis of Superhard Nanocomposite Films. Japanese Journal of Applied Physics, 2006, 45, 7866-7870.	1.5	6
136	Effect of chemical segregation on nanobainitic transformation in laser cladded coatings. Materials and Design, 2015, 88, 781-789.	7.0	6
137	High Temperature Oxidation and Wear Resistance of In Situ Synthesized (Ti3Alâ€‰+â€‰TiB)/Ti Composites by Laser Cladding. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2019, 50, 3414-3428.	2.2	6
138	Laser welding and laser cladding of high performance materials. Physics Procedia, 2010, 5, 1-8.	1.2	5
139	Effects of Heat Input on Microstructure and Mechanical Properties of Laser-Welded Mg-Rare Earth Alloy. Journal of Materials Engineering and Performance, 2013, 22, 64-70.	2.5	5
140	Microstructure and Toughness of Simulated Heat-Affected Zone of Laser Welded Joint for 960ÂMPa Grade High Strength Steel. Journal of Materials Engineering and Performance, 2014, 23, 3640-3648.	2.5	5
141	Microstructure and Strengthening Mechanism of Fiber Laser-Welded High-Strength Mg-Gd-Y-Zr Alloy. Journal of Materials Engineering and Performance, 2016, 25, 4506-4513.	2.5	5
142	High temperature tensile properties of laser-welded high-strength Mg-Gd-Y-Zr alloy in as-welded and heat-treated conditions. Welding in the World, Le Soudage Dans Le Monde, 2017, 61, 299-306.	2.5	5
143	Enhanced Strength of 304 SS-Ti6Al4V Laser-Welded Joints Containing Composite Interlayers. Journal of Materials Engineering and Performance, 2018, 27, 6135-6148.	2.5	5
144	Effects of Ti Addition on Microstructure and Tribological Properties of In Situ Composite Carbide Coating WC-TiC/FeNi Fabricated by Plasma Transferred Arc Metallurgical Reaction. Journal of Materials Engineering and Performance, 2020, 29, 8093-8106.	2.5	5

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145	Microstructure characteristics for quench sensitivity of in-situ TiB2/7050Al composite. Journal of Materials Research, 2021, 36, 1341-1356.	2.6	5
146	Laser Melting Deposition of CP-Ti/Tiâ€“0.4Ni Graded Material for Structural Applications. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2021, 52, 4742-4748.	2.2	5
147	Hierarchical WO_{3â€“x} Ultrabroadband Absorbers and Photothermal Converters Grown from Femtosecond Laser-Induced Periodic Surface Structures. ACS Applied Materials & Interfaces, 2022, 14, 24046-24058.	8.0	5
148	Studies on the surface morphology and hydrophobic property of NiTi thin films under in situ and post annealing various temperatures. Materials Letters, 2016, 183, 244-247.	2.6	4
149	Effect of Isothermal Temperature on Growth Behavior of Nanostructured Bainite in Laser Cladded Coatings. Materials, 2017, 10, 800.	2.9	4
150	Microstructure evolution and properties of in situ synthesized TiB₂-reinforced aluminum alloy by laser surface alloying. Journal of Materials Research, 2018, 33, 4307-4316.	2.6	4
151	Effects of Copper Doping on Structure and Properties of TiN Films Prepared by Magnetron Sputtering Assisted by Low Energy Ion Flux Irradiation. Japanese Journal of Applied Physics, 2006, 45, 5178-5182.	1.5	3
152	The constitutive relation of an axisymmetric detached coating on a rigid substrate. International Journal of Mechanical Sciences, 2010, 52, 1709-1715.	6.7	3
153	Microstructure and mechanical properties of high power CO2 laser welded joint of Mg-Rare earth alloy NZ30K. Physics Procedia, 2010, 5, 511-516.	1.2	3
154	Relationship between the Î³ and some parameters of Fe-based bulk metallic glasses. International Journal of Materials Research, 2012, 103, 336-340.	0.3	3
155	Evaluation of Mgâ€“Ndâ€“Znâ€“Zr magnesium alloy as bipolar plate in simulated polymer electrolyte membrane fuel cell environments. International Journal of Hydrogen Energy, 2016, 41, 14191-14206.	7.1	3
156	A novel method to increase the content of h-BN and the deposition efficiency of laser cladding Ni60/nano-Cu/h-BN coating by adding MoO3. Materials Letters, 2019, 257, 126614.	2.6	3
157	Mechanism and optimization of activating fluxes for process stability and weldability of hybrid laser-arc welded HSLA steel. Welding in the World, Le Soudage Dans Le Monde, 2021, 65, 753-766.	2.5	3
158	Improved microstructures and mechanical properties for 7085Al alloy subjected to slow quenching by aging treatment. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2021, 827, 142068.	5.6	3
159	Cooling Curve Analysis of Heat Treating Oils and Correlation With Hardness and Microstructure of a Low Carbon Steel. Materials Performance and Characterization, 2014, 3, 427-445.	0.3	3
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