

Jing-Wei Zhao

List of Publications by Year in descending order

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128
papers

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citations

147786

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all docs

128
docs citations

128
times ranked

2439
citing authors

#	ARTICLE	IF	CITATIONS
1	Study on the Tribological Behaviour of Nanolubricants during Micro Rolling of Copper Foils. <i>Materials</i> , 2022, 15, 2600.	2.9	9
2	Experimental study on drawability of aluminium-copper composite in micro deep drawing. <i>Journal of Materials Processing Technology</i> , 2022, 307, 117662.	6.3	2
3	Optimisation of sintering parameters for bonding nanocrystalline cemented tungsten carbide powder and solid high strength steel. <i>Composite Interfaces</i> , 2021, 28, 477-492.	2.3	3
4	Experimental Investigation on Micro Deep Drawing of Stainless Steel Foils with Different Microstructural Characteristics. <i>Chinese Journal of Mechanical Engineering (English Edition)</i> , 2021, 34, .	3.7	12
5	Interfacial bonding mechanism of Cu/Al composite plate produced by corrugated cold roll bonding. <i>Rare Metals</i> , 2021, 40, 1284-1293.	7.1	14
6	Effect of Temperature and Strain Rate on the Hot Deformation Behaviour of Ferritic Stainless Steel. <i>Metals and Materials International</i> , 2020, 26, 248-259.	3.4	14
7	Analysis of flow behaviour and strain partitioning mechanism of bimetal composite under hot tensile conditions. <i>International Journal of Mechanical Sciences</i> , 2020, 169, 105317.	6.7	22
8	Hot deformation behaviour and interfacial characteristics of bimetal composite at elevated temperatures. <i>Intermetallics</i> , 2020, 125, 106893.	3.9	16
9	Recent Development in Micromanufacturing of Metallic Materials. <i>Materials</i> , 2020, 13, 4046.	2.9	4
10	Microstructural evaluation of WC and steel dissimilar bilayered composite obtained by spark plasma sintering. <i>International Journal of Advanced Manufacturing Technology</i> , 2020, 111, 2405-2418.	3.0	5
11	Understanding the role of water-based nanolubricants in micro flexible rolling of aluminium. <i>Tribology International</i> , 2020, 151, 106378.	5.9	27
12	Effects of cold rolling and annealing on the ridging behaviour of ferritic stainless steel. <i>International Journal of Advanced Manufacturing Technology</i> , 2020, 107, 4823-4836.	3.0	8
13	Interfacial characteristics and mechanical properties of duplex stainless steel bimetal composite by heat treatment. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2020, 787, 139513.	5.6	24
14	Revealing the recrystallization behavior of an excellent strip casting 4.5Åwt% Si non-oriented electrical steel. <i>Materials Characterization</i> , 2020, 163, 110310.	4.4	8
15	Investigation into the Dissimilar Friction Stir Welding of AA5052 and AA6061 Aluminum Alloys Using Pin-Eccentric Stir Tool. <i>Metals</i> , 2019, 9, 718.	2.3	14
16	Study on edge cracking of copper foils in micro rolling. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2019, 747, 53-62.	5.6	20
17	Analysis of surface roughness evolution of ferritic stainless steel using crystal plasticity finite element method. <i>Journal of Materials Research and Technology</i> , 2019, 8, 3175-3187.	5.8	19
18	Effects of Holding Time on the Sintering of Cemented Tungsten Carbide Powder and Bonding with High-Strength Steel Wire. <i>Journal of Materials Engineering and Performance</i> , 2019, 28, 4074-4085.	2.5	13

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19	Effect of water-based nanolubricant containing nano-TiO ₂ on friction and wear behaviour of chrome steel at ambient and elevated temperatures. <i>Wear</i> , 2019, 426-427, 792-804.	3.1	32
20	Analysis of surface roughness alteration in micro flexible rolling. <i>Wear</i> , 2019, 426-427, 1286-1295.	3.1	10
21	Analysis and characterisation of WC-10Co and AISI 4340 steel bimetal composite produced by powderâ€solid diffusion bonding. <i>International Journal of Advanced Manufacturing Technology</i> , 2019, 103, 3247-3263.	3.0	22
22	Experimental investigation on the mechanical and tribological coupled behaviour of bimetal composite under different states. <i>Surface Topography: Metrology and Properties</i> , 2019, 7, 025015.	1.6	7
23	Quantification of texture-induced ridging in ferritic stainless steels 430 and 430LR during tensile deformation. <i>Journal of Materials Research and Technology</i> , 2019, 8, 2041-2051.	5.8	18
24	Micromanufacturing of composite materials: a review. <i>International Journal of Extreme Manufacturing</i> , 2019, 1, 012004.	12.7	62
25	Effect of Tool Pin Eccentricity on the Microstructure and Mechanical Properties of Friction Stir Processed Al-6061 Alloy. <i>Journal of Materials Engineering and Performance</i> , 2019, 28, 2845-2852.	2.5	4
26	Graphene encapsulated SiC nanoparticles as tribology-favoured nanofillers in aluminium composite. <i>Composites Part B: Engineering</i> , 2019, 162, 445-453.	12.0	46
27	Effects of micro flexible rolling and annealing on microstructure, microhardness and texture of aluminium alloy. <i>Materials Characterization</i> , 2019, 148, 142-155.	4.4	18
28	Numerical and experimental investigation on the forming behaviour of stainless/carbon steel bimetal composite. <i>International Journal of Advanced Manufacturing Technology</i> , 2019, 101, 1075-1083.	3.0	21
29	Microstructure and mechanical properties of thin varying thickness strips with different transition zones produced by micro flexible rolling. <i>Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture</i> , 2019, 233, 1954-1967.	2.4	7
30	Microstructure and tribological behaviour of alumina composites reinforced with SiC-graphene core-shell nanoparticles. <i>Tribology International</i> , 2019, 131, 94-101.	5.9	26
31	Effect of graphene on the tribolayer of aluminum matrix composite during dry sliding wear. <i>Surface and Coatings Technology</i> , 2019, 358, 907-912.	4.8	38
32	Influence of tool pin eccentricity on microstructural evolution and mechanical properties of friction stir processed Al-5052 alloy. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2019, 739, 272-276.	5.6	40
33	Effects of rolling processes on ridging generation of ferritic stainless steel. <i>Materials Characterization</i> , 2018, 137, 201-211.	4.4	27
34	In Situ synthesis of SiC-graphene core-shell nanoparticles using wet ball milling. <i>Ceramics International</i> , 2018, 44, 8283-8289.	4.8	30
35	Thermomechanical processing of advanced high strength steels. <i>Progress in Materials Science</i> , 2018, 94, 174-242.	32.8	295
36	Analysis of oil-in-water based nanolubricants with varying mass fractions of oil and TiO ₂ nanoparticles. <i>Wear</i> , 2018, 396-397, 162-171.	3.1	45

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37	Effects of friction-stir processing with water cooling on the properties of an Al–Zn–Mg–Cu Alloy. Materials Science and Technology, 2018, 34, 153-160.	1.6	16
38	Friction and wear characteristics of TiO ₂ nano-additive water-based lubricant on ferritic stainless steel. Tribology International, 2018, 117, 24-38.	5.9	126
39	Analysis of contact mechanics in micro flexible rolling. Procedia Manufacturing, 2018, 15, 1467-1474.	1.9	3
40	Water Cooling Effects on the Microstructural Evolution and Mechanical Properties of Friction-Stir-Processed Al-6061 Alloy. Transactions of the Indian Institute of Metals, 2018, 71, 3077-3087.	1.5	12
41	Effect of annealing on microstructure and hardness of thin aluminium strips fabricated by micro flexible rolling. MATEC Web of Conferences, 2018, 190, 11001.	0.2	2
42	Hot deformation behavior and processing maps of Ti–6Al–4V alloy with starting fully lamellar structure. Journal of Materials Research, 2018, 33, 3677-3688.	2.6	16
43	Microstructure and mechanical properties of aluminium-graphene composite powders produced by mechanical milling. Mechanics of Advanced Materials and Modern Processes, 2018, 4, .	2.2	36
44	Analysis of sintering and bonding of ultrafine WC powder and stainless steel by hot compaction diffusion bonding. Fusion Engineering and Design, 2018, 133, 39-50.	1.9	15
45	Effects of oil-in-water based nanolubricant containing TiO ₂ nanoparticles in hot rolling of 304 stainless steel. Journal of Materials Processing Technology, 2018, 262, 149-156.	6.3	36
46	Performance Evaluation and Lubrication Mechanism of Water-Based Nanolubricants Containing Nano-TiO ₂ in Hot Steel Rolling. Lubricants, 2018, 6, 57.	2.9	26
47	Synthesis and Characterization of Aluminum Matrix Composites Reinforced with SiC-Graphene Core-Shell Nanoparticles. Materials Science Forum, 2018, 923, 8-12.	0.3	0
48	Comparison of Multiphase Flow in a Continuous Casting Tundish Using Two Types of Industrialized Ladle Shrouds. Jom, 2018, 70, 2886-2892.	1.9	7
49	Analysis of bending characteristics of bimetal steel composite. International Journal of Mechanical Sciences, 2018, 148, 272-283.	6.7	30
50	Effects of Nano-TiO ₂ Additive in Oil-in-Water Lubricant on Contact Angle and Antiscratch Behavior. Tribology Transactions, 2017, 60, 362-372.	2.0	22
51	An analysis of ridging of ferritic stainless steel 430. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2017, 685, 358-366.	5.6	43
52	Microstructural and Mechanical Characterization of a Dissimilar Friction Stir-Welded AA5083-AA7B04 Butt Joint. Journal of Materials Engineering and Performance, 2017, 26, 530-539.	2.5	16
53	Developing a self-piercing riveting with flange pipe rivet joining aluminum sheets. International Journal of Advanced Manufacturing Technology, 2017, 91, 2315-2328.	3.0	14
54	A study of the tribological behaviour of TiO ₂ nano-additive water-based lubricants. Tribology International, 2017, 109, 398-408.	5.9	180

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55	Effects of oil-in-water based nanolubricant containing TiO ₂ nanoparticles on the tribological behaviour of oxidised high-speed steel. Tribology International, 2017, 110, 77-85.	5.9	38
56	Analysis of TiO ₂ nano-additive water-based lubricants in hot rolling of microalloyed steel. Journal of Manufacturing Processes, 2017, 27, 26-36.	5.9	63
57	Study on growth behaviour of oxide scale and its effects on tribological property of nano-TiO ₂ additive oil-in-water lubricant. Wear, 2017, 376-377, 792-802.	3.1	19
58	A review of modern advancements in micro drilling techniques. Journal of Manufacturing Processes, 2017, 29, 343-375.	5.9	146
59	Wear and friction behaviour of high-speed steel and indefinite chill material for rolling ferritic stainless steels. Wear, 2017, 376-377, 1580-1585.	3.1	28
60	Fabrication and properties of strip casting 4.5 wt% Si steel thin sheet. Journal of Magnetism and Magnetic Materials, 2017, 424, 64-68.	2.3	13
61	Influences of temperature and grain size on the material deformability in microforming process. International Journal of Material Forming, 2017, 10, 753-764.	2.0	27
62	Experimental and numerical study on micro deep drawing with aluminium-copper composite material. Procedia Engineering, 2017, 207, 1051-1056.	1.2	17
63	Effects of oil-in-water based nanolubricant containing TiO ₂ nanoparticles in hot rolling of 304 stainless steel. Procedia Engineering, 2017, 207, 1385-1390.	1.2	7
64	Size Effects in Microforming. , 2017, , 29-50.		1
65	Size effects in micro rolling of metals. IOP Conference Series: Materials Science and Engineering, 2017, 282, 012013.	0.6	5
66	Practice of Micro Flexible Rolling. , 2017, , 325-346.		1
67	Computational and Experimental Study on the Critical Unstable Shape of Cold-Rolled Strip. Steel Research International, 2016, 87, 691-698.	1.8	4
68	Large magnetoresistance in highly textured Mn _{44.7} Ni _{43.5} Sn _{11.8} melt spun ribbons. Smart Materials and Structures, 2016, 25, 055031.	3.5	8
69	High Temperature Oxidation of Indefinite Chill Roll Material Under Dry and Humid Atmospheres. Steel Research International, 2016, 87, 349-358.	1.8	3
70	Analysis of {411}$\langle 411 \rangle$ recrystallisation texture in twin-roll strip casting of 4.5 wt% Si non-oriented electrical steel. Materials Letters, 2016, 180, 63-67.	2.6	11
71	Flow behaviour and constitutive modelling of a ferritic stainless steel at elevated temperatures. Metals and Materials International, 2016, 22, 474-487.	3.4	18
72	Effect of strain rate and temperature on hot workability and flow behaviour of duplex stainless steel. Ironmaking and Steelmaking, 2016, 43, 88-96.	2.1	10

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73	Study on Tribological Property of Nano-TiO ₂ Additive Oil-in-Water Lubricant during Hot Rolling. Materials Science Forum, 2016, 874, 381-386.	0.3	2
74	Experimental and Numerical Study on the Effect of ZDDP Films on Sticking During Hot Rolling of Ferritic Stainless Steel Strip. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2016, 47, 5195-5202.	2.2	7
75	A Novel Nano-TiO ₂ Additive Oil-in-Water Lubricant for Hot Steel Rolling. Materials Science Forum, 2016, 861, 201-206.	0.3	5
76	A Comparative Study of Fluid Flow and Mass Transfer in a Trumpet-Shaped Ladle Shroud Using Large Eddy Simulation. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2016, 47, 495-507.	2.1	15
77	Effects of temperature and strain rate on flow behavior and microstructural evolution of super duplex stainless steel under hot deformation. Journal of Iron and Steel Research International, 2016, 23, 244-252.	2.8	42
78	Breakaway oxidation behaviour of ferritic stainless steels at 1150°C in humid air. Corrosion Science, 2016, 108, 11-22.	6.6	54
79	Effect of initial base metal temper on microstructure and mechanical properties of friction stir processed Al-7B04 alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2016, 650, 396-403.	5.6	37
80	The role of oxide-scale microtexture on tribological behaviour in the nanoparticle lubrication of hot rolling. Tribology International, 2016, 93, 190-201.	5.9	19
81	Influence of multi-pass friction stir processing on the microstructure and mechanical properties of Al-5083 alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2016, 650, 281-289.	5.6	93
82	Study on micro hydro-mechanical deep drawing using finite element method. MATEC Web of Conferences, 2016, 80, 02009.	0.2	2
83	A Comparison of Texture Development in an Experimental and Industrial Tertiary Oxide Scale in a Hot Strip Mill. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2015, 46, 2503-2513.	2.1	7
84	Crystallographic Texture Based Analysis of Fe ₃ O ₄ /Fe ₂ O ₃ Scale Formed on a Hot-rolled Microalloyed Steel. ISIJ International, 2015, 55, 278-284.		
85	Analysis of the microstructure, texture and magnetic properties of strip casting 4.5wt.% Si non-oriented electrical steel. Materials and Design, 2015, 85, 455-460.	7.0	28
86	The effects of vacuum annealing temperatures on the microstructure, mechanical properties and electrical resistivity of Mg ₃ Al ₂ Zn alloy ribbons. Vacuum, 2015, 115, 80-84.	3.5	6
87	Thermal Stability and Properties of Deformation-Processed Cu-Fe In Situ Composites. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2015, 46, 2255-2261.	2.2	20
88	Dependence of texture development on the grain size of tertiary oxide scales formed on a microalloyed steel. Surface and Coatings Technology, 2015, 272, 39-49.	4.8	7
89	Effects of grain boundaries in oxide scale on tribological properties of nanoparticles lubrication. Wear, 2015, 332-333, 1286-1292.	3.1	17
90	High temperature oxidation behaviour of ferritic stainless steel SUS 430 in humid air. Metals and Materials International, 2015, 21, 251-259.	3.4	40

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91	Effect of Extreme Pressure Additives on the Deformation Behavior of Oxide Scale during the Hot Rolling of Ferritic Stainless Steel Strips. Tribology Transactions, 2015, 58, 947-954.	2.0	15
92	Local strain analysis of the tertiary oxide scale formed on a hot-rolled steel strip via EBSD. Surface and Coatings Technology, 2015, 277, 151-159.	4.8	12
93	A switch-like magnetoresistance of ferromagnetic Ni ₄₀ Mn ₄₀ Ga ribbon during martensitic transformation. Materials Letters, 2015, 160, 428-431.	2.6	10
94	Investigation of oxide scale on ferritic stainless steel B445J1M and its tribological effect in hot rolling. Wear, 2015, 338-339, 178-188.	3.1	15
95	Effect of welding heat input and post-welded heat treatment on hardness of stir zone for friction stir-welded 2024-T3 aluminum alloy. Transactions of Nonferrous Metals Society of China, 2015, 25, 2524-2532.	4.2	56
96	Oxide scale characterization of ferritic stainless steel and its deformation and friction in hot rolling. Tribology International, 2015, 84, 61-70.	5.9	41
97	Microstructure and microtexture evolutions of deformed oxide layers on a hot-rolled microalloyed steel. Corrosion Science, 2015, 90, 140-152.	6.6	27
98	Effect of extreme pressure agents on the anti-scratch behaviour of high-speed steel material. Tribology International, 2015, 81, 19-28.	5.9	15
99	Characteristics of unsteady lubrication film in metal-forming process with dynamic roll gap. Journal of Central South University, 2014, 21, 3787-3792.	3.0	5
100	FEM Analysis of Profile Control Capability during Rolling in a 6-High CVC Cold Rolling Mill. Advanced Materials Research, 2014, 988, 257-262.	0.3	8
101	Molecular dynamics simulation of fracture behaviors of $\sim 110^\circ$ tilt grain boundaries in β -TiAl. Transactions of Nonferrous Metals Society of China, 2014, 24, 3645-3651.	4.2	6
102	3D FEM analysis of strip shape during multi-pass rolling in a 6-high CVC cold rolling mill. International Journal of Advanced Manufacturing Technology, 2014, 74, 1733-1745.	3.0	67
103	Hydrogen-induced hardening of Ti ₄₀ Al ₄₀ V alloy in β phase field. Materials & Design, 2014, 54, 967-972.	5.1	13
104	Effects of tungsten on the hydrogen embrittlement behaviour of microalloyed steels. Corrosion Science, 2014, 82, 380-391.	6.6	48
105	Characteristics of oxide scale formed on ferritic stainless steels in simulated reheating atmosphere. Surface and Coatings Technology, 2014, 258, 257-267.	4.8	58
106	Effects of Hydrogen on the Critical Conditions for Dynamic Recrystallization of Titanium Alloy During Hot Deformation. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2014, 45, 4932-4945.	2.2	8
107	Effect of a grain-refined microalloyed steel substrate on the formation mechanism of a tight oxide scale. Corrosion Science, 2014, 85, 115-125.	6.6	32
108	Effect of directional solidification rate on the microstructure and properties of deformation-processed Cu ₄₀ Cr ₄₀ 0.1Ag in situ composites. Journal of Alloys and Compounds, 2014, 612, 221-226.	5.5	27

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109	Modelling of the hot deformation behaviour of a titanium alloy using constitutive equations and artificial neural network. Computational Materials Science, 2014, 92, 47-56.	3.0	134
110	Study of intermetallics and phase equilibria of Mgâ€“Znâ€“La system in Mg-rich corner at 345Â°C. Journal of Alloys and Compounds, 2014, 612, 479-485.	5.5	16
111	Effects of Tungsten Addition on the Microstructure and Mechanical Properties of Microalloyed Forging Steels. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2013, 44, 3511-3523.	2.2	12
112	Multi-factor coupling system characteristic of the dynamic roll gap in the high-speed rolling mill during the unsteady lubrication process. Tribology International, 2013, 67, 174-181.	5.9	21
113	Enhancing impact fracture toughness and tensile properties of a microalloyed cast steel by hot forging and post-forging heat treatment processes. Materials & Design, 2013, 47, 227-233.	5.1	42
114	Effects of tungsten on continuous cooling transformation characteristics of microalloyed steels. Materials & Design, 2013, 49, 252-258.	5.1	14
115	Effects of hydrogen on the hot deformation behaviour of Tiâ€“6Alâ€“4V alloy: Experimental and constitutive model studies. Journal of Alloys and Compounds, 2013, 574, 407-414.	5.5	35
116	Effects of tungsten addition and heat treatment conditions on microstructure and mechanical properties of microalloyed forging steels. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2013, 562, 144-151.	5.6	16
117	Work hardening behaviors of a low carbon Nb-microalloyed Siâ€“Mn quenchingâ€“partitioning steel with different cooling styles after partitioning. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2013, 585, 132-138.	5.6	25
118	Enhancing mechanical properties of a low-carbon microalloyed cast steel by controlled heat treatment. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2013, 559, 427-435.	5.6	41
119	Effect of tungsten addition on the mechanical properties and corrosion resistance of S355NL forging steel. Metals and Materials International, 2012, 18, 217-223.	3.4	9
120	Effect of thermo hydrogen treatment on lattice defects and microstructure refinement of Ti6Al4V alloy. International Journal of Hydrogen Energy, 2010, 35, 6448-6454.	7.1	46
121	Influence of hydrogen content on hot deformation behavior and microstructural evolution of Ti600 alloy. Journal of Alloys and Compounds, 2010, 491, 673-678.	5.5	44
122	Influence of thermo hydrogen treatment on hot deformation behavior of Ti600 alloy. Transactions of Nonferrous Metals Society of China, 2009, 19, 65-71.	4.2	8
123	Influence of hydrogenation on microstructures and microhardness of Ti6Al4V alloy. Transactions of Nonferrous Metals Society of China, 2008, 18, 506-511.	4.2	22
124	Modeling of dynamic recrystallization of Ti6Al4V alloy using a cellular automaton approach. Acta Metallurgica Sinica (English Letters), 2008, 21, 260-268.	2.9	10
125	Thermodynamic Calculation on the Formation of Titanium Hydride. Chinese Journal of Chemical Physics, 2008, 21, 569-574.	1.3	12
126	Tribological Analysis of Oxide Scales during Cooling Process of Rolled Microalloyed Steel. Advanced Materials Research, 0, 1017, 435-440.	0.3	11

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127	Effect of Pre-Quenching Process on Microstructure and Mechanical Properties in a Nb-Microalloyed Low Carbon Q-P Steel. Materials Science Forum, 0, 816, 729-735.	0.3	6
128	A Review of Microstructure and Microtexture of Tertiary Oxide Scale in a Hot Strip Mill. Key Engineering Materials, 0, 716, 843-855.	0.4	4