Wenming Jiang

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/2907653/publications.pdf

Version: 2024-02-01

69	2,012	236925	289244
papers	citations	25 h-index	40 g-index

69	69	69	871
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Microstructure and mechanical properties of SiCnp/Al6082 aluminum matrix composites prepared by squeeze casting combined with stir casting. Journal of Materials Processing Technology, 2020, 283, 116699.	6.3	148
2	Effects of rare earth elements addition on microstructures, tensile properties and fractography of A357 alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2014, 597, 237-244.	5.6	147
3	Microstructure, mechanical properties and corrosion resistance of A356 aluminum/AZ91D magnesium bimetal prepared by a compound casting combined with a novel Ni-Cu composite interlayer. Journal of Materials Processing Technology, 2021, 288, 116874.	6.3	99
4	Correlation of microstructure with mechanical properties and fracture behavior of A356-T6 aluminum alloy fabricated by expendable pattern shell casting with vacuum and low-pressure, gravity casting and lost foam casting. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2013, 560, 396-403.	5.6	91
5	Enhanced mechanical properties of 6082 aluminum alloy via SiC addition combined with squeeze casting. Journal of Materials Science and Technology, 2021, 88, 119-131.	10.7	88
6	Improved steel/aluminum bonding in bimetallic castings by a compound casting process. Journal of Materials Processing Technology, 2015, 226, 25-31.	6.3	82
7	Investigation on the Interface Characteristics of Al/Mg Bimetallic Castings Processed by Lost Foam Casting. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2016, 47, 2462-2470.	2.2	64
8	Combined effects of mechanical vibration and wall thickness on microstructure and mechanical properties of A356 aluminum alloy produced by expendable pattern shell casting. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2014, 619, 228-237.	5.6	61
9	Effects of vibration frequency on microstructure, mechanical properties, and fracture behavior of A356 aluminum alloy obtained by expendable pattern shell casting. International Journal of Advanced Manufacturing Technology, 2016, 83, 167-175.	3.0	58
10	Interfacial microstructures and mechanical properties of Mg/Al bimetal produced by a novel liquid-liquid compound casting process. Journal of Materials Processing Technology, 2018, 261, 149-158.	6.3	57
11	Effects of zinc coating on interfacial microstructures and mechanical properties of aluminum/steel bimetallic composites. Journal of Alloys and Compounds, 2016, 678, 249-257.	5.5	54
12	Effect of heat treatment on bonding strength of aluminum/steel bimetal produced by a compound casting. Journal of Materials Processing Technology, 2018, 258, 239-250.	6.3	51
13	Effects of hot-dip galvanizing and aluminizing on interfacial microstructures and mechanical properties of aluminum/iron bimetallic composites. Journal of Alloys and Compounds, 2016, 688, 742-751.	5.5	48
14	Direct ink writing additive manufacturing of porous alumina-based ceramic cores modified with nanosized MgO. Journal of the European Ceramic Society, 2020, 40, 5758-5766.	5.7	46
15	The role of vacuum degree in the bonding of Al/Mg bimetal prepared by a compound casting process. Journal of Materials Processing Technology, 2019, 265, 112-121.	6.3	42
16	Effects of Melt-to-Solid Insert Volume Ratio on the Microstructures and Mechanical Properties of Al/Mg Bimetallic Castings Produced by Lost Foam Casting. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2016, 47, 6487-6497.	2.2	40
17	New Insights into the Characterization and Formation of the Interface of A356/AZ91D Bimetallic Composites Fabricated by Compound Casting. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2019, 50, 1076-1090.	2.2	39
18	Improving mechanical properties of AZ91D magnesium/A356 aluminum bimetal prepared by compound casting via a high velocity oxygen fuel sprayed Ni coating. Journal of Magnesium and Alloys, 2022, 10, 1075-1085.	11.9	39

#	Article	IF	Citations
19	Microstructure, tensile properties and fractography of A356 alloy under as-cast and T6 obtained with expendable pattern shell casting process. Transactions of Nonferrous Metals Society of China, 2012, 22, s7-s13.	4.2	36
20	Effects of pouring temperature on microstructure, mechanical properties, and fracture behavior of Al/Mg bimetallic composites produced by lost foam casting process. International Journal of Advanced Manufacturing Technology, 2017, 91, 1355-1368.	3.0	36
21	Fabrication and microstructure evolution of Al/Mg bimetal using a near-net forming process. Materials and Manufacturing Processes, 2017, 32, 1391-1397.	4.7	33
22	A new shell casting process based on expendable pattern with vacuum and low-pressure casting for aluminum and magnesium alloys. International Journal of Advanced Manufacturing Technology, 2010, 51, 25-34.	3.0	32
23	Effect of La on microstructure, mechanical properties and fracture behavior of Al/Mg bimetallic interface manufactured by compound casting. Journal of Materials Science and Technology, 2022, 105, 214-225.	10.7	32
24	Investigation of microstructures and mechanical properties of A356 aluminum alloy produced by expendable pattern shell casting process with vacuum and low pressure. Materials & Design, 2011, 32, 926-934.	5.1	31
25	Influence of gas flowrate on filling ability and internal quality of A356 aluminum alloy castings fabricated using the expendable pattern shell casting with vacuum and low pressure. International Journal of Advanced Manufacturing Technology, 2013, 67, 2459-2468.	3.0	30
26	Influence of process parameters on filling ability of A356 aluminium alloy in expendable pattern shell casting with vacuum and low pressure. International Journal of Cast Metals Research, 2012, 25, 47-52.	1.0	28
27	Effects of Process Parameters on Internal Quality of Castings during Novel Casting. Materials and Manufacturing Processes, 2012, 28, 48-55.	4.7	23
28	Development of high strength Mg/Al bimetal by a novel ultrasonic vibration aided compound casting process. Journal of Materials Processing Technology, 2022, 300, 117441.	6.3	23
29	Effect of vibration on interfacial microstructure and mechanical properties of Mg/Al bimetal prepared by a novel compound casting. Journal of Magnesium and Alloys, 2022, 10, 2296-2309.	11.9	23
30	Fabrication and characterization of high-strength water-soluble composite salt core for zinc alloy die castings. International Journal of Advanced Manufacturing Technology, 2018, 95, 505-512.	3.0	20
31	Processing of Al/Cu bimetal via a novel compound casting method. Materials and Manufacturing Processes, 2019, 34, 1016-1025.	4.7	20
32	Study on the surface roughness of ceramic shells and castings in the ceramic shell casting process based on expandable pattern. Journal of Materials Processing Technology, 2011, 211, 1465-1470.	6.3	19
33	Comprehensive utilization of foundry dust: Coal powder and clay minerals separation by ultrasonic-assisted flotation. Journal of Hazardous Materials, 2021, 402, 124124.	12.4	19
34	Improved interface bonding of Al/Mg bimetal fabricated by compound casting with Nd addition. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2021, 826, 141998.	5.6	19
35	Performance of resin bonded sand for magnesium alloy casting. Journal of Manufacturing Processes, 2017, 30, 313-319.	5.9	17
36	Comparative study on performance and microstructure of composite water-soluble salt core material for manufacturing hollow zinc alloy castings. Materials Chemistry and Physics, 2020, 252, 123257.	4.0	17

#	Article	IF	Citations
37	Effect of nano-TiO2 on properties of 3 mol% yttria-stabilized zirconia ceramic via layered extrusion forming. Journal of the European Ceramic Society, 2020, 40, 4539-4546.	5.7	17
38	Effect of different Ni interlayers on interfacial microstructure and bonding properties of Al/Mg bimetal using a novel compound casting. Journal of Manufacturing Processes, 2020, 50, 614-628.	5.9	16
39	Novel technologies for the lost foam casting process. Frontiers of Mechanical Engineering, 2018, 13, 37-47.	4.3	15
40	Preparation of porous Al2O3 ceramic microspheres by a novel micro-droplet jetting rapid forming method. Ceramics International, 2019, 45, 20583-20588.	4.8	15
41	Performance characteristics of collapsible CaO-SiO2 based ceramic core material via layered extrusion forming. Ceramics International, 2019, 45, 7681-7689.	4.8	15
42	Effect of insert materials on microstructure and mechanical properties of Al/Mg bimetal produced by a novel solid-liquid compound process. Journal of Manufacturing Processes, 2019, 47, 62-73.	5.9	14
43	The role of vibration time in interfacial microstructure and mechanical properties of Al/Mg bimetallic composites produced by a novel compound casting. Journal of Materials Research and Technology, 2021, 15, 3867-3879.	5.8	14
44	Layered extrusion forming of complex ceramic structures using starch as removable support. Ceramics International, 2019, 45, 21843-21850.	4.8	13
45	Microstructure, Mechanical Properties and Fracture Behavior of Magnesium/Steel Bimetal Using Compound Casting Assisted with Hot-Dip Aluminizing. Metals and Materials International, 2021, 27, 2977-2988.	3.4	13
46	Effect of heat treatment on microstructures and mechanical properties of Al/Fe bimetal. Materials Science and Technology, 2018, 34, 1519-1528.	1.6	12
47	Microstructure of Al/Al bimetallic composites by lost foam casting with Zn interlayer. Materials Science and Technology, 2018, 34, 487-492.	1.6	12
48	A water-soluble magnesium sulfate bonded sand core material for manufacturing hollow composite castings. Composite Structures, 2018, 201, 553-560.	5.8	12
49	Performance of water-soluble composite sulfate sand core for magnesium alloy castings. Archives of Civil and Mechanical Engineering, 2016, 16, 494-502.	3.8	11
50	Fabrication of soluble salt-based support for suspended ceramic structure by layered extrusion forming method. Materials and Design, 2019, 183, 108173.	7.0	11
51	Interface characteristics of Mg/Al bimetal produced by a novel liquid-liquid compound casting process with an Al interlayer. International Journal of Advanced Manufacturing Technology, 2019, 101, 1125-1132.	3.0	11
52	Investigation of parameters and mechanism of ultrasound-assisted wet reclamation of waste sodium silicate sands. International Journal of Cast Metals Research, 2018, 31, 169-176.	1.0	10
53	Interfacial bonding mechanism and pouring temperature effect on Al/Cu bimetal prepared by a novel compound casting process. Materials Research Express, 2019, 6, 096529.	1.6	10
54	Effects of glass fiber size and content on microstructures and properties of KNO3-based water-soluble salt core for high pressure die casting. International Journal of Metalcasting, 2021, 15, 520-529.	1.9	10

#	Article	IF	Citations
55	3D printing of high-strength water-soluble salt cores via material extrusion. International Journal of Advanced Manufacturing Technology, 2022, 118, 2993-3003.	3.0	10
56	Understanding the microstructural evolution and strengthening mechanism of Al/Mg bimetallic interface via the introduction of Y. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2022, 840, 142974.	5.6	10
57	Investigation on characteristic and formation mechanism of porosity defects of Alâ€“Li alloys prepared by sand casting. Journal of Materials Research and Technology, 2022, 19, 4063-4075.	5.8	8
58	Recycling water glass from wet reclamation sewage of waste sodium silicate-bonded sand. China Foundry, 2019, 16, 198-203.	1.4	7
59	Effect of silica sol on performance and surface precision of alumina ceramic shell prepared by binder jetting. Ceramics International, 2022, 48, 24372-24382.	4.8	7
60	Effects of Mechanical Vibration and Wall Thickness on Microstructure and Mechanical Properties of AZ91D Magnesium Alloy Processed by Expendable Pattern Shell Casting. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2015, 46, 1776-1788.	2.2	6
61	Effect of Vibration Acceleration on Interface Microstructure and Bonding Strength of Mgâ€“Al Bimetal Produced by Compound Casting. Metals, 2022, 12, 766.	2.3	6
62	Characteristics and wear performance of borided AISI 440C matensitic stainless steel. Materials Express, 2018, 8, 500-510.	0.5	4
63	Investigation on corrosion mechanism of stirring paddles of different iron-based materials in ZL101 aluminum melt. Journal of Materials Research and Technology, 2021, 13, 1992-2005.	5.8	4
64	Comparative Study on the Hardness and Wear Resistance of the Remelted Gradient Layer on Ductile Iron Fabricated by Plasma Transferred Arc. Metals, 2022, 12, 644.	2.3	3
65	Interfacial characteristics, mechanical properties and fracture behaviour of Al/Mg bimetallic composites by compound casting with different morphologies of Al insert. International Journal of Cast Metals Research, 2022, 35, 84-101.	1.0	3
66	Preparation of Al2O3/AZ91D Mg Interpenetrating Composites Using Lost Foam Casting Combined with Layered Extrusion Forming. Metals and Materials International, 2022, 28, 1047-1052.	3.4	1
67	Study on causticizing process of sewage discharged from wet reclamation of waste sodium silicate sand. IOP Conference Series: Earth and Environmental Science, 2018, 199, 042015.	0.3	0
68	Evaluation of Chromium Carbide Coatings on AISI 52100 Steel Obtained by Thermo-Reactive Diffusion Technique. Medziagotyra, 2019, 25, .	0.2	0
69	Properties Optimization and Strengthening Mechanism of KNO3â€“KCl Water-Soluble Composite Salt Core for Hollow Zinc Alloy Die Castings. International Journal of Metalcasting, 0, , 1.	1.9	0