Yuansheng Yang

List of Publications by Year
in descending order

67 papers	1,287 citations	331642 21 h-index	377849 34 g-index
67 all docs	67 docs citations	67 times ranked	1370 citing authors

#	Article	IF	Citations
1	Recommendation for modifying current cytotoxicity testing standards for biodegradable magnesium-based materials. Acta Biomaterialia, 2015, 21, 237-249.	8.3	338
2	A high strength and ductility Mgâ€“Znâ€“Alâ€“Cuâ€“Mn magnesium alloy. Materials & Design, 2013, 47, 746-749.	5.1	52
3	Effects of Cu addition on the microstructure and mechanical properties of as-cast and heat treated Mg-6Zn-4Al magnesium alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2017, 689, 203-211.	5.6	49
4	Effect of crystal orientation on corrosion behavior of directionally solidified Mg-4 wt% Zn alloy. Journal of Materials Science and Technology, 2018, 34, 1229-1235.	10.7	47
5	Microstructure and tensile properties of as-cast and as-aged Mgâ€“6Alâ€“4Zn alloys with Sn addition. Materials & Design, 2013, 51, 567-574.	5.1	39
6	Effect of pulsed magnetic field on superalloy melt. International Journal of Heat and Mass Transfer, 2009, 52, 5285-5292.	4.8	38
7	Microstructure and corrosion resistance of directionally solidified Mg-2 wt.% Zn alloy. Corrosion Science, 2017, 120, 75-81.	6.6	38
8	Microstructure and mechanical properties of as-cast Mgâ€“Alâ€“Snâ€“Yâ€“Nd alloy. Materials & Design, 2012, 36, 432-437.	5.1	34
9	Microstructure and mechanical properties of Mg-Zn-Y-Nd-Zr alloys. Journal of Rare Earths, 2013, 31, 616-621.	4.8	32
10	Influence of solution treatment on microstructure, mechanical and corrosion properties of Mg-4Zn alloy. Journal of Magnesium and Alloys, 2015, 3, 247-252.	11.9	31
11	Numerical simulation of non-dendritic structure formation in Mg-Al alloy solidified with ultrasonic field. Ultrasonics Sonochemistry, 2018, 40, 113-119.	8.2	28
12	Grain refinement effect of a pulsed magnetic field on as-cast superalloy K417. Journal of Materials Research, 2009, 24, 2670-2676.	2.6	27
13	Microstructure, texture and mechanical properties of hot-rolled Mgâ€“4Alâ€“2Snâ€“0.5Yâ€–0.4Nd alloy. Journal of Magnesium and Alloys, 2016, 4, 207-213.	11.9	27
14	Effects of scandium addition on biocompatibility of biodegradable Mgâ€“1.5Znâ€–0.6Zr alloy. Materials Letters, 2018, 215, 200-202.	2.6	27
15	Influence of the low voltage pulsed magnetic field on the columnar-to-equiaxed transition during directional solidification of superalloy K4169. Journal of Materials Science and Technology, 2020, 48, 9-17.	10.7	26
16	Effects of solution and quenching treatment on the residual stress in extruded ZK60 magnesium alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2018, 722, 14-19.	5.6	25
17	Influence of albumin on in vitro degradation behavior of biodegradable Mg-1.5Zn-0.6Zr-0.2Sc alloy. Materials Letters, 2018, 217, 227-230.	2.6	25
18	Improving mechanical properties of age-hardenable Mgâ€“6Znâ€–4Alâ€–1Sn alloy processed by double-aging treatment. Journal of Materials Science and Technology, 2017, 33, 1249-1254.	10.7	24

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19	Theoretical analysis of the particle gradient distribution in centrifugal field during solidification. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 1996, 27, 1025-1029.	2.1	23
20	Grain refinement effect of pulsed magnetic field on solidified microstructure of superalloy IN718. Journal of Materials Research, 2009, 24, 3174-3181.	2.6	23
21	Effect of grain morphology on the degradation behavior of Mg-4 wt% Zn alloy in Hank's solution. Materials Science and Engineering C, 2020, 106, 110013.	7.3	22
22	Low cycle fatigue behavior of the extruded AZ80 magnesium alloy under different strain amplitudes and strain rates. Journal of Magnesium and Alloys, 2016, 4, 181-187.	11.9	21
23	Application of Steady Magnetic Field for Refining Solidification Structure and Enhancing Mechanical Properties of 25Cr-20Ni-Fe-C Alloy in Centrifugal Casting.. ISIJ International, 1995, 35, 389-392.	1.4	18
24	Dynamic microstructural evolution in Mgâ€“4Znâ€“2Alâ€“2Sn alloy during hot deformation. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2016, 657, 393-398.	5.6	17
25	Effects of Pulsed Magnetic Field on Microsegregation of Solute Elements in a Ni-Based Single Crystal Superalloy. Journal of Materials Science and Technology, 2017, 33, 105-110.	10.7	17
26	Residual stress and precipitation of Mg-5Zn-3.5Sn-1Mn-0.5Ca-0.5Cu alloy with different quenching rates. Journal of Magnesium and Alloys, 2021, 9, 604-612.	11.9	16
27	Microstructure and mechanical properties of Mg-5Zn-3.5Sn-1Mn-0.5Ca-0.5Cu alloy. Materials Characterization, 2019, 147, 406-413.	4.4	15
28	Age hardening responses of as-extruded Mg-2.5Sn-1.5Ca alloys with a wide range of Al concentration. Journal of Materials Science and Technology, 2020, 38, 39-46.	10.7	15
29	An effective method to calculate the composition-dependent interdiffusivity with one diffusion couple. Computational Materials Science, 2018, 143, 182-188.	3.0	14
30	Effects of scandium addition on the in vitro degradation behavior of biodegradable Mgâ€“1.5Znâ€“0.6Zr alloy. Journal of Materials Science, 2018, 53, 14075-14086.	3.7	14
31	Effect of temperature conditions on grain refinement of Mgâ€“Al alloy under ultrasonic field. International Journal of Cast Metals Research, 2017, 30, 341-347.	1.0	13
32	A numerical model for spacing selection of lamellar eutectics grown from flowing liquids. Journal of Crystal Growth, 1998, 194, 263-271.	1.5	12
33	Effect of Pulsed Magnetic Field on the Residual Stress of Rolled Magnium Alloy AZ31 Sheet. Acta Metallurgica Sinica (English Letters), 2021, 34, 45-53.	2.9	12
34	Improved corrosion resistance of Mg alloy by a green phosphating: insights into pre-activation, temperature, and growth mechanism. Journal of Materials Science, 2021, 56, 828-843.	3.7	10
35	Numerical simulation of fluid flow in electromagnetic centrifugal casting. Modelling and Simulation in Materials Science and Engineering, 1996, 4, 421-432.	2.0	9
36	The segregation of copper and silicon in Al-Si-Cu alloy during electromagnetic centrifugal solidification. Science and Technology of Advanced Materials, 2001, 2, 271-275.	6.1	9

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37	Characterization the role of squeezing pressure on microstructure, tensile properties and failure mode of a new Mg-6Zn-4Al-0.5Cu magnesium alloy. Journal of Alloys and Compounds, 2017, 718, 188-196.	5.5	9
38	The Study on the Overall Plasma Electrolytic Oxidation for 6061â€“7075 Dissimilar Aluminum Alloy Welded Parts Based on the Dielectric Breakdown Theory. Materials, 2018, 11, 63.	2.9	8
39	Simulation of the Influence of Pulsed Magnetic Field on the Superalloy Melt with the Solidâ€“Liquid Interface in Directional Solidification. Acta Metallurgica Sinica (English Letters), 2020, 33, 1442-1454.	2.9	8
40	The origin of nuclei and the refinement mechanism for solidified superalloy IN718 under pulsed magnetic field. Journal of Materials Research, 2009, 24, 3689-3692.	2.6	7
41	Microstructure and mechanical property of biodegradable Mgâ€“1.5Znâ€“0.6Zr alloy with varying contents of scandium. Materials Letters, 2018, 229, 60-63.	2.6	6
42	Solidification Structure Control by the Interaction of Pulsed Magnetic Field and Melt. Procedia Manufacturing, 2019, 37, 621-626.	1.9	6
43	Comparison of the effects of pre-activators on morphology and corrosion resistance of phosphate conversion coating on magnesium alloy. Journal of Magnesium and Alloys, 2021, , .	11.9	6
44	The mechanical anisotropy of directionally solidified Mg-4 wt.% Zn alloy under compression test. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2019, 762, 138104.	5.6	5
45	Effect of Al on the microstructure and mechanical properties of Mgâ€“6Znâ€“2Snâ€“0.5Mn alloy. Materials Science and Technology, 2019, 35, 1464-1470.	1.6	5
46	Evolution of the Microstructure and Microsegregation in Subrapidly Solidified Mgâ€“6Alâ€“4Znâ€“1.2Sn Magnesium Alloy. Advanced Engineering Materials, 2021, 23, 2000583.	3.5	5
47	Monotonic and Fatigue Behavior of Magnesium Extrusion Alloy AM30: An International Benchmark Test in the â€œMagnesium Front End Research and Development Projectâ€•, 2010, , .		4
48	Crystallography and morphology of a lathy ferrite in Feâ€“Crâ€“Ni alloys during directional solidification. Journal of Materials Research, 2013, 28, 2040-2046.	2.6	4
49	Overall micro-arc oxidation treatment for AZ31Bâ€“6061 magnesiumâ€“aluminium dissimilar metal connecting parts. Corrosion Engineering Science and Technology, 2017, 52, 470-475.	1.4	4
50	Calculation of the solidâ€“liquid interfacial energy for Zrâ€“Niâ€“Al and Zrâ€“Niâ€“Alâ€“Cu alloys based on the non-structural approach. Modelling and Simulation in Materials Science and Engineering, 2006, 14, 1095-1103.	2.0	3
51	Simulation for Carbon Nanotube Dispersion and Microstructure Formation in CNTs/AZ91D Composite Fabricated by Ultrasonic Processing. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2017, 48, 2256-2266.	2.1	3
52	Atomic size and chemical effects of alloying elements Cu, Mg and Si on the structure and dynamics of molten 8090-based AlLi alloy. International Journal of Cast Metals Research, 2018, 31, 93-98.	1.0	3
53	Microstructure and mechanical properties of directionally solidified Mgâ€“Zn alloy as a biomaterial. Materials Science and Technology, 2019, 35, 2165-2172.	1.6	3
54	Numerical simulation of equiaxed growth of Ni-based alloy in multi-directional flowing melt. Computational Materials Science, 2020, 173, 109408.	3.0	3

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55	Effect of Graphite Powder Amount on Surface Films Formed on Molten AZ91D Alloy. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2017, 48, 2564-2573.	2.1	2
56	Fluidity, Microstructure, and Tensile Properties of Sub-rapidly Solidified Mg-6Al-4Zn-xSn (xâ€‰=â€‰0, 0.6, 1.2,) Tj ETQq0 0 0 rgBT /Ove	2.9	2
57	Effect of Holding Time on Surface Films Formed on Molten AZ91D Alloy Protected by Graphite Powder. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2017, 48, 2334-2342.	2.1	1
58	Effect of Melt Temperature on Surface Films Formed on Molten AZ91D Alloy Protected by Graphite Powder. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2017, 48, 3152-3160.	2.1	1
59	Effect of Convection on Equiaxed Solidification of Ni-based alloy. Procedia Manufacturing, 2019, 37, 508-512.	1.9	1
60	The corrosion characteristics and mechanism of directionally solidified Mg-3Zn-xCa alloys. Journal of Magnesium and Alloys, 2022, , .	11.9	1
61	Energy model for the Zr-based metallic glass alloy melt with clusters. Science in China Series G: Physics, Mechanics and Astronomy, 2007, 50, 460-466.	0.2	0
62	Microstructure of Mg-5Zn-3.5Sn-1Mn-0.5Ca-0.5Cu alloy after hot compression. Procedia Manufacturing, 2019, 37, 46-50.	1.9	0
63	Centrifugal Casting of Al-25%w Cu Alloy with Electromagnetic Stirring and Water Cooling. , 2001, , 177-184.		0
64	INCLUSIONS IN Mg-Gd-Y-Zr ALLOY MELTING UNDER THE GAS COVERAGE. Jinshu Xuebao/Acta Metallurgica Sinica, 2012, 48, 63.	0.3	0
65	EFFECTS OF A1 AND Zn ADDITION ON THEMICROSTRUCTURE AND MECHANICALPROPERTIES OF CAST Mg-5Sn ALLOY. Jinshu Xuebao/Acta Metallurgica Sinica, 2013, 49, 621.	0.3	0
66	Microstructures and Mechanical Properties of Extruded and Aged Mgâ€“4Znâ€“2Alâ€“2Snâ€“(0.6Mn) Alloy. Springer Proceedings in Physics, 2019, , 1-9.	0.2	0
67	Effect of Heat Treatment on the Cyclic Deforming Behavior of As-Extruded ZA81M Magnesium Alloy. Metals, 2022, 12, 146.	2.3	0