Ruizhi Wu

List of Publications by Year in descending order

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Version: 2024-02-01

116	4,165	38 h-index	59
papers	citations		g-index
117	117 docs citations	117	1519
all docs		times ranked	citing authors

#	Article	IF	CITATIONS
1	Recent developments in high-strength Mg-RE-based alloys: Focusing on Mg-Gd and Mg-Y systems. Journal of Magnesium and Alloys, 2018, 6, 277-291.	5.5	554
2	Towards developing Mg alloys with simultaneously improved strength and corrosion resistance via RE alloying. Journal of Magnesium and Alloys, 2021, 9, 41-56.	5.5	217
3	Achieving High Strength and Ductility in Magnesium Alloys via Densely Hierarchical Double Contraction Nanotwins. Nano Letters, 2017, 17, 6117-6124.	4.5	114
4	Microstructures and properties of superlight Mg–Li–Al–Zn wrought alloys. Journal of Alloys and Compounds, 2009, 486, 722-725.	2.8	93
5	Effect of Y and Ce on the microstructure, mechanical properties and anisotropy of as-rolled Mg-8Li-1Al alloy. Journal of Materials Science and Technology, 2020, 39, 124-134.	5.6	93
6	Development of high mechanical properties and moderate thermal conductivity cast Mg alloy with multiple RE via heat treatment. Journal of Materials Science and Technology, 2018, 34, 1076-1084.	5.6	89
7	Effects of the addition of Y in Mg–8Li–(1,3)Al alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2009, 516, 96-99.	2.6	83
8	Enhanced Electromagnetic Interference Shielding in a Duplex-Phase Mg–9Li–3Al–1Zn Alloy Processed by Accumulative Roll Bonding. Acta Metallurgica Sinica (English Letters), 2020, 33, 490-499.	1.5	83
9	Synergistically improved damping, elastic modulus and mechanical properties of rolled Mg-8Li-4Y–2Er-2Zn-0.6Zr alloy with twins and long-period stacking ordered phase. Journal of Alloys and Compounds, 2021, 881, 160663.	2.8	81
10	Effects of Ce-rich RE additions and heat treatment on the microstructure and tensile properties of Mg–Li–Al–Zn-based alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2011, 528, 2174-2179.	2.6	71
11	Microstructure, mechanical properties and wear performance of AZ31 matrix composites reinforced by graphene nanoplatelets(GNPs). Journal of Alloys and Compounds, 2018, 750, 530-536.	2.8	71
12	Microstructure and mechanical properties of Mg–Gd–Dy–Zn alloy with long period stacking ordered structure or stacking faults. Journal of Alloys and Compounds, 2011, 509, 7717-7722.	2.8	70
13	Microstructure, mechanical properties and aging behavior of Mg–5Li–3Al–2Zn–xAg. Materials Science & Science & Structural Materials: Properties, Microstructure and Processing, 2009, 520, 36-39.	2.6	67
14	Effects of Nd on microstructure and mechanical properties of as-cast LA141 alloys. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2008, 487, 347-351.	2.6	65
15	Microstructure, mechanical and damping properties of Mg–Er–Gd–Zn alloy reinforced with stacking faults. Materials & Design, 2015, 79, 53-59.	5.1	64
16	Influence of yttrium on microstructure and mechanical properties of as-cast Mg–5Li–3Al–2Zn alloy. Journal of Alloys and Compounds, 2011, 509, 9045-9049.	2.8	63
17	Coarsening kinetics and strengthening mechanisms of core-shell nanoscale precipitates in Al-Li-Yb-Er-Sc-Zr alloy. Journal of Materials Science and Technology, 2021, 61, 197-203.	5.6	60
18	Microstructure and mechanical properties of Mg-5Li-1Al sheets prepared by accumulative roll bonding. Journal of Materials Science and Technology, 2018, 34, 317-323.	5.6	59

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19	Microstructure and thermal conductivity of Mg-2Zn-Zr alloy. Journal of Alloys and Compounds, 2017, 722, 772-777.	2.8	57
20	Combination effects of Yb addition and cryogenic-rolling on microstructure and mechanical properties of LA141 alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2020, 788, 139611.	2.6	56
21	The solution and room temperature aging behavior of Mg–9Li–xAl(x=3, 6) alloys. Journal of Alloys and Compounds, 2012, 536, 145-149.	2.8	55
22	Effects of Cu/Mg ratio on the microstructure, mechanical and corrosion properties of Al-Li-Cu-Mg-X alloys. Materials Science & Structural Materials: Properties, Microstructure and Processing, 2018, 718, 241-249.	2.6	55
23	Ambient-temperature mechanical properties of isochronally aged 1420-Sc-Zr aluminum alloy. Materials Science & Science amp; Engineering A: Structural Materials: Properties, Microstructure and Processing, 2019, 745, 411-419.	2.6	54
24	Microstructure and mechanical properties of high-performance Mg–Y–Er–Zn extruded alloy. Materials & Design, 2014, 54, 256-263.	5.1	52
25	Influence of the combined addition of Y and Nd on the microstructure and mechanical properties of Mg–Li alloy. Materials & Design, 2014, 57, 245-249.	5.1	51
26	Influences of solid solution parameters on the microstrucuture and hardness of Mg–9Li–6Al and Mg–9Li–6Al–2Y. Materials & Design, 2014, 53, 528-533.	5.1	51
27	Experimental study on strengthening of Mg–Li alloy by introducing long-period stacking ordered structure. Scripta Materialia, 2013, 68, 675-678.	2.6	50
28	Influence of Y and Nd on microstructure, texture and anisotropy of Mg–5Li–1Al alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2014, 600, 1-7.	2.6	50
29	High specific strength Mg-Li-Zn-Er alloy processed by multi deformation processes. Materials Characterization, 2020, 160, 110135.	1.9	49
30	The transformation of LPSO type in Mg-4Y-2Er-2Zn-0.6Zr and its response to the mechanical properties and damping capacities. Journal of Magnesium and Alloys, 2020, 8, 793-798.	5.5	48
31	Deformation and microstructure evolution of a high strain rate superplastic Mg–Li–Zn alloy. Journal of Alloys and Compounds, 2011, 509, 9558-9561.	2.8	45
32	Microstructure and hardness of Mg–9Li–6Al– x La (x =0, 2, 5) alloys during solid solution treatment. Materials Science & Dice and Processing, 2015, 625, 169-176.	2.6	45
33	Improving age hardening response and mechanical properties of a new Mg-RE alloy via simple pre-cold rolling. Journal of Alloys and Compounds, 2019, 777, 1375-1385.	2.8	45
34	Effects of Cu addition on the microstructure and hardness of Mg–5Li–3Al–2Zn alloy. Materials Science & Science & Properties, Microstructure and Processing, 2010, 527, 2780-2783.	2.6	44
35	Superplasticity in a two-phase Mg–8Li–2Zn alloy processed by two-pass extrusion. Materials Science & Science & Structural Materials: Properties, Microstructure and Processing, 2011, 528, 6157-6162.	2.6	43
36	Effects of Annealing Process on the Interface of Alternate $\hat{l}\pm/\hat{l}^2$ Mg-Li Composite Sheets Prepared by Accumulative Roll Bonding. Journal of Materials Processing Technology, 2018, 254, 265-276.	3.1	42

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37	Influence of the rolling direction on the microstructure, mechanical, anisotropy and gamma rays shielding properties of an Al-Cu-Li-Mg-X alloy. Materials Science & Digineering A: Structural Materials: Properties, Microstructure and Processing, 2018, 732, 129-137.	2.6	41
38	Effect of carbonate additive on the microstructure and corrosion resistance of plasma electrolytic oxidation coating on Mg-9Li-3Al alloy. International Journal of Minerals, Metallurgy and Materials, 2022, 29, 1453-1463.	2.4	41
39	The process of electroplating with Cu on the surface of Mg–Li alloy. Surface and Coatings Technology, 2013, 225, 119-125.	2.2	40
40	Preparation of Fineâ€Grained and Highâ€Strength Mg–8Li–3Al–1Zn Alloy by Accumulative Roll Bonding. Advanced Engineering Materials, 2016, 18, 304-311.	1.6	40
41	Impeding effect of the Al3(Er,Zr,Li) particles on planar slip and intergranular fracture mechanism of Al-3Li-1Cu-0.1Zr-X alloys. Materials Characterization, 2019, 147, 146-154.	1.9	36
42	Creep behaviors of Mg–5Li–3Al–(0,1)Ca alloys. Materials & Design, 2012, 34, 863-866.	5.1	33
43	Microstructures and tensile properties of hot extruded Mg–5Li–3Al–2Zn–xRE(Rare Earths) alloys. Materials & Design, 2014, 54, 792-795.	5.1	33
44	Superplasticity at elevated temperature of an Mg–8%Li–2%Zn alloy. Journal of Alloys and Compounds, 2012, 541, 372-375.	2.8	32
45	Effect of Y and Ce addition on microstructures and mechanical properties of LZ91 alloys. Journal of Alloys and Compounds, 2019, 800, 72-80.	2.8	31
46	Effects of calcium on the microstructures and tensile properties of Mg–5Li–3Al alloys. Materials Science & Description of Science & Descripti	2.6	30
47	Influence of rolling directions on microstructure, mechanical properties and anisotropy of Mg-5Li-1Al-0.5Y alloy. Journal of Magnesium and Alloys, 2015, 3, 345-351.	5 . 5	30
48	Influence of rolling strain on electromagnetic shielding property and mechanical properties of dual-phase Mg-9Li alloy. Materials Characterization, 2019, 157, 109924.	1.9	30
49	Effects of Sc and Zr on microstructure and properties of 1420 aluminum alloy. Materials Characterization, 2019, 154, 241-247.	1.9	30
50	Microstructure and mechanical properties of ultra-lightweight Mg-Li-Al/Al-Li composite produced by accumulative roll bonding at ambient temperature. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2020, 787, 139494.	2.6	30
51	Microstructure and mechanical properties at elevated temperature of Mg-Al-Ni alloys prepared through powder metallurgy. Journal of Materials Science and Technology, 2017, 33, 947-953.	5.6	29
52	Effects of icosahedral phase on mechanical anisotropy of as-extruded Mg-14Li (in wt%) based alloys. Journal of Materials Science and Technology, 2019, 35, 2477-2484.	5.6	28
53	Microstructure, mechanical properties and aging behaviors of as-extruded Mg–5Li–3Al–2Zn–1.5Cu alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2011, 528, 3915-3920.	2.6	27
54	Study on hydrophobicity and wettability transition of Ni-Cu-SiC coating on Mg-Li alloy. Surface and Coatings Technology, 2018, 350, 428-435.	2.2	27

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55	Low temperature superplasticity of a dual-phase Mg-Li-Zn alloy processed by a multi-mode deformation process. Materials Science & Degineering A: Structural Materials: Properties, Microstructure and Processing, 2018, 737, 61-68.	2.6	27
56	Interface behavior and tensile properties of Mg-14Li-3Al-2Gd sheets prepared by four-layer accumulative roll bonding. Journal of Manufacturing Processes, 2021, 61, 254-260.	2.8	27
57	Advances in micro-arc oxidation coatings on Mg-Li alloys. Applied Surface Science Advances, 2022, 8, 100219.	2.9	27
58	Mechanical and gamma rays shielding properties of a novel fiber-metal laminate based on a basalt/phthalonitrile composite and an Al-Li alloy. Composite Structures, 2019, 210, 421-429.	3.1	26
59	The superplastic property of the as-extruded Mg–8Li alloy. Materials Science & Department of the Structural Materials: Properties, Microstructure and Processing, 2010, 527, 3284-3287.	2.6	25
60	Influence of Annealing Temperature on the Microstructure and Mechanical Properties of Al/Mg/Al Composite Sheets Fabricated by Roll Bonding. Advanced Engineering Materials, 2016, 18, 1792-1798.	1.6	23
61	Effect of cryogenic rolling process on microstructure and mechanical properties of Mg-14Li-1Al alloy. Materials Characterization, 2019, 157, 109903.	1.9	22
62	Effects of solution heat treatment on the microstructure and hardness of Mg–5Li–3Al–2Zn–2Cu alloy. Materials Science & Drocessing, 2010, 527, 7138-7142.	2.6	21
63	Mathematical analysis and its experimental comparisons for the accumulative roll bonding (ARB) process with different superimposed layers. Journal of Magnesium and Alloys, 2021, 9, 1741-1752.	5. 5	21
64	Simultaneous achievement of high electromagnetic shielding effectiveness (X-band) and strength in Mg-Li-Zn-Gd/MWCNTs composite. Journal of Alloys and Compounds, 2021, 882, 160524.	2.8	21
65	Effect of strain rate on compressive mechanical properties of extruded Mg–8Li–1Al–1Ce alloy. Materials & Design, 2013, 49, 110-115.	5.1	20
66	Effect of Yb addition on the microstructure and mechanical properties of ZK60 alloy during extrusion. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2020, 777, 139033.	2.6	20
67	Theoretical analysis and experimental study of spray degassing method. Materials Science & Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2005, 408, 19-25.	2.6	19
68	Microstructure and mechanical properties of LA51 and LA51–0.5Y alloys with different accumulated strains and rolling temperatures. Materials and Design, 2015, 85, 190-196.	3.3	18
69	Effect of extrusion plus rolling on damping capacity and mechanical properties of Mg–Y–Er–Zn-Zr alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2022, 830, 142298.	2.6	18
70	Effect of Sc and Zr on Microstructure and Mechanical Properties of As ast Al–Li–Cu Alloys. Advanced Engineering Materials, 2018, 20, 1700898.	1.6	17
71	Effect of rolling temperature on deformation behavior and mechanical properties of Mg-8Li-1Al-0.6Y-0.6Ce alloy. Journal of Alloys and Compounds, 2020, 831, 154765.	2.8	17
72	Superplastic behavior of extruded Mg–9RY–4Zn alloy containing long period stacking ordered phase. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2013, 576, 202-206.	2.6	16

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73	Microstructure and mechanical properties of Mg-5Li-1Al sheets processed by cross accumulative roll bonding. Journal of Manufacturing Processes, 2019, 46, 139-146.	2.8	16
74	X-band shielding properties of Mg-9Li matrix composite containing Ni0.4Zn0.4Co0.2Fe2O4 fabricated by multi-layer composite rolling. Journal of Alloys and Compounds, 2020, 843, 156053.	2.8	16
75	A good balance between mechanical properties and electromagnetic shielding effectiveness in Mg-9Li-3Al-1Zn alloy. Materials Characterization, 2022, 188, 111888.	1.9	16
76	Ageing behavior of Mg–9Li–6Al–xY(x= 0, 0.5, 2) alloys. Journal of Alloys and Compounds, 2014, 616, 408-412.	2.8	15
77	Microstructure, Texture, and Mechanical Properties of Alternate ⟨i⟩α⟨ i⟩⟨i⟩ ²⟨ i⟩ Mg–Li Composite Sheets Prepared by Accumulative Roll Bonding. Advanced Engineering Materials, 2017, 19, 1600817.	1.6	15
78	High-strength, ductility and modulus Al–Li/B4C composite with near nanostructure produced by accumulative roll bonding. Journal of Alloys and Compounds, 2020, 834, 155105.	2.8	15
79	Influence alloying elements of Al and Y in Mg Li alloy on the corrosion behavior and wear resistance of microarc oxidation coatings. Surface and Coatings Technology, 2022, 432, 128042.	2.2	15
80	High-strength and ductility bimodal-grained Al–Li/Al–Li–Zr composite produced by accumulative roll bonding. Materials Science & Description (Engineering A: Structural Materials: Properties, Microstructure and Processing, 2019, 761, 138049.	2.6	14
81	Concurrently improving uniform elongation and strength of ultrafine-grained Al–2Li alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2020, 792, 139848.	2.6	13
82	Microstructure and mechanical properties of Mg–8Li–2Zn–0.5(Ce, Y) alloys. Journal of Alloys and Compounds, 2011, 509, 1615-1618.	2.8	11
83	Microstructural evolution, precipitation behavior and mechanical properties of a novel Al–Zn–Mg–Cu–Li–Sc–Zr alloy. Journal of Materials Research, 2021, 36, 740-750.	1.2	11
84	Effects of Cold Rolling on Microstructural Evolution and Mechanical Properties of Mg–14Li–1Zn Alloy. Advanced Engineering Materials, 2019, 21, 1801344.	1.6	10
85	Achieving high strength in a Mg–Li–Zn–Y alloy by α-Mg precipitation. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2022, 846, 143272.	2.6	10
86	Fabrication Process, Tensile, and Gamma Rays Shielding Properties of Newly Developed Fiber Metal Laminates Based on an Al–Li Alloy and Carbon Fibersâ€Tungsten Carbide Nanoparticles Reinforced Phthalonitrile Resin Composite. Advanced Engineering Materials, 2019, 21, 1800779.	1.6	8
87	Effect of Sn alloying and cold rolling on microstructure and mechanical properties of Mg 14Li alloy. Materials Characterization, 2021, 182, 111491.	1.9	8
88	EFFECTS OF COMBINED ADDITION OF Y AND Nd ON MICROSTRUCTURE AND TEXTURE AFTER COMPRESSION OF Mg-Li ALLOY AT ROOM TEMPERATURE. Jinshu Xuebao/Acta Metallurgica Sinica, 2012, 48, 725.	0.3	8
89	Microstructure and Mechanical Properties of Mg-8Li- $(0, 1, 2)$ Ca- $(0, 2)$ Gd Alloys. Journal of Materials Engineering and Performance, 2017, 26, 4831-4837.	1.2	7
90	Processability and mechanical properties of surface-modified glass-fibres/phthalonitrile composite and Al–Li alloy fibre-metal-laminates. Materials Science and Technology, 2019, 35, 661-668.	0.8	6

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91	Microstructure and Mechanical Properties of Mg–14Li–3Al–2Gd Alloy Processed by Multilayer Accumulative Roll Bonding. Advanced Engineering Materials, 2020, 22, 1900774.	1.6	6
92	Improvement of electromagnetic shielding properties for Mg-8Li-6Y-2Zn alloy by heat treatment and hot rolling. Journal of Materials Science: Materials in Electronics, 2020, 31, 17249-17257.	1.1	6
93	Microstructure Evolution and Hardness Variation of Mg-9Li-6Al-xLa (xÂ=Â0 and 2.0) Alloys Under Different Aging Parameters. Jom, 2015, 67, 2442-2449.	0.9	5
94	Influence of Nd and Y on texture of as-extruded Mg–5Li–3Al–2Zn alloy. Physics of Metals and Metallography, 2016, 117, 735-741.	0.3	5
95	Effect of Minor Er on the Microstructure and Properties of Al-6.0Mg-0.4Mn-0.1Cr-0.1Zr Alloys. Journal of Materials Engineering and Performance, 2018, 27, 5709-5717.	1.2	5
96	Evolution of Microstructure, Mechanical Properties, and Thermal Conductivity of an Al-Li-Cu-Mg-Zr Alloy Processed by Accumulative Roll Bonding (ARB). Jom, 2019, 71, 4096-4104.	0.9	5
97	High strength ultrafine-grained Al–2Li laminate produced by accumulative roll bonding and aging processes. Journal of Alloys and Compounds, 2019, 811, 152045.	2.8	5
98	Protective and Thermophysical Characteristics of Plasma-Electrolytic Coatings on the Ultra-Light Magnesium Alloy. Journal of Engineering Materials and Technology, Transactions of the ASME, 0, , 1-15.	0.8	5
99	Ultra-high strength Mg-Li alloy with B2 particles and spinodal decomposition zones. Fundamental Research, 2023, 3, 430-433.	1.6	5
100	Microstructure and Mechanical Properties of the As-Cast and Extruded Mg-(6-11)Li-3Al-Ce-Ca Alloys. Materials Transactions, 2010, 51, 1526-1530.	0.4	4
101	The Effect of Y/Er and Zn Addition on the Microstructure and Mechanical Properties of Mg-11Li Alloy. Materials, 2019, 12, 3066.	1.3	4
102	Effects of melt temperature on mechanical properties and fracture structure of commercial purity aluminum purified with salt-based flux. Journal of Materials Science, 2004, 39, 6867-6869.	1.7	3
103	Microstructure and Hardness of Mg – 9Li – 6Al Alloy After Different Variants of Solid Solution Treatment. Metal Science and Heat Treatment, 2018, 59, 761-766.	0.2	3
104	Effect of Li content on electromagnetic shielding effectiveness in binary Mg–Li alloys: a combined experimental and first-principles study. Journal of Materials Science: Materials in Electronics, 2022, 33, 3891-3900.	1.1	3
105	Effects of Al, Y, and Zn Additions on the Microstructure and Mechanical Properties of Mgâ^'3Li Alloy. Advanced Engineering Materials, 2022, 24, .	1.6	3
106	Grain Refinement Behavior of Accumulative Roll Bonding-Processed Mg-14Li-3Al-2Gd Alloy. Journal of Materials Engineering and Performance, 2022, 31, 6617-6625.	1.2	3
107	The effects of purge gases on the hydrogen content and mechanical properties of spray-degassed Al. Jom, 2007, 59, 62-64.	0.9	2
108	Influences of 1Âwt% La-rich RE addition and deformation processes on the alloy of Mg–6Li–1.5Al. Journal of Materials Science, 2010, 45, 4084-4087.	1.7	2

#	Article	IF	CITATIONS
109	Effect of Annealing Temperature on the Microstructure and Mechanical Properties of the Al/Mg–8Li–3Al–1Zn/Al Composite Plates Fabricated by Hot Rolling. Physics of Metals and Metallography, 2019, 120, 447-453.	0.3	2
110	Effect of TiC Content on Tensile Properties, Bend Strength, and Thermal Conductivity of Al-Li-Cu-Mg-Zr Alloy/TiC Composites Produced by Accumulative Roll Bonding. Journal of Materials Engineering and Performance, 2020, 29, 3253-3263.	1.2	2
111	Microstructure and Mechanical Properties of the Asâ€Cast AlLiCuMgZr Alloy with High Li Content and Different Cu/Mg Ratios. Advanced Engineering Materials, 2020, 22, 1901570.	1.6	2
112	Microstructure, Mechanical Properties and Strain Hardening Behavior of Alternative $\hat{l}\pm\hat{l}^2$ Mg-Li Composite Sheets Prepared by Accumulative Roll Bonding. Metals and Materials International, 0, , 1.	1.8	2
113	Effect of Single-Pass Large-Strain Rolling on Microstructure and Mechanical Properties of Al-3Li-1Cu-0.2Er-0.1Zr Alloy. Journal of Materials Engineering and Performance, 2022, 31, 3287-3298.	1.2	2
114	The deformation behavior and microstructure evolution of duplex Mg-9Li-1Al alloy during superplasticity tensile testing. IOP Conference Series: Materials Science and Engineering, 2017, 274, 012113.	0.3	1
115	Microstructure and Mechanical Properties of the Cold-Rolled Mg-14Li-1Zn Alloy after Hot Rolling. Advances in Materials Science and Engineering, 2019, 2019, 1-7.	1.0	1
116	A Novel Ordered B2 Particle Strengthened Mg–Li–Zn Alloy. Advanced Engineering Materials, 2022, 24, .	1.6	1