Yuanding Huang

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/9371488/publications.pdf

Version: 2024-02-01

103	4,858	108046	111975
papers	citations	37 h-index	67 g-index

108	108	108	3088
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Microstructure and mechanical properties of Mg-3Sn-1Ca reinforced with AlN nano-particles. Journal of Magnesium and Alloys, 2023, 11, 259-269.	5.5	8
2	Investigations on the tensile deformation of pure Mg and Mgâ€“15Gd alloy by in-situ X-ray synchrotron radiation and visco-plastic self-consistent modeling. Journal of Magnesium and Alloys, 2023, 11, 607-613.	5.5	8
3	Microstructure, mechanical properties and fracture behaviors of large-scale sand-cast Mg-3Y-2Gd-1Nd-0.4Zr alloy. Journal of Magnesium and Alloys, 2023, 11, 2763-2775.	5.5	7
4	Revealing the role of Al in the microstructural evolution and creep properties of Mg-2.85Nd-0.92Gd-0.41Zr-0.29Zn alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2022, 832, 142358.	2.6	4
5	Compressive deformation of as-extruded LPSO-containing Mg alloys at different temperatures. Journal of Materials Research and Technology, 2022, 16, 944-959.	2.6	14
6	Effects of Y Additions on the Microstructures and Mechanical Behaviours of as Cast Mgâ€“xYâ€“0.5Zr Alloys. Advanced Engineering Materials, 2022, 24, .	1.6	4
7	Revisiting the tolerance limit of Fe impurity in biodegradable magnesium. Scripta Materialia, 2022, 212, 114509.	2.6	3
8	Advances in bioorganic molecules inspired degradation and surface modifications on Mg and its alloys. Journal of Magnesium and Alloys, 2022, 10, 670-688.	5.5	33
9	Comparison on Hot Tearing Behavior of Binary Mgâ€“Al, Mgâ€“Y, Mgâ€“Gd, Mgâ€“Zn, and Mgâ€“Ca Alloys. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2022, 53, 2986-3001.	1.1	7
10	Hot deformation behavior and microstructural evolution for dual-phase Mgâ€“9Liâ€“3Al alloys. Journal of Materials Research and Technology, 2022, 19, 3536-3545.	2.6	15
11	New strategy to solve the ambient strength-ductility dilemma in precipitation-strengthened Mg-Gd alloys via Li addition. Scripta Materialia, 2022, 220, 114901.	2.6	12
12	Influence of the amount of intermetallics on the degradation of Mg-Nd alloys under physiological conditions. Acta Biomaterialia, 2021, 121, 695-712.	4.1	39
13	Mechanism of Mn on inhibiting Fe-caused magnesium corrosion. Journal of Magnesium and Alloys, 2021, 9, 676-685.	5.5	29
14	Interdiffusion and atomic mobility in hcp Mgâ€“Alâ€“Sn alloys. Journal of Alloys and Compounds, 2021, 871, 159517.	2.8	9
15	Extraordinary strength-ductility in gradient amorphous structured Zr-based alloy. Journal of Alloys and Compounds, 2021, 888, 161507.	2.8	65
16	Improving the Creep Resistance of Elektron21 by Adding AlN/Al Nanoparticles Using the High Shear Dispersion Technique. Minerals, Metals and Materials Series, 2021, , 57-69.	0.3	0
17	Formation mechanism of the abnormal texture during extrusion in Mg-Y-Sm-Zn-Zr alloy. Journal of Alloys and Compounds, 2020, 821, 153477.	2.8	32
18	Effects of Intermetallic Microstructure on Degradation of Mg-5Nd Alloy. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2020, 51, 5498-5515.	1.1	10

#	Article	IF	Citations
19	Effects of heat treatment on the microstructural evolution and creep resistance of Elektron21 alloy and its nanocomposite. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2020, 789, 139669.	2.6	7
20	Effect of biaxial compressive stress state on the microstructure evolution and deformation compatibility of rolled sheet Mg alloy AZ31 at room temperature. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2020, 789, 139599.	2.6	22
21	Mechanical behaviors of novel multiple principal elements CuAl10Fe5Ni5Mn1.2Âwt% with micro-nano structures. Journal of Alloys and Compounds, 2020, 843, 155993.	2.8	8
22	Dynamic tensile properties and microstructural evolution of extruded EW75 magnesium alloy at high strain rates. Journal of Magnesium and Alloys, 2020, 8, 849-859.	5.5	25
23	Achieving enhanced mechanical properties in Mg-Gd-Y-Zn-Mn alloy by altering dynamic recrystallization behavior via pre-ageing treatment. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2020, 790, 139635.	2.6	47
24	Roles of Nd and Mn in a new creep-resistant magnesium alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2020, 779, 139152.	2.6	25
25	Individual/synergistic effects of Al and AlN on the microstructural evolution and creep resistance of Elektron21 alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2020, 777, 139072.	2.6	10
26	In situ compressive investigations on the effects of solid solution Gd on the texture and lattice strain evolution of Mg. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2020, 774, 138938.	2.6	9
27	Microstructure and mechanical properties of large-scale Mg-Gd-Y-Zn-Mn alloys prepared through semi-continuous casting. Journal of Materials Science and Technology, 2020, 52, 72-82.	5.6	30
28	Grain refinements of magnesium alloys inoculated by additions of external SiC particles. IOP Conference Series: Materials Science and Engineering, 2019, 529, 012049.	0.3	3
29	Influence of Torsion on Precipitation and Hardening Effects during Aging of an Extruded AZ91 Alloy. Journal of Materials Engineering and Performance, 2019, 28, 4403-4414.	1.2	6
30	Influences of Al and high shearing dispersion technique on the microstructure and creep resistance of Mg-2.85Nd-0.92Gd-0.41Zr-0.29Zn alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2019, 764, 138215.	2.6	11
31	Understanding solid solution strengthening at elevated temperatures in a creep-resistant Mgâ€“Gdâ€“Ca alloy. Acta Materialia, 2019, 181, 185-199.	3.8	71
32	Effects of samarium content on microstructure and mechanical properties of Mgâ€“0.5Znâ€“0.5Zr alloy. Journal of Materials Science and Technology, 2019, 35, 1368-1377.	5.6	66
33	Abnormal extrusion texture and reversed yield asymmetry in a Mgâ€“Y-Sm-Zn-Zr alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2019, 760, 426-430.	2.6	27
34	Calculation of Schmid factor in Mg alloys: Influence of stress state. Scripta Materialia, 2019, 171, 31-35.	2.6	68
35	Influences of AlN/Al Nanoparticles on the Creep Properties of Elektron21 Prepared by High Shear Dispersion Technology. Jom, 2019, 71, 2245-2252.	0.9	2
36	Unexpected Expansion Behavior of Mg-Al Alloys During Isothermal Ageing. Jom, 2019, 71, 2906-2912.	0.9	2

#	Article	IF	Citations
37	Developing a die casting magnesium alloy with excellent mechanical performance by controlling intermetallic phase. Journal of Alloys and Compounds, 2019, 795, 436-445.	2.8	43
38	Microscopic deformation compatibility during biaxial tension in AZ31 Mg alloy rolled sheet at room temperature. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2019, 756, 1-10.	2.6	13
39	Enhancing the creep resistance of AlN/Al nanoparticles reinforced Mg-2.85Nd-0.92Gd-0.41Zr-0.29Zn alloy by a high shear dispersion technique. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2019, 755, 18-27.	2.6	29
40	Microstructures, Corrosion and Mechanical Properties of Mgâ€“Si Alloys as Biodegradable Implant Materials. Minerals, Metals and Materials Series, 2019, , 151-157.	0.3	1
41	Influences of SiC Particle Additions on the Grain Refinement of Mgâ€“Zn Alloys. Minerals, Metals and Materials Series, 2019, , 331-338.	0.3	1
42	Microstructures and mechanical properties of a hot-extruded Mgâˆ’8Gdâˆ’3Ybâˆ’1.2Znâˆ’0.5Zr (wt%) alloy. Journal of Alloys and Compounds, 2019, 776, 666-678.	2.8	48
43	Strengthening and ductilizing of magnesium alloying with heavy rare earth elements. MATEC Web of Conferences, 2018, 188, 03021.	0.1	2
44	Current development of creep-resistant magnesium cast alloys: A review. Materials and Design, 2018, 155, 422-442.	3.3	151
45	The effect of Y addition on recrystallization and mechanical properties of Mgâ€“6Znâ€“xYâ€“0.5Ceâ€“0.4Zr alloys. Vacuum, 2018, 155, 445-455.	1.6	39
46	Effects of extrusion ratio and annealing treatment on the mechanical properties and microstructure of a Mgâ€“11Gdâ€“4.5Yâ€“1Ndâ€“1.5Znâ€“0.5Zr (wt%) alloy. Journal of Materials Science, 2017, 52, 6670-6686.	1.7	24
47	Influence of Dy in solid solution on the degradation behavior of binary Mg-Dy alloys in cell culture medium. Materials Science and Engineering C, 2017, 75, 1351-1358.	3.8	28
48	Recent research and developments on wrought magnesium alloys. Journal of Magnesium and Alloys, 2017, 5, 239-253.	5.5	472
49	Effects of Mn and Zn Solutes on Grain Refinement of Commercial Pure Magnesium. Minerals, Metals and Materials Series, 2017, , 191-198.	0.3	3
50	Simulation of Effective Slip and Drag in Pressure-Driven Flow on Superhydrophobic Surfaces. Journal of Nanomaterials, 2016, 2016, 1-9.	1.5	5
51	Unexpected formation of hydrides in heavy rare earth containing magnesium alloys. Journal of Magnesium and Alloys, 2016, 4, 173-180.	5.5	37
52	Microstructure evolution of Mgâ€“11Gdâ€“4.5Yâ€“1Ndâ€“1.5Znâ€“0.5Zr (wt%) alloy during deformation and its effect on strengthening. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2016, 657, 259-268.	2.6	16
53	Hot tearing characteristics of Mgâ€“2Caâ€“xZn alloys. Journal of Materials Science, 2016, 51, 2687-2704.	1.7	28
54	An in vivo study on the metabolism and osteogenic activity of bioabsorbable Mgâ€“1Sr alloy. Acta Biomaterialia, 2016, 29, 455-467.	4.1	85

#	Article	IF	Citations
55	Plasma electrolytic oxidation coatings on Mg alloy with addition of SiO2 particles. Electrochimica Acta, 2016, 187, 20-33.	2.6	219
56	Atomic Force Microscopy Measurement of Slip on Smooth Hydrophobic Surfaces and Possible Artifacts. Journal of Physical Chemistry C, 2015, 119, 12531-12537.	1.5	13
57	Effect of Zn addition on hot tearing behaviour of Mgâ€“0.5Caâ€“xZn alloys. Materials and Design, 2015, 87, 157-170.	3.3	39
58	An Investigation on Hot Tearing of Mg-4.5Zn-(0.5Zr) Alloys with Y Additions. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2015, 46, 2108-2118.	1.1	30
59	High temperature mechanical behavior of an extruded Mgâ€“11Gdâ€“4.5Yâ€“1Ndâ€“1.5Znâ€“0.5Zr (wt%) alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2015, 645, 213-224.	2.6	22
60	Mechanical properties and corrosion behavior of Mgâ€“Gdâ€“Caâ€“Zr alloys for medical applications. Journal of the Mechanical Behavior of Biomedical Materials, 2015, 47, 38-48.	1.5	46
61	Hot Tearing Susceptibility of Mg-Ca Binary Alloys. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2015, 46, 6003-6017.	1.1	23
62	Microstructural evolution and mechanical properties of Mgâ€“11Gdâ€“4.5Yâ€“1Ndâ€“1.5Znâ€“0.5Zr alloy prepared via pre-ageing and hot extrusion. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2015, 624, 23-31.	2.6	62
63	Fabrication of a high strength Mgâ€“11Gdâ€“4.5Yâ€“1Ndâ€“1.5Znâ€“0.5Zr (wt%) alloy by thermomechanical treatments. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2015, 622, 121-130.	2.6	97
64	Role of multi-microalloying by rare earth elements in ductilization of magnesium alloys. Journal of Magnesium and Alloys, 2014, 2, 1-7.	5.5	74
65	Experimental and numerical analysis of hot tearing susceptibility for Mgâ€“Y alloys. Journal of Materials Science, 2014, 49, 353-362.	1.7	42
66	Investigations on microstructures, mechanical and corrosion properties of Mgâ€“Gdâ€“Zn alloys. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2014, 595, 224-234.	2.6	120
67	Understanding effects of microstructural inhomogeneity on creep response â€“ New approaches to improve the creep resistance in magnesium alloys. Journal of Magnesium and Alloys, 2014, 2, 124-132.	5.5	24
68	Hot Tearing Characteristics of Binary Mg-Gd Alloy Castings. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2013, 44, 2285-2298.	1.1	41
69	Hot tearing susceptibility of binary Mgâ€“Y alloy castings. Materials & Design, 2013, 47, 90-100.	5.1	76
70	Microstructure, mechanical and corrosion properties of Mgâ€“Dyâ€“Gdâ€“Zr alloys for medical applications. Acta Biomaterialia, 2013, 9, 8499-8508.	4.1	92
71	Effects of Sn segregation and precipitates on creep response of Mgâ€“Sn alloys. Fatigue and Fracture of Engineering Materials and Structures, 2013, 36, 308-315.	1.7	16
72	Element distribution in the corrosion layer and cytotoxicity of alloy Mgâ€“10Dy during in vitro biodegradation. Acta Biomaterialia, 2013, 9, 8475-8487.	4.1	87

#	Article	IF	Citations
73	Compression-creep response of magnesium alloy DieMag422 containing barium compared with the commercial creep-resistant alloys AE42 and MRI230D. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2013, 585, 430-438.	2.6	58
74	Fabrication of magnesium alloy with high strength and heat-resistance by hot extrusion and ageing. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2013, 578, 346-353.	2.6	63
75	Role of sintering and clay particle additions on coating formation during PEO processing of AM50 magnesium alloy. Surface and Coatings Technology, 2012, 213, 48-58.	2.2	57
76	Hot Tearing Susceptibility of Magnesiumâ€“Gadolinium Binary Alloys. Transactions of the Indian Institute of Metals, 2012, 65, 701-706.	0.7	7
77	High ductile as-cast Mgâ€“RE based alloys at room temperature. Materials Letters, 2012, 83, 209-212.	1.3	19
78	Influence of ageing treatment on microstructure, mechanical and bio-corrosion properties of Mgâ€“Dy alloys. Journal of the Mechanical Behavior of Biomedical Materials, 2012, 13, 36-44.	1.5	59
79	Identification of unexpected hydrides in Mgâ€“20â€…wt% Dy alloy by high-brilliance synchrotron radiation. Journal of Applied Crystallography, 2012, 45, 17-21.	1.9	17
80	Development of High Performance Singleâ€Phase Solid Solution Magnesium Alloy at Low Temperature. Advanced Engineering Materials, 2012, 14, 178-184.	1.6	9
81	Strain induced GdH2 precipitate in Mgâ€“Gd based alloys. Intermetallics, 2011, 19, 382-389.	1.8	55
82	Mechanical and corrosion properties of binary Mgâ€“Dy alloys for medical applications. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2011, 176, 1827-1834.	1.7	86
83	Mechanism of grain refinement of Mgâ€“Al alloys by SiC inoculation. Scripta Materialia, 2011, 64, 793-796.	2.6	72
84	Characterization of calcium-modified zinc phosphate conversion coatings and their influences on corrosion resistance of AZ31 alloy. Surface and Coatings Technology, 2011, 205, 3347-3355.	2.2	152
85	Influence of composition on hot tearing in binary Mgâ€“Zn alloys. International Journal of Cast Metals Research, 2011, 24, 170-176.	0.5	52
86	Investigations on Hot Tearing of Mg-Zn-(Al) Alloys. , 2011, , 125-130.		2
87	Properties and processing of magnesium-tin-calcium alloys. Metallic Materials, 2011, 49, 163-177.	0.2	14
88	Preparation and properties of high purity Mgâ€“Y biomaterials. Biomaterials, 2010, 31, 398-403.	5.7	170
89	Magnesium alloys as implant materials â€“ Principles of property design for Mgâ€“RE alloysâ˜†. Acta Biomaterialia, 2010, 6, 1714-1725.	4.1	503
90	Bolt Load Retention and Creep Response of AS41 Alloyed with 0.15 % Ca. SAE International Journal of Materials and Manufacturing, 2010, 3, 202-210.	0.3	0

#	Article	IF	Citations
91	Microstructure and corrosion behavior of Mg-Sn-Ca alloys after extrusion. Transactions of Nonferrous Metals Society of China, 2009, 19, 40-44.	1.7	62
92	Effects of segregation of primary alloying elements on the creep response in magnesium alloys. Scripta Materialia, 2008, 58, 894-897.	2.6	9
93	Creep behavior of AE42 based hybrid composites. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2007, 460-461, 268-276.	2.6	32
94	Investigations on thermal fatigue of aluminum- and magnesium-alloy based composites. International Journal of Fatigue, 2006, 28, 1399-1405.	2.8	20
95	Intermetallics in Magnesium Alloys. Advanced Engineering Materials, 2006, 8, 235-240.	1.6	204
96	Microstructural Investigations of the Mg-Sn-xCa System. Advanced Engineering Materials, 2006, 8, 359-364.	1.6	125
97	Tensile and compressive creep behaviour of Al2O3 (SaffilÂ®) short fiber reinforced magnesium alloy AE42. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2005, 410-411, 85-88.	2.6	39
98	Microstructural investigations of interfaces in short fiber reinforced AlSi12CuMgNi composites. Acta Materialia, 2005, 53, 3913-3923.	3.8	18
99	Micro-Strain Induced by Thermal Cycling in Short Fiber Reinforced AlSi12CuMgNi Piston Alloy and AE42 Magnesium Alloy. Advanced Engineering Materials, 2004, 6, 883-888.	1.6	6
100	Preparation and mechanical properties of large-ingot Fe3Al-based alloys. Journal of Materials Processing Technology, 2004, 146, 175-180.	3.1	11
101	Thermal behavior of short fiber reinforced AlSi12CuMgNi piston alloys. Composites Part A: Applied Science and Manufacturing, 2004, 35, 249-263.	3.8	32
102	Mechanical Properties and Corrosion Performance of AZ-Mg Alloy Modified with Ca and Sr. SAE International Journal of Materials and Manufacturing, 0, 1, 103-110.	0.3	3
103	A Unique Quenching and Deformation Dilatometer for Combined In Situ Neutron Diffraction Analysis of Engineering Materials. Advanced Engineering Materials, 0, , 2100163.	1.6	1