Xinsheng Huang

List of Publications by Year
in descending order

99 papers	3,340 citations	136885 32 h-index	149623 56 g-index
100 all docs	100 docs citations	100 times ranked	1308 citing authors

#	Article	IF	Citations
1	Improvement of formability of Mgâ€“Alâ€“Zn alloy sheet at low temperatures using differential speed rolling. Journal of Alloys and Compounds, 2009, 470, 263-268.	2.8	187
2	Effects of Ca on Tensile Properties and Stretch Formability at Room Temperature in Mg-Zn and Mg-Al Alloys. Materials Transactions, 2011, 52, 1477-1482.	0.4	178
3	Mechanical properties of Mgâ€“Alâ€“Zn alloy with a tilted basal texture obtained by differential speed rolling. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2008, 488, 214-220.	2.6	173
4	Textures and stretch formability of Mgâ€“6Alâ€“1Zn magnesium alloy sheets rolled at high temperatures up to 793 K. Scripta Materialia, 2009, 60, 651-654.	2.6	154
5	Improvement of stretch formability of Mgâ€“3Alâ€“1Zn alloy sheet by high temperature rolling at finishing pass. Journal of Alloys and Compounds, 2011, 509, 7579-7584.	2.8	152
6	Discharge properties of Mgâ€“Alâ€“Mnâ€“Ca and Mgâ€“Alâ€“Mn alloys as anode materials for primary magnesiumâ€“air batteries. Journal of Power Sources, 2015, 297, 449-456.	4.0	142
7	Influence of Zn concentration on stretch formability at room temperature of Mgâ€“Znâ€“Ce alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2010, 528, 566-572.	2.6	120
8	Texture and stretch formability of AZ61 and AM60 magnesium alloy sheets processed by high-temperature rolling. Journal of Alloys and Compounds, 2015, 632, 94-102.	2.8	117
9	Microstructure and mechanical properties of AZ80 magnesium alloy sheet processed by differential speed rolling. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2009, 508, 226-233.	2.6	112
10	Microstructure and texture of Mgâ€“Alâ€“Zn alloy processed by differential speed rolling. Journal of Alloys and Compounds, 2008, 457, 408-412.	2.8	106
11	Enhancement of Stretch Formability at Room Temperature by Addition of Ca in Mg-Zn Alloy. Materials Transactions, 2010, 51, 818-821.	0.4	103
12	Enhancement of stretch formability of Mgâ€“3Alâ€“1Zn alloy sheet using hot rolling at high temperatures up to 823K and subsequent warm rolling. Scripta Materialia, 2009, 61, 445-448.	2.6	79
13	Effects of thickness reduction per pass on microstructure and texture of Mgâ€“3Alâ€“1Zn alloy sheet processed by differential speed rolling. Scripta Materialia, 2009, 60, 964-967.	2.6	77
14	Influence of aluminum content on the texture and sheet formability of AM series magnesium alloys. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2015, 633, 144-153.	2.6	69
15	Influences of initial texture on microstructure and stretch formability of Mgâ€“3Alâ€“1Zn alloy sheet obtained by a combination of high temperature and subsequent warm rolling. Scripta Materialia, 2010, 63, 395-398.	2.6	63
16	Microstructural and textural evolution of AZ31 magnesium alloy during differential speed rolling. Journal of Alloys and Compounds, 2009, 479, 726-731.	2.8	61
17	Influence of initial texture on rolling and annealing textures of Mgâ€“3Alâ€“1Zn alloy sheets processed by high temperature rolling. Journal of Alloys and Compounds, 2012, 537, 80-86.	2.8	59
18	Static recrystallization and mechanical properties of Mgâ€“4Yâ€“3RE magnesium alloy sheet processed by differential speed rolling at 823 K. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2012, 538, 281-287.	2.6	58

#	Article	IF	Citations
19	Fabrication of Mg alloy tubes for biodegradable stent application. Materials Science and Engineering C, 2013, 33, 4746-4750.	3.8	58
20	Improvement of stretch formability of pure titanium sheet by differential speed rolling. Scripta Materialia, 2010, 63, 473-476.	2.6	57
21	Influence of rolling temperature on static recrystallization behavior of AZ31 magnesium alloy. Journal of Materials Science, 2012, 47, 4561-4567.	1.7	56
22	Microstructure and mechanical properties of AZX912 magnesium alloy extruded at different temperatures. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2017, 679, 162-171.	2.6	54
23	Magnetic properties of fully dense Sm2Fe17Nx magnets prepared by shock compression. Journal of Magnetism and Magnetic Materials, 2000, 210, 109-120.	1.0	50
24	Annealing behaviour of Mgâ€“3Alâ€“1Zn alloy sheet obtained by a combination of high-temperature rolling and subsequent warm rolling. Journal of Alloys and Compounds, 2011, 509, 4854-4860.	2.8	48
25	Advanced high-temperature ultracentrifuge apparatus for mega-gravity materials science. Review of Scientific Instruments, 2003, 74, 160-163.	0.6	47
26	Substantial improvement in cold formability of concentrated Mgâ€“Alâ€“Znâ€“Ca alloy sheets by high temperature final rolling. Acta Materialia, 2021, 220, 117328.	3.8	43
27	Influences of grain size on mechanical properties and cold formability of Mgâ€“3Alâ€“1Zn alloy sheets with similar weak initial textures. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2014, 611, 152-161.	2.6	42
28	Effects of Ca and Sr additions on microstructure, mechanical properties, and ignition temperature of hot-rolled Mgâ€“Zn alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2020, 769, 138474.	2.6	40
29	Effects of Microstructure on Discharge Behavior of AZ91 Alloy as Anode for Mg–Air Battery. Materials Transactions, 2014, 55, 1202-1207.	0.4	38
30	Metastable BCC and FCC alloy bulk bodies in Feâ€“Cu system prepared by mechanical alloying and shock compression. Journal of Alloys and Compounds, 1999, 288, 299-305.	2.8	37
31	Different annealing behaviours of warm rolled Mgâ€“3Alâ€“1Zn alloy sheets with dynamic recrystallized microstructure and deformation microstructure. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2013, 560, 232-240.	2.6	36
32	Slater-Pauling curve of Fe-Cu solid solution alloys. Physical Review B, 2002, 66, .	1.1	35
33	Effects of Zinc Concentration on the Stretch Formability at Room Temperature of the Rolled Mg-Zn-Ca Alloys. Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals, 2011, 75, 35-41.	0.2	35
34	Simultaneously achieving excellent mechanical properties and high thermal conductivity in a high Mn-containing Mg-Zn-Ca-Al-Mn sheet alloy. Journal of Alloys and Compounds, 2021, 887, 161394.	2.8	33
35	Magnetic properties of Co-Cu metastable solid solution alloys. Physical Review B, 2004, 69, .	1.1	32
36	Compositional optimization of Mgâ€“Znâ€“Sc sheetÂalloys for enhanced room temperature stretch formability. Journal of Alloys and Compounds, 2020, 818, 152891.	2.8	31

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37	Influence of initial texture on cold deep drawability of Mgâ€"3Alâ€"1Zn alloy sheets. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2013, 565, 359-372.	2.6	29
38	Static recrystallization behavior of hot-rolled Mg-Zn-Ce magnesium alloy sheet. Journal of Alloys and Compounds, 2017, 724, 981-990.	2.8	29
39	Effects of initial microstructure on the microstructural evolution and stretch formability of warm rolled Mgâ€"3Alâ€"1Zn alloy sheets. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2013, 587, 150-160.	2.6	28
40	Sedimentation of substitutional atoms and phase change in an In-Pb alloy under an ultrastrong gravitational field. Philosophical Magazine Letters, 2003, 83, 687-690.	0.5	26
41	A combined experimental and numerical study on room temperature formable magnesiumâ€"silverâ€"calcium alloys. Journal of Alloys and Compounds, 2020, 834, 155017.	2.8	26
42	A room temperature formable magnesiumâ€"silverâ€"calcium sheet alloy with high ductility. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2020, 774, 138923.	2.6	25
43	Recycling of 6061 Aluminum Alloy Cutting Chips Using Hot Extrusion and Hot Rolling. Materials Science Forum, 2007, 544-545, 443-446.	0.3	23
44	Enhancement of Room Temperature Stretch Formability of Mg–1.5 mass%Mn Alloy by Texture Control. Materials Transactions, 2013, 54, 392-398.	0.4	22
45	Formation of atomic-scale graded structure in Se-Te semiconductor under strong gravitational field. Journal of Applied Physics, 2007, 101, 113502.	1.1	21
46	Title is missing!. Journal of Materials Science Letters, 1997, 16, 1051-1054.	0.5	18
47	Sedimentation of isotope atoms in monatomic liquid Se. Applied Physics Letters, 2007, 91, 231917.	1.5	17
48	Development of Room Temperature Formability of Rolled Magnesium Alloy Sheets by Texture Control. Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals, 2017, 81, 49-54.	0.2	16
49	Effects of manganese addition on microstructure and press formability of hot-rolled Mgâ€"Alâ€"Zn alloy sheets. Journal of Materials Research, 2008, 23, 3029-3039.	1.2	15
50	Simulation-aided analysis on mechanical properties of dilute Mg-Zn-Ca alloy sheets. Journal of Alloys and Compounds, 2022, 906, 164285.	2.8	15
51	Metastable alloy bulk bodies in the Feâ€"W system prepared by mechanical alloying and shock compression. Journal of Alloys and Compounds, 2000, 296, 183-190.	2.8	14
52	Improving flame resistance and mechanical properties of magnesiumâ€"silverâ€"calcium sheetÂalloys by optimization of calcium content. Journal of Alloys and Compounds, 2020, 837, 155551.	2.8	13
53	Nonequilibrium alloy powders and bulk alloys in Wâ€"Ag system prepared by mechanical alloying and shock compression. Journal of Alloys and Compounds, 2003, 361, 118-124.	2.8	12
54	Microstructural and textural evolution of pure titanium during differential speed rolling and subsequent annealing. Journal of Materials Science, 2014, 49, 3166-3176.	1.7	12

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55	Texture Formation and Room-Temperature Formability of Rolled Mg–Zn–Ce Alloys. Materials Transactions, 2014, 55, 1190-1195.	0.4	12
56	Improvement of deep drawing formability of Mg-6Al-1Zn magnesium alloy sheets with high strength utilizing aging precipitation. Scripta Materialia, 2022, 215, 114709.	2.6	12
57	Effects of Measurement Conditions on Ignition Temperature of Magnesium Alloys. Materials Transactions, 2017, 58, 1616-1623.	0.4	11
58	Effects of ultrastrong gravitational field on the crystalline state of a Bi-Sb alloy. Journal of Applied Physics, 2004, 96, 1336-1340.	1.1	10
59	Elastic and Damping Properties of AZ31 Magnesium Alloy Sheet Processed by High-Temperature Rolling. Materials Transactions, 2011, 52, 2040-2044.	0.4	10
60	Microstructure, Texture and Mechanical Properties of Mg-Zn-Ce Alloy Extruded at Different Temperatures. Materials Transactions, 2011, 52, 1104-1107.	0.4	10
61	Solute segregation assisted grain boundary precipitation and its impact to ductility of a precipitation-hardenable magnesium alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2021, 819, 141481.	2.6	9
62	Improving mechanical properties of an explosive-welded magnesium/aluminum clad plate by subsequent hot-rolling. Journal of Alloys and Compounds, 2022, 898, 162957.	2.8	9
63	Gravity-induced diffusion of isotope atoms in monoatomic solid Se. Europhysics Letters, 2008, 81, 56002.	0.7	8
64	Enhanced Room-Temperature Stretch Formability of Mg–0.2 mass%Ce Alloy Sheets Processed by Combination of High-Temperature Pre-Annealing and Warm Rolling. Materials Transactions, 2015, 56, 1096-1101.	0.4	8
65	Effects of decomposition on the magnetic property of shock-consolidated Sm2Fe17Nx bulk magnets. Journal of Materials Processing Technology, 1999, 85, 138-141.	3.1	7
66	Variation in Texture and Lankford Value of 1070 Aluminum Sheet Rolled by Cone-shaped Roll. Journal of Materials Science and Technology, 2013, 29, 175-179.	5.6	7
67	Improvement of mechanical properties of extruded AZX912 magnesium alloy using high-temperature solution treatment. Journal of Materials Research, 2019, 34, 3725-3734.	1.2	7
68	Effect of bending and tension deformation on the texture evolution and stretch formability of Mg-Zn-RE-Zr alloy. International Journal of Minerals, Metallurgy and Materials, 2022, 29, 1334-1342.	2.4	7
69	Sedimentation of Substitutional Solute Atoms in In-Pb System Alloy under Strong Gravitational Field: Experiments and Simulations. Materials Transactions, 2005, 46, 219-224.	0.4	6
70	Calculated Grain Boundary Segregation in Mg-Zn-Ca Alloys and Its Correlation to the Texture Formation and Formability of the Alloys. Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals, 2020, 84, 318-325.	0.2	6
71	Effects of Bending and Tension Deformation on Texture Evolution and Room Temperature Formability of AZ31B Alloy Sheets. Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals, 2019, 83, 212-220.	0.2	5
72	Synthesis of ruthenium oxide high pressure phases by shock compression. Physica B: Condensed Matter, 1997, 239, 9-12.	1.3	4

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73	Preparation of Feâ€“W system metastable alloy bulk body by mechanical alloying and shock compression. Journal of Materials Processing Technology, 1999, 85, 135-137.	3.1	4
74	Texture and Mechanical Properties of Mg-3Al-1Zn-0.5Mn-1.5Ca Alloy Produced by Torsion Extrusion. Materials Transactions, 2010, 51, 872-877.	0.4	4
75	Effects of Calcium Concentration on Room Temperature Formability and Damping Properties of Rolled Mg-Ca Alloys. Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals, 2018, 82, 249-255.	0.2	4
76	Effects of alloy compositions on ignition temperature of magnesium alloys. Keikinzoku/Journal of Japan Institute of Light Metals, 2019, 69, 46-53.	0.1	4
77	Preparation of fine-grained bulk materials in the FeÂCo system by shock compression. Journal of Physics Condensed Matter, 2002, 14, 10825-10828.	0.7	3
78	Influences of Rolling Conditions on Texture and Formability of Magnesium Alloy Sheets. Materials Science Forum, 2010, 638-642, 1536-1540.	0.3	3
79	Stress Corrosion Cracking and Corrosion Resistance of Mgâ€“6%Alâ€“1%Znâ€“2%Ca Extruded Magnesium Alloys. Materials Transactions, 2017, 58, 1257-1263.	0.4	3
80	Microstructures and Mechanical Properties of Precipitation-Hardenable Magnesiumâ€“Silverâ€“Calcium Alloy Sheets. Metals, 2020, 10, 1632.	1.0	3
81	Relationship between Calculated Segregation, Texture and Room Temperature Formability of Binary Magnesium Alloys. Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals, 2021, 85, 382-390.	0.2	3
82	Sedimentation of Substitutional Solute Atoms in Intermetallic Compound of Bi-Pb System under Ultra-Strong Gravitational Field. Defect and Diffusion Forum, 2005, 237-240, 1101-1106.	0.4	2
83	Effects of Manganese on Microstructure and Mechanical Properties of AZ31 Magnesium Alloy Processed by Differential Speed Rolling. Materials Science Forum, 2007, 544-545, 283-286.	0.3	2
84	Effects of Differential Speed Rolling on Microstructure and Mechanical Properties of AZ31 Magnesium Alloy. Materials Science Forum, 2007, 539-543, 1759-1763.	0.3	2
85	Texture and Formability of Heat-treatable Magnesium Alloy Sheets Processed by Differential Speed Rolling. Transactions of the Materials Research Society of Japan, 2009, 34, 785-788.	0.2	2
86	Effects of Solution Treatment on Corrosion Properties of Mgâ€“6 mass%Alâ€“1 mass%Znâ€“2 mass%Ca (AZX612) and Mgâ€“6 mass%Alâ€“1 mass%Zn (AZ61) Alloys. Materials Transactions, 2018, 59, 1173-1179.	0.4	2
87	Effect of Rolling Temperature on Room Temperature Formability and Texture Formation of Mg-3 massï¼…Al-1 massï¼…Sn Alloy Sheet. Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals, 2021, 85, 120-127.	0.2	2
88	Noncombustible Magnesium Alloy Processed by Rotary-Die Equal Channel Angular Pressing Method. Materials Science Forum, 2007, 544-545, 419-422.	0.3	1
89	Mechanical Properties and Formability of AZ31 Magnesium Alloy Processed by Differential Speed Rolling. Materials Science Forum, 2007, 544-545, 395-398.	0.3	1
90	Effects of Homogenization Treatment on Mechanical Properties of Hot-Rolled AZ31 Magnesium Alloy. Materials Science Forum, 2007, 561-565, 255-258.	0.3	1

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91	Metastable Transition-Metal System Bulk Alloys Prepared by MA and Shock Compression. Materials Science Forum, 0, 539-543, 1937-1942.	0.3	1
92	Isotope Separation by Condensed Matter Centrifugation: Sedimentation of Isotope Atoms in Se. Journal of Nuclear Science and Technology, 2008, 45, 105-107.	0.7	1
93	Effect of Bending-Tension Deformation on Texture Evolution and Room Temperature Formability of AZ31 Alloy Sheet Rolled at High Temperature. Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals, 2021, 85, 129-137.	0.2	1
94	Nonequilibrium alloy bulk material in W-Ag system prepared by MA and shock compression. AIP Conference Proceedings, 2000, , .	0.3	0
95	è¡æ’ƒåœ§ç¸®ã‚’ç”¨ã„ãŸé«˜æ€§èƒ½Sm2Fe17Nxç£çŸ³ã®ä½œè£½ã¨ä»Šå¾Œã®å±•æœ›. Materia Japan, 2005, 44, 296-301.	0.6	0
96	Sedimentation of Constitutional Atoms in In-Pb Alloy under Strong Gravitational Field (Experiments) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 5	0.2	0
97	Crystal-Grain Refinement of Materials under an Ultra-Strong Gravitational Field. Advanced Materials Research, 2006, 15-17, 639-642.	0.3	0
98	Influences of Rolling Conditions on Texture and Mechanical Properties of AZ31 Magnesium Alloy Processed by Differential Speed Rolling. Materials Science Forum, 2007, 561-565, 287-290.	0.3	0
99	Enhanced Mechanical Properties of Extruded Mgâ€“9mass%Alâ€“1mass%Znâ€“2mass%Ca Alloy. Minerals, Metals and Materials Series, 2017, , 269-274.	0.3	0