

Shigeharu Kamado

List of Publications by Year in descending order

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220
papers

12,794
citations

16451

64
h-index

29157

104
g-index

223
all docs

223
docs citations

223
times ranked

3379
citing authors

#	ARTICLE	IF	CITATIONS
1	Fabrication of extraordinary high-strength magnesium alloy by hot extrusion. Scripta Materialia, 2009, 61, 644-647.	5.2	495
2	Effect of Zn additions on the age-hardening of Mg $\hat{=}$ 2.0Gd $\hat{=}$ 1.2Y $\hat{=}$ 0.2Zr alloys. Acta Materialia, 2007, 55, 4137-4150.	7.9	441
3	Unveiling the formation of basal texture variations based on twinning and dynamic recrystallization in AZ31 magnesium alloy during extrusion. Acta Materialia, 2018, 157, 53-71.	7.9	352
4	A high-strength Mg $\hat{=}$ Sn $\hat{=}$ Zn $\hat{=}$ Al alloy extruded at low temperature. Scripta Materialia, 2008, 59, 1111-1114.	5.2	312
5	Aging Characteristics and High Temperature Tensile Properties of Mg-Gd-Y-Zr Alloys. Materials Transactions, 2001, 42, 1206-1211.	1.2	278
6	Towards the development of heat-treatable high-strength wrought Mg alloys. Scripta Materialia, 2010, 63, 710-715.	5.2	274
7	Chemistry of nanoscale precipitates in Mg $\hat{=}$ 2.1Gd $\hat{=}$ 0.6Y $\hat{=}$ 0.2Zr (at.%) alloy investigated by the atom probe technique. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2005, 395, 301-306.	5.6	235
8	Creep Properties of Mg-Gd-Y-Zr Alloys. Materials Transactions, 2001, 42, 1212-1218.	1.2	220
9	High-strength extruded Mg $\hat{=}$ Al $\hat{=}$ Ca $\hat{=}$ Mn alloy. Scripta Materialia, 2011, 65, 269-272.	5.2	214
10	Ultra high-strength Mg $\hat{=}$ Gd $\hat{=}$ Y $\hat{=}$ Zn $\hat{=}$ Zr alloy sheets processed by large-strain hot rolling and ageing. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2012, 547, 93-98.	5.6	214
11	Precipitation-hardenable Mg $\hat{=}$ 2.4Zn $\hat{=}$ 0.1Ag $\hat{=}$ 0.1Ca $\hat{=}$ 0.16Zr (at.%) wrought magnesium alloy. Acta Materialia, 2009, 57, 749-760.	7.9	211
12	Bimodally grained microstructure development during hot extrusion of Mg $\hat{=}$ 2.4 Zn $\hat{=}$ 0.1 Ag $\hat{=}$ 0.1 Ca $\hat{=}$ 0.16 Zr (at.%) alloys. Acta Materialia, 2009, 57, 5593-5604.	7.9	202
13	Recrystallization mechanism of as-cast AZ91 magnesium alloy during hot compressive deformation. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2009, 527, 52-60.	5.6	193
14	Effect of extrusion conditions on microstructure and mechanical properties of microalloyed Mg $\hat{=}$ Sn $\hat{=}$ Al $\hat{=}$ Zn alloys. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2013, 588, 318-328.	5.6	181
15	Formation of non-ferromagnetic grain boundary phase in a Ga-doped Nd-rich Nd $\hat{=}$ Fe $\hat{=}$ B sintered magnet. Scripta Materialia, 2016, 113, 218-221.	5.2	164
16	Strong and ductile age-hardening Mg-Al-Ca-Mn alloy that can be extruded as fast as aluminum alloys. Acta Materialia, 2017, 130, 261-270.	7.9	163
17	Structure and chemical compositions of the grain boundary phase in Nd-Fe-B sintered magnets. Acta Materialia, 2016, 115, 269-277.	7.9	160
18	Recrystallization mechanism and the relationship between grain size and Zener $\hat{=}$ Hollomon parameter of Mg $\hat{=}$ Al $\hat{=}$ Zn $\hat{=}$ Ca alloys during hot compression. Scripta Materialia, 2010, 63, 293-296.	5.2	151

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19	Solute clustering and grain boundary segregation in extruded dilute Mg-Gd alloys. <i>Scripta Materialia</i> , 2014, 93, 28-31.	5.2	150
20	Strong and ductile heat-treatable Mg-Sn-Zn-Al wrought alloys. <i>Acta Materialia</i> , 2015, 99, 176-186.	7.9	146
21	Altered ageing behaviour of a nanostructured Mg-8.2Gd-3.8Y-1.0Zn-0.4Zr alloy processed by high pressure torsion. <i>Acta Materialia</i> , 2018, 151, 260-270.	7.9	143
22	Alloy Development of High Toughness Mg-Gd-Y-Zn-Zr Alloys. <i>Materials Transactions</i> , 2006, 47, 1066-1070.	1.2	140
23	Rare earth texture and improved ductility in a Mg-Zn-Gd alloy after high-speed extrusion. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2016, 667, 233-239.	5.6	138
24	Deformation Behavior of Ultra-Strong and Ductile Mg-Gd-Y-Zn-Zr Alloy with Bimodal Microstructure. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2018, 49, 1931-1947.	2.2	135
25	Bake-hardenable Mg-Al-Zn-Mn-Ca sheet alloy processed by twin-roll casting. <i>Acta Materialia</i> , 2018, 158, 278-288.	7.9	131
26	Effect of Microstructural Factors on Tensile Properties of an ECAE-Processed AZ31 Magnesium Alloy. <i>Materials Transactions</i> , 2003, 44, 468-475.	1.2	130
27	Twins, shear bands and recrystallization of a Mg-2.0%Zn-0.8%Gd alloy during rolling. <i>Scripta Materialia</i> , 2011, 64, 141-144.	5.2	127
28	Enhanced age-hardening and formation of plate precipitates in Mg-Gd-Ag alloys. <i>Scripta Materialia</i> , 2009, 61, 636-639.	5.2	126
29	Study of the microstructure, texture and tensile properties of as-extruded AZ91 magnesium alloy. <i>Journal of Alloys and Compounds</i> , 2008, 456, 400-406.	5.5	121
30	Dynamic microstructural changes during hot extrusion and mechanical properties of a Mg-5.0 Zn-0.9 Y-0.16 Zr (wt.%) alloy. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2011, 528, 4055-4067.	5.6	121
31	Effect of Zr addition on the mechanical properties of as-extruded Mg-Zn-Ca-Zr alloys. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2010, 527, 2356-2362.	5.6	114
32	Dissimilar joining of Al/Mg light metals by compound casting process. <i>Journal of Materials Science</i> , 2011, 46, 6491-6499.	3.7	114
33	Texture weakening and ductility variation of Mg-2Zn alloy with CA or RE addition. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2015, 645, 196-204.	5.6	113
34	Dynamic microstructural changes in Mg-9Al-1Zn alloy during hot compression. <i>Scripta Materialia</i> , 2009, 61, 249-252.	5.2	111
35	Effect of LPSO and SFs on microstructure evolution and mechanical properties of Mg-Gd-Y-Zn-Zr alloy. <i>Scientific Reports</i> , 2017, 7, 40846.	3.3	110
36	A heat-treatable Mg-Al-Ca-Mn-Zn sheet alloy with good room temperature formability. <i>Scripta Materialia</i> , 2017, 138, 151-155.	5.2	104

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37	Magnetization reversal of exchange-coupled and exchange-decoupled Nd-Fe-B magnets observed by magneto-optical Kerr effect microscopy. <i>Acta Materialia</i> , 2017, 135, 68-76.	7.9	103
38	Microstructures and mechanical properties of high-strength Mg-Gd-Y-Zr alloy sheets processed by severe hot rolling. <i>Journal of Alloys and Compounds</i> , 2012, 524, 46-52.	5.5	101
39	Development of dilute Mg-Zn-Ca-Mn alloy with high performance via extrusion. <i>Journal of Alloys and Compounds</i> , 2016, 668, 13-21.	5.5	101
40	Effect of Mg ₁₇ Al ₁₂ precipitates on the microstructural changes and mechanical properties of hot compressed AZ91 magnesium alloy. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2009, 523, 47-52.	5.6	100
41	Improving strength and ductility of Mg-Gd-Y-Zr alloy simultaneously via extrusion, hot rolling and ageing. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2015, 643, 137-141.	5.6	100
42	Effect of Mn addition on microstructure, texture and mechanical properties of Mg-Zn-Ca alloy. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2011, 528, 3741-3747.	5.6	98
43	Influence of ECAP routes on microstructure and mechanical properties of Mg-Zn-Ca alloy. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2010, 527, 4250-4256.	5.6	97
44	Effect of Ca/Al ratio on microstructure and mechanical properties of Mg-Al-Ca-Mn alloys. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2017, 682, 423-432.	5.6	96
45	Microstructure evolution and mechanical properties of a high strength Mg-11.7Gd-4.9Y-0.3Zr (wt%) alloy prepared by pre-deformation annealing, hot extrusion and ageing. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2017, 703, 348-358.	5.6	95
46	High-speed extrusion of heat-treatable Mg-Al-Ca-Mn dilute alloy. <i>Scripta Materialia</i> , 2015, 101, 28-31.	5.2	89
47	Enhanced corrosion and wear resistances by graphene oxide coating on the surface of Mg-Zn-Ca alloy. <i>Carbon</i> , 2016, 109, 340-351.	10.3	87
48	Extruded Mg-Zn-Ca-Mn alloys with low yield anisotropy. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2012, 558, 356-365.	5.6	86
49	High-speed extrusion of dilute Mg-Zn-Ca-Mn alloys and its effect on microstructure, texture and mechanical properties. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2016, 678, 329-338.	5.6	83
50	Ultrahigh strength as-extruded Mg-10.3Zn-6.4Y-0.4Zr-0.5Ca alloy containing W phase. <i>Materials and Design</i> , 2016, 108, 391-399.	7.0	79
51	Ageing behavior of squeeze cast SiCw/AZ91 magnesium matrix composite. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2003, 348, 67-75.	5.6	77
52	Effect of substituting cerium-rich mischmetal with lanthanum on high temperature properties of die-cast Mg-Zn-Al-Ca-RE alloys. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2004, 380, 93-99.	5.6	77
53	Unexpected influence of Mn addition on the creep properties of a cast Mg-2Al-2Ca (mass%) alloy. <i>Acta Materialia</i> , 2011, 59, 7662-7672.	7.9	75
54	Microstructure and mechanical properties of Mg-Zn-Ca alloy processed by equal channel angular pressing. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2009, 523, 289-294.	5.6	74

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55	Effect of extrusion ratio on microstructure, texture and mechanical properties of indirectly extruded Mg–Zn–Ca alloy. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2013, 569, 48-53.	5.6	74
56	High temperature tensile properties of as-cast Mg–Al–Ca alloys. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2009, 509, 105-110.	5.6	73
57	Effects of trace Gd concentration on texture and mechanical properties of hot-rolled Mg–Zn–xGd sheets. <i>Journal of Magnesium and Alloys</i> , 2013, 1, 23-30.	11.9	73
58	Enhancing strength and creep resistance of Mg–Gd–Y–Zn–Zr alloy by substituting Mn for Zr. <i>Journal of Magnesium and Alloys</i> , 2019, 7, 388-399.	11.9	73
59	Activation of {100} twinning and slip in high ductile Mg–2.0Zn–0.8Gd rolled sheet with non-basal texture during tensile deformation at room temperature. <i>Journal of Alloys and Compounds</i> , 2013, 566, 98-107.	5.5	72
60	Ageing behavior of extruded Mg–8.2Gd–3.8Y–1.0Zn–0.4Zr (wt.%) alloy containing LPSO phase and β precipitates. <i>Scientific Reports</i> , 2017, 7, 43391.	3.3	72
61	Effects of pre-annealing on microstructure and mechanical properties of as-extruded Mg-Gd-Y-Zn-Zr alloy. <i>Journal of Alloys and Compounds</i> , 2017, 729, 627-637.	5.5	71
62	Microstructure evolution and mechanical properties of as-extruded Mg-Gd-Y-Zr alloy with Zn and Nd additions. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2018, 713, 234-243.	5.6	70
63	Ultrahigh strength Mg-Al-Ca-Mn extrusion alloys with various aluminum contents. <i>Journal of Alloys and Compounds</i> , 2019, 792, 130-141.	5.5	70
64	Realization of high strength and high ductility for AZ61 magnesium alloy by severe warm working. <i>Science and Technology of Advanced Materials</i> , 2005, 6, 185-194.	6.1	69
65	Effect of ageing treatment on the precipitation behaviour of Mg–Gd–Y–Zn–Zr alloy. <i>Journal of Alloys and Compounds</i> , 2013, 550, 50-56.	5.5	69
66	Improving tensile properties of dilute Mg-0.27Al-0.13Ca-0.21Mn (at.%) alloy by low temperature high speed extrusion. <i>Journal of Alloys and Compounds</i> , 2015, 648, 428-437.	5.5	69
67	High strength and formable Mg–6.2Zn–0.5Zr–0.2Ca alloy sheet processed by twin roll casting. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2014, 609, 154-160.	5.6	67
68	Improving mechanical properties and yield asymmetry in high-speed extrudable Mg-1.1Al-0.24Ca (wt%) alloy by high Mn addition. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2018, 712, 12-19.	5.6	66
69	The effect of thermal exposure on the interface and mechanical properties of Al ₁₈ B ₄ O ₃₃ w/AZ91 magnesium matrix composite. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2004, 372, 66-74.	5.6	63
70	Influence of rolling temperature on the microstructure and mechanical properties of Mg–Gd–Y–Zn–Zr alloy sheets. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2013, 559, 615-622.	5.6	63
71	Twins, recrystallization and texture evolution of a Mg–5.99Zn–1.76Ca–0.35Mn (wt.%) alloy during indirect extrusion process. <i>Scripta Materialia</i> , 2011, 65, 875-878.	5.2	62
72	Microstructure and mechanical properties of the Mg–Gd–Y–Zn–Zr alloy fabricated by semi-continuous casting. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2012, 549, 128-135.	5.6	61

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73	Effect of cooling rate on the microstructure evolution and mechanical properties of homogenized Mg-Gd-Y-Zn-Zr alloy. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2013, 559, 364-370.	5.6	61
74	Effect of extrusion parameters on microstructure and mechanical properties of Mg-7.5Gd-2.5Y-3.5Zn-0.9Ca-0.4Zr (wt%) alloy. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2017, 685, 159-167.	5.6	61
75	Ultra-fine grained Mg-Zn-Ca-Mn alloy with simultaneously improved strength and ductility processed by equal channel angular pressing. <i>Journal of Alloys and Compounds</i> , 2019, 785, 410-421.	5.5	61
76	Influence of deformation rate on microstructure, texture and mechanical properties of indirect-extruded Mg-Zn-Ca alloy. <i>Materials Characterization</i> , 2015, 104, 66-72.	4.4	60
77	Effects of different cooling rates during two casting processes on the microstructures and mechanical properties of extruded Mg-Al-Ca-Mn alloy. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2012, 542, 71-78.	5.6	59
78	Improvement of Mechanical Characteristics in Severely Plastic-deformed Mg Alloys. <i>Materials Transactions</i> , 2004, 45, 488-492.	1.2	57
79	Microstructure of a Dy-free Nd-Fe-B sintered magnet with 2T coercivity. <i>Acta Materialia</i> , 2018, 156, 146-157.	7.9	56
80	Structure and mechanical properties of extruded Mg-Gd based alloy sheet. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2009, 520, 162-167.	5.6	55
81	Hot compression deformation behavior of Mg-9Gd-2.9Y-1.9Zn-0.4Zr-0.2Ca (wt%) alloy. <i>Materials Characterization</i> , 2017, 124, 40-49.	4.4	55
82	Improvement in creep property of a cast Mg-6Al-3Ca alloy by Mn addition. <i>Scripta Materialia</i> , 2010, 63, 1173-1176.	5.2	54
83	Room and elevated temperature mechanical properties in the as-extruded Mg-Al-Ca-Mn alloys. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2012, 539, 163-169.	5.6	54
84	Effect of microalloyed Zr on the extruded microstructure of Mg-6.2Zn-based alloys. <i>Scripta Materialia</i> , 2014, 90-91, 37-40.	5.2	54
85	Effect of carbon on the coercivity and microstructure in fine-grained Nd-Fe-B sintered magnet. <i>Acta Materialia</i> , 2015, 84, 506-514.	7.9	54
86	Superplasticity of Mg-Zn-Y alloy containing quasicrystal phase processed by equal channel angular pressing. <i>Materials Letters</i> , 2007, 61, 4406-4408.	2.6	53
87	Bio-inspired graphene-based coatings on Mg alloy surfaces and their integrations of anti-corrosive/wearable performances. <i>Carbon</i> , 2019, 141, 154-168.	10.3	53
88	Influence of Ca-Ce/La synergistic alloying on the microstructure and mechanical properties of extruded Mg-Zn alloy. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2017, 708, 11-20.	5.6	52
89	Effects of extrusion ratio and temperature on the mechanical properties and microstructure of as-extruded Mg-Gd-Y-(Nd/Zn)-Zr alloys. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2019, 762, 138080.	5.6	52
90	Role of Ga on the high coercivity of Nd-rich Ga-doped Nd-Fe-B sintered magnet. <i>Journal of Alloys and Compounds</i> , 2019, 790, 750-759.	5.5	52

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91	Microstructure and mechanical properties of Mg-Gd-Y-Zn-Zr alloy sheets processed by combined processes of extrusion, hot rolling and ageing. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2013, 559, 844-851.	5.6	51
92	Reducing the tension-compression yield asymmetry of extruded Mg-Zn-Ca alloy via equal channel angular pressing. <i>Journal of Magnesium and Alloys</i> , 2015, 3, 302-308.	11.9	51
93	Optimization of Mn content for high strengths in high-speed extruded Mg-0.3Al-0.3Ca (wt%) dilute alloy. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2016, 673, 443-449.	5.6	51
94	Tensile deformation characteristics of a nano-structured 5083 Al alloy. <i>Journal of Alloys and Compounds</i> , 2005, 386, 197-201.	5.5	50
95	Fabrication of NiTi intermetallic compound coating made by laser plasma hybrid spraying of mechanically alloyed powders. <i>Surface and Coatings Technology</i> , 2001, 139, 93-100.	4.8	49
96	Effect of final rolling reduction on the microstructure and mechanical properties of Mg-Gd-Y-Zn-Zr alloy sheets. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2013, 559, 232-240.	5.6	49
97	Correlation between dynamic recrystallization and formation of rare earth texture in a Mg-Zn-Gd magnesium alloy during extrusion. <i>Scientific Reports</i> , 2018, 8, 16800.	3.3	49
98	Microstructure and mechanical properties of aluminum borate whisker-reinforced magnesium matrix composites. <i>Materials Letters</i> , 2002, 57, 558-564.	2.6	48
99	Compressive deformation of Mg-Zn-Y-Zr alloy processed by equal channel angular pressing. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2008, 483-484, 564-567.	5.6	47
100	Effect of homogenization on microstructures and mechanical properties of hot compressed Mg-9Al-1Zn alloy. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2011, 528, 2385-2393.	5.6	47
101	New Mg-Al based alloy sheet with good room-temperature stretch formability and tensile properties. <i>Scripta Materialia</i> , 2020, 180, 16-22.	5.2	46
102	Effects of rolling conditions on the microstructure and mechanical properties in a Mg-Al-Ca-Mn-Zn alloy sheet. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2018, 730, 147-154.	5.6	44
103	Development of New Die-castable Mg-Zn-Al-Ca-RE Alloys for High Temperature Applications. <i>Materials Transactions</i> , 2003, 44, 562-570.	1.2	42
104	Influence of size and distribution of W phase on strength and ductility of high strength Mg-5.1Zn-3.2Y-0.4Zr-0.4Ca alloy processed by indirect extrusion. <i>Journal of Materials Science and Technology</i> , 2018, 34, 277-283.	10.7	42
105	In-situ quasicrystal-reinforced magnesium matrix composite processed by equal channel angular extrusion (ECAE). <i>Journal of Materials Science</i> , 2005, 40, 2587-2590.	3.7	41
106	Enhancing strength and ductility of Mg-Zn-Gd alloy via slow-speed extrusion combined with pre-forming. <i>Journal of Alloys and Compounds</i> , 2017, 694, 1214-1223.	5.5	41
107	Intermetallic compounds and antiphase domains in Al/Mg compound casting. <i>Intermetallics</i> , 2012, 23, 182-186.	3.9	40
108	Quasi-in-situ observing the rare earth texture evolution in an extruded Mg-Zn-Gd alloy with bimodal microstructure. <i>Journal of Magnesium and Alloys</i> , 2021, 9, 1797-1805.	11.9	40

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109	Origin of texture weakening in a rolled ZEX4101 alloy sheet and its effect on room temperature formability and tensile property. <i>Journal of Alloys and Compounds</i> , 2019, 782, 304-314.	5.5	39
110	Effect of pre-aging treatment on microstructure and mechanical properties of hot compressed Mg-9Al-1Zn alloy. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2009, 517, 354-360.	5.6	38
111	Numerical simulation for microstructure evolution in AM50 Mg alloy during hot rolling. <i>Computational Materials Science</i> , 2010, 47, 919-925.	3.0	38
112	Microstructure and mechanical properties of rolled sheets of Mg-Gd-Y-Zn-Zr alloy: As-cast versus as-homogenized. <i>Journal of Alloys and Compounds</i> , 2012, 528, 40-44.	5.5	38
113	Superplastic Deformation of AZ61 Magnesium Alloy having Fine Grains. <i>Materials Transactions</i> , 2004, 45, 2537-2541.	1.2	37
114	The microstructural evolution and superplastic behavior at low temperatures of Mg-5.00Zn-0.92Y-0.16Zr (wt.%) alloys after hot extrusion and ECAP process. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2012, 549, 60-68.	5.6	36
115	Enhancing mechanical properties of rolled Mg-Al-Ca-Mn alloy sheet by Zn addition. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2018, 737, 223-229.	5.6	35
116	Role of Zn on the room temperature formability and strength in Mg-Al-Ca-Mn sheet Alloys. <i>Journal of Alloys and Compounds</i> , 2020, 847, 156347.	5.5	35
117	Age hardening characteristics and high temperature tensile properties of Mg-Gd and Mg-Dy alloys.. <i>Keikinzoku/Journal of Japan Institute of Light Metals</i> , 1994, 44, 3-8.	0.4	34
118	Grain Size Dependence of Active Slip Systems in an AZ31 Magnesium Alloy. <i>Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals</i> , 2003, 67, 149-152.	0.4	34
119	Microstructure Characteristics and Mechanical Properties of Al 413/Mg Joint in Compound Casting Process. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2012, 43, 4667-4677.	2.2	34
120	Evolution of microstructure and mechanical properties of an as-cast Mg-8.2Gd-3.8Y-1.0Zn-0.4Zr alloy processed by high pressure torsion. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2017, 700, 312-320.	5.6	34
121	Effect of extrusion ratio and temperature on microstructures and tensile properties of extruded Mg-Gd-Y-Mn-Sc alloy. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2021, 800, 140330.	5.6	34
122	Improving creep property of Mg-Gd-Zn alloy via trace Ca addition. <i>Scripta Materialia</i> , 2017, 139, 34-38.	5.2	32
123	Mechanical Properties of Mg-Y-Zn Alloy Processed by Equal-Channel-Angular Extrusion. <i>Materials Transactions</i> , 2003, 44, 463-467.	1.2	31
124	Microstructure and mechanical properties of extruded Mg-8Gd-2Y-1Nd-0.3Zn-0.6Zr alloy. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2011, 528, 7805-7810.	5.6	31
125	Comparison of coercivity and squareness in hot-deformed and sintered magnets produced from a Nd-Fe-B-Cu-Ga alloy. <i>Scripta Materialia</i> , 2019, 160, 9-14.	5.2	31
126	Improving tensile properties of a room-temperature formable and heat-treatable Mg-6Zn-0.2Ca (wt.%) alloy sheet via micro-alloying of Al and Mn. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2020, 772, 138690.	5.6	31

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127	Microstructures and Tensile Properties of ECAE-Processed and Forged AZ31 Magnesium Alloy. <i>Materials Transactions</i> , 2003, 44, 476-483.	1.2	30
128	Evolution of microstructure and texture of AZ91 alloy during hot compression. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2007, 452-453, 503-507.	5.6	27
129	Improving room-temperature stretch formability of a high-alloyed Mg-Al-Ca-Mn alloy sheet by a high-temperature solution-treatment. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2021, 801, 140399.	5.6	26
130	Aging characteristics and tensile properties of Mg-Gd-Nd-Zr and Mg-Dy-Nd-Zr alloys.. <i>Keikinzoku/Journal of Japan Institute of Light Metals</i> , 1994, 44, 555-561.	0.4	25
131	Microstructure, texture and mechanical properties of extruded Mg-5Al-2Nd-0.2Mn alloy. <i>Journal of Alloys and Compounds</i> , 2015, 653, 100-107.	5.5	25
132	Origins of high strength and ductility combination in a Guinier-Preston zone containing Mg-Al-Ca-Mn alloy. <i>Scripta Materialia</i> , 2019, 163, 121-124.	5.2	24
133	Microstructure and mechanical properties of extruded Mg-Gd-Y-Zn alloy with Mn or Zr addition. <i>Journal of Materials Science</i> , 2019, 54, 10473-10488.	3.7	23
134	Synthesis of high-strength magnesium alloy composites reinforced with Si-coated carbon nanofibres. <i>Scripta Materialia</i> , 2009, 60, 451-454.	5.2	22
135	Microstructure characteristics during the multi-pass hot rolling and their effect on the mechanical properties of AM50 magnesium alloy sheet. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2010, 527, 3379-3385.	5.6	22
136	Effect of warm rolling on the microstructure, texture and mechanical properties of extruded Mg-Zn-Ca-Ce/La alloy. <i>Materials Characterization</i> , 2016, 115, 1-7.	4.4	22
137	Determining the strength of GP zones in Mg alloy AXM10304, both parallel and perpendicular to the zone. <i>Acta Materialia</i> , 2019, 171, 231-239.	7.9	22
138	Development of high-performance Mg-Zn-Ca-Mn alloy via an extrusion process at relatively low temperature. <i>Journal of Alloys and Compounds</i> , 2020, 825, 153942.	5.5	22
139	Room-temperature compressive deformation behavior of Mg-Zn-Ca alloy processed by equal channel angular pressing. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2010, 528, 672-679.	5.6	20
140	Enhancement of current-perpendicular-to-plane giant magnetoresistive outputs by improving B2-order in polycrystalline Co ₂ (Mn _{0.6} Fe _{0.4})Ge Heusler alloy films with the insertion of amorphous CoFeBTa underlayer. <i>Acta Materialia</i> , 2018, 142, 49-57.	7.9	19
141	The partial substitution of Y with Gd on microstructures and mechanical properties of as-cast and as-extruded Mg-10Zn-6Y-0.5Zr alloy. <i>Materials Characterization</i> , 2018, 135, 96-103.	4.4	18
142	Effect of Mn Content on Tensile Properties of Rolled AZ31 Magnesium Alloy Sheet. <i>Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals</i> , 2004, 68, 412-417.	0.4	17
143	Development of an extruded Mg-Zn-Ca-based alloy: new insight on the role of Mn addition in precipitation. <i>Philosophical Magazine</i> , 2012, 92, 1569-1582.	1.6	16
144	Effect of calcium addition on microstructure and texture modification of Mg rolled sheets. <i>Transactions of Nonferrous Metals Society of China</i> , 2015, 25, 2875-2883.	4.2	16

#	ARTICLE	IF	CITATIONS
145	Unexpected influence of prismatic plate-shaped precipitates on strengths and yield anisotropy in an extruded Mg-0.3Ca-1.0In-0.1Al-0.2Mn (at.%) alloy. Scripta Materialia, 2019, 169, 70-75.	5.2	15
146	Development of corrosion-resistant Mg-Al-Ca-Mn-Zn alloy sheet with good tensile properties and stretch formability. Journal of Alloys and Compounds, 2022, 910, 164752.	5.5	15
147	Effect of extrusion speed on properties of the extruded AZ31B magnesium alloy machined chip. Keikinzoku/Journal of Japan Institute of Light Metals, 2006, 56, 166-171.	0.4	14
148	Microstructures and Mechanical Properties of As-Cast and Hot-Rolled Mg-8.43Li-0.353Ymm (Y-riched) Tj ETQq0 0 0 rgBT /Overlock 10 Tf Science, 2012, 43, 709-715.	2.2	14
149	Squeeze cast Al18B4O33 whisker-reinforced magnesium matrix composite. Journal of Materials Science Letters, 2002, 21, 533-535.	0.5	13
150	Investigation of the hot compression behavior of the Mg-9Al-1Zn alloy using EBSD analysis and a cellular automata simulation. Modelling and Simulation in Materials Science and Engineering, 2009, 17, 025009.	2.0	13
151	FEM modeling of dynamical recrystallization during multi-pass hot rolling of AM50 alloy and experimental verification. Transactions of Nonferrous Metals Society of China, 2013, 23, 2678-2685.	4.2	13
152	Experimentally and Numerical Study on Deep Drawing Process for Magnesium Alloy Sheet at Elevated Temperatures. Materials Transactions, 2008, 49, 1101-1106.	1.2	11
153	Effect of grain boundary segregation on microstructure and mechanical properties of ultra-fine grained Mg-9Al-1Ca-1Mn alloy wires. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2022, 848, 143423.	5.6	11
154	Effect of yttrium and neodymium additions on aging characteristics and high temperature tensile properties of Mg-10 mass%Gd and Mg-10 mass%Dy alloys.. Keikinzoku/Journal of Japan Institute of Light Metals, 1994, 44, 549-554.	0.4	10
155	Improving the Wear Resistance of a Magnesium Alloy by Laser Melt Injection. Materials Transactions, 2001, 42, 1322-1325.	1.2	10
156	HRTEM Observation of Age Hardening Precipitates in Mg-8.3%Gd-3.7%Y-0.76%Zr Alloy. Materials Transactions, 2007, 48, 954-959.	1.2	10
157	Mechanical properties of SiC particle- AZ31B magnesium alloy machined chips composites prepared by hot extrusion after ECAP. Keikinzoku/Journal of Japan Institute of Light Metals, 2008, 58, 104-110.	0.4	10
158	Fabrication of Porous Magnesium Alloys by Pulse Electric Current Sintering Process Using Machined Chips. Materials Transactions, 2003, 44, 595-600.	1.2	9
159	Effects of La Addition on the Microstructure, Thermal Conductivity and Mechanical Properties of Mg-3Al-0.3Mn Alloys. Materials, 2022, 15, 1078.	2.9	9
160	Electronic structure of magnesium containing various alloying elements. Journal of the Less Common Metals, 1988, 141, 295-307.	0.8	8
161	Microstructure and mechanical properties of extruded Mg-6.5Gd-1.3Nd-0.7Y-0.3Zn alloy. Transactions of Nonferrous Metals Society of China, 2010, 20, s508-s512.	4.2	8
162	Simultaneously Enhanced Mechanical Properties and Damping Capacities of ZK60 Mg Alloys Processed by Multi-Directional Forging. Acta Metallurgica Sinica (English Letters), 2021, 34, 265-277.	2.9	8

#	ARTICLE	IF	CITATIONS
163	Physical and chemical properties of magnesium. Keikinzoku/Journal of Japan Institute of Light Metals, 2009, 59, 216-224.	0.4	8
164	Interface of Al ₁₈ B ₄ O ₃₃ /w/AZ91 magnesium matrix composite after thermal exposure at 600 Å°C. Journal of Materials Science Letters, 2003, 22, 1709-1712.	0.5	7
165	Improvement in surface properties of extrusions from Mg-Al-Zn based alloy machined chips. Keikinzoku/Journal of Japan Institute of Light Metals, 2005, 55, 400-404.	0.4	7
166	FEM analysis for hot rolling process of AM60 alloy. Transactions of Nonferrous Metals Society of China, 2008, 18, s242-s246.	4.2	7
167	Estimation of the transient interfacial heat flux between substrate/melt at the initiation of magnesium solidification on aluminum substrates using the lumped capacitance method. Applied Surface Science, 2011, 257, 5077-5082.	6.1	7
168	Effect of Cu addition on mechanical properties of Mg-Gd-Zn-Zr casting alloy. Keikinzoku/Journal of Japan Institute of Light Metals, 2012, 62, 272-277.	0.4	7
169	Effect of finish-rolling conditions on mechanical properties and texture characteristics of AM50 alloy sheet. Transactions of Nonferrous Metals Society of China, 2014, 24, 2761-2766.	4.2	7
170	Effect of annealing on microstructure evolution and age-hardening behavior of dilute Mg-Al-Ca-Mn alloy. Journal of Materials Research and Technology, 2022, 18, 1754-1762.	5.8	7
171	Effect of Partially Substituting Ca with Mischmetal on the Microstructure and Mechanical Properties of Extruded Mg-Al-Ca-Mn-Based Alloys. Acta Metallurgica Sinica (English Letters), 2019, 32, 205-217.	2.9	6
172	Effects of Al and Zn contents and heat treatment on microstructures and tensile properties of Mg-Al-Zn alloys. Keikinzoku/Journal of Japan Institute of Light Metals, 2005, 55, 456-462.	0.4	5
173	Enhancement of L2 1 order and spin-polarization of Heusler alloy Co ₂ MnSi thin film by Ag alloying. Scripta Materialia, 2016, 110, 70-73.	5.2	5
174	Effect of microalloyed Al and Ca on mechanical properties and corrosion resistance of high-speed extruded Mg-2Zn-1Mn (mass%) alloy. Materials Characterization, 2022, 191, 112121.	4.4	5
175	Effect of solidification conditions on microstructure of directionally solidified 356 aluminum alloy.. Keikinzoku/Journal of Japan Institute of Light Metals, 1987, 37, 261-267.	0.4	4
176	Microstructure and Protium Absorbing/Desorbing Characteristics of Mg ₂ Ni-Mn Alloys. Materials Transactions, 2001, 42, 1305-1311.	1.2	4
177	Protium Absorption/Desorption Characteristics of Mg ₂ Ni/LaNi ₅ Composite. Materials Transactions, 2002, 43, 2728-2733.	1.2	4
178	HRTEM Observation of Age Hardening Precipitates in Mg-12.0%Gd-1.9%Y-0.7%Zr. Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals, 2006, 70, 828-834.	0.4	4
179	Kinds of magnesium alloys and their application. Keikinzoku/Journal of Japan Institute of Light Metals, 2010, 60, 100-105.	0.4	4
180	Effect of solidification conditions on mechanical properties of directionally solidified 356 aluminum alloy.. Keikinzoku/Journal of Japan Institute of Light Metals, 1987, 37, 268-276.	0.4	3

#	ARTICLE	IF	CITATIONS
181	Effects of the shielding gas and laser wavelength in laser welding magnesium alloy sheets. <i>Welding International</i> , 2002, 16, 442-450.	0.7	3
182	Improvement of Wear Resistance of Magnesium by Laser-Alloying with Silicon. <i>Materials Transactions</i> , 2003, 44, 531-538.	1.2	3
183	In-situ EBSD observation of recrystallization behavior in magnesium alloy. <i>Keikinzoku/Journal of Japan Institute of Light Metals</i> , 2009, 59, 333-338.	0.4	3
184	Microstructure and Mechanical Properties of Extruded Mg-Zn-Ca Alloy. <i>Materials Science Forum</i> , 2010, 654-656, 703-706.	0.3	3
185	Newly-developed flame-retardant magnesium alloy with superior age-hardenability and extrudability. <i>Keikinzoku/Journal of Japan Institute of Light Metals</i> , 2016, 66, 216-220.	0.4	3
186	Effect of aluminum content on stress corrosion cracking of AM60B and AZ91D magnesium alloy ingots. <i>Keikinzoku/Journal of Japan Institute of Light Metals</i> , 2021, 71, 60-67.	0.4	3
187	Fluidity of AZ91D magnesium alloy chips stirred at semi-solid state and mechanical properties after press-forming.. <i>Keikinzoku/Journal of Japan Institute of Light Metals</i> , 1995, 45, 516-521.	0.4	2
188	Hot deformation characteristics and formabilities of Mg-(2.0-4.5)%Al-(0.7-1.5)%Zn alloys. <i>Keikinzoku/Journal of Japan Institute of Light Metals</i> , 2006, 56, 8-14.	0.4	2
189	Microstructures and mechanical properties of porous Ti-6Al-4V alloy fabricated by spark plasma sintering technique. <i>Keikinzoku/Journal of Japan Institute of Light Metals</i> , 2009, 59, 491-497.	0.4	2
190	Rapidly Solidified Structures of Al-0.5 mass%Cu Alloy Obtained by High Power CO ₂ Laser Grazing. <i>Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals</i> , 1998, 62, 577-585.	0.4	2
191	Effect of Al Addition on Grain Refinement and Phase Transformation of the Mg-Gd-Y-Zn-Mn Alloy Containing LPSO Phase. <i>Materials</i> , 2022, 15, 1632.	2.9	2
192	Effect of solidification conditions on mechanical properties of unidirectionally solidified AZ91C alloy.. <i>Keikinzoku/Journal of Japan Institute of Light Metals</i> , 1987, 37, 721-728.	0.4	1
193	Effect of solidification conditions on mechanical properties of unidirectionally solidified EZ33A alloy.. <i>Keikinzoku/Journal of Japan Institute of Light Metals</i> , 1988, 38, 140-146.	0.4	1
194	My encounter with magnesium alloys. <i>Keikinzoku/Journal of Japan Institute of Light Metals</i> , 1992, 42, 481-482.	0.4	1
195	Structure, fluidity and mechanical property of semi-solid AZ91D magnesium alloy fabricated by pressure casting.. <i>Keikinzoku/Journal of Japan Institute of Light Metals</i> , 1994, 44, 9-15.	0.4	1
196	Grain refining by hot extrusion of AZ91D magnesium alloy machined chips and resulting high strain rate superplasticity. <i>Keikinzoku/Journal of Japan Institute of Light Metals</i> , 2007, 57, 391-397.	0.4	1
197	Microstructure and Compression Properties of Al-Si Alloy Foams by Spark Plasma Sintering Technique. <i>Materials Science Forum</i> , 2010, 638-642, 1890-1895.	0.3	1
198	Joining strength of AM50 magnesium alloy sheet jointed by in-situ heating self pierce riveting process. <i>Keikinzoku/Journal of Japan Institute of Light Metals</i> , 2012, 62, 237-243.	0.4	1

#	ARTICLE	IF	CITATIONS
199	Fatigue Behavior of Extruded Mg-Al-Ca-Mn Alloy with T6 Treatment at Elevated Temperature. Key Engineering Materials, 2014, 627, 417-420.	0.4	1
200	Development of Ultra-High Strength and Ductile Mg-Gd-Y-Zn Alloys by Extrusion with Forced Air Cooling. Minerals, Metals and Materials Series, 2017, , 23-28.	0.4	1
201	Development of High-Strength High-Speed-Extrudable Mg-Al-Ca-Mn Alloy. Minerals, Metals and Materials Series, 2017, , 17-21.	0.4	1
202	Effect of Ca on the Microstructure, Texture and Mechanical Properties in Mg-Zn-Mn Based Alloy. Minerals, Metals and Materials Series, 2017, , 525-531.	0.4	1
203	Microstructure and Mechanical Properties of an Extruded Mg-1.58Zn-0.52Gd Alloy. Minerals, Metals and Materials Series, 2017, , 297-301.	0.4	1
204	Effects of cooling rate and Zr content on microstructures and mechanical properties of Mg-3.9%RE-3.1%Zn alloys.. Keikinzoku/Journal of Japan Institute of Light Metals, 1987, 37, 784-791.	0.4	0
205	Effects of cooling rate and RE content on microstructures and mechanical properties of Mg-3.2%Zn-0.7%Zr alloys.. Keikinzoku/Journal of Japan Institute of Light Metals, 1987, 37, 792-799.	0.4	0
206	Effects of cooling rate and Zn content on microstructures and mechanical properties of Mg-4.0%RE-0.7%Zr alloy.. Keikinzoku/Journal of Japan Institute of Light Metals, 1988, 38, 251-256.	0.4	0
207	Effect of cooling rate and chemical composition on the mechanical properties of Mg-RE-Zn-Zr alloys.. Keikinzoku/Journal of Japan Institute of Light Metals, 1988, 38, 311-318.	0.4	0
208	Effect of solidification conditions on structures of unidirectionally solidified EZ33A alloy.. Keikinzoku/Journal of Japan Institute of Light Metals, 1988, 38, 134-139.	0.4	0
209	Effects of solidification variables on microstructures of Mg-2.4%Ag-1.5%RE-0.65%Zr alloy unidirectionally solidified.. Keikinzoku/Journal of Japan Institute of Light Metals, 1988, 38, 449-454.	0.4	0
210	Effects of solidification variables on mechanical properties of Mg-2.4%Ag-1.5%RE-0.65%Zr alloy unidirectionally solidified.. Keikinzoku/Journal of Japan Institute of Light Metals, 1988, 38, 455-461.	0.4	0
211	International symposium on "Light metals processing and applications" in 32nd annual conference of metallurgists. Keikinzoku/Journal of Japan Institute of Light Metals, 1994, 44, 194-196.	0.4	0
212	New Magnesium Alloys with High Tensile Strength at High Temperatures can be Hot Forged. Materials Technology, 1996, 11, 45-47.	3.0	0
213	Improvement of Protium Absorption/Desorption Characteristics of Mg-x mass%LaNi ₅ Composites by Interface-control. Materials Transactions, 2003, 44, 589-594.	1.2	0
214	Semi-solid Forming of New Mg-Zn-Al-Ca Alloys. , 2006, , 651-656.		0
215	Improvement of the mechanical properties of Mg-Gd-Y-Zn alloy castings by grain refinement. IOP Conference Series: Materials Science and Engineering, 2011, 21, 012017.	0.6	0
216	Alloy Design for the Development of Heat Treatable High Strength Mg Sheet Alloy with Excellent Room Temperature Formability. Minerals, Metals and Materials Series, 2018, , 373-377.	0.4	0

#	ARTICLE	IF	CITATIONS
217	OS02W0241 Development of ultrasonic on-line sensors for molten metal monitoring. The Abstracts of ATEM International Conference on Advanced Technology in Experimental Mechanics Asian Conference on Experimental Mechanics, 2003, 2003.2, _OS02W0241-_OS02W0241.	0.0	0
218	International Symposium on Global Multidisciplinary Engineering 2011 (S-GME2011). IOP Conference Series: Materials Science and Engineering, 2011, 21, 011001.	0.6	0
219	Microstructure and Mechanical Properties of Mg ^{1.2} Zn ^{0.5} Gd Alloys After Rolling or Extrusion Processes. Minerals, Metals and Materials Series, 2017, , 441-448.	0.4	0
220	Effects of Zn Additions on the Room Temperature Formability and Strength in Mg ^{1.2} Al ^{0.5} Ca ^{0.4} Mn Alloy Sheets. Minerals, Metals and Materials Series, 2020, , 105-111.	0.4	0