

Shigeharu Kamado

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206 papers	9,856 citations	57 h-index	91 g-index
223 ext. papers	11,528 ext. citations	3.9 avg, IF	6.35 L-index

#	Paper	IF	Citations
206	Fabrication of extraordinary high-strength magnesium alloy by hot extrusion. <i>Scripta Materialia</i> , 2009 , 61, 644-647	5.6	400
205	Effect of Zn additions on the age-hardening of Mg _{0.0} Gd _{0.2} Y _{0.2} Zr alloys. <i>Acta Materialia</i> , 2007 , 55, 4137-4150	8.4	378
204	A high-strength Mg ₉₀ Zn ₁₀ Al alloy extruded at low temperature. <i>Scripta Materialia</i> , 2008 , 59, 1111-1114	5.6	276
203	Aging Characteristics and High Temperature Tensile Properties of Mg-Gd-Y-Zr Alloys. <i>Materials Transactions</i> , 2001 , 42, 1206-1211	1.3	260
202	Towards the development of heat-treatable high-strength wrought Mg alloys. <i>Scripta Materialia</i> , 2010 , 63, 710-715	5.6	241
201	Chemistry of nanoscale precipitates in Mg _{0.1} Gd _{0.6} Y _{0.2} Zr (at.%) alloy investigated by the atom probe technique. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2005 , 395, 301-306	5.3	210
200	Creep Properties of Mg-Gd-Y-Zr Alloys. <i>Materials Transactions</i> , 2001 , 42, 1212-1218	1.3	208
199	Precipitation-hardenable Mg _{0.4} Zn _{0.1} Ag _{0.1} Ca _{0.16} Zr (at.%) wrought magnesium alloy. <i>Acta Materialia</i> , 2009 , 57, 749-760	8.4	190
198	Unveiling the formation of basal texture variations based on twinning and dynamic recrystallization in AZ31 magnesium alloy during extrusion. <i>Acta Materialia</i> , 2018 , 157, 53-71	8.4	175
197	Bimodally grained microstructure development during hot extrusion of Mg _{0.4} Zn _{0.1} Ag _{0.1} Ca _{0.16} Zr (at.%) alloys. <i>Acta Materialia</i> , 2009 , 57, 5593-5604	8.4	174
196	High-strength extruded Mg ₉₀ Al ₁₀ Mn alloy. <i>Scripta Materialia</i> , 2011 , 65, 269-272	5.6	166
195	Ultra high-strength Mg ₉₀ Gd ₁₀ Zr alloy sheets processed by large-strain hot rolling and ageing. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2012 , 547, 93-98	5.3	161
194	Recrystallization mechanism of as-cast AZ91 magnesium alloy during hot compressive deformation. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2009 , 527, 52-60	5.3	158
193	Effect of extrusion conditions on microstructure and mechanical properties of microalloyed Mg ₉₀ Al ₁₀ Zn alloys. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2013 , 588, 318-328	5.3	155
192	Recrystallization mechanism and the relationship between grain size and Zener-Hollomon parameter of Mg ₉₀ Al ₁₀ Ca alloys during hot compression. <i>Scripta Materialia</i> , 2010 , 63, 293-296	5.6	130
191	Alloy Development of High Toughness Mg-Gd-Y-Zn-Zr Alloys. <i>Materials Transactions</i> , 2006 , 47, 1066-1070	0.3	119
190	Structure and chemical compositions of the grain boundary phase in Nd-Fe-B sintered magnets. <i>Acta Materialia</i> , 2016 , 115, 269-277	8.4	118

189	Formation of non-ferromagnetic grain boundary phase in a Ga-doped Nd-rich Nd ₈₅ Fe ₁₅ B sintered magnet. <i>Scripta Materialia</i> , 2016 , 113, 218-221	5.6	118
188	Effect of Microstructural Factors on Tensile Properties of an ECAE-Processed AZ31 Magnesium Alloy. <i>Materials Transactions</i> , 2003 , 44, 468-475	1.3	117
187	Strong and ductile heat-treatable Mg ₈₅ Ni ₁₅ Al wrought alloys. <i>Acta Materialia</i> , 2015 , 99, 176-186	8.4	114
186	Dynamic microstructural changes during hot extrusion and mechanical properties of a Mg ₈₀ Zn ₁₀ Y _{0.9} Y _{0.16} Zr (wt.%) alloy. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2011 , 528, 4055-4067	5.3	112
185	Twins, shear bands and recrystallization of a Mg ₉₀ Zn ₈ Gd alloy during rolling. <i>Scripta Materialia</i> , 2011 , 64, 141-144	5.6	108
184	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	5.7	106
183	Solute clustering and grain boundary segregation in extruded dilute Mg ₉₀ Gd alloys. <i>Scripta Materialia</i> , 2014 , 93, 28-31	5.6	101
182	Strong and ductile age-hardening Mg-Al-Ca-Mn alloy that can be extruded as fast as aluminum alloys. <i>Acta Materialia</i> , 2017 , 130, 261-270	8.4	99
181	Effect of Zr addition on the mechanical properties of as-extruded Mg ₈₅ Ni ₁₅ Zr alloys. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2010 , 527, 2356-2362	5.3	99
180	Dynamic microstructural changes in Mg ₈₅ Al ₁₅ Zn alloy during hot compression. <i>Scripta Materialia</i> , 2009 , 61, 249-252	5.6	94
179	Enhanced age-hardening and formation of plate precipitates in Mg ₉₀ Gd ₁₀ Ag alloys. <i>Scripta Materialia</i> , 2009 , 61, 636-639	5.6	94
178	Dissimilar joining of Al/Mg light metals by compound casting process. <i>Journal of Materials Science</i> , 2011 , 46, 6491-6499	4.3	93
177	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	5.3	88
176	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	5.3	85
175	Microstructures and mechanical properties of high-strength Mg ₈₅ Gd ₁₅ Zn alloy sheets processed by severe hot rolling. <i>Journal of Alloys and Compounds</i> , 2012 , 524, 46-52	5.7	83
174	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	4.9	82
173	Influence of ECAP routes on microstructure and mechanical properties of Mg ₈₅ Ni ₁₅ Al alloy. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2010 , 527, 4250-4256	5.3	81
172	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	8.4	79

171	Effect of Mn addition on microstructure, texture and mechanical properties of Mg ₉₂ Ni ₈ alloy. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2011 , 528, 3741-3747	5.3	78
170	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	2.3	77
169	Development of dilute Mg ₉₂ Ni ₈ Mn alloy with high performance via extrusion. <i>Journal of Alloys and Compounds</i> , 2016 , 668, 13-21	5.7	76
168	Texture weakening and ductility variation of Mg ₉₂ Zn alloy with CA or RE addition. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2015 , 645, 196-204	5.3	75
167	Extruded Mg ₉₂ Ni ₈ Mn alloys with low yield anisotropy. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2012 , 558, 356-365	5.3	75
166	Bake-hardenable Mg ₉₂ Al ₇ Ni ₁ Mn ₁ Ca sheet alloy processed by twin-roll casting. <i>Acta Materialia</i> , 2018 , 158, 278-288	8.4	74
165	Effect of substituting cerium-rich mischmetal with lanthanum on high temperature properties of die-cast Mg ₉₂ Ni ₈ CaRE alloys. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2004 , 380, 93-99	5.3	73
164	Improving strength and ductility of Mg ₉₂ Gd ₈ Zn ₂ alloy simultaneously via extrusion, hot rolling and ageing. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2015 , 643, 137-141	5.3	72
163	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	8.4	69
162	Enhanced corrosion and wear resistances by graphene oxide coating on the surface of Mg-Zn-Ca alloy. <i>Carbon</i> , 2016 , 109, 340-351	10.4	69
161	Aging 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	5.3	68
160	High temperature tensile properties of as-cast Mg ₉₂ Al ₈ alloys. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2009 , 509, 105-110	5.3	67
159	Microstructure and mechanical properties of Mg ₉₂ Ni ₈ alloy processed by equal channel angular pressing. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2009 , 523, 289-294	5.3	63
158	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	7.1	63
157	Activation of {1 0 1 $\bar{2}$ } twinning and slip in high ductile Mg ₉₀ Zn ₈ Gd rolled sheet with non-basal texture during tensile deformation at room temperature. <i>Journal of Alloys and Compounds</i> , 2013 , 566, 98-107	5.7	62
156	Ultrahigh strength as-extruded Mg _{90.3} Zn _{8.4} Y _{0.4} Zr _{0.5} Ca alloy containing W phase. <i>Materials and Design</i> , 2016 , 108, 391-399	8.1	61
155	Effects of trace Gd concentration on texture and mechanical properties of hot-rolled Mg ₉₂ Zn ₈ Gd sheets. <i>Journal of Magnesium and Alloys</i> , 2013 , 1, 23-30	8.8	61
154	A heat-treatable Mg ₉₂ Al ₇ Mn ₁ Zn sheet alloy with good room temperature formability. <i>Scripta Materialia</i> , 2017 , 138, 151-155	5.6	60

153	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	5.3	60
152	High-speed extrusion of heat-treatable Mg-Al-Ca-Mn dilute alloy. <i>Scripta Materialia</i> , 2015 , 101, 28-31	5.6	58
151	Effect of extrusion ratio on microstructure, texture and mechanical properties of indirectly extruded Mg-Al-Ca alloy. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2013 , 569, 48-53	5.3	58
150	Unexpected influence of Mn addition on the creep properties of a cast Mg-Al-Ca (mass%) alloy. <i>Acta Materialia</i> , 2011 , 59, 7662-7672	8.4	57
149	The effect of thermal exposure on the interface and mechanical properties of Al18B4O33w/AZ91 magnesium matrix composite. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2004 , 372, 66-74	5.3	57
148	Twins, recrystallization and texture evolution of a Mg-99Zn-0.76Ca-0.35Mn (wt.%) alloy during indirect extrusion process. <i>Scripta Materialia</i> , 2011 , 65, 875-878	5.6	56
147	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	5.3	54
146	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	5.3	53
145	Influence of deformation rate on microstructure, texture and mechanical properties of indirect-extruded Mg-Al-Ca alloy. <i>Materials Characterization</i> , 2015 , 104, 66-72	3.9	52
144	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	5.3	52
143	Improvement of Mechanical Characteristics in Severely Plastic-deformed Mg Alloys. <i>Materials Transactions</i> , 2004 , 45, 488-492	1.3	52
142	High strength and formable Mg-2.2Zn-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	5.3	51
141	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	5.3	51
140	Ageing behavior of extruded Mg-8.2Gd-3.8Y-1.0Zn-0.4Zr (wt.%) alloy containing LPSO phase and η precipitates. <i>Scientific Reports</i> , 2017 , 7, 43391	4.9	50
139	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	5.7	50
138	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	5.3	50
137	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	5.7	47
136	Superplasticity of Mg-Al alloy containing quasicrystal phase processed by equal channel angular pressing. <i>Materials Letters</i> , 2007 , 61, 4406-4408	3.3	47

135	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	5.3	46
134	Effect of carbon on the coercivity and microstructure in fine-grained NdFeB sintered magnet. <i>Acta Materialia</i> , 2015 , 84, 506-514	8.4	46
133	Microstructure and mechanical properties of the Mg _{97.5} Gd _{1.5} Zn ₁ alloy fabricated by semi-continuous casting. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2012 , 549, 128-135	5.3	46
132	Tensile deformation characteristics of a nano-structured 5083 Al alloy. <i>Journal of Alloys and Compounds</i> , 2005 , 386, 197-201	5.7	46
131	Room and elevated temperature mechanical properties in the as-extruded Mg ₉₅ Al ₃ Ca ₁ Mn alloys. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2012 , 539, 163-169	5.3	45
130	Effect of ageing treatment on the precipitation behaviour of Mg _{97.5} Gd _{1.5} Zn ₁ alloy. <i>Journal of Alloys and Compounds</i> , 2013 , 550, 50-56	5.7	45
129	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	4.4	45
128	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	5.3	44
127	Compressive deformation of Mg _{97.5} Gd _{1.5} Zn ₁ alloy processed by equal channel angular pressing. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2008 , 483-484, 564-567	5.3	44
126	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	3.9	43
125	Improvement in creep property of a cast Mg ₉₅ Al ₃ Ca alloy by Mn addition. <i>Scripta Materialia</i> , 2010 , 63, 1173-1176	5.6	43
124	Enhancing strength and creep resistance of Mg _{97.5} Gd _{1.5} Zn ₁ alloy by substituting Mn for Zr. <i>Journal of Magnesium and Alloys</i> , 2019 , 7, 388-399	8.8	42
123	Influence of rolling temperature on the microstructure and mechanical properties of Mg _{97.5} Gd _{1.5} Zn ₁ alloy sheets. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2013 , 559, 615-622	5.3	42
122	Microstructure and mechanical properties of aluminum borate whisker-reinforced magnesium matrix composites. <i>Materials Letters</i> , 2002 , 57, 558-564	3.3	42
121	Effect of microalloyed Zr on the extruded microstructure of Mg _{97.2} Zn _{2.8} -based alloys. <i>Scripta Materialia</i> , 2014 , 90-91, 37-40	5.6	41
120	Effect of homogenization on microstructures and mechanical properties of hot compressed Mg ₉₅ Al ₃ Zn alloy. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2011 , 528, 2385-2393	5.3	41
119	Ultrahigh strength Mg-Al-Ca-Mn extrusion alloys with various aluminum contents. <i>Journal of Alloys and Compounds</i> , 2019 , 792, 130-141	5.7	40
118	Reducing the tension-compression yield asymmetry of extruded Mg _{97.5} Gd _{1.5} Zn ₁ alloy via equal channel angular pressing. <i>Journal of Magnesium and Alloys</i> , 2015 , 3, 302-308	8.8	40

117	Influence of Ca-Ce/La synergistic alloying on the microstructure and mechanical properties of extruded Mg ₉₅ Zn alloy. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2017 , 708, 11-20	5.3	38
116	Effect of final rolling reduction on the microstructure and mechanical properties of Mg ₉₅ Gd ₄ Zn ₁ alloy sheets. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2013 , 559, 232-240	5.3	38
115	Microstructure and mechanical properties of Mg ₉₅ Gd ₄ Zn ₁ 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	5.3	38
114	In-situ quasicrystal-reinforced magnesium matrix composite processed by equal channel angular extrusion (ECAE). <i>Journal of Materials Science</i> , 2005 , 40, 2587-2590	4.3	38
113	Enhancing strength and ductility of Mg-Zn-Gd alloy via slow-speed extrusion combined with pre-forging. <i>Journal of Alloys and Compounds</i> , 2017 , 694, 1214-1223	5.7	36
112	Development of New Die-castable Mg-Zn-Al-Ca-RE Alloys for High Temperature Applications. <i>Materials Transactions</i> , 2003 , 44, 562-570	1.3	36
111	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	5.7	36
110	Bio-inspired graphene-based coatings on Mg alloy surfaces and their integrations of anti-corrosive/wearable performances. <i>Carbon</i> , 2019 , 141, 154-168	10.4	35
109	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	5.3	35
108	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	9.1	33
107	Microstructure of a Dy-free Nd-Fe-B sintered magnet with 2 T coercivity. <i>Acta Materialia</i> , 2018 , 156, 146-157	8.7	33
106	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	32
105	Superplastic Deformation of AZ61 Magnesium Alloy having Fine Grains. <i>Materials Transactions</i> , 2004 , 45, 2537-2541	1.3	32
104	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	5.7	31
103	The microstructural evolution and superplastic behavior at low temperatures of Mg _{98.00} Zn _{0.92} Y _{0.16} Zr (wt.%) alloys after hot extrusion and ECAP process. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2012 , 549, 60-68	5.3	31
102	Effect of pre-aging treatment on microstructure and mechanical properties of hot compressed Mg ₉₅ Al ₄ Zn alloy. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2009 , 517, 354-360	5.3	31
101	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	0.3	31
100	Numerical simulation for microstructure evolution in AM50 Mg alloy during hot rolling. <i>Computational Materials Science</i> , 2010 , 47, 919-925	3.2	30

99	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	5.3	30
98	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	4.9	30
97	Intermetallic compounds and antiphase domains in Al/Mg compound casting. <i>Intermetallics</i> , 2012 , 23, 182-186	3.5	29
96	Microstructure and mechanical properties of rolled sheets of Mg-Gd-Y-Nd-Zr alloy: As-cast versus as-homogenized. <i>Journal of Alloys and Compounds</i> , 2012 , 528, 40-44	5.7	29
95	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	2.3	28
94	Microstructures and Tensile Properties of ECAE-Processed and Forged AZ31 Magnesium Alloy. <i>Materials Transactions</i> , 2003 , 44, 476-483	1.3	28
93	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	5.3	27
92	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	5.3	26
91	Mechanical Properties of Mg-Y-Zn Alloy Processed by Equal-Channel-Angular Extrusion. <i>Materials Transactions</i> , 2003 , 44, 463-467	1.3	26
90	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	5.7	26
89	Microstructure and mechanical properties of extruded Mg-Gd-Y-Nd-0.3Zn-0.6Zr alloy. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2011 , 528, 7805-7810	5.3	25
88	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	5.3	25
87	Improving creep property of Mg-Gd-Zn alloy via trace Ca addition. <i>Scripta Materialia</i> , 2017 , 139, 34-38	5.6	24
86	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	0.3	23
85	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	5.3	22
84	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	5.3	21
83	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	5.3	20
82	New Mg-Al based alloy sheet with good room-temperature stretch formability and tensile properties. <i>Scripta Materialia</i> , 2020 , 180, 16-22	5.6	20

81	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	5.7	19
80	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	5.6	18
79	Effect of warm rolling on the microstructure, texture and mechanical properties of extruded Mg-Zn-Ca-Li alloy. <i>Materials Characterization</i> , 2016 , 115, 1-7	3.9	18
78	Microstructure, texture and mechanical properties of extruded Mg-Al-Nd-0.2Mn alloy. <i>Journal of Alloys and Compounds</i> , 2015 , 653, 100-107	5.7	18
77	Synthesis of high-strength magnesium alloy composites reinforced with Si-coated carbon nanofibres. <i>Scripta Materialia</i> , 2009 , 60, 451-454	5.6	18
76	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	5.3	17
75	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	5.6	16
74	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 CoFeB/Ta underlayer. <i>Acta Materialia</i> , 2018 , 142, 49-57	8.4	15
73	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	15
72	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. <i>Scripta Materialia</i> , 2019 , 169, 70-75	5.6	14
71	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	5.7	14
70	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	14
69	Microstructures and Mechanical Properties of As-Cast and Hot-Rolled Mg-8.43Li-0.353Ymm (Y-riched mischmetch) Alloy. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2012 , 43, 709-715	2.3	13
68	Effect of extrusion speed on properties of the extruded AZ31B magnesium alloy machined chip. <i>Keikinzoku/Journal of Japan Institute of Light Metals</i> , 2006 , 56, 166-171	0.3	13
67	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	5.3	13
66	Microstructure and mechanical properties of extruded Mg-Cd-Zn alloy with Mn or Zr addition. <i>Journal of Materials Science</i> , 2019 , 54, 10473-10488	4.3	12
65	Investigation of the hot compression behavior of the Mg-Al-Zn alloy using EBSP analysis and a cellular automata simulation. <i>Modelling and Simulation in Materials Science and Engineering</i> , 2009 , 17, 025009	2	12
64	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	8.4	11

63	Improving tensile properties of a room-temperature formable and heat-treatable Mg ₉₈ Zn-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	5.3	11
62	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	3.3	10
61	Mechanical properties of SiC particle/AZ31B magnesium alloy machined chips composites prepared by hot extrusion after ECAP. <i>Keikinzoku/Journal of Japan Institute of Light Metals</i> , 2008 , 58, 104-110	0.3	10
60	Experimentally and Numerical Study on Deep Drawing Process for Magnesium Alloy Sheet at Elevated Temperatures. <i>Materials Transactions</i> , 2008 , 49, 1101-1106	1.3	10
59	HRTEM Observation of Age Hardening Precipitates in Mg-8.3%Gd-3.7%Y-0.76%Zr Alloy. <i>Materials Transactions</i> , 2007 , 48, 954-959	1.3	10
58	Squeeze cast Al ₁₈ B ₄ O ₃₃ whisker-reinforced magnesium matrix composite. <i>Journal of Materials Science Letters</i> , 2002 , 21, 533-535		10
57	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> , 2020 ,	8.8	10
56	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	5.3	10
55	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	3.9	9
54	FEM modeling of dynamical recrystallization during multi-pass hot rolling of AM50 alloy and experimental verification. <i>Transactions of Nonferrous Metals Society of China</i> , 2013 , 23, 2678-2685	3.3	9
53	Improving the Wear Resistance of a Magnesium Alloy by Laser Melt Injection. <i>Materials Transactions</i> , 2001 , 42, 1322-1325	1.3	9
52	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.. <i>Keikinzoku/Journal of Japan Institute of Light Metals</i> , 1994 , 44, 549-554	0.3	9
51	Improvement in surface properties of extrusions from Mg-Al-Zn based alloy machined chips. <i>Keikinzoku/Journal of Japan Institute of Light Metals</i> , 2005 , 55, 400-404	0.3	7
50	Electronic structure of magnesium containing various alloying elements. <i>Journal of the Less Common Metals</i> , 1988 , 141, 295-307		7
49	Microstructure and mechanical properties of extruded Mg-6.5Gd-1.3Nd-0.7Y-0.3Zn alloy. <i>Transactions of Nonferrous Metals Society of China</i> , 2010 , 20, s508-s512	3.3	6
48	Effect of Cu addition on mechanical properties of Mg [^] -Gd [^] -Zn [^] -Zr casting alloy. <i>Keikinzoku/Journal of Japan Institute of Light Metals</i> , 2012 , 62, 272-277	0.3	6
47	FEM analysis for hot rolling process of AM60 alloy. <i>Transactions of Nonferrous Metals Society of China</i> , 2008 , 18, s242-s246	3.3	6
46	Physical and chemical properties of magnesium. <i>Keikinzoku/Journal of Japan Institute of Light Metals</i> , 2009 , 59, 216-224	0.3	6

45	Enhancement of L2 1 order and spin-polarization of Heusler alloy Co ₂ MnSi thin film by Ag alloying. <i>Scripta Materialia</i> , 2016 , 110, 70-73	5.6	5
44	Effect of finish-rolling conditions on mechanical properties and texture characteristics of AM50 alloy sheet. <i>Transactions of Nonferrous Metals Society of China</i> , 2014 , 24, 2761-2766	3.3	5
43	Estimation of the transient interfacial heat flux between substrate/melt at the initiation of magnesium solidification on aluminum substrates using the lumped capacitance method. <i>Applied Surface Science</i> , 2011 , 257, 5077-5082	6.7	5
42	Fabrication of Porous Magnesium Alloys by Pulse Electric Current Sintering Process Using Machined Chips. <i>Materials Transactions</i> , 2003 , 44, 595-600	1.3	5
41	Interface of Al ₁₈ B ₄ O ₃₃ w/AZ91 magnesium matrix composite after thermal exposure at 600 °C. <i>Journal of Materials Science Letters</i> , 2003 , 22, 1709-1712		5
40	Effects of Al and Zn contents and heat treatment on microstructures and tensile properties of Mg-Al-Zn alloys. <i>Keikinzoku/Journal of Japan Institute of Light Metals</i> , 2005 , 55, 456-462	0.3	5
39	HRTEM Observation of Age Hardening Precipitates in Mg-12.0%Gd-1.9%Y-0.7%Zr. <i>Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals</i> , 2006 , 70, 828-834	0.4	4
38	Microstructure and Protium Absorbing/Desorbing Characteristics of Mg ₂ Ni-Mn Alloys. <i>Materials Transactions</i> , 2001 , 42, 1305-1311	1.3	4
37	Kinds of magnesium alloys and their application. <i>Keikinzoku/Journal of Japan Institute of Light Metals</i> , 2010 , 60, 100-105	0.3	4
36	Effect of Partially Substituting Ca with Mischmetal on the Microstructure and Mechanical Properties of Extruded Mg-Al-Ca-Mn-Based Alloys. <i>Acta Metallurgica Sinica (English Letters)</i> , 2019 , 32, 205-217	2.5	4
35	In-situ EBSD observation of recrystallization behavior in magnesium alloy. <i>Keikinzoku/Journal of Japan Institute of Light Metals</i> , 2009 , 59, 333-338	0.3	3
34	Improvement of Wear Resistance of Magnesium by Laser-Alloying with Silicon. <i>Materials Transactions</i> , 2003 , 44, 531-538	1.3	3
33	Effects of the shielding gas and laser wavelength in laser welding magnesium alloy sheets. <i>Welding International</i> , 2002 , 16, 442-450	0.1	3
32	Protium Absorption/Desorption Characteristics of Mg ₂ Ni/LaNi ₅ Composite. <i>Materials Transactions</i> , 2002 , 43, 2728-2733	1.3	3
31	Effect of solidification conditions on mechanical properties of directionally solidified 356 aluminum alloy.. <i>Keikinzoku/Journal of Japan Institute of Light Metals</i> , 1987 , 37, 268-276	0.3	3
30	Simultaneously Enhanced Mechanical Properties and Damping Capacities of ZK60 Mg Alloys Processed by Multi-Directional Forging. <i>Acta Metallurgica Sinica (English Letters)</i> , 2021 , 34, 265-277	2.5	3
29	Development of corrosion-resistant Mg-Al-Ca-Mn-Zn alloy sheet with good tensile properties and stretch formability. <i>Journal of Alloys and Compounds</i> , 2022 , 164752	5.7	3
28	Development of Heat-Treatable High-Strength Mg ₂ Ni-Ca-Zr Sheet Alloy with Excellent Room Temperature Formability. <i>Minerals, Metals and Materials Series</i> , 2018 , 361-364	0.3	2

27	Microstructure and Mechanical Properties of Extruded Mg-Zn-Ca Alloy. <i>Materials Science Forum</i> , 2010 , 654-656, 703-706	0.4	2
26	Microstructures and mechanical properties of porous Ti \bar{B} %Al \bar{B} %V alloy fabricated by spark plasma sintering technique. <i>Keikinzoku/Journal of Japan Institute of Light Metals</i> , 2009 , 59, 491-497	0.3	2
25	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	0.3	2
24	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	0.3	2
23	Effect of solidification conditions on microstructure of directionally solidified 356 aluminum alloy.. <i>Keikinzoku/Journal of Japan Institute of Light Metals</i> , 1987 , 37, 261-267	0.3	2
22	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
21	Development of High-Strength High-Speed-Extrudable MgAlCaMn Alloy. <i>Minerals, Metals and Materials Series</i> , 2017 , 17-21	0.3	1
20	Effect of Ca on the Microstructure, Texture and Mechanical Properties in MgZnMn Based Alloy. <i>Minerals, Metals and Materials Series</i> , 2017 , 525-531	0.3	1
19	Fatigue Behavior of Extruded Mg-Al-Ca-Mn Alloy with T6 Treatment at Elevated Temperature. <i>Key Engineering Materials</i> , 2014 , 627, 417-420	0.4	1
18	Microstructure and Compression Properties of Al-Si Alloy Foams by Spark Plasma Sintering Technique. <i>Materials Science Forum</i> , 2010 , 638-642, 1890-1895	0.4	1
17	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	0.3	1
16	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	0.3	1
15	Effects of La Addition on the Microstructure, Thermal Conductivity and Mechanical Properties of Mg-3Al-0.3Mn Alloys.. <i>Materials</i> , 2022 , 15,	3.5	1
14	Microstructure and Mechanical Properties of an Extruded Mg-1.58Zn-0.52Gd Alloy. <i>Minerals, Metals and Materials Series</i> , 2017 , 297-301	0.3	1
13	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	0.3	1
12	Effect of annealing on microstructure evolution and age-hardening behavior of dilute MgAlCaMn alloy. <i>Journal of Materials Research and Technology</i> , 2022 , 18, 1754-1762	5.5	0
11	Development of Ultra-High Strength and Ductile MgCuZnZr Alloys by Extrusion with Forced Air Cooling. <i>Minerals, Metals and Materials Series</i> , 2017 , 23-28	0.3	
10	Alloy Design for the Development of Heat Treatable High Strength Mg Sheet Alloy with Excellent Room Temperature Formability. <i>Minerals, Metals and Materials Series</i> , 2018 , 373-377	0.3	

9	Improvement of the mechanical properties of Mg-Gd-Y-Zn alloy castings by grain refinement. <i>IOP Conference Series: Materials Science and Engineering</i> , 2011 , 21, 012017	0.4
8	Semi-solid Forming of New Mg-Zn-Al-Ca Alloys 2006 , 651-656	
7	Improvement of Protium Absorption/Desorption Characteristics of Mg-x mass%LaNi ₅ (x=50, 70) Composites by Interface-control. <i>Materials Transactions</i> , 2003 , 44, 589-594	1.3
6	New Magnesium Alloys with High Tensile Strength at High Temperatures can be Hot Forged. <i>Materials Technology</i> , 1996 , 11, 45-47	2.1
5	Effects of Zn Additions on the Room Temperature Formability and Strength in Mg _{0.2} Al _{0.5} Ca _{0.4} Mn Alloy Sheets. <i>Minerals, Metals and Materials Series</i> , 2020 , 105-111	0.3
4	OS02W0241 Development of ultrasonic on-line sensors for molten metal monitoring. <i>The Abstracts of ATEM International Conference on Advanced Technology in Experimental Mechanics Asian Conference on Experimental Mechanics</i> , 2003 , 2003.2, _OS02W0241-_OS02W0241	0
3	Microstructure and Mechanical Properties of Mg ₂ Ni ₃ Al ₂ Alloys After Rolling or Extrusion Processes. <i>Minerals, Metals and Materials Series</i> , 2017 , 441-448	0.3
2	Significant Precipitation Strengthening in Extruded Mg-Sn-Zn Alloys 401-405	
1	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	0.3