Toshiji Mukai

List of Publications by Year in Descending Order

277 papers	10,542 citations	56 h-index	94 g-index
290 ext. papers	11,232 ext. citations	3 avg, IF	6.15 L-index

#	Paper	IF	Citations
277	Effect of Grain Refinement on Fatigue Properties of Mg–0.3 at%Ca Alloy in Air and Simulated Body Fluid. *Materials Transactions*, **2022**, 63, 69-72	1.3	0
276	Biodegradation behaviors of magnesium(Mg)-based alloy nails in autologous bone grafts: In vivo study in rabbit skulls. *Journal of Applied Biomaterials and Functional Materials*, **2022**, 20, 228080002210952	1.8	
275	Phase transformation and morphological features in a cold-worked CrMnFeCoNi high entropy alloy with Al addition. *Materials Characterization*, **2021**, 182, 111556	3.9	0
274	Osteogenic response under the periosteum by magnesium implantation in rat tibia. *Dental Materials Journal*, **2021**, 40, 498-507	2.5	0
273	Development of bioabsorbable zinc-magnesium alloy wire and validation of its application to urinary tract surgeries. *World Journal of Urology*, **2021**, 39, 201-208	4	5
272	Control of Microstructure in Ti-6Al-4V Porous Structure Fabricated by Electron Beam Powder Bed Fusion. *Journal of Smart Processing*, **2021**, 10, 246-250	0.2	
271	Effect of Adding Third Element on Deformability of Mg–Al Alloy. *Minerals, Metals and Materials Series*, **2021**, 37-44	0.3	
270	Effect of initial microstructure on grain refinement under hot compression in CrMnFeCoNi high-entropy alloy with Al addition. *Materialia*, **2021**, 18, 101172	3.2	3
269	Effect of cold-working on phase formation during heat treatment in CrMnFeCoNi system high-entropy alloys with Al addition. *Journal of Alloys and Compounds*, **2021**, 872, 159668	5.7	8
268	Microstructural Evolution in Magnesium after Hyper-Velocity Impact of Alumina Projectile. *Materials Transactions*, **2021**, 62, 1401-1406	1.3	
267	Influence of Manganese on Deformation Behavior of Magnesium Under Dynamic Loading. *Minerals, Metals and Materials Series*, **2020**, 381-385	0.3	
266	Novel artifact-robust and highly visible zinc solid fiducial marker for kilovoltage x-ray image-guided radiation therapy. *Medical Physics*, **2020**, 47, 4703-4710	4.4	
265	Domain structure and lattice effects in a severely plastically deformed CoCrFeMnNi high entropy alloy. *Journal of Alloys and Compounds*, **2020**, 812, 152028	5.7	10
264	Fabrication and characterization of Mg–0.2 at% Ca/Tricalcium phosphate composites. *Materials Letters*, **2019**, 241, 96-99	3.3	1
263	Effect of yttrium addition on the hot deformation behaviors and microstructure development of magnesium alloy. *Journal of Alloys and Compounds*, **2019**, 786, 118-125	5.7	9
262	Processing and Mechanical Properties of a Tricalcium Phosphate-Dispersed Magnesium-Based Composite. *Materials Transactions*, **2019**, 60, 105-110	1.3	2
261	Novel biodegradable magnesium alloy clips compared with titanium clips for hepatectomy in a rat model. *BMC Surgery*, **2019**, 19, 130	2.3	3

260	Microstructural evolution in magnesium after hyper-velocity impact of alumina projectile. *Keikinzoku/Journal of Japan Institute of Light Metals*, **2019**, 69, 287-292	0.3	1
259	In vitro and in vivo analysis of the biodegradable behavior of a magnesium alloy for biomedical applications. *Dental Materials Journal*, **2019**, 38, 11-21	2.5	10
258	Fabrication of biodegradable materials with high strength by grain refinement of Mg□.3 at.% Ca alloys. *Materials Letters*, **2018**, 223, 65-68	3.3	31
257	Dynamic deformation behavior of a face-centered cubic FeCoNiCrMn high-entropy alloy. *Science Bulletin*, **2018**, 63, 362-368	10.6	43
256	Initial organ distribution and biological safety of Mg released from a Mg alloy implant. *Biomedical Materials (Bristol)*, **2018**, 13, 035006	3.5	2
255	Material Design for Enhancing Toughness of Mg Alloy and Application for Biodegradable Devices. *Minerals, Metals and Materials Series*, **2018**, 87-89	0.3	
254	In-situ neutron diffraction of a quasicrystal-containing Mg alloy interpreted using a new polycrystal plasticity model of hardening due to {10.2} tensile twinning. *International Journal of Plasticity*, **2018**, 100, 34-51	7.6	29
253	Effect of Solidification Cooling Rate on Microstructure and Mechanical Properties of an Extruded Mg-Zn-Y Alloy. *Metals*, **2018**, 8, 337	2.3	2
252	Hydroxyapatite Dispersed Magnesium-Based Composite Produced from Pulverized Magnesium Alloy Powder and Its Mechanical Properties. *Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals*, **2018**, 82, 18-24	0.4	1
251	Development of a new biodegradable operative clip made of a magnesium alloy: Evaluation of its safety and tolerability for canine cholecystectomy. *Surgery*, **2017**, 161, 1553-1560	3.6	13
250	Mechanical and damping properties of equal channel angular extrusion-processed Mg□a alloys. *Materials Letters*, **2017**, 201, 144-147	3.3	12
249	Dislocation structures in a near-isotropic Mg-Y extruded alloy. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2017**, 698, 238-248	5.3	15
248	Deformation behavior of ultra-fine-grained Mg-0.3□at% Al alloy in compression. *Journal of Alloys and Compounds*, **2017**, 726, 651-657	5.7	10
247	Evaluation of In Vitro Fatigue Properties of Biodegradable Mg□.3at.%Ca Alloy. *Minerals, Metals and Materials Series*, **2017**, 533-535	0.3	1
246	Fabrication of a magnesium alloy with excellent ductility for biodegradable clips. *Acta Biomaterialia* , **2016**, 29, 468-476	10.8	31
245	Superplastic Deformation Behavior in Dual-Phase Mg-Ca Alloy. *Materials Science Forum*, **2016**, 838-839, 256-260	0.4	0
244	Effect of aluminum or zinc solute addition on enhancing impact fracture toughness in Mg□a alloys. *Acta Materialia*, **2016**, 104, 283-294	8.4	42
243	Lattice Ordering and Microstructure of Ultra-high Strength Mg-Ca-Zn Alloys **2016**, 83-88		

242	Lattice Ordering and Microstructure of Ultra-high trength Mg-Ca-Zn lloys **2016**, 83-88		1
241	Development of Small-Scale Impact Three-Point Bending Test Apparatus and Evaluation of Impact Fracture Properties of Mg-6%Al-1%Zn-2%Ca Alloy. *Materials Transactions*, **2016**, 57, 1872-1879	1.3	
240	Mechanical properties of hydroxyapatite-dispersed magnesium composites. *Keikinzoku/Journal of Japan Institute of Light Metals*, **2016**, 66, 318-323	0.3	4
239	Development of small-scale impact three-point bending test apparatus and evaluation of impact fracture properties of Mg□%Al□%Zn□%Ca alloy. *Keikinzoku/Journal of Japan Institute of Light Metals*, **2016**, 66, 258-265	0.3	1
238	Fabrication and mechanical properties of biodegradable magnesium stent. *Keikinzoku/Journal of Japan Institute of Light Metals*, **2016**, 66, 312-317	0.3	3
237	In vivo corrosion behaviour of magnesium alloy in association with surrounding tissue response in rats. *Biomedical Materials (Bristol)*, **2016**, 11, 025001	3.5	14
236	Effect of alloying elements on room temperature tensile ductility in magnesium alloys. *Philosophical Magazine*, **2016**, 96, 2671-2685	1.6	39
235	Material design for magnesium alloys with high deformability. *Philosophical Magazine*, **2015**, 95, 869-885	1.6	24
234	Effect of deformation twins on damping capacity in extruded pure magnesium. *Journal of Alloys and Compounds*, **2015**, 626, 60-64	5.7	37
233	Hall□Petch Breakdown in Fine-Grained Pure Magnesium at Low Strain Rates. *Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science*, **2015**, 46, 894-902	2.3	73
232	Effect of Micro-Alloying Elements on Deformation Behavior in Mg-Y Binary Alloys. *Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals*, **2015**, 79, 35-40	0.4	2
231	Degradation Behavior of Mg-Ca Nail After Penetration Into Artificial Bone **2015**, 399-402		1
230	Effect of Solute Segregation on Fracture Behavior of Mg Alloy **2015**, 197-200		
229	Deformation Response of Mg-Y Alloys under Dynamic Loading **2015**, 189-189		
228	Effect of Alloy Composition on Microstructure and Strength of Fine Grained Extruded Mg-Zn-Y Alloys Containing Quasicrystal Phase **2015**, 215-220		
227	Effect of Alloy Composition on Microstructure and Strength of Fine Grained Extruded Mg-Zn-Y Alloys Containing Quasicrystal Phase **2015**, 215-220		
226	Deformation Response of Mg-Y Alloys under Dynamic Loading **2015**, 189-189		
225	Effect of Solute Segregation on Fracture Behavior of Mg Alloy **2015**, 197-200		

224	Micromechanisms of grain refinement during extrusion of Mg□.3 at.% Al at low homologous temperature. *Materials Characterization*, **2014**, 93, 102-109	3.9	9
223	Formation of nano-twin domains by nucleation and multiplication of twins during fracture of a magnesium alloy. *Philosophical Magazine*, **2014**, 94, 898-913	1.6	12
222	Evaluation of Impact Fracture Toughness of AZ31 Magnesium Alloy. *Applied Mechanics and Materials*, **2014**, 566, 316-321	0.3	5
221	Effect of solute atoms on grain boundary sliding in magnesium alloys. *Philosophical Magazine*, **2014**, 94, 1345-1360	1.6	35
220	Microyielding and damping capacity in magnesium. *Scripta Materialia*, **2014**, 87, 1-4	5.6	21
219	Development of Very High Strength and Ductile Dilute Magnesium Alloys by Dispersion of Quasicrystal Phase. *Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science*, **2014**, 45, 3232-3240	2.3	18
218	Deformation Behavior of Binary Mg-Y Alloy Under Dynamic Compression Loading. *Jom*, **2014**, 66, 305-311	1.1	13
217	Effect of microstructure on strength and ductility of high strength quasicrystal phase dispersed Mg□nY alloys. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2014**, 611, 242-251	5.3	40
216	Effect of Micro-Alloying Elements on Deformation Behavior in Mg–Y Binary Alloys. *Materials Transactions*, **2014**, 55, 182-187	1.3	31
215	Mechanical Behavior at Low Strains in Pure Magnesium and Mg-Ca Alloy. *Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals*, **2014**, 78, 230-234	0.4	5
214	Wear and Friction Properties of Mg–Zn–Y Alloy with Dispersion of Quasi-Crystalline Phase. *Materials Transactions*, **2014**, 55, 216-219	1.3	7
213	Impact Energy Absorption Capability of Magnesium Alloy Pipe. *Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals*, **2014**, 78, 142-148	0.4	
212	Directionally Controlled Precipitation on Twin-Boundaries in Mg-Zn-Y Alloys **2014**, 319-324		
211	1C42 Fabrication of biodegradable Mg-0.3at.%Ca alloy with high strength. *The Proceedings of the Bioengineering Conference Annual Meeting of BED/JSME*, **2014**, 2014.26, 99-100	0	
210	Molecular dynamics simulation of grain boundary plasticity in magnesium and solid-solution magnesium alloys. *Computational Materials Science*, **2013**, 77, 424-429	3.2	17
209	Effect of precipitation on strength and ductility in a Mg□nY alloy. *Journal of Alloys and Compounds*, **2013**, 550, 114-123	5.7	61
208	Microstructural evolution during dry wear test in magnesium and MgY alloy. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2013**, 561, 371-377	5.3	31
207	Hall□etch relation for deformation twinning in solid solution magnesium alloys. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2013**, 561, 378-385	5.3	77

206	Increasing Volume Fraction of Precipitates and Strength of a Mg-Zn-Y Alloy by Pre-Aging Deformation **2013**, 323-328		
205	Grain Refinement and Superplasticity in Magnesium Alloys **2013**, 469-478		2
204	Pure-Shear Test for Investigation of Non-Basal Slip System Operation of Mg Alloy Single Crystal with and without Y. *Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals*, **2013**, 77, 466-472	0.4	16
203	Increasing volume fraction of precipitates and strength of a Mg-Zn-Y alloy by pre-ageing deformation **2013**, 323-328		1
202	Evolution of microstructure during caliber rolling of AZ31 alloy **2013**, 317-322		
201	Effect of grain boundary structures on grain boundary sliding in magnesium. *Materials Letters*, **2012**, 76, 32-35	3.3	34
200	The effect of size and distribution of rod-shaped precipitates on the strength and ductility of a Mg□n alloy. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2012**, 539, 230-237	5.3	47
199	Evaluating the Effect of Pre-Ageing Deformation on □Precipitate Size and Distribution in Mg-Zn(-Y) Alloys **2012**, 191-196		
198	Rate-dependent hardening due to twinning in an ultrafine-grained magnesium alloy. *Acta Materialia*, **2012**, 60, 1818-1826	8.4	67
197	Development of High Strength and Toughness Magnesium Alloy by Grain Boundary Control **2012**, 345-347		1
196	Evaluating the effect of pre-ageing deformation on □ precipitate size and distribution in Mg-Zn(-Y) Alloys **2012**, 191-196		
195	Formation of Nano-Scale Twins and Low Angle Grain Boundaries during Fracture of a Fine Grained Magnesium Alloys **2012**, 93-97		
194	Orientation relationships between icosahedral clusters in hexagonal MgZn2 and monoclinic Mg4Zn7 phases in Mg-Zn(-Y) alloys. *Philosophical Magazine*, **2011**, 91, 2634-2644	1.6	22
193	Crystallographic relationship of orthorhombic □Al5Mg11Zn4 phase to icosahedral quasicrystalline phase. *Journal of Alloys and Compounds*, **2011**, 509, 4676-4681	5.7	6
192	Strengthening Mg-Al-Zn Alloy by Repetitive Oblique Shear Strain **2011**, 211-214		2
191	Fracture Mechanism and Toughness in Fine- and Coarse-Grained Magnesium Alloys **2011**, 25-28		2
190	Effect of Quasicrystal Phase Particle Dispersion on Mechanical Properties in Mg-Zn-Al Alloys. *Materials Transactions*, **2011**, 52, 1111-1115	1.3	1
189	Ultra-fine grain size and isotropic very high strength by direct extrusion of chill-cast Mg□nY alloys containing quasicrystal phase. *Scripta Materialia*, **2011**, 64, 661-664	5.6	86

188	Damping properties in Mg□Zn□ alloy with dispersion of quasicrystal phase particle. *Materials Letters*, **2011**, 65, 3251-3253	3.3	13
187	Deformation Mechanism in the Crack-Tip Region of Fine-Grained Magnesium Alloy. *Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science*, **2011**, 42, 2475-2480	2.3	3
186	High temperature processing of Mg□Zn□ alloys containing quasicrystal phase for high strength. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing* , **2011**, 528, 6647-6651	5.3	47
185	Strengthening Mg-Al-Zn Alloy by Repetitive Oblique Shear Strain **2011**, 211-214		
184	Fracture Mechanism and Toughness in Fine- and Coarse-Grained Magnesium Alloys **2011**, 25-28		
183	Improved Processing of Mg-Zn-Y Alloys Containing Quasicrystal Phase for Isotropic High Strength and Ductility **2011**, 239-244		
182	OS19-3-2 Production of ultra fine grain size by direct extrusion of a chill cast Mg-Zn-Y alloy containing quasicrystal phase with a very high isotropic strength. *The Abstracts of ATEM International Conference on Advanced Technology in Experimental Mechanics Asian Conference on Experimental Mechanics*, **2011**, 2011.10, _OS19-3-2-	0	
181	OS19-3-4 Strengthening Mg-Al-Zn Alloys by Severe Plastic Rolling. *The Abstracts of ATEM International Conference on Advanced Technology in Experimental Mechanics Asian Conference on Experimental Mechanics*, **2011**, 2011.10, _OS19-3-4-	0	
180	Superplastic Behavior in Magnesium Alloy with Dispersion of Quasicrystal Phase Particle. *Key Engineering Materials*, **2010**, 433, 291-295	0.4	
179	Medical application of magnesium and its alloys as degradable biomaterials **2010**, 318-320		4
178	The structure of precipitates in Mg□Zn□ alloys. *Philosophical Magazine Letters*, **2010**, 90, 641-651	1	19
177	Structural relationships among MgZn2 and Mg4Zn7 phases and transition structures in Mg-Zn-Y alloys. *Philosophical Magazine*, **2010**, 90, 3355-3374	1.6	37
176	Nanoindentation creep behavior of grain boundary in pure magnesium. *Philosophical Magazine Letters*, **2010**, 90, 883-890	1	50
175	Ductile fracture mechanism in fine-grained magnesium alloy. *Philosophical Magazine Letters*, **2010**, 90, 831-839	1	38
174	Texture and mechanical properties of superplastically deformed magnesium alloy rod. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2010**, 527, 6350-6358	5.3	20
173	Strengthening Mg□Al□Zn alloy by repetitive oblique shear strain with caliber roll. *Scripta Materialia*, **2010**, 62, 113-116	5.6	48
172	Enhancing Fracture Toughness of Magnesium Alloy by Formation of Low-Angle Grain Boundary Structure. *Advanced Engineering Materials*, **2010**, 12, 837-842	3.5	15
171	Deformation mechanism near crack-tip by finite element analysis and microstructure observation in magnesium alloys. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2010**, 527, 1761-1768	5.3	23

170	Deformation Behavior of Bulk Metallic Glasses at High Strain Rates. *Zairyo/Journal of the Society of Materials Science, Japan*, **2010**, 59, 98-103	0.1	
169	Fracture mechanism of a coarse-grained magnesium alloy during fracture toughness testing. *Philosophical Magazine Letters*, **2009**, 89, 2-10	1	113
168	Grain refinement of magnesium alloy sheets by ARB using high-speed rolling mill. *Journal of Physics: Conference Series*, **2009**, 165, 012011	0.3	1
167	Structure of shear bands in Pd40Ni40P20 bulk metallic glass. *Journal of Materials Research*, **2009**, 24, 1-9	2.5	48
166	Microstructure evolution of Mg□Zn binary alloy during a direct extrusion process. *Scripta Materialia*, **2009**, 60, 411-414	5.6	49
165	Rare-earth free wrought-processed magnesium alloy with dispersion of quasicrystal phase. *Scripta Materialia*, **2009**, 61, 705-708	5.6	25
164	Texture and mechanical properties of a superplastically deformed Mg□Al□Zn alloy sheet. *Scripta Materialia*, **2009**, 61, 883-886	5.6	8
163	Hardness Variation and Strain Distribution in Magnesium Alloy AZ31 Processed by Multi-pass Caliber Rolling. *Advanced Engineering Materials*, **2009**, 11, 654-658	3.5	29
162	Superplastic Behavior in Mg?Zn?Y Alloy with Dispersed Quasicrystal Phase Particles. *Advanced Engineering Materials*, **2009**, 11, 782-787	3.5	18
161	Microstructure evolution of Mg□Al□Zn alloys during compression test at low strain and temperature. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2009**, 527, 370-375	5.3	5
160	Compressive properties of a closed-cell aluminum foam as a function of strain rate and temperature. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2009**, 525, 1-6	5.3	84
159	Room temperature creep of fine-grained pure Mg: A direct comparison between nanoindentation and uniaxial tension. *Journal of Materials Research*, **2009**, 24, 1615-1618	2.5	34
158	Development of Fine-Grained Structure Caused by Friction Stir Welding Process of a ZK60A Magnesium Alloy. *Materials Transactions*, **2009**, 50, 610-617	1.3	16
157	Development of High Performance Magnesium Alloys to Structural Parts. *Journal of the Japan Society for Technology of Plasticity*, **2009**, 50, 291-295	0.3	
156	323 Influence of Morphology of Dispersed Quasi-crystalline Phase in Mg-Zn-Y Alloys on Their Wear Property. *The Proceedings of Conference of Kansai Branch*, **2009**, 2009.84, _3-23_	0	
155	Synthesis of high-strength bimodally grained iron by mechanical alloying and spark plasma sintering. *Scripta Materialia*, **2008**, 58, 759-762	5.6	57
154	Grain refinement of AZ91 alloy by introducing ultrasonic vibration during solidification. *Materials Letters*, **2008**, 62, 2872-2875	3.3	97
153	Precipitation control of calcium phosphate on pure magnesium by anodization. *Corrosion Science*, **2008**, 50, 2906-2913	6.8	86

152	Influence of pH and flow on the polarisation behaviour of pure magnesium in borate buffer solutions. *Corrosion Science*, **2008**, 50, 3561-3568	6.8	62
151	Effect of precipitate volume fraction on fracture toughness of extruded Mg□Zn alloys. *Journal of Materials Research*, **2008**, 23, 1128-1135	2.5	23
150	High Strength and Fracture Toughness Balances in Extruded Mg-Zn-RE Alloys by Dispersion of Quasicrystalline Phase Particles. *Materials Transactions*, **2008**, 49, 1947-1952	1.3	32
149	Casting Surface of AZ91 Alloy and Its Reaction with Sand Mold. *Materials Transactions*, **2008**, 49, 1089-1092	1.3	1
148	Polarization Behavior of Pure Magnesium under a Controlled Flow in a NaCl Solution. *Materials Transactions*, **2008**, 49, 1456-1461	1.3	20
147	Fatigue Behaviors and Microstructures in an Extruded Mg-Al-Zn Alloy. *Materials Transactions*, **2008**, 49, 681-684	1.3	19
146	Effect of Ultrasonic Vibration Pretreatment on Microstructural Evolution and Mechanical Properties of Extruded AZ91 Alloy. *Materials Transactions*, **2008**, 49, 972-975	1.3	13
145	Influence of Temperature and Grain Size on Threshold Stress for Superplastic Flow in a Fine-Grained Magnesium Alloy. *Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science*, **2008**, 39, 2351-2362	2.3	21
144	Microstructure and mechanical properties of AZ91 alloy produced with ultrasonic vibration. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing* , **2008**, 487, 120-123	5.3	68
143	High strength and fracture toughness balance on the extruded Mg□Ca□Zn alloy. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2007**, 459, 366-370	5.3	102
142	Effect of temperature of differential speed rolling on room temperature mechanical properties and texture in an AZ31 magnesium alloy. *Journal of Materials Processing Technology*, **2007**, 182, 644-647	5.3	113
141	Plasticity and microstructure of Zr□Cu□Al bulk metallic glasses. *Scripta Materialia*, **2007**, 57, 173-176	5.6	112
140	Compressive strength and yield asymmetry in extruded Mg□Zn□Ho alloys containing quasicrystal phase. *Scripta Materialia*, **2007**, 56, 935-938	5.6	98
139	High fracture toughness of extruded Mg□Zn□Y alloy by the synergistic effect of grain refinement and dispersion of quasicrystalline phase. *Scripta Materialia*, **2007**, 56, 1091-1094	5.6	91
138	A high-strength bulk nanocrystalline Al□Fe alloy processed by mechanical alloying and spark plasma sintering. *Scripta Materialia*, **2007**, 57, 189-192	5.6	90
137	Effect of dominant diffusion process on cavitation behavior in superplastic Mg□Al□Zn alloy. *Scripta Materialia*, **2007**, 57, 1008-1011	5.6	16
136	Stress□strain behaviors of Ti-based bulk metallic glass and their nanostructures. *Journal of Materials Research*, **2007**, 22, 1406-1413	2.5	30
135	High Strain Rate Deformation Behavior of Mg□Al□Zn Alloys at Elevated Temperatures. *Key Engineering Materials*, **2007**, 340-341, 107-112	0.4	16

134	Effect of precipitate shapes on fracture toughness in extruded Mg-Zn-Zr magnesium alloys. *Journal of Materials Research*, **2007**, 22, 965-973	2.5	55
133	Fracture toughness in direct extruded Mg□Al□n alloys. *Journal of Materials Research*, **2007**, 22, 2598-2607	2.5	28
132	Synergetic Effect of Grain Refinement and Spherical Shaped Precipitate Dispersions in Fracture Toughness of a Mg-Zn-Zr Alloy. *Materials Transactions*, **2007**, 48, 1422-1426	1.3	25
131	Glass Forming Ability and Mechanical Properties of Quinary Zr-Based Bulk Metallic Glasses. *Materials Transactions*, **2007**, 48, 1322-1326	1.3	25
130	Large apparent compressive strain of metallic glasses. *Philosophical Magazine Letters*, **2007**, 87, 625-635	1	23
129	2304 Crack propagation and fracture toughness of Magnesium alloys. *The Proceedings of the JSME Annual Meeting*, **2007**, 2007.1, 325-326		
128	Fracture toughness in Mg□Al□n alloy processed by equal-channel-angular extrusion. *Scripta Materialia*, **2006**, 54, 633-638	5.6	76
127	Compressive response of a closed-cell aluminum foam at high strain rate. *Scripta Materialia*, **2006**, 54, 533-537	5.6	140
126	Effect of solid-solution strengthening on fracture toughness in extruded Mg□n alloys. *Scripta Materialia*, **2006**, 55, 593-596	5.6	72
125	Deformation structure after fracture-toughness test of Mg□Al□n alloys processed by equal-channel-angular extrusion. *Philosophical Magazine Letters*, **2006**, 86, 195-204	1	37
124	Fracture Toughness in Ultra Fine-Grained Magnesium Alloy. *Materials Science Forum*, **2006**, 503-504, 155-160	0.4	18
123	Fracture toughness in a rolled AZ31 magnesium alloy. *Journal of Alloys and Compounds*, **2006**, 417, 209-213	5.7	42
122	Fracture Toughness in an Extruded ZK60 Magnesium Alloy. *Materials Transactions*, **2006**, 47, 995-998	1.3	28
121	Computational Study of Compressive Mechanical Response in Two-dimensional Cellular Solids under Microstructural Control. *Materials Transactions*, **2005**, 46, 1221-1229	1.3	1
120	Characterization of Nanocrystal Dispersed Cu60Zr30Ti10 Metallic Glass. *Materials Transactions*, **2005**, 46, 1264-1270	1.3	32
119	Symmetric and asymmetric deformation transition in the regularly cell-structured materials. Part II: Theoretical study. *International Journal of Solids and Structures*, **2005**, 42, 2211-2224	3.1	8
118	Symmetric and asymmetric deformation transition in the regularly cell-structured materials. Part I: experimental study. *International Journal of Solids and Structures*, **2005**, 42, 2199-2210	3.1	17
117	High strain rate deformation behavior of an AZ91 magnesium alloy at elevated temperatures. *Materials Letters*, **2005**, 59, 1511-1515	3.3	135

116	Effect of texture on tensile properties at elevated temperatures in an AZ31 magnesium alloy. *Scripta Materialia*, **2005**, 52, 449-454	5.6	94
115	Effect of texture on fracture toughness in extruded AZ31 magnesium alloy. *Scripta Materialia*, **2005**, 53, 541-545	5.6	127
114	TEM and 3DAP characterization of an age-hardened Mg□Ca□Zn alloy. *Scripta Materialia*, **2005**, 53, 675-679	5.6	149
113	Fabrication of bulk nanocrystalline Fe□ alloy by spark plasma sintering of mechanically milled powder. *Scripta Materialia*, **2005**, 53, 863-868	5.6	88
112	Effect of grain refinement on fracture toughness in extruded pure magnesium. *Scripta Materialia*, **2005**, 53, 1059-1064	5.6	151
111	High temperature compressive properties over a wide range of strain rates in an AZ31 magnesium alloy. *Journal of Materials Science*, **2005**, 40, 1577-1582	4.3	84
110	Effect of Precipitate Morphology on Tribological Properties in AZ91 Alloy. *Zairyo/Journal of the Society of Materials Science, Japan*, **2005**, 54, 90-96	0.1	5
109	Diffusion Bonding on Superplastic-Aluminium and -Magnesium Alloys. *Materials Science Forum*, **2004**, 447-448, 527-532	0.4	
108	Dynamic Deformation of Regularly Cell-Structured Materials. *Materials Science Forum*, **2004**, 465-466, 13-20	0.4	1
107	Constitutive Equation for Superplastic Flow in Light Metallic Materials. *Materials Science Forum*, **2004**, 447-448, 91-96	0.4	
106	Elastic and damping properties from room temperature to 673 K in an AZ31 magnesium alloy. *Scripta Materialia*, **2004**, 51, 291-295	5.6	90
105	Differential speed rolling of an AZ31 magnesium alloy and the resulting mechanical properties. *Journal of Materials Science*, **2004**, 39, 1477-1480	4.3	137
104	?????????? ????????????. *Materia Japan*, **2004**, 43, 810-814	0.1	7
103	Deformation Mechanism of Fine-Grained Superplasticity in Metallic Materials Expected from the Phenomenological Constitutive Equation. *Materials Transactions*, **2004**, 45, 2497-2502	1.3	27
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