

# Toshiji Mukai

## List of Publications by Citations

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

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	The activity of non-basal slip systems and dynamic recovery at room temperature in fine-grained AZ31B magnesium alloys. <i>Acta Materialia</i> , <b>2003</b> , 51, 2055-2065	8.4	1046
276	Ductility enhancement in AZ31 magnesium alloy by controlling its grain structure. <i>Scripta Materialia</i> , <b>2001</b> , 45, 89-94	5.6	707
275	Effect of strain rate on compressive behavior of a Pd40Ni40P20 bulk metallic glass. <i>Intermetallics</i> , <b>2002</b> , 10, 1071-1077	3.5	260
274	Experimental study of energy absorption in a close-celled aluminum foam under dynamic loading. <i>Scripta Materialia</i> , <b>1999</b> , 40, 921-927	5.6	247
273	Deformation mechanism in a coarse-grained Mg-Al-Zn alloy at elevated temperatures. <i>International Journal of Plasticity</i> , <b>2001</b> , 17, 387-397	7.6	205
272	Dynamic response of a Pd40Ni40P20 bulk metallic glass in tension. <i>Scripta Materialia</i> , <b>2002</b> , 46, 43-47	5.6	173
271	Effect of temperature and grain size on the dominant diffusion process for superplastic flow in an AZ61 magnesium alloy. <i>Acta Materialia</i> , <b>1999</b> , 47, 3753-3758	8.4	171
270	Low temperature superplasticity of a fine-grained ZK60 magnesium alloy processed by equal-channel-angular extrusion. <i>Scripta Materialia</i> , <b>2002</b> , 46, 851-856	5.6	159
269	Effect of grain refinement on fracture toughness in extruded pure magnesium. <i>Scripta Materialia</i> , <b>2005</b> , 53, 1059-1064	5.6	151
268	TEM and 3DAP characterization of an age-hardened Mg-Al-Zn alloy. <i>Scripta Materialia</i> , <b>2005</b> , 53, 675-679	5.6	149
267	Grain Size Control of Commercial Wrought Mg-Al-Zn Alloys Utilizing Dynamic Recrystallization. <i>Materials Transactions</i> , <b>2001</b> , 42, 1200-1205	1.3	142
266	Compressive response of a closed-cell aluminum foam at high strain rate. <i>Scripta Materialia</i> , <b>2006</b> , 54, 533-537	5.6	140
265	Differential speed rolling of an AZ31 magnesium alloy and the resulting mechanical properties. <i>Journal of Materials Science</i> , <b>2004</b> , 39, 1477-1480	4.3	137
264	High strain rate deformation behavior of an AZ91 magnesium alloy at elevated temperatures. <i>Materials Letters</i> , <b>2005</b> , 59, 1511-1515	3.3	135
263	Effect of texture on fracture toughness in extruded AZ31 magnesium alloy. <i>Scripta Materialia</i> , <b>2005</b> , 53, 541-545	5.6	127
262	Fracture mechanism of a coarse-grained magnesium alloy during fracture toughness testing. <i>Philosophical Magazine Letters</i> , <b>2009</b> , 89, 2-10	1	113
261	Effect of temperature of differential speed rolling on room temperature mechanical properties and texture in an AZ31 magnesium alloy. <i>Journal of Materials Processing Technology</i> , <b>2007</b> , 182, 644-647	5.3	113

260	Plasticity and microstructure of Zr <sub>40</sub> Ti <sub>60</sub> Al bulk metallic glasses. <i>Scripta Materialia</i> , <b>2007</b> , 57, 173-176	5.6	112
259	Effect of Grain Refinement on Tensile Ductility in ZK60 Magnesium Alloy under Dynamic Loading. <i>Materials Transactions</i> , <b>2001</b> , 42, 1177-1181	1.3	103
258	High strength and fracture toughness balance on the extruded Mg <sub>92</sub> Ca <sub>8</sub> Zn alloy. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2007</b> , 459, 366-370	5.3	102
257	Superplastic deformation mechanism in powder metallurgy magnesium alloys and composites. <i>Acta Materialia</i> , <b>2001</b> , 49, 2027-2037	8.4	102
256	Realization of high-strain-rate superplasticity at low temperatures in a Mg <sub>92</sub> Ni <sub>8</sub> Zr alloy. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2001</b> , 307, 119-128	5.3	102
255	Compressive strength and yield asymmetry in extruded Mg <sub>92</sub> Ni <sub>8</sub> alloys containing quasicrystal phase. <i>Scripta Materialia</i> , <b>2007</b> , 56, 935-938	5.6	98
254	Grain refinement of AZ91 alloy by introducing ultrasonic vibration during solidification. <i>Materials Letters</i> , <b>2008</b> , 62, 2872-2875	3.3	97
253	Superplasticity in a ZK60 magnesium alloy at low temperatures. <i>Scripta Materialia</i> , <b>1999</b> , 40, 477-484	5.6	95
252	Effect of texture on tensile properties at elevated temperatures in an AZ31 magnesium alloy. <i>Scripta Materialia</i> , <b>2005</b> , 52, 449-454	5.6	94
251	High fracture toughness of extruded Mg <sub>92</sub> Ni <sub>8</sub> alloy by the synergistic effect of grain refinement and dispersion of quasicrystalline phase. <i>Scripta Materialia</i> , <b>2007</b> , 56, 1091-1094	5.6	91
250	Low temperature diffusion bonding in a superplastic AZ31 magnesium alloy. <i>Scripta Materialia</i> , <b>2003</b> , 48, 1249-1254	5.6	91
249	A high-strength bulk nanocrystalline AlBe alloy processed by mechanical alloying and spark plasma sintering. <i>Scripta Materialia</i> , <b>2007</b> , 57, 189-192	5.6	90
248	Elastic and damping properties from room temperature to 673 K in an AZ31 magnesium alloy. <i>Scripta Materialia</i> , <b>2004</b> , 51, 291-295	5.6	90
247	Fabrication of bulk nanocrystalline Fe <sub>90</sub> alloy by spark plasma sintering of mechanically milled powder. <i>Scripta Materialia</i> , <b>2005</b> , 53, 863-868	5.6	88
246	Ultra-fine grain size and isotropic very high strength by direct extrusion of chill-cast Mg <sub>92</sub> Ni <sub>8</sub> alloys containing quasicrystal phase. <i>Scripta Materialia</i> , <b>2011</b> , 64, 661-664	5.6	86
245	Precipitation control of calcium phosphate on pure magnesium by anodization. <i>Corrosion Science</i> , <b>2008</b> , 50, 2906-2913	6.8	86
244	Compressive properties of a closed-cell aluminum foam as a function of strain rate and temperature. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2009</b> , 525, 1-6	5.3	84
243	High temperature compressive properties over a wide range of strain rates in an AZ31 magnesium alloy. <i>Journal of Materials Science</i> , <b>2005</b> , 40, 1577-1582	4.3	84

242	Application of superplasticity in commercial magnesium alloy for fabrication of structural components. <i>Materials Science and Technology</i> , <b>2000</b> , 16, 1314-1319	1.5	80
241	Superplastic behavior of a Zr <sub>0.0</sub> Al <sub>0.5</sub> Ti <sub>0.7</sub> Cu <sub>0.4</sub> Ni <sub>0.6</sub> metallic glass in the supercooled liquid region. <i>Scripta Materialia</i> , <b>1999</b> , 40, 1021-1027	5.6	79
240	Hall-Petch relation for deformation twinning in solid solution magnesium alloys. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2013</b> , 561, 378-385	5.3	77
239	Fracture toughness in Mg-Al-Zn alloy processed by equal-channel-angular extrusion. <i>Scripta Materialia</i> , <b>2006</b> , 54, 633-638	5.6	76
238	Hall-Petch Breakdown in Fine-Grained Pure Magnesium at Low Strain Rates. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , <b>2015</b> , 46, 894-902	2.3	73
237	Effect of solid-solution strengthening on fracture toughness in extruded Mg-Zn alloys. <i>Scripta Materialia</i> , <b>2006</b> , 55, 593-596	5.6	72
236	Processing of an open-cellular AZ91 magnesium alloy with a low density of 0.05 g/cm <sup>3</sup> . <i>Journal of Materials Science Letters</i> , <b>1999</b> , 18, 1477-1480		71
235	Enhancement of energy absorption in a closed-cell aluminum by the modification of cellular structures. <i>Scripta Materialia</i> , <b>1999</b> , 41, 1055-1060	5.6	71
234	Nanostructured Al-Be alloys produced by e-beam deposition: static and dynamic tensile properties. <i>Acta Materialia</i> , <b>2003</b> , 51, 4197-4208	8.4	70
233	High-strain-rate superplasticity at low temperature in a ZK61 magnesium alloy produced by powder metallurgy. <i>Scripta Materialia</i> , <b>1999</b> , 41, 209-213	5.6	69
232	Experimental study of a structural magnesium alloy with high absorption energy under dynamic loading. <i>Scripta Materialia</i> , <b>1998</b> , 39, 1249-1253	5.6	68
231	Microstructure and mechanical properties of AZ91 alloy produced with ultrasonic vibration. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2008</b> , 487, 120-123	5.3	68
230	Superplastic behavior in a mechanically alloyed aluminum composite reinforced with SiC particulates. <i>Scripta Metallurgica Et Materialia</i> , <b>1992</b> , 26, 185-190		68
229	Rate-dependent hardening due to twinning in an ultrafine-grained magnesium alloy. <i>Acta Materialia</i> , <b>2012</b> , 60, 1818-1826	8.4	67
228	Dynamic mechanical properties of a near-nano aluminum alloy processed by equal-channel-angular-extrusion. <i>Scripta Materialia</i> , <b>1998</b> , 10, 755-765		62
227	Influence of pH and flow on the polarisation behaviour of pure magnesium in borate buffer solutions. <i>Corrosion Science</i> , <b>2008</b> , 50, 3561-3568	6.8	62
226	Effect of precipitation on strength and ductility in a Mg-Zn alloy. <i>Journal of Alloys and Compounds</i> , <b>2013</b> , 550, 114-123	5.7	61
225	Positive exponent strain-rate superplasticity in mechanically alloyed aluminum IN9021. <i>Scripta Metallurgica Et Materialia</i> , <b>1991</b> , 25, 2053-2057		61

224	Synthesis of high-strength bimodally grained iron by mechanical alloying and spark plasma sintering. <i>Scripta Materialia</i> , <b>2008</b> , 58, 759-762	5.6	57
223	Dynamic compressive behavior of an ultra-lightweight magnesium foam. <i>Scripta Materialia</i> , <b>1999</b> , 41, 365-371	5.6	57
222	Influence of the magnesium concentration on the relationship between fracture mechanism and strain rate in high purity Al-Mg alloys. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>1994</b> , 176, 181-189	5.3	56
221	Effect of precipitate shapes on fracture toughness in extruded Mg-Zn-Zr magnesium alloys. <i>Journal of Materials Research</i> , <b>2007</b> , 22, 965-973	2.5	55
220	Elevated temperature mechanical properties of A 5056 Al-Mg alloy processed by equal-channel-angular-extrusion. <i>Scripta Materialia</i> , <b>1997</b> , 36, 699-705	5.6	53
219	Effects of heat treatment on compressive properties of AZ91 Mg and SG91A Al foams with open-cell structure. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2000</b> , 280, 225-228	5.3	52
218	Nanoindentation creep behavior of grain boundary in pure magnesium. <i>Philosophical Magazine Letters</i> , <b>2010</b> , 90, 883-890	1	50
217	Microstructure evolution of Mg-Zn binary alloy during a direct extrusion process. <i>Scripta Materialia</i> , <b>2009</b> , 60, 411-414	5.6	49
216	Consolidation of machined magnesium alloy chips by hot extrusion utilizing superplastic flow. <i>Journal of Materials Science</i> , <b>2001</b> , 36, 5007-5011	4.3	49
215	Structure of shear bands in Pd <sub>40</sub> Ni <sub>40</sub> P <sub>20</sub> bulk metallic glass. <i>Journal of Materials Research</i> , <b>2009</b> , 24, 1-9	2.5	48
214	Strengthening Mg-Al-Zn alloy by repetitive oblique shear strain with caliber roll. <i>Scripta Materialia</i> , <b>2010</b> , 62, 113-116	5.6	48
213	Experimental study for the improvement of crashworthiness in AZ91 magnesium foam controlling its microstructure. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2001</b> , 308, 283-287	5.3	48
212	The effect of size and distribution of rod-shaped precipitates on the strength and ductility of a Mg-Zn alloy. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2012</b> , 539, 230-237	5.3	47
211	High temperature processing of Mg-Zn alloys containing quasicrystal phase for high strength. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2011</b> , 528, 6647-6651	5.3	47
210	High-Strain-Rate Superplasticity in an AZ91 Magnesium Alloy Processed by Ingot Metallurgy Route. <i>Materials Transactions</i> , <b>2002</b> , 43, 78-80	1.3	44
209	Influence of strain rate on the mechanical properties in fine-grained aluminum alloys. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>1995</b> , 204, 12-18	5.3	44
208	High strain rate superplasticity in an Al-Ni-misch metal alloy produced from its amorphous powders. <i>Scripta Metallurgica Et Materialia</i> , <b>1992</b> , 26, 191-196		44
207	Dynamic deformation behavior of a face-centered cubic FeCoNiCrMn high-entropy alloy. <i>Science Bulletin</i> , <b>2018</b> , 63, 362-368	10.6	43

206	Effect of aluminum or zinc solute addition on enhancing impact fracture toughness in Mg-Al alloys. <i>Acta Materialia</i> , <b>2016</b> , 104, 283-294	8.4	42
205	Fracture toughness in a rolled AZ31 magnesium alloy. <i>Journal of Alloys and Compounds</i> , <b>2006</b> , 417, 209-213	5.7	42
204	Effect of microstructure on strength and ductility of high strength quasicrystal phase dispersed Mg-Zn alloys. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2014</b> , 611, 242-251	5.3	40
203	Materials Processing for Structural Stability in a ZK60 Magnesium Alloy. <i>Materials Transactions</i> , <b>2003</b> , 44, 775-781	1.3	39
202	Superplasticity of a Particle-Strengthened WE43 Magnesium Alloy. <i>Materials Transactions</i> , <b>2001</b> , 42, 157-162	1.6	39
201	Superplastic characteristics in an extruded AZ31 magnesium alloy.. <i>Keikinzoku/Journal of Japan Institute of Light Metals</i> , <b>1999</b> , 49, 401-404	0.3	39
200	Effect of alloying elements on room temperature tensile ductility in magnesium alloys. <i>Philosophical Magazine</i> , <b>2016</b> , 96, 2671-2685	1.6	39
199	Ductile fracture mechanism in fine-grained magnesium alloy. <i>Philosophical Magazine Letters</i> , <b>2010</b> , 90, 831-839	1	38
198	Low temperature superplasticity in a magnesium-based composite. <i>Scripta Materialia</i> , <b>2000</b> , 42, 249-255	5.6	38
197	Effect of deformation twins on damping capacity in extruded pure magnesium. <i>Journal of Alloys and Compounds</i> , <b>2015</b> , 626, 60-64	5.7	37
196	Structural relationships among MgZn <sub>2</sub> and Mg <sub>4</sub> Zn <sub>7</sub> phases and transition structures in Mg-Zn-Y alloys. <i>Philosophical Magazine</i> , <b>2010</b> , 90, 3355-3374	1.6	37
195	Deformation structure after fracture-toughness test of Mg-Al-Zn alloys processed by equal-channel-angular extrusion. <i>Philosophical Magazine Letters</i> , <b>2006</b> , 86, 195-204	1	37
194	Compressive properties of open-cellular SG91A Al and AZ91 Mg. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>1999</b> , 272, 455-458	5.3	36
193	Effect of solute atoms on grain boundary sliding in magnesium alloys. <i>Philosophical Magazine</i> , <b>2014</b> , 94, 1345-1360	1.6	35
192	Effect of grain boundary structures on grain boundary sliding in magnesium. <i>Materials Letters</i> , <b>2012</b> , 76, 32-35	3.3	34
191	Room temperature creep of fine-grained pure Mg: A direct comparison between nanoindentation and uniaxial tension. <i>Journal of Materials Research</i> , <b>2009</b> , 24, 1615-1618	2.5	34
190	High Strength and Fracture Toughness Balances in Extruded Mg-Zn-RE Alloys by Dispersion of Quasicrystalline Phase Particles. <i>Materials Transactions</i> , <b>2008</b> , 49, 1947-1952	1.3	32
189	Characterization of Nanocrystal Dispersed Cu <sub>60</sub> Zr <sub>30</sub> Ti <sub>10</sub> Metallic Glass. <i>Materials Transactions</i> , <b>2005</b> , 46, 1264-1270	1.3	32

188	Fabrication of a magnesium alloy with excellent ductility for biodegradable clips. <i>Acta Biomaterialia</i> , <b>2016</b> , 29, 468-476	10.8	31
187	Fabrication of biodegradable materials with high strength by grain refinement of Mg0.3 at.% Ca alloys. <i>Materials Letters</i> , <b>2018</b> , 223, 65-68	3.3	31
186	Effect of Micro-Alloying Elements on Deformation Behavior in Mg&ndash;Y Binary Alloys. <i>Materials Transactions</i> , <b>2014</b> , 55, 182-187	1.3	31
185	Microstructural evolution during dry wear test in magnesium and Mg&#x2D; alloy. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2013</b> , 561, 371-377	5.3	31
184	Grain Refinement of Commercial Magnesium Alloys for High-Strain-Rate-Superplastic Forming. <i>Materials Science Forum</i> , <b>2000</b> , 350-351, 159-170	0.4	31
183	Stress&#x2D;strain behaviors of Ti-based bulk metallic glass and their nanostructures. <i>Journal of Materials Research</i> , <b>2007</b> , 22, 1406-1413	2.5	30
182	Superplastic Behavior in Commercial Wrought Magnesium Alloys. <i>Materials Science Forum</i> , <b>2000</b> , 350-351, 171-176	0.4	30
181	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. <i>International Journal of Plasticity</i> , <b>2018</b> , 100, 34-51	7.6	29
180	Hardness Variation and Strain Distribution in Magnesium Alloy AZ31 Processed by Multi-pass Caliber Rolling. <i>Advanced Engineering Materials</i> , <b>2009</b> , 11, 654-658	3.5	29
179	Compressive deformation behavior of Al2O3 foam. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2000</b> , 277, 213-217	5.3	29
178	Fracture toughness in direct extruded Mg&#x2D;Al&#x2D;Zn alloys. <i>Journal of Materials Research</i> , <b>2007</b> , 22, 2598-2607	2.5	28
177	Fracture Toughness in an Extruded ZK60 Magnesium Alloy. <i>Materials Transactions</i> , <b>2006</b> , 47, 995-998	1.3	28
176	Strain-rate dependence of mechanical properties in AA5056 Al&#x2D;Mg alloy processed by equal-channel-angular-extrusion. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>1998</b> , 247, 270-274	5.3	27
175	Deformation Mechanism of Fine-Grained Superplasticity in Metallic Materials Expected from the Phenomenological Constitutive Equation. <i>Materials Transactions</i> , <b>2004</b> , 45, 2497-2502	1.3	27
174	Secondary Processing of AZ31 Magnesium Alloy Concomitant with Grain Growth or Dynamic Recrystallization. <i>Materials Transactions</i> , <b>2004</b> , 45, 2377-2382	1.3	27
173	Effect of Cell Size on the Dynamic Compressive Properties of Open-Celled Aluminum Foams. <i>Materials Transactions</i> , <b>2002</b> , 43, 2548-2553	1.3	27
172	Superplastic behavior at high strain rates of a mechanically alloyed Al&#x2D;Mg&#x2D;Li alloy. <i>Scripta Metallurgica Et Materialia</i> , <b>1992</b> , 26, 761-766		27
171	Mechanical Properties of Mg-Y-Zn Alloy Processed by Equal-Channel-Angular Extrusion. <i>Materials Transactions</i> , <b>2003</b> , 44, 463-467	1.3	26

170	Development of a Closed Cell Aluminum Alloy Foam with Enhancement of the Compressive Strength. <i>Materials Transactions</i> , <b>2001</b> , 42, 2118-2123	1.3	26
169	Superplasticity in doubly extruded magnesium composite ZK60/SiC/17p. <i>Materials Science and Technology</i> , <b>1998</b> , 14, 32-35	1.5	26
168	Rare-earth free wrought-processed magnesium alloy with dispersion of quasicrystal phase. <i>Scripta Materialia</i> , <b>2009</b> , 61, 705-708	5.6	25
167	Synergetic Effect of Grain Refinement and Spherical Shaped Precipitate Dispersions in Fracture Toughness of a Mg-Zn-Zr Alloy. <i>Materials Transactions</i> , <b>2007</b> , 48, 1422-1426	1.3	25
166	Glass Forming Ability and Mechanical Properties of Quinary Zr-Based Bulk Metallic Glasses. <i>Materials Transactions</i> , <b>2007</b> , 48, 1322-1326	1.3	25
165	Material design for magnesium alloys with high deformability. <i>Philosophical Magazine</i> , <b>2015</b> , 95, 869-885	1.6	24
164	The Processing and Properties of Superplastic Magnesium Alloys and Their Composites. <i>Materialia Japan</i> , <b>2000</b> , 39, 347-354	0.1	24
163	Deformation mechanism near crack-tip by finite element analysis and microstructure observation in magnesium alloys. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2010</b> , 527, 1761-1768	5.3	23
162	Effect of precipitate volume fraction on fracture toughness of extruded Mg <sub>2</sub> Ni alloys. <i>Journal of Materials Research</i> , <b>2008</b> , 23, 1128-1135	2.5	23
161	Large apparent compressive strain of metallic glasses. <i>Philosophical Magazine Letters</i> , <b>2007</b> , 87, 625-635	1	23
160	?????????. <i>Keikinzoku/Journal of Japan Institute of Light Metals</i> , <b>2001</b> , 51, 503-508	0.3	23
159	Processing of Ductile Magnesium Alloy under Dynamic Tensile Loading. <i>Materials Transactions</i> , <b>2001</b> , 42, 2652-2654	1.3	23
158	Orientation relationships between icosahedral clusters in hexagonal MgZn <sub>2</sub> and monoclinic Mg <sub>4</sub> Zn <sub>7</sub> phases in Mg-Zn(-Y) alloys. <i>Philosophical Magazine</i> , <b>2011</b> , 91, 2634-2644	1.6	22
157	High-strain-rate superplastic behavior in a super-rapidly-solidified Al-Si system alloy. <i>Scripta Materialia</i> , <b>1997</b> , 37, 673-678	5.6	22
156	Ductility enhancement of ultra fine-grained aluminum under dynamic loading. <i>Scripta Materialia</i> , <b>2001</b> , 44, 1493-1496	5.6	22
155	Microyielding and damping capacity in magnesium. <i>Scripta Materialia</i> , <b>2014</b> , 87, 1-4	5.6	21
154	Influence of Temperature and Grain Size on Threshold Stress for Superplastic Flow in a Fine-Grained Magnesium Alloy. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , <b>2008</b> , 39, 2351-2362	2.3	21
153	Low Temperature Superplasticity in a ZK60 Magnesium Alloy. <i>Materials Transactions, JIM</i> , <b>1999</b> , 40, 809-814		21

152	Texture and mechanical properties of superplastically deformed magnesium alloy rod. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2010</b> , 527, 6350-6358	5.3	20
151	Polarization Behavior of Pure Magnesium under a Controlled Flow in a NaCl Solution. <i>Materials Transactions</i> , <b>2008</b> , 49, 1456-1461	1.3	20
150	Guide for Enhancement of Room Temperature Ductility in Mg Alloys at High Strain Rates. <i>Materials Science Forum</i> , <b>2003</b> , 419-422, 171-176	0.4	20
149	The structure of precipitates in Mg <sub>2</sub> Ni alloys. <i>Philosophical Magazine Letters</i> , <b>2010</b> , 90, 641-651	1	19
148	Fatigue Behaviors and Microstructures in an Extruded Mg-Al-Zn Alloy. <i>Materials Transactions</i> , <b>2008</b> , 49, 681-684	1.3	19
147	Energy Absorption in Closed-Cell Al-Zn-Mg-Ca-Ti Foam. <i>Materials Transactions</i> , <b>2002</b> , 43, 1778-1781	1.3	19
146	Development of Very High Strength and Ductile Dilute Magnesium Alloys by Dispersion of Quasicrystal Phase. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , <b>2014</b> , 45, 3232-3240	2.3	18
145	Superplastic Behavior in Mg <sub>2</sub> Zn <sub>3</sub> Y Alloy with Dispersed Quasicrystal Phase Particles. <i>Advanced Engineering Materials</i> , <b>2009</b> , 11, 782-787	3.5	18
144	Fracture Toughness in Ultra Fine-Grained Magnesium Alloy. <i>Materials Science Forum</i> , <b>2006</b> , 503-504, 155-160	1.4	18
143	New Forming Process of Three-Dimensionally Shaped Magnesium Parts Utilizing High-Strain-Rate Superplasticity. <i>Materials Transactions</i> , <b>2004</b> , 45, 2531-2536	1.3	18
142	Very high strain rate superplasticity in a mechanically alloyed IN9052 aluminum alloy. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>1992</b> , 159, L1-L4	5.3	18
141	Molecular dynamics simulation of grain boundary plasticity in magnesium and solid-solution magnesium alloys. <i>Computational Materials Science</i> , <b>2013</b> , 77, 424-429	3.2	17
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138	Development of Fine-Grained Structure Caused by Friction Stir Welding Process of a ZK60A Magnesium Alloy. <i>Materials Transactions</i> , <b>2009</b> , 50, 610-617	1.3	16
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126	Effect of Ultrasonic Vibration Pretreatment on Microstructural Evolution and Mechanical Properties of Extruded AZ91 Alloy. <i>Materials Transactions</i> , <b>2008</b> , 49, 972-975	1.3	13
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