

Zenji Horita

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336
papers

22,061
citations

76
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139
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344
ext. papers

23,664
ext. citations

3.8
avg, IF

7
L-index

#	Paper	IF	Citations
336	Principle of equal-channel angular pressing for the processing of ultra-fine grained materials. <i>Scripta Materialia</i> , 1996 , 35, 143-146	5.6	1522
335	Producing bulk ultrafine-grained materials by severe plastic deformation. <i>Jom</i> , 2006 , 58, 33-39	2.1	1192
334	The process of grain refinement in equal-channel angular pressing. <i>Acta Materialia</i> , 1998 , 46, 3317-3331	8.4	1057
333	The shearing characteristics associated with equal-channel angular pressing. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 1998 , 257, 328-332	5.3	827
332	Improving the mechanical properties of magnesium and a magnesium alloy through severe plastic deformation. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2001 , 300, 142-147	5.3	530
331	Influence of channel angle on the development of ultrafine grains in equal-channel angular pressing. <i>Acta Materialia</i> , 1998 , 46, 1589-1599	8.4	365
330	Equal-channel angular pressing of commercial aluminum alloys: Grain refinement, thermal stability and tensile properties. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2000 , 31, 691-701	2.3	359
329	A review on high-pressure torsion (HPT) from 1935 to 1988. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2016 , 652, 325-352	5.3	315
328	The evolution of homogeneity in processing by high-pressure torsion. <i>Acta Materialia</i> , 2007 , 55, 203-212	8.4	306
327	Grain refinement and superplasticity in an aluminum alloy processed by high-pressure torsion. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2005 , 393, 344-351	5.3	302
326	An investigation of grain boundaries in submicrometer-grained Al-Mg solid solution alloys using high-resolution electron microscopy. <i>Journal of Materials Research</i> , 1996 , 11, 1880-1890	2.5	291
325	Producing Bulk Ultrafine-Grained Materials by Severe Plastic Deformation: Ten Years Later. <i>Jom</i> , 2016 , 68, 1216-1226	2.1	268
324	Factors influencing the equilibrium grain size in equal-channel angular pressing: Role of Mg additions to aluminum. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 1998 , 29, 2503-2510	2.3	251
323	Microstructural characteristics of ultrafine-grained aluminum produced using equal-channel angular pressing. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 1998 , 29, 2245-2252	2.3	241
322	Influence of stacking-fault energy on microstructural characteristics of ultrafine-grain copper and copper-zinc alloys. <i>Acta Materialia</i> , 2008 , 56, 809-820	8.4	219
321	The evolution of homogeneity and grain refinement during equal-channel angular pressing: A model for grain refinement in ECAP. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2005 , 398, 66-76	5.3	218
320	Factors influencing the shearing patterns in equal-channel angular pressing. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2002 , 332, 97-109	5.3	214

319	Development of a multi-pass facility for equal-channel angular pressing to high total strains. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2000 , 281, 82-87	5.3	214
318	Optimizing the rotation conditions for grain refinement in equal-channel angular pressing. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 1998 , 29, 2011-2013	2.3	206
317	The potential for scaling ECAP: effect of sample size on grain refinement and mechanical properties. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2001 , 318, 34-41	5.3	203
316	Using ECAP to achieve grain refinement, precipitate fragmentation and high strain rate superplasticity in a spray-cast aluminum alloy. <i>Acta Materialia</i> , 2003 , 51, 6139-6149	8.4	198
315	High-pressure torsion of pure magnesium: Evolution of mechanical properties, microstructures and hydrogen storage capacity with equivalent strain. <i>Scripta Materialia</i> , 2011 , 64, 880-883	5.6	196
314	Microstructural evolution in high purity aluminum processed by ECAP. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2009 , 524, 143-150	5.3	193
313	Microstructural evolution in pure aluminum processed by high-pressure torsion. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2009 , 503, 32-36	5.3	192
312	An investigation of ductility and microstructural evolution in an Al8% Mg alloy with submicron grain size. <i>Journal of Materials Research</i> , 1993 , 8, 2810-2818	2.5	181
311	Influence of pressing temperature on microstructural development in equal-channel angular pressing. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2000 , 287, 100-106	5.3	180
310	Microstructure and mechanical properties of pure Cu processed by high-pressure torsion. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2008 , 497, 168-173	5.3	179
309	Using equal-channel angular pressing for refining grain size. <i>Jom</i> , 2000 , 52, 30-33	2.1	179
308	High-pressure torsion of pure metals: Influence of atomic bond parameters and stacking fault energy on grain size and correlation with hardness. <i>Acta Materialia</i> , 2011 , 59, 6831-6836	8.4	161
307	Influence of stacking fault energy on microstructural development in equal-channel angular pressing. <i>Journal of Materials Research</i> , 1999 , 14, 4044-4050	2.5	161
306	Thermal stability of ultrafine-grained aluminum in the presence of Mg and Zr additions. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 1999 , 265, 188-196	5.3	159
305	Microstructures and microhardness of an aluminum alloy and pure copper after processing by high-pressure torsion. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2005 , 410-411, 422-425	5.3	155
304	Developing grain refinement and superplasticity in a magnesium alloy processed by high-pressure torsion. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2008 , 488, 117-124	5.3	154
303	The evolution of homogeneity in an aluminum alloy processed using high-pressure torsion. <i>Acta Materialia</i> , 2008 , 56, 5168-5176	8.4	153
302	Developing high-pressure torsion for use with bulk samples. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2005 , 406, 268-273	5.3	146

301	Production of aluminum-matrix carbon nanotube composite using high pressure torsion. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2008 , 490, 300-304	5.3	142
300	Influence of ECAP on precipitate distributions in a spray-cast aluminum alloy. <i>Acta Materialia</i> , 2005 , 53, 749-758	8.4	140
299	Influence of dislocation-solute atom interactions and stacking fault energy on grain size of single-phase alloys after severe plastic deformation using high-pressure torsion. <i>Acta Materialia</i> , 2014 , 69, 68-77	8.4	138
298	Observations of grain boundary structure in submicrometer-grained Cu and Ni using high-resolution electron microscopy. <i>Journal of Materials Research</i> , 1998 , 13, 446-450	2.5	138
297	Significance of homologous temperature in softening behavior and grain size of pure metals processed by high-pressure torsion. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2011 , 528, 7514-7523	5.3	137
296	High-pressure torsion using ring specimens. <i>Scripta Materialia</i> , 2008 , 58, 469-472	5.6	135
295	Influence of pressing speed on microstructural development in equal-channel angular pressing. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 1999 , 30, 1989-1997	2.3	134
294	High-pressure torsion for enhanced atomic diffusion and promoting solid-state reactions in the aluminum-copper system. <i>Acta Materialia</i> , 2013 , 61, 3482-3489	8.4	132
293	The use of severe plastic deformation for microstructural control. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2002 , 324, 82-89	5.3	132
292	Microstructural characteristics and superplastic ductility in a Zn-22% Al alloy with submicrometer grain size. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 1998 , 241, 122-128	5.3	129
291	Structural evolution and the Hall-Petch relationship in an Al-Mg-Li-Zr alloy with ultra-fine grain size. <i>Acta Materialia</i> , 1997 , 45, 4751-4757	8.4	126
290	Processing Pure Ti by High-Pressure Torsion in Wide Ranges of Pressures and Strain. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2009 , 40, 2079-2086	2.3	121
289	A two-step processing route for achieving a superplastic forming capability in dilute magnesium alloys. <i>Scripta Materialia</i> , 2002 , 47, 255-260	5.6	119
288	Optimizing the procedure of equal-channel angular pressing for maximum superplasticity. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2001 , 297, 111-118	5.3	119
287	Exceptional superplasticity in an AZ61 magnesium alloy processed by extrusion and ECAP. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2006 , 420, 240-244	5.3	118
286	Grain refinement of pure nickel using equal-channel angular pressing. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2002 , 325, 54-58	5.3	118
285	A new constitutive relationship for the homogeneous deformation of metals over a wide range of strain. <i>Acta Materialia</i> , 2004 , 52, 3555-3563	8.4	113
284	Fabrication of bulk ultrafine-grained materials through intense plastic straining. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 1998 , 29, 2237-2243	2.3	109

283	High strain rate superplasticity in an Al-Mg alloy containing scandium. <i>Scripta Materialia</i> , 1998 , 38, 1851-1856	5.6	106
282	Influence of rolling on the superplastic behavior of an Al-Mg-Sc alloy after ECAP. <i>Scripta Materialia</i> , 2001 , 44, 759-764	5.6	105
281	Evolution of Mechanical Properties and Microstructures with Equivalent Strain in Pure Fe Processed by High Pressure Torsion. <i>Materials Transactions</i> , 2009 , 50, 44-50	1.3	103
280	Design and synthesis of a magnesium alloy for room temperature hydrogen storage. <i>Acta Materialia</i> , 2018 , 149, 88-96	8.4	101
279	Significance of temperature increase in processing by high-pressure torsion. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2011 , 528, 7301-7305	5.3	101
278	Influence of stacking fault energy on the minimum grain size achieved in severe plastic deformation. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2007 , 463, 22-26	5.3	101
277	Significance of adiabatic heating in equal-channel angular pressing. <i>Scripta Materialia</i> , 1999 , 41, 791-796	5.6	99
276	Effect of hydrogen on martensite formation in austenitic stainless steels in high-pressure torsion. <i>Acta Materialia</i> , 2009 , 57, 2993-3002	8.4	96
275	The application of equal-channel angular pressing to an aluminum single crystal. <i>Acta Materialia</i> , 2004 , 52, 1387-1395	8.4	95
274	Microstructural and Mechanical Characteristics of AZ61 Magnesium Alloy Processed by High-Pressure Torsion. <i>Materials Transactions</i> , 2008 , 49, 76-83	1.3	93
273	High-pressure torsion of TiFe intermetallics for activation of hydrogen storage at room temperature with heterogeneous nanostructure. <i>International Journal of Hydrogen Energy</i> , 2013 , 38, 4622-4627	6.7	92
272	The significance of slippage in processing by high-pressure torsion. <i>Scripta Materialia</i> , 2009 , 60, 9-12	5.6	91
271	Hydrogen storage capability of MgNi ₂ processed by high pressure torsion. <i>Scripta Materialia</i> , 2007 , 57, 751-753	5.6	90
270	Developing superplastic properties in an aluminum alloy through severe plastic deformation. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 1999 , 272, 63-72	5.3	87
269	Ultrahigh strength and high plasticity in TiAl intermetallics with bimodal grain structure and nanotwins. <i>Scripta Materialia</i> , 2012 , 67, 814-817	5.6	83
268	Continuous high-pressure torsion. <i>Journal of Materials Science</i> , 2010 , 45, 4578-4582	4.3	80
267	Enhanced grain growth in an Al-Mg alloy with ultrafine grain size. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 1996 , 216, 41-46	5.3	80
266	Plastic flow, structure and mechanical properties in pure Al deformed by twist extrusion. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2009 , 519, 105-111	5.3	79

265	Plastic deformation and allotropic phase transformations in zirconia ceramics during high-pressure torsion. <i>Scripta Materialia</i> , 2011 , 65, 974-977	5.6	78
264	Equal-channel angular pressing: A novel tool for microstructural control. <i>Metals and Materials International</i> , 1998 , 4, 1181-1190		78
263	Equal-channel angular pressing using plate samples. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2003 , 361, 258-266	5.3	78
262	Achieving exceptional superplasticity in a bulk aluminum alloy processed by high-pressure torsion. <i>Scripta Materialia</i> , 2008 , 58, 1029-1032	5.6	77
261	High-pressure zinc oxide phase as visible-light-active photocatalyst with narrow band gap. <i>Journal of Materials Chemistry A</i> , 2017 , 5, 20298-20303	13	76
260	Microstructural development in equal-channel angular pressing using a 60° die. <i>Acta Materialia</i> , 2004 , 52, 2497-2507	8.4	76
259	Significance of Microstructural Control for Superplastic Deformation and Forming. <i>Materials Transactions, JIM</i> , 1996 , 37, 336-339		76
258	Universal Plot for Hardness Variation in Pure Metals Processed by High-Pressure Torsion. <i>Materials Transactions</i> , 2010 , 51, 1051-1054	1.3	73
257	Using grain boundary engineering to evaluate the diffusion characteristics in ultrafine-grained AlMg and AlZn alloys. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2004 , 371, 241-250	5.3	71
256	Characteristics of diffusion in Al-Mg alloys with ultrafine grain sizes. <i>Philosophical Magazine A: Physics of Condensed Matter, Structure, Defects and Mechanical Properties</i> , 2002 , 82, 2249-2262		71
255	Grain refinement and superplastic flow in an aluminum alloy processed by high-pressure torsion. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2005 , 408, 141-146	5.3	70
254	Factors influencing the flow and hardness of materials with ultrafine grain sizes. <i>Philosophical Magazine A: Physics of Condensed Matter, Structure, Defects and Mechanical Properties</i> , 1998 , 78, 203-216		70
253	Softening of high purity aluminum and copper processed by high pressure torsion. <i>International Journal of Materials Research</i> , 2009 , 100, 1668-1673	0.5	69
252	Room-Temperature Superplasticity in an Ultrafine-Grained Magnesium Alloy. <i>Scientific Reports</i> , 2017 , 7, 2662	4.9	68
251	An Evaluation of Superplasticity in Aluminum-Scandium Alloys Processed by Equal-Channel Angular Pressing. <i>Materials Transactions, JIM</i> , 1999 , 40, 772-778		68
250	Ultrafine-grained magnesium-lithium alloy processed by high-pressure torsion: Low-temperature superplasticity and potential for hydroforming. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2015 , 640, 443-448	5.3	66
249	Development of High-Pressure Sliding Process for Microstructural Refinement of Rectangular Metallic Sheets. <i>Materials Transactions</i> , 2009 , 50, 930-933	1.3	66
248	Equal-Channel Angular Pressing and High-Pressure Torsion of Pure Copper: Evolution of Electrical Conductivity and Hardness with Strain. <i>Materials Transactions</i> , 2012 , 53, 123-127	1.3	65

247	Microstructural Evolution in Pure Aluminum in the Early Stages of Processing by High-Pressure Torsion. <i>Materials Transactions</i> , 2010 , 51, 2-7	1.3	65
246	High-pressure torsion of titanium at cryogenic and room temperatures: Grain size effect on allotropic phase transformations. <i>Acta Materialia</i> , 2014 , 68, 207-213	8.4	62
245	Application of high-pressure torsion for consolidation of ceramic powders. <i>Scripta Materialia</i> , 2010 , 63, 174-177	5.6	62
244	Age hardening and thermal stability of AlCu alloy processed by high-pressure torsion. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2015 , 627, 111-118	5.3	60
243	Evaluating the influence of pressure and torsional strain on processing by high-pressure torsion. <i>Journal of Materials Science</i> , 2008 , 43, 7286-7292	4.3	60
242	Grain boundary structure in AlMg and AlMgBc alloys after equal-channel angular pressing. <i>Journal of Materials Research</i> , 2001 , 16, 583-589	2.5	60
241	Using ring samples to evaluate the processing characteristics in high-pressure torsion. <i>Acta Materialia</i> , 2009 , 57, 1147-1153	8.4	59
240	Formation of FeNi with L10-ordered structure using high-pressure torsion. <i>Philosophical Magazine Letters</i> , 2014 , 94, 639-646	1	58
239	Microstructural evolution in an aluminum solid solution alloy processed by ECAP. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2011 , 528, 6059-6065	5.3	58
238	Severe plastic deformation as a processing tool for developing superplastic metals. <i>Journal of Alloys and Compounds</i> , 2004 , 378, 27-34	5.7	57
237	Grain refinement and superplasticity in a magnesium alloy processed by equal-channel angular pressing. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2005 , 36, 1705-1711	2.3	57
236	Visible-Light-Driven Photocatalytic Hydrogen Generation on Nanosized TiO ₂ -II Stabilized by High-Pressure Torsion. <i>ACS Catalysis</i> , 2016 , 6, 5103-5107	13.1	56
235	Strong and ductile nanostructured Cu-carbon nanotube composite. <i>Applied Physics Letters</i> , 2009 , 95, 071907	3.4	56
234	New nanostructured phases with reversible hydrogen storage capability in immiscible magnesium-zirconium system produced by high-pressure torsion. <i>Acta Materialia</i> , 2016 , 108, 293-303	8.4	54
233	Powder consolidation of Al10 wt% Fe alloy by High-Pressure Torsion. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2012 , 558, 462-471	5.3	54
232	Cold Consolidation of Ball-Milled Titanium Powders Using High-Pressure Torsion. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2010 , 41, 3308-3317	2.3	54
231	Influence of crystal orientation on ECAP of aluminum single crystals. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2006 , 420, 79-86	5.3	54
230	Achieving superplasticity in ultrafine-grained copper: influence of Zn and Zr additions. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2003 , 352, 129-135	5.3	54

229	Achieving superplasticity in a Cu \approx 0%Zn alloy through severe plastic deformation. <i>Scripta Materialia</i> , 2001 , 45, 965-970	5.6	54
228	Mechanism of activation of TiFe intermetallics for hydrogen storage by severe plastic deformation using high-pressure torsion. <i>Applied Physics Letters</i> , 2013 , 103, 143902	3.4	53
227	Correlations between hardness and atomic bond parameters of pure metals and semi-metals after processing by high-pressure torsion. <i>Scripta Materialia</i> , 2011 , 64, 161-164	5.6	53
226	Using X-ray microdiffraction to determine grain sizes at selected positions in disks processed by high-pressure torsion. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2007 , 444, 153-156	5.3	53
225	Plastic Deformation of BaTiO ₃ Ceramics by High-pressure Torsion and Changes in Phase Transformations, Optical and Dielectric Properties. <i>Materials Research Letters</i> , 2015 , 3, 216-221	7.4	52
224	Grain refinement and high strain rate superplasticity in aluminium 2024 alloy processed by high-pressure torsion. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2015 , 622, 139-145	5.3	52
223	Formation of metastable phases in magnesium-titanium system by high-pressure torsion and their hydrogen storage performance. <i>Acta Materialia</i> , 2015 , 99, 150-156	8.4	52
222	High-pressure torsion of pure cobalt: hcp-fcc phase transformations and twinning during severe plastic deformation. <i>Applied Physics Letters</i> , 2013 , 102, 181902	3.4	52
221	Achieving enhanced ductility in a dilute magnesium alloy through severe plastic deformation. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2004 , 35, 1735-1744	2.3	52
220	High-pressure torsion of aluminum with ultrahigh purity (99.9999%) and occurrence of inverse Hall-Petch relationship. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2017 , 679, 428-434	5.3	51
219	Effect of temperature rise on microstructural evolution during high-pressure torsion. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2018 , 714, 167-171	5.3	50
218	Phase transformation and nanograin refinement of silicon by processing through high-pressure torsion. <i>Applied Physics Letters</i> , 2012 , 101, 121908	3.4	50
217	Fabrication of submicrometer-grained Zn \approx 2% Al by torsion straining. <i>Journal of Materials Research</i> , 1996 , 11, 2128-2130	2.5	49
216	Development of Severe Torsion Straining Process for Rapid Continuous Grain Refinement. <i>Materials Transactions</i> , 2004 , 45, 3338-3342	1.3	48
215	Microstructures and Mechanical Properties of Pure V and Mo Processed by High-Pressure Torsion. <i>Materials Transactions</i> , 2010 , 51, 1072-1079	1.3	47
214	High-Pressure Torsion of Machining Chips and Bulk Discs of Amorphous Zr ₅₀ Cu ₃₀ Al ₁₀ Ni ₁₀ . <i>Materials Transactions</i> , 2010 , 51, 23-26	1.3	46
213	Effect of high-pressure torsion on hydrogen trapping in Fe \approx 0.01 mass% C and type 310S austenitic stainless steel. <i>Acta Materialia</i> , 2010 , 58, 649-657	8.4	46
212	Ultra-severe plastic deformation: Evolution of microstructure, phase transformation and hardness in immiscible magnesium-based systems. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2017 , 701, 158-166	5.3	45

211	Microstructure Evolution in Pure Al Processed with Twist Extrusion. <i>Materials Transactions</i> , 2009 , 50, 96-100	1.3	45
210	Scaling-Up of High Pressure Torsion Using Ring Shape. <i>Materials Transactions</i> , 2009 , 50, 92-95	1.3	45
209	An evaluation of the flow behavior during high strain rate superplasticity in an AlMgSc alloy. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2001 , 32, 707-716	2.3	44
208	Evolution of Microstructure and Hardness in Pure Al by Twist Extrusion. <i>Materials Transactions</i> , 2008 , 49, 2-6	1.3	43
207	Fabrication and thermal stability of a nanocrystalline NiAlCr alloy: Comparison with pure Cu and Ni. <i>Journal of Materials Research</i> , 1999 , 14, 4200-4207	2.5	43
206	Effect of initial grain sizes on hardness variation and strain distribution of pure aluminum severely deformed by compression tests. <i>Acta Materialia</i> , 2008 , 56, 6291-6303	8.4	41
205	Mechanical Properties and Microstructures of Al-Fe Alloys Processed by High-Pressure Torsion. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2012 , 43, 5182-5192	2.3	40
204	Superplastic flow in a nanostructured aluminum alloy produced using high-pressure torsion. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2009 , 500, 170-175	5.3	40
203	Influence of scandium on superplastic ductilities in an AlMgSc alloy. <i>Journal of Materials Research</i> , 2000 , 15, 2571-2576	2.5	40
202	Strengthening of CuNiBi alloy using high-pressure torsion and aging. <i>Materials Characterization</i> , 2014 , 90, 62-70	3.9	39
201	High-Pressure Torsion for Pure Chromium and Niobium. <i>Materials Transactions</i> , 2012 , 53, 38-45	1.3	38
200	Transition from poor ductility to room-temperature superplasticity in a nanostructured aluminum alloy. <i>Scientific Reports</i> , 2018 , 8, 6740	4.9	37
199	Methods for Designing Concurrently Strengthened Severely Deformed Age-Hardenable Aluminum Alloys by Ultrafine-Grained and Precipitation Hardenings. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2013 , 44, 3921-3933	2.3	37
198	Factors influencing microstructural development in equal-channel angular pressing. <i>Metals and Materials International</i> , 2003 , 9, 141-149	2.4	37
197	Texture of bismuth telluride-based thermoelectric semiconductors processed by high-pressure torsion. <i>Journal of Physics and Chemistry of Solids</i> , 2009 , 70, 1089-1092	3.9	36
196	Softening by severe plastic deformation and hardening by annealing of aluminum-zinc alloy: Significance of elemental and spinodal decompositions. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2014 , 610, 17-27	5.3	35
195	Continuous high-pressure torsion using wires. <i>Journal of Materials Science</i> , 2012 , 47, 473-478	4.3	35
194	Age hardening and the potential for superplasticity in a fine-grained Al-Mg-Li-Zr alloy. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 1998 , 29, 169-177	2.3	35

193	Using intense plastic straining for high-strain-rate superplasticity. <i>Jom</i> , 1998 , 50, 41-45	2.1	35
192	An extrapolation method for the determination of Cliff-Lorimer kAB factors at zero foil thickness. <i>Journal of Microscopy</i> , 1986 , 143, 215-231	1.9	35
191	Softening and Microstructural Coarsening without Twin Formation in FCC Metals with Low Stacking Fault Energy after Processing by High-Pressure Torsion. <i>Materials Transactions</i> , 2009 , 50, 1633-1637	1.3	34
190	The aging characteristics of an AlMg alloy processed by equal-channel angular pressing. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2006 , 437, 240-247	5.3	34
189	Activation of titanium-vanadium alloy for hydrogen storage by introduction of nanograins and edge dislocations using high-pressure torsion. <i>International Journal of Hydrogen Energy</i> , 2016 , 41, 8917-8924	6.7	34
188	Structure and mechanical behavior of ultrafine-grained aluminum-iron alloy stabilized by nanoscaled intermetallic particles. <i>Acta Materialia</i> , 2019 , 167, 89-102	8.4	32
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