Karl Kainer

List of Publications by Year in Descending Order

367 papers	12,366 citations	52 h-index	99 g-index
388 ext. papers	13,733 ext. citations	3.1 avg, IF	6.37 L-index

#	Paper	IF	Citations
367	Revisiting the tolerance limit of Fe impurity in biodegradable magnesium. *Scripta Materialia*, **2022**, 212, 114509	5.6	1
366	Influence of Third Alloying Element on Dislocation Slip and Twinning Activities in Mg□Nd-Based Alloys. *Minerals, Metals and Materials Series*, **2022**, 97-103	0.3	
365	Influence of the amount of intermetallics on the degradation of Mg-Nd alloys under physiological conditions. *Acta Biomaterialia*, **2021**, 121, 695-712	10.8	11
364	Improving the Creep Resistance of Elektron21 by Adding AlN/Al Nanoparticles Using the High Shear Dispersion Technique. *Minerals, Metals and Materials Series*, **2021**, 57-69	0.3	
363	Effects of heat treatment on the microstructural evolution and creep resistance of Elektron21 alloy and its nanocomposite. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2020**, 789, 139669	5.3	4
362	Effect of Ca and Nd on the microstructural development during dynamic and static recrystallization of indirectly extruded Mg□n based alloys. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2020**, 793, 139527	5.3	7
361	Individual/synergistic effects of Al and AlN on the microstructural evolution and creep resistance of Elektron21 alloy. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2020**, 777, 139072	5.3	7
360	Thixomolded AZ91D and MRI153M magnesium alloys and their enhanced corrosion resistance. *Materials and Corrosion - Werkstoffe Und Korrosion*, **2020**, 71, 339-351	1.6	2
359	Effect of Heat Treatment on the Corrosion Behavior of Mg-10Gd Alloy in 0.5% NaCl Solution. *Frontiers in Materials*, **2020**, 7,	4	5
358	Cold Formability of Extruded Magnesium Bands. *Minerals, Metals and Materials Series*, **2020**, 329-334	0.3	
357	Effect of Nd Additions on the Mechanical Properties of Mg Binary Alloys. *Jom*, **2020**, 72, 517-525	2.1	1
356	On the Direct Extrusion of Magnesium Wires from Mg-Al-Zn Series Alloys. *Metals*, **2020**, 10, 1208	2.3	9
355	Effects of Intermetallic Microstructure on Degradation of Mg-5Nd Alloy. *Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science*, **2020**, 51, 5498-5515	2.3	4
354	Influences of AlN/Al Nanoparticles on the Creep Properties of Elektron21 Prepared by High Shear Dispersion Technology. *Jom*, **2019**, 71, 2245-2252	2.1	1
353	The Role of Second Phases on the Creep Behavior of As-Cast and Hot-Extruded Mg-Ca-Zr Alloys. *Jom*, **2019**, 71, 2227-2234	2.1	
352	Unexpected Expansion Behavior of Mg-Al Alloys During Isothermal Ageing. *Jom*, **2019**, 71, 2906-2912	2.1	2
351	Role of deformation mechanisms and grain growth in microstructure evolution during recrystallization of Mg-Nd based alloys. *Scripta Materialia*, **2019**, 166, 53-57	5.6	29

350	Enhancing the creep resistance of AlN/Al nanoparticles reinforced Mg-2.85Nd-0.92Gd-0.41Zr-0.29Zn alloy by a high shear dispersion technique. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2019**, 755, 18-27	5.3	18
349	Enhanced predictive corrosion modeling with implicit corrosion products. *Materials and Corrosion - Werkstoffe Und Korrosion*, **2019**, 70, 2247-2255	1.6	5
348	Grain refinements of magnesium alloys inoculated by additions of external SiC particles. *IOP Conference Series: Materials Science and Engineering*, **2019**, 529, 012049	0.4	1
347	Influences of Al and high shearing dispersion technique on the microstructure and creep resistance of Mg-2.85Nd-0.92Gd-0.41Zr-0.29Zn alloy. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2019**, 764, 138215	5.3	8
346	Influence of Nd or Ca addition on the dislocation activity and texture changes of Mg□n alloy sheets under uniaxial tensile loading. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2019**, 761, 138053	5.3	18
345	Development of Pore-Free Ti-Si-C MAX/Al-Si Composite Materials Manufactured by Squeeze Casting Infiltration. *Journal of Materials Engineering and Performance*, **2019**, 28, 6248-6257	1.6	6
344	Processing Effects on the Formability of Extruded Flat Products of Magnesium Alloys. *Frontiers in Materials*, **2019**, 6,	4	4
343	Influence of Microstructure Evolution During Twin-Roll Casting on the Properties of Magnesium Sheets. *Minerals, Metals and Materials Series*, **2019**, 1677-1686	0.3	
342	Influences of SiC Particle Additions on the Grain Refinement of Mg□n Alloys. *Minerals, Metals and Materials Series*, **2019**, 331-338	0.3	1
341	Corrosion behaviour of as-cast ZK40 with CaO and Y additions. *Transactions of Nonferrous Metals Society of China*, **2018**, 28, 427-439	3.3	7
340	Influences of Yttrium Content on Microstructure and Mechanical Properties of as-cast Mg□a□□r Alloys. *Minerals, Metals and Materials Series*, **2018**, 91-97	0.3	
339	Deformation and Recrystallization Mechanisms and Their Influence on the Microstructure Development of Rare Earth Containing Magnesium Sheets. *Minerals, Metals and Materials Series*, **2018**, 209-216	0.3	2
338	Mg Alloys: Challenges and Achievements in Controlling Performance, and Future Application Perspectives. *Minerals, Metals and Materials Series*, **2018**, 3-14	0.3	6
337	Towards Active Corrosion Protection of Mg Alloys Using Corrosion Inhibition Approaches. *Minerals, Metals and Materials Series*, **2018**, 19-20	0.3	
336	Magnesium Pistons in Engines: Fiction or Fact?. *Minerals, Metals and Materials Series*, **2018**, 349-353	0.3	2
335	Waste Mg-Al based alloys for hydrogen storage. *International Journal of Hydrogen Energy*, **2018**, 43, 16736-16748	3.7	44
334	Current Status and Recent Developments in Porous Magnesium Fabrication. *Advanced Engineering Materials*, **2018**, 20, 1700562	3.5	18
333	Influence of particle additions on corrosion and wear resistance of plasma electrolytic oxidation coatings on Mg alloy. *Surface and Coatings Technology*, **2018**, 352, 1-14	4.4	32

332	The Effect of Solid Solute and Precipitate Phase on Young's Modulus of Binary MgRE Alloys. *Advanced Engineering Materials*, **2018**, 20, 1800271	3.5	7
331	Processing Effects on the Formability of Magnesium Alloy Sheets. *Metals*, **2018**, 8, 147	2.3	16
330	Simulation assisted investigation of substrate geometry impact on PEO coating formation. *Surface and Coatings Technology*, **2018**, 350, 281-297	4.4	5
329	Enhanced predictive corrosion modeling via randomly distributed boundary conditions. *Materials and Corrosion - Werkstoffe Und Korrosion*, **2018**, 69, 1720-1728	1.6	4
328	Profile Shape Effect on the Texture and Mechanical Properties of Extruded Rare Earth Containing Magnesium Alloys. *Acta Physica Polonica A*, **2018**, 134, 714-719	0.6	2
327	On the Influence of Solution and Ageing Treatments on the Microstructure of ZK40 Alloys Modified with Ca, Gd, Nd and Y Additions. *Praktische Metallographie/Practical Metallography*, **2018**, 55, 268-287	0.3	
326	Magnesium and Magnesium Alloys. *Springer Handbooks*, **2018**, 151-159	1.3	2
325	Effects of Gd solutes on hardness and yield strength of Mg alloys. *Progress in Natural Science: Materials International*, **2018**, 28, 724-730	3.6	30
324	Influence of SiO2 Particles on the Corrosion and Wear Resistance of Plasma Electrolytic Oxidation-Coated AM50 Mg Alloy. *Coatings*, **2018**, 8, 306	2.9	11
323	3D reconstruction of plasma electrolytic oxidation coatings on Mg alloy via synchrotron radiation tomography. *Corrosion Science*, **2018**, 139, 395-402	6.8	55
322	Sintering Behavior and Microstructure Formation of Titanium Aluminide Alloys Processed by Metal Injection Molding. *Jom*, **2017**, 69, 676-682	2.1	11
321	The Use of Neutron and Synchrotron Research for Aerospace and Automotive Materials and Components **2017**, 327-364		
320	Corrosion and Creep Resistance of Thixomolded Magnesium Alloys. *Minerals, Metals and Materials Series*, **2017**, 381-389	0.3	4
319	3D Microstructural Evolution on Solidifying MgNdZn Alloy Observed via In Situ Synchrotron Tomography. *Minerals, Metals and Materials Series*, **2017**, 605-612	0.3	2
318	Predictive modeling of long-time crevice evolution at e-coat defects under climate chamber test conditions. *Materials and Corrosion - Werkstoffe Und Korrosion*, **2017**, 68, 699-710	1.6	3
317	Influence of Dy in solid solution on the degradation behavior of binary Mg-Dy alloys in cell culture medium. *Materials Science and Engineering C*, **2017**, 75, 1351-1358	8.3	15
316	Recent research and developments on wrought magnesium alloys. *Journal of Magnesium and Alloys*, **2017**, 5, 239-253	8.8	301
315	Influence of plasma electrolytic oxidation coatings on fatigue performance of AZ31 Mg alloy. *Materials and Corrosion - Werkstoffe Und Korrosion*, **2017**, 68, 50-57	1.6	7

314	As cast microstructures on the mechanical and corrosion behaviour of ZK40 modified with Gd and Nd additions. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2017**, 682, 238-247	5.3	20
313	Effects of Mn and Zn Solutes on Grain Refinement of Commercial Pure Magnesium. *Minerals, Metals and Materials Series*, **2017**, 191-198	0.3	1
312	Effects of Gadolinium and Neodymium Addition on Young Modulus of Magnesium-Based Binary Alloys. *Minerals, Metals and Materials Series*, **2017**, 341-347	0.3	1
311	A model describing the growth of a PEO coating on AM50 Mg alloy under constant voltage mode. *Electrochimica Acta*, **2017**, 251, 461-474	6.7	16
310	Effect of the Zn Content on the Compression Behaviour of Mg5Nd(Zn): An In Situ Synchrotron Radiation Diffraction Study. *Minerals, Metals and Materials Series*, **2017**, 675-681	0.3	
309	Die Leichtbauwerkstoffe f den Fahrzeugbau **2017**, 205-449		1
308	Creep behavior of Mg10Gd Zn (x=2 and 6 wt%) alloys. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2016**, 649, 158-167	5.3	15
307	Plasma electrolytic oxidation coatings with particle additions A review. *Surface and Coatings Technology*, **2016**, 307, 1165-1182	4.4	271
306	Unexpected formation of hydrides in heavy rare earth containing magnesium alloys. *Journal of Magnesium and Alloys*, **2016**, 4, 173-180	8.8	24
305	Influence of surface pre-treatment on the deposition and corrosion properties of hydrophobic coatings on a magnesium alloy. *Corrosion Science*, **2016**, 112, 483-494	6.8	43
304	In Situ Tensile Texture Analysis of a New Mg-RE Alloy. *Materials Science Forum*, **2016**, 879, 779-783	0.4	
303	Formation of photocatalytic plasma electrolytic oxidation coatings on magnesium alloy by incorporation of TiO2 particles. *Surface and Coatings Technology*, **2016**, 307, 287-291	4.4	12
302	Microstructure and Mechanical Properties of Ca Containing AZX310 Alloy Sheets Produced via Twin Roll Casting Technology **2016**, 383-387		
301	Role of Sic in Grain Refinement of Aluminum-Free Mg-Zn Alloys **2016**, 177-181		
300	Forging of cast Mg-3Sn-2Ca-0.4Al-0.4Si magnesium alloy using processing map. *Journal of Mechanical Science and Technology*, **2016**, 30, 2699-2705	1.6	4
299	Hot tearing characteristics of Mg Ca Zn alloys. *Journal of Materials Science*, **2016**, 51, 2687-2704	4.3	23
298	Investigation of electrode distance impact on PEO coating formation assisted by simulation. *Applied Surface Science*, **2016**, 388, 304-312	6.7	17
297	Influence of electrical parameters on particle uptake during plasma electrolytic oxidation processing of AM50 Mg alloy. *Surface and Coatings Technology*, **2016**, 289, 179-185	4.4	35

296	Investigation of the formation mechanisms of plasma electrolytic oxidation coatings on Mg alloy AM50 using particles. *Electrochimica Acta*, **2016**, 196, 680-691	6.7	70
295	Plasma electrolytic oxidation coatings on Mg alloy with addition of SiO2 particles. *Electrochimica Acta*, **2016**, 187, 20-33	6.7	170
294	Microstructure and Mechanical Properties of Ca Containing AZX310 Alloy Sheets Produced via Twin Roll Casting Technology **2016**, 383-387		2
293	Advances in Manufacturing Processes for Magnesium Alloys **2016**, 19-24		1
292	Role of SiC in Grain Refinement of Aluminum-Free Mg-Zn Alloys **2016**, 177-181		
291	Elevated Temperature and Varied Load Response of AS41 at Bolted Joint **2016**, 511-516		
290	Solid Solution Strengthening in Mg-Gd Alloys **2016**, 135-139		
289	Microstructural and Mechanical Aspects of Reinforcement Welds for Lightweight Components Produced by Friction Hydro Pillar Processing **2016**, 499-504		
288	Formability of Magnesium Sheet ZE10 and AZ31 with Respect to Initial Texture **2016**, 357-362		
287	Thermodynamic Description of Reactions between Mg and CaO **2016**, 67-72		
286	Thermodynamic Description of Reactions between Mg and CaO **2016**, 67-72		1
285	The Role of Zn on the Elevated Temperature Compression Behavior of Mg5Nd: An In Situ Synchrotron Radiation Diffraction Study. *Jom*, **2016**, 68, 3051-3056	2.1	2
284	Axial fatigue testing of Ti6Al4V using an alternative specimen geometry fabricated by metal injection moulding. *Powder Metallurgy*, **2016**, 59, 344-349	1.9	0
283	In situ synchrotron radiation diffraction investigation of the compression behaviour at 350°C of ZK40 alloys with addition of CaO and Y. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2016**, 664, 2-9	5.3	10
282	Solid Solution Strengthening in Mg-Gd Alloys **2016**, 135-139		2
281	Comparative study of microstructure and texture of cast and homogenized TX32 magnesium alloy after hot deformation. *Metals and Materials International*, **2015**, 21, 134-146	2.4	7
280	The effect of zirconium addition on sintering behaviour, microstructure and creep resistance of the powder metallurgy processed alloy Ti-45Al-5Nb-0.2B-0.2C. *Materials and Design*, **2015**, 84, 87-94	8.1	17
279	Influence of Alloying Elements and Extrusion Process Parameter on the Recrystallization Process of Mg-Zn alloys. *Materials Today: Proceedings*, **2015**, 2, S19-S25	1.4	9

278	Calcium and zirconium as texture modifiers during rolling and annealing of magnesium–zinc alloys. *Materials Characterization*, **2015**, 101, 144-152	3.9	67
277	Mechanical properties and corrosion behavior of Mg-Gd-Ca-Zr alloys for medical applications. *Journal of the Mechanical Behavior of Biomedical Materials*, **2015**, 47, 38-48	4.1	30
276	Twin-Roll Casting after Intensive Melt Shearing and Subsequent Rolling of an AM30 Magnesium Alloy with Addition of CaO and SiC. *Materials Science Forum*, **2015**, 828-829, 35-40	0.4	3
275	Insights into plasma electrolytic oxidation treatment with particle addition. *Corrosion Science*, **2015**, 101, 201-207	6.8	78
274	In situ synchrotron radiation diffraction study of the role of Gd, Nd on the elevated temperature compression behavior of ZK40. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2015**, 640, 129-136	5.3	10
273	Hot Tearing Susceptibility of Mg-Ca Binary Alloys. *Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science*, **2015**, 46, 6003-6017	2.3	17
272	High Strength Magnesium Alloys Through Precipitation Hardening and Micro Alloying: Considerations for Alloy Design. *Jom*, **2015**, 67, 2427-2432	2.1	7
271	Degradation behavior of PEO coating on AM50 magnesium alloy produced from electrolytes with clay particle addition. *Surface and Coatings Technology*, **2015**, 269, 155-169	4.4	62
270	CaO dissolution during melting and solidification of a Mg–10 wt.% CaO alloy detected with in situ synchrotron radiation diffraction. *Journal of Alloys and Compounds*, **2015**, 618, 64-66	5.7	21
269	Sintering behaviour of Ti–45Al–5Nb–0.2B–0.2C alloy modifications by additions of elemental titanium and aluminium. *Powder Metallurgy*, **2015**, 58, 369-375	1.9	3
268	Challenges and Solutions in the Development of Magnesium Sheet for Sustainable Vehicle Concepts. *Materials Science Forum*, **2015**, 828-829, 15-22	0.4	2
267	Magnesium Melt Protection. *Materials Science Forum*, **2015**, 828-829, 78-81	0.4	7
266	Effect of Zn addition on hot tearing behaviour of Mg–0.5Ca–xZn alloys. *Materials and Design*, **2015**, 87, 157-170	8.1	30
265	Experimental and numerical crushing analyses of thin-walled magnesium profiles. *International Journal of Crashworthiness*, **2015**, 20, 177-190	1	26
264	An Investigation on Hot Tearing of Mg-4.5Zn-(0.5Zr) Alloys with Y Additions. *Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science*, **2015**, 46, 2108-2118	2.3	23
263	In Situ Investigation of Microstructure Evolution during Solidification of Mg10CaxGd (x=5, 10, 20) Alloys. *Acta Physica Polonica A*, **2015**, 128, 606-611	0.6	2
262	Investigations on microstructures, mechanical and corrosion properties of Mg–Gd–Zn alloys. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing* , **2014**, 595, 224-234	5.3	84
261	In vitro mechanical and corrosion properties of biodegradable Mg–Ag alloys. *Materials and Corrosion - Werkstoffe Und Korrosion*, **2014**, 65, 569-576	1.6	51

260	Study of hot forging behavior of as-cast Mg–Al–Zn–Ca alloy towards optimization of its hot workability. *Materials & Design*, **2014**, 57, 697-704		28
259	Understanding effects of microstructural inhomogeneity on creep response – New approaches to improve the creep resistance in magnesium alloys. *Journal of Magnesium and Alloys*, **2014**, 2, 124-132	8.8	19
258	Effect of aluminium and calcium on the microstructure, texture, plastic deformation and related acoustic emission of extruded magnesium–manganese alloys. *Journal of Alloys and Compounds*, **2014**, 617, 253-264	5.7	17
257	Measurement and calculation of the viscosity of metals – review of the current status and developing trends. *Measurement Science and Technology*, **2014**, 25, 062001	2	33
256	Hot tearing mechanisms of B206 aluminum–copper alloy. *Materials & Design*, **2014**, 64, 44-55		33
255	Effect of aluminum on microstructural evolution during hot deformation of TX32 magnesium alloy. *Journal of Materials Science*, **2014**, 49, 5885-5898	4.3	7
254	A Study on the Hot Deformation Behavior of Cast Mg-4Sn-2Ca (TX42) Alloy. *Jom*, **2014**, 66, 322-328	2.1	4
253	Advances in Manufacturing Processes for Magnesium Alloys **2014**, 19-24		0
252	Effect of silicon content on hot working, processing maps, and microstructural evolution of cast TX32–0.4Al magnesium alloy. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2014**, 606, 11-23	5.3	12
251	Microstructures and mechanical properties of pure Mg processed by rotary swaging. *Materials & Design*, **2014**, 63, 83-88		34
250	Investigation of hot workability behavior of as-cast Mg–Sn–Ca (TX52) magnesium alloy through processing map. *Production and Manufacturing Research*, **2014**, 2, 241-252	3.3	3
249	Mechanical Properties and Microstructures of Nano SiC Reinforced ZE10 Composites Prepared with Ultrasonic Vibration. *Advanced Materials Research*, **2014**, 1019, 169-176	0.5	1
248	Corrosion behavior of Mg–Gd–Zn based alloys in aqueous NaCl solution. *Journal of Magnesium and Alloys*, **2014**, 2, 245-256	8.8	51
247	Residual Stresses of the As-Cast Mg-xCa Alloys with Hot Sprues by Neutron Diffraction. *Advanced Materials Research*, **2014**, 996, 592-597	0.5	
246	Deformation-Induced Dynamic Precipitation during Creep in Magnesium-Tin Alloys. *Key Engineering Materials*, **2014**, 627, 365-368	0.4	1
245	Magnesium powder injection moulding for biomedical application. *Powder Metallurgy*, **2014**, 57, 331-340	1.9	21
244	Hot Forging of Cast Magnesium Alloy TX31 Using Semi-Closed Die and its Finite Element Simulation. *Materials Science Forum*, **2014**, 783-786, 449-454	0.4	1
243	Microstructure and Compression Creep Strength of the Newly Developed Magnesium Alloy DieMag422. *Advanced Materials Research*, **2014**, 1019, 177-183	0.5	

242	Role of multi-microalloying by rare earth elements in ductilization of magnesium alloys. *Journal of Magnesium and Alloys*, **2014**, 2, 1-7	8.8	61
241	Experimental and numerical analysis of hot tearing susceptibility for MgY alloys. *Journal of Materials Science*, **2014**, 49, 353-362	4.3	35
240	Hot Tearing Characteristics of Binary Mg-Gd Alloy Castings. *Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science*, **2013**, 44, 2285-2298	2.3	32
239	Bulk and local textures of pure magnesium processed by rotary swaging. *Journal of Magnesium and Alloys*, **2013**, 1, 341-345	8.8	17
238	Hot tearing susceptibility of binary MgY alloy castings. *Materials & Design*, **2013**, 47, 90-100		63
237	Influence of incorporating Si3N4 particles into the oxide layer produced by plasma electrolytic oxidation on AM50 Mg alloy on coating morphology and corrosion properties. *Journal of Magnesium and Alloys*, **2013**, 1, 267-274	8.8	52
236	Thermodynamic assessment and experimental study of MgGd alloys. *Journal of Alloys and Compounds*, **2013**, 581, 166-177	5.7	39
235	Microstructure and mechanical properties of as-cast MgSnCa alloys and effect of alloying elements. *Transactions of Nonferrous Metals Society of China*, **2013**, 23, 3604-3610	3.3	30
234	Microstructure, mechanical and corrosion properties of Mg-Dy-Gd-Zr alloys for medical applications. *Acta Biomaterialia*, **2013**, 9, 8499-508	10.8	64
233	Effects of Sn segregation and precipitates on creep response of Mg-Sn alloys. *Fatigue and Fracture of Engineering Materials and Structures*, **2013**, 36, 308-315	3	12
232	Influence of Ce addition on microstructure and mechanical properties of high pressure die cast AM50 magnesium alloy. *Transactions of Nonferrous Metals Society of China*, **2013**, 23, 66-72	3.3	22
231	Element distribution in the corrosion layer and cytotoxicity of alloy Mg-10Dy during in vitro biodegradation. *Acta Biomaterialia*, **2013**, 9, 8475-87	10.8	72
230	Effect of calcium addition on the hot working behavior of as-cast AZ31 magnesium alloy. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2013**, 588, 272-279	5.3	21
229	In situ synchrotron diffraction of the solidification of Mg4Y3Nd. *Materials Letters*, **2013**, 102-103, 62-64	3.3	31
228	Development of a magnesium secondary alloy system for mixed magnesium post-consumer scrap. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing* , **2013**, 576, 222-230	5.3	6
227	A New Magnesium Alloy System: TEXAS **2013**, 231-235		
226	Hot workability analysis with processing map and texture characteristics of as-cast TX32 magnesium alloy. *Journal of Materials Science*, **2013**, 48, 5236-5246	4.3	20
225	General and Localized Corrosion of Magnesium Alloys: A Critical Review. *Journal of Materials Engineering and Performance*, **2013**, 22, 2875-2891	1.6	27

224	High Temperature Deformation and Microstructural Features of TXA321 Magnesium Alloy: Correlations with Processing Map. *Advanced Engineering Materials*, **2013**, 15, 761-766	3.5	6
223	Improving Corrosion Resistance of Mg10Gd Alloy. *Materials Science Forum*, **2013**, 765, 673-677	0.4	3
222	Acoustic Emission Study of Mg-Mn Extruded Alloys with Prospective Mechanical Properties. *Materials Science Forum*, **2013**, 765, 537-542	0.4	
221	Influence of Process Parameters on Twin Roll Cast Strip of the Alloy AZ31. *Materials Science Forum*, **2013**, 765, 205-209	0.4	20
220	Compressive strength and hot deformation mechanisms in as-cast Mg-4Al-2Ba-2Ca (ABaX422) alloy. *Philosophical Magazine*, **2013**, 93, 4364-4377	1.6	14
219	Microstructure, Mechanical and Corrosion Properties of Mg-Gd-Zn Alloys. *Materials Science Forum*, **2013**, 765, 28-32	0.4	4
218	Study of the Solidification of AS Alloys Combining In Situ Synchrotron Diffraction and Differential Scanning Calorimetry. *Materials Science Forum*, **2013**, 765, 286-290	0.4	14
217	Influences of Y Additions on the Hot Tearing Susceptibility of Mg-1.5wt.%Zn Alloys. *Materials Science Forum*, **2013**, 765, 306-310	0.4	10
216	Mechanical properties and corrosion behaviour of freestanding, precipitate-free magnesium WE43 thin films. *International Journal of Materials Research*, **2013**, 104, 286-292	0.5	7
215	Crashworthiness of Magnesium Sheet Structures. *Materials Science Forum*, **2013**, 765, 590-594	0.4	9
214	Fundamentals of magnesium alloy metallurgy **2013**,		61
213	A new magnesium alloy system: TEXAS **2013**, 231-235		
212	Die Leichtbauwerkstoffe f□den Fahrzeugbau **2013**, 199-442		
211	Hot Tearing Susceptibility of Magnesium□adolinium Binary Alloys. *Transactions of the Indian Institute of Metals*, **2012**, 65, 701-706	1.2	3
210	From titanium to magnesium: processing by advanced metal injection moulding. *Powder Metallurgy* , **2012**, 55, 315-321	1.9	7
209	High ductile as-cast Mg□RE based alloys at room temperature. *Materials Letters*, **2012**, 83, 209-212	3.3	14
208	Hot deformation behavior of Mg□Sn□Ca alloy in as-cast condition and after homogenization. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing* , **2012**, 552, 444-450	5.3	41
207	Controlled degradation of a magnesium alloy in simulated body fluid using hydrofluoric acid treatment followed by polyacrylonitrile coating. *Corrosion Science*, **2012**, 62, 83-89	6.8	36

206	Polycrystalline and amorphous MgZnCa thin films. *Corrosion Science*, **2012**, 63, 234-238	6.8	20
205	Influence of cerium additions on the corrosion behaviour of high pressure die cast AM50 alloy. *Corrosion Science*, **2012**, 65, 145-151	6.8	47
204	Influence of ageing treatment on microstructure, mechanical and bio-corrosion properties of Mg-Dy alloys. *Journal of the Mechanical Behavior of Biomedical Materials*, **2012**, 13, 36-44	4.1	48
203	Hot working mechanisms and texture development in Mg-3Sn-2Ca-0.4Al alloy. *Materials Chemistry and Physics*, **2012**, 136, 1081-1091	4.4	19
202	Hot Deformation Mechanisms in AZ31 Magnesium Alloy Extruded at Different Temperatures: Impact of Texture. *Metals*, **2012**, 2, 292-312	2.3	15
201	Identification of unexpected hydrides in Mg□0 wt% Dy alloy by high-brilliance synchrotron radiation. *Journal of Applied Crystallography*, **2012**, 45, 17-21	3.8	14
200	Development of High Performance Single-Phase Solid Solution Magnesium Alloy at Low Temperature. *Advanced Engineering Materials*, **2012**, 14, 178-184	3.5	8
199	Influence of Die Lubricants on Pickling and Conversion Treatment of High-Pressure Die-Cast AM30 Magnesium Alloy. *Advanced Engineering Materials*, **2012**, 14, 227-235	3.5	4
198	The formation of Sr6.33Mg16.67Si13 in magnesium alloy AM50 and its effect on mechanical properties. *Journal of Materials Science*, **2012**, 47, 5461-5469	4.3	2
197	Deformation Microstructures and Textures of Cast Mg-3Sn-2Ca Alloy under Uniaxial Hot Compression. *Applied Mechanics and Materials*, **2012**, 152-154, 322-325	0.3	
196	Microstructural Evolution during Recrystallization of Magnesiun Alloys. *Materials Science Forum*, **2012**, 706-709, 1291-1296	0.4	2
195	Metallurgical Characterization of Hot Tearing Curves Recorded during Solidification of Magnesium Alloys. *Acta Physica Polonica A*, **2012**, 122, 497-500	0.6	15
194	Corrosion protection of magnesium AZ31 alloy using poly(ether imide) [PEI] coatings prepared by the dip coating method: Influence of solvent and substrate pre-treatment. *Corrosion Science*, **2011**, 53, 338-346	6.8	47
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