Peter J Uggowitzer

List of Publications by Year in Descending Order

208 papers	10,337 citations	56 h-index	96 g-index
216 ext. papers	11,808 ext. citations	5.2 avg, IF	6.38 L-index

#	Paper	IF	Citations
208	Stabilization of Al3Zr allotropes in dilute aluminum alloys via the addition of ternary elements. *Materialia*, **2022**, 21, 101321	3.2	2
207	Aluminum–lithium alloy development for thixoforming. *International Journal of Materials Research*, **2022**, 95, 1097-1107	0.5	
206	Alloy design strategy for microstructural-tailored scandium-modified aluminium alloys for additive manufacturing. *Scripta Materialia*, **2022**, 207, 114277	5.6	8
205	Making sustainable aluminum by recycling scrap: The science of "dirty" alloys. *Progress in Materials Science*, **2022**, 100947	42.2	8
204	High Fe content in Al-Mg-Si wrought alloys facilitates excellent mechanical properties. *Scripta Materialia*, **2022**, 215, 114701	5.6	0
203	Synergistic alloy design concept for new high-strength Al–Mg–Si thick plate alloys. *Materialia*, **2021**, 15, 100997	3.2	1
202	Giant hardening response in AlMgZn(Cu) alloys. *Acta Materialia*, **2021**, 206, 116617	8.4	18
201	Enhanced aging kinetics in Al-Mg-Si alloys by up-quenching. *Communications Materials*, **2021**, 2,	6	4
200	Influence of Fe and Mn on the Microstructure Formation in 5xxx Alloys-Part I: Evolution of Primary and Secondary Phases. *Materials*, **2021**, 14,	3.5	2
199	Lean Wrought Magnesium Alloys. *Materials*, **2021**, 14,	3.5	1
198	Formation of Die Soldering and the Influence of Alloying Elements on the Intermetallic Interface. *Materials*, **2021**, 14,	3.5	4
197	On the potential of aluminum crossover alloys. *Progress in Materials Science*, **2021**, 124, 100873	42.2	14
196	Degradation of Cu nanowires in a low-reactive plasma environment. *Npj Materials Degradation*, **2020**, 4,	5.7	2
195	Age-hardening response of AlMgZn alloys with Cu and Ag additions. *Acta Materialia*, **2020**, 195, 541-554	8.4	25
194	Microstructural Change during the Interrupted Quenching of the AlZnMg(Cu) Alloy AA7050. *Materials*, **2020**, 13,	3.5	5
193	Ageing Behaviour of Al-Mg-Si Alloys After Cryogenic and Room Temperature Deformation. *Materials*, **2020**, 13,	3.5	2
192	Mg-Alloys for Forging Applications-A Review. *Materials*, **2020**, 13,	3.5	27

191	Evolution of Microstructure and Texture in Laboratory- and Industrial-Scaled Production of Automotive Al-Sheets. *Materials*, **2020**, 13,	3.5	6
190	Room temperature recovery of cryogenically deformed aluminium alloys. *Materials and Design*, **2020**, 193, 108819	8.1	13
189	Prototypic Lightweight Alloy Design for Stellar-Radiation Environments. *Advanced Science*, **2020**, 7, 2002397	3.6	3
188	Mechanism of low temperature deformation in aluminium alloys. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2020**, 795, 139935	5.3	25
187	Exceptional Strengthening of Biodegradable Mg-Zn-Ca Alloys through High Pressure Torsion and Subsequent Heat Treatment. *Materials*, **2019**, 12,	3.5	13
186	Influence of Zn and Sn on the Precipitation Behavior of New Al-Mg-Si Alloys. *Materials*, **2019**, 12,	3.5	6
185	The role of zinc in the biocorrosion behavior of resorbable Mg-Zn-Ca alloys. *Acta Biomaterialia*, **2019**, 100, 398-414	10.8	27
184	Effect of Compositional and Processing Variations in New 5182-Type AlMgMn Alloys on Mechanical Properties and Deformation Surface Quality. *Materials*, **2019**, 12,	3.5	10
183	Effect of Thermal Treatments on Sn-Alloyed Al-Mg-Si Alloys. *Materials*, **2019**, 12,	3.5	5
182	Measurement of specific heat capacity via fast scanning calorimetry□Accuracy and loss corrections. *Thermochimica Acta*, **2019**, 677, 12-20	2.9	14
181	Processing-controlled suppression of L□ders elongation in AlMgMn alloys. *Scripta Materialia*, **2019**, 166, 64-67	5.6	15
180	Age-hardening of high pressure die casting AlMg alloys with Zn and combined Zn and Cu additions. *Materials and Design*, **2019**, 181, 107927	8.1	28
179	Size-dependent diffusion controls natural aging in aluminium alloys. *Nature Communications*, **2019**, 10, 4746	17.4	26
178	Monotropic polymorphism in a glass-forming metallic alloy. *Journal of Physics Condensed Matter*, **2018**, 30, 234002	1.8	7
177	The influence of two common sterilization techniques on the corrosion of Mg and its alloys for biomedical applications. *Journal of Biomedical Materials Research - Part B Applied Biomaterials*, **2018** , 106, 1907-1917	3.5	12
176	Rational design of a lean magnesium-based alloy with high age-hardening response. *Acta Materialia* , **2018**, 158, 214-229	8.4	33
175	The influence of biodegradable magnesium implants on the growth plate. *Acta Biomaterialia*, **2018**, 66, 109-117	10.8	47
174	Influence of SLM scan-speed on microstructure, precipitation of Al3Sc particles and mechanical properties in Sc- and Zr-modified Al-Mg alloys. *Materials and Design*, **2018**, 140, 134-143	8.1	104

173	Clustering in Age-Hardenable Aluminum Alloys. *Advanced Engineering Materials*, **2018**, 20, 1800255	3.5	34
172	Microstructure, crystallographic texture and mechanical behaviour of friction stir processed Mg-Zn-Ca-Zr alloy ZKX50. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2017**, 685, 253-264	5.3	21
171	Atom Probe Tomography Study of As-Quenched Al–Mg–Si Alloys . *Advanced Engineering Materials*, **2017**, 19, 1600668	3.5	13
170	Microstructural features of Sc- and Zr-modified Al-Mg alloys processed by selective laser melting. *Materials and Design*, **2017**, 115, 52-63	8.1	229
169	Stress corrosion cracking and corrosion fatigue characterisation of MgZn1Ca0.3 (ZX10) in a simulated physiological environment. *Journal of the Mechanical Behavior of Biomedical Materials*, **2017**, 65, 634-643	4.1	43
168	Effect of Interrupted Quenching on Al–Zn–Mg–Cu Alloys. *Minerals, Metals and Materials Series*, **2017** , 385-389	0.3	1
167	Long-term in vivo degradation behavior and near-implant distribution of resorbed elements for magnesium alloys WZ21 and ZX50. *Acta Biomaterialia*, **2016**, 42, 440-450	10.8	67
166	Hardening of Al–Mg–Si alloys: Effect of trace elements and prolonged natural aging. *Materials and Design*, **2016**, 107, 257-268	8.1	62
165	Solid-solid phase transitions via melting in metals. *Nature Communications*, **2016**, 7, 11113	17.4	53
164	Microstructural characteristics of the nickel-based alloy IN738LC and the cobalt-based alloy Mar-M509 produced by selective laser melting. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2016**, 658, 68-76	5.3	66
163	Ultrafast artificial aging of Al–Mg–Si alloys. *Scripta Materialia*, **2016**, 112, 148-151	5.6	51
162	Investigations on the microstructure and crack formation of IN738LC samples processed by selective laser melting using Gaussian and doughnut profiles. *Materials and Design*, **2016**, 89, 770-784	8.1	171
161	Differential Scanning Calorimetry and Thermodynamic Predictions—A Comparative Study of Al-Zn-Mg-Cu Alloys. *Metals*, **2016**, 6, 180	2.3	6
160	Microstructure and mechanical properties of as-processed scandium-modified aluminium using selective laser melting. *CIRP Annals - Manufacturing Technology*, **2016**, 65, 213-216	4.9	112
159	Design strategy for controlled natural aging in Al–Mg–Si alloys. *Acta Materialia*, **2016**, 118, 296-305	8.4	67
158	Secondary Al-Si-Mg High-pressure Die Casting Alloys with Enhanced Ductility. *Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science*, **2015**, 46, 1035-1045	2.3	22
157	Reprint of: Characterization of bulk metallic glasses via fast differential scanning calorimetry. *Thermochimica Acta*, **2015**, 603, 46-52	2.9	5
156	Statistical and Thermodynamic Optimization of Trace-Element Modified Al-Mg-Si-Cu Alloys **2015**, 263-270		2

155	Parallel nano-assembling of a multifunctional GO/HapNP coating on ultrahigh-purity magnesium for biodegradable implants. *Applied Surface Science*, **2015**, 345, 387-393	6.7	22
154	Processing and microstructure–property relations of high-strength low-alloy (HSLA) Mg–Zn–Ca alloys. *Acta Materialia*, **2015**, 98, 423-432	8.4	86
153	Precipitation strengthening of Nb-stabilized TP347 austenitic steel by a dispersion of secondary Nb(C,N) formed upon a short-term hardening heat treatment. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2015**, 647, 294-302	5.3	32
152	Assessing the degradation performance of ultrahigh-purity magnesium in vitro and in vivo. *Corrosion Science*, **2015**, 91, 29-36	6.8	86
151	Thermodynamics of Pd–Mn phases and extension to the Fe–Mn–Pd system. *Calphad: Computer Coupling of Phase Diagrams and Thermochemistry*, **2015**, 51, 314-333	1.9	5
150	Influence of Temperature on Natural Aging Kinetics of AA6061 Modified with Sn **2015**, 367-371		1
149	Influence of trace impurities on the in vitro and in vivo degradation of biodegradable Mg-5Zn-0.3Ca alloys. *Acta Biomaterialia*, **2015**, 23, 347-353	10.8	48
148	Corrosion and stress corrosion cracking of ultra-high-purity Mg5Zn. *Corrosion Science*, **2015**, 93, 330-335	6.8	29
147	Atom Probe Tomography Investigations of Modified Early Stage Clustering in Si-Containing Aluminum Alloys. *Acta Physica Polonica A*, **2015**, 128, 643-647	0.6	4
146	Influence of Temperature on Natural Aging Kinetics of AA6061 Modified with Sn **2015**, 367-371		1
145	Statistical and Thermodynamic Optimization of Trace-Element Modified Al-Mg-Si-Cu Alloys **2015**, 265-270		
144	High-Strength Low-Alloy (HSLA) Mg–Zn–Ca Alloys with Excellent Biodegradation Performance. *Jom* , **2014**, 66, 566-572	2.1	92
143	Immunological Response to Biodegradable Magnesium Implants. *Jom*, **2014**, 66, 573-579	2.1	20
142	Reverse α–ε transformation mechanisms of martensitic Fe–Mn and age-hardenable Fe–Mn–Pd alloys upon fast and slow continuous heating. *Acta Materialia*, **2014**, 72, 99-109	8.4	24
141	Diffusion on demand to control precipitation aging: application to Al-Mg-Si alloys. *Physical Review Letters*, **2014**, 112, 225701	7.4	101
140	Process-controlled suppression of natural aging in an Al–Mg–Si alloy. *Scripta Materialia*, **2014**, 89, 53-56	5.6	37
139	In-vitro characterization of stress corrosion cracking of aluminium-free magnesium alloys for temporary bio-implant applications. *Materials Science and Engineering C*, **2014**, 42, 629-36	8.3	64
138	Biodegradable Fe-based alloys for use in osteosynthesis: outcome of an in vivo study after 52 weeks. *Acta Biomaterialia*, **2014**, 10, 3346-53	10.8	158

137	Influence of Chemical Composition and Process Parameters on Mechanical Properties and Formability of AlMgSi-Sheets for Automotive Application **2014**, 227-232		
136	Influence of the Chemical Composition on the Ductility of an AlSiCuZnFe Recycling Foundry Alloy **2014**, 189-193		
135	Using Scrap in Recycling Alloys for Structural Applications in the Automotive Industry **2014**, 349-353		1
134	Property Criteria for Automotive Al-Mg-Si Sheet Alloys. *Materials*, **2014**, 7, 5047-5068	3.5	47
133	In-situ probing of metallic glass formation and crystallization upon heating and cooling via fast differential scanning calorimetry. *Applied Physics Letters*, **2014**, 104, 251908	3.4	58
132	Characterization of bulk metallic glasses via fast differential scanning calorimetry. *Thermochimica Acta*, **2014**, 590, 84-90	2.9	25
131	Correlation between Supersaturation of Solid Solution and Mechanical Behaviour of Two Binary Al-Si-Alloys. *Materials Science Forum*, **2014**, 794-796, 508-514	0.4	10
130	The Role of Vacancies in the Aging of Al-Mg-Si Alloys. *Materials Science Forum*, **2014**, 794-796, 1008-1013	0.4	13
129	Structural and chemical characterization of the hardening phase in biodegradable Fe-Mn-Pd maraging steels. *Journal of Materials Research*, **2014**, 29, 1069-1076	2.5	6
128	Atomic-scale characterization of prior austenite grain boundaries in Fe–Mn-based maraging steel using site-specific atom probe tomography. *Acta Materialia*, **2014**, 73, 215-226	8.4	11
127	Cellular reactions to biodegradable magnesium alloys on human growth plate chondrocytes and osteoblasts. *International Orthopaedics*, **2014**, 38, 881-9	3.8	43
126	Corrosion of ultra-high-purity Mg in 3.5% NaCl solution saturated with Mg(OH)2. *Corrosion Science*, **2013**, 75, 78-99	6.8	201
125	Influence of starting temperature on differential scanning calorimetry measurements of an Al–Mg–Si alloy. *Materials Letters*, **2013**, 100, 163-165	3.3	9
124	In vivo degradation performance of micro-arc-oxidized magnesium implants: a micro-CT study in rats. *Acta Biomaterialia*, **2013**, 9, 5411-20	10.8	158
123	Degradation performance of biodegradable Fe-Mn-C(-Pd) alloys. *Materials Science and Engineering C*, **2013**, 33, 1882-93	8.3	95
122	On the Immersion Testing of Degradable Implant Materials in Simulated Body Fluid: Active pH Regulation Using CO2. *Advanced Engineering Materials*, **2013**, 15, 434-441	3.5	26
121	The effect of main alloying elements on the physical properties of Al–Si foundry alloys. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2013**, 560, 481-491	5.3	68
120	On the cytocompatibility of biodegradable Fe-based alloys. *Materials Science and Engineering C*, **2013**, 33, 782-9	8.3	76

119	Influence of the thermal route on the peak-aged microstructures in an AlMgSi aluminum alloy. *Scripta Materialia*, **2013**, 68, 158-161	5.6	72
118	The in vivo and in vitro corrosion of high-purity magnesium and magnesium alloys WZ21 and AZ91. *Corrosion Science*, **2013**, 75, 354-366	6.8	152
117	Production of High Purity Mg-X Rare Earth Binary Alloys Using Zr. *Materials Science Forum*, **2013**, 765, 301-305	0.4	0
116	Influence of interrupted quenching on artificial aging of AlMgSi alloys. *Acta Materialia*, **2012**, 60, 4496-4505	8.4	61
115	PHB, crystalline and amorphous magnesium alloys: promising candidates for bioresorbable osteosynthesis implants?. *Materials Science and Engineering C*, **2012**, 32, 1503-10	8.3	30
114	Interdependent effect of chemical composition and thermal history on artificial aging of AA6061. *Acta Materialia*, **2012**, 60, 5545-5554	8.4	27
113	In Vivo Performance and Structural Relaxation of Biodegradable Bone Implants Made from Mg?Zn?Ca Bulk Metallic Glasses. *Advanced Engineering Materials*, **2012**, 14, B357-B364	3.5	19
112	Production of High Purity Magnesium Alloys by Melt Purification with Zr. *Advanced Engineering Materials*, **2012**, 14, 477-490	3.5	45
111	Recrystallization behavior, microstructure evolution and mechanical properties of biodegradable FeMnC(Pd) TWIP alloys. *Acta Materialia*, **2012**, 60, 2746-2756	8.4	59
110	Magnesium alloys for temporary implants in osteosynthesis: in vivo studies of their degradation and interaction with bone. *Acta Biomaterialia*, **2012**, 8, 1230-8	10.8	412
109	Effect of main alloying elements on strength of AlSi foundry alloys at elevated temperatures. *International Journal of Cast Metals Research*, **2012**, 25, 215-224	1	43
108	Design considerations for achieving simultaneously high-strength and highly ductile magnesium alloys. *Philosophical Magazine Letters*, **2012**, 92, 417-427	1	30
107	The Role of Co-Clusters in the Artificial Aging of AA6061 and AA6060 **2012**, 415-420		3
106	The Influence of Solution Treatment on the High-Temperature Strength of Al-Si Foundry Alloys with Ni **2012**, 431-434		0
105	The Effect of Nickel on the Thermal Conductivity of Al-Si Cast Alloys **2012**, 137-142		1
104	Experimental investigation and thermodynamic assessment of the CuSnTi ternary system. *Calphad: Computer Coupling of Phase Diagrams and Thermochemistry*, **2011**, 35, 82-94	1.9	58
103	High-strength magnesium alloys for degradable implant applications. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2011**, 528, 1047-1054	5.3	73
102	Precipitation hardening of biodegradable FeMnPd alloys. *Acta Materialia*, **2011**, 59, 981-991	8.4	30

101	Mechanisms controlling the artificial aging of Al–Mg–Si Alloys. *Acta Materialia*, **2011**, 59, 3352-3363	8.4	253
100	Biodegradable wound-closing devices for gastrointestinal interventions: Degradation performance of the magnesium tip. *Materials Science and Engineering C*, **2011**, 31, 1098-1103	8.3	26
99	The Effect of Ni on the High-Temperature Strength of Al-Si Cast Alloys. *Materials Science Forum*, **2011**, 690, 274-277	0.4	28
98	Influence of compositional variations on microstructural evolution, mechanical properties and fluidity of secondary foundry alloy AlSi9Cu3. *International Journal of Cast Metals Research*, **2010**, 23, 375-383	1	9
97	The influence of yttrium (Y) on the corrosion of Mg–Y binary alloys. *Corrosion Science*, **2010**, 52, 3687-3701	6.8	246
96	The influence of heat treatment and plastic deformation on the bio-degradation of a Mg-Y-RE alloy. *Journal of Biomedical Materials Research - Part A*, **2010**, 92, 409-18	5.4	6
95	Design strategy for biodegradable Fe-based alloys for medical applications. *Acta Biomaterialia*, **2010**, 6, 1705-13	10.8	331
94	On the in vitro and in vivo degradation performance and biological response of new biodegradable Mg-Y-Zn alloys. *Acta Biomaterialia*, **2010**, 6, 1824-33	10.8	261
93	Interface formation between liquid and solid Mg alloys—An approach to continuously metallurgic joining of magnesium parts. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2010**, 527, 2274-2279	5.3	35
92	Influence of yttrium additions on the hot tearing susceptibility of magnesium–zinc alloys. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2010**, 527, 7074-7079	5.3	55
91	In Situ Microtomographically Monitored and Electrochemically Controlled Corrosion Initiation and Propagation in AlMgSi Alloy AA6016. *Journal of the Electrochemical Society*, **2009**, 156, C1	3.9	17
90	Design strategy for new biodegradable Mg–Zn alloys for medical applications. *International Journal of Materials Research*, **2009**, 100, 1127-1136	0.5	58
89	The Influence of Heat Treatment and Plastic Deformation on the Bio-Degradation of a Mg–Y–RE Alloy. *Materials Science Forum*, **2009**, 618-619, 71-74	0.4	1
88	Corrosion of AZ91 - Influence of the β-Phase Morphology. *Materials Science Forum*, **2009**, 618-619, 473-478	0.4	9
87	Design Strategy for Microalloyed Ultra-Ductile Magnesium Alloys for Medical Applications. *Materials Science Forum*, **2009**, 618-619, 75-82	0.4	13
86	On the biodegradation performance of an Mg-Y-RE alloy with various surface conditions in simulated body fluid. *Acta Biomaterialia*, **2009**, 5, 162-71	10.8	162
85	Light metal compound casting. *Science in China Series D: Earth Sciences*, **2009**, 52, 46-51		32
84	Effects of wear on static and dynamic failure loads of aluminium-based alloy climbing karabiners. *Sports Engineering*, **2009**, 11, 85-91	1.4	1

83	MgZnCa glasses without clinically observable hydrogen evolution for biodegradable implants. *Nature Materials*, **2009**, 8, 887-91	27	669
82	Tensile properties of glassy MgZnCa wires and reliability analysis using Weibull statistics. *Acta Materialia*, **2009**, 57, 3223-3231	8.4	81
81	Design strategy for microalloyed ultra-ductile magnesium alloys. *Philosophical Magazine Letters*, **2009**, 89, 377-390	1	68
80	Calculated phase diagrams and the corrosion of die-cast Mg-Al alloys. *Corrosion Science*, **2009**, 51, 602-619	6.8	246
79	Corrosion properties of glassy Mg70Al15Ga15 in 0.1M NaCl solution. *Intermetallics*, **2009**, 17, 811-817	3.5	18
78	Microstructure and mechanical properties of microalloyed and equal channel angular extruded Mg alloys. *Scripta Materialia*, **2008**, 59, 207-210	5.6	15
77	Investigation of the exfoliation-like attack mechanism in relation to Al-Mg-Si alloy microstructure. *Corrosion Science*, **2008**, 50, 2085-2093	6.8	24
76	In situ monitoring of corrosion processes within the bulk of AlMgSi alloys using X-ray microtomography. *Corrosion Science*, **2008**, 50, 3455-3466	6.8	39
75	ICP-MS, SKPFM, XPS, and Microcapillary Investigation of the Local Corrosion Mechanisms of WC-Co Hardmetal. *Journal of the Electrochemical Society*, **2008**, 155, C415	3.9	42
74	Corrosion behaviour of an Mg-RE alloy used in biomedical applications studied by electrochemical techniques. *Comptes Rendus Chimie*, **2008**, 11, 1043-1054	2.7	55
73	Calculated phase diagrams, iron tolerance limits, and corrosion of Mg-Al alloys. *Jom*, **2008**, 60, 39-44	2.1	70
72	The influence of Mg2Si particle reactivity and dissolution processes on corrosion in Al-Mg-Si alloys. *Electrochimica Acta*, **2008**, 54, 844-855	6.7	123
71	Interface formation in aluminium–aluminium compound casting. *Acta Materialia*, **2008**, 56, 3036-3043	8.4	88
70	Martensitic–austenitic 9–12% Cr steels–Alloy design, microstructural stability and mechanical properties. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2008**, 476, 186-194	5.3	49
69	Micro-Alloyed Wrought Magnesium for Room-Temperature Forming. *Advanced Engineering Materials*, **2007**, 9, 799-802	3.5	13
68	On the microstructure formation in chromium steels rapidly cooled from the semi-solid state. *Acta Materialia*, **2007**, 55, 1033-1042	8.4	65
67	On the microstructure and properties of 100Cr6 steel processed in the semi-solid state. *Acta Materialia*, **2007**, 55, 6553-6560	8.4	55
66	Aluminium carbide formation in interpenetrating graphite/aluminium composites. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2007**, 448, 1-6	5.3	139

65	Experimental investigation of the Cu□Ti□Zr system at 800□C. *Intermetallics*, **2007**, 15, 1666-1671	3.5	22
64	Local Fatigue in Lead-Free SnAg3.8Cu0.7 Solder. *Advanced Engineering Materials*, **2006**, 8, 179-183	3.5	1
63	Influence of Composition and Roughness on Localized Corrosion of Al-Mg-Si Alloys Characterized by Microelectrochemistry. *Materials Science Forum*, **2006**, 519-521, 635-640	0.4	1
62	Analytical Characterization of the Corrosion Mechanisms of WC-Co by Electrochemical Methods and Inductively-Coupled Plasma Mass Spectroscopy. *ECS Transactions*, **2006**, 1, 251-262	1	2
61	Interface Reactions of Al and Binary Al-Alloys on Mild Steel Substrates in Controlled Atmosphere. *Materials Science Forum*, **2006**, 519-521, 1157-1162	0.4	11
60	Microstructure Control and Structure Analysis in the Semi-Solid State of Different Feedstock Materials for the Bearing Steel 100Cr6. *Solid State Phenomena*, **2006**, 116-117, 177-180	0.4	2
59	Cytotoxicity of Zr-based bulk metallic glasses. *Intermetallics*, **2006**, 14, 729-734	3.5	97
58	Structure and properties of a hypoeutectic chromium steel processed in the semi-solid state. *Acta Materialia*, **2006**, 54, 2727-2734	8.4	64
57	Selective interfacial bonding in Al(Si)□diamond composites and its effect on thermal conductivity. *Composites Science and Technology*, **2006**, 66, 2677-2685	8.6	199
56	Approaching Representative Volume Element size in Interpenetrating Phase Composites. *Advanced Engineering Materials*, **2005**, 7, 225-229	3.5	13
55	Thermodynamic Assessment of the Sn□Ti System. *Monatshefte F□ Chemie*, **2005**, 136, 1921-1930	1.4	41
54	Local creep in SnAg3.8Cu0.7 lead-free solder. *Journal of Electronic Materials*, **2005**, 34, 1206-1214	1.9	9
53	Influence of variations in alloy composition on castability and process stability. Part 2: Semi-solid casting processes. *International Journal of Cast Metals Research*, **2005**, 18, 279-285	1	5
52	Influence of variations in alloy composition on castability and process stability. Part 1: Gravity and pressure casting processes. *International Journal of Cast Metals Research*, **2005**, 18, 273-278	1	12
51	Microstructure evolution during reheating of an extruded Mg□Al□Zn alloy into the semisolid state. *Scripta Materialia*, **2004**, 51, 405-410	5.6	97
50	High aspect ratio micro mechanical structures made of bulk metallic glass. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2004**, 375-377, 327-331	5.3	10
49	Elektrochemische Korrosionsuntersuchungen an der Magnesiumlegierung AZ91: Beschreibung kritischer Parameter und deren Einfluss auf die Angriffsmechanismen auf NRC-Proben. *Materials and Corrosion - Werkstoffe Und Korrosion*, **2004**, 55, 5-17	1.6	19
48	Mechanical anisotropy of extruded Mg□% Al□% Zn alloy. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2004**, 379, 258-263	5.3	341

47	Evolution of Globular Microstructure in New Rheocasting and Super Rheocasting Semi-Solid Slurries. *Steel Research International*, **2004**, 75, 525-530	1.6	23
46	SIMS Investigations on the Distribution of Trace Elements in Modified Aluminium□Silicon□Magnesium Alloys. *Mikrochimica Acta*, **2003**, 141, 23-27	5.8	6
45	Preparation of high aspect ratio surface microstructures out of a Zr-based bulk metallic glass. *Microelectronic Engineering*, **2003**, 67-68, 405-409	2.5	24
44	Semi-Solid Metal Processing of Aluminum Alloy A356 and Magnesium Alloy AZ91: Comparison Based on Metallurgical Consideration. *Advanced Engineering Materials*, **2003**, 5, 653-658	3.5	24
43	Physical properties of graphite/aluminium composites produced by gas pressure infiltration method. *Carbon*, **2003**, 41, 1017-1024	10.4	54
42	Structure and properties of AlMgSi1 alloy tailored for semi-solid forming. *Journal of Materials Science*, **2002**, 37, 1173-1178	4.3	8
41	Mechanical and Thermophysical Properties of Graphite/Al Composites Produced by Casting Infiltration Methods. *Materials Science Forum*, **2002**, 396-402, 1247-1254	0.4	4
40	Influence of Low Oxygen Contents and Alloy Refinement on the Glass Forming Ability of Zr52.5Cu17.9Ni14.6Al10Ti5. *Materials Transactions*, **2002**, 43, 3206-3210	1.3	47
39	On the silicon spheroidization in Al□Si alloys. *Journal of Light Metals*, **2002**, 2, 263-269		166
38	Microstructure and mechanical properties of squeeze cast and semi-solid cast Mg□Al alloys. *Journal of Light Metals*, **2002**, 2, 277-280		114
37	Silicon Spheroidization Treatment of Thixoformed Al-Si-Mg Alloys. *Materials Science Forum*, **2002**, 396-402, 149-154	0.4	36
36	ZrN, ZrxAlyN and ZrxGayN thin films □novel materials for hard coatings grown using pulsed laser deposition. *Applied Physics A: Materials Science and Processing*, **2001**, 73, 441-450	2.6	41
35	Influence of decomposition on the thermal stability of undercooled Zr-Ti-Cu-Ni-Al alloys. *Scripta Materialia*, **2001**, 44, 1269-1273	5.6	26
34	Corrosion resistance of super duplex stainless steels in chloride ion containing environments: investigations by means of a new microelectrochemical method. *Corrosion Science*, **2001**, 43, 707-726	6.8	110
33	Corrosion resistance of super duplex stainless steels in chloride ion containing environments: investigations by means of a new microelectrochemical method. *Corrosion Science*, **2001**, 43, 727-745	6.8	100
32	Wear□corrosion behavior of biocompatible austenitic stainless steels. *Wear*, **2000**, 239, 48-58	3.5	102
31	Metallurgical Aspects of Thixoforming of AlMgSi - Wrought Alloys. *Materials Science Forum*, **2000**, 331-337, 235-240	0.4	4
30	Characterization of Fe-C/N Steel. *Materials Science Forum*, **1999**, 318-320, 757-762	0.4	3

29	Strength and fracture toughness of spray formed AlCuMgAg alloys. *Materials Science and Technology*, **1999**, 15, 926-932	1.5	5
28	Nitrogen Alloyed 9-12% Chromium Steels with a Mertensitic-Austenitic Microstructure. *Materials Science Forum*, **1999**, 318-320, 437-442	0.4	1
27	Properties of Cold Worked High Nitrogen Chromium-Based Alloys. *Materials Science Forum*, **1999**, 318-320, 241-248	0.4	4
26	Alloy compositions and mechanical properties of 9–12% chromium steels with martensitic–austenitic microstructure. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **1999**, 272, 292-299	5.3	19
25	On material immanent ratchetting of two-phase materials under cyclic purely thermal loading. *Archive of Applied Mechanics*, **1999**, 69, 727-750	2.2	9
24	Nickel-Free High Nitrogen Austenitic Stainless Steels Produced by Metal Injection Moulding. *Materials Science Forum*, **1999**, 318-320, 663-672	0.4	8
23	Nickel-free duplex stainless steels. *Scripta Materialia*, **1998**, 40, 123-129	5.6	41
22	Partitioning of chromium and molybdenum in super duplex stainless steels with respect to nitrogen and nickel content. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **1998**, 242, 222-229	5.3	87
21	Effect of recrystallisation and grain size on the mechanical properties of spray formed AlCuMgAg-alloys. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **1998**, 248, 1-8	5.3	17
20	Microstructures and yield strength of nitrogen alloyed super duplex steels. *Acta Materialia*, **1997**, 45, 1645-1654	8.4	25
19	High Nitrogen Steels. Nickel Free High Nitrogen Austenitic Steels.. *ISIJ International*, **1996**, 36, 901-908	1.7	201
18	High Nitrogen Steels. Precipitation Behaviour and Stability of Nitrides in High Nitrogen Martensitic 9% and 12% Chromium Steels.. *ISIJ International*, **1996**, 36, 768-776	1.7	12
17	High toughness and high strength spray-deposited AlCuMgAg-base alloys for use at moderately elevated temperatures. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **1995**, 191, 121-134	5.3	31
16	Brittle fracture in austenitic steel. *Acta Metallurgica Et Materialia*, **1994**, 42, 2211-2217		94
15	On the effect of nitrogen on the dislocation structure of austenitic stainless steel. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **1993**, 164, 164-169	5.3	108
14	Magnetic properties of Cr-Mn austenitic stainless steels. *Journal of Magnetism and Magnetic Materials*, **1992**, 110, 185-196	2.8	7
13	Struktur und Eigenschaften einer hochfesten sprühkompaktierten Aluminiumlegierung. *Materialwissenschaft Und Werkstofftechnik*, **1990**, 21, 459-463	0.9	2
12	Influence of annealing temperature on the microstructure and mechanical properties of a high nitrogen containing austenitic stainless steel. *Scripta Metallurgica*, **1987**, 21, 513-518		18

11	Improved boron-containing 9 to 12% chromium steel with high creep rupture strength. *Journal of Materials Science Letters*, **1986**, 5, 835-839		11
10	The effect of crack branching on the residual lifetime of machine components containing stress corrosion cracks. *Corrosion Science*, **1985**, 25, 745-756	6.8	4
9	The fracture toughness behaviour of a 18 Ni (300 grade) maraging steel in various solution treated and aged conditions. *Scripta Metallurgica*, **1984**, 18, 373-378		8
8	Configuration at the 2-position of oxazolidines derived from l-ephedrine and p-bromobenzaldehyde. An x-ray structure redetermination. *Journal of Organic Chemistry*, **1983**, 48, 2923-2924	4.2	25
7	The tensile fracture of ferritic-martensitic carbon steels. *Materials Science and Engineering*, **1982**, 55, 181-189		31
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