

# Oscar A Ruano

## List of Publications by Citations

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193  
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194  
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6,424  
ext. citations

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#	Paper	IF	Citations
193	Influence of texture and grain size on work hardening and ductility in magnesium-based alloys processed by ECAP and rolling. <i>Acta Materialia</i> , <b>2006</b> , 54, 4247-4259	8.4	500
192	Corrosion behaviour of AZ31 magnesium alloy with different grain sizes in simulated biological fluids. <i>Acta Biomaterialia</i> , <b>2010</b> , 6, 1763-71	10.8	349
191	Texture evolution during large-strain hot rolling of the Mg AZ61 alloy. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2003</b> , 355, 68-78	5.3	245
190	Grain refinement of Mg-Al-Zn alloys via accumulative roll bonding. <i>Scripta Materialia</i> , <b>2004</b> , 51, 1093-1097	5.6	224
189	Microstructural evolution during large strain hot rolling of an AM60 Mg alloy. <i>Scripta Materialia</i> , <b>2004</b> , 50, 661-665	5.6	173
188	Texture evolution during annealing of magnesium AZ31 alloy. <i>Scripta Materialia</i> , <b>2002</b> , 46, 149-155	5.6	160
187	Texture, microstructure and mechanical properties of equiaxed ultrafine-grained Zr fabricated by accumulative roll bonding. <i>Acta Materialia</i> , <b>2008</b> , 56, 1228-1242	8.4	114
186	Bulk nanocrystalline Zr by high-pressure torsion. <i>Scripta Materialia</i> , <b>2008</b> , 58, 219-222	5.6	109
185	Achieving high strength in commercial Mg cast alloys through large strain rolling. <i>Materials Letters</i> , <b>2005</b> , 59, 3299-3303	3.3	108
184	Corrosion inhibition of powder metallurgy Mg by fluoride treatments. <i>Acta Biomaterialia</i> , <b>2010</b> , 6, 1772-1782	8.8	104
183	Influence of texture on dynamic recrystallization and deformation mechanisms in rolled or ECAPed AZ31 magnesium alloy. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2008</b> , 487, 473-480	5.3	102
182	Superplastic behavior of a fine-grained two-phase Mg-9wt.%Li alloy. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>1990</b> , 125, 195-202	5.3	98
181	Separate contributions of texture and grain size on the creep mechanisms in a fine-grained magnesium alloy. <i>Acta Materialia</i> , <b>2007</b> , 55, 455-466	8.4	92
180	Deformation of fine-grained alumina by grain boundary sliding accommodated by slip. <i>Acta Materialia</i> , <b>2003</b> , 51, 3617-3634	8.4	92
179	Texture analysis of the transition from slip to grain boundary sliding in a discontinuously recrystallized superplastic aluminum alloy. <i>Acta Materialia</i> , <b>2001</b> , 49, 2259-2268	8.4	85
178	Accumulative roll bonding of a Mg-based AZ61 alloy. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2005</b> , 410-411, 353-357	5.3	83
177	Harper-dorn creep in pure metals. <i>Acta Metallurgica</i> , <b>1988</b> , 36, 1117-1128		82

176	Texture evolution during grain growth in annealed MG AZ61 alloy. <i>Scripta Materialia</i> , <b>2003</b> , 48, 59-64	5.6	81
175	Comparison of the microstructure and thermal stability of an AZ31 alloy processed by ECAP and large strain hot rolling. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2005</b> , 410-411, 308-311	5.3	78
174	The influence of pipe diffusion on the creep of fine-grained materials. <i>Materials Science and Engineering</i> , <b>1981</b> , 51, 9-16		75
173	Effect of sheet thickness on the microstructural evolution of an Mg AZ61 alloy during large strain hot rolling. <i>Scripta Materialia</i> , <b>2004</b> , 50, 667-671	5.6	73
172	Particle and grain growth in an AlSi alloy during high-pressure torsion. <i>Scripta Materialia</i> , <b>2007</b> , 57, 763-765	5.6	70
171	Delamination effect on the impact toughness of an ultrahigh carbon mild steel laminate composite. <i>Composites Science and Technology</i> , <b>2006</b> , 66, 2671-2676	8.6	67
170	Denuded zones, diffusional creep, and grain boundary sliding. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , <b>2002</b> , 33, 219-229	2.3	66
169	Microstructure and fracture properties of an ultrahigh carbon steel mild steel laminated composite. <i>Scripta Materialia</i> , <b>2003</b> , 48, 1135-1140	5.6	64
168	Microstructure and high temperature mechanical properties of tin. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>1995</b> , 194, 17-23	5.3	60
167	Low stress creep of fine-grained materials at intermediate temperatures: Diffusional creep or grain boundary sliding?. <i>Materials Science and Engineering</i> , <b>1982</b> , 56, 167-175		60
166	Mechanical properties at room temperature of an AlZnMgCu alloy processed by equal channel angular pressing. <i>Journal of Alloys and Compounds</i> , <b>2011</b> , 509, 8649-8656	5.7	57
165	Influence of the thermal treatment on the deformation-induced precipitation of a hypoeutectic Al7wt% Si casting alloy deformed by high-pressure torsion. <i>Journal of Alloys and Compounds</i> , <b>2011</b> , 509, 636-643	5.7	56
164	Mechanical properties of ultra-fine grained AZ91 magnesium alloy processed by friction stir processing. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2015</b> , 628, 198-206	5.3	54
163	Influence of the grain size on the strain rate sensitivity in an MgAlZn alloy at moderate temperatures. <i>Scripta Materialia</i> , <b>2006</b> , 55, 775-778	5.6	53
162	Effect of the deformation path on the ductility of a hypoeutectic AlSi casting alloy subjected to equal-channel angular pressing by routes A, BA, BC and C. <i>Scripta Materialia</i> , <b>2008</b> , 58, 138-141	5.6	52
161	Deformation mechanisms in an austenitic stainless steel (25Cr-20Ni) at elevated temperature. <i>Journal of Materials Science</i> , <b>1985</b> , 20, 3735-3744	4.3	52
160	An evidence of high strain rate superplasticity at intermediate homologous temperatures in an AlZnMgCu alloy processed by high-pressure torsion. <i>Journal of Alloys and Compounds</i> , <b>2009</b> , 473, 163-166	5.7	46
159	High strain rate superplasticity at intermediate temperatures of the Al 7075 alloy severely processed by equal channel angular pressing. <i>Journal of Alloys and Compounds</i> , <b>2011</b> , 509, 9589-9597	5.7	45

158	Optimization of the microstructure for improving superplastic forming in magnesium alloys. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2007</b> , 467, 165-171	5-3	44
157	Harper-Dorn and power law creep in uranium dioxide. <i>Acta Metallurgica Et Materialia</i> , <b>1991</b> , 39, 661-668		44
156	Study of hot deformation of an AlCuMg alloy using processing maps and microstructural characterization. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2012</b> , 552, 530-539	5-3	43
155	Structural characterization of rapidly solidified white cast iron powders. <i>Journal of Materials Science</i> , <b>1983</b> , 18, 483-492	4-3	42
154	Influence of the thermomechanical processing on the fracture mechanisms of high strength aluminium/pure aluminium multilayer laminate materials. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2008</b> , 490, 319-327	5-3	41
153	The use of foil metallurgy processing to achieve ultrafine grained Mg-9 Li laminates and Mg-9Li-5B4C particulate composites. <i>Journal of Materials Science</i> , <b>1990</b> , 25, 4535-4540	4-3	39
152	Effect of annealing treatments on the anisotropy of a magnesium alloy sheet processed by severe rolling. <i>Materials Letters</i> , <b>2009</b> , 63, 1551-1554	3-3	37
151	Evidence for Nabarro-Herring creep in metals: fiction or reality?. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>1993</b> , 165, 133-141	5-3	37
150	Lowering the temperature for high strain rate superplasticity in an AlMgZnCu alloy via cooled friction stir processing. <i>Materials Chemistry and Physics</i> , <b>2013</b> , 142, 182-185	4-4	35
149	Refutation of the relationship between denuded zones and diffusional creep. <i>Scripta Metallurgica Et Materialia</i> , <b>1993</b> , 29, 515-520		35
148	Influence of interfacial defects on the impact toughness of solid state diffusion bonded TiB <sub>2</sub> /Al <sub>2</sub> O <sub>3</sub> V alloy based multilayer composites. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2013</b> , 563, 28-35	5-3	34
147	Effect of testing temperature and strain rate on the transformation behaviour of retained austenite in low-alloyed multiphase steel. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2009</b> , 508, 195-199	5-3	34
146	Toughness dependence on the microstructural parameters for an ultrahigh carbon steel (1.3 wt.% C). <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2002</b> , 335, 175-185	5-3	34
145	Damage tolerance assessment by bend and shear tests of two multilayer composites: Glass fibre reinforced metal laminate and aluminium roll-bonded laminate. <i>Composites Science and Technology</i> , <b>2009</b> , 69, 343-348	8.6	33
144	Microstructural development during equal channel angular pressing of hypo-eutectic AlBi casting alloy by different processing routes. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2008</b> , 485, 160-175	5-3	33
143	Influence of the alumina thickness at the interfaces on the fracture mechanisms of aluminium multilayer composites. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2008</b> , 496, 133-142	5-3	33
142	Superplastic behavior of a fine-grained Mg <sub>9</sub> Li material at low homologous temperature. <i>Journal of Materials Research</i> , <b>1992</b> , 7, 2131-2135	2.5	33
141	High temperature deformation and microstructural instability in AZ31 magnesium alloy. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2013</b> , 570, 135-148	5-3	32

140	Influence of the supersaturated silicon solid solution concentration on the effectiveness of severe plastic deformation processing in Al $\bar{7}$ wt.% Si casting alloy. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2011</b> , 528, 7938-7947	5.3	32
139	Interface Effects on the Fracture Mechanism of a High-Toughness Aluminum-Composite Laminate. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , <b>2009</b> , 40, 69-79	2.3	32
138	Impact toughness improvement of high-strength aluminium alloy by intrinsic and extrinsic fracture mechanisms via hot roll bonding. <i>Scripta Materialia</i> , <b>2009</b> , 61, 407-410	5.6	31
137	Analysis of adiabatic heating and its influence on the Garofalo equation parameters of a high nitrogen steel. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2009</b> , 517, 191-196	5.3	30
136	Influence of the Processing Temperature on the Microstructure, Texture, and Hardness of the 7075 Aluminum Alloy Fabricated by Accumulative Roll Bonding. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , <b>2010</b> , 41, 758-767	2.3	30
135	Mechanical properties of Ultrahigh Boron Steels. <i>Advanced Materials</i> , <b>1995</b> , 7, 130-136	24	30
134	Origin of the reversed yield asymmetry in Mg-rare earth alloys at high temperature. <i>Acta Materialia</i> , <b>2015</b> , 92, 265-277	8.4	29
133	Characterization of a $\bar{7}$ duplex stainless steel. <i>Journal of Materials Science</i> , <b>2000</b> , 35, 907-915	4.3	29
132	Superplastic behavior of iron carbide. <i>Scripta Metallurgica</i> , <b>1989</b> , 23, 1515-1520		28
131	Evolution of the microstructure, texture and creep properties of the 7075 aluminium alloy during hot accumulative roll bonding. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2014</b> , 606, 434-442	5.3	27
130	High strain rate torsional behavior of an ultrahigh carbon steel (1.8 Pct C-1.6 Pct Al) at elevated temperature. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , <b>1997</b> , 28, 1913-1920	2.3	27
129	Effect of Hot Rolling on Bonding Characteristics and Impact Behavior of a Laminated Composite Material Based on UHCS-1.35 Pct C. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , <b>2008</b> , 39, 666-671	2.3	27
128	Grain Refinement in a Mg AZ91 Alloy via Large Strain Hot Rolling. <i>Materials Transactions</i> , <b>2003</b> , 44, 2625-2630	2.3	27
127	Superplasticity in Rapidly Solidified White Cast Irons. <i>Metallurgical and Materials Transactions A - Physical Metallurgy and Materials Science</i> , <b>1982</b> , 13, 1785-1792		27
126	Enhanced grain refinement due to deformation-induced precipitation during ambient-temperature severe plastic deformation of an Al $\bar{7}$ %Si alloy. <i>Journal of Alloys and Compounds</i> , <b>2009</b> , 478, 139-143	5.7	26
125	Strain path and microstructure evolution during severe deformation processing of an as-cast hypoeutectic AlSi alloy. <i>Journal of Materials Science</i> , <b>2010</b> , 45, 4613-4620	4.3	26
124	Achieving microstructures prone to superplastic deformation in an Al $\bar{7}$ nMgCu alloy by equal channel angular pressing. <i>Journal of Alloys and Compounds</i> , <b>2013</b> , 546, 253-259	5.7	24
123	A New Constitutive Strain-Dependent Garofalo Equation to Describe the High-Temperature Processing of MaterialsApplication to the AZ31 Magnesium Alloy. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , <b>2010</b> , 41, 2396-2407	2.3	24

122	On the threshold stress for superplasticity in Mg <sub>3</sub> AlZn alloys. <i>Scripta Materialia</i> , <b>2007</b> , 57, 829-832	5.6	24
121	Superplastic properties of a $\beta$ -stainless steel. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2001</b> , 307, 134-142	5.3	24
120	Influence of Constituent Materials on the Impact Toughness and Fracture Mechanisms of Hot-Roll-Bonded Aluminum Multilayer Laminates. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , <b>2010</b> , 41, 61-72	2.3	23
119	The fabrication of bulk ultrafine-grained zirconium by accumulative roll bonding. <i>Jom</i> , <b>2007</b> , 59, 42-45	2.1	23
118	Influence of Processing Severity During Equal-Channel Angular Pressing on the Microstructure of an Al-Zn-Mg-Cu Alloy. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , <b>2012</b> , 43, 4224-4236	2.3	22
117	New numerical method for the fit of Garofalo equation and its application for predicting hot workability of a (V <sub>2</sub> N) microalloyed steel. <i>Materials Science and Technology</i> , <b>2009</b> , 25, 995-1002	1.5	22
116	Microstructure and creep behaviour of an Osprey processed and extruded AlCuMgTiAg alloy. <i>Journal of Alloys and Compounds</i> , <b>2007</b> , 433, 97-107	5.7	22
115	Development of ultrafine microstructures and superplasticity in Hadfield manganese steels. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>1992</b> , 150, 187-194	5.3	22
114	Effect of warm accumulative roll bonding on the evolution of microstructure, texture and creep properties in the 7075 aluminium alloy. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2012</b> , 556, 287-294	5.3	21
113	Microstructural characterization of an ultrahigh carbon and boron tool steel processed by different routes. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>1996</b> , 206, 194-200	5.3	21
112	Processing and superplastic properties of fine-grained iron carbide. <i>Metallurgical and Materials Transactions A - Physical Metallurgy and Materials Science</i> , <b>1992</b> , 23, 527-535		21
111	Harrer-Dorn and power law creep in Fe <sub>3</sub> wt%Si. <i>Scripta Metallurgica</i> , <b>1988</b> , 22, 1907-1910		21
110	Enhanced densification of white cast iron powders by cyclic phase transformations under stress. <i>Metallurgical and Materials Transactions A - Physical Metallurgy and Materials Science</i> , <b>1982</b> , 13, 355-361		21
109	Creep behavior of Fe <sub>3</sub> alloys at high temperatures and high strain rates. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2001</b> , 317, 101-107	5.3	20
108	Superplasticity in a magnesium alloy prepared with bimodal grain size distributions developed by dynamic recrystallisation. <i>Materials Letters</i> , <b>2008</b> , 62, 3391-3394	3.3	19
107	Solute-diffusion-controlled dislocation creep in pure aluminium containing 0.026 at.% Fe. <i>Philosophical Magazine</i> , <b>2004</b> , 84, 2417-2434	1.6	19
106	Severe friction stir processing of an Al-Zn-Mg-Cu alloy: Misorientation and its influence on superplasticity. <i>Materials and Design</i> , <b>2018</b> , 137, 128-139	8.1	18
105	Texture analysis of the transition from slip to grain boundary sliding in a continuously recrystallized superplastic aluminum alloy. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2003</b> , 342, 216-230	5.3	18

104	Texture gradient evolution in Al-5%Ca-5%Zn sheet alloy after tensile deformation at high superplastic strain rate. <i>Scripta Materialia</i> , <b>1996</b> , 35, 1455-1460	5.6	17
103	Influence of interfaces on the mechanical properties of ultrahigh carbon steel multilayer laminates. <i>International Journal of Materials Research</i> , <b>2007</b> , 98, 47-52	0.5	16
102	Development of ferrous laminated composites with unique microstructures by control of carbon diffusion. <i>Metallurgical and Materials Transactions A - Physical Metallurgy and Materials Science</i> , <b>1986</b> , 17, 1517-1521		16
101	On the applicability of diffusional flow to the creep of polycrystalline materials at low stresses and intermediate temperatures. <i>Materials Science and Engineering</i> , <b>1984</b> , 64, 61-66		16
100	Influence of microstructural stability on the creep mechanism of Al $\square$ wt% Si alloy processed by equal channel angular pressing. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2014</b> , 612, 162-171	5.3	15
99	Symbiosis between grain boundary sliding and slip creep to obtain high-strain-rate superplasticity in aluminum alloys. <i>Journal of the European Ceramic Society</i> , <b>2007</b> , 27, 3385-3390	6	15
98	Analysis of Garofalo equation parameters for an ultrahigh carbon steel. <i>Journal of Materials Science</i> , <b>2010</b> , 45, 5522-5527	4.3	14
97	Microstructure and high-temperature mechanical behavior of the NiAl $\square$ 7 at.% Cr intermetallic composite. <i>Acta Materialia</i> , <b>1999</b> , 47, 3655-3662	8.4	14
96	Rebuttal to the defense of diffusional creep. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>1996</b> , 211, 66-71	5.3	14
95	High temperature deformation behavior of an Al $\square$ Fe $\square$ V $\square$ Si alloy. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>1993</b> , 164, 216-219	5.3	14
94	Rate-controlling processes in creep of subgrain containing aluminum materials. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2005</b> , 410-411, 8-11	5.3	13
93	Superplastic behaviour of two extruded gamma TiAl(Mo,Si) materials. <i>Intermetallics</i> , <b>2005</b> , 13, 749-755	3.5	12
92	The strain rate as a factor influencing the hot forming simulation of medium carbon microalloyed steels. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>1996</b> , 216, 155-160	5.3	12
91	Harper-Dorn creep in class I solid solution alloys. <i>Scripta Metallurgica Et Materialia</i> , <b>1990</b> , 24, 903-906		12
90	Influence of the thermal treatment on the microstructure and hardness evolution of 7075 aluminium layers in a hot-rolled multilayer laminate composite. <i>Journal of Alloys and Compounds</i> , <b>2009</b> , 478, 154-162	5.7	11
89	Harper-Dorn and Power-Law Creep in Single-Crystalline Magnesium Oxide. <i>Journal of the American Ceramic Society</i> , <b>1992</b> , 75, 1737-1741	3.8	11
88	A New Stability Criterion for the Hot Deformation Behavior of Materials: Application to the AZ31 Magnesium Alloy. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , <b>2017</b> , 48, 3445-3460	2.3	10
87	Influence of data conversion methods from torsion tests on the Garofalo equation parameters for a high nitrogen steel. <i>International Journal of Materials Research</i> , <b>2010</b> , 101, 787-793	0.5	10

86	The effect of microstructure on the creep behavior of the Ti <sub>6</sub> Al <sub>4</sub> Mo <sub>0.2</sub> Si alloy. <i>Intermetallics</i> , <b>2005</b> , 13, 1021-1029	3.5	10
85	Mechanical properties of two ultrahigh carbon-boron tool steels. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>1995</b> , 202, 94-102	5.3	10
84	Low stress creep of $\beta$ Zr at intermediate temperatures. <i>Materials Science and Engineering</i> , <b>1986</b> , 84, L1-L6		10
83	Effect of Processing Temperature on the Texture and Shear Mechanical Properties of Diffusion Bonded Ti-6Al-4V Multilayer Laminates. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , <b>2013</b> , 44, 4743-4753	2.3	9
82	Effect of thermal treatment on the interfacial shear toughness of an aluminium composite laminate. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2010</b> , 527, 2579-2587	5.3	9
81	Superplastic behavior of a kappa carbide material (Fe <sub>3</sub> AlC <sub>x</sub> ). <i>Journal of Materials Research</i> , <b>1997</b> , 12, 2317-2324	2.5	9
80	Innovative Ultrahigh Carbon Steel Laminates with Outstanding Mechanical Properties. <i>Materials Science Forum</i> , <b>2003</b> , 426-432, 883-888	0.4	9
79	Microstructural and mechanical characterisation of composite materials consisting of M3/2 high speed steel reinforced with niobium carbides. <i>Powder Metallurgy</i> , <b>2005</b> , 48, 371-376	1.9	9
78	Characterization of rapidly solidified ultrahigh boron steels. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>1992</b> , 159, 103-109	5.3	9
77	Assessment of homogeneity of the shear-strain pattern in Al <sub>70</sub> wt%Si casting alloy processed by high-pressure torsion. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2014</b> , 597, 102-110	5.3	8
76	Microstructural characterization by electron backscatter diffraction of a hot worked Al <sub>70</sub> Ti <sub>30</sub> Mg alloy. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2011</b> , 528, 3161-3168	5.3	8
75	High temperature workability behaviour of a modified P92 steel. <i>International Journal of Materials Research</i> , <b>2011</b> , 102, 1378-1383	0.5	8
74	Grain shape and microstructural evolution during equal channel angular pressing. <i>Scripta Materialia</i> , <b>2008</b> , 58, 17-20	5.6	8
73	Severe plastic deformation of an as-cast hypoeutectic Al <sub>55</sub> Si alloy. <i>Journal of Materials Science</i> , <b>2008</b> , 43, 7501-7506	4.3	8
72	Deformation behavior of an Al <sub>70</sub> Ti <sub>30</sub> MgTi alloy obtained by spray forming and extrusion. <i>Materials Letters</i> , <b>2006</b> , 60, 3232-3237	3.3	8
71	Superplastic Behavior of a Fine Grained AZ61 Alloy Processed by Large Strain Hot Rolling. <i>Materials Science Forum</i> , <b>2004</b> , 447-448, 221-226	0.4	8
70	Harper-dorn creep in single crystalline NaCl. <i>Scripta Metallurgica Et Materialia</i> , <b>1991</b> , 25, 2065-2070		8
69	Texture changes during the tensile deformation of a fine grained aluminium alloy. <i>Scripta Metallurgica</i> , <b>1985</b> , 19, 27-31		8



68	Role of particles on microstructure and mechanical properties of the severely processed 7075 aluminium alloy. <i>Journal of Materials Science</i> , <b>2014</b> , 49, 833-841	4.3	7
67	Influence of grain size fluctuations on ductility of superplastic magnesium alloys processed by severe plastic deformation. <i>Materials Science and Technology</i> , <b>2008</b> , 24, 1238-1244	1.5	7
66	Characterization of a thermomechanically processed powder metallurgy Al5wt.% Mg1.2wt.% Cr alloy. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2003</b> , 361, 36-44	5.3	7
65	Superplastic behaviour of Al-5wt.%Ca-5wt.%Zn alloy. <i>Materials Science and Engineering</i> , <b>1987</b> , 93, L11-L15		7
64	The effect of heterogeneous deformation on the hot deformation of WE54 magnesium alloy. <i>Materials &amp; Design</i> , <b>2014</b> , 58, 30-35		6
63	High-temperature deformation behavior of an Al-8.4Fe-3.6Ce dispersion-strengthened material. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , <b>1999</b> , 30, 371-376	2.3	6
62	Threshold stresses in high temperature deformation of dispersion strengthened aluminum alloys. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>1996</b> , 214, 177-180	5.3	6
61	Superplastic behavior of two ultrahigh boron steels. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , <b>1994</b> , 25, 1241-1248	2.3	6
60	Fracture of Al-4% Cu-0.1% Fe single crystals. <i>Journal of Materials Science</i> , <b>1989</b> , 24, 2594-2602	4.3	6
59	On solid solution hardening in Hf-O and Hf-N alloys. <i>Journal of the Less Common Metals</i> , <b>1977</b> , 52, 153-162		6
58	Influence of Grain Coarsening on the Creep Parameters During the Superplastic Deformation of a Severely Friction Stir Processed Al-Zn-Mg-Cu Alloy. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , <b>2017</b> , 48, 3980-3984	2.3	5
57	Friction Stir Processing of the Magnesium Alloy AZ61: Grain Size Refinement and Mechanical Properties. <i>Materials Science Forum</i> , <b>2012</b> , 706-709, 1823-1828	0.4	5
56	Fine and Ultra-Fine Grained AZ61 and AZ91 Magnesium Alloys Obtained by Friction Stir Processing. <i>Materials Science Forum</i> , <b>2012</b> , 706-709, 1002-1007	0.4	5
55	Deformation behaviour of an Al-6%Cu-0.4%Zr superplastic alloy containing a gradient of texture. <i>Journal of Alloys and Compounds</i> , <b>2005</b> , 403, 176-185	5.7	5
54	The fracture toughness of a ultrahigh carbon steel containing 1.5 wt% C. <i>Fatigue and Fracture of Engineering Materials and Structures</i> , <b>2006</b> , 29, 817-828	3	5
53	Texture evolution during deformation of an Al-6%Cu-0.4%Zr superplastic alloy. <i>Journal of Materials Science</i> , <b>2006</b> , 41, 5576-5586	4.3	5
52	Mechanical Property - Microstructure Relations in Iron-Carbon Alloys from 1.0 to 5.2% Carbon. <i>Materials Science Forum</i> , <b>2003</b> , 426-432, 11-18	0.4	5
51	Superplastic behaviour of a ceramic-based kappa/alpha Fe-10Al-1.9C material. <i>Journal of Materials Science</i> , <b>1994</b> , 29, 6581-6586	4.3	5

50	Influence of thermomechanical processing on superplastic forming of MgAl alloys. <i>Materials Science and Technology</i> , <b>2007</b> , 23, 444-450	1.5	4
49	Microstructural studies of a roll-bonded laminated ultrahigh carbon steel bar. <i>Materials Characterization</i> , <b>1991</b> , 27, 141-145	3.9	4
48	El método de Newton para la optimización de una nueva ecuación constitutiva para la fluencia plástica dependiente de la deformación. Aplicación a las aleaciones de magnesio AZ80 y AZ61. <i>Revista De Metalurgia</i> , <b>2013</b> , 49, 378-396	0.4	4
47	Fracture toughness for interfacial delamination of CrMo steel multilayer laminate. <i>Materials Science and Technology</i> , <b>2009</b> , 25, 632-635	1.5	3
46	Forming stability of an AlTiMo intermetallic compound and its dependence on microstructure. <i>Journal of Materials Processing Technology</i> , <b>2003</b> , 143-144, 416-419	5.3	3
45	Mechanical behavior and lattice reorientation during tensile deformation of Al-4%Cu-0.1%Fe single crystals. <i>Acta Metallurgica Et Materialia</i> , <b>1991</b> , 39, 2393-2403		3
44	High Temperature Mechanical Behavior of a 30%Ni-19%Cr Steel. <i>ISIJ International</i> , <b>2003</b> , 43, 2062-2066	1.7	3
43	Hot forming behavior of a modified NiCr superalloy. <i>International Journal of Materials Research</i> , <b>2020</b> , 111, 968-975	0.5	3
42	Influencia de la microestructura de partida en la ecuación constitutiva para la fluencia de un acero. <i>Revista De Metalurgia</i> , <b>2009</b> , 45, 70-75	0.4	3
41	Modelling the optimum hot workability of TiB reinforced Ti-6Al-4 V alloy by stability maps. <i>International Journal of Material Forming</i> , <b>2017</b> , 10, 379-387	2	2
40	Critical Analysis of Threshold Stresses in the Creep Mechanisms of a Powder Metallurgy Magnesium Alloy AZ31. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , <b>2020</b> , 51, 2344-2358	2.3	2
39	Superplasticity of Aerospace 7075 (Al-Zn-Mg-Cu) Aluminium Alloy Obtained by Severe Plastic Deformation. <i>Defect and Diffusion Forum</i> , <b>2018</b> , 385, 39-44	0.7	2
38	Mechanical Properties and Forming Behavior of a Type 9%Cr Steel Containing 2%W. <i>Materials Science Forum</i> , <b>2010</b> , 638-642, 3128-3133	0.4	2
37	Accumulative Roll Bonding of 7075 Aluminium Alloy at High Temperature. <i>Materials Science Forum</i> , <b>2010</b> , 638-642, 1929-1933	0.4	2
36	Simulation of Hot Rolling Processing of an Al-Cu-Mg Alloy by Torsion Tests. <i>Materials Science Forum</i> , <b>2012</b> , 706-709, 277-282	0.4	2
35	New Model for Characterization of Dynamic Recrystallization and Prediction of Grain Size Applied to Two Wrought Magnesium Alloys. <i>Materials Science Forum</i> , <b>2008</b> , 604-605, 87-96	0.4	2
34	Bond Strength of Ultrafine Grained Zr Fabricated by Accumulative Roll Bonding. <i>Materials Science Forum</i> , <b>2008</b> , 584-586, 243-248	0.4	2
33	Deformation Mechanisms of Superplastic Al&ndash;Li 8090 Alloy Examined by X-Ray Texture Measurements. <i>Materials Transactions, JIM</i> , <b>2000</b> , 41, 1562-1568		2

32	Relationship between microstructure and texture in Fe-25%Cr-5%Al ribbons produced by planar flow casting. <i>Scripta Metallurgica Et Materialia</i> , <b>1995</b> , 33, 1027-1031		2
31	Microstructure and stability conditions for hot deformation of a modified iron-based superalloy. <i>Materials Science and Technology</i> , <b>2019</b> , 35, 2217-2224	1.5	1
30	Optimum hot forming temperature of AZ61 magnesium alloy. <i>Materials Science and Technology</i> , <b>2018</b> , 34, 1425-1432	1.5	1
29	Effect of Annealing Treatments on Strain Rate Sensitivity and Anisotropy in a Magnesium Alloy Processed by Severe Rolling. <i>Materials Science Forum</i> , <b>2010</b> , 638-642, 1524-1529	0.4	1
28	Microstructure and Texture Evolution in Metals and Alloys during Intense Plastic Deformation. <i>Materials Science Forum</i> , <b>2012</b> , 715-716, 51-60	0.4	1
27	Nanostructuring a Zr-Hf Alloy via Large Strain Rolling. <i>Materials Science Forum</i> , <b>2007</b> , 539-543, 2843-2848	0.4	1
26	Bend and Shear Tests: Suitable Methods for Mechanical Characterization of Laminated Composite Materials. <i>Materials Science Forum</i> , <b>2007</b> , 539-543, 901-906	0.4	1
25	Thermomechanical Treatments of Ultrahigh Carbon Steels and Optimal Microstructures to Improve Toughness. <i>Materials Science Forum</i> , <b>2007</b> , 539-543, 4826-4831	0.4	1
24	Superplastic Behavior of Hot Extruded Gamma TiAl (Mo, Si) Alloys. <i>Materials Science Forum</i> , <b>2003</b> , 426-432, 1915-1920	0.4	1
23	Microstructural Evolution during Hot Rolling of an AZ31 Mg Alloy. <i>Materials Science Forum</i> , <b>2003</b> , 426-432, 637-642	0.4	1
22	Processing of Advanced Shape Memory Materials by Powder Metallurgy. <i>Materials Science Forum</i> , <b>2003</b> , 426-432, 4319-4324	0.4	1
21	Texture, Grain Boundaries and Deformation of Superplastic Aluminum Alloys. <i>Materials Science Forum</i> , <b>2001</b> , 357-359, 255-260	0.4	1
20	Characterization and Mechanical Properties of a $\gamma/\delta$ Duplex Stainless Steel. <i>Key Engineering Materials</i> , <b>1999</b> , 171-174, 389-394	0.4	1
19	Response to thermal treatment of a powder metallurgy Fe-0.8 % B-1.3 % C-1.6 %Cr alloy. <i>Steel Research = Archiv Für Das Eisenhüttenwesen</i> , <b>1995</b> , 66, 360-365		1
18	New insights on single-crystal orientation by the diffractometer method. <i>Materials Characterization</i> , <b>1991</b> , 27, 27-33	3.9	1
17	Nuevo modelo para la predicción de la microestructura final y los parámetros de recristalización dinámica de materiales metálicos policristalinos. Aplicación a la aleación de magnesio AZ31. <i>Revista De Metalurgia</i> , <b>2010</b> , 46, 115-127	0.4	1
16	High-Temperature Deformation Mechanisms in Ceramic Materials <b>1995</b> , 369-380		1
15	Determinación de los mecanismos de fractura de un material multicapa de aluminio de alta resistencia y excelente tenacidad a impacto basado en la aleación aeroespacial Al 7075. <i>Revista De Metalurgia</i> , <b>2012</b> , 48, 290-302	0.4	1

14	Hot Forming Optimization of ZK30 Magnesium Alloy. <i>Materials Science Forum</i> , <b>2018</b> , 941, 2325-2330	0.4	1
13	Creep behavior of an oxide dispersion strengthened Ni3Al ordered intermetallic material. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2000</b> , 278, 272-277	5.3	0
12	Comparison of efficiency and stability maps obtained by various methods. <i>Advances in Materials and Processing Technologies</i> , <b>2018</b> , 4, 132-141	0.8	
11	Comparative Analysis by the Newton Method of New Constitutive Strain Dependent Creep Equations Based on the Garofalo Equation. <i>Materials Science Forum</i> , <b>2014</b> , 783-786, 2136-2141	0.4	
10	Comparative Study of Various Data Conversion Methods for Torsion Tests Applied to a HSLA Steel. <i>Materials Science Forum</i> , <b>2010</b> , 638-642, 3164-3169	0.4	
9	The Ultrahigh Ductility of an Ultrahigh Carbon Steel Containing 3%Si. <i>Materials Science Forum</i> , <b>2007</b> , 539-543, 4801-4806	0.4	
8	Mechanical Properties of Composite Materials Consisting of M3/2 High Speed Steel Reinforced with Niobium Carbides. <i>Materials Science Forum</i> , <b>2007</b> , 539-543, 756-762	0.4	
7	Fracture Behavior of an Ultrahigh Carbon Steel Containing 1.3%C as Influenced by Microstructure and Testing Conditions. <i>Materials Science Forum</i> , <b>2003</b> , 426-432, 847-852	0.4	
6	Microstructure and mechanical properties of rapidly solidified Fe-25%Cr-5%Al ribbons produced by planar flow casting. <i>Steel Research = Archiv Für Das Eisenhüttenwesen</i> , <b>1995</b> , 66, 251-253		
5	La tensión umbral para la fluencia, en un material de base magnesio procesado por pulvimetalurgia. <i>Revista De Metalurgia</i> , <b>2010</b> , 46, 78-84	0.4	
4	Influencia del tratamiento térmico en las intercaras y propiedades mecánicas de un laminado multicapa de aluminio. <i>Revista De Metalurgia</i> , <b>2010</b> , 46, 85-94	0.4	
3	Un nuevo modelo fenomenológico y diferencial para predecir la respuesta mecánica de materiales metálicos policristalinos sometidos a deformación en caliente. <i>Revista De Metalurgia</i> , <b>2012</b> , 48, 367-376	0.4	
2	Processing Maps for the Hot Forming of Polycrystalline Metallic Materials Using the Garofalo Equation. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , <b>2020</b> , 51, 5836-5847	2.3	
1	Ductility and Stability in Metallic Materials. <i>Materials Science Forum</i> , <b>2018</b> , 941, 2319-2324	0.4	