Carlos H Caceres

List of Publications by Year
in descending order

99	5,111	87888	88630
papers	citations	38 h-index	70 g-index

103	103	103	2367
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Atomic size and local order effects on the high temperature strength of binary Mg alloys. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2016, 673, 114-121.	5.6	23
2	Grain Size Hardening Effects in Mg-Gd Solid Solutions. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2016, 47, 5401-5408.	2.2	11
3	High Temperature Strength and Stress Relaxation Behavior of Dilute Binary Mg Alloys. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2016, 47, 1313-1321.	2.2	25
4	Thermodynamics-Based Selection and Design of Creep-Resistant Cast Mg Alloys. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2015, 46, 5972-5988.	2.2	46
5	SDAS, Si and Cu Content, and the Size of Intermetallics in Al-Si-Cu-Mg-Fe Alloys. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2015, 46, 2082-2107.	2.2	11
6	Deformation Behavior of the Percolating Eutectic Intermetallic in HPDC and Squeeze-Cast Mg Alloys. Jom, 2014, 66, 2086-2094.	1.9	13
7	Strengthening Micromechanisms in Cold-Chamber High-Pressure Die-Cast Mg-Al Alloys. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2014, 45, 4117-4128.	2.2	16
8	The Strength of the Spatially Interconnected Eutectic Network in HPDC Mg-La, Mg-Nd, and Mg-La-Nd Alloys. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2014, 45, 4386-4397.	2.2	18
9	Strengthening by the percolating intergranular eutectic in an HPDC Mgâ€“Ce alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2014, 599, 204-211.	5.6	23
10	Strengthening Due to the Percolating Eutectic Microstructure in Squeeze Cast MRI230D. , 2014, , 203-207.		0
11	Alloy Composition and Dendrite Arm Spacing in Al-Si-Cu-Mg-Fe Alloys. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2013, 44, 4071-4080.	2.2	33
12	The development of the skin in HPDC Mgâ€“Al alloys. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2013, 580, 191-195.	5.6	20
13	A microplasticity-based definition of the skin in HPDC Mgâ€“Al alloys. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2013, 580, 355-361.	5.6	12
14	The Effect of Solidification Dynamics on the Formation of the Skin in Die Cast Mgâ€“Al and Mgâ€“RE Alloys. Advanced Engineering Materials, 2013, 15, 302-307.	3.5	11
15	Deformation Behavior of the Percolating Intermetallic Microstructure of High Pressure Die Cast <scp>AZ</scp>91 Alloy. Advanced Engineering Materials, 2013, 15, 1059-1067.	3.5	17
16	Low-strain plasticity in a high pressure die cast Mgâ€“Al alloy. Modelling and Simulation in Materials Science and Engineering, 2012, 20, 024010.	2.0	6
17	The skin effect and the yielding behavior of cold chamber high pressure die cast Mgâ€“Al alloys. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2012, 542, 49-55.	5.6	34
18	Anelastic Phenomena in Mg-Al Alloys. Acta Physica Polonica A, 2012, 122, 501-504.	0.5	14

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19	Grain Size Hardening in Mg and Mg-Zn Solid Solutions. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2011, 42, 1950-1959.	2.2	126
20	The skin effect in a high pressure die cast Mg-RE alloy. Metallic Materials, 2011, 49, 207-212.	0.3	2
21	On the development of a pseudo micro-truss intermetallic microstructure in a high pressure die cast AZ91 alloy. Journal of Physics: Conference Series, 2010, 240, 012005.	0.4	2
22	3D characterization of intermetallics in a high pressure die cast Mg alloy using focused ion beam tomography. Materials Characterization, 2010, 61, 1035-1042.	4.4	44
23	Size effects in aluminium alloy castings. Acta Materialia, 2010, 58, 3006-3013.	7.9	31
24	The Skin Effect in an Mg-RE High Pressure Die Cast Alloy. Materials Science Forum, 2010, 654-656, 691-694.	0.3	2
25	Cross-Sectional Geometry and the Intermetallics Structure in a High Pressure Die Cast Mg-Al Alloy. Materials Science Forum, 2010, 638-642, 1579-1584.	0.3	1
26	Role of Solute Content on the Intermetallic Structure Development in HPDC Mg-Al Binary Alloys. Materials Science Forum, 2009, 618-619, 479-482.	0.3	6
27	Solute Content and the Grain Microstructure of High Pressure Diecast Magnesiumâ€“Aluminium Alloys. Advanced Engineering Materials, 2009, 11, 912-919.	3.5	35
28	Transient environmental effects of light alloy substitutions in transport vehicles. Materials & Design, 2009, 30, 2813-2822.	5.1	35
29	Solute and Temperature Effects on the Strain Hardening Behaviour of Mg-Zn Solid Solutions. Materials Science Forum, 2008, 567-568, 45-50.	0.3	3
30	Solid-solution hardening and softening in Mgâ€“Zn alloys. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2008, 483-484, 161-163.	5.6	75
31	Strain hardening due to {10 <ovl>1</ovl>2} twinning in pure magnesium. Philosophical Magazine, 2008, 88, 991-1003.	1.6	84
32	Strain hardening behaviour and the Taylor factor of pure magnesium. Philosophical Magazine, 2008, 88, 977-989.	1.6	190
33	Solute Content and the Tensile Behavior of High Pressure Die Cast Mg-Al Alloys. Materials Science Forum, 2007, 561-565, 333-336.	0.3	4
34	On the strain hardening behaviour of magnesium at room temperature. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2007, 462, 193-196.	5.6	91
35	Reversible plastic strain during cyclic loadingâ€“unloading of Mg and Mgâ€“Zn alloys. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2007, 456, 138-146.	5.6	128
36	On the strain to the onset of serrated flow in a magnesium alloy. Scripta Materialia, 2007, 56, 793-796.	5.2	17

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37	Economical and Environmental Factors in Light Alloys Automotive Applications. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2007, 38, 1649-1662.	2.2	71
38	Enhanced ductility in Al-Si-Cu-Mg foundry alloys with high Si content. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2006, 37, 897-903.	2.1	22
39	Light Alloy Castings for Automotive Applications: The Case of Al vs. Mg. Materials Science Forum, 2006, 519-521, 1801-1808.	0.3	3
40	Section thickness, macrohardness and yield strength in high-pressure diecast magnesium alloy AZ91. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2005, 402, 269-277.	5.6	72
41	Microhardness mapping and the hardness-yield strength relationship in high-pressure diecast magnesium alloy AZ91. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2005, 402, 258-268.	5.6	83
42	Effect of Si additions and heat treatment on the mechanical behaviour of an Alâ€“5Mg casting alloy. International Journal of Cast Metals Research, 2004, 17, 94-98.	1.0	9
43	Serrated flow in magnesium alloy AZ91. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2004, 387-389, 22-24.	5.6	74
44	Modeling of hardening and softening processes in Mg alloys. Journal of Alloys and Compounds, 2004, 378, 176-179.	5.5	41
45	Hall-Petch parameters in tension and compression in cast Mgâ€“2Zn alloys. Journal of Alloys and Compounds, 2004, 378, 188-191.	5.5	77
46	Damage by eutectic particle cracking in aluminum casting alloys A356/357. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2003, 34, 2901-2912.	2.2	163
47	Pseudoelastic behaviour of cast magnesium AZ91 alloy under cyclic loadingâ€“unloading. Acta Materialia, 2003, 51, 6211-6218.	7.9	256
48	Hall-Petch Parameters for Tension and Compression in Cast Mg. Materials Science Forum, 2003, 419-422, 123-128.	0.3	62
49	The Effect of Microstructural Features and Defects on the Ductility of High Pressure Die Cast AS21, AM60 and AZ91. Materials Science Forum, 2003, 419-422, 147-152.	0.3	14
50	Strength-Ductility Behaviour of Al-Si-Cu-Mg Casting Alloys in T6 Temper. International Journal of Cast Metals Research, 2003, 15, 531-543.	1.0	143
51	The elastic modulus of cast Mgâ€“Alâ€“Zn alloys. Journal of Light Metals, 2002, 2, 49-56.	0.8	67
52	The Strength of Concentrated Mg-Zn Solid Solutions. Physica Status Solidi A, 2002, 194, 147-158.	1.7	127
53	Effects of solidification rate and ageing on the microstructure and mechanical properties of AZ91 alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2002, 325, 344-355.	5.6	229
54	Hardness and flow strength in particulate metal matrix composites. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2002, 332, 311-317.	5.6	19

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55	Quality index chart for different alloys and temperatures: a case study on aluminium die-casting alloys. Journal of Light Metals, 2001, 1, 51-59.	0.8	26
56	Solid solution strengthening in concentrated Mgâ€“Al alloys. Journal of Light Metals, 2001, 1, 151-156.	0.8	205
57	Material properties and process assessment in Mg-Al casting alloys using strengthâ€”ductility charts. International Journal of Cast Metals Research, 2001, 14, 185-197.	1.0	10
58	A phenomenological approach to the Quality Index of Al-Si-Mg casting alloys. International Journal of Cast Metals Research, 2000, 12, 367-375.	1.0	41
59	Selection of temper and Mg content to optimise the Quality Index of Al-7Si-Mg casting alloys. International Journal of Cast Metals Research, 2000, 12, 377-384.	1.0	25
60	A rationale for the quality index of Al-Si-Mg casting alloys. International Journal of Cast Metals Research, 2000, 12, 385-391.	1.0	16
61	Microstructure Design and Heat Treatment Selection for Casting Alloys Using the Quality Index. Journal of Materials Engineering and Performance, 2000, 9, 215-221.	2.5	37
62	Microstructural Effects on the Strength-Ductility Relationship of Al-7Si-Mg Casting Alloys. Materials Science Forum, 2000, 331-337, 223-228.	0.3	8
63	Effect of aging on quality index of an Alâ€“Cu casting alloy. Materials Science and Technology, 1999, 15, 711-716.	1.6	38
64	The effect of Mg on the microstructure and mechanical behavior of Al-Si-Mg casting alloys. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 1999, 30, 2611-2618.	2.2	152
65	The effect of Cu content on the level of microporosity in Al-Si-Cu-Mg casting alloys. Scripta Materialia, 1999, 40, 631-637.	5.2	99
66	Mg Effects on the Eutectic Structure and Tensile Properties of Al-Si-Mg Alloys. Materials Science Forum, 1997, 242, 159-164.	0.3	32
67	Porosity formation in aluminium alloy castings under quasi-directional solidification. International Journal of Cast Metals Research, 1997, 9, 331-336.	1.0	6
68	The influence of microstructure on the Bauschinger effect in an Alî—¸Siî—¸Mg casting alloy. Acta Materialia, 1996, 44, 15-23.	7.9	100
69	Damage by the cracking of silicon particles in an Al-7Si-0.4Mg casting alloy. Acta Materialia, 1996, 44, 25-33.	7.9	223
70	Microstructural aspects of superplastic deformation of Al2O3/ZrO2 laminate composites. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 1996, 219, 148-155.	5.6	5
71	Casting defects and the tensile properties of an AlSiMg alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 1996, 220, 109-116.	5.6	263
72	The deformation and fracture behaviour of an Alî—¸Siî—¸Mg casting alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 1995, 197, 171-179.	5.6	161

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73	On the effect of macroporosity on the tensile properties of the Al-7%Si-0.4%Mg casting alloy. Scripta Metallurgica Et Materialia, 1995, 32, 1851-1856.	1.0	88
74	Tape Casting of Fine Alumina/Zirconia Powders for Composite Fabrication. Journal of the American Ceramic Society, 1994, 77, 2137-2144.	3.8	53
75	Processing of Tape-Cast Laminates Prepared from Fine Alumina/Zirconia Powders. Journal of the American Ceramic Society, 1994, 77, 2145-2153.	3.8	57
76	Tape Casting Using Fine Ceramic Powders. Materials Research Society Symposia Proceedings, 1991, 249, 305.	0.1	0
77	Creep and Creep Fracture in Hot-Pressed Alumina. Journal of the American Ceramic Society, 1991, 74, 915-921.	3.8	81
78	Damage and Fracture Mechanisms During High-Temperature Creep in Hot-Pressed Alumina. Journal of the American Ceramic Society, 1991, 74, 922-933.	3.8	36
79	The growth of artificial voids during superplastic deformation of a Znî—¸Alî—¸Cu alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 1990, 128, 147-154.	5.6	1
80	Effect of cyclic deformation on strain enhanced grain growth during superplastic flow. Materials Science and Technology, 1989, 5, 999-1004.	1.6	1
81	Strain enhanced grain growth at large strains in a superplastic ZnAl alloy. Scripta Metallurgica, 1988, 22, 359-364.	1.2	2
82	Acoustic emission and deformation bands in Al-2.5% Mg and Cu-30% Zn. Acta Metallurgica, 1987, 35, 2851-2864.	2.1	47
83	Cavitation damage in the superplastic Zn-22% Al-0.5% Cu alloy. Acta Metallurgica, 1987, 35, 897-906.	2.1	19
84	Mechanism of plastic void growth during superplastic flow. Materials Science and Technology, 1986, 2, 1086-1092.	1.6	20
85	Superplastic behavior of a zn-22 pct ai-0.5 pct cu alloy. Metallurgical and Materials Transactions A - Physical Metallurgy and Materials Science, 1986, 17, 1873-1875.	1.4	11
86	Amplitude measurement in acoustic emission. Review of Scientific Instruments, 1985, 56, 1669-1670.	1.3	3
87	On the mechanism of strain-enhanced grain growth during superplastic deformation. Acta Metallurgica, 1984, 32, 1335-1345.	2.1	179
88	Large strain behaviour of a superplastic copper alloyâ€”I. Deformation. Acta Metallurgica, 1984, 32, 415-422.	2.1	113
89	Large strain behaviour of a superplastic copper alloyâ€”II. Cavitation and fracture. Acta Metallurgica, 1984, 32, 423-434.	2.1	67
90	An evaluation of available data for strain-enhanced grain growth during superplastic flow. Journal of Materials Science Letters, 1984, 3, 395-399.	0.5	49

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91	Detection of acoustic emission and simultaneous observation of nuclear quadrupole resonance in the Î± â‡‹ Î² phase transition of paradichlorobenzene. Journal of Physics and Chemistry of Solids, 1983, 44, 647-650.	4.0	3
92	Acoustic emission during non-homogeneous flow in Al MG alloys. Scripta Metallurgica, 1983, 17, 1115-1120.	1.2	19
93	Grain growth at low strain rates in a superplastic Cu alloy. Scripta Metallurgica, 1982, 16, 1363-1365.	1.2	12
94	Acoustic emission related to stress induced martensitic transformation in Î² Cuî—¸Zn. Scripta Metallurgica, 1980, 14, 293-297.	1.2	51
95	Investigation of Streaking Defects on Aluminium Extrusions. Materials Science Forum, 0, 561-565, 341-344.	0.3	2
96	The Skin Effect in a High Pressure Die Cast Mg-9%Al Alloy. Advanced Materials Research, 0, 97-101, 743-747.	0.3	1
97	Effect of Si Content on the Size of Fe-Rich Intermetallic Particles in Al-xSi-0.8Fe Alloys. Materials Science Forum, 0, 765, 107-111.	0.3	2
98	Tape Cast Al2O3/ZrO2 Composite Laminates. Ceramic Engineering and Science Proceedings, 0, , 873-880.	0.1	5
99	Elastic Behavior of the Percolating Eutectic Structure of a High Pressure Die Cast Magnesium Alloy. , 0, , 79-83.		0