Carmen M Cepeda-JimÃ©nez

List of Publications by Year
in descending order

62 papers	1,961 citations	196777 29 h-index	299063 42 g-index
62 all docs	62 docs citations	62 times ranked	1650 citing authors

#	Article	IF	Citations
1	The relation between ductility at high temperature and solid solution in Mg alloys. Journal of Magnesium and Alloys, 2022, 10, 224-238.	5.5	16
2	Origin of the low precipitation hardening in magnesium alloys. Acta Materialia, 2019, 165, 164-176.	3.8	80
3	Understanding the high temperature reversed yield asymmetry in a Mg-rare earth alloy by slip trace analysis. Acta Materialia, 2018, 145, 264-277.	3.8	57
4	Grain size versus microstructural stability in the high strain rate superplastic response of a severely friction stir processed Al-Zn-Mg-Cu alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2017, 680, 329-337.	2.6	36
5	Tuning the magnetic properties of pure hafnium by high pressure torsion. Acta Materialia, 2017, 123, 206-213.	3.8	14
6	Controlling the high temperature mechanical behavior of Al alloys by precipitation and severe straining. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2017, 679, 36-47.	2.6	5
7	Microstructure, mechanical properties and creep of magnesium alloy Elektron21 reinforced with AlN nanoparticles by ultrasound-assisted stirring. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2016, 659, 84-92.	2.6	52
8	Influence of the Accumulative Roll Bonding Process Severity on the Microstructure and Superplastic Behaviour of 7075 Al Alloy. Journal of Materials Science and Technology, 2016, 32, 774-782.	5.6	27
9	Microplasticity-based rationalization of the room temperature yield asymmetry in conventional polycrystalline Mg alloys. Acta Materialia, 2016, 108, 304-316.	3.8	52
10	Onset of room temperature ferromagnetism by plastic deformation in three paramagnetic pure metals. Scripta Materialia, 2016, 118, 41-45.	2.6	6
11	EBSD-Assisted Slip Trace Analysis During In Situ SEM Mechanical Testing: Application to Unravel Grain Size Effects on Plasticity of Pure Mg Polycrystals. Jom, 2016, 68, 116-126.	0.9	29
12	Strategy for severe friction stir processing to obtain acute grain refinement of an Alâ€“Znâ€“Mgâ€“Cu alloy in three initial precipitation states. Materials Characterization, 2016, 112, 197-205.	1.9	38
13	Strength ceiling smashed for light metals. Nature, 2015, 528, 486-487.	13.7	16
14	Origin of the twinning to slip transition with grain size refinement, with decreasing strain rate and with increasing temperature in magnesium. Acta Materialia, 2015, 88, 232-244.	3.8	127
15	Effect of grain size on slip activity in pure magnesium polycrystals. Acta Materialia, 2015, 84, 443-456.	3.8	187
16	Prominent role of basal slip during high-temperature deformation of pure Mg polycrystals. Acta Materialia, 2015, 85, 1-13.	3.8	48
17	Influence of microstructural stability on the creep mechanism of Alâ€“7wt% Si alloy processed by equal channel angular pressing. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2014, 612, 162-171.	2.6	16
18	Role of particles on microstructure and mechanical properties of the severely processed 7075 aluminium alloy. Journal of Materials Science, 2014, 49, 833-841.	1.7	9

#	Article	IF	Citations
19	Evolution of the microstructure, texture and creep properties of the 7075 aluminium alloy during hot accumulative roll bonding. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2014, 606, 434-442.	2.6	31
20	Assessment of homogeneity of the shear-strain pattern in Alâ€“7wt%Si casting alloy processed by high-pressure torsion. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2014, 597, 102-110.	2.6	12
21	Effect of Processing Temperature on the Texture and Shear Mechanical Properties of Diffusion Bonded Ti-6Al-4V Multilayer Laminates. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2013, 44, 4743-4753.	1.1	10
22	Achieving microstructures prone to superplastic deformation in an Alâ€“Znâ€“Mgâ€“Cu alloy by equal channel angular pressing. Journal of Alloys and Compounds, 2013, 546, 253-259.	2.8	29
23	Lowering the temperature for high strain rate superplasticity in an Alâ€“Mgâ€“Znâ€“Cu alloy via cooled friction stir processing. Materials Chemistry and Physics, 2013, 142, 182-185.	2.0	41
24	Influence of interfacial defects on the impact toughness of solid state diffusion bonded Tiâ€“6 Alâ€“4 V alloy based multilayer composites. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2013, 563, 28-35.	2.6	44
25	Influence of Processing Severity During Equal-Channel Angular Pressing on the Microstructure of an Al-Zn-Mg-Cu Alloy. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2012, 43, 4224-4236.	1.1	23
26	Study of hot deformation of an Alâ€“Cuâ€“Mg alloy using processing maps and microstructural characterization. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2012, 552, 530-539.	2.6	48
27	Effect of warm accumulative roll bonding on the evolution of microstructure, texture and creep properties in the 7075 aluminium alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2012, 556, 287-294.	2.6	30
28	DeterminaciÃ³n de los mecanismos de fractura de un material multicapa de aluminio de alta resistencia y excelente tenacidad a impacto basado en la aleaciÃ³n aeroespacial Al 7075. Revista De Metalurgia, 2012, 48, 290-302.	0.1	1
29	Influence of the thermal treatment on the deformation-induced precipitation of a hypoeutectic Alâ€“7 wt% Si casting alloy deformed by high-pressure torsion. Journal of Alloys and Compounds, 2011, 509, 636-643.	2.8	67
30	Mechanical properties at room temperature of an Alâ€“Znâ€“Mgâ€“Cu alloy processed by equal channel angular pressing. Journal of Alloys and Compounds, 2011, 509, 8649-8656.	2.8	71
31	High strain rate superplasticity at intermediate temperatures of the Al 7075 alloy severely processed by equal channel angular pressing. Journal of Alloys and Compounds, 2011, 509, 9589-9597.	2.8	48
32	Influence of the supersaturated silicon solid solution concentration on the effectiveness of severe plastic deformation processing in Alâ€“7wt.% Si casting alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2011, 528, 7938-7947.	2.6	37
33	Microstructural characterization by electron backscatter diffraction of a hot worked Alâ€“Cuâ€“Mg alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2011, 528, 3161-3168.	2.6	11
34	Effect of thermal treatment on the interfacial shear toughness of an aluminium composite laminate. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2010, 527, 2579-2587.	2.6	9
35	Influence of Constituent Materials on the Impact Toughness and Fracture Mechanisms of Hot-Roll-Bonded Aluminum Multilayer Laminates. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2010, 41, 61-72.	1.1	29
36	Influence of the Processing Temperature on the Microstructure, Texture, and Hardness of the 7075 Aluminum Alloy Fabricated by Accumulative Roll Bonding. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2010, 41, 758-767.	1.1	37

#	Article	IF	Citations
37	Influencia del tratamiento tÃ©rmico en las intercaras y propiedades mecÃ¡nicas de un laminado multicapa de aluminio. Revista De Metalurgia, 2010, 46, 85-94.	0.1	0
38	Fracture toughness for interfacial delamination of Crâ€“Mo steel multilayer laminate. Materials Science and Technology, 2009, 25, 632-635.	0.8	14
39	Impact toughness improvement of high-strength aluminium alloy by intrinsic and extrinsic fracture mechanisms via hot roll bonding. Scripta Materialia, 2009, 61, 407-410.	2.6	41
40	Interface Effects on the Fracture Mechanism of a High-Toughness Aluminum-Composite Laminate. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2009, 40, 69-79.	1.1	37
41	Damage tolerance assessment by bend and shear tests of two multilayer composites: Glass fibre reinforced metal laminate and aluminium roll-bonded laminate. Composites Science and Technology, 2009, 69, 343-348.	3.8	38
42	Enhanced grain refinement due to deformation-induced precipitation during ambient-temperature severe plastic deformation of an Alâ€“7%Si alloy. Journal of Alloys and Compounds, 2009, 478, 139-143.	2.8	31
43	Influence of the thermal treatment on the microstructure and hardness evolution of 7075 aluminium layers in a hot-rolled multilayer laminate composite. Journal of Alloys and Compounds, 2009, 478, 154-162.	2.8	11
44	Effect of Hot Rolling on Bonding Characteristics and Impact Behavior of a Laminated Composite Material Based on UHCS-1.35ÂPct C. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2008, 39, 666-671.	1.1	29
45	Influence of the thermomechanical processing on the fracture mechanisms of high strength aluminium/pure aluminium multilayer laminate materials. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2008, 490, 319-327.	2.6	46
46	Influence of the alumina thickness at the interfaces on the fracture mechanisms of aluminium multilayer composites. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2008, 496, 133-142.	2.6	41
47	Effect of the deformation path on the ductility of a hypoeutectic Alâ€“Si casting alloy subjected to equal-channel angular pressing by routes A, BA, BC and C. Scripta Materialia, 2008, 58, 138-141.	2.6	61
48	Corona discharge treatment of EVAs with different vinyl acetate contents. Journal of Adhesion Science and Technology, 2007, 21, 441-463.	1.4	11
49	Influence of the Particle Size of CaCO3on the Adhesion of Filled EVA Materials. Macromolecular Symposia, 2005, 221, 23-32.	0.4	1
50	Surface treatment of vulcanized latex soles to improve their adhesion performance in shoe manufacturing. Journal of Adhesion Science and Technology, 2005, 19, 19-40.	1.4	1
51	Surface modifications of EVA copolymers by using RF oxidizing and non-oxidizing plasmas. Surface and Coatings Technology, 2003, 174-175, 94-99.	2.2	16
52	Chemical modification of styreneâ€“butadieneâ€“styrene (SBS) rubber by reactive grafting with maleic anhydride. Journal of Adhesion Science and Technology, 2003, 17, 1713-1726.	1.4	10
53	Treatment of thermoplastic rubberwith chlorine bleach as an alternative halogenation treatment in the footwear industry. Journal of Adhesion, 2003, 79, 207-237.	1.8	17
54	Treatment of EVA with corona discharge to improve its adhesion to polychloroprene adhesive. Journal of Adhesion Science and Technology, 2003, 17, 47-65.	1.4	29

#	Article	IF	Citations
55	Surface modifications of EVA copolymers induced by low pressure RF plasmas from different gases and their relation to adhesion properties. Journal of Adhesion Science and Technology, 2003, 17, 1145-1159.	1.4	11
56	A new water-based chemical treatment based on sodium dichloroisocyanurate (DCI) for rubber soles in the footwear industry. Journal of Adhesion Science and Technology, 2002, 16, 257-283.	1.4	12
57	Influence of the styrene content of thermoplastic styreneâ€“butadiene rubbers in the effectiveness of the treatment with sulfuric acid. International Journal of Adhesion and Adhesives, 2001, 21, 161-172.	1.4	42
58	Influence of the vinyl acetate content and the tackifier nature on the rheological, thermal, and adhesion properties of EVA adhesives. Journal of Adhesion Science and Technology, 2001, 15, 243-263.	1.4	11
59	Weak boundary layers on vulcanized styreneâ€“butadiene rubber treated with sulfuric acid. Journal of Adhesion Science and Technology, 2001, 15, 1323-1350.	1.4	9
60	Surface Characterization of Vulcanized Rubber Treated with Sulfuric Acid and its Adhesion to Polyurethane Adhesive. Journal of Adhesion, 2000, 73, 135-160.	1.8	45
61	Accumulative Roll Bonding of 7075 Aluminium Alloy at High Temperature. Materials Science Forum, 0, 638-642, 1929-1933.	0.3	2
62	Simulation of Hot Rolling Processing of an Al-Cu-Mg Alloy by Torsion Tests. Materials Science Forum, 0, 706-709, 277-282.	0.3	2