Emanuela Cerri

List of Publications by Year
in descending order

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Version: 2024-02-01

85 papers	2,015 citations	236833 25 h-index	265120 42 g-index
86 all docs	86 docs citations	86 times ranked	1355 citing authors

#	Article	IF	Citations
1	Comparative hot workability of 7012 and 7075 alloys after different pretreatments. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 1995, 197, 181-198.	2.6	166
2	Evolution of microstructure in a modified 9Crâ€“1Mo steel during short term creep. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 1998, 245, 285-292.	2.6	88
3	Interpretation of creep behaviour of a 9Crâ€“Moâ€“Nbâ€“Vâ€“N (T91) steel using threshold stress concept. Materials Science and Technology, 1999, 15, 1433-1440.	0.8	83
4	Mechanical response of 2024-7075 aluminium alloys joined by Friction Stir Welding. Journal of Materials Science, 2005, 40, 3669-3676.	1.7	82
5	Effects of thermal treatments on microstructure and mechanical properties in a thixocast 319 aluminum alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2000, 284, 254-260.	2.6	76
6	Hot compression behavior of the AZ91 magnesium alloy produced by high pressure die casting. Journal of Materials Processing Technology, 2007, 189, 97-106.	3.1	76
7	Creep behavior of an aluminum 2024 alloy produced by powder metallurgy. Acta Materialia, 1997, 45, 529-540.	3.8	75
8	Friction Stir Welding of Ceramic Particle Reinforced Aluminium Based Metal Matrix Composites. Applied Composite Materials, 2004, 11, 247-258.	1.3	68
9	An analysis of hot formability of the 6061+20% Al2O3 composite by means of different stability criteria. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2002, 327, 144-154.	2.6	66
10	Hot deformation and processing maps of a particulate-reinforced 6061+20% Al2O3 composite. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2002, 324, 157-161.	2.6	65
11	Properties and deformation behaviour of severe plastic deformed aluminium alloys. Journal of Materials Processing Technology, 2007, 182, 207-214.	3.1	61
12	Electrodeposition of ZnTe for photovoltaic cells. Thin Solid Films, 2000, 361-362, 388-395.	0.8	60
13	Influence of severe plastic deformation on aging of Alâ€“Mgâ€“Si alloys. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2005, 410-411, 226-229.	2.6	54
14	FEM and metallurgical analysis of modified 6082 aluminium alloys processed by multipass ECAP: Influence of material properties and different process settings on induced plastic strain. Journal of Materials Processing Technology, 2009, 209, 1550-1564.	3.1	54
15	Divorced eutectic in a HPDC magnesiumâ€“aluminum alloy. Journal of Alloys and Compounds, 2004, 378, 226-232.	2.8	49
16	Hot deformation and processing maps of a particulate reinforced 2618/Al2O3/20p metal matrix composite. Composites Science and Technology, 2004, 64, 1287-1291.	3.8	46
17	Constitutive equations for hot deformation of an Al-6061/20%Al2O3 composite. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2001, 319-321, 721-725.	2.6	43
18	Effect of heat treatments on mechanical properties and damage evolution of thixoformed aluminium alloys. Materials Characterization, 2005, 55, 35-42.	1.9	41

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19	Fatigue crack growth behavior of a selective laser melted AlSi10Mg. Engineering Fracture Mechanics, 2019, 217, 106564.	2.0	38
20	Restoration mechanisms in large-strain deformation of high purity aluminum at ambient temperature and the determination of the existence of â€œsteady-stateâ€• Acta Metallurgica Et Materialia, 1994, 42, 3223-3230.	1.9	36
21	Effect of heat treatments on mechanical properties and fracture behavior of a thixocast A356 aluminum alloy. Journal of Materials Science, 2004, 39, 1653-1658.	1.7	36
22	Restoration mechanisms in large-strain deformation of high purity aluminum at ambient temperature. Scripta Metallurgica Et Materialia, 1994, 31, 1331-1336.	1.0	33
23	Mechanical properties evolution during post-welding-heat treatments of double-lap Friction Stir Welded joints. Materials & Design, 2011, 32, 3465-3475.	5.1	33
24	Warm and room temperature deformation of friction stir welded thin aluminium sheets. Materials & Design, 2010, 31, 1392-1402.	5.1	29
25	Evaluation of the KIC and JIC fracture parameters in a sand cast AZ91 magnesium alloy. Engineering Failure Analysis, 2004, 11, 127-140.	1.8	28
26	Numerical reliability of hot working processing maps. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2002, 328, 344-347.	2.6	26
27	Effect of the Distance from Build Platform and Post-Heat Treatment of AlSi10Mg Alloy Manufactured by Single- and Multi-Laser Selective Laser Melting. Journal of Materials Engineering and Performance, 2021, 30, 4981-4992.	1.2	24
28	Mechanical Properties and Microstructural Evolution of Friction-Stir-Welded Thin Sheet Aluminum Alloys. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2011, 42, 1283-1295.	1.1	23
29	Mo Addition to the A354 (Alâ€“Siâ€“Cuâ€“Mg) Casting Alloy: Effects on Microstructure and Mechanical Properties at Room and High Temperature. Metals, 2018, 8, 393.	1.0	23
30	The influence of high temperature exposure on aging kinetics of a die cast magnesium alloy. Materials Letters, 2002, 56, 716-720.	1.3	21
31	Constitutive Equations for Mg Alloy Hot Work Modeling. Materials Science Forum, 2008, 604-605, 53-65.	0.3	21
32	Additive Manufacturing of AlSi10Mg and Ti6Al4V Lightweight Alloys via Laser Powder Bed Fusion: A Review of Heat Treatments Effects. Materials, 2022, 15, 2047.	1.3	21
33	Significance of continuous precipitation during creep of a powder mettallurgy aluminum alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 1996, 216, 161-168.	2.6	20
34	Compressive plastic deformation of an AS21X magnesium alloy produced by high pressure die casting at elevated temperatures. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2004, 367, 9-16.	2.6	20
35	Isothermal forging modelling of 2618 + 20% Al2O3p metal matrix composite. Journal of Alloys and Compounds, 2004, 378, 117-122.	2.8	20
36	Influence of high temperature thermal treatment on grain stability and mechanical properties of medium strength aluminium alloy friction stir welds. Journal of Materials Processing Technology, 2013, 213, 75-83.	3.1	20

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37	An evaluation of the creep properties of two Al-Si alloys produced by rapid solidification processing. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 1996, 27, 3871-3879.	1.1	18
38	Interpretation of constant-load and constant-stress creep behavior of a magnesium alloy produced by rapid solidification. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 1998, 254, 90-98.	2.6	17
39	Influence of Cu addition on the heat treatment response of A356 foundry alloy. Materials Today Communications, 2019, 19, 342-348.	0.9	17
40	Influence of microstructure and porosity on the fracture toughness of Al-Si-Mg alloy. Journal of Materials Research and Technology, 2020, 9, 1286-1295.	2.6	15
41	Work Hardening of Heat-Treated AlSi10Mg Alloy Manufactured by Selective Laser Melting: Effects of Layer Thickness and Hatch Spacing. Materials, 2021, 14, 4901.	1.3	14
42	The Influence of Ni and V Trace Elements on High-Temperature Tensile Properties and Aging of A356 Aluminum Foundry Alloy. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2016, 47, 2049-2057.	1.1	12
43	Microstructural evolution during high-temperature exposure in a thixocast magnesium alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2002, 333, 208-217.	2.6	11
44	On the effect of plastic deformation on the coarsening of Î¸'-phase precipitation in an Al-Cu alloy. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 1997, 28, 257-263.	1.1	10
45	Friction Stir Welding of Ceramic Particle Reinforced Aluminium Based Metal Matrix Composites. Applied Composite Materials, 2004, 11, 399.	1.3	10
46	Isothermal forging of AA2618 + 20% Al2O3 by means of hot torsion and hot compression tests. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2004, 387-389, 857-861.	2.6	10
47	High temperature mechanical properties of an aluminum alloy containing Zn and Mg. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2012, 550, 206-213.	2.6	10
48	Microstructure evolution and mechanical properties of hot deformed Mg9Al1Zn samples containing a friction stir processed zone. Journal of Magnesium and Alloys, 2017, 5, 388-403.	5.5	10
49	Repairing 2024 Aluminum Alloy via Electrospark Deposition Process: A Feasibility Study. Advances in Materials Science and Engineering, 2018, 2018, 1-11.	1.0	9
50	Effect of Low-Temperature Annealing on Creep Properties of AlSi10Mg Alloy Produced by Additive Manufacturing: Experiments and Modeling. Metals, 2021, 11, 179.	1.0	9
51	Defect-Correlated Vickers Microhardness of Al-Si-Mg Alloy Manufactured by Laser Powder Bed Fusion with Post-process Heat Treatments. Journal of Materials Engineering and Performance, 2022, 31, 8047-8067.	1.2	9
52	Evaluation of damage after straining in a heat treated thixoformed aluminium alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2003, 355, 160-166.	2.6	8
53	Mechanical behavior and microstructure of Au-Ni brazes. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 1995, 26, 941-948.	1.1	7
54	Room Temperature Mechanical Properties of A356 Alloy with Ni Additions from 0.5 Wt to 2 Wt %. Metals, 2018, 8, 224.	1.0	7

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55	The relationship between microstructural and plastic instability in Al-4.0 Wt Pct Cu alloy. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 1996, 27, 2916-2922.	1.1	6
56	Effect of heterogeneous deformation on the creep behaviour of a near-fully lamellar TiAl-base alloy at 750 Â°C. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 1996, 211, 15-22.	2.6	6
57	Effect of treatment temperature on the texture of mechanically alloyed Feâ€"40 at.% Al+Y2O3 intermetallic. Materials Letters, 1999, 41, 283-288.	1.3	6
58	Aging of medium strength aluminum alloy friction stir welds produced by different process parameter after tensile strain hardening. Materials Chemistry and Physics, 2014, 147, 1123-1133.	2.0	6
59	How Slight Solidification Rate Variations within Cast Plate Affect Mechanical Response: A Study on As-Cast A356 Alloy with Cu Additions. Advances in Materials Science and Engineering, 2018, 2018, 1-11.	1.0	6
60	Optical substructure and serrations in hot deformed Al-5.8 at.% Mg alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 1997, 234-236, 373-377.	2.6	5
61	Effect of Friction Stir Processing on Microstructure and Mechanical Properties of a HPDC Magnesium Alloy. Materials Science Forum, 0, 783-786, 1735-1740.	0.3	5
62	High Temperature Behaviour of the HPDC AS21X Magnesium Alloy. Materials Science Forum, 2003, 419-422, 433-438.	0.3	4
63	Friction Stir Processing at High Rotation Rates of a Magnesium Alloy: Mechanical Properties at High Temperatures and Microstructure. Materials Science Forum, 2016, 879, 295-300.	0.3	4
64	Effect of Friction Stir Processing at High Rotational Speed on Aging of a HPDC Mg9Al1Zn. Metals, 2020, 10, 1014.	1.0	4
65	Mechanical Behaviour of 319 Heat Treated Thixo Cast Bars. Materials Science Forum, 2000, 331-337, 259-264.	0.3	3
66	Isothermal Forging Modelling of Aluminium Based Metal Matrix Composites. Materials Science Forum, 2002, 396-402, 505-512.	0.3	3
67	Mechanical and microstructural characterization of friction stir welded skin and stringer joints. Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture, 2014, 228, 278-290.	1.5	3
68	Assessment of the Creep Response of New Powder Metallurgy - Rapid Solidification Al-Si-Ni-Cr and Al-Si-Cu-Fe Alloys. Materials Science Forum, 1996, 217-222, 1423-1428.	0.3	2
69	Characteristics of grain boundary migration and sliding during fatigue of high purity lead. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 1997, 222, 9-13.	2.6	2
70	Microstructure and Mechanical Characterization of an Al-Zn-Mg Alloy after Various Heat Treatments and Room Temperature Deformation. Materials Science Forum, 0, 604-605, 67-76.	0.3	2
71	Thermal Stability of Fine Grains as a Function of Process Parameters in FSW Butt Joints. Materials Science Forum, 0, 683, 249-254.	0.3	2
72	Friction Stir Welding of Ti-6Al-4V Alloy. Materials Science Forum, 0, 783-786, 574-579.	0.3	2

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73	Correlation between Aging Effects and High Temperature Mechanical Properties of the Unmodified A356 Foundry Aluminium Alloy. Materials Science Forum, 2016, 879, 424-429.	0.3	2
74	Aging Response in Selective Laser Melted AlSi10Mg Alloy as Function of Distance from the Substrate Plate. Materials Science Forum, 0, 1016, 476-480.	0.3	2
75	Ti6Al4V-ELI Alloy Manufactured via Laser Powder-Bed Fusion and Heat-Treated below and above the Î²-Transus: Effects of Sample Thickness and Sandblasting Post-Process. Applied Sciences (Switzerland), 2022, 12, 5359.	1.3	2
76	Effect of Post-Processing Heat Treatments on Short-Term Creep Response at 650 Â°C for a Ti-6Al-4V Alloy Produced by Additive Manufacturing. Metals, 2022, 12, 1084.	1.0	2
77	Microstructural Refinement of Cast Ti48Al2W0.5Si Alloy by Static Heat Treatment. High Temperature Materials and Processes, 1996, 15, 281-286.	0.6	1
78	Fracture Behaviour and Relationship with Mechanical Properties of a Thixocast Aluminium Alloy. Key Engineering Materials, 2000, 188, 111-120.	0.4	1
79	Damage and plastic flow in a Al-Si-Cu thixocast alloy. Journal of Materials Science, 2004, 39, 3115-3119.	1.7	1
80	Analysis of Hardness Maps on Aluminium Alloy Processed by ECAP. Materials Science Forum, 2006, 519-521, 1415-1420.	0.3	1
81	A Multipass ECAP Study of Modified Aluminium Alloys. Materials Science Forum, 0, 604-605, 163-170.	0.3	1
82	An Investigation of Hardness and Microstructure Evolution of Heat Treatable Aluminum Alloys during and after Equal-Channel Angular Pressing. Materials Science Forum, 2009, 633-634, 333-340.	0.3	1
83	Fracture Surface Characterisation of Friction Stir Processed Magnesium Alloy after Mechanical Tests. Materials Science Forum, 2016, 879, 301-305.	0.3	1
84	Effect of Distance along the Built Axis on Mechanical Properties and Microstructure in Al10SiMg SLM Alloy. Materials Science Forum, 0, 1016, 309-314.	0.3	1
85	Characterisation of a 6082 Aluminum Alloy after Thixoforming. Key Engineering Materials, 2000, 188, 101-110.	0.4	0