Riccardo Casati

List of Publications by Year
in descending order

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81 papers	2,731 citations	279798 23 h-index	189892 50 g-index
84 all docs	84 docs citations	84 times ranked	2690 citing authors

#	Article	IF	Citations
1	Effects of Powder Atomization Route and Postâ€Processing Thermal Treatments on the Mechanical Properties and Fatigue Resistance of Additively Manufactured 18Ni300 Maraging Steel. Advanced Engineering Materials, 2022, 24, 2101011.	3.5	10
2	Design and Characterization of Alâ€“Mgâ€“Siâ€“Zr Alloys with Improved Laser Powder Bed Fusion Processability. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2022, 53, 331-343.	2.2	5
3	On the Recycling of Water Atomized Powder and the Effects on Properties of L-PBF Processed 4130 Low-Alloy Steel. Materials, 2022, 15, 336.	2.9	6
4	Effect of Cu content on hot-crack resistance of Al-Cu-Mg alloys produced by laser powder bed fusion. Philosophical Magazine Letters, 2022, 102, 111-119.	1.2	5
5	Development of Al-Cu-Mg and Al-Mg-Si-Zr Alloys with Improved L-PBF Processability. Minerals, Metals and Materials Series, 2022, , 289-297.	0.4	1
6	Enhanced cryogenic and ambient temperature mechanical properties of CoCuFeMnNi high entropy alloy through controlled heat treatment. Journal of Alloys and Compounds, 2022, 910, 164810.	5.5	6
7	Effect of heat treatments and loading orientation on the tensile properties and fracture toughness of AlSi7Mg alloy produced by Laser Powder Bed Fusion. International Journal of Fracture, 2022, 235, 145-157.	2.2	6
8	Effect of Process Parameters on Laser Powder Bed Fusion of Al-Sn Miscibility Gap Alloy. Quantum Beam Science, 2022, 6, 17.	1.2	4
9	L-PBF Processing of Steel Powders Produced by Gas and Water Atomization. BHM-Zeitschrift Fuer Rohstoffe Geotechnik Metallurgie Werkstoffe Maschinen-Und Anlagentechnik, 2021, 166, 40-45.	1.0	4
10	Insight into the effect of different thermal treatment routes on the microstructure of AlSi7Mg produced by laser powder bed fusion. Materials Characterization, 2021, 172, 110881.	4.4	16
11	Investigation on two Tiâ€“B-reinforced Al alloys for Laser Powder Bed Fusion. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2021, 808, 140944.	5.6	27
12	Fluctuations of Tracks and Layers during Aluminium Laser Powder-Bed Fusion. Applied Sciences (Switzerland), 2021, 11, 3132.	2.5	3
13	Rapid production of AZ91 Mg alloy by extrusion based additive manufacturing process. Powder Metallurgy, 2021, 64, 370-377.	1.7	13
14	Effect of Heat Treatment on Microstructure Evolution of X38CrMoV5-1 Hot-Work Tool Steel Produced by L-PBF. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2021, 52, 2564-2575.	2.2	6
15	Six-Month Long In Vitro Degradation Tests of Biodegradable Twinning-Induced Plasticity Steels Alloyed with Ag for Stent Applications. ACS Biomaterials Science and Engineering, 2021, 7, 3669-3682.	5.2	7
16	Multi-Material Wire Arc Additive Manufacturing of low and high alloyed aluminium alloys with in-situ material analysis. Journal of Manufacturing Processes, 2021, 69, 378-390.	5.9	26
17	A 3D Printed Ti6Al4V Alloy Uniaxial Capacitive Accelerometer. IEEE Sensors Journal, 2021, 21, 19640-19646.	4.7	4
18	Effects of process parameters, debinding and sintering on the microstructure of 316L stainless steel produced by binder jetting. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2021, 828, 142108.	5.6	54

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19	Comparative thermal fatigue behavior of AlSi7Mg alloy produced by L-PBF and sand casting. International Journal of Fatigue, 2021, 152, 106424.	5.7	6
20	Pseudoelasticity in FeMnNiAl shape memory alloy lattice structures produced by Laser Powder Bed Fusion. Materials Letters, 2021, 302, 130349.	2.6	3
21	Effect of water atomization on properties of type 4130 steel processed by L-PBF. Materials and Design, 2021, 210, 110085.	7.0	13
22	Development of a Novel High-Temperature Al Alloy for Laser Powder Bed Fusion. Metals, 2021, 11, 35.	2.3	15
23	Effect of annealing temperature on microstructure and high-temperature tensile behaviour of Ti-6242S alloy produced by Laser Powder Bed Fusion. European Journal of Materials, 2021, 1, 72-83.	2.6	0
24	Effects of Powder Atomisation on Microstructural and Mechanical Behaviour of L-PBF Processed Steels. Metals, 2020, 10, 1474.	2.3	11
25	Effective addition of nanoclay in enhancement of mechanical and electromechanical properties of SWCNT reinforced epoxy: Strain sensing and crack-induced piezoresistivity. Theoretical and Applied Fracture Mechanics, 2020, 110, 102831.	4.7	8
26	Microstructural Precipitation Evolution and In Vitro Degradation Behavior of a Novel Chill-Cast Zn-Based Absorbable Alloy for Medical Applications. Metals, 2020, 10, 586.	2.3	4
27	Thermal fatigue testing of laser powder bed fusion (L-PBF) processed AlSi7Mg alloy in presence of a quasi-static tensile load. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2020, 789, 139617.	5.6	5
28	Aging Response of an A357 Al Alloy Processed by Selective Laser Melting. Advanced Engineering Materials, 2019, 21, 1800406.	3.5	41
29	Hydrogen Embrittlement Behavior of 18Ni 300 Maraging Steel Produced by Selective Laser Melting. Materials, 2019, 12, 2360.	2.9	11
30	Additive Manufacturing of Heterogeneous Lattice Structures: An Experimental Exploration. Proceedings of the Design Society International Conference on Engineering Design, 2019, 1, 669-678.	0.6	15
31	Effect of build orientation on fracture and tensile behavior of A357 Al alloy processed by Selective Laser Melting. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2019, 766, 138392.	5.6	39
32	Development of a high strength Alâ€“Znâ€“Siâ€“Mgâ€“Cu alloy for selective laser melting. Journal of Alloys and Compounds, 2019, 801, 243-253.	5.5	66
33	Effect of Graphene Nanoplatelets on Microstructure and Mechanical Properties of AlSi10Mg Nanocomposites Produced by Hot Extrusion. Powder Metallurgy and Metal Ceramics, 2018, 56, 647-655.	0.8	16
34	Functional Performances of CuZnAl Shape Memory Alloy Open-Cell Foams. Journal of Materials Engineering and Performance, 2018, 27, 1706-1713.	2.5	4
35	Microstructure and mechanical behavior of hot-work tool steels processed by Selective Laser Melting. Materials Characterization, 2018, 137, 50-57.	4.4	73
36	Design of Wear-Resistant Austenitic Steels for Selective Laser Melting. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2018, 49, 962-971.	2.2	5

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37	Microstructural evolution and thermal fatigue resistance of grey cast iron. Fatigue and Fracture of Engineering Materials and Structures, 2018, 41, 99-110.	3.4	8
38	Fatigue life evaluation of car front halfshaft. Procedia Structural Integrity, 2018, 12, 3-8.	0.8	1
39	Effects of Platform Pre-Heating and Thermal-Treatment Strategies on Properties of AlSi10Mg Alloy Processed by Selective Laser Melting. Metals, 2018, 8, 954.	2.3	119
40	Damping behavior of 316L lattice structures produced by Selective Laser Melting. Materials and Design, 2018, 160, 1010-1018.	7.0	50
41	Bacillus cereus in fresh ricotta: Comparison of growth and Haemolysin BL production after artificial contamination during production or post processing. Food Control, 2017, 79, 272-278.	5.5	12
42	Aging Behavior of High-Strength Al Alloy 2618 Produced by Selective Laser Melting. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2017, 48, 575-579.	2.2	35
43	Synthesis, mechanical properties and corrosion behavior of powder metallurgy processed Fe/Mg2Si composites for biodegradable implant applications. Materials Science and Engineering C, 2017, 81, 511-521.	7.3	24
44	Designing for Metal Additive Manufacturing: A Case Study in the Professional Sports Equipment Field. Procedia Manufacturing, 2017, 11, 1544-1551.	1.9	13
45	Effect of ball milling on the ageing response of Al2618 composites reinforced with SiC and oxide nanoparticles. Journal of Alloys and Compounds, 2017, 693, 909-920.	5.5	27
46	Improved Functional Properties and Efficiencies of Nitinol Wires Under High-Performance Shape Memory Effect (HP-SME). Journal of Materials Engineering and Performance, 2017, 26, 4964-4969.	2.5	9
47	Aging Behaviour and Mechanical Performance of 18-Ni 300 Steel Processed by Selective Laser Melting. Metals, 2016, 6, 218.	2.3	178
48	Microstructure and mechanical properties of laser welded beads realized for joining CuZn open cellular foams. Materials Letters, 2016, 181, 132-135.	2.6	8
49	Properties of Aluminium Alloys Produced by Selective Laser Melting. Key Engineering Materials, 2016, 710, 83-88.	0.4	5
50	Microstructure and Fracture Behavior of 316L Austenitic Stainless Steel Produced by Selective Laser Melting. Journal of Materials Science and Technology, 2016, 32, 738-744.	10.7	390
51	Microstructural and Mechanical Properties of Alâ€Based Composites Reinforced with Inâ€Situ and Exâ€Situ Al₂O₃ Nanoparticles. Advanced Engineering Materials, 2016, 18, 550-558.	3.5	19
52	Laser shape setting of thin NiTi wires. Smart Materials and Structures, 2016, 25, 01LT02.	3.5	9
53	Consolidation of Al Powder and Colloidal Suspension of Al2O3 Nanoparticles after 2Âh Ball Milling. SpringerBriefs in Applied Sciences and Technology, 2016, , 59-64.	0.4	0
54	Consolidation of Al Powder and Colloidal Suspension of Al2O3 Nanoparticles After 16Âh Ball Milling. SpringerBriefs in Applied Sciences and Technology, 2016, , 65-96.	0.4	4

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55	Consolidation of AL Powder and Colloidal Suspension of Al2O3 Nanoparticles After 24Âh Ball Milling. SpringerBriefs in Applied Sciences and Technology, 2016, , 97-105.	0.4	0
56	Aluminum Matrix Composites Reinforced with Alumina Nanoparticles. SpringerBriefs in Applied Sciences and Technology, 2016, , .	0.4	8
57	State of the Art of Metal Matrix Nanocomposites. SpringerBriefs in Applied Sciences and Technology, 2016, , 1-35.	0.4	1
58	Consolidation of Micro- and Nano-Sized Al Powder. SpringerBriefs in Applied Sciences and Technology, 2016, , 107-123.	0.4	0
59	Straight Shape Setting of Nitinol Wires by Using a Laser Beam. , 2015, , .		1
60	Ni3Ta High Temperature Shape Memory Alloys: Effect of B Addition on the Martensitic Transformation and Microstructure. Materials Today: Proceedings, 2015, 2, S813-S816.	1.8	6
61	High Performance Shape Memory Effect (HP-SME) for New Shape Memory Devices: A Diamond-like Actuator. Materials Today: Proceedings, 2015, 2, S975-S978.	1.8	5
62	Consolidated Al/Al₂O₃Nanocomposites by Equal Channel Angular Pressing and Hot Extrusion. Materials and Manufacturing Processes, 2015, 30, 1218-1222.	4.7	24
63	Effect of vanadium on microstructure and wear behaviour of Fe based Câ€“Bâ€“Ni hardfacing alloy. International Journal of Cast Metals Research, 2015, 28, 201-207.	1.0	2
64	ECAP consolidation of Al matrix composites reinforced with in-situ Î³-Al2O3 nanoparticles. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2015, 648, 113-122.	5.6	27
65	High performance shape memory effect in nitinol wire for actuators with increased operating temperature range. Functional Materials Letters, 2014, 07, 1450063.	1.2	11
66	Fatigue properties of a pseudoelastic NiTi alloy: Strain ratcheting and hysteresis under cyclic tensile loading. International Journal of Fatigue, 2014, 66, 78-85.	5.7	116
67	Thermal cycling of stress-induced martensite for high-performance shape memory effect. Scripta Materialia, 2014, 80, 13-16.	5.2	26
68	Mechanical and functional properties of ultrafine grained Al wires reinforced by nano-Al2O3 particles. Materials & Design, 2014, 64, 102-109.	5.1	45
69	Electrical Pulse Shape Setting of Thin Ni49Ti51 Wires for Shape Memory Actuators. Journal of Materials Engineering and Performance, 2014, 23, 2487-2490.	2.5	3
70	Ex situ Alâ€“Al2O3 ultrafine grained nanocomposites produced via powder metallurgy. Journal of Alloys and Compounds, 2014, 615, S386-S388.	5.5	45
71	Metal Matrix Composites Reinforced by Nano-Particlesâ€”A Review. Metals, 2014, 4, 65-83.	2.3	772
72	Microstructure and Damping Properties of Ultra Fine Grained Al Wires Reinforced by Al2O3 Nanoparticles. , 2014, , 1347-1351.		1

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73	Al/Al₂O₃ Nanocomposite Produced by ECAP. Materials Science Forum, 2013, 762, 457-464.	0.3	23
74	On the preparation and characterization of thin NiTi shape memory alloy wires for MEMS. Frattura Ed Integrita Strutturale, 2013, 7, 7-12.	0.9	3
75	Microstructural evolution of pure silver during ECAP processing and subsequent heating. International Journal of Materials and Product Technology, 2013, 47, 80.	0.2	0
76	THIN NiTi WIRES WITH REDUCED THERMAL HYSTERESIS FOR SHAPE MEMORY ACTUATORS. Functional Materials Letters, 2012, 05, 1250009.	1.2	8
77	Fatigue of pseudoelastic NiTi within the stress-induced transformation regime: a modified Coffinâ€“Manson approach. Smart Materials and Structures, 2012, 21, 112001.	3.5	83
78	Effect of Current Pulses on Fatigue of Thin NiTi Wires for Shape Memory Actuators. Journal of Materials Engineering and Performance, 2012, 21, 2633-2637.	2.5	15
79	Effect of electrical heating conditions on functional fatigue of thin NiTi wire for shape memory actuators. Procedia Engineering, 2011, 10, 3423-3428.	1.2	30
80	Application of SMA Composites in the Collectors of the Railway Pantograph for the Italian High-Speed Train. Journal of Materials Engineering and Performance, 2009, 18, 612-619.	2.5	24
81	Processing of CuZr Based Shape Memory Alloys. Materials Science Forum, 0, 773-774, 534-540.	0.3	3