

Maurizio Vedani

List of Publications by Year in descending order

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Version: 2024-02-01

78
papers

3,847
citations

218677

26
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128289

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all docs

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docs citations

79
times ranked

3639
citing authors

#	ARTICLE	IF	CITATIONS
1	Effect of silver in thermal treatments of Fe-Mn-C degradable metals: Implications for stent processing. <i>Bioactive Materials</i> , 2022, 12, 30-41.	15.6	3
2	Design and Characterization of Al-Mg-Si-Zr Alloys with Improved Laser Powder Bed Fusion Processability. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2022, 53, 331-343.	2.2	5
3	Geometrical Issues in Design for Binder Jetting – The Effect of Anisotropic Dimensional Change on Sintering. <i>Lecture Notes in Mechanical Engineering</i> , 2022, , 410-421.	0.4	4
4	On the Recycling of Water Atomized Powder and the Effects on Properties of L-PBF Processed 4130 Low-Alloy Steel. <i>Materials</i> , 2022, 15, 336.	2.9	6
5	Effect of Cu content on hot-crack resistance of Al-Cu-Mg alloys produced by laser powder bed fusion. <i>Philosophical Magazine Letters</i> , 2022, 102, 111-119.	1.2	5
6	Development of Al-Cu-Mg and Al-Mg-Si-Zr Alloys with Improved L-PBF Processability. <i>Minerals, Metals and Materials Series</i> , 2022, , 289-297.	0.4	1
7	Corrosion behavior of as-cast magnesium-4% zinc alloys in simulated body fluid solution: the influence of minor calcium and manganese addition. <i>Materialwissenschaft Und Werkstofftechnik</i> , 2022, 53, 819-834.	0.9	3
8	Novel concepts for the design of moulds and equipment for expanded polymer bead foams. <i>Progress in Additive Manufacturing</i> , 2021, 6, 339-346.	4.8	2
9	L-PBF Processing of Steel Powders Produced by Gas and Water Atomization. <i>BHM-Zeitschrift Fuer Rohstoffe Geotechnik Metallurgie Werkstoffe Maschinen-Und Anlagentechnik</i> , 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. <i>Materials Characterization</i> , 2021, 172, 110881.	4.4	16
11	Investigation on two Ti-B-reinforced Al alloys for Laser Powder Bed Fusion. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2021, 808, 140944.	5.6	27
12	Tungsten Fabricated by Laser Powder Bed Fusion. <i>BHM-Zeitschrift Fuer Rohstoffe Geotechnik Metallurgie Werkstoffe Maschinen-Und Anlagentechnik</i> , 2021, 166, 263-269.	1.0	9
13	Effect of Heat Treatment on Microstructure Evolution of X38CrMoV5-1 Hot-Work Tool Steel Produced by L-PBF. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2021, 52, 2564-2575.	2.2	6
14	Beta Titanium Alloys Processed By Laser Powder Bed Fusion: A Review. <i>Journal of Materials Engineering and Performance</i> , 2021, 30, 6365-6388.	2.5	25
15	Six-Month Long <i>In Vitro</i> Degradation Tests of Biodegradable Twinning-Induced Plasticity Steels Alloyed with Ag for Stent Applications. <i>ACS Biomaterials Science and Engineering</i> , 2021, 7, 3669-3682.	5.2	7
16	Fatigue Performance of an Additively Manufactured Zr-Based Bulk Metallic Glass and the Effect of Post-Processing. <i>Metals</i> , 2021, 11, 1064.	2.3	13
17	Dimensional and geometrical precision of parts produced by binder jetting process as affected by the anisotropic shrinkage on sintering. <i>Additive Manufacturing</i> , 2021, 43, 102007.	3.0	14
18	Pure molybdenum manufactured by Laser Powder Bed Fusion: Thermal and mechanical characterization at room and high temperature. <i>Additive Manufacturing</i> , 2021, 47, 102277.	3.0	5

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19	Effect of water atomization on properties of type 4130 steel processed by L-PBF. <i>Materials and Design</i> , 2021, 210, 110085.	7.0	13
20	Development of a Novel High-Temperature Al Alloy for Laser Powder Bed Fusion. <i>Metals</i> , 2021, 11, 35.	2.3	15
21	Effect of annealing temperature on microstructure and high-temperature tensile behaviour of Ti-6242S alloy produced by Laser Powder Bed Fusion. <i>European Journal of Materials</i> , 2021, 1, 72-83.	2.6	0
22	First Proof-of-Concept Prototype of an Additive Manufactured Radio Frequency Quadrupole. <i>Instruments</i> , 2021, 5, 35.	1.8	10
23	Effects of Powder Atomisation on Microstructural and Mechanical Behaviour of L-PBF Processed Steels. <i>Metals</i> , 2020, 10, 1474.	2.3	11
24	Microstructural Precipitation Evolution and In Vitro Degradation Behavior of a Novel Chill-Cast Zn-Based Absorbable Alloy for Medical Applications. <i>Metals</i> , 2020, 10, 586.	2.3	4
25	Effect of Silver on Corrosion Behavior of Plastically Deformed Twinning-Induced Plasticity Steel for Biodegradable Stents. <i>Jom</i> , 2020, 72, 1892-1901.	1.9	8
26	Aging Response of an A357 Al Alloy Processed by Selective Laser Melting. <i>Advanced Engineering Materials</i> , 2019, 21, 1800406.	3.5	41
27	Hydrogen Embrittlement Behavior of 18Ni 300 Maraging Steel Produced by Selective Laser Melting. <i>Materials</i> , 2019, 12, 2360.	2.9	11
28	Development of a high strength Al-Zn-Si-Mg-Cu alloy for selective laser melting. <i>Journal of Alloys and Compounds</i> , 2019, 801, 243-253.	5.5	66
29	The addition of silver affects the deformation mechanism of a twinning-induced plasticity steel: Potential for thinner degradable stents. <i>Acta Biomaterialia</i> , 2019, 98, 103-113.	8.3	13
30	In Vitro Degradation of Absorbable Zinc Alloys in Artificial Urine. <i>Materials</i> , 2019, 12, 295.	2.9	32
31	Effect of Surface and Subsurface Defects on Fatigue Behavior of AlSi10Mg Alloy Processed by Laser Powder Bed Fusion (L-PBF). <i>Metals</i> , 2019, 9, 1063.	2.3	30
32	Understanding the effect of the reinforcement addition on corrosion behavior of Fe/Mg ₂ Si composites for biodegradable implant applications. <i>Materials Chemistry and Physics</i> , 2019, 223, 771-778.	4.0	20
33	Long-term <i>in vitro</i> degradation behaviour of Fe and Fe/Mg ₂ Si composites for biodegradable implant applications. <i>RSC Advances</i> , 2018, 8, 9627-9639.	3.6	17
34	Effect of Graphene Nanoplatelets on Microstructure and Mechanical Properties of AlSi10Mg Nanocomposites Produced by Hot Extrusion. <i>Powder Metallurgy and Metal Ceramics</i> , 2018, 56, 647-655.	0.8	16
35	Effects of Superplastic Forming on Modification of Surface Properties of Ti Alloys for Biomedical Applications. <i>Journal of Manufacturing Science and Engineering, Transactions of the ASME</i> , 2018, 140, .	2.2	3
36	Microstructure and mechanical behavior of hot-work tool steels processed by Selective Laser Melting. <i>Materials Characterization</i> , 2018, 137, 50-57.	4.4	73

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37	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
38	Zinc-based alloys for degradable vascular stent applications. Acta Biomaterialia, 2018, 71, 1-23.	8.3	324
39	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
40	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
41	On morphological surface features of the parts printed by selective laser melting (SLM). Additive Manufacturing, 2018, 24, 373-377.	3.0	45
42	Fabrication, mechanical properties and in vitro degradation behavior of newly developed Zn Ag alloys for degradable implant applications. Materials Science and Engineering C, 2017, 77, 1170-1181.	7.3	197
43	Formability enhancement of Al 6060 sheets through fiber laser heat treatment. International Journal of Material Forming, 2017, 10, 741-751.	2.0	6
44	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
45	Synthesis, mechanical properties and corrosion behavior of powder metallurgy processed Fe/Mg ₂ Si composites for biodegradable implant applications. Materials Science and Engineering C, 2017, 81, 511-521.	7.3	24
46	Effect of ball milling on the ageing response of Al ₂ 618 composites reinforced with SiC and oxide nanoparticles. Journal of Alloys and Compounds, 2017, 693, 909-920.	5.5	27
47	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
48	Aging Behaviour and Mechanical Performance of 18-Ni 300 Steel Processed by Selective Laser Melting. Metals, 2016, 6, 218.	2.3	178
49	Novel Zn-based alloys for biodegradable stent applications: Design, development and in vitro degradation. Journal of the Mechanical Behavior of Biomedical Materials, 2016, 60, 581-602.	3.1	316
50	Formability and anisotropy of the mechanical properties in commercially pure titanium after various routes normal and different speed rolling. Journal of Materials Research, 2016, 31, 3372-3380.	2.6	11
51	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
52	Microstructural and Mechanical Properties of Al ₂ O ₃ -Based Composites Reinforced with In ₂ O ₃ and Ex ₂ O ₃ Nanoparticles. Advanced Engineering Materials, 2016, 18, 550-558.	3.5	19
53	Effects of texture and grain size on mechanical properties of AZ80 magnesium alloys at lower temperatures. Materials and Design, 2016, 89, 1-8.	7.0	108
54	Grain size and texture dependence on mechanical properties, asymmetric behavior and low temperature superplasticity of ZK60 Mg alloy. Materials Characterization, 2015, 107, 70-78.	4.4	41

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55	Consolidated Al/Al ₂ O ₃ Nanocomposites by Equal Channel Angular Pressing and Hot Extrusion. <i>Materials and Manufacturing Processes</i> , 2015, 30, 1218-1222.	4.7	24
56	ECAP consolidation of Al matrix composites reinforced with in-situ $\hat{3}$ -Al ₂ O ₃ nanoparticles. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2015, 648, 113-122.	5.6	27
57	High performance shape memory effect in nitinol wire for actuators with increased operating temperature range. <i>Functional Materials Letters</i> , 2014, 07, 1450063.	1.2	11
58	Ultra-Fine Grained Degradable Magnesium for Biomedical Applications. <i>Rare Metal Materials and Engineering</i> , 2014, 43, 2561-2566.	0.8	26
59	Extrusion behaviour of AZ91 Mg alloy produced by spark plasma sintering. <i>Materials Science and Technology</i> , 2014, 30, 1959-1965.	1.6	2
60	Influence of ECAP process on mechanical and corrosion properties of pure Mg and ZK60 magnesium alloy for biodegradable stent applications. <i>Biomatter</i> , 2014, 4, e28283.	2.6	78
61	Texture effects on design of Mg biodegradable stents. <i>International Journal of Material Forming</i> , 2014, 7, 31-38.	2.0	15
62	Microstructure, texture evolution, mechanical properties and corrosion behavior of ECAP processed ZK60 magnesium alloy for biodegradable applications. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2014, 37, 307-322.	3.1	127
63	Metal Matrix Composites Reinforced by Nano-Particles – A Review. <i>Metals</i> , 2014, 4, 65-83.	2.3	772
64	The processing of ultrafine-grained Mg tubes for biodegradable stents. <i>Acta Biomaterialia</i> , 2013, 9, 8604-8610.	8.3	86
65	A comparison between equal channel angular pressing and asymmetric rolling of silver in the severe plastic deformation regime. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2013, 559, 742-750.	5.6	25
66	On the preparation and characterization of thin NiTi shape memory alloy wires for MEMS. <i>Frattura Ed Integrita Strutturale</i> , 2013, 7, 7-12.	0.9	3
67	Effects of skin pass rolling parameters on mechanical properties of steels. <i>International Journal of Precision Engineering and Manufacturing</i> , 2012, 13, 2017-2026.	2.2	19
68	Properties of nitrided layers formed during plasma nitriding of commercially pure Ti and Ti-6Al-4V alloy. <i>Surface and Coatings Technology</i> , 2012, 206, 2287-2292.	4.8	62
69	Features on Grain-Structure Evolution during Asymmetric Rolling of Aluminium Alloys. <i>Materials Science Forum</i> , 2008, 604-605, 77-85.	0.3	3
70	Effect of Nb-V addition on the mechanical behaviour and structural stability of ultrafine grained steels. <i>International Journal of Materials Research</i> , 2007, 98, 307-313.	0.3	2
71	Problems in laser repair-welding a surface-treated tool steel. <i>Surface and Coatings Technology</i> , 2007, 201, 4518-4525.	4.8	39
72	Surface treatment of welded duplex stainless steels by diode laser. , 2005, , .		3

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73	Microstructural evolution of tool steels after Nd-YAG laser repair welding. Journal of Materials Science, 2004, 39, 241-249.	3.7	39
74	Laser Surface Treatment of Laser Welded Duplex Stainless Steel. , 2004, , 259-264.		5
75	Laser welding and surface treatment of a 22Crâ€“5Niâ€“3Mo duplex stainless steel. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2003, 351, 334-343.	5.6	66
76	Microâ€“structural and mechanical properties of stainless steel electrical resistance projection welds. Welding International, 2002, 16, 696-703.	0.7	0
77	Effect of thermal treatments on microstructure and impact toughness of die cast Mgâ€“Alâ€“Mn alloys. Materials Science and Technology, 2001, 17, 938-944.	1.6	8
78	Microstructural and Mechanical Properties of UFG Silver Subjected to Severe Plastic Deformation by ECAP. Materials Science Forum, 0, 706-709, 1847-1852.	0.3	5