Ausonio Tuissi

List of Publications by Year
in descending order

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80	1,175	361296	454834
papers	citations	20 h-index	30 g-index

81	81	81	1171
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Aging Behaviour and Mechanical Performance of 18-Ni 300 Steel Processed by Selective Laser Melting. Metals, 2016, 6, 218.	1.0	178
2	Characterisation of surface oxidation of nickelâ€“titanium alloy by ion-beam and electrochemical techniques. Electrochimica Acta, 2004, 50, 11-18.	2.6	69
3	Selective laser melting of AlCu-TiB2 alloy using pulsed wave laser emission mode: processability, microstructure and mechanical properties. Materials and Design, 2021, 204, 109628.	3.3	47
4	Building orientation-structure-property in laser powder bed fusion of NiTi shape memory alloy. Journal of Alloys and Compounds, 2021, 873, 159791.	2.8	43
5	Porous NiTi shape memory alloys produced by SHS: microstructure and biocompatibility in comparison with Ti2Ni and TiNi3. Journal of Materials Science: Materials in Medicine, 2014, 25, 2277-2285.	1.7	41
6	Selective Laser Melting of NiTi Shape Memory Alloy: Processability, Microstructure, and Superelasticity. Shape Memory and Superelasticity, 2020, 6, 342-353.	1.1	37
7	Influence of the annealing and defects on the VHCF behavior of an SLM AlSi10Mg alloy. Fatigue and Fracture of Engineering Materials and Structures, 2019, 42, 2794-2807.	1.7	34
8	Enhanced Nitinol Properties for Biomedical Applications. Recent Patents on Biomedical Engineering, 2008, 1, 180-196.	0.5	34
9	Surface Tension and Density of Alâ^'Ni Alloys. Journal of Chemical & Engineering Data, 2010, 55, 3024-3028.	1.0	29
10	Laser Weldability of AlSi10Mg Alloy Produced by Selective Laser Melting: Microstructure and Mechanical Behavior. Journal of Materials Engineering and Performance, 2019, 28, 6714-6719.	1.2	28
11	Thermal cycling of stress-induced martensite for high-performance shape memory effect. Scripta Materialia, 2014, 80, 13-16.	2.6	26
12	CO2-rich atmosphere strongly affects the degradation of Fe-21Mn-1C for biodegradable metallic implants. Materials Letters, 2016, 181, 362-366.	1.3	26
13	Aging Behaviour and Mechanical Properties of a Solution Treated and ECAP Processed 6082 Alloy. Materials Transactions, 2004, 45, 2282-2287.	0.4	24
14	Consolidated Al/Al₂O₃Nanocomposites by Equal Channel Angular Pressing and Hot Extrusion. Materials and Manufacturing Processes, 2015, 30, 1218-1222.	2.7	24
15	Effects of the scanning strategy on the microstructure and mechanical properties of a TiAl6V4 alloy produced by electron beam additive manufacturing. International Journal of Advanced Manufacturing Technology, 2020, 107, 4913-4924.	1.5	24
16	Al/Al₂O₃ Nanocomposite Produced by ECAP. Materials Science Forum, 2013, 762, 457-464.	0.3	23
17	Microstructure Evolution and Aging Kinetics of Al-Mg-Si and Al-Mg-Si-Sc Alloys Processed by ECAP. Materials Science Forum, 2006, 503-504, 493-498.	0.3	22
18	Microstructural and Mechanical Response of NiTi Lattice 3D Structure Produced by Selective Laser Melting. Metals, 2020, 10, 814.	1.0	22

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19	CuZr Based Shape Memory Alloys: Effect of Cr and Co on the Martensitic Transformation. Materials Science Forum, 2013, 738-739, 167-171.	0.3	21
20	Effect of Optimized Heat Treatments on the Tensile Behavior and Residual Stresses of Selective Laser Melted AlSi10Mg Samples. Key Engineering Materials, 0, 813, 364-369.	0.4	21
21	Metamaterial architecture from a self-shaping carnivorous plant. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 18777-18782.	3.3	21
22	Enhancement of the Damping Behavior of Ti₆Al₄V Alloy through the Use of Trabecular Structure Produced by Selective Laser Melting. Advanced Engineering Materials, 2020, 22, 1900722.	1.6	21
23	Microstructural and Mechanical Properties of Alâ€Based Composites Reinforced with Inâ€Situ and Exâ€Situ Al₂O₃ Nanoparticles. Advanced Engineering Materials, 2016, 18, 550-558.	1.6	19
24	Effect of heating/cooling rate on martensitic transformation of NiMnGa-Co high temperature ferromagnetic shape memory alloys. Journal of Alloys and Compounds, 2017, 690, 478-484.	2.8	19
25	VHCF Response up to 109 Cycles of SLM AlSi10Mg Specimens Built in a Vertical Direction. Applied Sciences (Switzerland), 2019, 9, 2954.	1.3	16
26	Laser and Surface Processes of NiTi Shape Memory Elements for Micro-actuation. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2014, 45, 2242-2249.	1.1	15
27	Effect of laser microcutting on thermo-mechanical properties of NiTiCu shape memory alloy. Metals and Materials International, 2014, 20, 83-92.	1.8	15
28	Intermetallic Particle Evolution during ECAP Processing of a 6082 Alloy. Materials Transactions, 2004, 45, 2182-2186.	0.4	14
29	Microstructure and calorimetric behavior of laser welded open cell foams in CuZnAl shape memory alloy. Functional Materials Letters, 2016, 09, 1642007.	0.7	14
30	Martensitic transformation, microstructure and functional behavior of thin-walled Nitinol produced by micro laser metal wire deposition. Journal of Materials Research and Technology, 2021, 12, 2205-2215.	2.6	12
31	High performance shape memory effect in nitinol wire for actuators with increased operating temperature range. Functional Materials Letters, 2014, 07, 1450063.	0.7	11
32	Surface tension and density of Si-Ge melts. Journal of Chemical Physics, 2014, 140, 214704.	1.2	11
33	Multiaxial fatigue behavior of SLM Ti6Al4V alloy under different loading conditions. Fatigue and Fracture of Engineering Materials and Structures, 2021, 44, 2625-2642.	1.7	11
34	Microcutting of NiTiCu Alloy With Pulsed Fiber Laser. , 2010, , .		10
35	FLEXURAL VIBRATION SUPPRESSION OF GLASS FIBER/CuZnAl SMA COMPOSITE. Functional Materials Letters, 2012, 05, 1250014.	0.7	10
36	Laser shape setting of thin NiTi wires. Smart Materials and Structures, 2016, 25, 01LT02.	1.8	9

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37	THIN NiTi WIRES WITH REDUCED THERMAL HYSTERESIS FOR SHAPE MEMORY ACTUATORS. Functional Materials Letters, 2012, 05, 1250009.	0.7	8
38	Hot Workability of CuZr-Based Shape Memory Alloys for Potential High-Temperature Applications. Journal of Materials Engineering and Performance, 2014, 23, 2379-2384.	1.2	8
39	Experimental characterization and modelling validation of shape memory alloy Negator springs. Journal of Intelligent Material Systems and Structures, 2015, 26, 619-630.	1.4	8
40	Radiopaque Shape Memory Alloys: NiTiâ€“Er with Stable Superelasticity. Shape Memory and Superelasticity, 2016, 2, 196-203.	1.1	8
41	Multiaxial fatigue behavior of additive manufactured Ti-6Al-4V under in-phase stresses. Procedia Structural Integrity, 2019, 18, 914-920.	0.3	8
42	Heat Treatments for Stress Relieving AlSi9Cu3 Alloy Produced by Laser Powder Bed Fusion. Materials, 2021, 14, 4184.	1.3	8
43	Electrochemical Etching of NiTi Alloy in a Neutral Fluoride Solution. Journal of the Electrochemical Society, 2009, 156, C428.	1.3	7
44	NiTi Alloy Negator Springs for Long-Stroke Constant-Force Shape Memory Actuators: Modeling, Simulation and Testing. Journal of Materials Engineering and Performance, 2014, 23, 2412-2419.	1.2	7
45	Investigation of high temperature behavior of AlSi10Mg produced by selective laser melting. Materials Chemistry and Physics, 2021, 259, 123975.	2.0	7
46	CuZnAl Shape Memory Alloys Foams. Advances in Science and Technology, 0, , .	0.2	6
47	Laser shape setting of superelastic nitinol wires: Functional properties and microstructure. Functional Materials Letters, 2017, 10, 1740008.	0.7	6
48	Design of a smart bidirectional actuator for space operation. Smart Materials and Structures, 2017, 26, 035041.	1.8	6
49	Microstructure and Martensitic Transformation Behavior in Thermal Cycled Equiatomic CuZr Shape Memory Alloy. Metals, 2019, 9, 580.	1.0	6
50	A new method for simple quantification of Laves phases and precipitates in TiCr2 alloys. Intermetallics, 2019, 109, 110-122.	1.8	6
51	Mechanical Analysis of Hybrid Textile Composites with NiTi Wires. Journal of Materials Engineering and Performance, 2009, 18, 517-521.	1.2	5
52	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
53	New Developments on Mini/Micro Shape Memory Actuators. , 2012, , .		5
54	Properties of Aluminium Alloys Produced by Selective Laser Melting. Key Engineering Materials, 2016, 710, 83-88.	0.4	5

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55	Cohesive surface model for delamination and dynamic behavior of hybrid composite with SMA-GFRP interface. International Journal of Lightweight Materials and Manufacture, 2019, 2, 146-155.	1.3	5
56	Superconducting and structural properties of YBCO/CeO2/NiCr14 tapes prepared by thermal co-evaporation. Physica C: Superconductivity and Its Applications, 2002, 372-376, 1385-1388.	0.6	4
57	Synthesis and Structural Analysis of Copper-Zirconium Oxide. Metals, 2016, 6, 195.	1.0	4
58	Laser shape setting of superelastic NiTi wire: effects of laser beam power and axial pre-load. Smart Materials and Structures, 2019, 28, 075043.	1.8	4
59	Ultrashort Laser Texturing for Tuning Surface Morphology and Degradation Behavior of the Biodegradable Feâ€“20Mn Alloy for Temporary Implants. Advanced Engineering Materials, 2022, 24, .	1.6	4
60	Processing of CuZr Based Shape Memory Alloys. Materials Science Forum, 0, 773-774, 534-540.	0.3	3
61	On the preparation and characterization of thin NiTi shape memory alloy wires for MEMS. Frattura Ed Integrita Strutturale, 2013, 7, 7-12.	0.5	3
62	On the thermo-mechanical behavior of NiTi shape memory elements for potential smart micro-actuation applications. Journal of Intelligent Material Systems and Structures, 2016, 27, 1875-1884.	1.4	3
63	Characterization of the pseudoelastic damping capacity of shape memory alloy wire. , 2017, , .		3
64	Laser-Induced Superelasticity in NiTinol Stent Strut. Shape Memory and Superelasticity, 2018, 4, 377-382.	1.1	3
65	Multiaxial fatigue behavior of additively manufactured Ti6Al4V alloy: Axialâ€“torsional proportional loads. Material Design and Processing Communications, 2021, 3, e190.	0.5	3
66	Design and testing of selective laser melted structural component in AlSi9Cu3 alloy for a space dust analyser. Acta Astronautica, 2021, 184, 193-207.	1.7	3
67	Automatic designÂof chiral mechanical metamaterials. APL Materials, 2021, 9, .	2.2	3
68	The High Performance Shape Memory Effect (HP-SME) in Ni Rich NiTi Wires: In Situ X-Ray Diffraction on Thermal Cycling. MATEC Web of Conferences, 2015, 33, 03008.	0.1	2
69	Fiber Laser Welding of Copper based Open Cell Foams. Procedia CIRP, 2015, 33, 418-422.	1.0	2
70	Electrochemical Etching of NiTi Alloy in a Neutral Fluoride Solution. ECS Transactions, 2009, 25, 43-56.	0.3	1
71	Experimental Characterization and Modelling Validation of Shape Memory Alloy Negator Springs. , 2013, , .		1
72	Functional Characterization of NiTi Shape Memory Elements for Smart Micro-Actuation. , 2013, , .		1

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73	Straight Shape Setting of Nitinol Wires by Using a Laser Beam. , 2015, , .		1
74	Tuning of Static and Dynamic Mechanical Response of Laser Powder Bed Fused AlSi10Mg Lattice Structures through Heat Treatments. Advanced Engineering Materials, 2021, 23, 2100418.	1.6	1
75	Publisher's Note: Electrochemical Etching of NiTi Alloy in a Neutral Fluoride Solution [J. Electrochem. Soc., 156, C428 (2009)]. Journal of the Electrochemical Society, 2010, 157, S3.	1.3	0
76	Microstructural evolution of pure silver during ECAP processing and subsequent heating. International Journal of Materials and Product Technology, 2013, 47, 80.	0.1	0
77	Feasibility design of an interface damper for a space borne microbalance. , 2017, , .		0
78	Role of defectivity on the crystallography of martensitic transformations in Ti50Ni40Cu10: an XRD investigation. Zeitschrift Fur Kristallographie - Crystalline Materials, 2018, 233, 337-348.	0.4	0
79	Specific Damping Capacity of CuZn and CuZnAl Metal Foams, a Preliminary Study. , 2018, , .		0
80	Effect of Al Addition on Martensitic Transformation Stability and Microstructural and Mechanical Properties of CuZr Based Shape Memory Alloys. Metals, 2021, 11, 1141.	1.0	0