

# Maria E Tata

## List of Publications by Year in descending order

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62  
papers

752  
citations

623188

14  
h-index

580395

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67  
docs citations

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times ranked

623  
citing authors

#	ARTICLE	IF	CITATIONS
1	Workability of Ti-6Al-4V alloy at high temperatures and strain rates. <i>Materials Letters</i> , 2004, 58, 3622-3629.	1.3	122
2	Shape Memory Alloys for Aerospace, Recent Developments, and New Applications: A Short Review. <i>Materials</i> , 2020, 13, 1856.	1.3	119
3	Lattice expansion of Ti-6Al-4V by nitrogen and oxygen absorption. <i>Materials Characterization</i> , 2008, 59, 334-337.	1.9	44
4	Nitinol one-way shape memory springs: Thermomechanical characterization and actuator design. <i>Sensors and Actuators A: Physical</i> , 2010, 157, 113-117.	2.0	42
5	Cooling rate inference in aluminum alloy squeeze casting. <i>Materials Letters</i> , 2007, 61, 2969-2972.	1.3	33
6	Weldability of austenitic stainless steel by metal arc welding with different shielding gas. <i>Procedia Structural Integrity</i> , 2016, 2, 3508-3514.	0.3	23
7	IR thermography characterization of residual stress in plastically deformed metallic components. <i>Applied Physics A: Materials Science and Processing</i> , 2010, 98, 461-465.	1.1	22
8	Structural and mechanical properties of welded joints of reduced activation martensitic steels. <i>Journal of Nuclear Materials</i> , 2002, 307-311, 1563-1567.	1.3	19
9	AISI 304 steel: anomalous evolution of martensitic phase following heat treatments at 400°C. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2006, 438-440, 202-206.	2.6	19
10	IR Thermography and Resistivity Investigations on Ni-Ti Shape Memory Alloy. <i>Key Engineering Materials</i> , 2014, 605, 23-26.	0.4	19
11	Shape Memory Activated Self-Deployable Solar Sails: Small-Scale Prototypes Manufacturing and Planarity Analysis by 3D Laser Scanner. <i>Actuators</i> , 2019, 8, 38.	1.2	16
12	Martensite formation during heat treatments of AISI 304 steel with biphasic structure. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 1999, 273-275, 443-447.	2.6	15
13	Superplasticity in PbSn60: Experimental and neural network implementation. <i>Computational Materials Science</i> , 2006, 37, 226-233.	1.4	15
14	A Novel Self-Deployable Solar Sail System Activated by Shape Memory Alloys. <i>Aerospace</i> , 2019, 6, 78.	1.1	15
15	A Weldability Study of Al-Cu-Li 2198 Alloy. <i>Metallurgist</i> , 2014, 57, 1134-1141.	0.2	14
16	Characterization of Eurofer-97 TIG-welded joints by FIMEC indentation tests. <i>Journal of Nuclear Materials</i> , 2004, 329-333, 1529-1533.	1.3	13
17	Effect of powder mix composition on Al foam morphology. <i>Proceedings of the Institution of Mechanical Engineers, Part L: Journal of Materials: Design and Applications</i> , 2008, 222, 131-140.	0.7	12
18	A novel methodology for solar sail opening employing shape memory alloy elements. <i>Journal of Intelligent Material Systems and Structures</i> , 2018, 29, 1793-1798.	1.4	12

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19	Mechanical twins in 304 stainless steel after small-charge explosions. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2006, 424, 23-32.	2.6	11
20	Pressure effect on Al alloy cast behaviour: microstructures and mechanical properties. <i>International Journal of Materials and Product Technology</i> , 2004, 20, 345.	0.1	10
21	Design and characterization of a small-scale solar sail deployed by NiTi Shape Memory actuators. <i>Procedia Structural Integrity</i> , 2016, 2, 1451-1456.	0.3	10
22	Microstructural Effects in Face-Centered-Cubic Alloys after Small Charge Explosions. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2007, 38, 2869-2884.	1.1	9
23	Design and Characterization of a Small-Scale Solar Sail Prototype by Integrating NiTi SMA and Carbon Fibre Composite. <i>Advances in Materials Science and Engineering</i> , 2017, 2017, 1-6.	1.0	9
24	Correlation Modeling between Morphology and Compression Behavior of Closed-Cell Al Foams Based on X-ray Computed Tomography Observations. <i>Metals</i> , 2021, 11, 1370.	1.0	8
25	Distribution of Ca-Cr associates and mechanical stability of Cr martensitic steels. <i>Journal of Nuclear Materials</i> , 1998, 258-263, 1167-1172.	1.3	6
26	H-induced Ca-Cr cluster redistribution in MANET steel. <i>Journal of Alloys and Compounds</i> , 2000, 310, 209-213.	2.8	6
27	Manufacturing and Characterization of AlSi Foams as Core Materials. <i>Procedia Engineering</i> , 2015, 109, 219-227.	1.2	6
28	Optimization of the process parameters for the manufacturing of open-cells iron foams with high energy absorption. <i>Procedia Structural Integrity</i> , 2016, 2, 2277-2282.	0.3	6
29	Effects of thermal treatments on the ductile to brittle transition of MANET steel. <i>Journal of Nuclear Materials</i> , 1996, 233-237, 248-252.	1.3	5
30	Explosion Welding: Process Evolution and Parameters Optimization. <i>Materials Science Forum</i> , 2018, 941, 1558-1564.	0.3	5
31	Design and characterization of linear shape memory alloy actuator with modular stroke. <i>Procedia Structural Integrity</i> , 2019, 18, 223-230.	0.3	5
32	Mechanical behavior of PCMT and SDP Al foams: a comparison. <i>Procedia Structural Integrity</i> , 2020, 25, 55-62.	0.3	5
33	Al foams manufactured by PLA replication and sacrifice. <i>International Journal of Lightweight Materials and Manufacture</i> , 2021, 4, 62-66.	1.3	5
34	LEAD AND LEAD ALLOYS FOAMS PRODUCTION. <i>Acta Metallurgica Slovaca</i> , 2018, 24, 347-352.	0.3	5
35	An overview on laser welding of metal foams: techniques, advantages and challenges. <i>Procedia Structural Integrity</i> , 2021, 33, 544-555.	0.3	5
36	MANET steel: thermal treatments and Q <sup>~</sup> 1 spectrum evolution. <i>Materials Letters</i> , 1995, 25, 249-255.	1.3	4

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37	Influence of Si, Ni and Co additions on gold alloy for investment cast process. <i>Journal of Alloys and Compounds</i> , 2001, 325, 252-258.	2.8	4
38	Mechanical and surface properties of Ti-sputtered thin films. <i>International Journal of Surface Science and Engineering</i> , 2008, 2, 366.	0.4	4
39	Mechanical and metallurgical characterization of 8090 Al-Li alloy welded joints. <i>Metallurgist</i> , 2012, 56, 75-84.	0.2	4
40	Metallurgical modifications and residual stress in welded steel with average carbon content. <i>Welding International</i> , 2015, 29, 124-130.	0.3	4
41	Deployment of Solar Sails by Joule Effect: Thermal Analysis and Experimental Results. <i>Aerospace</i> , 2020, 7, 180.	1.1	4
42	Interfacial Reactions between AlSi10 Foam Core and AISI 316L Steel Sheets Manufactured by In-Situ Bonding Process. <i>Metals</i> , 2021, 11, 1374.	1.0	4
43	Internal friction and Mössbauer study of Cr associates in MANET steel. <i>Journal of Materials Research</i> , 1997, 12, 296-299.	1.2	3
44	Evaluation of Structural Stability of Materials through Mechanical Spectroscopy: Four Case Studies. <i>Metals</i> , 2016, 6, 306.	1.0	3
45	Study and prototyping of a permanent magnetic suspension for the alignment by gravity of the elevation angle for the next generation lunar reflector experiment. <i>Planetary and Space Science</i> , 2020, 192, 105049.	0.9	3
46	Mechanical behavior of Nd:YAG laser welded aluminum alloys. <i>Procedia Structural Integrity</i> , 2020, 28, 132-138.	0.3	3
47	Influence of Ti coatings on the fatigue behaviour of Al-Matrix MMCs. Part II: FEM simulations. <i>Composites Part B: Engineering</i> , 2005, 36, 446-454.	5.9	2
48	Metal Objects Mapping After Small Charge Explosions. A Study on AISI 304Cu Steel with Two Different Grain Sizes. <i>Journal of Forensic Sciences</i> , 2006, 51, 520-531.	0.9	2
49	New capabilities in the numerical simulation of aluminium alloy casting processes. <i>International Journal of Computational Materials Science and Surface Engineering</i> , 2010, 3, 224.	0.2	2
50	Dislocation Density Effect on Thermal Diffusivity of AISI 316 Steel. <i>Key Engineering Materials</i> , 0, 605, 27-30.	0.4	2
51	Parameters Affecting Energy Absorption in Metal Foams. <i>Materials Science Forum</i> , 2018, 941, 1552-1557.	0.3	2
52	Application of neural network to the materials characterisation. <i>International Journal of Computational Materials Science and Surface Engineering</i> , 2010, 3, 96.	0.2	1
53	Investigation of skin-core joints in aluminium foam sandwich panels by EDS and XPS. <i>Surface and Interface Analysis</i> , 2016, 48, 479-482.	0.8	1
54	Characterization in Dynamic Load Environment of COTS Synthetic Sapphire Bearings for Application in Magnetic Suspension in Space. <i>Applied Sciences (Switzerland)</i> , 2021, 11, 9027.	1.3	1

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55	Recycling of Exhaust Batteries in Lead-Foam Electrodes. , 2013, , 272-278.		1
56	Internal Friction Study on Manet Steel : Effects of Cooling Rate from Austenitic Domain. European Physical Journal Special Topics, 1996, 06, C8-115-C8-118.	0.2	1
57	C-Cr Associates and Carbide Precipitation in Manet Steel. European Physical Journal Special Topics, 1996, 06, C8-155-C8-158.	0.2	1
58	Microstructural modifications in -brass targets after small charge explosions. Calphad: Computer Coupling of Phase Diagrams and Thermochemistry, 2009, 33, 76-81.	0.7	0
59	Increasing Performances of En AB-46000 by Squeeze Casting. Key Engineering Materials, 2014, 611-612, 629-636.	0.4	0
60	Effect of Temperature on the Mechanical Behaviour of Ni-Ti Shape Memory Sheets. , 2016, , 433-439.		0
61	Chacterization of Cu Tube Filled with al Alloy Foam by Means of X-Ray Computer Tomography. , 2014, , 613-620.		0
62	HYBRID SOLUTION FOR TWO-WAY INDUCED SHAPE MEMORY ACTUATOR. Acta Metallurgica Slovaca, 2020, 26, 34-36.	0.3	0