Milton Lima

List of Publications by Year
in descending order

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Version: 2024-02-01

90 papers	1,435 citations	394421 19 h-index	377865 34 g-index
90 all docs	90 docs citations	90 times ranked	1461 citing authors

#	Article	IF	Citations
1	Microstructure and mechanical behavior of laser additive manufactured AISI 316 stainless steel stringers. Materials & Design, 2014, 55, 526-532.	5.1	143
2	A multi-objective green UAV routing problem. Computers and Operations Research, 2017, 88, 306-315.	4.0	127
3	Optimization of titanium cutting by factorial analysis of the pulsed Nd:YAG laser parameters. Journal of Materials Processing Technology, 2006, 179, 105-110.	6.3	86
4	Microstructural analyses and wear behavior of the cemented carbide tools after laser surface treatment and PVD coating. Applied Surface Science, 2013, 282, 680-688.	6.1	64
5	Microstructure and mechanical properties of Niî—¸Al and Niî—¸Alî—¸B alloys produced by rapid solidification technique. Intermetallics, 1996, 4, 85-90.	3.9	50
6	Embedded atom computer simulation of lattice distortion and dislocation core structure and mobility in Feî—¸Cr alloys. Acta Materialia, 1996, 44, 409-419.	7.9	48
7	Efficiency of the laser texturing on the adhesion of the coated twist drills. Journal of Materials Processing Technology, 2006, 179, 139-145.	6.3	48
8	Laser beam welding of dual-phase DP1000 steel. Journal of Materials Processing Technology, 2018, 252, 498-510.	6.3	47
9	Microstructure and surface properties of laser-remelted titanium nitride coatings on titanium. Surface and Coatings Technology, 2005, 199, 83-91.	4.8	45
10	Laser texturing of substrate of coated tools â€" Performance during machining and in adhesion tests. Surface and Coatings Technology, 2015, 276, 485-501.	4.8	40
11	One-sided laser beam welding of autogenous T-joints for 6013-T4 aluminium alloy. Materials & Design, 2015, 65, 726-736.	5.1	35
12	Microstructural analyses of the nanoparticles obtained after laser irradiation of Ti and W in ethanol. Applied Surface Science, 2006, 252, 4420-4424.	6.1	31
13	Fatigue in laser welded titanium tubes intended for use in aircraft pneumatic systems. International Journal of Fatigue, 2016, 90, 47-56.	5.7	27
14	A novel proposal to manipulate the properties of titanium parts by laser surface alloying. Scripta Materialia, 2013, 68, 471-474.	5.2	25
15	Wear performance of laser precoating treated cemented carbide milling tools. Wear, 2010, 268, 1329-1336.	3.1	22
16	Comparison of Mechanical and Microstructural Characteristics in Maraging 300 Steel Welded by three Different Processes: LASER, PLASMA and TIG. Procedia Engineering, 2015, 114, 291-297.	1.2	22
17	Mechanical and microstructural characterization of laser-welded joints of 6013-T4 aluminum alloy. Journal of the Brazilian Society of Mechanical Sciences and Engineering, 2015, 37, 133-140.	1.6	22
18	Scratch resistances of compacted graphite iron with plasma nitriding, laser hardening, and duplex surface treatments. Tribology International, 2020, 143, 106081.	5.9	22

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19	Cemented carbide surface modifications using laser treatment and its effects on hard coating adhesion. Surface and Coatings Technology, 2010, 204, 2410-2416.	4.8	21
20	Surface Hardening of an AISI D6 Cold Work Steel Using a Fiber Laser. Journal of ASTM International, 2011, 8, 1-9.	0.2	20
21	Laser surface remelting and hardening of an automotive shaft sing a high-power fiber laser. Materials Research, 2007, 10, 461-467.	1.3	19
22	Laser Processing of Carbon Fiber Reinforced Polymer Composite for Optical Fiber Guidelines. Physics Procedia, 2013, 41, 572-580.	1.2	19
23	An Analysis of the Mechanical Behavior of AISI 4130 Steel after TIG and Laser Welding Process. Procedia Engineering, 2015, 114, 181-188.	1.2	19
24	Surface stiffness gradient in Ti parts obtained by laser surface alloying with Cu and Nb. Surface and Coatings Technology, 2016, 297, 34-42.	4.8	19
25	Massive transformation and absolute stability. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2002, 33, 2337-2345.	2.2	18
26	Influence of laser surface texturing on surface microstructure and mechanical properties of adhesive joined steel sheets. Surface Engineering, 2009, 25, 180-186.	2.2	17
27	Development of laser beam welding of advanced high-strength steels. International Journal of Advanced Manufacturing Technology, 2016, 83, 1967-1977.	3.0	17
28	Absorption of Nd:YAG laser beam by metallic alloys. Journal of Materials Science Letters, 2000, 19, 2095-2097.	0.5	16
29	Cracking susceptibility of aluminum alloys during laser welding. Materials Research, 2003, 6, 273-278.	1.3	16
30	Influence of Laser Beam Power and Scanning Speed on the Macrostructural Characteristics of AISI 316L and AISI 431 Stainless Steel Depositions Produced by Laser Cladding Process. Journal of Materials Engineering and Performance, 2021, 30, 3298-3312.	2.5	16
31	Structure of laser remelted surface of cast irons. Surface Engineering, 2000, 16, 127-130.	2.2	15
32	Effect of laser welding heat input on fatigue crack growth and CTOD fracture toughness of HSLA steel joints. Journal of Materials Research and Technology, 2021, 11, 801-810.	5.8	15
33	Morphological instability of the austenite growth front in a laser remelted ironâ€“carbonâ€“silicon alloy. Journal of Crystal Growth, 2000, 208, 709-716.	1.5	14
34	Comparing mechanical behaviour of aluminium welds produced by laser beam welding (LBW), friction stir welding (FSW), and riveting for aeronautical structures. Welding International, 2016, 30, 497-503.	0.7	14
35	The influence of laser surface treatment on the fatigue crack growth of AA 2024-T3 aluminum alloy alclad sheet. Surface and Coatings Technology, 2017, 329, 244-249.	4.8	14
36	Laser beam welding of titanium nitride coated titanium using pulse-shaping. Materials Research, 2005, 8, 323-328.	1.3	12

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37	Effect of the initial substrate temperature on heat transfer and related phenomena in austenitic stainless steel parts fabricated by additive manufacturing using direct energy deposition. Journal of Materials Research and Technology, 2022, 18, 5267-5279.	5.8	12
38	Laser beam welding of DP980 dual phase steel at high temperatures. Optics and Laser Technology, 2020, 124, 105964.	4.6	11
39	Microstructural changes due to laser ablation of oxidized surfaces on an AISI M2 tool steel. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2003, 344, 1-9.	5.6	10
40	Machining performance of laser surface micro-textured drilling tools. International Journal of Surface Science and Engineering, 2011, 5, 98.	0.4	10
41	Laser surface treatment for enhanced titanium to carbon fiber-reinforced polymer adhesion. Journal of the Brazilian Society of Mechanical Sciences and Engineering, 2017, 39, 2917-2924.	1.6	10
42	A Comparative Study of the Heat Input During Laser Welding of Aeronautical Aluminum Alloy AA6013-T4. Journal of Aerospace Technology and Management, 0, 10, .	0.3	10
43	Mechanical and Corrosion Properties of a Duplex Steel Welded using Micro-Arc or Laser. Materials Research, 2015, 18, 723-731.	1.3	9
44	Discontinuity Detection in the Shield Metal Arc Welding Process. Sensors, 2017, 17, 1082.	3.8	9
45	Improvement weldability of dissimilar joints (Ti6Al4V/Al6013) for aerospace industry by laser beam welding. International Journal of Advanced Manufacturing Technology, 2021, 116, 1053-1070.	3.0	9
46	Effect of laser welding on microstructure and mechanical behaviour of dual phase 600 steel sheets. Heliyon, 2021, 7, e08601.	3.2	9
47	Phase transformations in an AISI 410S stainless steel observed in directional and laser-induced cooling regimes. Materials Research, 2012, 15, 32-40.	1.3	8
48	Experimental Development of Dual Phase Steel Laser-arc Hybrid Welding and its Comparison to Laser and Gas Metal Arc Welding. Soldagem E Inspecao, 2016, 21, 379-386.	0.6	8
49	Characterization of a laser-soldered avionic component using lead-free paste. Optics and Laser Technology, 2009, 41, 159-164.	4.6	7
50	Surface Modification of Ti6Al4V Alloy by Pulsed Lasers: Microstructure and Hydrophobic Behavior. Materials Research, 2017, 20, 8-14.	1.3	7
51	Non-contact sheet forming using lasers applied to a high strength aluminum alloy. Journal of Materials Research and Technology, 2016, 5, 275-281.	5.8	6
52	Mechanical behavior and microstructure of a fiber laserâ€“welded TWIP steel. International Journal of Advanced Manufacturing Technology, 2019, 104, 1245-1250.	3.0	6
53	Weldability of a zirconium alloy comparing resistance and pulsed laser methods. Nuclear Materials and Energy, 2019, 20, 100693.	1.3	6
54	Occurrence of defects in laser beam welded Al-Cu-Li sheets with t-joint configuration. Journal of Aerospace Technology and Management, 2012, 4, 421-429.	0.3	6

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55	A crack propagation study on T-joints of AA6013-T4 aluminum alloy welded by an Yb:fiber laser. International Journal of Advanced Manufacturing Technology, 2017, 92, 2831-2841.	3.0	5
56	Laser-induced heating for enhanced fatigue life of aerospace aluminum alloys. Journal of the Brazilian Society of Mechanical Sciences and Engineering, 2018, 40, 1.	1.6	5
57	Fiber Laser Surface Melting of a NiTi Superelastic Alloy: Influence on Structural and Mechanical Properties. Metals, 2019, 9, 1268.	2.3	5
58	Comparing the weldability of AA6013-T4 aluminium alloy on DP600 dual-phase steel with laser welding and resistance spot welding. Journal of the Brazilian Society of Mechanical Sciences and Engineering, 2020, 42, 1.	1.6	5
59	Pulsed laser damage threshold evaluation of a carbon fiber composite skin and its effects on internal substrates. Optics and Laser Technology, 2021, 143, 107304.	4.6	5
60	Laser beam welding aerospace aluminum using fiber lasers. Proceedings of SPIE, 2008, , .	0.8	4
61	Surface Characterization in a 300 M Bainitic Steel Laser Carburizing. Procedia Engineering, 2015, 114, 322-329.	1.2	4
62	Fatigue crack growth behavior of laser-shock processed aluminum alloy 2024-T3. Procedia Structural Integrity, 2019, 17, 324-330.	0.8	4
63	Assessment of the Fatigue Behavior of Ti-6Al-4V ELI Alloy with Surface Treated by Nd:YAG Laser Irradiation. Materials Research, 2019, 22, .	1.3	4
64	Low-velocity growth in laser resolidified Fe-C-Si alloys. International Journal of Cast Metals Research, 1999, 11, 273-277.	1.0	3
65	Simulating the damage accumulation in aircraft bleed system ducts joined by laser and arc welding processes. Procedia Engineering, 2011, 10, 1321-1326.	1.2	3
66	ITO Obtained by Spray Pyrolysis and Coating on Glass Substrate. Journal of the Brazilian Chemical Society, 2017, , .	0.6	3
67	Formability of in-situ Austempered Transformation-induced Plasticity Steels After Laser Beam Welding. Soldagem E Inspecao, 2018, 23, 402-412.	0.6	3
68	Effect of Different Forms of Application of a Laser Surface Treatment on Fatigue Crack Growth of an AA6013-T4 Aluminum Alloy. Journal of Materials Engineering and Performance, 2019, 28, 5832-5842.	2.5	3
69	A Comparative Study of Abbreviated Heat Treatments for SAE 4130 Steel After Laser Welding. Materials Research, 2020, 23, .	1.3	3
70	DeterminaciÃ³n de la absorciÃ³n de haz lÃ¡ser en ensayos de refusiÃ³n en rÃ©gimen continuo. Revista De Metalurgia, 1998, 34, 131-134.	0.5	3
71	Investigation of Laser Treatment as a Method for Fatigue Crack Growth Retardation in Aluminum Alloy 2198-T851. Metals, 2021, 11, 2034.	2.3	3
72	Comparison of High Cycle Fatigue in 4340 and 300M Steel Welded with Fiber Laser. Advanced Materials Research, 0, 891-892, 1507-1512.	0.3	2

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73	Characterization of Phase Transformations and Microstructural Changes in an API 5CT L80 Steel Grade During Ni Alloy Laser Cladding. Materials Research, 2018, 21, .	1.3	2
74	Microstructure and wear behaviour of laser hardened SAE 4130 steels. International Journal of Surface Science and Engineering, 2018, 12, 161.	0.4	2
75	Fatigue Performance of Laser Welds in Heavy-Gage Press Hardening Steels. Metals, 2022, 12, 580.	2.3	2
76	Numerical Simulation and Experimental Analysis of Laser Surface Remelting of AISI 304 Stainless Steel Samples. Materials Science Forum, 0, 636-637, 1119-1124.	0.3	1
77	Study of Laser Welding and Heat Treatments Done in Different High Strength Steels: 4340, 300M, Maraging 300. , 2013, , .		1
78	Weldability and mechanical behavior of laser-welded TRIP 750 steel sheets. International Journal of Advanced Manufacturing Technology, 2020, 107, 2807-2815.	3.0	1
79	Heat treatment effects on the hardness and wear behavior of laser-welded AISI40 martensitic steel plates. International Journal of Advanced Manufacturing Technology, 2021, 114, 1155-1163.	3.0	1
80	Elimination of Lubricants from Aluminum Cold Rolled Products Using Short Laser Pulses. Materials Research, 2002, 5, 205-208.	1.3	0
81	Coated Steel Surfaces with WC by Lasers Action. Materials Science Forum, 0, 727-728, 345-348.	0.3	0
82	High Cycle Fatigue Behavior and Microstructural Characterization of 6013-T4 Aluminum Alloy Laser Welded Joints. Advanced Materials Research, 0, 891-892, 1767-1772.	0.3	0
83	Fiber laser welding of hot stamping steel: effect of in situ annealing on the microstructure and mechanical properties. Welding in the World, Le Soudage Dans Le Monde, 2021, 65, 57-65.	2.5	0
84	Experimental and Simulation Analysis of Effects of Laser Bending on Microstructures Applied to Advanced Metallic Alloys. Metals, 2021, 11, 362.	2.3	0
85	Soldagem do aÃ§o inoxidÃ¡vel AISI 316 com laser Ã fibra de alta potÃªncia: influÃªncia dos parÃ¢metros operacionais na micro dureza e na susceptibilidade Ã corrosÃ£o eletrolÃtica dos cordÃµes de solda. Revista Materia, 2013, 18, 1338-1349.	0.2	0
86	ComparaÃ§Ã£o das propriedades mecÃ¢nicas de juntas de alumÃnio obtidas por soldagem a laser (LBW), por friction stir welding (FSW) e rebitadas para aplicaÃ§Ã£o em estruturas aeronÃ¡uticas. Soldagem E Inspecao, 2014, 19, 145-151.	0.6	0
87	Phase Separation and Development of the Microstructure for Stainless Steel to Copper Alloy Weld Joints Using a Fiber Laser. Journal of Aerospace Technology and Management, 0, , .	0.3	0
88	Corrosion Susceptibility and Functionally Graded Properties of Ti-35Nb-4Sn Alloy Processed by Laser Remelting. Materials Research, 2020, 23, .	1.3	0
89	Determination of Tensile Shear Strength and Corrosion Behavior of Circular Bead Produced by a Laser Beam for Overlapped AISI 304 Steel Sheets. Soldagem E Inspecao, 0, 26, .	0.6	0
90	Reduced Coefficient of Friction of Laser Surface Hardened AISI 4130 Steel Substrates. Material Design and Processing Communications, 2022, 2022, 1-9.	0.9	0