

Giuseppe Casalino

List of Publications by Year in descending order

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Version: 2024-02-01

85
papers

2,791
citations

147726

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197736

49
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88
all docs

88
docs citations

88
times ranked

2136
citing authors

#	ARTICLE	IF	CITATIONS
1	Experimental investigation and statistical optimisation of the selective laser melting process of a maraging steel. Optics and Laser Technology, 2015, 65, 151-158.	2.2	327
2	Investigation on Ti6Al4V laser welding using statistical and Taguchi approaches. Journal of Materials Processing Technology, 2005, 167, 422-428.	3.1	112
3	An ANN and Taguchi algorithms integrated approach to the optimization of CO2 laser welding. Advances in Engineering Software, 2006, 37, 643-648.	1.8	102
4	Ybâ€“YAG laser offset welding of AA5754 and T40 butt joint. Journal of Materials Processing Technology, 2015, 223, 139-149.	3.1	101
5	Effect of power distribution on the weld quality during hybrid laser welding of an Alâ€“Mg alloy. Optics and Laser Technology, 2015, 73, 118-126.	2.2	90
6	Laser offset welding of AZ31B magnesium alloy to 316 stainless steel. Journal of Materials Processing Technology, 2017, 242, 49-59.	3.1	75
7	Laser-arc hybrid welding of wrought to selective laser molten stainless steel. International Journal of Advanced Manufacturing Technology, 2013, 68, 209-216.	1.5	74
8	Study on arc and laser powers in the hybrid welding of AA5754 Al-alloy. Materials & Design, 2014, 61, 191-198.	5.1	74
9	Laser diode transmission welding of polypropylene: Geometrical and microstructure characterisation of weld. Materials & Design, 2009, 30, 2745-2751.	5.1	73
10	Analysis and Comparison of Friction Stir Welding and Laser Assisted Friction Stir Welding of Aluminum Alloy. Materials, 2013, 6, 5923-5941.	1.3	72
11	Ytterbium fiber laser welding of Ti6Al4V alloy. Journal of Manufacturing Processes, 2015, 20, 250-256.	2.8	70
12	Modeling and experimental analysis of fiber laser offset welding of Al-Ti butt joints. International Journal of Advanced Manufacturing Technology, 2016, 83, 89-98.	1.5	66
13	On the Relevance of Volumetric Energy Density in the Investigation of Inconel 718 Laser Powder Bed Fusion. Materials, 2020, 13, 538.	1.3	66
14	On the numerical modelling of the multiphysics self piercing riveting process based on the finite element technique. Advances in Engineering Software, 2008, 39, 787-795.	1.8	58
15	Statistical analysis of MIG-laser CO2 hybrid welding of Alâ€“Mg alloy. Journal of Materials Processing Technology, 2007, 191, 106-110.	3.1	52
16	A technical note on the mechanical and physical characterization of selective laser sintered sand for rapid casting. Journal of Materials Processing Technology, 2005, 166, 1-8.	3.1	46
17	Minimisation of the residual stress in the heat affected zone by means of numerical methods. Materials & Design, 2007, 28, 2295-2302.	5.1	46
18	Multi-objective optimization of laser milling of 5754 aluminum alloy. Optics and Laser Technology, 2013, 52, 48-56.	2.2	45

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19	Numerical model of CO2 laser welding of thermoplastic polymers. Journal of Materials Processing Technology, 2008, 207, 63-71.	3.1	43
20	An artificial neural network approach for the control of the laser milling process. International Journal of Advanced Manufacturing Technology, 2013, 66, 1777-1784.	1.5	43
21	Characterization of Thermo-Mechanical and Fracture Behaviors of Thermoplastic Polymers. Materials, 2014, 7, 375-398.	1.3	43
22	Taguchi Optimization of the Surface Finish Obtained by Laser Ablation on Selective Laser Molten Steel Parts. Procedia CIRP, 2013, 12, 462-467.	1.0	41
23	Investigation on direct laser powder deposition of 18 Ni (300) marage steel using mathematical model and experimental characterisation. International Journal of Advanced Manufacturing Technology, 2017, 89, 885-895.	1.5	41
24	Arc Leading Versus Laser Leading in the Hybrid Welding of Aluminium Alloy Using a Fiber Laser. Procedia CIRP, 2013, 12, 151-156.	1.0	38
25	Influence of Shoulder Geometry and Coating of the Tool on the Friction Stir Welding of Aluminium Alloy Plates. Procedia Engineering, 2014, 69, 1541-1548.	1.2	38
26	Microstructural Characteristics and Mechanical Properties of Ti6Al4V Alloy Fiber Laser Welds. Procedia CIRP, 2015, 33, 428-433.	1.0	36
27	FEM Simulation of Dissimilar Aluminum Titanium Fiber Laser Welding Using 2D and 3D Gaussian Heat Sources. Metals, 2017, 7, 307.	1.0	36
28	[INVITED] Computational intelligence for smart laser materials processing. Optics and Laser Technology, 2018, 100, 165-175.	2.2	36
29	Low temperature heat treatments of AA5754-Ti6Al4V dissimilar laser welds: Microstructure evolution and mechanical properties. Optics and Laser Technology, 2018, 100, 109-118.	2.2	35
30	Study on the fiber laser/TIG weldability of AISI 304 and AISI 410 dissimilar weld. Journal of Manufacturing Processes, 2018, 35, 216-225.	2.8	35
31	Effects of Laser Offset and Hybrid Welding on Microstructure and IMC in Fe-Al Dissimilar Welding. Metals, 2017, 7, 282.	1.0	32
32	Experimental and Numerical Study of AISI 4130 Steel Surface Hardening by Pulsed Nd:YAG Laser. Materials, 2019, 12, 3136.	1.3	31
33	ANN modelling to optimize manufacturing processes: the case of laser welding. IFAC-PapersOnLine, 2016, 49, 378-383.	0.5	29
34	Hybrid welding of AA5754 annealed alloy: Role of post weld heat treatment on microstructure and mechanical properties. Materials and Design, 2016, 90, 777-786.	3.3	29
35	Deformation prediction and quality evaluation of the gas metal arc welding butt weld. Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture, 2003, 217, 1615-1622.	1.5	28
36	Investigation on the effects of laser power and scanning speed on polypropylene diode transmission welds. International Journal of Advanced Manufacturing Technology, 2010, 50, 217-226.	1.5	27

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37	Statistical Analysis and Modelling of an Yb: KGW Femtosecond Laser Micro-drilling Process. <i>Procedia CIRP</i> , 2017, 62, 275-280.	1.0	27
38	A FEM model to study the fiber laser welding of Ti6Al4V thin sheets. <i>International Journal of Advanced Manufacturing Technology</i> , 2016, 86, 1339-1346.	1.5	26
39	On the role of the Thermal Contact Conductance during the Friction Stir Welding of an AA5754-H111 butt joint. <i>Applied Thermal Engineering</i> , 2016, 104, 263-273.	3.0	25
40	An investigation of rapid prototyping of sand casting molds by selective laser sintering. <i>Journal of Laser Applications</i> , 2002, 14, 100-106.	0.8	24
41	Influence of Process Parameters on the Vertical Forces Generated during Friction Stir Welding of AA6082-T6 and on the Mechanical Properties of the Joints. <i>Metals</i> , 2017, 7, 350.	1.0	23
42	Hybrid laser arc welding of dissimilar TWIP and DP high strength steel weld. <i>Journal of Manufacturing Processes</i> , 2019, 39, 233-240.	2.8	23
43	On the feasibility of AISI 304 stainless steel laser welding with metal powder. <i>Journal of Manufacturing Processes</i> , 2020, 56, 96-105.	2.8	23
44	A model for evaluation of laser welding efficiency and quality using an artificial neural network and fuzzy logic. <i>Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture</i> , 2004, 218, 641-646.	1.5	22
45	Statistical analysis and optimization of direct metal laser deposition of 227-F Colmonoy nickel alloy. <i>Optics and Laser Technology</i> , 2017, 94, 138-145.	2.2	22
46	Mechanical and microstructure analysis of AA6061 and Ti6Al4V fiber laser butt weld. <i>Optik</i> , 2017, 148, 151-156.	1.4	22
47	Optimization of Ni-Based WC/Co/Cr Composite Coatings Produced by Multilayer Laser Cladding. <i>Advances in Materials Science and Engineering</i> , 2013, 2013, 1-7.	1.0	21
48	FEM Analysis of Fiber Laser Welding of Titanium and Aluminum. <i>Procedia CIRP</i> , 2016, 41, 992-997.	1.0	21
49	Finite Element Model for Laser Welding of Titanium. <i>Procedia CIRP</i> , 2015, 33, 434-439.	1.0	20
50	Parameter selection by an artificial neural network for a laser bending process. <i>Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture</i> , 2002, 216, 1517-1520.	1.5	18
51	Finite element simulation of high speed pulse welding of high specific strength metal alloys. <i>Journal of Materials Processing Technology</i> , 2008, 197, 301-305.	3.1	18
52	Study of the Direct Metal Deposition of AA2024 by ElectroSpark for Coating and Reparation Scopes. <i>Applied Sciences (Switzerland)</i> , 2017, 7, 945.	1.3	16
53	A Methodology for Optimization of the Direct Laser Metal Deposition Process. <i>Key Engineering Materials</i> , 2011, 473, 75-82.	0.4	15
54	Effect of Cold Rolling on the Mechanical Properties and Formability of FSWed Sheets in AA5754-H114. <i>Metals</i> , 2018, 8, 223.	1.0	15

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55	Analysis of the molten/solidified zone in selective laser melted parts. , 2014, , .		14
56	Advances in Welding Metal Alloys, Dissimilar Metals and Additively Manufactured Parts. Metals, 2017, 7, 32.	1.0	13
57	Weldability of TWIP and DP steel dissimilar joint by laser arc hybrid welding with austenitic filler. Procedia CIRP, 2018, 67, 607-611.	1.0	13
58	Off-Set and Focus Effects on Grade 5 Titanium to 6061 Aluminum Alloy Fiber Laser Weld. Materials, 2018, 11, 2337.	1.3	13
59	Analysis of laser direct stainless steel powder deposition on Ti6Al4V substrate. Materials Letters, 2020, 274, 128064.	1.3	13
60	Analysis of the Process Parameters, Post-Weld Heat Treatment and Peening Effects on Microstructure and Mechanical Performance of TiAl Dissimilar Laser Weldings. Metals, 2021, 11, 1257.	1.0	13
61	Neuro-Fuzzy Model for the Prediction and Classification of the Fused Zone Levels of Imperfections in Ti6Al4V Alloy Butt Weld. Advances in Materials Science and Engineering, 2013, 2013, 1-7.	1.0	12
62	Study of a fiber laser assisted friction stir welding process. Proceedings of SPIE, 2012, , .	0.8	10
63	Mathematical Modeling of Weld Phenomena, Part 1. , 2014, , 101-109.		10
64	Transfer mode effects on Ti6Al4V wall building in wire laser additive manufacturing. Manufacturing Letters, 2021, 28, 17-20.	1.1	10
65	Repairing 2024 Aluminum Alloy via Electrospark Deposition Process: A Feasibility Study. Advances in Materials Science and Engineering, 2018, 2018, 1-11.	1.0	9
66	Experimental Investigation of Material Properties in FSW Dissimilar Aluminum-Steel Lap Joints. Metals, 2021, 11, 1474.	1.0	9
67	Microstructural analysis of AISI 304 bars welded with high speed pulsed discharges. Journal of Materials Processing Technology, 2007, 191, 149-152.	3.1	8
68	Fiber laser-MAG hybrid welding of DP/AISI 316 and TWIP/AISI 316 dissimilar weld. Procedia CIRP, 2019, 79, 153-158.	1.0	8
69	Thermo-Mechanical Simulation of Hybrid Welding of DP/AISI 316 and TWIP/AISI 316 Dissimilar Weld. Materials, 2020, 13, 2088.	1.3	8
70	Numerical Simulation of Multi-Point Capacitor Discharge Welding of AISI 304 Bars. Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture, 2006, 220, 647-655.	1.5	7
71	Hybrid Welding of AA5754-H111 Alloy Using a Fiber Laser. Advanced Materials Research, 2012, 628, 193-198.	0.3	7
72	FEM model for TIG hybrid laser butt welding of 6 mm thick austenitic to martensitic stainless steels. Procedia CIRP, 2020, 88, 116-121.	1.0	7

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73	Laser-assisted friction stir welding of aluminum alloy lap joints: microstructural and microhardness characterizations. Proceedings of SPIE, 2014, , .	0.8	6
74	FEM simulation of metal sheets laser welding with wire filler material. , 2005, , .		4
75	Recent Achievements in Rotary, Linear and Friction Stir Welding of Metals Alloys. Metals, 2020, 10, 80.	1.0	4
76	Process parameters effects on Al-Mg alloys mig-laser CO2 welding. , 2005, , .		3
77	DOE Analysis of the Effects of Geometrical Parameters on the Self-Piercing Riveting of Aluminium Alloy AA6060T4. Key Engineering Materials, 2011, 473, 733-738.	0.4	3
78	Statistical modelling and optimization of nanosecond Nd:YAG Q-switched laser scarfing of carbon fiber reinforced polymer. Optics and Laser Technology, 2022, 147, 107599.	2.2	3
79	Characterisation of Al-Mg alloys mig-laser CO2 combined welding. , 2005, , .		2
80	Investigation on the Residual Stress of AISI 4047 Low Alloy Steel Laser Welded. Key Engineering Materials, 2007, 344, 715-722.	0.4	2
81	Post Treatment Laser Irradiation For Recovery Of Deformation Induced By Surface Laser Hardening. AIP Conference Proceedings, 2009, , .	0.3	2
82	Analysis of the Material Removal Rate of Nanosecond Laser Ablation of Aluminium Using a Parallel Hatching Mode. Applied Mechanics and Materials, 2012, 201-202, 1159-1163.	0.2	2
83	Laser-arc combined welding of aa5754 alloy. Materials Letters, 2021, 284, 128946.	1.3	2
84	Laser Materials Fabrication and Joining. Materials, 2020, 13, 2800.	1.3	1
85	On the laser scarfing of epoxy resin matrix composite with copper reinforcement. Manufacturing Letters, 2021, 27, 1-3.	1.1	1