

# Michela Simoncini

## List of Publications by Year in descending order

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90  
papers

1,483  
citations

331670

21  
h-index

377865

34  
g-index

92  
all docs

92  
docs citations

92  
times ranked

1001  
citing authors

#	ARTICLE	IF	CITATIONS
1	Robotic automated fiber placement of carbon fiber towpregs. Materials and Manufacturing Processes, 2022, 37, 539-547.	4.7	7
2	Comparison between the mechanical properties and environmental impacts of 3D printed synthetic and bio-based composites. Procedia CIRP, 2022, 105, 380-385.	1.9	3
3	Investigation on Corrosion Resistance Properties of 17-4 PH Bound Metal Deposition As-Sintered Specimens with Different Build-Up Orientations. Metals, 2022, 12, 588.	2.3	5
4	Process parameters effect on environmental sustainability of composites FFF technology. Materials and Manufacturing Processes, 2022, 37, 591-601.	4.7	15
5	Life cycle impact assessment of safety shoes toe caps realized with reclaimed composite materials. Journal of Cleaner Production, 2022, 347, 131321.	9.3	8
6	The use of 3D printed models for the pre-operative planning of surgical correction of pediatric hip deformities: a case series and concise review of the literature.. Acta Biomedica, 2022, 92, e2021221.	0.3	3
7	Assessing 3-D Printing in Hip Replacement Surgical Planning.. Radiologic Technology, 2022, 93, 246-254.	0.1	0
8	Buckling behavior of 3D printed composite isogrid structures. Procedia CIRP, 2021, 99, 375-380.	1.9	6
9	Deformation behavior of pre-painted steel sheets. Procedia CIRP, 2021, 99, 266-271.	1.9	1
10	Effect of Geometric Parameters and Moisture Content on the Mechanical Performances of 3D-Printed Isogrid Structures in Short Carbon Fiber-Reinforced Polyamide. Journal of Materials Engineering and Performance, 2021, 30, 5100-5107.	2.5	12
11	Environmental impact assessment of zero waste approach for carbon fiber prepreg scraps. Sustainable Materials and Technologies, 2021, 29, e00308.	3.3	9
12	Experimental and numerical investigation on forming limit curves of AA6082 aluminum alloy at high strain rates. International Journal of Advanced Manufacturing Technology, 2021, 112, 1973-1991.	3.0	13
13	Environmental and buckling performance analysis of 3D printed composite isogrid structures. Procedia CIRP, 2021, 98, 458-463.	1.9	10
14	Effect of Cavitation Peening on Fatigue Properties in Friction Stir Welded Aluminum Alloy AA5754. Metals, 2021, 11, 59.	2.3	12
15	Experimental Analysis and Optimization to Maximize Ultimate Tensile Strength and Ultimate Elongation of Friction Stir Welded AA6082 Aluminum Alloy. Metals, 2021, 11, 69.	2.3	6
16	Comparison among the environmental impact of solid state and fusion welding processes in joining an aluminium alloy. Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture, 2020, 234, 140-156.	2.4	29
17	High-Speed Deformation of Pinless FSWed Thin Sheets in AA6082 Alloy. Metals, 2020, 10, 15.	2.3	5
18	Performance analysis of MWCNT/Epoxy composites produced by CRTM. Journal of Materials Processing Technology, 2020, 286, 116839.	6.3	11

#	ARTICLE	IF	CITATIONS
19	Environmental assessment of an automated impregnation process of carbon fiber tows. Procedia CIRP, 2020, 88, 445-450.	1.9	5
20	Mechanical properties of carbon fiber reinforced plastic obtained by the automatic deposition of an innovative towpreg. Procedia CIRP, 2020, 88, 451-456.	1.9	8
21	3D printing and testing of composite isogrid structures. International Journal of Advanced Manufacturing Technology, 2020, 109, 1881-1893.	3.0	15
22	Solid State Joining of Thin Hybrid Sandwiches Made of Steel and Polymer: a Feasibility Study. Procedia Manufacturing, 2020, 47, 400-405.	1.9	4
23	Manufacturing of Isogrid Composite Structures by 3D Printing. Procedia Manufacturing, 2020, 47, 1096-1100.	1.9	18
24	New Approaches to Friction Stir Welding of Aluminum Light-Alloys. Metals, 2020, 10, 233.	2.3	23
25	Life cycle impact assessment of different manufacturing technologies for automotive CFRP components. Journal of Cleaner Production, 2020, 271, 122677.	9.3	31
26	Tensile Behavior and Formability of Pre-Painted Steel Sheets. Metals, 2020, 10, 53.	2.3	1
27	Mechanical properties and formability of metalâ€“polymerâ€“metal sandwich composites. International Journal of Advanced Manufacturing Technology, 2020, 107, 3333-3349.	3.0	14
28	Buckling Behavior of Isogrid Composite Structures Obtained by Fused Deposition Modeling Technique. , 2020, , .		0
29	Prediction of the vertical force during FSW of AZ31 magnesium alloy sheets using an artificial neural network-based model. Neural Computing and Applications, 2019, 31, 7211-7226.	5.6	23
30	Constant Heat Input Friction Stir Welding of Variable Thickness AZ31 Sheets Through In-Process Tool Rotation Control. Journal of Manufacturing Science and Engineering, Transactions of the ASME, 2019, 141, .	2.2	9
31	Mechanical properties of sandwich composite panels. AIP Conference Proceedings, 2019, , .	0.4	1
32	Flow curve prediction of ZAM100 magnesium alloy sheets using artificial neural network-based models. Procedia CIRP, 2019, 79, 661-666.	1.9	3
33	A new sustainable direct solid state recycling of AA1090 aluminum alloy chips by means of friction stir back extrusion process. Procedia CIRP, 2019, 79, 638-643.	1.9	16
34	Benchmarking the sustainable manufacturing paradigm via automatic analysis and clustering of scientific literature: A perspective from Italian technologists. Procedia Manufacturing, 2019, 33, 153-159.	1.9	4
35	Post-FSW Cold-Rolling Simulation of ECAP Shear Deformation and Its Microstructure Role Combined to Annealing in a FSWed AA5754 Plate Joint. Materials, 2019, 12, 1526.	2.9	8
36	Formability and Grained Structure Refinement of Cold-Rolled Friction Stir Welded AA5754 Sheet. IOP Conference Series: Materials Science and Engineering, 2019, 611, 012001.	0.6	1

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37	Effect of Carbon Nanotubes Dispersion on the Microhardness of CFRP Composites. Key Engineering Materials, 2019, 813, 370-375.	0.4	1
38	In-process Control of Rotational Speed in Friction Stir Welding of Sheet Blanks with Variable Mechanical Properties. Procedia CIRP, 2018, 67, 440-445.	1.9	4
39	In-process control strategies for friction stir welding of AZ31 sheets with non-uniform thickness. International Journal of Advanced Manufacturing Technology, 2018, 95, 493-504.	3.0	6
40	Effect of the Rolling Temperature on Hot Formability of ZAM100 Magnesium Alloy. Procedia CIRP, 2018, 67, 493-497.	1.9	5
41	Study of tapping process of carbon fiber reinforced plastic composites/AA7075 stacks. AIP Conference Proceedings, 2018, , .	0.4	5
42	Effect of Cold Rolling on the Mechanical Properties and Formability of FSWed Sheets in AA5754-H114. Metals, 2018, 8, 223.	2.3	15
43	Adapted Nakazima test to evaluate dynamic effect on strain distribution and dome height in balanced biaxial stretching condition. International Journal of Mechanical Sciences, 2018, 148, 50-63.	6.7	9
44	A sustainable solid state recycling of pure aluminum by means of friction stir extrusion process (FSE). AIP Conference Proceedings, 2018, , .	0.4	5
45	Frictional behaviour of AA7075-O aluminium alloy in high speed tests. International Journal of Advanced Manufacturing Technology, 2017, 89, 1-12.	3.0	47
46	Sustainability Analysis of Friction Stir Welding of AA5754 Sheets. Procedia CIRP, 2017, 62, 529-534.	1.9	44
47	Reverse Engineering and Scanning Electron Microscopy Applied to the Characterization of Tool Wear in Dry Milling Processes. Procedia CIRP, 2017, 62, 233-238.	1.9	8
48	In-process tool rotational speed variation with constant heat input in friction stir welding of AZ31 sheets with variable thickness. AIP Conference Proceedings, 2017, , .	0.4	1
49	Design of Stamping Processes of Pinless FSWed Thin Sheets in AA1050 Alloy for Motomotive Applications Using FEM. Procedia Engineering, 2017, 183, 213-218.	1.2	3
50	Tool wear and hole quality in drilling of CFRP/AA7075 stacks with DLC and nanocomposite TiAlN coated tools. Journal of Manufacturing Processes, 2017, 30, 582-592.	5.9	57
51	Mechanical Properties and Formability of Cold Rolled Friction Stir Welded Sheets in AA5754 for Automotive Applications. Procedia Engineering, 2017, 183, 245-250.	1.2	17
52	Study of high strain rate effect on sheet formability based on Nakazima test. AIP Conference Proceedings, 2017, , .	0.4	0
53	Influence of Process Parameters on the Vertical Forces Generated during Friction Stir Welding of AA6082-T6 and on the Mechanical Properties of the Joints. Metals, 2017, 7, 350.	2.3	23
54	New Approaches to the Friction Stir Welding of Aluminum Alloys. , 2016, , .		2

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55	Friction Stir Processing at High Rotation Rates of a Magnesium Alloy: Mechanical Properties at High Temperatures and Microstructure. Materials Science Forum, 2016, 879, 295-300.	0.3	4
56	In-process tool force and rotation variation to control sheet thickness change in friction stir welding of magnesium alloys. AIP Conference Proceedings, 2016, , .	0.4	4
57	Development of double-side friction stir welding to improve post-welding formability of joints in AA6082 aluminium alloy. Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture, 2016, 230, 807-817.	2.4	15
58	Effect of welding motion and pre-/post-annealing of friction stir welded AA5754 joints. Materials and Design, 2016, 93, 146-159.	7.0	33
59	Effect of process parameters on vertical forces and temperatures developed during friction stir welding of magnesium alloys. International Journal of Advanced Manufacturing Technology, 2016, 85, 595-604.	3.0	40
60	Robotic Friction Stir Welding of AA5754 Aluminum Alloy Sheets at Different Initial Temper States. Key Engineering Materials, 2014, 622-623, 540-547.	0.4	3
61	Bending and Stamping Processes of FSWed Thin Sheets in AA1050 Alloy. Key Engineering Materials, 2014, 622-623, 459-466.	0.4	6
62	Double side friction stir welding of AA6082 sheets: Microstructure and nanoindentation characterization. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2014, 590, 209-217.	5.6	50
63	Micro- and Macro- Mechanical Properties of Pinless Friction Stir Welded Joints in AA5754 Aluminium Thin Sheets. Procedia CIRP, 2014, 18, 9-14.	1.9	21
64	Mechanical properties and microstructure of joints in AZ31 thin sheets obtained by friction stir welding using "pin" and "pinless" tool configurations. Materials & Design, 2012, 34, 219-229.	5.1	49
65	Plastic flow behaviour and formability of friction stir welded joints in AZ31 thin sheets obtained using the "pinless" tool configuration. Materials & Design, 2012, 36, 123-129.	5.1	28
66	Effect of the welding parameters and tool configuration on micro- and macro-mechanical properties of similar and dissimilar FSWed joints in AA5754 and AZ31 thin sheets. Materials & Design, 2012, 41, 50-60.	5.1	85
67	Prediction of flow curves and forming limit curves of Mg alloy thin sheets using ANN-based models. Computational Materials Science, 2011, 50, 3184-3197.	3.0	22
68	Post-welding formability of AZ31 magnesium alloy. Materials & Design, 2011, 32, 2988-2991.	5.1	12
69	A statistically based methodology in the identification of friction welding parameters. , 2011, , .		2
70	Effect of the $\dot{\gamma}/v$ ratio and sheet thickness on mechanical properties of magnesium alloy FSWED joints. International Journal of Material Forming, 2010, 3, 1007-1010.	2.0	7
71	Effect of temperature, strain rate and fibre orientation on the plastic flow behaviour and formability of AZ31 magnesium alloy. Journal of Materials Processing Technology, 2010, 210, 1354-1363.	6.3	71
72	Formability of Friction Stir Welded AZ31 Magnesium Alloy Sheets. Materials Science Forum, 2010, 638-642, 1249-1254.	0.3	11

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73	Process Parameter Effects on the LDR in Warm Deep Drawing of Magnesium Alloys. Key Engineering Materials, 2009, 410-411, 587-593.	0.4	1
74	Characterisation of AZ31B magnesium alloy formability in warm forming conditions. International Journal of Material Forming, 2008, 1, 205-208.	2.0	16
75	Surface roughness modelling in finish face milling under MQL and dry cutting conditions. International Journal of Material Forming, 2008, 1, 503-506.	2.0	35
76	Hard turning of an alloy steel on a machine tool with a polymer concrete bed. Journal of Materials Processing Technology, 2008, 202, 493-499.	6.3	66
77	Constitutive Models for AZ31 Magnesium Alloys. Key Engineering Materials, 2008, 367, 87-94.	0.4	11
78	Evaluation of Friction Coefficient in Tube Drawing Processes. AIP Conference Proceedings, 2007, , .	0.4	2
79	Formability and Microstructure of AZ31 Magnesium Alloy Sheets. Key Engineering Materials, 2007, 344, 31-38.	0.4	18
80	Effect of the lubrication-cooling technique, insert technology and machine bed material on the workpart surface finish and tool wear in finish turning of AISI 420B. International Journal of Machine Tools and Manufacture, 2006, 46, 1547-1554.	13.4	99
81	Air bending of AZ31 magnesium alloy in warm and hot forming conditions. Journal of Materials Processing Technology, 2006, 177, 373-376.	6.3	27
82	Modelling of the rheological behaviour of aluminium alloys in multistep hot deformation using the multiple regression analysis and artificial neural network techniques. Journal of Materials Processing Technology, 2006, 177, 323-326.	6.3	80
83	Warm Formability of AZ31 Magnesium Alloy Sheets under Different Process Conditions. Materials Science Forum, 0, 604-605, 379-387.	0.3	6
84	Friction Stir Welding of Magnesium Alloys under Different Process Parameters. Materials Science Forum, 0, 638-642, 3954-3959.	0.3	21
85	Thickness Effect on the Formability of AZ31 Magnesium Alloy Sheets. Key Engineering Materials, 0, 473, 313-318.	0.4	5
86	Experimental and Numerical Analysis on FSWed Magnesium Alloy Thin Sheets Obtained Using "Pin" and "Pinless" Tool. Key Engineering Materials, 0, 504-506, 747-752.	0.4	9
87	Similar and Dissimilar FSWed Joints in Lightweight Alloys: Heating Distribution Assessment and IR Thermography Monitoring for On-Line Quality Control. Key Engineering Materials, 0, 554-557, 1055-1064.	0.4	6
88	High Strain Rate Behaviour of AA7075 Aluminum Alloy at Different Initial Temper States. Key Engineering Materials, 0, 651-653, 114-119.	0.4	21
89	Evaluation of Friction at High Strain Rate using the Split Hopkinson Bar. Key Engineering Materials, 0, 651-653, 108-113.	0.4	3
90	Formability and Microstructure of AZ31 Magnesium Alloy Sheets. Key Engineering Materials, 0, , 31-38.	0.4	1