

Diego Carou

List of Publications by Year in descending order

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47
papers

1,396
citations

394286

19
h-index

345118

36
g-index

50
all docs

50
docs citations

50
times ranked

1135
citing authors

#	ARTICLE	IF	CITATIONS
1	Multi-objective optimization and life cycle assessment of eco-friendly cryogenic N2 assisted turning of Ti-6Al-4V. <i>Journal of Cleaner Production</i> , 2019, 210, 121-133.	4.6	165
2	Technical, Economic and Environmental Review of the Lubrication/Cooling Systems Used in Machining Processes. <i>Procedia Engineering</i> , 2017, 184, 99-116.	1.2	164
3	Surface Quality Enhancement of Fused Deposition Modeling (FDM) Printed Samples Based on the Selection of Critical Printing Parameters. <i>Materials</i> , 2018, 11, 1382.	1.3	143
4	Thermal analysis during turning of AZ31 magnesium alloy under dry and cryogenic conditions. <i>International Journal of Advanced Manufacturing Technology</i> , 2017, 91, 2855-2868.	1.5	127
5	Machining characteristics based life cycle assessment in eco-benign turning of pure titanium alloy. <i>Journal of Cleaner Production</i> , 2020, 251, 119598.	4.6	69
6	Current advances in additive manufacturing. <i>Procedia CIRP</i> , 2020, 88, 439-444.	1.0	65
7	Experimental investigation on surface finish during intermittent turning of UNS M11917 magnesium alloy under dry and near dry machining conditions. <i>Measurement: Journal of the International Measurement Confederation</i> , 2014, 56, 136-154.	2.5	55
8	Surface Roughness Investigation in the Hard Turning of Steel Using Ceramic Tools. <i>Materials and Manufacturing Processes</i> , 2016, 31, 648-652.	2.7	49
9	A note on the use of the minimum quantity lubrication (MQL) system in turning. <i>Industrial Lubrication and Tribology</i> , 2015, 67, 256-261.	0.6	46
10	The effect of minimum quantity lubrication in the intermittent turning of magnesium based on vibration signals. <i>Measurement: Journal of the International Measurement Confederation</i> , 2016, 94, 338-343.	2.5	45
11	Comparative analysis of sustainable cooling systems in intermittent turning of magnesium pieces. <i>International Journal of Precision Engineering and Manufacturing</i> , 2014, 15, 929-940.	1.1	40
12	Experimental investigation on finish intermittent turning of UNS M11917 magnesium alloy under dry machining. <i>International Journal of Advanced Manufacturing Technology</i> , 2014, 75, 1417-1429.	1.5	39
13	Analysis of the hard turning of AISI H13 steel with ceramic tools based on tool geometry: surface roughness, tool wear and their relation. <i>Journal of the Brazilian Society of Mechanical Sciences and Engineering</i> , 2016, 38, 2413-2420.	0.8	36
14	Investigation of surface integrity induced on AZ31C magnesium alloy turned under cryogenic and dry conditions. <i>Procedia Manufacturing</i> , 2019, 41, 476-483.	1.9	32
15	Experimental study of the dry facing of magnesium pieces based on the surface roughness. <i>International Journal of Precision Engineering and Manufacturing</i> , 2013, 14, 995-1001.	1.1	26
16	Analysis of ignition risk in intermittent turning of UNS M11917 magnesium alloy at low cutting speeds based on the chip morphology. <i>Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture</i> , 2015, 229, 365-371.	1.5	25
17	Experimental study for the effective and sustainable repair and maintenance of bars made of Ti-6Al-4V alloy. Application to the aeronautic industry. <i>Journal of Cleaner Production</i> , 2017, 164, 465-475.	4.6	25
18	Force Prediction for Incremental Forming of Polymer Sheets. <i>Materials</i> , 2018, 11, 1597.	1.3	21

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19	Comparative study of the performance of diamond-coated drills on the delamination in drilling of carbon fiber reinforced plastics: Assessing the influence of the temperature of the drill. <i>Journal of Composite Materials</i> , 2016, 50, 179-189.	1.2	20
20	Facing the challenges of the food industry: Might additive manufacturing be the answer?. <i>Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture</i> , 2019, 233, 1902-1906.	1.5	20
21	The impact of the COVID-19 crisis on the US airline market: Are current business models equipped for upcoming changes in the air transport sector?. <i>Case Studies on Transport Policy</i> , 2022, 10, 647-656.	1.1	20
22	Residual stresses evaluation in precision milling of hardened steel based on the deflection-electrochemical etching technique. <i>Robotics and Computer-Integrated Manufacturing</i> , 2017, 47, 112-116.	6.1	16
23	Specific cutting energy employed to study the influence of the grain size in the micro-milling of the hardened AISI H13 steel. <i>International Journal of Advanced Manufacturing Technology</i> , 2015, 81, 1591-1599.	1.5	15
24	Latest advances in the micro-milling of titanium alloys: a review. <i>Procedia Manufacturing</i> , 2017, 13, 275-282.	1.9	15
25	Machinability of Magnesium and Its Alloys: A Review. <i>Materials Forming, Machining and Tribology</i> , 2015, , 133-152.	0.7	14
26	The Role of Surfactant Structure on the Development of a Sustainable and Effective Cutting Fluid for Machining Titanium Alloys. <i>Metals</i> , 2020, 10, 1388.	1.0	12
27	Study Based on Sound Monitoring as a Means for Superficial Quality Control in Intermittent Turning of Magnesium Workpieces. <i>Procedia CIRP</i> , 2017, 62, 262-268.	1.0	10
28	Analysis of the latest trends in hybrid components of lightweight materials for structural uses. <i>Procedia Manufacturing</i> , 2019, 41, 1047-1054.	1.9	10
29	Statistical models for the mechanical properties of 3D printed external medical aids. <i>Rapid Prototyping Journal</i> , 2021, 27, 176-186.	1.6	9
30	Enabling Technologies for the Successful Deployment of Industry 4.0. , 0, , .		8
31	Inserts Selection for Intermittent Turning of Magnesium Pieces. <i>Applied Mechanics and Materials</i> , 2012, 217-219, 1581-1591.	0.2	7
32	Analysis of Main Optimization Techniques in Predicting Surface Roughness in Metal Cutting Processes. <i>Applied Mechanics and Materials</i> , 2012, 217-219, 2171-2182.	0.2	6
33	Sustainable Turning of the Ti-6Al-4V alloy at Low Feed Rates: Surface Quality Assessment. <i>Procedia Manufacturing</i> , 2017, 8, 769-774.	1.9	6
34	Surface Roughness Analysis of Magnesium Pieces Obtained by Intermittent Turning. <i>Materials Science Forum</i> , 0, 773-774, 377-391.	0.3	5
35	On surface quality of engineered parts manufactured by additive manufacturing and postfinishing by machining. , 2021, , 369-394.		5
36	Experimental Investigation on the Effect of Carbon Fiber Reinforcements in the Mechanical Resistance of 3D Printed Specimens. <i>Applied Composite Materials</i> , 2022, 29, 937-952.	1.3	5

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37	A novel method for the determination of fatty acid esters in aqueous emulsion on Ti6Al4V surface with IRRAS and carbon quantification. Tribology International, 2018, 128, 155-160.	3.0	4
38	Experimental Study on the Manufacturing of Steel Inclined Walls by Directed Energy Deposition Based on Dimensional and 3D Surface Roughness Measurements. Materials, 2022, 15, 4994.	1.3	4
39	Enhancing Productivity by Means of High Feed Rate in the Drilling of Al 2011 Aluminium Alloy. Arabian Journal for Science and Engineering, 2019, 44, 8035-8042.	1.7	3
40	How to use and compare interpolation schemes in Fused Deposition Modeling. Procedia Manufacturing, 2019, 41, 343-350.	1.9	3
41	Aerospace Transformation through Industry 4.0 Technologies. SpringerBriefs in Applied Sciences and Technology, 2021, , 17-46.	0.2	3
42	Insights for the Selection of the Machining Parameters in the Turning of Difficult-To-Cut Coatings. Manufacturing Technology, 2015, 15, 295-303.	0.2	3
43	A Note on Big Data and Value Creation. Management and Industrial Engineering, 2022, , 1-18.	0.3	1
44	Machining of a biomaterial with dual negative tool geometry. , 2019, , 117-128.		0
45	The Aerospace Sector. SpringerBriefs in Applied Sciences and Technology, 2021, , 9-16.	0.2	0
46	The Impact of the COVID-19 Pandemic. SpringerBriefs in Applied Sciences and Technology, 2021, , 47-49.	0.2	0
47	Efficiency and Sustainability Analysis of the Repair and Maintenance Operations of UNS M11917 Magnesium Alloy Parts of the Aeronautical Industry Made by Intermittent Facing. Metals, 2021, 11, 1035.	1.0	0