

Ciro A RodrÃ-iguez

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/8277166/publications.pdf>

Version: 2024-02-01

99
papers

2,470
citations

201674

27
h-index

223800

46
g-index

102
all docs

102
docs citations

102
times ranked

2753
citing authors

#	ARTICLE	IF	CITATIONS
1	Influence of process parameters on part quality and mechanical properties for DMLS and SLM with iron-based materials. <i>International Journal of Advanced Manufacturing Technology</i> , 2012, 60, 601-610.	3.0	234
2	High-speed machining of cast iron and alloy steels for die and mold manufacturing. <i>Journal of Materials Processing Technology</i> , 2000, 98, 104-115.	6.3	165
3	Characterization of the Mechanical Properties of FFF Structures and Materials: A Review on the Experimental, Computational and Theoretical Approaches. <i>Materials</i> , 2019, 12, 895.	2.9	161
4	Next-generation manufacturing systems: key research issues in developing and integrating reconfigurable and intelligent machines. <i>International Journal of Computer Integrated Manufacturing</i> , 2005, 18, 525-536.	4.6	125
5	Influence of tool path strategy on the cycle time of high-speed milling. <i>CAD Computer Aided Design</i> , 2003, 35, 395-401.	2.7	97
6	Analyzing effects of cooling and lubrication conditions in micromilling of Ti6Al4V. <i>Journal of Cleaner Production</i> , 2015, 87, 906-913.	9.3	88
7	An experimental analysis of process parameters to manufacture metallic micro-channels by micro-milling. <i>International Journal of Advanced Manufacturing Technology</i> , 2010, 51, 945-955.	3.0	84
8	Characterization and stability analysis of a multivariable milling tool by the enhanced multistage homotopy perturbation method. <i>International Journal of Machine Tools and Manufacture</i> , 2012, 57, 27-33.	13.4	76
9	Rapid tooling using 3D printing system for manufacturing of customized tracheal stent. <i>Rapid Prototyping Journal</i> , 2014, 20, 2-12.	3.2	62
10	Environmental analysis of selective laser melting in the manufacturing of aeronautical turbine blades. <i>Journal of Cleaner Production</i> , 2020, 246, 119068.	9.3	56
11	Sound mapping for identification of stability lobe diagrams in milling processes. <i>International Journal of Machine Tools and Manufacture</i> , 2009, 49, 203-211.	13.4	51
12	Circular Economy in the Electronic Products Sector: Material Flow Analysis and Economic Impact of Cellphone E-Waste in Mexico. <i>Sustainability</i> , 2019, 11, 1361.	3.2	50
13	Influence of PEEK Coating on Hip Implant Stress Shielding: A Finite Element Analysis. <i>Computational and Mathematical Methods in Medicine</i> , 2016, 2016, 1-10.	1.3	47
14	Study of face milling of hardened AISI D3 steel with a special design of carbide tools. <i>International Journal of Advanced Manufacturing Technology</i> , 2009, 40, 12-25.	3.0	44
15	Swarm Intelligent Selection and Optimization of Machining System Parameters for Microchannel Fabrication in Medical Devices. <i>Materials and Manufacturing Processes</i> , 2011, 26, 403-414.	4.7	43
16	Optimization of photocrosslinkable resin components and 3D printing process parameters. <i>Acta Biomaterialia</i> , 2019, 97, 154-161.	8.3	43
17	Using chaotic advection for facile high-throughput fabrication of ordered multilayer micro- and nanostructures: continuous chaotic printing. <i>Biofabrication</i> , 2020, 12, 035023.	7.1	43
18	Xurography as a Rapid Fabrication Alternative for Point-of-Care Devices: Assessment of Passive Micromixers. <i>Sensors</i> , 2016, 16, 705.	3.8	40

#	ARTICLE	IF	CITATIONS
19	Cycle time prediction in high-speed milling operations for sculptured surface finishing. <i>Journal of Materials Processing Technology</i> , 2006, 174, 355-362.	6.3	39
20	Determination of the stability lobes in milling operations based on homotopy and simulated annealing techniques. <i>Mechatronics</i> , 2014, 24, 177-185.	3.3	39
21	Evaluation of micromechanical manufacturing processes for microfluidic devices. <i>International Journal of Advanced Manufacturing Technology</i> , 2010, 48, 963-972.	3.0	38
22	Effect of process parameters in nanosecond pulsed laser micromachining of PMMA-based microchannels at near-infrared and ultraviolet wavelengths. <i>International Journal of Advanced Manufacturing Technology</i> , 2013, 67, 1651-1664.	3.0	38
23	Parametric Modeling of Biomimetic Cortical Bone Microstructure for Additive Manufacturing. <i>Materials</i> , 2019, 12, 913.	2.9	32
24	Design of a decision support system for machine tool selection based on machine characteristics and performance tests. <i>Journal of Intelligent Manufacturing</i> , 2011, 22, 263-277.	7.3	31
25	Dross formation and process parameters analysis of fibre laser cutting of stainless steel thin sheets. <i>International Journal of Advanced Manufacturing Technology</i> , 2014, 71, 1611-1621.	3.0	31
26	Continuous flow micro-bioreactors for the production of biopharmaceuticals: the effect of geometry, surface texture, and flow rate. <i>Lab on A Chip</i> , 2014, 14, 1320-1329.	6.0	30
27	Photopolymerizable Resins for 3D-Printing Solid-Cured Tissue Engineered Implants. <i>Current Drug Targets</i> , 2019, 20, 823-838.	2.1	30
28	Electrospun Polycaprolactone Fibrous Membranes Containing Ag, TiO ₂ and Na ₂ Ti ₆ O ₁₃ Particles for Potential Use in Bone Regeneration. <i>Membranes</i> , 2019, 9, 12.	3.0	28
29	Effect of Fluence and Pulse Overlapping on Fabrication of Microchannels in PMMA/PDMS Via UV Laser Micromachining: Modeling and Experimentation. <i>Materials and Manufacturing Processes</i> , 2015, 30, 890-901.	4.7	25
30	Experimental analysis of dimensional error vs. cycle time in high-speed milling of aluminium alloy. <i>International Journal of Machine Tools and Manufacture</i> , 2007, 47, 236-246.	13.4	23
31	Adaptive control optimization in micro-milling of hardened steels—evaluation of optimization approaches. <i>International Journal of Advanced Manufacturing Technology</i> , 2016, 84, 2219-2238.	3.0	22
32	Hydrostatic High-Pressure Post-Processing of Specimens Fabricated by DLP, SLA, and FDM: An Alternative for the Sterilization of Polymer-Based Biomedical Devices. <i>Materials</i> , 2018, 11, 2540.	2.9	22
33	Hybrid Fabrication of a 3D Printed Geometry Embedded with PCL Nanofibers for Tissue Engineering Applications. <i>Procedia Engineering</i> , 2015, 110, 128-134.	1.2	20
34	Analysis and simulation of a wind-electric battery charging system. <i>International Journal of Energy Research</i> , 2006, 30, 633-646.	4.5	19
35	Monitoring deep twist drilling for a rapid manufacturing of light high-strength parts. <i>Mechanical Systems and Signal Processing</i> , 2011, 25, 2745-2752.	8.0	19
36	A Mobile Solution to Enhance Training and Execution of Troubleshooting Techniques of the Engine Air Bleed System on Boeing 737. <i>Procedia Computer Science</i> , 2013, 25, 161-170.	2.0	19

#	ARTICLE	IF	CITATIONS
37	Influence of Controlled Cooling in Bimodal Scaffold Fabrication Using Polymers with Different Melting Temperatures. <i>Materials</i> , 2017, 10, 640.	2.9	18
38	Process planning of L-PBF of AISI 316L for improving surface quality and relating part integrity with microstructural characteristics. <i>Surface and Coatings Technology</i> , 2020, 396, 125956.	4.8	18
39	Process planning guidelines in selective laser melting for the manufacturing of stainless steel parts. <i>Procedia Manufacturing</i> , 2018, 26, 973-982.	1.9	17
40	Photocrosslinking-based 3D printing of unsaturated polyesters from isosorbide: A new material for resorbable medical devices. <i>Bioprinting</i> , 2020, 18, e00062.	5.8	17
41	A biopharmaceutical plant on a chip: continuous micro-devices for the production of monoclonal antibodies. <i>Lab on A Chip</i> , 2013, 13, 1243.	6.0	16
42	Circular Economy in Mexico's Electronic and Cell Phone Industry: Recent Evidence of Consumer Behavior. <i>Applied Sciences (Switzerland)</i> , 2020, 10, 7744.	2.5	15
43	Industry and university cooperation to enhance manufacturing education. <i>Journal of Manufacturing Systems</i> , 2005, 24, 277-287.	13.9	14
44	A non-monotonous damage function to characterize stress-softening effects with permanent set during inflation and deflation of rubber balloons. <i>International Journal of Engineering Science</i> , 2010, 48, 1937-1943.	5.0	14
45	An experimental study of process variables in turning operations of Ti-6Al-4V and Cr-Co spherical prostheses. <i>International Journal of Advanced Manufacturing Technology</i> , 2012, 63, 887-902.	3.0	14
46	Study of the fabrication of AISI 316L microneedle arrays. <i>Procedia Manufacturing</i> , 2018, 26, 117-124.	1.9	14
47	Economical and technological study of surface grinding versus face milling in hardened AISI D3 steel machining operations. <i>International Journal of Production Economics</i> , 2012, 138, 273-283.	8.9	13
48	Multiobjective Optimization of Laser Milling Parameters of Microcavities for the Manufacturing of DES. <i>Materials and Manufacturing Processes</i> , 2013, 28, 1370-1378.	4.7	13
49	Rapid Fabrication of Disposable Micromixing Arrays Using Xurography and Laser Ablation. <i>Micromachines</i> , 2017, 8, 144.	2.9	13
50	On the solution of strong nonlinear oscillators by applying a rational elliptic balance method. <i>Computers and Mathematics With Applications</i> , 2010, 60, 1409-1420.	2.7	12
51	Assembly Operations Aided by Augmented Reality: An Endeavour toward a Comparative Analysis. <i>Procedia Computer Science</i> , 2015, 75, 281-290.	2.0	12
52	Electrospinning Complexly-shaped, Resorbable, Bifurcated Vascular Grafts. <i>Procedia CIRP</i> , 2017, 65, 207-212.	1.9	12
53	Evaluation and modeling of productivity and dynamic capability in high-speed machining centers. <i>International Journal of Advanced Manufacturing Technology</i> , 2007, 33, 403-411.	3.0	11
54	Trends in Nanomaterials and Processing for Drug Delivery of Polyphenols in the Treatment of Cancer and Other Therapies. <i>Current Drug Targets</i> , 2016, 18, 135-146.	2.1	11

#	ARTICLE	IF	CITATIONS
55	Virtual processing – application of rapid prototyping for visualization of metal forming processes. <i>Journal of Materials Processing Technology</i> , 2000, 98, 116-124.	6.3	10
56	Characterization of Soft Tooling Photopolymers and Processes for Micromixing Devices with Variable Cross-Section. <i>Micromachines</i> , 2020, 11, 970.	2.9	9
57	Application of the elliptic balance method to a nonlinear singular oscillator. <i>Applied Mathematics and Computation</i> , 2012, 218, 11112-11117.	2.2	8
58	Fiber Laser Microcutting of AISI 316L Stainless Steel Tubes- influence of Pulse Energy and Spot Overlap on Back Wall Dross. <i>Procedia CIRP</i> , 2016, 49, 222-226.	1.9	8
59	Feasibility of manufacturing low aspect ratio parts of PLA by ultrasonic moulding technology. <i>Procedia Manufacturing</i> , 2017, 13, 251-258.	1.9	8
60	Influence of process parameters for sheet lamination based on laser micro-spot welding of austenitic stainless steel sheets for bone tissue applications. <i>International Journal of Advanced Manufacturing Technology</i> , 2021, 115, 247-262.	3.0	8
61	Evaluation of Ball End Micromilling for Ti6Al4V ELI Microneedles Using a Nanoadditive Under MQL Condition. <i>International Journal of Precision Engineering and Manufacturing - Green Technology</i> , 2022, 9, 1231-1246.	4.9	8
62	Stress-Softening and Residual Strain Effects in Suture Materials. <i>Advances in Materials Science and Engineering</i> , 2013, 2013, 1-9.	1.8	7
63	Design Concepts of Polycarbonate-Based Intervertebral Lumbar Cages: Finite Element Analysis and Compression Testing. <i>Applied Bionics and Biomechanics</i> , 2016, 2016, 1-9.	1.1	7
64	Experimental Study of Back Wall Dross and Surface Roughness in Fiber Laser Microcutting of 316L Miniature Tubes. <i>Micromachines</i> , 2018, 9, 4.	2.9	7
65	Laser Surface Texturing and Electropolishing of CoCr and Ti6Al4V-ELI Alloys for Biomedical Applications. <i>Materials</i> , 2020, 13, 5203.	2.9	7
66	LAPKaans: Tool-Motion Tracking and Gripping Force-Sensing Modular Smart Laparoscopic Training System. <i>Sensors</i> , 2020, 20, 6937.	3.8	7
67	A dimensional assessment of small features and lattice structures manufactured by laser powder bed fusion. <i>Progress in Additive Manufacturing</i> , 2022, 7, 751-763.	4.8	7
68	Stability Predictions for End Milling Operations With a Nonlinear Cutting Force Model. <i>Journal of Manufacturing Science and Engineering, Transactions of the ASME</i> , 2009, 131, .	2.2	6
69	Morphological and Mechanical Evaluation of Hybrid Scaffolds for Bone Regeneration. <i>Advanced Materials Research</i> , 2013, 749, 429-432.	0.3	6
70	Supercritical CO2 Foaming of Thermoplastic Materials Derived from Maize: Proof-of-Concept Use in Mammalian Cell Culture Applications. <i>PLoS ONE</i> , 2015, 10, e0122489.	2.5	6
71	Evaluation of machine-tool motion accuracy using a CNC machining center in micro-milling processes. <i>International Journal of Advanced Manufacturing Technology</i> , 2015, 76, 219-228.	3.0	6
72	Process planning considerations for micromilling of mould cavities used in ultrasonic moulding technology. <i>Precision Engineering</i> , 2015, 39, 252-260.	3.4	6

#	ARTICLE	IF	CITATIONS
73	E-Skin Development and Prototyping via Soft Tooling and Composites with Silicone Rubber and Carbon Nanotubes. <i>Materials</i> , 2022, 15, 256.	2.9	6
74	Polymeric Materials Reinforced with Multiwall Carbon Nanotubes: A Constitutive Material Model. <i>Materials</i> , 2013, 6, 2873-2891.	2.9	5
75	Micro-injection Moulding of Polymer Locking Ligation Systems. <i>Procedia CIRP</i> , 2016, 49, 1-7.	1.9	5
76	Surface Finish and Back-Wall Dross Behavior during the Fiber Laser Cutting of AZ31 Magnesium Alloy. <i>Micromachines</i> , 2018, 9, 485.	2.9	4
77	Reusable unit process life cycle inventory (UPLCI) for manufacturing: laser powder bed fusion (L-PBF). <i>Production Engineering</i> , 2021, 15, 701-716.	2.3	4
78	Soft Tissue Hybrid Model for Real-Time Simulations. <i>Polymers</i> , 2022, 14, 1407.	4.5	4
79	Electrospun Tubular Scaffold for Stenting Application: A Proof of Concept. <i>Procedia Manufacturing</i> , 2019, 41, 312-319.	1.9	3
80	Influence of Controlled Cooling on Crystallinity of Poly(L-Lactic Acid) Scaffolds after Hydrolytic Degradation. <i>Materials</i> , 2020, 13, 2943.	2.9	3
81	Surface Roughness and Cutting Tool-Wear Diagnosis Based on Bayesian Networks. , 2007, , 408-413.		2
82	Evaluation of metrology technologies for free form surfaces. <i>International Journal of Metrology and Quality Engineering</i> , 2012, 3, 55-62.	1.0	2
83	Design, simulation and analysis of a positive displacement pump controller for biomedical applications requiring pulsatile flow. , 2017, , .		2
84	Effect of Surgical Expertise on Biomechanical Properties of Sutures After Abdominal Wall Closure. <i>Journal of Surgical Research</i> , 2020, 245, 403-409.	1.6	2
85	An assessment of magnesium AZ31 coronary stents manufacture. <i>Materials Research Express</i> , 2021, 8, 075403.	1.6	2
86	Experimental Analysis of Process Parameters to Manufacture Micro-Cavities by Micro-Milling. <i>Advanced Materials Research</i> , 0, 498, 91-96.	0.3	1
87	A Preliminary Material Model to Predict Stress Softening and Permanent Set Effects of Human Vaginal Tissue. <i>Procedia Engineering</i> , 2013, 59, 150-157.	1.2	1
88	Influence of Electrical Field Collector Positioning and Motion Scheme on Electrospun Bifurcated Vascular Graft Membranes. <i>Materials</i> , 2019, 12, 2123.	2.9	1
89	Laser micro-welding of AZ92A magnesium wires using a fiber-laser: a preliminary study. <i>Procedia CIRP</i> , 2020, 89, 33-38.	1.9	1
90	Chatter Prediction in Orthogonal Cutting Based on Lambert Function. , 2005, , .		1

#	ARTICLE	IF	CITATIONS
91	Manufacturing and Test of Split and Recombine Micromixers with a Variable Cross-Section. ECS Meeting Abstracts, 2018, , .	0.0	1
92	Evaluation of Manufacturing Processes for Microfluidic Devices. , 2009, , .		0
93	Neural network modelling of process parameters influence on tool wear for ball-nose end mills. International Journal of Mechatronics and Manufacturing Systems, 2010, 3, 393.	0.1	0
94	A Nonmonotonous Damage Model to Characterize Mullins and Residual Strain Effects of Rubber Strings Subjected to Transverse Vibrations. Advances in Materials Science and Engineering, 2013, 2013, 1-9.	1.8	0
95	Adaptive fourier series speed controller for permanent magnet synchronous motor and brushless dc motor. Journal of Physics: Conference Series, 2018, 1074, 012012.	0.4	0
96	Biofabrication 2019: Special Issue of Selected Papers from the Annual Meeting of the International Society for Biofabrication. Advanced Healthcare Materials, 2020, 9, e2002049.	7.6	0
97	CIIASaT Structure Additive Manufacturing Design. Southern Space Studies, 2020, , 37-54.	0.1	0
98	Machine Tools for the Automotive Industry. , 2009, , 421-435.		0
99	Characterization of Porous Scaffolds Fabricated by Joining Stacking Based Laser Micro-Spot Welding (JS-LMSW) for Tissue Engineering Applications. Materials, 2022, 15, 99.	2.9	0