

Francesco Leali

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/775962/publications.pdf>

Version: 2024-02-01

75
papers

1,968
citations

471509

17
h-index

265206

42
g-index

84
all docs

84
docs citations

84
times ranked

1670
citing authors

#	ARTICLE	IF	CITATIONS
1	Survey on human-robot collaboration in industrial settings: Safety, intuitive interfaces and applications. <i>Mechatronics</i> , 2018, 55, 248-266.	3.3	660
2	A method for reducing the energy consumption of pick-and-place industrial robots. <i>Mechatronics</i> , 2013, 23, 326-334.	3.3	120
3	A review on artificial intelligence applications to the optimal design of dedicated and reconfigurable manufacturing systems. <i>International Journal of Advanced Manufacturing Technology</i> , 2014, 72, 403-418.	3.0	118
4	Human-robot coexistence and interaction in open industrial cells. <i>Robotics and Computer-Integrated Manufacturing</i> , 2020, 61, 101846.	9.9	93
5	Modeling and Optimization of Energy Consumption in Cooperative Multi-Robot Systems. <i>IEEE Transactions on Automation Science and Engineering</i> , 2012, 9, 423-428.	5.2	90
6	Improving robotic machining accuracy through experimental error investigation and modular compensation. <i>International Journal of Advanced Manufacturing Technology</i> , 2016, 85, 3-15.	3.0	85
7	A workcell calibration method for enhancing accuracy in robot machining of aerospace parts. <i>International Journal of Advanced Manufacturing Technology</i> , 2016, 85, 47-55.	3.0	48
8	Survey on Human-Robot Interaction for Robot Programming in Industrial Applications. <i>IFAC-PapersOnLine</i> , 2018, 51, 66-71.	0.9	48
9	A review on decision-making methods in engineering design for the automotive industry. <i>Journal of Engineering Design</i> , 2017, 28, 118-143.	2.3	47
10	Augmented reality based approach for on-line quality assessment of polished surfaces. <i>Robotics and Computer-Integrated Manufacturing</i> , 2019, 59, 158-167.	9.9	43
11	Hybrid Reconfigurable System design and optimization through virtual prototyping and digital manufacturing tools. <i>International Journal on Interactive Design and Manufacturing</i> , 2012, 6, 17-27.	2.2	39
12	Selecting alternatives in the conceptual design phase: an application of Fuzzy-AHP and Pugh's Controlled Convergence. <i>International Journal on Interactive Design and Manufacturing</i> , 2015, 9, 1-17.	2.2	32
13	Engineering method for adaptive manufacturing systems design. <i>International Journal on Interactive Design and Manufacturing</i> , 2009, 3, 81-91.	2.2	29
14	A systematic user-centred framework for engineering product design in small- and medium-sized enterprises (SMEs). <i>International Journal of Advanced Manufacturing Technology</i> , 2017, 91, 1723-1746.	3.0	29
15	Experimental Investigation of Sources of Error in Robot Machining. <i>Communications in Computer and Information Science</i> , 2013, , 14-26.	0.5	25
16	Integrated CAD platform approach for Design for Additive Manufacturing of high performance automotive components. <i>International Journal on Interactive Design and Manufacturing</i> , 2020, 14, 899-909.	2.2	23
17	A Co-Design Method for the Additive Manufacturing of Customised Assistive Devices for Hand Pathologies. <i>Journal of Integrated Design and Process Science</i> , 2019, 22, 21-37.	0.5	22
18	Embedding detailed robot energy optimization into high-level scheduling. , 2010, , .		20

#	ARTICLE	IF	CITATIONS
19	A minimal touch approach for optimizing energy efficiency in pick-and-place manipulators. , 2011, , .		20
20	Enhancing changeability of automotive Hybrid Reconfigurable Systems in digital environments. International Journal on Interactive Design and Manufacturing, 2012, 6, 251-263.	2.2	18
21	A Framework for 3D Pattern Analysis and Reconstruction of Persian Architectural Elements. Nexus Network Journal, 2016, 18, 133-167.	0.7	17
22	Enhancing heritage fruition through 3D virtual models and augmented reality: an application to Roman artefacts. Virtual Archaeology Review, 2019, 10, 67.	1.9	17
23	Real-time 3D features reconstruction through monocular vision. International Journal on Interactive Design and Manufacturing, 2010, 4, 103-112.	2.2	16
24	Numerical Simulation and Experimental Validation of MIG Welding of T-Joints of Thin Aluminum Plates for Top Class Vehicles. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2017, 48, 379-388.	2.2	16
25	3D Virtual Reconstruction and Augmented Reality Visualization of Damaged Stone Sculptures. IOP Conference Series: Materials Science and Engineering, 2018, 364, 012018.	0.6	16
26	A systematic approach to the engineering design of a HRC workcell for bio-medical product assembly. , 2015, , .		15
27	An Augmented Reality Application for the Visualization and the Pattern Analysis of a Roman Mosaic. IOP Conference Series: Materials Science and Engineering, 2018, 364, 012094.	0.6	15
28	Integration of Topology Optimisation and Design Variants Selection for Additive Manufacturing-Based Systematic Product Redesign. Applied Sciences (Switzerland), 2020, 10, 7841.	2.5	15
29	A Multicriteria Decisionâ€™Making Application to the Conceptual Design of Mechanical Components. Journal of Multi-Criteria Decision Analysis, 2016, 23, 87-111.	1.9	14
30	Evaluation of operator relief for an effective design of HRC workcells. , 2016, , .		13
31	A parametric CAD-based method for modelling and simulation of positive displacement machines. Journal of Mechanical Science and Technology, 2016, 30, 3253-3263.	1.5	13
32	Integration of CAM off-line programming in robot high-accuracy machining. , 2013, , .		12
33	Effective integration of Cobots and additive manufacturing for reconfigurable assembly solutions of biomedical products. International Journal on Interactive Design and Manufacturing, 2020, 14, 1085-1089.	2.2	12
34	Reciprocal Frames in Temporary Structures: An Aesthetical and Parametric Investigation. Nexus Network Journal, 2017, 19, 741-762.	0.7	11
35	Reconfigurable Robotic Solution for Effective Finishing of Complex Surfaces. , 2018, , .		10
36	Integrated design method for optimal tolerance stack evaluation for top class automotive chassis. Lecture Notes in Mechanical Engineering, 2017, , 1013-1022.	0.4	8

#	ARTICLE	IF	CITATIONS
37	Assessment of Computer-Aided Design Tools for Topology Optimization of Additively Manufactured Automotive Components. Applied Sciences (Switzerland), 2021, 11, 10980.	2.5	8
38	Milling strategies optimized for industrial robots to machine hard materials. , 2013, , .		7
39	Design of Fixture Systems in Automotive Manufacturing and Assembly. Advanced Materials Research, 0, 712-715, 2913-2916.	0.3	6
40	Out of Position Driver Monitoring from Seat Pressure in Dynamic Maneuvers. Advances in Intelligent Systems and Computing, 2019, , 76-81.	0.6	6
41	A methodology for out of position occupant identification from pressure sensors embedded in a vehicle seat. Human-Intelligent Systems Integration, 2020, 2, 35-44.	2.5	6
42	Assessment of close-range photogrammetry for the low cost development of 3D models of car bodywork components. International Journal on Interactive Design and Manufacturing, 2022, 16, 703-713.	2.2	6
43	Object-Oriented Modeling of Industrial Manipulators With Application to Energy Optimal Trajectory Scaling. , 2011, , .		5
44	Robotic implementation of the slide method for measurement of the thermal emissivity of building elements. Energy and Buildings, 2016, 114, 241-246.	6.7	5
45	Integrated geometrical and dimensional tolerances stack-up analysis for the design of mechanical assemblies: an application on marine engineering. Computer-Aided Design and Applications, 2018, 15, 631-642.	0.6	5
46	Human-robot collaborative reconfigurable platform for surface finishing processes. Procedia Manufacturing, 2019, 38, 76-83.	1.9	5
47	Vibration-Assisted Face Grinding of Mould Steel. Lecture Notes in Mechanical Engineering, 2020, , 291-303.	0.4	5
48	The Role of Co-Simulation in the Integrated Design of High-Dynamics Servomechanisms: An Experimental Evaluation. Applied Mechanics and Materials, 2013, 278-280, 1758-1764.	0.2	4
49	Predicting tolerance on the welding distortion in a thin aluminum welded T-joint. International Journal of Advanced Manufacturing Technology, 2018, 96, 2479-2494.	3.0	4
50	Monitoring Driver Posture Through Sensorized Seat. Advances in Intelligent Systems and Computing, 2019, , 744-749.	0.6	4
51	Systematic Integration of Topology Optimization Techniques in Design for Additive Manufacturing Methodologies Applied to Automotive Settings. , 2020, , .		4
52	Offline workpiece calibration method for robotic reconfigurable machining platform. , 2014, , .		3
53	A Methodological Approach for the Design of Inclusive Assistive Devices by Integrating Co-design and Additive Manufacturing Technologies. Advances in Intelligent Systems and Computing, 2020, , 816-822.	0.6	3
54	MÃTODO INTEGRADO ASISTIDO POR ORDENADOR PARA EL DESARROLLO EFECTIVO DE PROCESOS DE SOLDADURA ROBÃTICA EN EL MONTAJE DE CHASIS DE AUTOMÃVILES. Dyna (Spain), 2019, 94, 150-154.	0.2	3

#	ARTICLE	IF	CITATIONS
55	Optimization of an Engine Piston Through CAD Platforms and Additive Manufacturing Based Systematic Product Redesign. Lecture Notes in Mechanical Engineering, 2022, , 486-493.	0.4	3
56	Design Archetype of Gears for Knowledge Based Engineering. Lecture Notes in Mechanical Engineering, 2017, , 1131-1140.	0.4	2
57	Correlation of Driver Head Posture and Trapezius Muscle Activity as Comfort Assessment of Car Seat. Advances in Intelligent Systems and Computing, 2019, , 241-247.	0.6	2
58	The Systematic Design of Industrial Products through Design Archetypes: An Application on Mechanical Transmissions. Applied Sciences (Switzerland), 2020, 10, 2277.	2.5	2
59	Design for Additive Manufacturing of a Topology Optimized Brake Caliper Through CAD-Platform-Based Systematic Approach. Lecture Notes in Mechanical Engineering, 2021, , 92-97.	0.4	2
60	Simulation and Experimental Validation of Secondary Dendrite Arm Spacing for AlSi7Mg0.3 Chassis Parts in Low Pressure Die Casting. Lecture Notes in Mechanical Engineering, 2021, , 28-33.	0.4	2
61	Robust Parameter Analysis of Compliant Part Models for Computer Aided Tolerancing. Lecture Notes in Mechanical Engineering, 2020, , 241-254.	0.4	2
62	Model-Based Approach for Optimal Allocation of GD&T. Lecture Notes in Mechanical Engineering, 2022, , 277-284.	0.4	2
63	Synergic Product and Process Design for Additive Fabrication of Lightweight Vehicles. SAE International Journal of Advances and Current Practices in Mobility, 0, 5, 1024-1033.	2.0	2
64	Development of a Computer-Aided integrated method for the tolerance-cost multi-disciplinary optimization of an automotive engine. International Journal on Interactive Design and Manufacturing, 2022, 16, 1457-1469.	2.2	2
65	On designing optimal trajectories for servo-actuated mechanisms through highly detailed virtual prototypes. , 2013, , .		1
66	Sensor Matrix Robustness for Monitoring the Interface Pressure Between Car Driver and Seat. Advances in Intelligent Systems and Computing, 2020, , 229-235.	0.6	1
67	Computer-Aided Tolerancing Analysis of a High-Performance Car Engine Assembly. Lecture Notes in Mechanical Engineering, 2021, , 121-127.	0.4	1
68	Automotive Design Engineering: Material and Processes Selection Problems. Lecture Notes in Mechanical Engineering, 2020, , 373-384.	0.4	1
69	Investigation of Warpage and Tolerances in Injection Moulding Components Based on Simulation and Experimental Validation. Lecture Notes in Mechanical Engineering, 2022, , 342-353.	0.4	1
70	An Integrated Modular Design and Group Decision-Making Method in Complex Design Environments. Lecture Notes in Mechanical Engineering, 2022, , 581-592.	0.4	1
71	Implementation of a quality framework on the launch phase of an automated assembly line for top class automotive chassis. IOP Conference Series: Materials Science and Engineering, 2020, 836, 012003.	0.6	0
72	A Design Methodology for an Innovative Racing Mini Motorcycle Frame. Computer-Aided Design and Applications, 2020, 17, 1116-1129.	0.6	0

#	ARTICLE	IF	CITATIONS
73	Computer-Aided Assessment of Safety Countermeasures for Industrial Human-Robot Collaborative Applications. Springer Proceedings in Advanced Robotics, 2020, , 186-198.	1.3	0
74	CAD-platform-based Process optimization Design Method by Selective Laser Melting Simulation. , 2020, , .		0
75	A method for yield and cycle time improvements in Al alloy casting with enhanced conductivity steel for die construction. Manufacturing Review, 2022, 9, 18.	1.5	0