# Antonio Lanzotti

List of Publications by Year
in descending order



| 119 | 1,949 | 257357 24 | 302012 39 |
|---|---|---|---|
| papers | citations | h-index | g-index |

| 124 | 124 | 124 | 1814 |
|---|---|---|---|
| all docs | docs citations | times ranked | citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | The impact of process parameters on mechanical properties of parts fabricated in PLA with an open-source 3-D printer. Rapid Prototyping Journal, 2015, 21, 604-617. | 1.6 | 419 |
| 2 | A comparison between mechanical properties of specimens 3D printed with virgin and recycled PLA. Procedia CIRP, 2019, 79, 143-146. | 1.0 | 94 |
| 3 | On the influence of scanning factors on the laser scanner-based 3D inspection process. International Journal of Advanced Manufacturing Technology, 2016, 84, 1787-1799. | 1.5 | 68 |
| 4 | Mechanical behavior of bulk direct composite versus block composite and lithium disilicate indirect Class II restorations by CAD-FEM modeling. Dental Materials, 2017, 33, 690-701. | 1.6 | 63 |
| 5 | CAD-FE modeling and analysis of class II restorations incorporating resin-composite, glass ionomer and glass ceramic materials. Dental Materials, 2017, 33, 1456-1465. | 1.6 | 56 |
| 6 | Understanding Process Parameter Effects of RepRap Open-Source Three-Dimensional Printers Through a Design of Experiments Approach. Journal of Manufacturing Science and Engineering, Transactions of the ASME, 2015, 137, . | 1.3 | 48 |
| 7 | Mechanical behavior of endodontically restored canine teeth: Effects of ferrule, post material and shape. Dental Materials, 2017, 33, 1466-1472. | 1.6 | 46 |
| 8 | The effects of cavity-margin-angles and bolus stiffness on the mechanical behavior of indirect resin composite class II restorations. Dental Materials, 2017, 33, e39-e47. | 1.6 | 43 |
| 9 | Adhesive class I restorations in sound molar teeth incorporating combined resin-composite and glass ionomer materials: CAD-FE modeling and analysis. Dental Materials, 2019, 35, 1514-1522. | 1.6 | 41 |
| 10 | A virtual reality approach for usability assessment: case study on a wheelchair-mounted robot manipulator. Engineering With Computers, 2013, 29, 359-373. | 3.5 | 39 |
| 11 | Kanseiengineering approach for total quality design and continuous innovation. TQM Journal, 2008, 20, 324-337. | 2.1 | 38 |
| 12 | FE analysis of conceptual hybrid composite endodontic post designs in anterior teeth. Dental Materials, 2018, 34, 1063-1071. | 1.6 | 33 |
| 13 | Effect of Shrinking and No Shrinking Dentine and Enamel Replacing Materials in Posterior Restoration: A 3D-FEA Study. Applied Sciences (Switzerland), 2021, 11, 2215. | 1.3 | 31 |
| 14 | Concept design for quality in virtual environment. Computers and Graphics, 2006, 30, 1011-1019. | 1.4 | 29 |
| 15 | Improving MTM-UAS to predetermine automotive maintenance times. International Journal on Interactive Design and Manufacturing, 2012, 6, 265-273. | 1.3 | 28 |
| 16 | The use of different adhesive filling material and mass combinations to restore class II cavities under loading and shrinkage effects: a 3D-FEA. Computer Methods in Biomechanics and Biomedical Engineering, 2021, 24, 485-495. | 0.9 | 27 |
| 17 | The role of cortical zone level and prosthetic platform angle in dental implant mechanical response: A 3D finite element analysis. Dental Materials, 2021, 37, 1688-1697. | 1.6 | 27 |
| 18 | Improving concept design of divertor support system for FAST tokamak using TRIZ theory and AHP approach. Fusion Engineering and Design, 2013, 88, 3014-3020. | 1.0 | 26 |

| # | Article | IF | Citations |
|---|---|---|---|
| 19 | Improving comfort of shoe sole through experiments based on CAD-FEM modeling. Medical Engineering and Physics, 2013, 35, 36-46. | 0.8 | 26 |
| 20 | Tensile Properties Characterization of AlSi10Mg Parts Produced by Direct Metal Laser Sintering via Nested Effects Modeling. Materials, 2017, 10, 144. | 1.3 | 26 |
| 21 | Experimental study on hydrodynamic performances of naval propellers to adopt new additive manufacturing processes. International Journal on Interactive Design and Manufacturing, 2018, 12, 1-14. | 1.3 | 26 |
| 22 | Combining ESPI with laser scanning for 3D characterization of racing tyres sections. Optics and Lasers in Engineering, 2018, 104, 71-77. | 2.0 | 26 |
| 23 | A new interactive design approach for concept selection based on expert opinion. International Journal on Interactive Design and Manufacturing, 2018, 12, 1189-1199. | 1.3 | 26 |
| 24 | Designing in VR. International Journal on Interactive Design and Manufacturing, 2009, 3, 51-53. | 1.3 | 25 |
| 25 | Design and Analysis of 3D Customized Models of a Human Mandible. Procedia CIRP, 2016, 49, 199-202. | 1.0 | 24 |
| 26 | On the Geometric Accuracy of RepRap Open-Source Three-Dimensional Printer. Journal of Mechanical Design, Transactions of the ASME, 2015, 137, . | 1.7 | 23 |
| 27 | Influence of Framework Material and Posterior Implant Angulation in Full-Arch All-on-4 Implant-Supported Prosthesis Stress Concentration. Dentistry Journal, 2022, 10, 12. | 0.9 | 23 |
| 28 | Virtual concepts and experiments to improve quality of train interiors. International Journal on Interactive Design and Manufacturing, 2009, 3, 65-79. | 1.3 | 19 |
| 29 | Interactive tools for safety 4.0: virtual ergonomics and serious games in real working contexts. Ergonomics, 2020, 63, 324-333. | 1.1 | 19 |
| 30 | Iterative and Participative Axiomatic Design Process in complex mechanical assemblies: case study on fusion engineering. International Journal on Interactive Design and Manufacturing, 2015, 9, 325-338. | 1.3 | 18 |
| 31 | Concept design of the DEMO divertor cassette-to-vacuum vessel locking system adopting a systems engineering approach. Fusion Engineering and Design, 2015, 94, 72-81. | 1.0 | 17 |
| 32 | On the usability assessment of the graphical user interface related to a digital pattern software tool. International Journal on Interactive Design and Manufacturing, 2017, 11, 457-469. | 1.3 | 17 |
| 33 | Towards a new monitoring system to detect illegal steps in race-walking. International Journal on Interactive Design and Manufacturing, 2017, 11, 317-329. | 1.3 | 17 |
| 34 | Concept design in virtual reality of a forestry trailer using a QFD-TRIZ based approach. Turk Tarim Ve Ormancilik Dergisi/Turkish Journal of Agriculture and Forestry, 2013, 37, 789-801. | 0.8 | 16 |
| 35 | Design Progress of the DEMO Divertor Locking System According to IPADeP Methodology. Procedia CIRP, 2015, 34, 56-63. | 1.0 | 16 |
| 36 | Development of a New Experimental Protocol for Analysing the Race-walking Technique Based on Kinematic and Dynamic Parameters. Procedia Engineering, 2016, 147, 741-746. | 1.2 | 15 |

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|---|---|---|---|
| 37 | Assessment of upper limb muscle synergies for industrial overhead tasks: a preliminary study. , 2019, , . | | 15 |
| 38 | Biomechanical indices represented on radar chart for assessment of performance and infringements in elite race-walkers. Sports Engineering, 2020, 23, 1. | 0.5 | 15 |
| 39 | Automatic evaluation of variational parameters for tolerance analysis of rigid parts based on graphs. International Journal on Interactive Design and Manufacturing, 2013, 7, 239-248. | 1.3 | 14 |
| 40 | User-centered design of an innovative foot stretcher for ergometers to enhance the indoor rowing training. International Journal on Interactive Design and Manufacturing, 2018, 12, 1211-1221. | 1.3 | 14 |
| 41 | Robust design of car packaging in virtual environment. International Journal on Interactive Design and Manufacturing, 2008, 2, 39-46. | 1.3 | 13 |
| 42 | Concept design of divertor remote handling system for the FAST machine. Fusion Engineering and Design, 2013, 88, 2052-2056. | 1.0 | 12 |
| 43 | Outdoor Tests for the Validation of an Inertial System Able to Detect Illegal Steps in Race-walking. Procedia Engineering, 2016, 147, 544-549. | 1.2 | 12 |
| 44 | Controlling form errors in 3D printed models associated to size and position on the working plane. International Journal on Interactive Design and Manufacturing, 2018, 12, 969-977. | 1.3 | 12 |
| 45 | Understanding the Human Motor Control for User-Centered Design of Custom Wearable Systems: Case Studies in Sports, Industry, Rehabilitation. Lecture Notes in Mechanical Engineering, 2020, , 753-764. | 0.3 | 12 |
| 46 | Design and analysis of comparative experiments to assess the (dis-)comfort of aircraft seating. Applied Ergonomics, 2019, 76, 155-163. | 1.7 | 11 |
| 47 | Collaborative Workplace Design: A Knowledge-Based Approach to Promote Humanâ€“Robot Collaboration and Multi-Objective Layout Optimization. Applied Sciences (Switzerland), 2021, 11, 12147. | 1.3 | 11 |
| 48 | Design and development of an automotive magnetorheological semi-active differential. Mechatronics, 2014, 24, 426-435. | 2.0 | 10 |
| 49 | Evaluation of human joint angles in industrial tasks using OpenSim. , 2019, , . | | 10 |
| 50 | Using the KUKA LBR iiwa Robot as Haptic Device for Virtual Reality Training of Hip Replacement Surgery. , 2019, , . | | 10 |
| 51 | Mechanical behavior of Class I cavities restored by different material combinations under loading and polymerization shrinkage stress. A 3D-FEA study. American Journal of Dentistry, 2019, 32, 55-60. | 0.1 | 10 |
| 52 | Biomechanical analysis of the upper body during overhead industrial tasks using electromyography and motion capture integrated with digital human models. International Journal on Interactive Design and Manufacturing, 2022, 16, 733-752. | 1.3 | 10 |
| 53 | An interactive design approach for nuclear fusion purposes: remote handling system for FAST divertor. International Journal on Interactive Design and Manufacturing, 2014, 8, 55-65. | 1.3 | 9 |
| 54 | Low-Velocity Impacts on a Polymeric Foam for the Passive Safety Improvement of Sports Fields: Meshless Approach and Experimental Validation. Applied Sciences (Switzerland), 2018, 8, 1174. | 1.3 | 9 |

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|---|---|---|---|
| 55 | Validation of a novel wearable solution for measuring L5/S1 load during manual material handling tasks. , 2020, , . | | 9 |
| 56 | A new approach to the anthropocentric design of humanâ€“robot collaborative environments. Acta IMEKO (2012), 2020, 9, 80. | 0.4 | 9 |
| 57 | Task-based Motion Control of Digital Humans for Industrial Applications. Procedia CIRP, 2017, 62, 535-540. | 1.0 | 8 |
| 58 | Flatness, circularity and cylindricity errors in 3D printed models associated to size and position on the working plane. Lecture Notes in Mechanical Engineering, 2017, , 201-212. | 0.3 | 8 |
| 59 | A wearable inertial device based on biomechanical parameters for sports performance analysis in race-walking: preliminary results. , 2019, , . | | 8 |
| 60 | The anthropometric basis for the designing of collaborative workplaces. , 2019, , . | | 8 |
| 61 | Virtual production planning of a high-speed train using a discrete event simulation based approach. International Journal on Interactive Design and Manufacturing, 2015, 9, 65-75. | 1.3 | 7 |
| 62 | Automotive power window system design: object-oriented modelling and design of experiments integration within a digital pattern approach. Mechanics and Industry, 2016, 17, 505. | 0.5 | 7 |
| 63 | A graph-based method and a software tool for interactive tolerance specification. Procedia CIRP, 2018, 75, 173-178. | 1.0 | 7 |
| 64 | Modelling Head Impact Safety Performance of Polymer-based Foam Protective Devices. Procedia Engineering, 2014, 72, 581-586. | 1.2 | 6 |
| 65 | On the usability of augmented reality devices for interactive risk assessment. International Journal of Safety and Security Engineering, 2018, 8, 132-138. | 0.5 | 6 |
| 66 | An Efficient and Easy Discretizing Method for the Treatment of Noise Factors in Robust Design. Asian Journal on Quality, 2007, 8, 188-197. | 0.5 | 5 |
| 67 | Wind speed parameter estimation from oneâ€month sample via Bayesian approach. Quality and Reliability Engineering International, 2010, 26, 853-862. | 1.4 | 5 |
| 68 | Towards the integration of thermal physics and geometrical constraints for a 3D-multiphysical sketcher. , 2015, , . | | 5 |
| 69 | Contribution to risk assessment in football by video analysis of overstepping boundary line events. Sports Engineering, 2016, 19, 129-137. | 0.5 | 5 |
| 70 | Robust interactive design for ergonomics and safety: R-IDEaS procedure and applications. International Journal on Interactive Design and Manufacturing, 2019, 13, 1259-1268. | 1.3 | 5 |
| 71 | A model-based approach for the analysis of aircraft seating comfort. Work, 2021, 68, S251-S255. | 0.6 | 5 |
| 72 | Interactive Tools for Safety 4.0: Virtual Ergonomics and Serious Games in Tower Automotive. Advances in Intelligent Systems and Computing, 2019, , 270-280. | 0.5 | 5 |

| # | Article | IF | Citations |
|---|---|---|---|
| 73 | Multi-wave light technology enabling closed-loop in-process quality control for automotive battery assembly with remote laser welding. , 2019, , . | | 5 |
| 74 | A Top-Down Approach for Virtual Redesign and Ergonomic Optimization of an Agricultural Tractorâ€™s Driver Cab. , 2012, , . | | 4 |
| 75 | Simulation of forest harvesting alternative processes and concept design ofan innovative skidding winch focused on productivity improvement. Turk Tarim Ve Ormancilik Dergisi/Turkish Journal of Agriculture and Forestry, 2015, 39, 350-359. | 0.8 | 4 |
| 76 | â€˜Federicaâ€™s MOOCâ€™ (Massive Open Online Course): a blended course in engineering drawing at Federico II. International Journal on Interactive Design and Manufacturing, 2019, 13, 1115-1128. | 1.3 | 4 |
| 77 | User-centered approach for design and development of industrial workplace. International Journal on Interactive Design and Manufacturing, 2021, 15, 121-123. | 1.3 | 4 |
| 78 | A Digital Pattern Approach to 3D CAD Modelling of Automotive Car Door Assembly by Using Directed Graphs. Mechanisms and Machine Science, 2017, , 175-185. | 0.3 | 4 |
| 79 | Robust Ergonomic Optimization of Car Packaging in Virtual Environment. Lecture Notes in Mechanical Engineering, 2017, , 1177-1186. | 0.3 | 4 |
| 80 | Innovative design for FAST divertor compatible with remote handling, electromagnetic and mechanical analyses. Fusion Engineering and Design, 2015, 98-99, 1465-1469. | 1.0 | 3 |
| 81 | Design of Additively Manufactured Lattice Structures for Tissue Regeneration. Materials Science Forum, 2018, 941, 2154-2159. | 0.3 | 3 |
| 82 | Biomechanicalâ€“based torque reconstruction of the human shoulder joint in industrial tasks. , 2019, , . | | 3 |
| 83 | Preliminary Requirements of a Soft Upper-Limb Exoskeleton for Industrial Overhead Tasks Based on Biomechanical Analysis. Lecture Notes in Networks and Systems, 2022, , 317-324. | 0.5 | 3 |
| 84 | Robust Ergonomic Virtual Design. , 2009, , 43-64. | | 3 |
| 85 | A NEW INTERACTIVE RAILWAY VIRTUAL SIMULATOR FOR TESTING PREVENTIVE SAFETY. WIT Transactions on the Built Environment, 2018, , . | 0.0 | 3 |
| 86 | Requirements Engineering in Complex Systems Design. Lecture Notes in Mechanical Engineering, 2022, , 658-667. | 0.3 | 3 |
| 87 | Improving design validation of playground equipment in virtual reality. International Journal on Interactive Design and Manufacturing, 2013, 7, 191-201. | 1.3 | 2 |
| 88 | Window shape effect in a single bowden power window system. , 2017, , . | | 2 |
| 89 | Some tools to control the technological innovation process. , 1995, , 412-415. | | 2 |
| 90 | Improving the Robustness of Mechatronic Systems. , 2016, , 113-128. | | 2 |

| # | Article | IF | Citations |
|---|---|---|---|
| 91 | Functional or Nonfunctional Cusps Preservation for Molars Restored with Indirect Composite or Glass-Ceramic Onlays: 3D FEA Study. Polymers, 2021, 13, 3831. | 2.0 | 2 |
| 92 | Towards the Upscaling of Biomanufacturing Process Enhanced by Human-Robot Collaboration. Lecture Notes in Mechanical Engineering, 2022, , 615-622. | 0.3 | 2 |
| 93 | Design of Wearables for Biosignal Acquisition: A User Centered Approach for Concept Generation and Selection. Lecture Notes in Mechanical Engineering, 2022, , 818-826. | 0.3 | 2 |
| 94 | A Functional Approach to Optimal Dimensioning of Automotive Transmission Shafts. , 2012, , . | | 1 |
| 95 | Object-oriented model validation for single bowden power window system development. , 2015, , . | | 1 |
| 96 | Video-Analysis of Player's Kinematics in Running out of Boundaries in Association Football Fields. Procedia Engineering, 2016, 147, 234-239. | 1.2 | 1 |
| 97 | An autonomous and self-locating handling device for reverse engineering systems. , 2019, , . | | 1 |
| 98 | Functional analyses to assess the effect of the curing process on the properties of light activated composites. Production Engineering, 2019, 13, 239-246. | 1.1 | 1 |
| 99 | Development of siteâ€“specific biomechanical indices for estimating injury risk in cycling. , 2020, , . | | 1 |
| 100 | Understanding the Effect of Gloves on Hand-Arm Vibrations in Road Cycling. Proceedings (mdpi), 2020, 49, 70. | 0.2 | 1 |
| 101 | Comparison among different inertial-based algorithms for the automatic detection of temporal events in sprint tests: a preliminary study on elite athletes with intellectual impairment. , 2020, , . | | 1 |
| 102 | Towards innovative road cycle gloves for low vibration transmission. International Journal on Interactive Design and Manufacturing, 2021, 15, 155-158. | 1.3 | 1 |
| 103 | Statistical Design for Innovation in Virtual Reality. , 2009, , 27-41. | | 1 |
| 104 | Iterative and Participative Axiomatic Design Process to Improve Conceptual Design of Large-Scale Engineering Systems. Lecture Notes in Mechanical Engineering, 2020, , 492-505. | 0.3 | 1 |
| 105 | Loading stress distribution in posterior teeth restored by different core materials under fixed zirconia partial denture: A 3D-FEA study. American Journal of Dentistry, 2021, 34, 157-162. | 0.1 | 1 |
| 106 | Beyond robust design: an example of synergy between statistics and advanced engineering design. Asian Journal on Quality, 2002, 3, 13-28. | 0.5 | 0 |
| 107 | Improving Quality of Train Interiors Through a VR-Based Participative Design Approach. , 2012, , . | | 0 |
| 108 | Collaborative Environments, Knowledge Creation and Knowledge Reuse for Railway Industries. , 2015, , . | | 0 |

| # | Article | IF | Citations |
|---|---|---|---|
| 109 | Concept Design, Virtual Prototyping and Ergonomic Analysis of an Innovative Skidding Winch Using a DES-TRIZ Approach. , 2015, , . | | 0 |
| 110 | Towards Adaptive Switches through implementation of visual feedback in assistive devices. , 2019, , . | | 0 |
| 111 | The IART System for Race Walking: Experience with World-Class Olympic Race Walkers. Proceedings (mdpi), 2020, 49, . | 0.2 | 0 |
| 112 | A graph-based approach and an interactive tool for preliminary digital prototyping. International Journal on Interactive Design and Manufacturing, 2021, 15, 125-127. | 1.3 | 0 |
| 113 | Virtual environments and prototyping for human health and safety. , 2011, , 103-112. | | 0 |
| 114 | Developing a Graphical Interface for Pre-Posterior Bayesian Analysis. Contributions To Statistics, 1997, , 135-147. | 0.2 | 0 |
| 115 | A Statistical Approach to Simulate Instances of Archeological Findings Fragments. Journal of Automation, Mobile Robotics and Intelligent Systems, 0, , 46-64. | 0.4 | 0 |
| 116 | Mechanicsâ€“Based Virtual Prototyping of Robots with Deformable Bodies and Flexible Joints. Lecture Notes in Mechanical Engineering, 2020, , 444-457. | 0.3 | 0 |
| 117 | Optimization Design Strategy for Additive Manufacturing Process to Develop 3D Magnetic Nanocomposite Scaffolds. Lecture Notes in Mechanical Engineering, 2020, , 948-958. | 0.3 | 0 |
| 118 | A Preliminary Analysis of the Effects of Process Parameters on the Impact Resistance of 3D Printed PETG and HIPS. Lecture Notes in Mechanical Engineering, 2022, , 524-534. | 0.3 | 0 |
| 119 | A Digital Pattern Methodology supporting Railway Industries in Portfolio Management. , 0, , . | | 0 |