# Monica Malvezzi

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/3428959/publications.pdf

Version: 2024-02-01

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|---|---|---|---|
| 49 papers | 1,303 citations | 394421 19 h-index | 414414 32 g-index |
| 49 all docs | 49 docs citations | 49 times ranked | 945 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Modelling the human touch: A basic study for haptic technology. Tribology International, 2022, 166, 107352. | 5.9 | 11 |
| 2 | Design and Prototyping of an Underactuated Hand Exoskeleton With Fingers Coupled by a Gear-Based Differential. Frontiers in Robotics and AI, 2022, 9, 862340. | 3.2 | 7 |
| 3 | Design, Development, and Control of a Hand/Wrist Exoskeleton for Rehabilitation and Training. IEEE Transactions on Robotics, 2022, 38, 1472-1488. | 10.3 | 21 |
| 4 | A methodology to evaluate contact areas and indentations of human fingertips based on 3D techniques for haptic purposes. MethodsX, 2022, 9, 101781. | 1.6 | 3 |
| 5 | The Wavejoints: A Novel Methodology to Design Soft-Rigid Grippers Made by Monolithic 3D Printed Fingers with Adjustable Joint Stiffness. , 2022, , . | | 7 |
| 6 | Compliant gripper design, prototyping, and modeling using screw theory formulation. International Journal of Robotics Research, 2021, 40, 55-71. | 8.5 | 23 |
| 7 | Design of Personalized Wearable Haptic Interfaces to Account for Fingertip Size and shape. IEEE Transactions on Haptics, 2021, 14, 266-272. | 2.7 | 8 |
| 8 | Accessible Educational Resources for Teaching and Learning Robotics. Robotics, 2021, 10, 38. | 3.5 | 16 |
| 9 | Human augmentation by wearable supernumerary robotic limbs: review and perspectives. Progress in Biomedical Engineering, 2021, 3, 042005. | 4.9 | 31 |
| 10 | Design of a Wearable Haptic Device for Hand Palm Cutaneous Feedback. Frontiers in Robotics and AI, 2021, 8, 706627. | 3.2 | 3 |
| 11 | Exploiting VR and AR Technologies in Education and Training to Inclusive Robotics. Studies in Computational Intelligence, 2021, , 115-126. | 0.9 | 0 |
| 12 | Modeling a Sensorized Soft Layer for Adding Compliance to the Environment in Robotic Manipulation. Mechanisms and Machine Science, 2021, , 370-377. | 0.5 | 4 |
| 13 | A Modular Wearable Finger Interface for Cutaneous and Kinesthetic Interaction: Control and Evaluation. IEEE Transactions on Industrial Electronics, 2020, 67, 706-716. | 7.9 | 39 |
| 14 | Hand closure model for planning top grasps with soft robotic hands. International Journal of Robotics Research, 2020, 39, 1706-1723. | 8.5 | 19 |
| 15 | Design, Development, and Control of a Tendon-actuated Exoskeleton for Wrist Rehabilitation and Training. , 2020, , . | | 10 |
| 16 | Design of Soft Grippers with Modular Actuated Embedded Constraints. Robotics, 2020, 9, 105. | 3.5 | 19 |
| 17 | Cooperative Human-Robot Grasping With Extended Contact Patches. IEEE Robotics and Automation Letters, 2020, 5, 3121-3128. | 5.1 | 2 |
| 18 | A Numerical Procedure Based on Orowanâ€™s Theory for Predicting the Behavior of the Cold Rolling Mill Process in Full Film Lubrication. Lubricants, 2020, 8, 2. | 2.9 | 3 |

| # | Article | IF | Citations |
|---|---|---|---|
| 19 | Design and prototyping softâ€“rigid tendon-driven modular grippers using interpenetrating phase composites materials. International Journal of Robotics Research, 2020, 39, 1635-1646. | 8.5 | 45 |
| 20 | Grasping With the SoftPad, a Soft Sensorized Surface for Exploiting Environmental Constraints With Rigid Grippers. IEEE Robotics and Automation Letters, 2020, 5, 3884-3891. | 5.1 | 6 |
| 21 | Design and Prototype of Supernumerary Robotic Finger (SRF) Inspired by Fin RayÂ® Effect for Patients Suffering from Sensorimotor Hand Impairment. , 2019, , . | | 18 |
| 22 | The Role of Closed-Loop Hand Control in Handshaking Interactions. IEEE Robotics and Automation Letters, 2019, 4, 878-885. | 5.1 | 16 |
| 23 | Exploiting Robot Hand Compliance and Environmental Constraints for Edge Grasps. Frontiers in Robotics and AI, 2019, 6, 135. | 3.2 | 13 |
| 24 | Evaluation of Grasp Stiffness inÂUnderactuated Compliant Hands Exploiting Environment Constraints. CISM International Centre for Mechanical Sciences, Courses and Lectures, 2019, , 409-416. | 0.6 | 3 |
| 25 | Design of Multiple Wearable Robotic Extra Fingers for Human Hand Augmentation. Robotics, 2019, 8, 102. | 3.5 | 20 |
| 26 | The Closure Signature: A Functional Approach to Model Underactuated Compliant Robotic Hands. IEEE Robotics and Automation Letters, 2018, 3, 2206-2213. | 5.1 | 21 |
| 27 | The hBracelet: A Wearable Haptic Device for the Distributed Mechanotactile Stimulation of the Upper Limb. IEEE Robotics and Automation Letters, 2018, 3, 2198-2205. | 5.1 | 42 |
| 28 | A Three Revolute-Revolute-Spherical Wearable Fingertip Cutaneous Device for Stiffness Rendering. IEEE Transactions on Haptics, 2018, 11, 39-50. | 2.7 | 56 |
| 29 | Modeling and Prototyping of a Soft Prosthetic Hand Exploiting Joint Compliance and Modularity. , 2018, , . | | 13 |
| 30 | Modeling and Prototyping of an Underactuated Gripper Exploiting Joint Compliance and Modularity. IEEE Robotics and Automation Letters, 2018, 3, 2854-2861. | 5.1 | 43 |
| 31 | Design of the Passive Joints of Underactuated Modular Soft Hands for Fingertip Trajectory Tracking. IEEE Robotics and Automation Letters, 2017, 2, 2008-2015. | 5.1 | 42 |
| 32 | A soft supernumerary robotic finger and mobile arm support for grasping compensation and hemiparetic upper limb rehabilitation. Robotics and Autonomous Systems, 2017, 93, 1-12. | 5.1 | 35 |
| 33 | Multicontact Bilateral Telemanipulation With Kinematic Asymmetries. IEEE/ASME Transactions on Mechatronics, 2017, 22, 445-456. | 5.8 | 18 |
| 34 | On Grasp Quality Measures: Grasp Robustness and Contact Force Distribution in Underactuated and Compliant Robotic Hands. IEEE Robotics and Automation Letters, 2017, 2, 329-336. | 5.1 | 27 |
| 35 | On the role of stiffness design for fingertip trajectories of underactuated modular soft hands. , 2017, , . | | 12 |
| 36 | Modeling compliant grasps exploiting environmental constraints. , 2015, , . | | 9 |

| # | Article | IF | Citations |
|---|---|---|---|
| 37 | Soft finger tactile rendering for wearable haptics. , 2015, , . | | 24 |
| 38 | SynGrasp: A MATLAB Toolbox for Underactuated and Compliant Hands. IEEE Robotics and Automation Magazine, 2015, 22, 52-68. | 2.0 | 69 |
| 39 | Simulation of braking performance: The AnsaldoBreda EMU V250 application. Proceedings of the Institution of Mechanical Engineers, Part F: Journal of Rail and Rapid Transit, 2015, 229, 160-172. | 2.0 | 19 |
| 40 | Design and development of a 3RRS wearable fingertip cutaneous device. , 2015, , . | | 62 |
| 41 | The Sixth-Finger: A modular extra-finger to enhance human hand capabilities. , 2014, , . | | 66 |
| 42 | Design and preliminary validation of a tool for the simulation of train braking performance. Journal of Modern Transportation, 2013, 21, 247-257. | 2.5 | 46 |
| 43 | On Motion and Force Controllability of Precision Grasps with Hands Actuated by Soft Synergies. IEEE Transactions on Robotics, 2013, 29, 1440-1456. | 10.3 | 80 |
| 44 | Mapping Synergies From Human to Robotic Hands With Dissimilar Kinematics: An Approach in the Object Domain. IEEE Transactions on Robotics, 2013, 29, 825-837. | 10.3 | 115 |
| 45 | Evaluation of grasp stiffness in underactuated compliant hands. , 2013, , . | | 17 |
| 46 | Identification of a wheelâ€“rail adhesion coefficient from experimental data during braking tests. Proceedings of the Institution of Mechanical Engineers, Part F: Journal of Rail and Rapid Transit, 2013, 227, 128-139. | 2.0 | 24 |
| 47 | A numerical model of a HIL scaled roller rig for simulation of wheelâ€“rail degraded adhesion condition. Vehicle System Dynamics, 2012, 50, 775-804. | 3.7 | 12 |
| 48 | On the manipulability ellipsoids of underactuated robotic hands with compliance. Robotics and Autonomous Systems, 2012, 60, 337-346. | 5.1 | 75 |
| 49 | Odometric estimation for automatic train protection and control systems. Vehicle System Dynamics, 2011, 49, 723-739. | 3.7 | 29 |