

Xin Li

List of Publications by Year in descending order

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44
papers

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623734

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642732

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docs citations

44
times ranked

197
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|--|-----|-----------|
| 1 | Development of following robot for supplying power to solar panel cleaning robot. <i>Industrial Robot</i> , 2022, 49, 88-95. | 2.1 | 3 |
| 2 | Optimization of mechanical performance of a Bernoulli gripper based on the force characteristic curve synthesis method. <i>Industrial Robot</i> , 2022, 49, 1169. | 2.1 | 1 |
| 3 | Theoretical modeling and experimental study of pressure fields of inclined airflow film. <i>Precision Engineering</i> , 2021, 67, 14-23. | 3.4 | 2 |
| 4 | Experimental investigation on nozzle diameter of vortex gripper. <i>Assembly Automation</i> , 2021, 41, 1-9. | 1.7 | 2 |
| 5 | Inertia-enhancement effect of divergent flow on the force characteristics of a Bernoulli gripper. <i>Physics of Fluids</i> , 2021, 33, . | 4.0 | 4 |
| 6 | Force characteristics and two-dimensional pressure fields of air flotation units with different numbers and distribution radii of orifices. <i>Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science</i> , 2020, 234, 108-120. | 2.1 | 2 |
| 7 | Stiffness improvement of swirl gripper based on gap height and force estimation. <i>Precision Engineering</i> , 2020, 62, 134-142. | 3.4 | 3 |
| 8 | Force Characteristics of Rotating Air Film and Flow Closed-Loop for Noncontact Adsorption. <i>IEEE/ASME Transactions on Mechatronics</i> , 2020, 25, 2835-2845. | 5.8 | 0 |
| 9 | Two-dimensional pressure field and backflow in the annular skirt of vortex gripper. <i>Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science</i> , 2020, , 095440622097404. | 2.1 | 1 |
| 10 | Visual Positioning of Distant Wall-Climbing Robots Using Convolutional Neural Networks. <i>Journal of Intelligent and Robotic Systems: Theory and Applications</i> , 2020, 98, 603-613. | 3.4 | 8 |
| 11 | Efficiency Improvement of Electrically Activated Rotation-Flow Suction Unit Based on Drag Torque and Suction Force Modeling. <i>IEEE/ASME Transactions on Mechatronics</i> , 2020, 25, 882-893. | 5.8 | 1 |
| 12 | Vacuum suction unit based on the zero pressure difference method. <i>Physics of Fluids</i> , 2020, 32, . | 4.0 | 16 |
| 13 | Theoretical and Experimental Study and Design Method of Blade Height of a Rotational-Flow Suction Unit in a Wall-Climbing Robot. <i>Journal of Mechanisms and Robotics</i> , 2020, 12, . | 2.2 | 4 |
| 14 | Effect of chamber diameter of vortex gripper on maximum suction force and flow field. <i>Advances in Mechanical Engineering</i> , 2019, 11, 168781401983740. | 1.6 | 6 |
| 15 | Gap flow with circumferential velocity in annular skirt of vortex gripper. <i>Precision Engineering</i> , 2019, 57, 64-72. | 3.4 | 6 |
| 16 | Convolutional network-based method for wall-climbing robot direction angle measurement. <i>Industrial Robot</i> , 2019, 46, 863-869. | 2.1 | 1 |
| 17 | Force Characteristics of Rotating Air Film and Flow Closed-Loop for Noncontact Adsorption. , 2019, , . | | 1 |
| 18 | Convolutional network-based method for wall-climbing robot direction angle measurement. , 2019, , . | | 1 |

| # | ARTICLE | IF | CITATIONS |
|----|--|-----|-----------|
| 19 | Experimental investigation on climbing robot using rotation-flow adsorption unit. Robotics and Autonomous Systems, 2018, 105, 112-120. | 5.1 | 45 |
| 20 | Experimental and theoretical study of dynamic characteristics of Bernoulli gripper. Precision Engineering, 2018, 52, 323-331. | 3.4 | 23 |
| 21 | Development of Vacuum Suction Unit Using Flame Extinguishment. , 2018, , . | | 0 |
| 22 | Experimental study of vortex suction unit-based wall-climbing robot on walls with various surface conditions. Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science, 2018, 232, 3977-3991. | 2.1 | 14 |
| 23 | Study on the basic characteristics of a noncontact air conveyor for large glass sheets. Advances in Mechanical Engineering, 2017, 9, 168781401769719. | 1.6 | 5 |
| 24 | Development of Wall-Climbing Robot Using Vortex Suction Unit and Its Evaluation on Walls with Various Surface Conditions. Lecture Notes in Computer Science, 2017, , 179-192. | 1.3 | 6 |
| 25 | Modeling and verification of a contactless air film conveyor using a viscous traction principle. International Journal of Precision Engineering and Manufacturing, 2017, 18, 1763-1772. | 2.2 | 4 |
| 26 | Experimental comparison of drag-wiper and roller-wiper glass-cleaning robots. Industrial Robot, 2016, 43, 409-420. | 2.1 | 16 |
| 27 | Optimization of outer diameter of Bernoulli gripper. Experimental Thermal and Fluid Science, 2016, 77, 284-294. | 2.7 | 29 |
| 28 | Effect of supply flow rate on performance of pneumatic non-contact gripper using vortex flow. Experimental Thermal and Fluid Science, 2016, 79, 91-100. | 2.7 | 23 |
| 29 | Study on the basic characteristics of a contactless air film conveyor using viscous traction. Proceedings of the Institution of Mechanical Engineers, Part J: Journal of Engineering Tribology, 2016, 230, 1139-1148. | 1.8 | 6 |
| 30 | Development and Analysis of an Electrically Activated Sucker for Handling Workpieces With Rough and Uneven Surfaces. IEEE/ASME Transactions on Mechatronics, 2016, 21, 1024-1034. | 5.8 | 15 |
| 31 | Suppression of Vortex Precession in a Non-Contact Handling Device by a Circular Column. Journal of Flow Control Measurement & Visualization, 2016, 04, 70-78. | 0.1 | 4 |
| 32 | Development and experimental evaluation of air flotation element with additional air intake capacity. Lubrication Science, 2015, 27, 397-411. | 2.1 | 2 |
| 33 | Experimental comparison of Bernoulli gripper and vortex gripper. International Journal of Precision Engineering and Manufacturing, 2015, 16, 2081-2090. | 2.2 | 30 |
| 34 | Theoretical and Experimental Study of Factors Affecting the Suction Force of a Bernoulli Gripper. Journal of Engineering Mechanics - ASCE, 2014, 140, . | 2.9 | 44 |
| 35 | Pressure-Distribution Methods for Estimating Lifting Force of a Swirl Gripper. IEEE/ASME Transactions on Mechatronics, 2014, 19, 707-718. | 5.8 | 19 |
| 36 | Development of a new noncontact gripper using swirl vanes. Robotics and Computer-Integrated Manufacturing, 2013, 29, 63-70. | 9.9 | 51 |

| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 37 | Study on the basic characteristics of a vortex bearing element. International Journal of Advanced Manufacturing Technology, 2013, 64, 1-12. | 3.0 | 37 |
| 38 | Modelling and experimental validation of dynamic characteristics of porous-walled air film for non-contact conveyor system. Proceedings of the Institution of Mechanical Engineers, Part J: Journal of Engineering Tribology, 2013, 227, 787-797. | 1.8 | 3 |
| 39 | An Experimental Investigation on the Quasi-Static Flotation Transport of a Glass Substrate Using Vortex Bearing Elements. Journal of Flow Control Measurement & Visualization, 2013, 01, 6-12. | 0.1 | 3 |
| 40 | Computational Fluid Dynamics Study of a Noncontact Handling Device Using Air-Swirling Flow. Journal of Engineering Mechanics - ASCE, 2011, 137, 400-409. | 2.9 | 33 |
| 41 | Performance of a non-contact handling device using swirling flow with various gap height. Journal of Visualization, 2010, 13, 319-326. | 1.8 | 23 |
| 42 | Analysis of vortex levitation. Experimental Thermal and Fluid Science, 2008, 32, 1448-1454. | 2.7 | 72 |
| 43 | Dynamic characteristics of vortex levitation. , 2008, , . | | 4 |
| 44 | Bubble growth in water vortex unit and its effect on suction force. Physics of Fluids, 0, , . | 4.0 | 0 |