

# Won-jong Kim

## List of Publications by Year in descending order

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Version: 2024-02-01

51  
papers

981  
citations

430874

18  
h-index

454955

30  
g-index

51  
all docs

51  
docs citations

51  
times ranked

952  
citing authors

| #  | ARTICLE  | IF  | CITATIONS |
|----|--|-----|-----------|
| 1  | Automated Alignment With Respect to a Moving Inductive Wireless Charger. IEEE Transactions on Transportation Electrification, 2022, 8, 605-614.  | 7.8 | 5         |
| 2  | A 3-D Printed Halbach-Cylinder Motor With Self-Position Sensing for Precision Motions. IEEE/ASME Transactions on Mechatronics, 2022, 27, 1489-1497.  | 5.8 | 4         |
| 3  | A Human-Following Mobile Robot Providing Natural and Universal Interfaces for Control With Wireless Electronic Devices. IEEE/ASME Transactions on Mechatronics, 2019, 24, 2377-2385.                                       | 5.8 | 15        |
| 4  | Lateral Position Error Reduction Using Misalignment-Sensing Coils in Inductive Power Transfer Systems. IEEE/ASME Transactions on Mechatronics, 2018, 23, 875-882.  | 5.8 | 36        |
| 5  | Autonomous Positioning of a Mobile Robot for Wireless Charging Using Computer Vision and Misalignment-Sensing Coils. , 2018, , .   |     | 11        |
| 6  | An electrical model with equivalent elements in a time-variant environment for an ionic-polymer-metal-composite system. International Journal of Control, Automation and Systems, 2017, 15, 45-53.                         | 2.7 | 3         |
| 7  | Electromagnetic Analysis and Steady-State Performance of Double-Sided Flat Linear Motor Using Soft Magnetic Composite. IEEE Transactions on Industrial Electronics, 2017, 64, 2178-2187.                                   | 7.9 | 29        |
| 8  | Two-Phase Lorentz Coils and Linear Halbach Array for Multiaxis Precision-Positioning Stages With Magnetic Levitation. IEEE/ASME Transactions on Mechatronics, 2017, 22, 2662-2672.   | 5.8 | 39        |
| 9  | Parameter identification for nanopositioning of a 6-axis maglev stage with moving Lorentz coils. , 2016, , .   |     | 0         |
| 10 | Steady-State Modeling and Analysis of a Double-Sided Interior Permanent-Magnet Flat Linear Brushless Motor With Slot-Phase Shift and Alternate Teeth Windings. IEEE Transactions on Magnetics, 2016, 52, 1-11.             | 2.1 | 16        |
| 11 | Design of precision positioner with Hall-effect sensors and multivariable control methodology. International Journal of Control, Automation and Systems, 2016, 14, 787-795.  | 2.7 | 2         |
| 12 | Detent-Force Minimization of Double-Sided Interior Permanent-Magnet Flat Linear Brushless Motor. IEEE Transactions on Magnetics, 2016, 52, 1-9.  | 2.1 | 42        |
| 13 | Experimental analysis and implementation of a multiscale wireless/wired networked control system. International Journal of Control, Automation and Systems, 2014, 12, 102-110.   | 2.7 | 10        |
| 14 | Development of a New High-Resolution Angle-Sensing Mechanism Using an RGB Sensor. IEEE/ASME Transactions on Mechatronics, 2014, 19, 1707-1715.   | 5.8 | 13        |
| 15 | Multivariable Control and Optimization of a Compact 6-DOF Precision Positioner With Hybrid $\{cal H\}_{2}/\{cal H\}_{\infty}$ and Digital Filtering. IEEE Transactions on Control Systems Technology, 2013, 21, 1641-1651. | 5.2 | 20        |
| 16 | Aquatic Ionic-Polymer-Metal-Composite Insectile Robot With Multi-DOF Legs. IEEE/ASME Transactions on Mechatronics, 2013, 18, 547-555.  | 5.8 | 44        |
| 17 | Switched Ethernet-Based Real-Time Networked Control System with Multiple-Clientâ€“Server Architecture. IEEE/ASME Transactions on Mechatronics, 2013, 18, 104-112.  | 5.8 | 34        |
| 18 | Novel Electromagnetic Design for a Precision Planar Positioner Moving Over a Superimposed Concentrated-Field Magnet Matrix. IEEE Transactions on Energy Conversion, 2012, 27, 52-62.                                       | 5.2 | 18        |

| #  | ARTICLE  | IF  | CITATIONS |
|----|--|-----|-----------|
| 19 | Markov-chain-based output feedback control for stabilization of networked control systems with random time delays and packet losses. International Journal of Control, Automation and Systems, 2012, 10, 1013-1022.                                    | 2.7 | 31        |
| 20 | Sensorless Control of a Novel Linear Magnetostrictive Motor. IEEE Transactions on Industry Applications, 2011, 47, 736-743.  | 4.9 | 3         |
| 21 | Adaptive-Neuro-Fuzzy-Based Sensorless Control of a Smart-Material Actuator. IEEE/ASME Transactions on Mechatronics, 2011, 16, 371-379.   | 5.8 | 26        |
| 22 | Time-domain fixed-structure closed-loop model identification of an unstable multivariable maglev nanopositioning system. International Journal of Control, Automation and Systems, 2011, 9, 32-41.   | 2.7 | 4         |
| 23 | Autonomous robotic wheelchair with collision-avoidance navigation and real-time path planning. , 2010, , .   |     | 2         |
| 24 | A Novel Low-Power Linear Magnetostrictive Actuator With Local Three-Phase Excitation. IEEE/ASME Transactions on Mechatronics, 2010, 15, 299-307.   | 5.8 | 29        |
| 25 | A Compact Hall-Effect-Sensing 6-DOF Precision Positioner. IEEE/ASME Transactions on Mechatronics, 2010, , .  | 5.8 | 17        |
| 26 | Active Suspension Control With Direct-Drive Tubular Linear Brushless Permanent-Magnet Motor. IEEE Transactions on Control Systems Technology, 2010, 18, 859-870.   | 5.2 | 53        |
| 27 | Sensorless control of a novel linear magnetostrictive motor. , 2009, , .   |     | 3         |
| 28 | Active Suspension Control with Direct-Drive Tubular Linear Brushless Permanent-Magnet Motor. , 2009, , .   |     | 8         |
| 29 | Design and relay-based control of a novel linear magnetostrictive motor. , 2009, , .   |     | 6         |
| 30 | Multiscale Control for Nanoprecision Positioning Systems With Large Throughput. IEEE Transactions on Control Systems Technology, 2007, 15, 945-951.  | 5.2 | 13        |
| 31 | Network-based control with real-time prediction of delayed/lost sensor data. IEEE Transactions on Control Systems Technology, 2006, 14, 182-185.   | 5.2 | 21        |
| 32 | Extended Range Six-DOF High-Precision Positioner for Wafer Processing. IEEE/ASME Transactions on Mechatronics, 2006, 11, 682-689.  | 5.8 | 38        |
| 33 | Real-time operating environment for networked control systems. IEEE Transactions on Automation Science and Engineering, 2006, 3, 287-296.  | 5.2 | 60        |
| 34 | Networked Real-Time Control Strategy Dealing With Stochastic Time Delays and Packet Losses. Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME, 2006, 128, 681-685.   | 1.6 | 33        |
| 35 | System identification and microposition control of ionic polymer metal composite for three-finger gripper manipulation. Proceedings of the Institution of Mechanical Engineers Part I: Journal of Systems and Control Engineering, 2006, 220, 539-551. | 1.0 | 31        |
| 36 | Modeling and Multivariable Control Design Methodologies for Hexapod-Based Satellite Vibration Isolation. Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME, 2005, 127, 700-704.  | 1.6 | 9         |

| #  | ARTICLE  | IF  | CITATIONS |
|----|--|-----|-----------|
| 37 | Multi-Axis Maglev Nanopositioner for Precision Manufacturing and Manipulation Applications. IEEE Transactions on Industry Applications, 2005, 41, 1159-1167. | 4.9 | 78        |
| 38 | Fabrication and control of a 6-DOF magnetic levitation stage with nanopositioning capability. , 2004, , .  |     | 4         |
| 39 | Design and control of a 6-DOF high-precision integrated positioner. , 2004, , .  |     | 4         |
| 40 | Six-Axis Nanopositioning Device With Precision Magnetic Levitation Technology. IEEE/ASME Transactions on Mechatronics, 2004, 9, 384-391.                     | 5.8 | 99        |
| 41 | Precision position control of ionic polymer metal composite. , 2004, , .   |     | 5         |
| 42 | Intuitive representation of gain schedulers to facilitate their design and tuning. , 2004, , .   |     | 0         |
| 43 | Supervisory control via the Internet and time delay estimation. , 2003, , .  |     | 0         |
| 44 | High-precision control of a maglev linear actuator with nanopositioning capability. , 2002, , .  |     | 7         |
| 45 | Precision dynamics, stochastic modeling, and multivariable control of planar magnetic levitator. , 2002, , .   |     | 2         |
| 46 | Six-axis nano-positioning with planar magnetic levitation. , 0, , .  |     | 3         |
| 47 | Internet-based supervisory control and stability analysis for time delay. , 0, , .   |     | 6         |
| 48 | Networked real-time control strategies dealing with stochastic time delays and packet losses. , 0, , .   |     | 21        |
| 49 | Nanoscale path planning and motion control. , 0, , .   |     | 1         |
| 50 | A novel multi-DOF precision positioning methodology using two-axis hall-effect sensors. , 0, , .   |     | 10        |
| 51 | Real-time operating environment for networked control systems. , 0, , .  |     | 13        |