Won-jong Kim

List of Publications by Year
in descending order

51	981	430874 18	454955 30
papers	citations	h-index	g-index

51	51	51	952
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Six-Axis Nanopositioning Device With Precision Magnetic Levitation Technology. IEEE/ASME Transactions on Mechatronics, 2004, 9, 384-391.	5.8	99
2	Multi-Axis Maglev Nanopositioner for Precision Manufacturing and Manipulation Applications. IEEE Transactions on Industry Applications, 2005, 41, 1159-1167.	4.9	78
3	Real-time operating environmentfor networked control systems. IEEE Transactions on Automation Science and Engineering, 2006, 3, 287-296.	5.2	60
4	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
5	Aquatic Ionic-Polymer-Metal-Composite Insectile Robot With Multi-DOF Legs. IEEE/ASME Transactions on Mechatronics, 2013, 18, 547-555.	5.8	44
6	Detent-Force Minimization of Double-Sided Interior Permanent-Magnet Flat Linear Brushless Motor. IEEE Transactions on Magnetics, 2016, 52, 1-9.	2.1	42
7	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
8	Extended Range Six-DOF High-Precision Positioner for Wafer Processing. IEEE/ASME Transactions on Mechatronics, 2006, 11, 682-689.	5.8	38
9	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
10	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
11	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
12	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
13	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
14	A Novel Low-Power Linear Magnetostrictive Actuator With Local Three-Phase Excitation. IEEE/ASME Transactions on Mechatronics, 2010, 15, 299-307.	5.8	29
15	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
16	Adaptive-Neuro-Fuzzy-Based Sensorless Control of a Smart-Material Actuator. IEEE/ASME Transactions on Mechatronics, 2011, 16, 371-379.	5.8	26
17	Networked real-time control strategies dealing with stochastic time delays and packet losses. , 0, , .		21
18	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

#	Article	IF	Citations
19	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
20	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
21	A Compact Hall-Effect-Sensing 6-DOF Precision Positioner. IEEE/ASME Transactions on Mechatronics, 2010, , .	5.8	17
22	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
23	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
24	Real-time operating environment for networked control systems. , 0, , .		13
25	Multiscale Control for Nanoprecision Positioning Systems With Large Throughput. IEEE Transactions on Control Systems Technology, 2007, 15, 945-951.	5.2	13
26	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
27	Autonomous Positioning of a Mobile Robot for Wireless Charging Using Computer Vision and Misalignment-Sensing Coils. , 2018, , .		11
28	A novel multi-DOF precision positioning methodology using two-axis hall-effect sensors. , 0, , .		10
29	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
30	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
31	Active Suspension Control with Direct-Drive Tubular Linear Brushless Permanent-Magnet Motor. , 2009, , .		8
32	High-precision control of a maglev linear actuator with nanopositioning capability. , 2002, , .		7
33	Internet-based supervisory control and stability analysis for time delay. , 0, , .		6
34	Design and relay-based control of a novel linear magnetostrictive motor. , 2009, , .		6
35	Automated Alignment With Respect to a Moving Inductive Wireless Charger. IEEE Transactions on Transportation Electrification, 2022, 8, 605-614.	7.8	5
36	Precision position control of ionic polymer metal composite. , 2004, , .		5

#	Article	IF	Citations
37	Fabrication and control of a 6-DOF magnetic levitation stage with nanopositioning capability. , 2004, , .		4
38	Design and control of a 6-DOF high-precision integrated positioner. , 2004, , .		4
39	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
40	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
41	Six-axis nano-positioning with planar magnetic levitation. , 0, , .		3
42	Sensorless control of a novel linear magnetostrictive motor. , 2009, , .		3
43	Sensorless Control of a Novel Linear Magnetostrictive Motor. IEEE Transactions on Industry Applications, 2011, 47, 736-743.	4.9	3
44	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
45	Precision dynamics, stochastic modeling, and multivariable control of planar magnetic levitator. , 2002, , .		2
46	Autonomous robotic wheelchair with collision-avoidance navigation and real-time path planning. , 2010, , .		2
47	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
48	Nanoscale path planning and motion control. , 0, , .		1
49	Supervisory control via the Internet and time delay estimation. , 2003, , .		0
50	Parameter identification for nanopositioning of a 6-axis maglev stage with moving Lorentz coils. , 2016, , .		0
51	Intuitive representation of gain schedulers to facilitate their design and tuning. , 2004, , .		0