

# Jong Won Kim

## List of Publications by Year in descending order

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49  
papers

1,050  
citations

430874

18  
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454955

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g-index

49  
all docs

49  
docs citations

49  
times ranked

645  
citing authors

#	ARTICLE	IF	CITATIONS
1	Position Error Compensation of Façade-Cleaning Robot by Optimal Rope Winch Design. IEEE Access, 2021, 9, 143392-143405.	4.2	2
2	Highly Repeatable Rope Winch Design With Multiple Windings and Differential Gear Mechanism. IEEE Access, 2020, 8, 87291-87308.	4.2	7
3	STEP: A New Mobile Platform With 2-DOF Transformable Wheels for Service Robots. IEEE/ASME Transactions on Mechatronics, 2020, 25, 1859-1868.	5.8	40
4	Compact Variable Gravity Compensation Mechanism With a Geometrically Optimized Lever for Maximizing Variable Ratio of Torque Generation. IEEE/ASME Transactions on Mechatronics, 2020, 25, 2019-2026.	5.8	12
5	Design and Force-Tracking Impedance Control of 2-DOF Wall-Cleaning Manipulator via Disturbance Observer. IEEE/ASME Transactions on Mechatronics, 2020, 25, 1487-1498.	5.8	22
6	Dual Ascender Robot With Position Estimation Using Angle and Length Sensors. IEEE Sensors Journal, 2020, 20, 7422-7432.	4.7	16
7	Design of Window-Cleaning Robotic Manipulator With Compliant Adaptation Capability. IEEE/ASME Transactions on Mechatronics, 2020, 25, 1878-1885.	5.8	12
8	Optimal Trajectory Planning for 2-DOF Adaptive Transformable Wheel. IEEE Access, 2020, 8, 14452-14459.	4.2	9
9	Reconfiguration Solution of a Variable Topology Truss: Design and Experiment. IEEE Robotics and Automation Letters, 2020, 5, 1939-1945.	5.1	7
10	A New Lizard-Inspired Robot With S-Shaped Lateral Body Motions. IEEE/ASME Transactions on Mechatronics, 2020, 25, 130-141.	5.8	3
11	Polygon-Based Random Tree Search Planning for Variable Geometry Truss Robot. IEEE Robotics and Automation Letters, 2020, 5, 813-819.	5.1	7
12	Performance Comparison of Adaptive Mechanisms of Cleaning Module to Overcome Step-Shaped Obstacles on Façades. IEEE Access, 2019, 7, 159879-159887.	4.2	7
13	Unmanned High-Rise Façade Cleaning Robot Implemented on a Gondola: Field Test on 000-Building in Korea. IEEE Access, 2019, 7, 30174-30184.	4.2	29
14	Optimal Parameter Design of a Cleaning Device for Vertical Glass Surfaces. International Journal of Precision Engineering and Manufacturing, 2019, 20, 233-241.	2.2	14
15	Parallel 2-DoF manipulator for wall-cleaning applications. Automation in Construction, 2019, 101, 209-217.	9.8	14
16	Design of Compact Variable Gravity Compensator (CVGC) Based on Cam and Variable Pivot of a Lever Mechanism. , 2019, , .		7
17	Curved-Spoke Tri-Wheel Mechanism for Fast Stair-Climbing. IEEE Access, 2019, 7, 173766-173773.	4.2	21
18	Optimization-Based Nonimpact Rolling Locomotion of a Variable Geometry Truss. IEEE Robotics and Automation Letters, 2019, 4, 747-752.	5.1	17

#	ARTICLE	IF	CITATIONS
19	Multidisciplinary methodology to predict the performance of modular actuator-based manipulator. <i>Robotics and Computer-Integrated Manufacturing</i> , 2018, 52, 46-64.	9.9	5
20	A new non-servo motor type automatic tool changing mechanism based on rotational transmission with dual four-bar linkages. <i>Meccanica</i> , 2018, 53, 2447-2459.	2.0	8
21	Development of Efficient Strategy for Square Peg-in-Hole Assembly Task. <i>International Journal of Precision Engineering and Manufacturing</i> , 2018, 19, 1323-1330.	2.2	5
22	Improvement of step-climbing capability of a new mobile robot RHyMo via kineto-static analysis. <i>Mechanism and Machine Theory</i> , 2017, 114, 20-37.	4.5	22
23	Development of a wall-climbing platform with modularized wall-cleaning units. <i>Automation in Construction</i> , 2017, 83, 1-18.	9.8	38
24	Positioning control of an underwater robot with tilting thrusters via decomposition of thrust vector. <i>International Journal of Control, Automation and Systems</i> , 2017, 15, 2283-2291.	2.7	9
25	Disturbance compensation of a dual-arm underwater robot via redundant parallel mechanism theory. <i>Meccanica</i> , 2017, 52, 1711-1719.	2.0	7
26	Trajectory generation algorithm for smooth movement of a hybrid-type robot Rocker-Pillar. <i>Journal of Mechanical Science and Technology</i> , 2016, 30, 5217-5224.	1.5	7
27	Design, modeling and optimization of an underwater manipulator with four-bar mechanism and compliant linkage. <i>Journal of Mechanical Science and Technology</i> , 2016, 30, 4337-4343.	1.5	12
28	Numerical hybrid Taguchi-random coordinate search algorithm for path synthesis. <i>Mechanism and Machine Theory</i> , 2016, 102, 203-216.	4.5	23
29	A New Mobile Platform (RHyMo) for Smooth Movement on Rugged Terrain. <i>IEEE/ASME Transactions on Mechatronics</i> , 2016, 21, 1303-1314.	5.8	32
30	MultiTrack: A multi-linked track robot with suction adhesion for climbing and transition. <i>Robotics and Autonomous Systems</i> , 2015, 72, 207-216.	5.1	73
31	Empirical modeling of rotating thruster for underwater robotic platform. <i>Journal of Marine Science and Technology</i> , 2015, 20, 118-126.	2.9	7
32	Dynamic analysis during internal transition of a compliant multi-body climbing robot with magnetic adhesion. <i>Journal of Mechanical Science and Technology</i> , 2014, 28, 5175-5187.	1.5	21
33	Optimal design of the front linkage of a hydraulic excavator for multi-objective function. <i>Journal of Mechanical Science and Technology</i> , 2014, 28, 3103-3111.	1.5	20
34	Analysis method of climbing stairs with the rocker-bogie mechanism. <i>Journal of Mechanical Science and Technology</i> , 2013, 27, 2783-2788.	1.5	11
35	Design and stability analysis of a novel wall-climbing robotic platform (ROPE RIDE). <i>Mechanism and Machine Theory</i> , 2013, 70, 189-208.	4.5	66
36	Rocker-Pillar : Design of the rough terrain mobile robot platform with caterpillar tracks and rocker bogie mechanism. , 2012, , .		20

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37	Optimal design and kinetic analysis of a stair-climbing mobile robot with rocker-bogie mechanism. <i>Mechanism and Machine Theory</i> , 2012, 50, 90-108.	4.5	86
38	Optimal design and workspace analysis of a mobile welding robot with a 3P3R serial manipulator. <i>Robotics and Autonomous Systems</i> , 2011, 59, 813-826.	5.1	36
39	Optimal design of a micro-orifice for constant evaporator superheat in a small cooler. <i>Applied Thermal Engineering</i> , 2011, 31, 2631-2635.	6.0	3
40	Characteristics of R-123 two-phase flow through micro-scale short tube orifice for design of a small cooling system. <i>Experimental Thermal and Fluid Science</i> , 2011, 35, 1484-1489.	2.7	8
41	A dynamic model of humanoid robots using the analytical method. <i>International Journal of Precision Engineering and Manufacturing</i> , 2010, 11, 67-75.	2.2	2
42	Optimal design of a micro evaporator with lateral gaps. <i>Applied Thermal Engineering</i> , 2009, 29, 2921-2926.	6.0	10
43	Design and analysis of decoupled parallel mechanism with redundant actuator. <i>International Journal of Precision Engineering and Manufacturing</i> , 2009, 10, 93-99.	2.2	22
44	Development and kinematic calibration for measurement structure of a micro parallel mechanism platform. <i>Journal of Mechanical Science and Technology</i> , 2008, 22, 746-754.	1.5	9
45	Development of a wall-climbing robot using a tracked wheel mechanism. <i>Journal of Mechanical Science and Technology</i> , 2008, 22, 1490-1498.	1.5	106
46	Gain-scheduled robust control of a novel 3-DOF micro parallel positioning platform via a dual stage servo system. <i>Mechatronics</i> , 2008, 18, 495-505.	3.3	25
47	Design and fabrication of a micro PZT cantilever array actuator for applications in fluidic systems. <i>Journal of Mechanical Science and Technology</i> , 2005, 19, 1544-1553.	1.5	7
48	Chatter analysis of a parallel mechanism-based universal machining center. <i>Journal of Mechanical Science and Technology</i> , 2003, 17, 691-697.	0.4	2
49	Hybrid rapid prototyping system using machining and deposition. <i>CAD Computer Aided Design</i> , 2002, 34, 741-754.	2.7	102