Soohyun Kim

List of Publications by Citations

92 papers	1,052 citations	16 h-index	29 g-index
119 ext. papers	1,332 ext. citations	3.8 avg, IF	4.53 L-index

#	Paper	IF	Citations
92	Disturbance Observer for Estimating Higher Order Disturbances in Time Series Expansion. *IEEE Transactions on Automatic Control*, **2010**, 55, 1905-1911	5.9	196
91	Measurement of the thickness profile of a transparent thin film deposited upon a pattern structure with an acousto-optic tunablefilter. *Optics Letters*, **2002**, 27, 1893-5	3	58
90	A Robot Finger Design Using a Dual-Mode Twisting Mechanism to Achieve High-Speed Motion and Large Grasping Force. *IEEE Transactions on Robotics*, **2012**, 28, 1398-1405	6.5	48
89	Six-degree-of-freedom displacement measurement system using a diffraction grating. *Review of Scientific Instruments*, **2000**, 71, 3214-3219	1.7	44
88	Designing Anthropomorphic Robot Hand With Active Dual-Mode Twisted String Actuation Mechanism and Tiny Tension Sensors. *IEEE Robotics and Automation Letters*, **2017**, 2, 1571-1578	4.2	43
87	Morphology-based guidance line extraction for an autonomous weeding robot in paddy fields. *Computers and Electronics in Agriculture*, **2015**, 113, 266-274	6.5	42
86	Flow-induced voltage generation in non-ionic liquids over monolayer graphene. *Applied Physics Letters*, **2013**, 102, 063116	3.4	42
85	Flow-induced voltage generation in high-purity metallic and semiconducting carbon nanotubes. *Applied Physics Letters*, **2011**, 99, 104103	3.4	34
84	Degradation of optical properties of a film-type single-wall carbon nanotubes saturable absorber (SWNT-SA) with an Er-doped all-fiber laser. *Optics Express*, **2012**, 20, 12966-74	3.3	34
83	A linear air bearing stage with active magnetic preloads for ultraprecise straight motion. *Precision Engineering*, **2010**, 34, 186-194	2.9	30
82	Estimating Clothing Thermal Insulation Using an Infrared Camera. *Sensors*, **2016**, 16,	3.8	28
81	Compound Explosives Detection and Component Analysis via Terahertz Time-Domain Spectroscopy. *Journal of the Optical Society of Korea*, **2013**, 17, 454-460		25
80	Controller Design of an Electric Power Steering System. *IEEE Transactions on Control Systems Technology*, **2018**, 26, 748-755	4.8	24
79	Note: A compact three-axis optical force/torque sensor using photo-interrupters. *Review of Scientific Instruments*, **2013**, 84, 126109	1.7	23
78	Effective image enhancement techniques for fog-affected indoor and outdoor images. *IET Image Processing*, **2018**, 12, 465-471	1.7	19
77	Flow-induced voltage generation over monolayer graphene in the presence of herringbone grooves. *Nanoscale Research Letters*, **2013**, 8, 487	5	19
76	Polarization insensitive graphene saturable absorbers using etched fiber for highly stable ultrafast fiber lasers. *Optics Express*, **2015**, 23, 22116-22	3.3	16

75	A Portable and Remote 6-DOF Pose Sensor System With a Long Measurement Range Based on 1-D Laser Sensors. *IEEE Transactions on Industrial Electronics*, **2015**, 62, 5722-5729	8.9	16
74	Design of a prism to compensate the image-shifting error of the Acousto-Optic tunable filter. *Optics Express*, **2008**, 16, 17138-47	3.3	16
73	A Novel Fabrication of 3.6 nm High Graphene Nanochannels for Ultrafast Ion Transport. *Advanced Materials*, **2017**, 29, 1605854	24	15
72	Developing Accurate Long-Distance 6-DOF Motion Detection With One-Dimensional Laser Sensors: Three-Beam Detection System. *IEEE Transactions on Industrial Electronics*, **2012**, 1-1	8.9	14
71	Highly Increased Flow-Induced Power Generation on Plasmonically Carbonized Single-Walled Carbon Nanotube . *ACS Applied Materials & Interfaces*, **2016**, 8, 29877-29882	9.5	13
70	Design of a cat-inspired robotic leg for fast running. *Advanced Robotics*, **2014**, 28, 1587-1598	1.7	13
69	A Study on the Effects of Multiwall Carbon Nanotubes on Dynamic Stiffness of Hydrophilic-base Magnetorheological Gel. *Current Nanoscience*, **2019**, 15, 319-323	1.4	12
68	Selective atomic layer deposition onto directly transferred monolayer graphene. *Materials Letters*, **2016**, 165, 45-49	3.3	10
67	Structural Optimization of a Novel 6-DOF Pose Sensor System for Enhancing Noise Robustness at a Long Distance. *IEEE Transactions on Industrial Electronics*, **2014**, 61, 5622-5631	8.9	10
66	Independent traction control for uneven terrain using stick-slip phenomenon: application to a stair climbing robot. *Autonomous Robots*, **2007**, 23, 3-18	3	10
65	A Novel Passive Quasi-Zero Stiffness Isolator for Ultra-Precision Measurement Systems. *International Journal of Precision Engineering and Manufacturing*, **2019**, 20, 1573-1580	1.7	9
64	Vibration isolation strategies using magneto-rheological elastomer for a miniature cryogenic cooler in space application **2010**,		9
63	Nondestructive evaluation of multilayered paint films in ambient atmosphere using terahertz reflection spectroscopy. *NDT and E International*, **2016**, 80, 71-76	4.1	9
62	Nondestructive Material Characterization in the Terahertz Band by Selective Extraction of Sample-Induced Echo Signals. *Journal of Nondestructive Evaluation*, **2015**, 34, 1	2.1	8
61	Experimental determination of the spring constant of an individual multiwalled carbon nanotube cantilever using fluorescence measurement. *Applied Physics Letters*, **2009**, 95, 013110	3.4	8
60	Vacuum chamber-free centrifuge with magnetic bearings. *Review of Scientific Instruments*, **2013**, 84, 095106	1.7	7
59	Design improvement of the three-beam detector towards a precise long-range 6-degree of freedom motion sensor system. *Review of Scientific Instruments*, **2014**, 85, 015004	1.7	7
58	Development of a robotic finger with an active dual-mode twisting actuation and a miniature tendon tension sensor **2016**,		7

57	The Role of Relative Spinal Motion during Feline Galloping for Speed Performance. *Journal of Bionic Engineering*, **2014**, 11, 517-528	2.7	6
56	Actuation of a robotic fish caudal fin for low reaction torque. *Review of Scientific Instruments*, **2011**, 82, 075114	1.7	6
55	High sensitivity inductive sensing system for position measurement		6
54	Two-channel electrotactile stimulation for sensory feedback of fingers of prosthesis **2016**,		6
53	Design and control of antagonistic robot joint with Twisted String Actuators **2016**,		5
52	Weighted virtual tangential vector algorithm for local path planning of mobile robots. *Electronics Letters*, **2013**, 49, 255-256	1.1	5
51	Developing a robust sensing system for remote relative 6-DOF motion using 1-D laser sensors **2012** ,		5
50	SoftGait: compliant walking assistance via pneumatically actuated robot legs. *Electronics Letters*, **2013**, 49, 1208-1209	1.1	5
49	Bioinspired Image Stabilization Control Using the Adaptive Gain Adjustment Scheme of Vestibulo-Ocular Reflex. *IEEE/ASME Transactions on Mechatronics*, **2016**, 21, 922-930	5.5	4
48	Controllable pneumatic generator based on the catalytic decomposition of hydrogen peroxide. *Review of Scientific Instruments*, **2014**, 85, 075109	1.7	4
47	Development of magnetically preloaded air bearings for a linear slide: active compensation of three degrees of freedom motion errors. *Review of Scientific Instruments*, **2008**, 79, 036104	1.7	4
46	Practical Approach for Controlling Optical Image Stabilization System. *International Journal of Control, Automation and Systems*, **2020**, 18, 824-833	2.9	4
45	An H□Design of Disturbance Observer for a Class of Linear Time-invariant Single-input/Single-output Systems. *International Journal of Control, Automation and Systems*, **2020**, 18, 1662-1670	2.9	3
44	Highly Enhanced Electromechanical Stability of Large-Area Graphene with Increased Interfacial Adhesion Energy by Electrothermal-Direct Transfer for Transparent Electrodes. *ACS Applied Materials & Interfaces*, **2016**, 8, 23396-403	9.5	3
43	Design of modular gripper for explosive ordinance disposal robot manipulator based on modified dual-mode twisting actuation. *International Journal of Control, Automation and Systems*, **2016**, 14, 1322-1330	2.9	3
42	A passively adaptive variable-radius pulley for a tendon-driven robotic joint. *Mechanism and Machine Theory*, **2018**, 128, 110-124	4	3
41	Auto-positioning of sliding planes based on virtual force. *International Journal of Control, Automation and Systems*, **2013**, 11, 798-804	2.9	3
40	Sliding Mechanism of Lateral Thermosonic Process With Anisotropic Conductive Film for High Productivity and High Reliability. *IEEE Transactions on Components, Packaging and Manufacturing Technology*, **2013**, 3, 205-212	1.7	3

39	Investigation of fiber Bragg grating as a spectral notch shaper for single-pulse coherent anti-Stokes Raman spectroscopy. *Optics Communications*, **2017**, 383, 107-112	2	3
38	Highly enhanced compatibility of human brain vascular pericyte cells on monolayer graphene. *Bioengineered*, **2017**, 8, 85-91	5.7	3
37	Advanced sensing system of crane spreader motion(for Mobile Harbor) **2012**,		3
36	Design and Evaluation of the Unmanned Technology Research Center Exoskeleton Implementing the Precedence Walking Assistance Mechanism. *Journal of Electrical Engineering and Technology*, **2015**, 10, 2376-2383	1.4	3
35	Design of biped robot inspired by cats for fast running. *Electronics Letters*, **2014**, 50, 730-731	1.1	2
34	Verification of the peak time approach for detection of step initiation using the UTRCEXO. *International Journal of Control, Automation and Systems*, **2014**, 12, 1070-1076	2.9	2
33	A novel actuation for a robotic fish using a flexible joint. *International Journal of Control, Automation and Systems*, **2014**, 12, 878-885	2.9	2
32	Note: Dynamic analysis of a robotic fish motion with a caudal fin with vertical phase differences. *Review of Scientific Instruments*, **2013**, 84, 036108	1.7	2
31	Multiplex CARS imaging with spectral notch shaped laser pulses delivered by optical fibers. *Optics Express*, **2017**, 25, 32178-32188	3.3	2
30	Supercontinuum notch shaping via fiber Bragg grating for the excitation source in coherent anti-Stokes Raman spectroscopy **2015**,		2
29	A novel disturbance observer based robust current-control for a PMSM drive system **2015**,		2
28	Portable serial robot manipulator with distributed actuation mechanism **2014**,		2
27	Remote position detection of steel coils using 2D laser scanners: Two-line-tracker **2014**,		2
26	Tuning the S-curve motion profile in short distance case **2013**,		2
25	Dielectric Electroactive Polymer energy harvesting system forward path design for different vibration input patterns **2011**,		2
24	Development of the piezoelectric motor using momentum generated by bimorphs. *Review of Scientific Instruments*, **2005**, 76, 105109	1.7	2
23	A simple terahertz time-domain signal reconstruction algorithm for thickness measurement in real-world applications. *Measurement: Journal of the International Measurement Confederation*, **2020**, 151, 107201	4.6	2
22	Note: Position/torque control of antagonistic robot joint with high-compliant twisted string actuators (TSAs). *Review of Scientific Instruments*, **2016**, 87, 126107	1.7	2

21	Neural Network Based Contact Force Control Algorithm for Walking Robots. *Sensors*, **2021**, 21,	3.8	2
20	Accurate thickness measurement using a single terahertz pulse obtained in ambient atmosphere. *Optics Communications*, **2020**, 462, 125276	2	1
19	Single-pulse coherent anti-Stokes Raman spectroscopy via fiber Bragg grating **2016**,		1
18	Generalized design of disturbance observer for non-minimum phase system using an H-infinity approach **2013**,		1
17	Development of a vehicle body velocity sensor using Modulated Motion Blur **2017**,		1
16	Note: Reconfigurable pelvis mechanism for efficient multi-locomotion: Biped and quadruped walking. *Review of Scientific Instruments*, **2017**, 88, 126104	1.7	1
15	Structure optimization of 1-D laser sensors assembly for robust 6-DOF measurement **2012**,		1
14	Ground following locomotion of a robot inspired by pill bugs **2011**,		1
13	Moving fringe detection for ultra precision position measurement		1
12	Compensation of surface inclination for detecting in optical triangulation sensors		1
11	Automatic parking system using background subtraction with CCTV environment international conference on control, automation and systems (ICCAS 2016) **2016**,		1
10	Note: Rotor design optimization for vacuum chamber-free ultracentrifuge. *Review of Scientific Instruments*, **2018**, 89, 116107	1.7	1
9	Precedence walking assistance mechanism for exoskeletons with improved detection of step initiation based on gait analysis. *Journal of Mechanical Science and Technology*, **2014**, 28, 4353-4359	1.6	0
8	Control of tendon-driven(Twisted-string Actuator) robotic joint with adaptive variable-radius pulley		0
7	Development of the crossbow-type launcher for a small reconnaissance robot based on the axiomatic theorem. *Journal of Advanced Mechanical Design, Systems and Manufacturing*, **2016**, 10, JAMDSM0084-JAMDSM	0.6	
6	Note: Hybrid active/passive force feedback actuator using hydrostatic transmission. *Review of Scientific Instruments*, **2017**, 88, 126103	1.7	
5	Graphene: Ultraconformal Contact Transfer of Monolayer Graphene on Metal to Various Substrates (Adv. Mater. 37/2014). *Advanced Materials*, **2014**, 26, 6520-6520	24	
4	Highly Damage-Resistant Thin Film Saturable Absorber Based on Mechanically Functionalized SWCNTs.. *Nanoscale Research Letters*, **2022**, 17, 11	5	

3	Generalized Control Framework for Exoskeleton Robots by Interaction Force Feedback Control. *International Journal of Control, Automation and Systems*, **2021**, 19, 3419	2.9
2	Modulated Motion Blur-Based Vehicle Body Velocity and Pose Estimation Using an Optical Image Modulator. *IEEE Transactions on Vehicular Technology*, **2021**, 70, 8744-8754	6.8
1	Development of quadruped robot for inspection of underground pipelines in nuclear power plants. *Electronics Letters*, **2022**, 58, 234-236	1.1