Jungwon Yoon

List of Publications by Year in Descending Order

152 papers	1,620 citations	21 h-index	33 g-index
176 ext. papers	2,039 ext. citations	3.1 avg, IF	5.25 L-index

#	Paper	IF	Citations
152	Development of a Novel 2-Dimensional Neck Haptic Device for Gait Balance Training. *IEEE Robotics and Automation Letters*, **2022**, 7, 2511-2518	4.2	2
151	Offline Programming Guidance for Swarm Steering of Micro/Nano Magnetic Particles in a Dynamic Multichannel Vascular Model. *IEEE Robotics and Automation Letters*, **2022**, 1-1	4.2	0
150	Highly Optimized Iron Oxide Embedded Poly(Lactic Acid) Nanocomposites for Effective Magnetic Hyperthermia and Biosecurity.. *International Journal of Nanomedicine*, **2022**, 17, 31-44	7.3	3
149	Two-stage mechanism path synthesis using optimized control of a shadow robot: Case study of the eight-bar Jansen mechanism. *Mechanism and Machine Theory*, **2022**, 168, 104569	4	0
148	Comparative Study on Overground Gait of Stroke Survivors With a Conventional Cane and a Haptic Cane. *IEEE Transactions on Neural Systems and Rehabilitation Engineering*, **2021**, 29, 2183-2192	4.8	2
147	Electromagnetic Actuation System for Focused Capturing of Magnetic Particles With a Half of Static Saddle Potential Energy Configuration. *IEEE Transactions on Biomedical Engineering*, **2021**, 68, 869-880	5	2
146	The Heating Efficiency and Imaging Performance of Magnesium Iron Oxide@tetramethyl Ammonium Hydroxide Nanoparticles for Biomedical Applications. *Nanomaterials*, **2021**, 11,	5.4	4
145	Development of a Novel Omnidirectional Treadmill-Based Locomotion Interface Device with Running Capability. *Applied Sciences (Switzerland)*, **2021**, 11, 4223	2.6	1
144	Mech-Walker:A Novel Single-DOF Linkage Device With Movable Frame for Gait Rehabilitation. *IEEE/ASME Transactions on Mechatronics*, **2021**, 26, 13-23	5.5	2
143	. *IEEE/ASME Transactions on Mechatronics*, **2021**, 26, 551-562	5.5	3
142	Theoretical Analysis for Using Pulsed Heating Power in Magnetic Hyperthermia Therapy of Breast Cancer. *International Journal of Molecular Sciences*, **2021**, 22,	6.3	4
141	Use of Vibrotactile Bracelets to Study Effects of Arm Swing Variation on Overground Gait. *IEEE Access*, **2021**, 9, 90896-90907	3.5	2
140	. *IEEE Access*, **2020**, 8, 106714-106725	3.5	7
139	Development of a Robotic Companion to Provide Haptic Force Interaction for Overground Gait Rehabilitation. *IEEE Access*, **2020**, 8, 34888-34899	3.5	3
138	Development of Rat-Scale Magnetic Particle Spectroscopy for Functional Magnetic Particle Imaging. *IEEE Magnetics Letters*, **2020**, 11, 1-5	1.6	2
137	Study on the Design and Analysis of a 4-DOF Robot for Trunk Rehabilitation. *Journal of the Korean Society of Manufacturing Process Engineers*, **2020**, 19, 41-51	0.1	2
136	Engineering Core-Shell Structures of Magnetic Ferrite Nanoparticles for High Hyperthermia Performance. *Nanomaterials*, **2020**, 10,	5.4	17

135	Swarm of magnetic nanoparticles steering in multi-bifurcation vessels under fluid flow. *Journal of Micro-Bio Robotics*, **2020**, 16, 137-145	1.4	9
134	A Novel Trunk Rehabilitation Robot Based Evaluation of Seated Balance Under Varying Seat Surface and Visual Conditions. *IEEE Access*, **2020**, 8, 204902-204913	3.5	1
133	A Magnetic Particle Imaging-Based Navigation Platform for Magnetic Nanoparticles Using Interactive Manipulation of a Virtual Field Free Point to Ensure Targeted Drug Delivery. *IEEE Transactions on Industrial Electronics*, **2020**, 1-1	8.9	5
132	Core/shell PA6 @ Fe3O4 nanofibers: Magnetic and shielding behavior. *Journal of Dispersion Science and Technology*, **2020**, 41, 1711-1719	1.5	13
131	Catalytic Activity of Hybrid Iron Oxide Silver Nanoparticles in Methyl Methacrylate Polymerization. *Catalysts*, **2020**, 10, 422	4	3
130	Effects of Vibrotactile Biofeedback Coding Schemes on Gait Symmetry Training of Individuals With Stroke. *IEEE Transactions on Neural Systems and Rehabilitation Engineering*, **2019**, 27, 1617-1625	4.8	8
129	Theoretical Analysis for Wireless Magnetothermal Deep Brain Stimulation Using Commercial Nanoparticles. *International Journal of Molecular Sciences*, **2019**, 20,	6.3	12
128	Development of a Novel Gait Rehabilitation Device with Hip Interaction and a Single DOF Mechanism **2019**,		5
127	Synthesis of Magnetic Ferrite Nanoparticles with High Hyperthermia Performance via a Controlled Co-Precipitation Method. *Nanomaterials*, **2019**, 9,	5.4	43
126	Electromagnetic Actuation Scheme for Swarm of Magnetic Nanoparticles Steering in Multi-bifurcation **2019**,		3
125	Development of a Wearable Haptic Feedback System for Limb Movement Symmetry Training. *Biosystems and Biorobotics*, **2019**, 455-459	0.2	1
124	A Novel Gait Assistance System Based on an Active Knee Orthosis and a Haptic Cane for Overground Walking. *Biosystems and Biorobotics*, **2019**, 439-443	0.2	0
123	A Wearable Reaction Wheel based Kinesthetic Biofeedback Device for Delivery of Balance Cues **2019**,		2
122	A novel method for optimal path synthesis of mechanisms based on tracking control of shadow robot. *Mechanism and Machine Theory*, **2019**, 131, 218-233	4	5
121	Vision-based control of an underactuated flying robot with input delay. *Transactions of the Institute of Measurement and Control*, **2018**, 40, 446-455	1.8	5
120	Biomechanical Evaluation of Virtual Reality-based Turning on a Self-Paced Linear Treadmill. *Gait and Posture*, **2018**, 65, 157-162	2.6	9
119	Evaluating the Effects of Kinesthetic Biofeedback Delivered Using Reaction Wheels on Standing Balance. *Journal of Healthcare Engineering*, **2018**, 2018, 7892020	3.7	9
118	Evaluating the effects of delivering integrated kinesthetic and tactile cues to individuals with unilateral hemiparetic stroke during overground walking. *Journal of NeuroEngineering and Rehabilitation*, **2018**, 15, 33	5.3	11

117	A Soft Magnetic Core can Enhance Navigation Performance of Magnetic Nanoparticles in Targeted Drug Delivery. *IEEE/ASME Transactions on Mechatronics*, **2018**, 23, 1573-1584	5.5	17
116	An Intelligent Control Scheme to Facilitate Abrupt Stopping on Self-Adjustable Treadmills **2018**,		5
115	Haptic-Based Manipulation Scheme of Magnetic Nanoparticles in a Multi-Branch Blood Vessel for Targeted Drug Delivery. *Micromachines*, **2018**, 9,	3.3	11
114	An Optimal Design of an Electromagnetic Actuator for Targeting Magnetic Micro-/Nano-Carriers in a Desired Region. *IEEE Transactions on Magnetics*, **2018**, 54, 1-5	2	1
113	Adaptive control of variable-speed wind turbines for power capture optimisation. *Transactions of the Institute of Measurement and Control*, **2017**, 39, 1663-1672	1.8	10
112	Simulation studies of a novel electromagnetic actuation scheme for focusing magnetic micro/nano-carriers into a deep target region. *AIP Advances*, **2017**, 7, 056724	1.5	7
111	Osmotin-loaded magnetic nanoparticles with electromagnetic guidance for the treatment of Alzheimerꞵs disease. *Nanoscale*, **2017**, 9, 10619-10632	7.7	64
110	Functionalized electromagnetic actuation method for aggregated nanoparticles steering. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference*, **2017**, 2017, 885-888	0.9	4
109	Stable assist-as-needed controller design for a planar cable-driven robotic system. *International Journal of Control, Automation and Systems*, **2017**, 15, 2871-2882	2.9	9
108	Identifying the effects of using integrated haptic feedback for gait rehabilitation of stroke patients. *IEEE International Conference on Rehabilitation Robotics*, **2017**, 2017, 1055-1060	1.3	12
107	Robust trajectory tracking control of cable-driven parallel robots. *Nonlinear Dynamics*, **2017**, 89, 2769-2784	3	16
106	Studies of aggregated nanoparticles steering during magnetic-guided drug delivery in the blood vessels. *Journal of Magnetism and Magnetic Materials*, **2017**, 427, 181-187	2.8	45
105	Development of a real time imaging-based guidance system of magnetic nanoparticles for targeted drug delivery. *Journal of Magnetism and Magnetic Materials*, **2017**, 427, 345-351	2.8	31
104	Bounded-Input Control of the Quadrotor Unmanned Aerial Vehicle: A Vision-Based Approach. *Asian Journal of Control*, **2017**, 19, 840-855	1.7	13
103	An electromagnetic navigation system with real-time 2D magnetic particle imaging for targeted drug delivery **2017**,		4
102	**2017**,		1
101	Development of an augmented feedback system for training of gait improvement using vibrotactile cues **2017**,		7
100	Sensitivity Analysis in 3D Manipulation of Biological Nanoparticles. *Journal of Nanoscience and Nanotechnology*, **2017**, 17, 5205-5208	1.3	1

99	Real-Time Two-Dimensional Magnetic Particle Imaging for Electromagnetic Navigation in Targeted Drug Delivery. *Sensors*, **2017**, 17,	3.8	25
98	A Novel Magnetic Actuation Scheme to Disaggregate Nanoparticles and Enhance Passage across the Blood-Brain Barrier. *Nanomaterials*, **2017**, 8,	5.4	21
97	Power capture optimization of variable-speed wind turbines using an output feedback controller. *Renewable Energy*, **2016**, 86, 517-525	8.1	45
96	A modified functionalized magnetic Field for nanoparticle guidance in magnetic drug targeting **2016**,		5
95	**2016**,		2
94	A novel balance training system using multimodal biofeedback. *BioMedical Engineering OnLine*, **2016**, 15, 42	4.1	14
93	Guidance of Magnetic Nanocontainers for Treating Alzheimer's Disease Using an Electromagnetic, Targeted Drug-Delivery Actuator. *Journal of Biomedical Nanotechnology*, **2016**, 12, 569-74	4	34
92	In Silico Magnetic Nanocontainers Navigation in Blood Vessels: A Feedback Control Approach. *Journal of Nanoscience and Nanotechnology*, **2016**, 16, 6368-73	1.3	2
91	Modeling and simulation of critical force and time in 3D manipulations using rectangular, V-shaped and dagger-shaped cantilevers. *European Journal of Mechanics, A/Solids*, **2016**, 59, 333-343	3.7	5
90	Functionalized Magnetic Force Enhances Magnetic Nanoparticle Guidance: From Simulation to Crossing of the Blood-Brain Barrier In Vivo. *IEEE Transactions on Magnetics*, **2016**, 52, 1-4	2	6
89	Optimum kinematic design of a planar cable-driven parallel robot with wrench-closure gait trajectory. *Mechanism and Machine Theory*, **2016**, 99, 1-18	4	31
88	VISION-BASED TRACKING CONTROL OF QUADROTOR USING VELOCITY OF IMAGE FEATURES. *International Journal of Robotics and Automation*, **2016**, 31,	1.3	4
87	An Analytical Approach for Fast Recovery of the LSI Properties in Magnetic Particle Imaging. *International Journal of Biomedical Imaging*, **2016**, 2016, 6120713	5.2	1
86	Analysis of the Linearity and Shift Invariance Characteristics of the X-Space Magnetic Particle Imaging. *Journal of Nanoscience and Nanotechnology*, **2016**, 16, 8683-8686	1.3	
85	Band-Stop Filter Analysis and Design for 1D Magnetic Particle Imaging Hybrid System. *Journal of Nanoscience and Nanotechnology*, **2016**, 16, 8492-8495	1.3	6
84	Haptic based gait rehabilitation system for stroke patients **2016**,		6
83	Development of a magnetic nanoparticles guidance system for interleaved actuation and MPI-based monitoring **2016**,		2
82	Robust image-based control of the quadrotor unmanned aerial vehicle. *Nonlinear Dynamics*, **2016**, 85, 2035-2048	5	21

81	Adaptive vision-based control of an unmanned aerial vehicle without linear velocity measurements. *ISA Transactions*, **2016**, 65, 296-306	5.5	16
80	Effects of kinesthetic haptic feedback on standing stability of young healthy subjects and stroke patients. *Journal of NeuroEngineering and Rehabilitation*, **2015**, 12, 27	5.3	29
79	A Novel Design of an MPI-Based Guidance System for Simultaneous Actuation and Monitoring of Magnetic Nanoparticles. *IEEE Transactions on Magnetics*, **2015**, 51, 1-5	2	17
78	Vision-based control of a flying robot without linear velocity measurements **2015**,		1
77	Development of a multimodal biofeedback system for balance training **2015**,		3
76	A novel scheme for nanoparticle steering in blood vessels using a functionalized magnetic field. *IEEE Transactions on Biomedical Engineering*, **2015**, 62, 303-13	5	36
75	An optimized field function scheme for nanoparticle guidance in magnetic drug targeting systems **2015**,		4
74	A Portable Gait Asymmetry Rehabilitation System for Individuals with Stroke Using a Vibrotactile Feedback. *BioMed Research International*, **2015**, 2015, 375638	3	48
73	Control of cable-driven parallel robot for gait rehabilitation **2015**,		6
72	Development of an Assistant Robot for use in Hot Forging Work Sites and Its Performance Evaluations using Electromyographic Signals. *Journal of Institute of Control, Robotics and Systems*, **2015**, 21, 427-433	1	1
71	Development of an Active Gait Assistive Device with Haptic Information. *Journal of Institute of Control, Robotics and Systems*, **2015**, 21, 553-559	1	
70	A Novel Electromagnetic Actuation System for Magnetic Nanoparticle Guidance in Blood Vessels. *IEEE Transactions on Magnetics*, **2014**, 50, 1-12	2	36
69	Haptic assisted aircraft optimal assembly path planning scheme based on swarming and artificial potential field approach. *Advances in Engineering Software*, **2014**, 69, 18-25	3.6	13
68	A cost effective design and analysis of an active prosthetic knee for transfemoral amputees **2014**,		2
67	Impedance control of a small treadmill with sonar sensors for automatic speed adaptation. *International Journal of Control, Automation and Systems*, **2014**, 12, 1323-1335	2.9	9
66	A novel robotic knee device with stance control and its kinematic weight optimization for rehabilitation. *Robotica*, **2014**, 32, 1245-1263	2.1	5
65	A Balance Training System using a Haptic Device and Its Evaluations. *Journal of Institute of Control, Robotics and Systems*, **2014**, 20, 971-976	1	6
64	Adaptive neural controller for space robot system with an attitude controlled base. *Neural Computing and Applications*, **2013**, 23, 2333-2340	4.8	20

63	A hybrid approach for vessel enhancement and fast level set segmenatation based 3d blood vessel extraction using MR brain image **2013**,		3
62	Optimized targeting of magnetic nano particles for drug delivery system **2013**,		1
61	Design of a haptic cane for walking stability and rehabilitation **2013**,		7
60	Statistical investigation of efficiency of the nanomagnetic particle steering in blood vessels **2013**,		3
59	**2013**,		1
58	**2013**,		1
57	Investigation of dimensional parameters influencing a nanorobotic drug delivery actuation system performance **2013**,		1
56	**2013**,		11
55	Haptic guided virtual reality simulation for targeted drug delivery using nano-containers manipulation. *Journal of Biomedical Nanotechnology*, **2013**, 9, 1190-4	4	2
54	Analysis of Active Haptic Feedback Effects on Standing Stability. *Lecture Notes in Computer Science*, **2013**, 154-164	0.9	7
53	Design and Simulation of a 3D Actuation System for Magnetic Nano-Particles Delivery System. *Lecture Notes in Computer Science*, **2013**, 177-187	0.9	10
52	Speed Adaptation of a Small Size Treadmill Using Impedance Control Approach for Rehabilitation. *Lecture Notes in Computer Science*, **2013**, 165-176	0.9	
51	Optimal Kinematic Design of a Novel Robotic Knee Device for Gait Rehabilitation with Stance Control. *Lecture Notes in Computer Science*, **2013**, 188-203	0.9	
50	Development of a six-axis force/moment sensor for a spherical-type finger force measuring system. *IET Science, Measurement and Technology*, **2012**, 6, 96-104	1.5	10
49	Development of cylindrical-type finger force measuring system using force sensors and its characteristics evaluation. *Mechanical Systems and Signal Processing*, **2012**, 27, 513-522	7.8	5
48	A novel walking speed estimation scheme and its application to treadmill control for gait rehabilitation. *Journal of NeuroEngineering and Rehabilitation*, **2012**, 9, 62	5.3	42
47	Hybrid Potential Field Swarm Optimization Based Novel Targeted Drug Delivery System Using Drug Loaded Nano Carriers. *Lecture Notes in Computer Science*, **2012**, 333-343	0.9	
46	Robotic virtual manipulations of a nuclear hot-cell digital mock-up system. *Assembly Automation*, **2011**, 31, 17-28	2.1	3

45	An adaptive foot device for increased gait and postural stability in lower limb Orthoses and exoskeletons. *International Journal of Control, Automation and Systems*, **2011**, 9, 515-524	2.9	9
44	Virtual maintenance system with a two-staged ant colony optimization algorithm **2011**,		7
43	A novel dynamic walker with heel, ankle, and toe rocker motions. *Robotica*, **2011**, 29, 883-893	2.1	4
42	Assembly simulations in virtual environments with optimized haptic path and sequence. *Robotics and Computer-Integrated Manufacturing*, **2011**, 27, 306-317	9.2	50
41	An Automatic Speed Control System of a Treadmill with Ultrasonic Sensors. *Journal of Institute of Control, Robotics and Systems*, **2011**, 17, 505-511	1	1
40	A Novel Kinematic Design of a Knee Orthosis to Allow Independent Actuations During Swing and Stance Phases. *Journal of Institute of Control, Robotics and Systems*, **2011**, 17, 814-823	1	3
39	Optimal Design of a Novel Knee Orthosis using a Genetic Algorism. *Journal of Institute of Control, Robotics and Systems*, **2011**, 17, 1021-1028	1	
38	Haptic based optimized path planning approach to virtual maintenance assembly / disassembly (MAD) **2010**,		2
37	A Planar Symmetric Walking Cancellation Algorithm for a Foot-Platform Locomotion Interface. *International Journal of Robotics Research*, **2010**, 29, 39-59	5.7	7
36	A 6-DOF Gait Rehabilitation Robot With Upper and Lower Limb Connections That Allows Walking Velocity Updates on Various Terrains. *IEEE/ASME Transactions on Mechatronics*, **2010**, 15, 201-215	5.5	103
35	Development of 6-axis force/moment sensor for measuring the fingers' muscular strength of human **2010**,		3
34	Speed adaptation control of a small-sized treadmill with state feedback controller **2010**,		4
33	Haptic guided optimized aircraft maintenance assembly disassembly path planning scheme **2010**,		3
32	Development of an intuitive user interface for a hydraulic backhoe. *Automation in Construction*, **2010**, 19, 779-790	9.6	20
31	Open architecture dynamic manipulator design philosophy (DMD). *Robotics and Computer-Integrated Manufacturing*, **2010**, 26, 156-161	9.2	6
30	A Maneuver Interface Scheme of a Hydraulic Backhoe Manipulator. *Journal of Institute of Control, Robotics and Systems*, **2010**, 16, 346-352	1	1
29	The simplest passive dynamic walking model with toed feet: a parametric study. *Robotica*, **2009**, 27, 701	2.1	17
28	A novel optimal assembly algorithm for haptic interface applications of a virtual maintenance system. *Journal of Mechanical Science and Technology*, **2009**, 23, 183-194	1.6	14

27	An enhanced haptic assembly simulation system for the efficiency of assembly tasks **2009**,		5
26	Interaction control of a programmable footpad-type gait rehabilitation robot for active walking on various terrains **2009**,		4
25	Development of intelligent foot with six-axis force/moment sensors for humanoid robot **2009**,		1
24	A VR navigation of a 6-DOF gait rehabilitation robot with upper and lower limbs connections **2008**,		2
23	Gait pattern generation with knee stretch motion for biped robot using toe and heel joints **2008**,		22
22	A novel optimal assembly algorithm for the haptic interface application of a virtual maintenance system **2008**,		5
21	Development of 6-axis force/moment sensor for a humanoid robotR intelligent foot. *Sensors and Actuators A: Physical*, **2008**, 141, 276-281	3.9	59
20	Design of a Novel Gait Rehabilitation Robot with Upper and Lower Limbs Connections. *Journal of Institute of Control, Robotics and Systems*, **2008**, 14, 672-678	1	2
19	Optimal assembly path planning algorithm for aircraft part maintenance **2007**,		7
18	Hybrid toe and heel joints for biped/humanoid robots for natural gait **2007**,		8
17	Development of six-axis force/moment sensor for an intelligent foot of humanoid robot **2007**,		1
16	Intelligent Assembly/Disassembly System with a Haptic Device for Aircraft Parts Maintenance. *Lecture Notes in Computer Science*, **2007**, 760-767	0.9	5
15	A Novel 4-DOF Robotic Foot Mechanism with Multi-platforms for Humanoid Robot (SICE-ICCAS 2006) **2006**,		1
14	A Smooth Planar Walking Algorithm for Virtual Walking Machine (K-Walker) **2006**,		1
13	A Novel Locomotion Interface with Two 6-DOF Parallel Manipulators That Allows Human Walking on Various Virtual Terrains. *International Journal of Robotics Research*, **2006**, 25, 689-708	5.7	31
12	Reconfigurable ankle rehabilitation robot for various exercises. *Journal of Field Robotics*, **2006**, 22, S15-S33		76
11	A Novel Navigation Algorithm for Locomotion Interfaces with Programmable Platforms. *Lecture Notes in Computer Science*, **2006**, 610-617	0.9	
10	A Novel Planar Walking Algorithm for Virtual Walking Machine. *Lecture Notes in Computer Science*, **2006**, 1175-1185	0.9	1

9	A new family of hybrid 4-DOF parallel mechanisms with two platforms and its application to a footpad device. *Journal of Field Robotics*, **2005**, 22, 287-298		6
8	Walking control of a dual-planar parallel robot for omni-directional locomotion interface **2005**,		2
7	Development of a 3-DOF Planar Parallel Robot (RRR Type) for Omni-directional Locomotion Interface. *IFAC Postprint Volumes IPPV / International Federation of Automatic Control*, **2004**, 37, 67-72		3
6	Control of the Rutgers Ankle Rehabilitation Interface **2002**, 787		0
5	Multimodal Gumdo Game: The Whole Body Interaction with an Intelligent Cyber Fencer. *Lecture Notes in Computer Science*, **2002**, 1088-1095	0.9	2
4	Design, fabrication, and evaluation of a new haptic device using a parallel mechanism. *IEEE/ASME Transactions on Mechatronics*, **2001**, 6, 221-233	5.5	49
3	A Novel Reconfigurable Ankle/Foot Rehabilitation Robot		9
2	Design and analysis of a novel virtual walking machine		2
1	A Bio-Robotic Toe & Foot & Heel Models of a Biped Robot for More Natural Walking: Foot Mechanism & Gait Pattern		2