

# Tae-Heon Yang

## List of Publications by Year in descending order

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66  
papers

674  
citations

759233

12  
h-index

677142

22  
g-index

68  
all docs

68  
docs citations

68  
times ranked

567  
citing authors

#	ARTICLE	IF	CITATIONS
1	Recent Advances and Opportunities of Active Materials for Haptic Technologies in Virtual and Augmented Reality. <i>Advanced Functional Materials</i> , 2021, 31, 2008831.	14.9	63
2	Development of a miniature tunable stiffness display using MR fluids for haptic application. <i>Sensors and Actuators A: Physical</i> , 2010, 163, 180-190.	4.1	53
3	A compact pulsatile simulator based on cam-follower mechanism for generating radial pulse waveforms. <i>BioMedical Engineering OnLine</i> , 2019, 18, 1.	2.7	49
4	Development of a miniature pin-array tactile module using elastic and electromagnetic force for mobile devices. , 2009, , .		42
5	Novel linear impact-resonant actuator for mobile applications. <i>Sensors and Actuators A: Physical</i> , 2015, 233, 460-471.	4.1	36
6	Small and lightweight tactile display(SaLT) and its application. , 2009, , .		35
7	Application of magnetorheological fluids for a miniature haptic button: Experimental evaluation. <i>Journal of Intelligent Material Systems and Structures</i> , 2012, 23, 1025-1031.	2.5	33
8	An Electronically Perceptive Bioinspired Soft Wet-Adhesion Actuator with Carbon Nanotube-Based Strain Sensors. <i>ACS Nano</i> , 2021, 15, 14137-14148.	14.6	33
9	Design, modeling, and evaluation of a slim haptic actuator based on electrorheological fluid. <i>Journal of Intelligent Material Systems and Structures</i> , 2019, 30, 2521-2533.	2.5	26
10	Magnetorheological Fluid Haptic Shoes for Walking in VR. <i>IEEE Transactions on Haptics</i> , 2021, 14, 83-94.	2.7	24
11	Bioinspired Microsphere-Embedded Adhesive Architectures for an Electrothermally Actuating Transport Device of Dry/Wet Pliable Surfaces. <i>ACS Applied Materials &amp; Interfaces</i> , 2021, 13, 6930-6940.	8.0	20
12	A New Blood Pulsation Simulator Platform Incorporating Cardiovascular Physiology for Evaluating Radial Pulse Waveform. <i>Journal of Healthcare Engineering</i> , 2019, 2019, 1-9.	1.9	15
13	Mechatronics Technology in Mobile Devices. <i>IEEE Industrial Electronics Magazine</i> , 2010, 4, 36-41.	2.6	12
14	Trend & prospects of haptic technology in mobile devices. , 2010, , .		12
15	Frequency analysis of a step dynamic pressure calibrator. <i>Review of Scientific Instruments</i> , 2012, 83, 095007.	1.3	12
16	Miniature impact actuator for haptic interaction with mobile devices. <i>International Journal of Control, Automation and Systems</i> , 2014, 12, 1283-1288.	2.7	11
17	A new subminiature impact actuator for mobile devices. , 2011, , .		10
18	RealWalk: Haptic Shoes Using Actuated MR Fluid for Walking in VR. , 2019, , .		10

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19	Application of Magneto-Rheological Fluids for Investigating the Effect of Skin Properties on Arterial Tonometry Measurements. <i>Frontiers in Materials</i> , 2019, 6, .	2.4	10
20	Design and Evaluation of Enhanced Mock Circulatory Platform Simulating Cardiovascular Physiology for Medical Palpation Training. <i>Applied Sciences (Switzerland)</i> , 2020, 10, 5433.	2.5	10
21	A new modular pin-array tactile device. <i>International Journal of Precision Engineering and Manufacturing</i> , 2015, 16, 1745-1751.	2.2	9
22	Design, simulation, and testing of a magnetorheological fluid-based haptic actuator for mobile applications. <i>Journal of Intelligent Material Systems and Structures</i> , 2015, 26, 1670-1678.	2.5	9
23	Mechanical and psychophysical performance evaluation of a haptic actuator based on magnetorheological fluids. <i>Journal of Intelligent Material Systems and Structures</i> , 2016, 27, 1967-1975.	2.5	9
24	A miniature magneto-rheological actuator with an impedance sensing mechanism for haptic applications. <i>Journal of Intelligent Material Systems and Structures</i> , 2014, 25, 1054-1061.	2.5	8
25	Experimental evaluation of a miniature MR device for a wide range of human perceivable haptic sensations. <i>Smart Materials and Structures</i> , 2017, 26, 125006.	3.5	8
26	A compact and compliant electrorheological actuator for generating a wide range of haptic sensations. <i>Smart Materials and Structures</i> , 2020, 29, 055028.	3.5	8
27	Compact Tactile Display for Fingertips with Multiple Vibrotactile Actuator and Thermoelectric Module. <i>Proceedings - IEEE International Conference on Robotics and Automation</i> , 2007, , .	0.0	7
28	Tiny Feel: A New Miniature Tactile Module Using Elastic and Electromagnetic Force for Mobile Devices. <i>IEICE Transactions on Information and Systems</i> , 2010, E93-D, 2233-2242.	0.7	7
29	Enhanced Haptic Sensations Using a Novel Electrostatic Vibration Actuator With Frequency Beating Phenomenon. <i>IEEE Robotics and Automation Letters</i> , 2020, 5, 1827-1834.	5.1	7
30	Recent Advances and Opportunities of Active Materials for Haptic Technologies in Virtual and Augmented Reality (Adv. Funct. Mater. 39/2021). <i>Advanced Functional Materials</i> , 2021, 31, 2170292.	14.9	7
31	Modeling and test of a kinaesthetic actuator based on MR fluid for haptic applications. <i>Review of Scientific Instruments</i> , 2017, 88, 035004.	1.3	6
32	Development of an Electrostatic Beat Module for Various Tactile Sensations in Touch Screen Devices. <i>Applied Sciences (Switzerland)</i> , 2019, 9, 1229.	2.5	6
33	Vibration Alert to the Brain: Evoked and Induced MEC Responses to High-Frequency Vibrotactile Stimuli on the Index Finger of Dominant and Non-dominant Hand. <i>Frontiers in Human Neuroscience</i> , 2020, 14, 576082.	2.0	6
34	Development and evaluation of an impact vibration actuator using an unstable mass for mobile devices. <i>International Journal of Control, Automation and Systems</i> , 2016, 14, 827-834.	2.7	5
35	Development of a Mathematical Model for Age-Dependent Radial Artery Pulse Wave Analysis Based on Pulse Waveform Decomposition. <i>IEEE Access</i> , 2020, 8, 2963-2974.	4.2	5
36	Implementing Compact Tactile Display for Fingertips with Multiple Vibrotactile Actuator and Thermoelectric Module. , 2007, , .		4

#	ARTICLE	IF	CITATIONS
37	Conceptual design of miniature tunable stiffness display using MR fluids. , 2009, , .		4
38	TAXEL: Initial progress toward self-morphing visio-haptic interface. , 2011, , .		4
39	Flexible and bendable vibrotactile actuator using electro-conductive polyurethane. , 2015, , .		4
40	Development of an Impact-Resonant Actuator for Mobile Devices. Lecture Notes in Computer Science, 2012, , 133-138.	1.3	4
41	Applications of a miniature pin-array tactile module for a mobile device. , 2008, , .		3
42	A New Miniature Smart Actuator based on Piezoelectric material and Solenoid for Mobile Devices. The Abstracts of the International Conference on Advanced Mechatronics Toward Evolutionary Fusion of IT and Mechatronics ICAM, 2010, 2010.5, 615-620.	0.0	3
43	Design of a new miniature haptic button based on magneto-rheological fluids. , 2012, , .		3
44	Development of a Polymer-Based MEG-Compatible Vibrotactile Stimulator for Studying Neuromagnetic Somatosensory Responses. IEEE Access, 2020, 8, 9235-9245.	4.2	3
45	Experimental Evaluation on the Effect of Electrode Configuration in Electrostatic Actuators for Increasing Vibrotactile Feedback Intensity. Applied Sciences (Switzerland), 2020, 10, 5375.	2.5	3
46	A Transfer Function Model Development for Reconstructing Radial Pulse Pressure Waveforms Using Non-Invasively Measured Pulses by a Robotic Tonometry System. Sensors, 2021, 21, 6837.	3.8	3
47	Design of Flexible Hybrid Tactile Display Using Electro-Vibration and Electroactive Polymer Modules. , 2013, , .		2
48	Application of magneto-rheological fluids for generating a wide range of radial pulse waveforms. Smart Materials and Structures, 2018, 27, 125010.	3.5	2
49	Design and Experimental Evaluation of an Electrorheological Haptic Module with Embedded Sensing. Applied Sciences (Switzerland), 2021, 11, 7723.	2.5	2
50	Design of New Micro Actuator for Tactile Display. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2008, 41, 14693-14698.	0.4	1
51	Design and Simulation of an MR Fluids-Based Haptic Actuator for Mobile Applications. , 2013, , .		1
52	Design of a Multi-Functional Module for Visually Impaired Persons. International Journal of Precision Engineering and Manufacturing, 2018, 19, 1745-1751.	2.2	1
53	A Feasibility Study of a Vibrotactile System Based on Electrostatic Actuators for Touch Bar Interfaces: Experimental Evaluations. Applied Sciences (Switzerland), 2021, 11, 7084.	2.5	1
54	A Novel Miniature Kinaesthetic Actuator Based on Magnetorheological Fluids. Lecture Notes in Computer Science, 2012, , 181-185.	1.3	1

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55	Experimental evaluation of a miniature haptic actuator based on electrorheological fluids. , 2018, , .		1
56	Design of a Miniature Integrated Haptic Device for Cutaneous, Thermal and Kinaesthetic Sensations. Lecture Notes in Computer Science, 2014, , 505-512.	1.3	1
57	Conceptual design of new micro-actuator for tactile display. , 2007, , .		0
58	A Miniature MR Actuator With Impedance Sensing Mechanism for Haptic Applications. , 2012, , .		0
59	Design of a Mouse-Type Combined Haptic Device for Cutaneous, Thermal and Kinaesthetic Sensations. , 2014, , .		0
60	Design and Evaluation of a Haptic Keypad System for Realistic Touch Interaction. , 2014, , .		0
61	A new thin and flexible vibrotactile module for an interactive mouse. , 2015, , .		0
62	Design and testing of a new radial pulsation simulator. , 2017, , .		0
63	The Use of Magneto-Rheological Fluids for Simulating Arterial Pulse Waveforms. , 2017, , .		0
64	Capturing Age-Dependent Properties of Human Skin Using Magnetorheological Elastomers. , 2018, , .		0
65	APPLICATION OF MAGNETO-RHEOLOGICAL FLUIDS FOR A MINIATURE HAPTIC BUTTON. , 2011, , .		0
66	Investigation of Variable Stiffness Effects on Radial Pulse Measurements Using Magneto-Rheological Elastomers. , 2019, , .		0