Doo Yong Lee

List of Publications by Year
in descending order

110 papers	1,138 citations	516710 16 h-index	454955 30 g-index
110 all docs	110 docs citations	110 times ranked	790 citing authors

#	Article	IF	Citations
1	Control of Haptic Systems Based on Input-to-State Stability. IEEE Access, 2022, 10, 27242-27254.	4.2	2
2	Hydraulically Steerable Micro Guidewire Capable of Distal Sharp Steering. IEEE Transactions on Biomedical Engineering, 2021, 68, 728-735.	4.2	12
3	Adaptive surface representation based on homogeneous hexahedrons for interactive simulation of soft tissue cutting. Computer Methods and Programs in Biomedicine, 2021, 200, 105873.	4.7	3
4	Adaptive Model-Mediated Teleoperation for Tasks Interacting With Uncertain Environment. IEEE Access, 2021, 9, 128188-128201.	4.2	4
5	Multirate Haptic Rendering Using Local Stiffness Matrix for Stable and Transparent Simulation Involving Interaction With Deformable Objects. IEEE Transactions on Industrial Electronics, 2020, 67, 820-828.	7.9	7
6	Method for real-time simulation of haptic interaction with deformable objects using GPU-based parallel computing and homogeneous hexahedral elements. Computational Mechanics, 2020, 65, 1205-1218.	4.0	7
7	Deformable objects modeling with iterative updates of local positions. Computer Methods and Programs in Biomedicine, 2020, 190, 105346.	4.7	2
8	Stability and performance of haptic simulation involving interaction with non-passive virtual environment. Robotica, 2019, 37, 560-574.	1.9	4
9	Improved estimation of torque between a surgical instrument and environment in multi-DOF motion. Journal of Mechanical Science and Technology, 2018, 32, 2817-2828.	1.5	0
10	Method to Generate the Cardiac Motion of Blood Vessels in a Real-time Angiography Simulation. Transactions of the Korean Society of Mechanical Engineers, B, 2018, 42, 487-492.	0.1	0
11	A one-dimensional fluid simulation method of branching narrow vessel for real-time angiography simulation. , 2017, 2017, 1828-1831.		1
12	A New Control Architecture for Stable and Transparent Haptic Feedback of Interactive Simulation. IFAC-PapersOnLine, 2017, 50, 1346-1351.	0.9	2
13	Model of transmitted stiffness including the radial artery pressure. , 2017, , .		0
14	A 3-DOF sensor to estimate the force applied to the tip of a surgical instrument. , 2017, , .		8
15	A method to estimate the axial force applied to a surgical instrument tip considering the effect of the gravity. , 2017, , .		1
16	Accuracy Improvement of Torque Estimation Between a Surgical Robot Instrument and Environment in Single-DOF Motion. Lecture Notes in Computer Science, 2016, , 187-195.	1.3	1
17	An empirical nonlinear viscoelastic model of reflective force by a layer of soft tissue. , 2016, , .		1
18	Design of position and force sensors of the haptic interface for training simulation of radial artery puncture. , 2016, , .		1

#	Article	IF	Citations
19	A pneumatic haptic module for simulation of catheters used in gastrointestinal endoscopy. , 2016, , .		2
20	An empirical model of friction force between a needle and soft tissue. , 2016, , .		1
21	Markerless registration for image-guided endoscopic retrograde cholangiopancreatography (ERCP). , 2015, 2015, 2932-5.		1
22	Design of a New Haptic Interface for Endoscopy Simulation. Journal of Medical Devices, Transactions of the ASME, 2015, 9, .	0.7	2
23	Friction-model-based estimation of interaction force of a surgical robot. , 2015, , .		3
24	Empirical model of reflective bending moment for training simulation of needle intervention. , 2015, , .		1
25	A psychophysical evaluation of haptic controllers: viscosity perception of soft environments. Robotica, 2014, 32, 1-17.	1.9	16
26	Design of a slave arm of a surgical robot system to estimate the contact force at the tip of the employed instruments. Advanced Robotics, 2014, 28, 1305-1320.	1.8	8
27	Implementation of skin manipulation in a haptic interface of needle intervention simulation. , 2014, , .		2
28	A verification method of image registration for image-guided therapy (IGT). , 2014, , .		0
29	Analytical and Psychophysical Comparison of Bilateral Teleoperators for Enhanced Perceptual Performance. IEEE Transactions on Industrial Electronics, 2014, 61, 6202-6212.	7.9	16
30	Dynamic cylindrical free–form deformation for interactive simulation of tool–tissue interaction. International Journal of Medical Robotics and Computer Assisted Surgery, 2013, 9, 58-66.	2.3	0
31	Caterpillar mechanism for a portable haptic interface of endoscopy simulation. , 2013, , .		0
32	Markerless tracking for augmented reality for image-guided Endoscopic Retrograde Cholangiopancreatography. , 2013, 2013, 7364-7.		3
33	Design of a haptic interface for simulation of needle intervention. , 2013, , .		5
34	A method for generating cut surface in surgery simulation. , 2013, , .		5
35	Gain-Scheduling Control of Teleoperation Systems Interacting With Soft Tissues. IEEE Transactions on Industrial Electronics, 2013, 60, 946-957.	7.9	31
36	A method for collision detection between needle and tissues in the needle insertion simulation. , 2013, , .		0

#	Article	IF	Citations
37	Real–time cutting simulation of meshless deformable object using dynamic bounding volume hierarchy. Computer Animation and Virtual Worlds, 2012, 23, 489-501.	1.2	14
38	Design of a Haptic Interface for a Gastrointestinal Endoscopy Simulation. Advanced Robotics, 2012, 26, 2115-2143.	1.8	2
39	Residual force based optimization of 8 DOF haptic master device. , 2012, , .		0
40	Real–time deformation of colon and endoscope for colonoscopy simulation. International Journal of Medical Robotics and Computer Assisted Surgery, 2012, 8, 273-281.	2.3	3
41	Exploitation of the Impedance and Characteristics of the Human Arm in the Design of Haptic Interfaces. IEEE Transactions on Industrial Electronics, 2011, 58, 3221-3233.	7.9	32
42	Real-Time Resolution of Self-Intersection in Dynamic Cylindrical Free-Form Deformation. IEEE Transactions on Visualization and Computer Graphics, 2011, 17, 515-526.	4.4	4
43	Identification of dynamic parameters of an industrial robot using a recursively-optimized trajectory. , 2010, , .		10
44	GPU-based real-time soft tissue deformation with cutting and haptic feedback. Progress in Biophysics and Molecular Biology, 2010, 103, 159-168.	2.9	131
45	Estimation of environmental force for the haptic interface of robotic surgery. International Journal of Medical Robotics and Computer Assisted Surgery, 2010, 6, 221-230.	2.3	29
46	Real-time simulation of dynamic fluoroscopy of ERCP. Proceedings of SPIE, 2010, , .	0.8	0
47	Multi-contact model for FEM-based surgical simulation. Proceedings of SPIE, 2010, , .	0.8	0
48	Psychophysical evaluation of control scheme designed for optimal kinesthetic perception in scaled teleoperation. , 2010, , .		1
49	High Fidelity Haptic Rendering for Deformable Objects Undergoing Topology Changes. Lecture Notes in Computer Science, 2010, , 262-268.	1.3	2
50	Position-Position Control with Gain-Scheduling for Telesurgical Systems. The Abstracts of the International Conference on Advanced Mechatronics Toward Evolutionary Fusion of IT and Mechatronics ICAM, 2010, 2010.5, 283-288.	0.0	0
51	Gain-scheduling control of a teleoperation system. , 2009, , .		6
52	High-fidelity simulation of integrated single-wafer processing tools for evaluation of scheduling algorithms. Robotics and Computer-Integrated Manufacturing, 2009, 25, 107-121.	9.9	3
53	Adjusting Output-Limiter for Stable Haptic Rendering in Virtual Environments. IEEE Transactions on Control Systems Technology, 2009, 17, 768-779.	5.2	24
54	Time-delayed phase-control for suppression of the flow-induced noise from an open cavity. Applied Acoustics, 2008, 69, 215-224.	3.3	10

#	Article	IF	Citations
55	Haptic Interface of the KAIST-Ewha Colonoscopy Simulator II. IEEE Transactions on Information Technology in Biomedicine, 2008, 12, 746-753.	3.2	16
56	Enhancement of kinesthetic perception for microsurgical teleoperation using impedance-shaping. , 2008, 2008, 1939-42.		3
57	Two-channel control for scaled teleoperation. , 2008, , .		0
58	Haptic control with environment force estimation for telesurgery. , 2008, 2008, 3241-4.		8
59	Passivity analysis of a 1-DOF haptic system with consideration of human arm impedance. , 2008, , .		8
60	Improved Haptic Interface for Colonoscopy Simulation. Annual International Conference of the IEEE Engineering in Medicine and Biology Society, 2007, 2007, 1253-6.	0.5	0
61	Quantitative Analysis of Colonoscopy Skills Using the KAIST-Ewha Colonoscopy Simulator II. , 2007, , .		1
62	Motion planning based on multiple kinematic performance measures for bimanual robotic tasks. , 2007, , .		0
63	Adaptive Modeling of Robotic Assembly Using Augmented Petri Nets. Proceedings of the American Control Conference, 2007, , .	0.0	0
64	Experimental study on the time-delayed-phase-control for reduction of open cavity noise. , 2007, , .		0
65	MIMO Output Estimation With Reduced Multirate Sampling for Real-Time Haptic Rendering. , 2007, 23, 481-493.		11
66	Haptic Rendering of Drilling into Femur Bone with Graded Stiffness. , 2007, , .		4
67	Motion planning of bimanual robot for assembly. , 2007, , .		3
68	Real-time haptic rendering using multi-rate output-estimation with ARMAX model. , 2007, , .		1
69	Simulation-based planning of the multiple pinning operation. , 2007, , .		1
70	Optimal post-process of industrial solid freeform fabrication system. , 2007, , .		0
71	Surface-Data-Based Haptic Rendering for Simulation of Surgery of Closed Reduction and Internal Fixation. Annual International Conference of the IEEE Engineering in Medicine and Biology Society, 2007, 2007, 210-3.	0.5	3
72	Adjusting output-limiter for stable haptic interaction with deformable objects. , 2007, , .		1

#	Article	IF	Citations
73	Colonoscopy Simulator with Enhanced Haptic Realism and Visual Feedback. , 2007, , 3820-3823.		1
74	Task-Compatibility-Based Motion Planning for Bimanual Assembly. , 2006, , .		5
75	Clinical Evaluation of the KAIST-Ewha Colonoscopy Simulator II. , 2006, , .		0
76	Clinical Evaluation of a Colonoscopy Simulator with Improved Haptics. Industrial Electronics Society (IECON), Annual Conference of IEEE, 2006, , .	0.0	0
77	Multirate-Output-Estimator-Based Control for Virtual Environment with Computational Time Delay. , 2006, , .		0
78	New colonoscopy simulator with improved haptic fidelity. Advanced Robotics, 2006, 20, 349-365.	1.8	28
79	An augmented Petri net for modelling and control of assembly tasks with uncertainties. International Journal of Computer Integrated Manufacturing, 2005, 18, 170-178.	4.6	17
80	Online Scheduling of Integrated Single-Wafer Processing Tools With Temporal Constraints. IEEE Transactions on Semiconductor Manufacturing, 2005, 18, 390-398.	1.7	39
81	Simulator of Integrated Single-Wafer Processing Tools with Contingency Handling. Transactions of the Korean Society of Mechanical Engineers, A, 2005, 29, 96-106.	0.2	0
82	Deadlock-Free Scheduling of Photolithography Equipment in Semiconductor Fabrication. IEEE Transactions on Semiconductor Manufacturing, 2004, 17, 42-54.	1.7	39
83	Trajectory planning for the tracking control of systems with unstable zeros. Mechatronics, 2003, 13, 127-139.	3.3	16
84	Concurrent Design of Continuous Zero Phase Error Tracking Controller and Sinusoidal Trajectory for Improved Tracking Control. Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME, 2001, 123, 127-129.	1.6	22
85	A control method to reduce the standard deviation of flow time in wafer fabrication. IEEE Transactions on Semiconductor Manufacturing, 2000, 13, 389-392.	1.7	20
86	Scheduling cluster tools in wafer fabrication using candidate list and simulated annealing. Journal of Intelligent Manufacturing, 1999, 10, 531-540.	7.3	19
87	Comparative Study of Search Methods for the Scheduling of Flexible Manufacturing Systems. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 1997, 30, 1427-1432.	0.4	1
88	Integrated scheduling of flexible manufacturing systems employing automated guided vehicles. IEEE Transactions on Industrial Electronics, 1994, 41, 602-610.	7.9	45
89	Scheduling flexible manufacturing systems using Petri nets and heuristic search. IEEE Transactions on Automation Science and Engineering, 1994, 10, 123-132.	2.3	322
90	Real-time scheduling of wafer fabrication with multiple product types. , 0, , .		1

#	Article	IF	Citations
91	Scheduling flexible manufacturing systems with the consideration of setup times. , 0, , .		7
92	Multiple objective scheduling for flexible manufacturing systems using Petri nets and heuristic search. , 0, , .		8
93	Scheduling method with the consideration of machine setup in flexible manufacturing systems. , 0, , .		2
94	An approach to control design for cooperative multiple mobile robots. , 0, , .		3
95	Scheduling cluster tools in wafer fabrication using candidate list and simulated annealing. , 0, , .		0
96	Design and verification of supervisory controller of high-speed train. , 0, , .		2
97	KAIST interactive bicycle simulator. , 0, , .		17
98	Semiconductor track system simulator. , 0, , .		2
99	Identification of potential deadlock set in semiconductor track systems. , 0, , .		4
100	Efficient real-time scheduling of integrated equipment in semiconductor fabrication. , 0, , .		0
101	KAIST interactive bicycle racing simulator: the 2nd version with advanced features. , 0, , .		6
102	Compliant motion planning for two manipulators via human demonstration. , 0, , .		1
103	An augmented Petri net for modeling and control of assembly tasks with uncertainties. , 0, , .		3
104	Stability of haptic interface using nonlinear virtual coupling. , 0, , .		8
105	On-line scheduling of robotic cells with post-processing residency constraints. , 0, , .		0
106	Multirate control of haptic interface for stability and high fidefity. , 0, , .		5
107	Model of Frictional Contact with Soft Tissue for Colonoscopy Simulator. , 0, , .		3
108	Assembly approach for bimanual robots. , 0, , .		4

#	Article	IF	Citations
109	Multirate output estimation for real-time haptic rendering. , 0, , .		2
110	Deadlock-free scheduling method for track systems in semiconductor fabrication. , 0, , .		3