

Jee-Hwan Ryu

List of Publications by Year in descending order

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Version: 2024-02-01

161
papers

3,708
citations

361413

20
h-index

189892

50
g-index

164
all docs

164
docs citations

164
times ranked

1849
citing authors

#	ARTICLE	IF	CITATIONS
1	Time-domain passivity control of haptic interfaces. IEEE Transactions on Automation Science and Engineering, 2002, 18, 1-10.	2.3	610
2	Stable Teleoperation With Time-Domain Passivity Control. IEEE Transactions on Automation Science and Engineering, 2004, 20, 365-373.	2.3	310
3	Robotic Artificial Muscles: Current Progress and Future Perspectives. IEEE Transactions on Robotics, 2019, 35, 761-781.	10.3	225
4	A passive bilateral control scheme for a teleoperator with time-varying communication delay. Mechatronics, 2010, 20, 812-823.	3.3	182
5	Time domain passivity control with reference energy following. IEEE Transactions on Control Systems Technology, 2005, 13, 737-742.	5.2	132
6	Portable Exoskeleton Glove With Soft Structure for Hand Assistance in Activities of Daily Living. IEEE/ASME Transactions on Mechatronics, 2017, 22, 865-875.	5.8	120
7	Twisted String Actuation Systems: A Study of the Mathematical Model and a Comparison of Twisted Strings. IEEE/ASME Transactions on Mechatronics, 2014, 19, 1331-1342.	5.8	107
8	Vine Robots. IEEE Robotics and Automation Magazine, 2020, 27, 120-132.	2.0	97
9	Stability Guaranteed Control: Time Domain Passivity Approach. IEEE Transactions on Control Systems Technology, 2004, 12, 860-868.	5.2	86
10	Sampled- and Continuous-Time Passivity and Stability of Virtual Environments. Journal of the American College of Radiology, 2004, 20, 772-776.	1.8	76
11	KONTUR-2: Force-feedback teleoperation from the international space station. , 2016, , .		72
12	Auxilio: A portable cable-driven exosuit for upper extremity assistance. International Journal of Control, Automation and Systems, 2017, 15, 73-84.	2.7	67
13	Sampled and continuous time passivity and stability of virtual environments. , 0, , .		66
14	Control of a Flexible Manipulator With Noncollocated Feedback: Time-Domain Passivity Approach. Journal of the American College of Radiology, 2004, 20, 776-780.	1.8	55
15	Time Domain Passivity Control for Position-Position Teleoperation Architectures. Presence: Teleoperators and Virtual Environments, 2010, 19, 482-497.	0.6	48
16	A novel adaptive bilateral control scheme using similar closed-loop dynamic characteristics of master/slave manipulators. Journal of Field Robotics, 2001, 18, 533-543.	0.7	47
17	Time domain passivity control of haptic interfaces. , 0, , .		45
18	Stable Bilateral Control of Teleoperators Under Time-varying Communication Delay: Time Domain Passivity Approach. Proceedings - IEEE International Conference on Robotics and Automation, 2007, , .	0.0	44

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19	A preliminary experimental study on haptic teleoperation of mobile robot with variable force feedback gain. , 2010, , .		43
20	Landing Force Control for Humanoid Robot by Time-Domain Passivity Approach. IEEE Transactions on Robotics, 2007, 23, 1294-1301.	10.3	42
21	A user study of command strategies for mobile robot teleoperation. Intelligent Service Robotics, 2009, 2, 95-104.	2.6	40
22	Novel learning from demonstration approach for repetitive teleoperation tasks. , 2017, , .		31
23	Reducing the conservatism of the time domain passivity approach through consideration of energy reflection in delayed coupled network systems. Mechatronics, 2019, 58, 58-69.	3.3	31
24	Towards variable stiffness control of antagonistic twisted string actuators. , 2014, , .		30
25	Network representation and passivity of delayed teleoperation systems. , 2011, , .		30
26	Development and Evaluation of an Intuitive Flexible Interface for Teleoperating Soft Growing Robots. , 2018, , .		29
27	Memory-Based Passivation Approach for Stable Haptic Interaction. IEEE/ASME Transactions on Mechatronics, 2014, 19, 1424-1435.	5.8	28
28	Position drift compensation in time domain passivity based teleoperation. , 2010, , .		27
29	Bidirectional elbow exoskeleton based on twisted-string actuators. , 2013, , .		27
30	Hybrid position-position and position-speed command strategy for the bilateral teleoperation of a mobile robot. , 2007, , .		26
31	Plugfest 2009: Global interoperability in Telerobotics and telemedicine. , 2010, 2010, 1733-1738.		26
32	Passivity-based stability in explicit force control of robots. , 2017, , .		25
33	Time domain passivity control for 6 degrees of freedom haptic displays. , 0, , .		24
34	Independent force and position control for cooperating manipulators handling an unknown object and interacting with an unknown environment. Journal of the Franklin Institute, 2016, 353, 857-875.	3.4	22
35	Performance comparison of Wave Variable Transformation and Time Domain Passivity Approaches for time-delayed teleoperation: Preliminary results. , 2016, , .		21
36	A Tip Mount for Transporting Sensors and Tools using Soft Growing Robots. , 2020, , .		21

#	ARTICLE	IF	CITATIONS
37	Control of underwater manipulators mounted on an ROV using base force information. , 0, , .		20
38	Improving mobile robot bilateral teleoperation by introducing variable force feedback gain. , 2010, , .		20
39	Twisted string-based passively variable transmission: Concept, model, and evaluation. Mechanism and Machine Theory, 2016, 100, 205-221.	4.5	20
40	A simulation/experimental study of the noisy behavior of the time-domain passivity controller. , 2005, 21, 733-741.		19
41	A preliminary study on a twisted strings-based elbow exoskeleton. , 2013, , .		19
42	Time domain passivity control with reference energy behavior. , 0, , .		18
43	The Input-to-State Stable (ISS) Approach for Stabilizing Haptic Interaction With Virtual Environments. IEEE Transactions on Robotics, 2017, 33, 948-963.	10.3	18
44	Direct current measurement based steer-by-wire systems for realistic driving feeling. , 2009, , .		17
45	Passivity of delayed bilateral teleoperation of mobile robots with ambiguous causalities: Time Domain Passivity Approach. , 2012, , .		17
46	Compensating position drift in Time Domain Passivity Approach based teleoperation. , 2014, , .		17
47	Switching of control signals in teleoperation systems: Formalization and application. , 2008, , .		16
48	Multilateral control for delayed teleoperation. , 2013, , .		16
49	Stable multilateral teleoperation with Time Domain Passivity Approach. , 2013, , .		16
50	Passivity Controller Based on Load-Side Damping Assignment for High Stiffness Controlled Series Elastic Actuators. IEEE Transactions on Industrial Electronics, 2021, 68, 871-881.	7.9	16
51	Teleoperation of multi-robot and multi-property systems. , 2008, , .		15
52	Input-to-state stable approach to release the conservatism of passivity-based stable haptic interaction. , 2015, , .		15
53	Accurate Dynamic Modeling of Twisted String Actuators Accounting for String Compliance and Friction. IEEE Robotics and Automation Letters, 2020, 5, 3438-3443.	5.1	15
54	A study on twisted string actuation systems: Mathematical model and its experimental evaluation. , 2012, , .		14

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55	A study on life cycle of twisted string actuators: Preliminary results. , 2017, , .		14
56	Enhancing the Force Transparency of Time Domain Passivity Approach: Observer-Based Gradient Controller. , 2019, , .		14
57	Motion encoding with asynchronous trajectories of repetitive teleoperation tasks and its extension to human-agent shared teleoperation. Autonomous Robots, 2019, 43, 2055-2069.	4.8	13
58	Multilateral Teleoperation Over Communication Time Delay Using the Time-Domain Passivity Approach. IEEE Transactions on Control Systems Technology, 2020, 28, 2705-2712.	5.2	13
59	Design of a teleoperation controller for an underwater manipulator. , 0, , .		12
60	Compensation for the landing impact force of a humanoid robot by time domain passivity approach. , 0, , .		12
61	A feasibility study of time-domain passivity approach for bilateral teleoperation of mobile manipulator. , 2008, , .		12
62	Preliminary Study of Twisted String Actuation Through a Conduit Toward Soft and Wearable Actuation. , 2018, , .		12
63	Inverse discounted-based LQR algorithm for learning human movement behaviors. Applied Intelligence, 2019, 49, 1489-1501.	5.3	12
64	Development of a Twisted String Actuator-based Exoskeleton for Hip Joint Assistance in Lifting Tasks. , 2020, , .		12
65	Development of the human interactive autonomy for the shared teleoperation of mobile robots. , 2016, , .		11
66	Enhancing the Rate-Hardness of Haptic Interaction: Successive Force Augmentation Approach. IEEE Transactions on Industrial Electronics, 2020, 67, 809-819.	7.9	11
67	Title is missing!. Journal of Intelligent and Robotic Systems: Theory and Applications, 2000, 27, 345-361.	3.4	10
68	Relaxing the Conservatism of Passivity Condition for Impedance Controlled Series Elastic Actuators. , 2019, , .		10
69	Origami-inspired New Material Feeding Mechanism for Soft Growing Robots to Keep the Camera Stay at the Tip by Securing its Path. IEEE Robotics and Automation Letters, 2021, 6, 4592-4599.	5.1	10
70	OpenStreetMap-Based LiDAR Global Localization in Urban Environment Without a Prior LiDAR Map. IEEE Robotics and Automation Letters, 2022, 7, 4999-5006.	5.1	10
71	Development of an Exoskeleton System for Elderly and Disabled People. , 2011, , .		9
72	Telerobotic System for Cell Manipulation. , 2008, , .		8

#	ARTICLE	IF	CITATIONS
73	Shared teleoperation of a vehicle with a virtual driving interface. , 2013, , .		8
74	Rotational twisted string actuator with linearized output: Mathematical model and experimental evaluation. , 2015, , .		8
75	Stable and transparent teleoperation over communication time-delay: Observer-based input-to-state stable approach. , 2016, , .		8
76	Single-Motor-Based Bidirectional Twisted String Actuation With Variable Radius Pulleys. IEEE Robotics and Automation Letters, 2019, 4, 3735-3741.	5.1	8
77	Co-Actuation: A Method for Achieving High Stiffness and Low Inertia for Haptic Devices. IEEE Transactions on Haptics, 2020, 13, 312-324.	2.7	8
78	Nonlinear Model Predictive Growth Control of a Class of Plant-Inspired Soft Growing Robots. IEEE Access, 2020, 8, 214495-214503.	4.2	8
79	Control of a Flexible Manipulator with Noncollocated Feedback: Time Domain Passivity Approach. , 2003, , 121-134.		8
80	A robust controller design method for a flexible manipulator with a time varying payload and parameter uncertainties. , 0, , .		7
81	Bilateral Control with Time Domain Passivity Approach Under Time-varying Communication Delay. , 2007, , .		7
82	FPGA based time domain Passivity Observer and Passivity Controller. , 2009, , .		7
83	Design of a master device for the teleoperation of wheeled and tracked vehicles. , 2010, , .		7
84	Hybrid force-motion control of coordinated robots interacting with unknown environments. , 2014, , .		7
85	Preserving the Physical Coupling in Teleoperation despite Time Delay through Observer-Based Gradient Control. IFAC-PapersOnLine, 2019, 52, 25-30.	0.9	7
86	Method for generating real-time interactive virtual fixture for shared teleoperation in unknown environments. International Journal of Robotics Research, 2022, 41, 925-951.	8.5	7
87	Landing Force Controller for a Humanoid Robot: Time-Domain Passivity Approach. , 2006, , .		6
88	Dynamic authority distribution for cooperative teleoperation. , 2015, , .		6
89	Palpation simulator with stable haptic feedback. Minimally Invasive Therapy and Allied Technologies, 2015, 24, 211-217.	1.2	6
90	Passively adjustable gear based on twisted string actuator: Concept, model and evaluation. , 2015, , .		6

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91	New passivity observers for improved robot force control. , 2017, , .		6
92	Increasing the rate-hardness of haptic interaction: Successive force augmentation approach. , 2017, , .		6
93	Ferro-fluid based portable fingertip haptic display and its preliminary experimental evaluation. , 2018, , .		6
94	Shared Teleoperation for Nuclear Plant Robotics Using Interactive Virtual Guidance Generation and Shared Autonomy Approaches. , 2018, , .		6
95	Effect of Vibration on Twisted String Actuation Through Conduit at High Bending Angles. , 2019, , .		6
96	A Framework for Interactive Virtual Fixture Generation for Shared Teleoperation in Unstructured Environments. , 2020, , .		6
97	A Study on the Role of Force Feedback for Teleoperation of Industrial Overhead Crane. Lecture Notes in Computer Science, 2008, , 796-805.	1.3	6
98	An injecting method of physical damping to haptic interfaces based on FPGA. , 2008, , .		5
99	Connected Components for a Fast and Robust 2D Lidar Data Segmentation. , 2013, , .		5
100	Passive returning mechanism for twisted string actuators. , 2017, , .		5
101	Preliminary Study on Real-Time Interactive Virtual Fixture Generation Method for Shared Teleoperation in Unstructured Environments. Lecture Notes in Computer Science, 2018, , 648-659.	1.3	5
102	Rendering of environmental force feedback in mobile robot teleoperation based on fuzzy logic. , 2009, , .		4
103	Stable bilateral teleoperation with input-to-state stable approach. , 2015, , .		4
104	Circumventing the fundamental tradeoff between stability and performance in haptic rendering "successive force augment approach. , 2016, , .		4
105	Design of Robotic Gripper with Constant Transmission Ratio Based on Twisted String Actuator: Concept and Evaluation. , 2018, , .		4
106	High-Bandwidth Control of Twisted String Actuators. , 2019, , .		4
107	The Effect of Asynchronous Haptic and Video Feedback on Teleoperation and a Comment for Improving the Performance. Journal of Institute of Control, Robotics and Systems, 2012, 18, 156-160.	0.2	4
108	Active-Type Continuously Variable Transmission System Based on a Twisted String Actuator. IEEE Robotics and Automation Letters, 2022, 7, 2605-2612.	5.1	4

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109	Stable teleoperation with time domain passivity control. , 0, , .		3
110	Memory based passivation method for stable haptic interaction. , 2011, , .		3
111	Implementation of Time Domain Passivity Approach on Rate-Mode bilateral teleoperation. , 2012, , .		3
112	Sliding mode hybrid impedance control of robot manipulators interacting with unknown environments using VSMRC method. , 2013, , .		3
113	Multi Degree-of-Freedom Input-to-State Stable approach for stable haptic interaction. , 2015, , .		3
114	6-DOF extension of memory-based passivation approach for stable haptic interaction. Intelligent Service Robotics, 2015, 8, 23-34.	2.6	3
115	Realizing low-impedance rendering in admittance-type haptic interfaces using the input-to-state stable approach. , 2017, , .		3
116	Development of shared autonomy and virtual guidance generation system for human interactive teleoperation. , 2017, , .		3
117	Enhancing the Command-Following Bandwidth for Transparent Bilateral Teleoperation. , 2018, , .		3
118	Lyapunov Observer/Controller for Stable Haptic Interaction. , 2018, , .		3
119	Stability guaranteed control: Time domain passivity approach. , 0, , .		2
120	A Simulation/Experimental Study of the Noisy Behavior of the Time Domain Passivity Controller for Haptic Interfaces. , 0, , .		2
121	Haptic interface for intuitive teleoperation of wheeled and tracked vehicles. , 2011, , .		2
122	Supervisory model-mediated teleoperation for multiple-master/multiple-slave system. , 2012, , .		2
123	Estimation of human arm impedance in accordance with the master device types and gripping posture. , 2015, , .		2
124	Network formulation and stability improvement of a bilateral teleoperation system with admittance-type master interfaces. , 2015, , .		2
125	Increasing the impedance range of admittance-type haptic interfaces by using Time Domain Passivity Approach. , 2015, , .		2
126	A preliminary study on development of haptic interface for underwater vehicles. , 2015, , .		2

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127	Design of Manipulator End Effectors for Pier Column Construction. The Journal of Korea Robotics Society, 2021, 16, 207-215.	0.4	2
128	Chattering-Free Time Domain Passivity Approach. IEEE Transactions on Haptics, 2022, 15, 572-581.	2.7	2
129	Stable and high performance teleoperation with time domain passivity control: reference energy following scheme. , 0, , .		1
130	Stable Teleoperation with Time Domain Passivity Approach. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2008, 41, 15654-15659.	0.4	1
131	Stable haptic interaction with admittance type virtual environments based on time-domain passivity approach. , 2012, , .		1
132	Transmission of operator intention impedance using phantom haptic device. , 2014, , .		1
133	Human-Agent Shared Teleoperation: A Case Study Utilizing Haptic Feedback. Lecture Notes in Electrical Engineering, 2019, , 247-251.	0.4	1
134	Ensuring Stable and Transparent High Stiffness Haptic Interaction Using Successive Force Augmentation with Time Domain Passivity Approach. Springer Proceedings in Advanced Robotics, 2021, , 263-273.	1.3	1
135	Performance Analysis of Telerobotic Systems with Different Haptic and Video Time-delay. Journal of Institute of Control, Robotics and Systems, 2010, 16, 286-292.	0.2	1
136	Testing Time Domain Passivity Control of Haptic Enabled Systems. , 0, , 550-559.		1
137	Virtual Inertia as an Energy Dissipation Element for Haptic Interfaces. IEEE Robotics and Automation Letters, 2022, 7, 2708-2715.	5.1	1
138	Development of a Observe-By-Wire System for Forklifts Using Haptic Interfaces. , 2008, , .		0
139	A study on unconstrained tactile-kinesthetic feedback. , 2012, , .		0
140	Implementation of semi-virtual Multiple-Master/Multiple-Slave system. , 2013, , .		0
141	Independent force and position control for cooperating manipulators handling an unknown object interacting with an unknown environment. , 2013, , .		0
142	A Multiresolution Approach for Real-Time Motion Planning under Differential Constraints. Advances in Intelligent Systems and Computing, 2013, , 745-754.	0.6	0
143	Measurement of human arm impedance using the human arm posture. , 2013, , .		0
144	Memory-based passivation approach for 6-DOF haptic rendering of high stiffness virtual environment. , 2014, , .		0

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145	Effect of kinesthetic coupling in cooperative teleoperation. , 2015, , .		0
146	SoTCM: a scene-oriented task complexity metric for gaze-supported teleoperation tasks. Intelligent Service Robotics, 2018, 11, 279-288.	2.6	0
147	Interactive Virtual Fixture Generation for Shared Teleoperation in Unstructured Environments. Lecture Notes in Electrical Engineering, 2019, , 88-91.	0.4	0
148	On Energy-Preserving Motion in Twisted String Actuators. IEEE Robotics and Automation Letters, 2021, 6, 7406-7412.	5.1	0
149	On Smooth Time-Optimal Trajectory Planning in Twisted String Actuators. , 2021, , .		0
150	Control of a Flexible Manipulator with Noncollocated Feedback: Time Domain Passivity Approach. , 0, , .		0
151	A Study on Teleoperation Systems with Different Haptic and Video time-delay. The Abstracts of the International Conference on Advanced Mechatronics Toward Evolutionary Fusion of IT and Mechatronics ICAM, 2010, 2010.5, 621-625.	0.0	0
152	Stability Analysis of Mobile Robot Teleoperation with Variable Force Feedback Gain. Lecture Notes in Computer Science, 2010, , 177-182.	1.3	0
153	Polar Histogram Based Sampling Method for Autonomous Vehicle Motion Planning. Advances in Intelligent Systems and Computing, 2013, , 737-744.	0.6	0
154	Ferro-Fluid Based Lightweight and Portable Tactile Display for Persuasive Tactile Cues Including Orientation and Texture. Lecture Notes in Electrical Engineering, 2018, , 87-93.	0.4	0
155	Multi Degree-of-Freedom Successive Stiffness Increment Approach for High Stiffness Haptic Interaction. Lecture Notes in Electrical Engineering, 2018, , 287-293.	0.4	0
156	Configuration of Haptic Feedback Based Relief Robot System. Lecture Notes in Electrical Engineering, 2019, , 294-299.	0.4	0
157	A Novel Fingertip Tactile Display for Concurrently Displaying Texture and Orientation. Lecture Notes in Electrical Engineering, 2019, , 216-218.	0.4	0
158	Effect of Vibration on Twisted String Actuation Inside Conduit at High Curvature Angles. The Journal of Korea Robotics Society, 2019, 14, 221-227.	0.4	0
159	Intelligent Filtering in Telerobotic System. , 2007, , 313-321.		0
160	Stable and high performance teleoperation with time domain passivity control: reference energy following scheme. , 0, , .		0
161	Learning Robotic Rotational Manipulation Skill from Bilateral Teleoperation. , 2022, , .		0