Dongheui Lee

List of Publications by Year
in descending order

111 papers	1,957 citations	567281 15 h-index	434195 31 g-index
111 all docs	111 docs citations	111 times ranked	1445 citing authors

#	Article	IF	Citations
1	Sex differences in the association of postural control with indirect measures of body representations. Scientific Reports, 2022, 12, 4556.	3.3	4
2	Design of a Collaborative Modular End Effector Considering Human Values and Safety Requirements for Industrial Use Cases. Springer Proceedings in Advanced Robotics, 2022, , 45-60.	1.3	3
3	Safety-Aware Hierarchical Passivity-Based Variable Compliance Control for Redundant Manipulators. IEEE Transactions on Robotics, 2022, 38, 3899-3916.	10.3	11
4	Novel Approach Using Risk Analysis Component to Continuously Update Collaborative Robotics Applications in the Smart, Connected Factory Model. Applied Sciences (Switzerland), 2022, 12, 5639.	2.5	4
5	Deep Active Cross-Modal Visuo-Tactile Transfer Learning for Robotic Object Recognition. IEEE Robotics and Automation Letters, 2022, 7, 9557-9564.	5.1	5
6	Visually Grounding Language Instruction for History-Dependent Manipulation. , 2022, , .		0
7	Bilateral Teleoperation With Adaptive Impedance Control for Contact Tasks. IEEE Robotics and Automation Letters, 2021, 6, 5429-5436.	5.1	31
8	A center of pressure progression model for walking with non heeled and heeled footwear. Gait and Posture, 2021, 84, 300-307.	1.4	0
9	Inverse reinforcement learning for dexterous hand manipulation. , 2021, , .		4
10	Detection of Collaboration and Collision Events during Contact Task Execution. , 2021, , .		4
11	Identification of Common Force-based Robot Skills from the Human and Robot Perspective. , 2021, , .		5
12	Combining Task and Motion Planning using Policy Improvement with Path Integrals. , 2021, , .		1
13	Closed-Loop Variable Stiffness Control of Dynamical Systems. , 2021, , .		2
14	Manipulation Planning Using Object-Centered Predicates and Hierarchical Decomposition of Contextual Actions. IEEE Robotics and Automation Letters, 2020, 5, 5629-5636.	5.1	7
15	Hand Pose-based Task Learning from Visual Observations with Semantic Skill Extraction. , 2020, , .		2
16	A human-cyber-physical system approach to lean automation using an industrie 4.0 reference architecture. Procedia Manufacturing, 2020, 51, 1082-1090.	1.9	16
17	Stabilization of body balance with Light Touch following a mechanical perturbation: Adaption of sway and disruption of right posterior parietal cortex by cTBS. PLoS ONE, 2020, 15, e0233988.	2.5	7
18	Passivity-based variable impedance control for redundant manipulators. IFAC-PapersOnLine, 2020, 53, 9865-9872.	0.9	5

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19	Gesture, Posture, Facial Interfaces. , 2020, , 1-10.		3
20	Incremental Motion Reshaping of Autonomous Dynamical Systems. Springer Proceedings in Advanced Robotics, 2020, , 43-57.	1.3	0
21	Collaborative Programming of Conditional Robot Tasks. , 2020, , .		4
22	Title is missing!. , 2020, 15, e0233988.		0
23	Title is missing!. , 2020, 15, e0233988.		0
24	Title is missing!. , 2020, 15, e0233988.		0
25	Title is missing!. , 2020, 15, e0233988.		0
26	Title is missing!. , 2020, 15, e0233988.		0
27	Title is missing!. , 2020, 15, e0233988.		0
28	Merging Position and orientation Motion Primitives. , 2019, , .		28
29	Intuitive Programming of Conditional Tasks by Demonstration of Multiple Solutions. IEEE Robotics and Automation Letters, 2019, 4, 4483-4490.	5.1	6
30	Prioritized Inverse Kinematics: Generalization. IEEE Robotics and Automation Letters, 2019, 4, 3537-3544.	5.1	8
31	Enabling the sense of touch in EMG-controlled hand prostheses using vibro-tactile stimulation. , 2019, , .		0
32	A Transfer Learning Approach to Cross-Modal Object Recognition: From Visual Observation to Robotic Haptic Exploration. IEEE Transactions on Robotics, 2019, 35, 987-998.	10.3	29
33	Symbolic Task Compression in Structured Task Learning. , 2019, , .		1
34	Learning Haptic Exploration Schemes for Adaptive Task Execution. , 2019, , .		10
35	Human-Agent Shared Teleoperation: A Case Study Utilizing Haptic Feedback. Lecture Notes in Electrical Engineering, 2019, , 247-251.	0.4	1
36	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

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37	Learning Barrier Functions for Constrained Motion Planning with Dynamical Systems. , 2019, , .		26
38	Learning Control. , 2019, , 1261-1312.		20
39	Kinesthetic teaching and attentional supervision of structured tasks in human–robot interaction. Autonomous Robots, 2019, 43, 1291-1307.	4.8	50
40	Representing human motion with FADE and U-FADE: an efficient frequency-domain approach. Autonomous Robots, 2019, 43, 179-196.	4.8	2
41	A Method to Identify the Nonlinear Stiffness Characteristics of an Elastic Continuum Mechanism. IEEE Robotics and Automation Letters, 2018, 3, 1450-1457.	5.1	11
42	On Policy Learning Robust to Irreversible Events: An Application to Robotic In-Hand Manipulation. IEEE Robotics and Automation Letters, 2018, 3, 1482-1489.	5.1	18
43	Special issue on learning for human–robot collaboration. Autonomous Robots, 2018, 42, 953-956.	4.8	11
44	Bidirectional invariant representation of rigid body motions and its application to gesture recognition and reproduction. Autonomous Robots, 2018, 42, 125-145.	4.8	8
45	Learning task-parameterized dynamic movement primitives using mixture of GMMs. Intelligent Service Robotics, 2018, 11, 61-78.	2.6	50
46	Incremental Skill Learning of Stable Dynamical Systems. , 2018, , .		7
47	Learning Control. , 2018, , 1-52.		8
48	A Human Action Descriptor Based on Motion Coordination. IEEE Robotics and Automation Letters, 2017, 2, 811-818.	5.1	7
49	Human-aware motion reshaping using dynamical systems. Pattern Recognition Letters, 2017, 99, 96-104.	4.2	18
50	RGB-D SLAM in Dynamic Environments Using Static Point Weighting. IEEE Robotics and Automation Letters, 2017, 2, 2263-2270.	5.1	172
51	Cross-modal visuo-tactile object recognition using robotic active exploration. , 2017, , .		35
52	Novel learning from demonstration approach for repetitive teleoperation tasks. , 2017, , .		31
53	Learning deep movement primitives using convolutional neural networks. , 2017, , .		25
54	Data-efficient control policy search using residual dynamics learning. , 2017, , .		27

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55	Learning stable dynamical systems using contraction theory. , 2017, , .		17
56	Learning Control. , 2017, , 1-52.		13
57	Encoding human actions with a frequency domain approach. , 2016, , .		6
58	An extremum-seeking control approach for constrained robotic motion tasks. Control Engineering Practice, 2016, 52, 1-14.	5.5	11
59	Learning and Generalization of Compensative Zero-Moment Point Trajectory for Biped Walking. IEEE Transactions on Robotics, 2016, 32, 717-725.	10.3	20
60	Fast Visual Odometry Using Intensity-Assisted Iterative Closest Point. IEEE Robotics and Automation Letters, 2016, 1, 992-999.	5.1	22
61	An adaptive dynamic inversion-extremum seeking control approach for constrained robotic motion tasks. , 2015, , .		2
62	Incremental kinesthetic teaching of end-effector and null-space motion primitives. , 2015, , .		35
63	Incremental robot skill learning by human motion retargetting and physical human guidance. , 2015, , .		5
64	Real-time and model-free object tracking using particle filter with Joint Color-Spatial Descriptor. , 2015, , .		2
65	Prioritized Inverse Kinematics with Multiple Task Definitions. , 2015, , .		19
66	Generalization of Force Control Policies from Demonstrations for Constrained Robotic Motion Tasks. Journal of Intelligent and Robotic Systems: Theory and Applications, 2015, 80, 133-148.	3.4	9
67	A bidirectional invariant representation of motion for gesture recognition and reproduction. , 2015, , .		12
68	Online iterative learning control of zero-moment point for biped walking stabilization. , 2015, , .		1
69	A Componentwise Simulated Annealing EM Algorithm for Mixtures. Lecture Notes in Computer Science, 2015, , 287-294.	1.3	3
70	Unsupervised object individuation from RGB-D image sequences. , 2014, , .		8
71	A Bayesian approach for task recognition and future human activity prediction. , 2014, , .		24
72	Online human walking imitation in task and joint space based on quadratic programming. , 2014, , .		26

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73	Distance based dynamical system modulation for reactive avoidance of moving obstacles. , 2014, , .		31
74	Incremental object learning and robust tracking of multiple objects from RGB-D point set data. Journal of Visual Communication and Image Representation, 2014, 25, 108-121.	2.8	15
75	Prioritized inverse kinematics using QR and cholesky decompositions. , 2014, , .		5
76	ESC-MRAC of MIMO systems for constrained robotic motion tasks in deformable environments. , 2014, , .		7
77	Motion recognition and recovery from occluded monocular observations. Robotics and Autonomous Systems, 2014, 62, 818-832.	5.1	10
78	Learning motion and impedance behaviors from human demonstrations. , 2014, , .		8
79	GMM-based 3D object representation and robust tracking in unconstructed dynamic environments. , 2013, , .		5
80	Point cloud based dynamical system modulation for reactive avoidance of convex and concave obstacles. , 2013, , .		21
81	Invariant representation for user independent motion recognition. , 2013, , .		11
82	Multiple object tracking using an RGB-D camera by hierarchical spatiotemporal data association. , 2013, , .		3
83	Kinesthetic teaching of humanoid motion based on whole-body compliance control with interaction-aware balancing. , 2013, , .		23
84	Feedback motion planning and learning from demonstration in physical robotic assistance: differences and synergies. , 2012, , .		16
85	Towards interactive physical robotic assistance: Parameterizing motion primitives through natural language. , 2012, , .		13
86	Disagreement-aware physical assistance through risk-sensitive optimal feedback control. , 2012, , .		9
87	Learning and generalizing force control policies for sculpting. , 2012, , .		8
88	Prediction-Based Synchronized Human Motion Imitation by a Humanoid Robot. Automatisierungstechnik, 2012, 60, 705-714.	0.8	6
89	Bipedal Locomotion Primitive Learning, Control and Prediction from Human Data. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2012, 45, 536-542.	0.4	1
90	Incremental learning of full body motion primitives and their sequencing through human motion observation. International Journal of Robotics Research, 2012, 31, 330-345.	8.5	155

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91	Risk-Sensitive Optimal Feedback Control for Haptic Assistance. , 2012, , .		26
92	Real-time human motion tracking using multiple depth cameras. , 2012, , .		62
93	Physical human robot interaction in imitation learning. , 2011, , .		8
94	Incremental kinesthetic teaching of motion primitives using the motion refinement tube. Autonomous Robots, 2011, 31, 115-131.	4.8	143
95	Imitation learning of human grasping skills from motion and force data. , 2011, , .		29
96	Learning interaction control policies by demonstration. , 2011, , .		16
97	An experience-driven robotic assistant acquiring human knowledge to improve haptic cooperation. , 2011, , .		60
98	Particle filter based monocular human tracking with a 3d cardbox model and a novel deterministic resampling strategy. , 2011, , .		2
99	Parameterizing actions to have the appropriate effects. , 2011, , .		6
100	An experience-driven robotic assistant acquiring human knowledge to improve haptic cooperation. , 2011, , .		1
101	Learning force control policies for compliant manipulation. , 2011, , .		6
102	Image-based magnetic control of paramagnetic microparticles in water. , 2011, , .		3
103	Mimesis Model from Partial Observations for a Humanoid Robot. International Journal of Robotics Research, 2010, 29, 60-80.	8.5	29
104	Mimetic Communication Model with Compliant Physical Contact in Humanâ€"Humanoid Interaction. International Journal of Robotics Research, 2010, 29, 1684-1704.	8.5	71
105	Incremental motion primitive learning by physical coaching using impedance control. , 2010, , .		4
106	Development of a biped robot with torque controlled joints. , 2010, , .		55
107	Mimetic communication with impedance control for physical human-robot interaction. , 2009, , .		5
108	Associating and reshaping of whole body motions for object manipulation. , 2009, , .		6

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109	Motion capture based human motion recognition and imitation by direct marker control. , 2008, , .		84
110	Stochastic Model of Imitating a New Observed Motion Based on the Acquired Motion Primitives. , 2006, , .		19
111	Special Issue on the 2021 Ubiquitous Robots Conference. Intelligent Service Robotics, 0, , 1.	2.6	0