Tamim Asfour

List of Publications by Year
in descending order

243 papers	6,181 citations	257450 24 h-index	182427 51 g-index
248 all docs	248 docs citations	248 times ranked	3552 citing authors

#	Article	IF	Citations
1	Probabilistic Spatio-Temporal Fusion of Affordances for Grasping and Manipulation. IEEE Robotics and Automation Letters, 2022, 7, 3226-3233.	5.1	3
2	Mechanical design and friction modelling of a cable-driven upper-limb exoskeleton. Mechanism and Machine Theory, 2022, 171, 104746.	4.5	7
3	Designing Prosthetic Hands With Embodied Intelligence: The KIT Prosthetic Hands. Frontiers in Neurorobotics, 2022, 16, 815716.	2.8	16
4	Semi-autonomous control of prosthetic hands based on multimodal sensing, human grasp demonstration and user intention. Robotics and Autonomous Systems, 2022, 154, 104123.	5.1	10
5	Learning to Sequence and Blend Robot Skills via Differentiable Optimization. IEEE Robotics and Automation Letters, 2022, 7, 8431-8438.	5.1	1
6	Agiles Produktionssystem mittels lernender Roboter bei ungewissen Produktzuständen am Beispiel der Anlasser-Demontage. Automatisierungstechnik, 2022, 70, 504-516.	0.8	1
7	BlueSky: Combining Task Planning and Activity-Centric Access Control for Assistive Humanoid Robots. , 2022, , .		2
8	Erfassung und Interpretation menschlicher Handlungen für die Programmierung von Robotern in der Produktion. Automatisierungstechnik, 2022, 70, 517-533.	0.8	1
9	Combining Navigation and Manipulation Costs for Time-Efficient Robot Placement in Mobile Manipulation Tasks. IEEE Robotics and Automation Letters, 2022, 7, 9913-9920.	5.1	5
10	Oriented Surface Reachability Maps for Robot Placement. , 2022, , .		3
11	Probabilistic Representation of Objects and Their Support Relations. Springer Proceedings in Advanced Robotics, 2021, , 510-519.	1.3	2
12	Uncertainty-Aware Contact-Safe Model-Based Reinforcement Learning. IEEE Robotics and Automation Letters, 2021, 6, 3918-3925.	5.1	11
13	Binary-LoRAX: Low-Latency Runtime Adaptable XNOR Classifier for Semi-Autonomous Grasping with Prosthetic Hands. , 2021, , .		6
14	The KIT Gripper: A Multi-Functional Gripper for Disassembly Tasks. , 2021, , .		5
15	Vision-Based Robotic Pushing and Grasping for Stone Sample Collection under Computing Resource Constraints. , 2021, , .		12
16	The KIT Bimanual Manipulation Dataset. , 2021, , .		13
17	Semantic Scene Manipulation Based on 3D Spatial Object Relations and Language Instructions. , 2021, , .		5
18	Deep Episodic Memory for Verbalization of Robot Experience. IEEE Robotics and Automation Letters, 2021, 6, 5808-5815.	5.1	7

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19	Fast Reactive Grasping with In-Finger Vision and In-Hand FPGA-accelerated CNNs. , 2021, , .		6
20	Graph-based Task-specific Prediction Models for Interactions between Deformable and Rigid Objects. , 2021, , .		8
21	Detecting Grasp Phases and Adaption of Object-Hand Interaction Forces of a Soft Humanoid Hand Based on Tactile Feedback. , 2021, , .		2
22	An Embedded, Multi-Modal Sensor System for Scalable Robotic and Prosthetic Hand Fingers. Sensors, 2020, 20, 101.	3.8	27
23	Learning Object-Action Relations from Bimanual Human Demonstration Using Graph Networks. IEEE Robotics and Automation Letters, 2020, 5, 187-194.	5.1	36
24	Human-Inspired Representation of Object-Specific Grasps for Anthropomorphic Hands. International Journal of Humanoid Robotics, 2020, 17, 2050008.	1.1	12
25	Predicting Pushing Action Effects on Spatial Object Relations by Learning Internal Prediction Models. , 2020, , .		14
26	Movement Primitive Learning and Generalization: Using Mixture Density Networks. IEEE Robotics and Automation Magazine, 2020, 27, 22-32.	2.0	16
27	Guest Editorial of Special Issue on New Advances of Humanoid Robotics for â€œ2018 IEEE-RAS International Conference on Humanoid Robotsâ€• International Journal of Humanoid Robotics, 2020, 17, 2002001.	1.1	0
28	Guest Editorial of Special Issue on New Advances of Humanoid Robotics for â€œ2018 IEEE-RAS International Conference on Humanoid Robotsâ€• International Journal of Humanoid Robotics, 2020, 17, 2002002.	1.1	0
29	I-Support: A robotic platform of an assistive bathing robot for the elderly population. Robotics and Autonomous Systems, 2020, 126, 103451.	5.1	35
30	Affordance-Based Grasping and Manipulation in Real World Applications. , 2020, , .		10
31	Torque-Based Velocity Control for Safe Human-Humanoid Interaction. Advances in Intelligent Systems and Computing, 2020, , 61-68.	0.6	3
32	A Soft Humanoid Hand with In-Finger Visual Perception. , 2020, , .		11
33	Representing Spatial Object Relations as Parametric Polar Distribution for Scene Manipulation Based on Verbal Commands. , 2020, , .		4
34	ARMAR-6: A High-Performance Humanoid for Human-Robot Collaboration in Real-World Scenarios. IEEE Robotics and Automation Magazine, 2019, 26, 108-121.	2.0	59
35	The Anthropomorphic Hand Assessment Protocol (AHAP). Robotics and Autonomous Systems, 2019, 121, 103259.	5.1	23
36	ROBDEKON: Robotic Systems for Decontamination in Hazardous Environments. , 2019, , .		32

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37	Learning and Adaptation of Inverse Dynamics Models: A Comparison. , 2019, , .		7
38	Minimal Sensor Setup in Lower Limb Exoskeletons for Motion Classification based on Multi-Modal Sensor Data. , 2019, , .		5
39	Resource-Aware Object Classification and Segmentation for Semi-Autonomous Grasping with Prosthetic Hands. , 2019, , .		11
40	Learning Via-Point Movement Primitives with Inter- and Extrapolation Capabilities. , 2019, , .		24
41	On Force Synergies in Human Grasping Behavior. , 2019, , .		12
42	Visuo-Haptic Grasping of Unknown Objects based on Gaussian Process Implicit Surfaces and Deep Learning. , 2019, , .		14
43	Evaluation of an Industrial Robotic Assistant in an Ecological Environment. , 2019, , .		8
44	Predicting Grasp Success with a Soft Sensing Skin and Shape-Memory Actuated Gripper. , 2019, , .		16
45	Active Vision for Extraction of Physically Plausible Support Relations. , 2019, , .		6
46	Exoskeleton Arm Pronation/Supination Assistance Mechanism With A Guided Double Rod System. , 2019, , .		7
47	Feature Space Exploration for Motion Classification Based on Multi-Modal Sensor Data for Lower Limb Exoskeletons. , 2019, , .		2
48	Does a Passive Unilateral Lower Limb Exoskeleton Affect Human Static and Dynamic Balance Control?. Frontiers in Sports and Active Living, 2019, 1, 22.	1.8	11
49	A Rolling Contact Joint Lower Extremity Exoskeleton Knee. Advances in Intelligent Systems and Computing, 2019, , 263-277.	0.6	3
50	The Karlsruhe ARMAR Humanoid Robot Family. , 2019, , 337-368.		4
51	Vision-Based Online Adaptation of Motion Primitives to Dynamic Surfaces: Application to an Interactive Robotic Wiping Task. IEEE Robotics and Automation Letters, 2018, 3, 1410-1417.	5.1	25
52	Distance-Aware Dynamically Weighted Roadmaps for Motion Planning in Unknown Environments. IEEE Robotics and Automation Letters, 2018, 3, 2016-2023.	5.1	5
53	Autonomous Detection and Experimental Validation of Affordances. IEEE Robotics and Automation Letters, 2018, 3, 1949-1956.	5.1	7
54	Active Tactile Exploration Based on Cost-Aware Information Gain Maximization. International Journal of Humanoid Robotics, 2018, 15, 1850015.	1.1	16

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55	Planning High-Quality Grasps Using Mean Curvature Object Skeletons. IEEE Robotics and Automation Letters, 2018, 3, 911-918.	5.1	16
56	On the Dualities Between Grasping and Whole-Body Loco-Manipulation Tasks. Springer Proceedings in Advanced Robotics, 2018, , 305-322.	1.3	2
57	Integrating multi-purpose natural language understanding, robot's memory, and symbolic planning for task execution in humanoid robots. Robotics and Autonomous Systems, 2018, 99, 148-165.	5.1	16
58	Generation of Walking Motions Based on Whole-Body Poses and QP Control. , 2018, , .		0
59	The KIT Swiss Knife Gripper for Disassembly Tasks: A Multi-Functional Gripper for Bimanual Manipulation with a Single Arm. , 2018, , .		5
60	EVALUATING AND OPTIMIZING COMPONENT-BASED ROBOT ARCHITECTURES USING NETWORK SIMULATION. , 2018, , .		0
61	Coupling Mobile Base and End-Effector Motion in Task Space. , 2018, , .		11
62	Projected Force-Admittance Control for Compliant Bimanual Tasks. , 2018, , .		5
63	Learning Efficient Omni-Directional Capture Stepping for Humanoid Robots from Human Motion and Simulation Data. , 2018, , .		3
64	Linear Contact Modeling and Stochastic Parameter Optimization for LQR-Based Whole-Body Push Recovery. , 2018, , .		0
65	Exploration and Reconstruction of Unknown Objects using a Novel Normal and Contact Sensor. , 2018, , .		2
66	ARMAR-6: A Collaborative Humanoid Robot for Industrial Environments. , 2018, , .		32
67	Temporal Concurrent Planning with Stressed Actions. , 2018, , .		0
68	Extraction of Physically Plausible Support Relations to Predict and Validate Manipulation Action Effects. IEEE Robotics and Automation Letters, 2018, 3, 3991-3998.	5.1	25
69	Synergy-Based, Data-Driven Generation of Object-Specific Grasps for Anthropomorphic Hands. , 2018, , .		9
70	A Multimodal Embedded Sensor System for Scalable Robotic and Prosthetic Fingers. , 2018, , .		3
71	An Ontology-Based Expert System to Support the Design of Humanoid Robot Components. , 2018, , .		2
72	The KIT Prosthetic Hand: Design and Control. , 2018, , .		39

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73	Human Motion Classification Based on Multi-Modal Sensor Data for Lower Limb Exoskeletons. , 2018, , .		20
74	The Rise of the Robots: The European Robotics Flagship [Regional Spotlight]. IEEE Robotics and Automation Magazine, 2018, 25, 121-122.	2.0	1
75	Deep Episodic Memory: Encoding, Recalling, and Predicting Episodic Experiences for Robot Action Execution. IEEE Robotics and Automation Letters, 2018, 3, 4007-4014.	5.1	18
76	Affordance-Based Multi-Contact Whole-Body Pose Sequence Planning for Humanoid Robots in Unknown Environments. , 2018, , .		6
77	Grasping of Unknown Objects Using Deep Convolutional Neural Networks Based on Depth Images. , 2018, , .		53
78	Learning a bidirectional mapping between human whole-body motion and natural language using deep recurrent neural networks. Robotics and Autonomous Systems, 2018, 109, 13-26.	5.1	68
79	Temporal Context Influences the Perceived Duration of Everyday Actions: Assessing the Ecological Validity of Lab-Based Timing Phenomena. Journal of Cognition, 2018, 2, 1.	1.4	17
80	Unsupervised Linking of Visual Features to Textual Descriptions in Long Manipulation Activities. IEEE Robotics and Automation Letters, 2017, 2, 1397-1404.	5.1	8
81	Self-aligning exoskeleton hip joint: Kinematic design with five revolute, three prismatic and one ball joint. , 2017, 2017, 1349-1355.		11
82	Online stability estimation based on inertial sensor data for human and humanoid fall prevention. , 2017, , .		8
83	A whole-body support pose taxonomy for multi-contact humanoid robot motions. Science Robotics, 2017, 2, .	17.6	11
84	Textile identification using fingertip motion and 3D force sensors in an open-source gripper. , 2017, , .		6
85	Multimodal gaze stabilization of a humanoid robot based on reafferences. , 2017, , .		1
86	Highly integrated sensor-actuator-controller units for modular robot design. , 2017, , .		17
87	A combined approach for robot placement and coverage path planning for mobile manipulation. , 2017, , .		14
88	Autonomous view selection and gaze stabilization for humanoid robots. , 2017, , .		7
89	Task-oriented generalization of dynamic movement primitive. , 2017, , .		8
90	Autonomous narration of humanoid robot kitchen task experience. , 2017, , .		7

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91	Graph-based visual semantic perception for humanoid robots. , 2017, , .		6
92	A framework for evaluating motion segmentation algorithms. , 2017, , .		3
93	The Karlsruhe ARMAR Humanoid Robot Family. , 2017, , 1-32.		3
94	The ArmarX Statechart Concept: Graphical Programing of Robot Behavior. Frontiers in Robotics and AI, 2016, 3, .	3.2	25
95	Real-time whole-body human motion tracking based on unlabeled markers. , 2016, , .		6
96	The KIT Motion-Language Dataset. Big Data, 2016, 4, 236-252.	3.4	57
97	Enriched manipulation action semantics for robot execution of time constrained tasks. , 2016, , .		10
98	Is hugging a robot weird? Investigating the influence of robot appearance on users' perception of hugging. , 2016, , .		14
99	Collaboration of heterogeneous agents in time constrained tasks. , 2016, , .		7
100	Design of a high-performance humanoid dual arm system with inner shoulder joints. , 2016, , .		27
101	An affordance-based pilot interface for high-level control of humanoid robots in supervised autonomy. , 2016, , .		13
102	The sense of surface orientation â€" A new sensor modality for humanoid robots. , 2016, , .		3
103	Local implicit surface estimation for haptic exploration. , 2016, , .		15
104	Part-based grasp planning for familiar objects. , 2016, , .		36
105	Two ways of walking: Contrasting a reflexive neuro-controller and a LIP-based ZMP-controller on the humanoid robot ARMAR-4. , 2016, , .		6
106	Learning and force adaptation for interactive actions. , 2016, , .		3
107	Workspace analysis for planning human-robot interaction tasks. , 2016, , .		28
108	Heuristic 3D object shape completion based on symmetry and scene context. , 2016, , .		16

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109	Towards a hierarchy of loco-manipulation affordances. , 2016, , .		20
110	Using language models to generate whole-body multi-contact motions. , 2016, , .		5
111	Coordinate Change Dynamic Movement Primitives â€" A leader-follower approach. , 2016, , .		9
112	New mechanism for a 3 DOF exoskeleton hip joint with five revolute and two prismatic joints. , 2016, , .		9
113	Unifying Representations and Large-Scale Whole-Body Motion Databases for Studying Human Motion. IEEE Transactions on Robotics, 2016, 32, 796-809.	10.3	77
114	Resource-aware motion planning. , 2016, , .		4
115	Adaptation and coaching of periodic motion primitives through physical and visual interaction. Robotics and Autonomous Systems, 2016, 75, 340-351.	5.1	43
116	A measurement setup for the 3D validation of fingertip deformation models. International Journal of Human Factors Modelling and Simulation, 2016, 5, 230.	0.2	0
117	Hierarchical segmentation of manipulation actions based on object relations and motion characteristics. , 2015, , .		18
118	A whole-body pose taxonomy for loco-manipulation tasks. , 2015, , .		19
119	A Novel Greeting Selection System for a Culture-Adaptive Humanoid Robot. International Journal of Advanced Robotic Systems, 2015, 12, 34.	2.1	19
120	Multi-purpose natural language understanding linked to sensorimotor experience in humanoid robots. , 2015, , .		10
121	The KIT whole-body human motion database. , 2015, , .		120
122	Nonprehensile whole arm rearrangement planning on physics manifolds. , 2015, , .		35
123	Guest Editorial: "Humans and Humanoids Face to Face". International Journal of Humanoid Robotics, 2015, 12, 1502001.	1.1	0
124	Kinodynamic randomized rearrangement planning via dynamic transitions between statically stable states. , 2015, , .		39
125	IK-Map: An enhanced workspace representation to support inverse kinematics solvers. , 2015, , .		15
126	Transferring object grasping knowledge and skill across different robotic platforms. , 2015, , .		4

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127	Validation of whole-body loco-manipulation affordances for pushability and liftability. , 2015, , .		16
128	Analyzing whole-body pose transitions in multi-contact motions. , 2015, , .		19
129	Extraction of Whole-Body Affordances for Loco-Manipulation Tasks. International Journal of Humanoid Robotics, 2015, 12, 1550031.	1.1	14
130	The robot software framework ArmarX. IT - Information Technology, 2015, 57, 99-111.	0.9	38
131	Structural Bootstrapping—A Novel, Generative Mechanism for Faster and More Efficient Acquisition of Action-Knowledge. IEEE Transactions on Autonomous Mental Development, 2015, 7, 140-154.	1.6	21
132	Special Issue on Humanoid Robotics. Advanced Robotics, 2015, 29, 301-301.	1.8	0
133	Representing the robot's workspace through constrained manipulability analysis. Autonomous Robots, 2015, 38, 17-30.	4.8	53
134	Design and control of the lower limb exoskeleton KIT-EXO-1. , 2015, , .		36
135	Self-adaptive corner detection on MPSoC through resource-aware programming. Journal of Systems Architecture, 2015, 61, 520-530.	4.3	3
136	A jumping robot using soft pneumatic actuator. , 2015, , .		11
137	Resource-awareness on heterogeneous MPSoCs for image processing. Journal of Systems Architecture, 2015, 61, 668-680.	4.3	6
138	Walking pattern prediction with partial observation for partial walking assistance by using an exoskeleton system. , 2015, , .		3
139	Visual collision detection for corrective movements during grasping on a humanoid robot. , 2014, , .		4
140	Multi-sensor and prediction fusion for contact detection and localization. , 2014, , .		7
141	Changing pre-grasp strategies with increasing object location uncertainty. , 2014, , .		0
142	Master Motor Map (MMM) — Framework and toolkit for capturing, representing, and reproducing human motion on humanoid robots. , 2014, , .		48
143	Self-adaptive harris corner detector on heterogeneous many-core processor. , 2014, , .		1
144	Extracting common sense knowledge from text for robot planning. , 2014, , .		14

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145	Physical interaction for segmentation of unknown textured and non-textured rigid objects. , 2014, , .		23
146	Learn to wipe: A case study of structural bootstrapping from sensorimotor experience. , 2014, , .		26
147	Robust real-time 6D active visual localization for humanoid robots. , 2014, , .		9
148	Learning of grasp selection based on shape-templates. Autonomous Robots, 2014, 36, 51-65.	4.8	80
149	Data-Driven Grasp Synthesisâ€"A Survey. IEEE Transactions on Robotics, 2014, 30, 289-309.	10.3	681
150	Extracting whole-body affordances from multimodal exploration. , 2014, , .		19
151	Resource-Aware Harris Corner Detection Based on Adaptive Pruning. Lecture Notes in Computer Science, 2014, , 1-12.	1.3	6
152	Gaze selection during manipulation tasks. , 2013, , .		7
153	Robot placement based on reachability inversion. , 2013, , .		100
154	Synthesizing object receiving motions of humanoid robots with human motion database. , 2013, , .		34
155	Synthesizing compliant reaching movements by searching a database of example trajectories. , 2013, , .		9
156	Action sequence reproduction based on automatic segmentation and Object-Action Complexes. , 2013, , .		23
157	Grounded spatial symbols for task planning based on experience. , 2013, , .		9
158	Modulation of motor primitives using force feedback: Interaction with the environment and bimanual tasks. , 2013, , .		14
159	Development of a five-finger dexterous hand without feedback control: The TUAT/Karlsruhe humanoid hand. , 2013, , .		20
160	Towards online trajectory generation considering robot dynamics and torque limits. , 2013, , .		6
161	Integrating visual perception and manipulation for autonomous learning of object representations. Adaptive Behavior, 2013, 21, 328-345.	1.9	25
162	ARMAR-4: A 63 DOF torque controlled humanoid robot. , 2013, , .		44

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163	Grasp and Motion Planning for Humanoid Robots. Mechanisms and Machine Science, 2013, , 329-359.	0.5	1
164	ARMAR-III: Advances in Humanoid Grasping and Manipulation. Journal of the Robotics Society of Japan, 2013, 31, 341-346.	0.1	7
165	EFFICIENT INVERSE KINEMATICS COMPUTATION BASED ON REACHABILITY ANALYSIS. International Journal of Humanoid Robotics, 2012, 09, 1250035.	1.1	27
166	Haptic object recognition for multi-fingered robot hands. , 2012, , .		35
167	Task-based Grasp Adaptation on a Humanoid Robot. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2012, 45, 779-786.	0.4	12
168	Visual Servoing fÃ¼r ein- und zweiarmige Manipulationsaufgaben bei humanoiden Robotern. Automatisierungstechnik, 2012, 60, 309-317.	0.8	4
169	Kinematic BÃ©zier Maps. IEEE Transactions on Systems, Man, and Cybernetics, 2012, 42, 1215-1230.	5.0	11
170	Template-based learning of grasp selection. , 2012, , .		65
171	Discovery, segmentation and reactive grasping of unknown objects. , 2012, , .		9
172	Manipulability analysis. , 2012, , .		83
173	Encoding of periodic and their transient motions by a single dynamic movement primitive. , 2012, , .		28
174	Retrieving contact points without environment knowledge. , 2012, , .		3
175	Constellation - An algorithm for finding robot configurations that satisfy multiple constraints. , 2012, , .		2
176	A skeleton-based approach to grasp known objects with a humanoid robot. , 2012, , .		8
177	Learning robot dynamics with Kinematic Bézier Maps. , 2012, , .		2
178	Templates for pre-grasp sliding interactions. Robotics and Autonomous Systems, 2012, 60, 411-423.	5.1	21
179	Humanoid Robotics [TC Spotlight]. IEEE Robotics and Automation Magazine, 2012, 19, 108-118.	2.0	10
180	Simultaneous Grasp and Motion Planning: Humanoid Robot ARMAR-III. IEEE Robotics and Automation Magazine, 2012, 19, 43-57.	2.0	66

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181	General Robot Kinematics Decomposition Without Intermediate Markers. IEEE Transactions on Neural Networks and Learning Systems, 2012, 23, 620-630.	11.3	12
182	Human-inspired selection of grasp hypotheses for execution on a humanoid robot. , 2011, , .		3
183	Segmentation and learning of unknown objects through physical interaction. , 2011, , .		15
184	Bimanual grasp planning. , 2011, , .		20
185	RDT⁺: A parameter-free algorithm for exact motion planning. , 2011, , .		10
186	Objectâ€"Action Complexes: Grounded abstractions of sensoryâ€"motor processes. Robotics and Autonomous Systems, 2011, 59, 740-757.	5.1	127
187	Towards stratified model-based environmental visual perception for humanoid robots. Pattern Recognition Letters, 2011, 32, 2254-2260.	4.2	2
188	Towards a unifying grasp representation for imitation learning on humanoid robots. , 2011, , .		6
189	Towards high-level, cloud-distributed robotic telepresence: Concept introduction and preliminary experiments. , 2011, , .		0
190	6-DoF model-based tracking of arbitrarily shaped 3D objects. , 2011, , .		33
191	Advances in Robot Programming by Demonstration. KI - Kunstliche Intelligenz, 2010, 24, 295-303.	3.2	24
192	Guest Editorial Representations and Architectures for Cognitive Systems. IEEE Transactions on Autonomous Mental Development, 2010, 2, 265-266.	1.6	1
193	A strategy for grasping unknown objects based on co-planarity and colour information. Robotics and Autonomous Systems, 2010, 58, 551-565.	5.1	77
194	Task-Specific Generalization of Discrete and Periodic Dynamic Movement Primitives. IEEE Transactions on Robotics, 2010, 26, 800-815.	10.3	292
195	Planning multi-robot grasping motions. , 2010, , .		15
196	Unions of balls for shape approximation in robot grasping. , 2010, , .		41
197	Autonomous acquisition of visual multi-view object representations for object recognition on a humanoid robot. , 2010, , .		33
198	Integrated Grasp and motion planning. , 2010, , .		42

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199	On-line periodic movement and force-profile learning for adaptation to new surfaces. , 2010, , .		37
200	Representation of pre-grasp strategies for object manipulation. , 2010, , .		19
201	Towards social integration of humanoid robots by conversational concept learning. , 2010, , .		2
202	Efficient Motion and Grasp Planning for Humanoid Robots. , 2010, , 129-160.		6
203	OpenGRASP: A Toolkit for Robot Grasping Simulation. Lecture Notes in Computer Science, 2010, , 109-120.	1.3	75
204	Model-Based Visual Self-localization Using Gaussian Spheres. , 2010, , 299-324.		3
205	Planning and execution of grasping motions on a humanoid robot. , 2009, , .		12
206	Active multi-view object search on a humanoid head. , 2009, , .		12
207	Accurate shape-based 6-DoF pose estimation of single-colored objects. , 2009, , .		18
208	Bayesian visual feature integration with saccadic eye movements. , 2009, , .		4
209	Learning to reach by reinforcement learning using a receptive field based function approximation approach with continuous actions. Biological Cybernetics, 2009, 100, 249-260.	1.3	13
210	Grasp recognition and mapping on humanoid robots. , 2009, , .		12
211	Combining Harris interest points and the SIFT descriptor for fast scale-invariant object recognition. , 2009, , .		101
212	Autonomous acquisition of pushing actions to support object grasping with a humanoid robot. , 2009, , .		30
213	Force position control for a pneumatic anthropomorphic hand. , 2009, , .		15
214	Rapid learning of humanoid body schemas with Kinematic Bézier Maps. , 2009, , .		18
215	Humanoid motion planning for dual-arm manipulation and re-grasping tasks. , 2009, , .		120
216	Learning and generalization of motor skills by learning from demonstration. , 2009, , .		425

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217	Grasp affordances from multi-fingered tactile exploration using dynamic potential fields. , 2009, , .		33
218	Visual servoing for dual arm motions on a humanoid robot. , 2009, , .		22
219	Tactile object exploration using cursor navigation sensors. , 2009, , .		5
220	Dynamic Potential Fields for Dexterous Tactile Exploration. Cognitive Systems Monographs, 2009, , 23-31.	0.1	1
221	Stereo-Based vs. Monocular 6-DoF Pose Estimation Using Point Features: A Quantitative Comparison. Informatik Aktuell, 2009, , 41-48.	0.6	9
222	Toward humanoid manipulation in human-centred environments. Robotics and Autonomous Systems, 2008, 56, 54-65.	5.1	98
223	Manipulation strategies and Imitation learning in humanoid robots. , 2008, , .		0
224	Imitation of human motion on a humanoid robot using non-linear optimization. , 2008, , .		55
225	A potential field approach to dexterous tactile exploration of unknown objects. , 2008, , .		37
226	Control and recognition on a humanoid head with cameras having different field of view. , 2008, , .		1
227	Compliant interaction in household environments by the Armar-III humanoid robot. , 2008, , .		22
228	The Karlsruhe Humanoid Head. , 2008, , .		74
229	Adaptive motion planning for humanoid robots. , 2008, , .		20
230	Robust real-time stereo-based markerless human motion capture. , 2008, , .		22
231	Object separation using active methods and multi-view representations. , 2008, , .		4
232	Visual servoing for humanoid grasping and manipulation tasks. , 2008, , .		60
233	Stereo-based 6D object localization for grasping with humanoid robot systems. , 2007, , .		34
234	Toward an Unified Representation for Imitation of Human Motion on Humanoids. Proceedings - IEEE International Conference on Robotics and Automation, 2007, , .	0.0	44

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235	Efficient motion planning for humanoid robots using lazy collision checking and enlarged robot models. , 2007, , .		15
236	Stereo-based Markerless Human Motion Capture for Humanoid Robot Systems. Proceedings - IEEE International Conference on Robotics and Automation, 2007, , .	0.0	21
237	Manipulation Planning Among Movable Obstacles. Proceedings - IEEE International Conference on Robotics and Automation, 2007, , .	0.0	131
238	Synthesizing goal-directed actions from a library of example movements. , 2007, , .		13
239	Sensorimotor processes for learning object representations. , 2007, , .		6
240	Integrated Grasp Planning and Visual Object Localization For a Humanoid Robot with Five-Fingered Hands. , 2006, , .		70
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242	Imitation Learning of Dual-Arm Manipulation Tasks in Humanoid Robots. , 2006, , .		79
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