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	Data-Driven Grasp Synthesisâ€"A Survey. IEEE Transactions on Robotics, 2014, 30, 289-309.	10.3	681
2	Learning and generalization of motor skills by learning from demonstration. , 2009, , .		425
3	Task-Specific Generalization of Discrete and Periodic Dynamic Movement Primitives. IEEE Transactions on Robotics, 2010, 26, 800-815.	10.3	292
4	Manipulation Planning Among Movable Obstacles. Proceedings - IEEE International Conference on Robotics and Automation, 2007, , .	0.0	131
5	Objectâ€"Action Complexes: Grounded abstractions of sensoryâ€"motor processes. Robotics and Autonomous Systems, 2011, 59, 740-757.	5.1	127
6	Humanoid motion planning for dual-arm manipulation and re-grasping tasks. , 2009, , .		120
7	The KIT whole-body human motion database. , 2015, , .		120
8	Combining Harris interest points and the SIFT descriptor for fast scale-invariant object recognition. , 2009, , .		101
9	Robot placement based on reachability inversion. , 2013, , .		100
10	Toward humanoid manipulation in human-centred environments. Robotics and Autonomous Systems, 2008, 56, 54-65.	5.1	98
11	Manipulability analysis. , 2012, , .		83
12	Learning of grasp selection based on shape-templates. Autonomous Robots, 2014, 36, 51-65.	4.8	80
13	Imitation Learning of Dual-Arm Manipulation Tasks in Humanoid Robots. , 2006, , .		79
14	A strategy for grasping unknown objects based on co-planarity and colour information. Robotics and Autonomous Systems, 2010, 58, 551-565.	5.1	77
15	Unifying Representations and Large-Scale Whole-Body Motion Databases for Studying Human Motion. IEEE Transactions on Robotics, 2016, 32, 796-809.	10.3	77
16	OpenGRASP: A Toolkit for Robot Grasping Simulation. Lecture Notes in Computer Science, 2010, , 109-120.	1.3	75
17	The Karlsruhe Humanoid Head. , 2008, , .		74
18	Integrated Grasp Planning and Visual Object Localization For a Humanoid Robot with Five-Fingered Hands. , 2006, , .		70

#	Article	IF	Citations
19	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
20	Simultaneous Grasp and Motion Planning: Humanoid Robot ARMAR-III. IEEE Robotics and Automation Magazine, 2012, 19, 43-57.	2.0	66
21	Template-based learning of grasp selection. , 2012, , .		65
22	Visual servoing for humanoid grasping and manipulation tasks. , 2008, , .		60
23	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
24	The KIT Motion-Language Dataset. Big Data, 2016, 4, 236-252.	3.4	57
25	Imitation of human motion on a humanoid robot using non-linear optimization. , 2008, , .		55
26	Representing the robot's workspace through constrained manipulability analysis. Autonomous Robots, 2015, 38, 17-30.	4.8	53
27	Grasping of Unknown Objects Using Deep Convolutional Neural Networks Based on Depth Images. , 2018, , .		53
28	Master Motor Map (MMM) â€" Framework and toolkit for capturing, representing, and reproducing human motion on humanoid robots. , 2014, , .		48
29	Toward an Unified Representation for Imitation of Human Motion on Humanoids. Proceedings - IEEE International Conference on Robotics and Automation, 2007, , .	0.0	44
30	ARMAR-4: A 63 DOF torque controlled humanoid robot. , 2013, , .		44
31	Adaptation and coaching of periodic motion primitives through physical and visual interaction. Robotics and Autonomous Systems, 2016, 75, 340-351.	5.1	43
32	Integrated Grasp and motion planning. , 2010, , .		42
33	Unions of balls for shape approximation in robot grasping. , 2010, , .		41
34	Kinodynamic randomized rearrangement planning via dynamic transitions between statically stable states. , 2015, , .		39
35	The KIT Prosthetic Hand: Design and Control. , 2018, , .		39
36	The robot software framework ArmarX. IT - Information Technology, 2015, 57, 99-111.	0.9	38

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37	A potential field approach to dexterous tactile exploration of unknown objects. , 2008, , .		37
38	On-line periodic movement and force-profile learning for adaptation to new surfaces. , 2010, , .		37
39	Design and control of the lower limb exoskeleton KIT-EXO-1. , 2015, , .		36
40	Part-based grasp planning for familiar objects. , 2016, , .		36
41	Learning Object-Action Relations from Bimanual Human Demonstration Using Graph Networks. IEEE Robotics and Automation Letters, 2020, 5, 187-194.	5.1	36
42	Haptic object recognition for multi-fingered robot hands. , 2012, , .		35
43	Nonprehensile whole arm rearrangement planning on physics manifolds. , 2015, , .		35
44	I-Support: A robotic platform of an assistive bathing robot for the elderly population. Robotics and Autonomous Systems, 2020, 126, 103451.	5.1	35
45	Stereo-based 6D object localization for grasping with humanoid robot systems. , 2007, , .		34
46	Synthesizing object receiving motions of humanoid robots with human motion database. , 2013, , .		34
47	Grasp affordances from multi-fingered tactile exploration using dynamic potential fields. , 2009, , .		33
48	Autonomous acquisition of visual multi-view object representations for object recognition on a humanoid robot. , 2010, , .		33
49	6-DoF model-based tracking of arbitrarily shaped 3D objects. , 2011, , .		33
50	ARMAR-6: A Collaborative Humanoid Robot for Industrial Environments. , 2018, , .		32
51	ROBDEKON: Robotic Systems for Decontamination in Hazardous Environments. , 2019, , .		32
52	Autonomous acquisition of pushing actions to support object grasping with a humanoid robot. , 2009, , .		30
53	Encoding of periodic and their transient motions by a single dynamic movement primitive. , 2012, , .		28
54	Workspace analysis for planning human-robot interaction tasks. , 2016, , .		28

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55	EFFICIENT INVERSE KINEMATICS COMPUTATION BASED ON REACHABILITY ANALYSIS. International Journal of Humanoid Robotics, 2012, 09, 1250035.	1.1	27
56	Design of a high-performance humanoid dual arm system with inner shoulder joints. , 2016, , .		27
57	An Embedded, Multi-Modal Sensor System for Scalable Robotic and Prosthetic Hand Fingers. Sensors, 2020, 20, 101.	3.8	27
58	Learn to wipe: A case study of structural bootstrapping from sensorimotor experience. , 2014, , .		26
59	Integrating visual perception and manipulation for autonomous learning of object representations. Adaptive Behavior, 2013, 21, 328-345.	1.9	25
60	The ArmarX Statechart Concept: Graphical Programing of Robot Behavior. Frontiers in Robotics and AI, 2016, 3, .	3.2	25
61	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
62	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
63	Advances in Robot Programming by Demonstration. KI - Kunstliche Intelligenz, 2010, 24, 295-303.	3.2	24
64	Learning Via-Point Movement Primitives with Inter- and Extrapolation Capabilities. , 2019, , .		24
65	Action sequence reproduction based on automatic segmentation and Object-Action Complexes. , 2013, , .		23
66	Physical interaction for segmentation of unknown textured and non-textured rigid objects. , 2014, , .		23
67	The Anthropomorphic Hand Assessment Protocol (AHAP). Robotics and Autonomous Systems, 2019, 121, 103259.	5.1	23
68	Compliant interaction in household environments by the Armar-III humanoid robot. , 2008, , .		22
69	Robust real-time stereo-based markerless human motion capture. , 2008, , .		22
70	Visual servoing for dual arm motions on a humanoid robot. , 2009, , .		22
71	Combining Appearance-based and Model-based Methods for Real-Time Object Recognition and 6D Localization. , 2006, , .		21
72	Stereo-based Markerless Human Motion Capture for Humanoid Robot Systems. Proceedings - IEEE International Conference on Robotics and Automation, 2007, , .	0.0	21

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73	Templates for pre-grasp sliding interactions. Robotics and Autonomous Systems, 2012, 60, 411-423.	5.1	21
74	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
75	Adaptive motion planning for humanoid robots. , 2008, , .		20
76	Bimanual grasp planning. , 2011, , .		20
77	Development of a five-finger dexterous hand without feedback control: The TUAT/Karlsruhe humanoid hand. , 2013, , .		20
78	Towards a hierarchy of loco-manipulation affordances. , 2016, , .		20
79	Human Motion Classification Based on Multi-Modal Sensor Data for Lower Limb Exoskeletons. , 2018, , .		20
80	Representation of pre-grasp strategies for object manipulation. , 2010, , .		19
81	Extracting whole-body affordances from multimodal exploration. , 2014, , .		19
82	A whole-body pose taxonomy for loco-manipulation tasks. , 2015, , .		19
83	A Novel Greeting Selection System for a Culture-Adaptive Humanoid Robot. International Journal of Advanced Robotic Systems, 2015, 12, 34.	2.1	19
84	Analyzing whole-body pose transitions in multi-contact motions. , 2015, , .		19
85	Accurate shape-based 6-DoF pose estimation of single-colored objects. , 2009, , .		18
86	Rapid learning of humanoid body schemas with Kinematic Bézier Maps. , 2009, , .		18
87	Hierarchical segmentation of manipulation actions based on object relations and motion characteristics. , 2015, , .		18
88	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
89	Highly integrated sensor-actuator-controller units for modular robot design. , 2017, , .		17
90	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

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91	Validation of whole-body loco-manipulation affordances for pushability and liftability. , 2015, , .		16
92	Heuristic 3D object shape completion based on symmetry and scene context. , 2016, , .		16
93	Active Tactile Exploration Based on Cost-Aware Information Gain Maximization. International Journal of Humanoid Robotics, 2018, 15, 1850015.	1.1	16
94	Planning High-Quality Grasps Using Mean Curvature Object Skeletons. IEEE Robotics and Automation Letters, 2018, 3, 911-918.	5.1	16
95	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
96	Predicting Grasp Success with a Soft Sensing Skin and Shape-Memory Actuated Gripper. , 2019, , .		16
97	Movement Primitive Learning and Generalization: Using Mixture Density Networks. IEEE Robotics and Automation Magazine, 2020, 27, 22-32.	2.0	16
98	Designing Prosthetic Hands With Embodied Intelligence: The KIT Prosthetic Hands. Frontiers in Neurorobotics, 2022, 16, 815716.	2.8	16
99	Efficient motion planning for humanoid robots using lazy collision checking and enlarged robot models. , 2007, , .		15
100	Force position control for a pneumatic anthropomorphic hand. , 2009, , .		15
101	Planning multi-robot grasping motions. , 2010, , .		15
102	Segmentation and learning of unknown objects through physical interaction. , 2011, , .		15
103	IK-Map: An enhanced workspace representation to support inverse kinematics solvers. , 2015, , .		15
104	Local implicit surface estimation for haptic exploration. , 2016, , .		15
105	Modulation of motor primitives using force feedback: Interaction with the environment and bimanual tasks. , 2013, , .		14
106	Extracting common sense knowledge from text for robot planning. , 2014, , .		14
107	Extraction of Whole-Body Affordances for Loco-Manipulation Tasks. International Journal of Humanoid Robotics, 2015, 12, 1550031.	1.1	14
108	Is hugging a robot weird? Investigating the influence of robot appearance on users' perception of hugging. , 2016, , .		14

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109	A combined approach for robot placement and coverage path planning for mobile manipulation. , 2017, , .		14
110	Visuo-Haptic Grasping of Unknown Objects based on Gaussian Process Implicit Surfaces and Deep Learning. , 2019, , .		14
111	Predicting Pushing Action Effects on Spatial Object Relations by Learning Internal Prediction Models. , 2020, , .		14
112	Synthesizing goal-directed actions from a library of example movements. , 2007, , .		13
113	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
114	An affordance-based pilot interface for high-level control of humanoid robots in supervised autonomy. , 2016, , .		13
115	The KIT Bimanual Manipulation Dataset. , 2021, , .		13
116	Planning and execution of grasping motions on a humanoid robot. , 2009, , .		12
117	Active multi-view object search on a humanoid head. , 2009, , .		12
118	Grasp recognition and mapping on humanoid robots. , 2009, , .		12
119	Task-based Grasp Adaptation on a Humanoid Robot. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2012, 45, 779-786.	0.4	12
120	General Robot Kinematics Decomposition Without Intermediate Markers. IEEE Transactions on Neural Networks and Learning Systems, 2012, 23, 620-630.	11.3	12
121	On Force Synergies in Human Grasping Behavior. , 2019, , .		12
122	Human-Inspired Representation of Object-Specific Grasps for Anthropomorphic Hands. International Journal of Humanoid Robotics, 2020, 17, 2050008.	1.1	12
123	Vision-Based Robotic Pushing and Grasping for Stone Sample Collection under Computing Resource Constraints. , 2021, , .		12
124	Kinematic BÃ©zier Maps. IEEE Transactions on Systems, Man, and Cybernetics, 2012, 42, 1215-1230.	5.0	11
125	A jumping robot using soft pneumatic actuator. , 2015, , .		11
126	Self-aligning exoskeleton hip joint: Kinematic design with five revolute, three prismatic and one ball joint. , 2017, 2017, 1349-1355.		11

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127	A whole-body support pose taxonomy for multi-contact humanoid robot motions. Science Robotics, 2017, 2, .	17.6	11
128	Coupling Mobile Base and End-Effector Motion in Task Space. , 2018, , .		11
129	Resource-Aware Object Classification and Segmentation for Semi-Autonomous Grasping with Prosthetic Hands. , 2019, , .		11
130	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
131	Uncertainty-Aware Contact-Safe Model-Based Reinforcement Learning. IEEE Robotics and Automation Letters, 2021, 6, 3918-3925.	5.1	11
132	A Soft Humanoid Hand with In-Finger Visual Perception. , 2020, , .		11
133	RDT^{+}: A parameter-free algorithm for exact motion planning. , 2011, , .		10
134	Humanoid Robotics [TC Spotlight]. IEEE Robotics and Automation Magazine, 2012, 19, 108-118.	2.0	10
135	Multi-purpose natural language understanding linked to sensorimotor experience in humanoid robots. , 2015, , .		10
136	Enriched manipulation action semantics for robot execution of time constrained tasks. , 2016, , .		10
137	Affordance-Based Grasping and Manipulation in Real World Applications. , 2020, , .		10
138	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
139	Efficient Collision and Self-Collision Detection for Humanoids Based on Sphere Trees Hierarchies. , 2006, , .		9
140	Discovery, segmentation and reactive grasping of unknown objects. , 2012, , .		9
141	Synthesizing compliant reaching movements by searching a database of example trajectories. , 2013, , .		9
142	Grounded spatial symbols for task planning based on experience. , 2013, , .		9
143	Robust real-time 6D active visual localization for humanoid robots. , 2014, , .		9
144	Coordinate Change Dynamic Movement Primitives â€" A leader-follower approach. , 2016, , .		9

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145	New mechanism for a 3 DOF exoskeleton hip joint with five revolute and two prismatic joints. , 2016, , .		9
146	Synergy-Based, Data-Driven Generation of Object-Specific Grasps for Anthropomorphic Hands. , 2018, , .		9
147	Stereo-Based vs. Monocular 6-DoF Pose Estimation Using Point Features: A Quantitative Comparison. Informatik Aktuell, 2009, , 41-48.	0.6	9
148	A skeleton-based approach to grasp known objects with a humanoid robot. , 2012, , .		8
149	Unsupervised Linking of Visual Features to Textual Descriptions in Long Manipulation Activities. IEEE Robotics and Automation Letters, 2017, 2, 1397-1404.	5.1	8
150	Online stability estimation based on inertial sensor data for human and humanoid fall prevention. , 2017, , .		8
151	Task-oriented generalization of dynamic movement primitive. , 2017, , .		8
152	Evaluation of an Industrial Robotic Assistant in an Ecological Environment. , 2019, , .		8
153	Graph-based Task-specific Prediction Models for Interactions between Deformable and Rigid Objects. , 2021, , .		8
154	Gaze selection during manipulation tasks. , 2013, , .		7
155	Multi-sensor and prediction fusion for contact detection and localization. , 2014, , .		7
156	Collaboration of heterogeneous agents in time constrained tasks. , 2016, , .		7
157	Autonomous view selection and gaze stabilization for humanoid robots. , 2017, , .		7
158	Autonomous narration of humanoid robot kitchen task experience. , 2017, , .		7
159	Autonomous Detection and Experimental Validation of Affordances. IEEE Robotics and Automation Letters, 2018, 3, 1949-1956.	5.1	7
160	Learning and Adaptation of Inverse Dynamics Models: A Comparison. , 2019, , .		7
161	Exoskeleton Arm Pronation/Supination Assistance Mechanism With A Guided Double Rod System. , 2019, , .		7
162	ARMAR-III: Advances in Humanoid Grasping and Manipulation. Journal of the Robotics Society of Japan, 2013, 31, 341-346.	0.1	7

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163	Deep Episodic Memory for Verbalization of Robot Experience. IEEE Robotics and Automation Letters, 2021, 6, 5808-5815.	5.1	7
164	Mechanical design and friction modelling of a cable-driven upper-limb exoskeleton. Mechanism and Machine Theory, 2022, 171, 104746.	4.5	7
165	Sensorimotor processes for learning object representations. , 2007, , .		6
166	Towards a unifying grasp representation for imitation learning on humanoid robots. , 2011, , .		6
167	Towards online trajectory generation considering robot dynamics and torque limits. , 2013, , .		6
168	Resource-awareness on heterogeneous MPSoCs for image processing. Journal of Systems Architecture, 2015, 61, 668-680.	4.3	6
169	Real-time whole-body human motion tracking based on unlabeled markers. , 2016, , .		6
170	Two ways of walking: Contrasting a reflexive neuro-controller and a LIP-based ZMP-controller on the humanoid robot ARMAR-4. , 2016, , .		6
171	Textile identification using fingertip motion and 3D force sensors in an open-source gripper. , 2017, , .		6
172	Graph-based visual semantic perception for humanoid robots. , 2017, , .		6
173	Affordance-Based Multi-Contact Whole-Body Pose Sequence Planning for Humanoid Robots in Unknown Environments. , 2018, , .		6
174	Active Vision for Extraction of Physically Plausible Support Relations. , 2019, , .		6
175	Efficient Motion and Grasp Planning for Humanoid Robots. , 2010, , 129-160.		6
176	Binary-LoRAX: Low-Latency Runtime Adaptable XNOR Classifier for Semi-Autonomous Grasping with Prosthetic Hands. , 2021, , .		6
177	Resource-Aware Harris Corner Detection Based on Adaptive Pruning. Lecture Notes in Computer Science, 2014, , 1-12.	1.3	6
178	Fast Reactive Grasping with In-Finger Vision and In-Hand FPGA-accelerated CNNs. , 2021, , .		6
179	Tactile object exploration using cursor navigation sensors. , 2009, , .		5
180	Using language models to generate whole-body multi-contact motions. , 2016, , .		5

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181	Distance-Aware Dynamically Weighted Roadmaps for Motion Planning in Unknown Environments. IEEE Robotics and Automation Letters, 2018, 3, 2016-2023.	5.1	5
182	The KIT Swiss Knife Gripper for Disassembly Tasks: A Multi-Functional Gripper for Bimanual Manipulation with a Single Arm. , 2018, , .		5
183	Projected Force-Admittance Control for Compliant Bimanual Tasks. , 2018, , .		5
184	Minimal Sensor Setup in Lower Limb Exoskeletons for Motion Classification based on Multi-Modal Sensor Data. , 2019, , .		5
185	The KIT Gripper: A Multi-Functional Gripper for Disassembly Tasks. , 2021, , .		5
186	Semantic Scene Manipulation Based on 3D Spatial Object Relations and Language Instructions. , 2021, , .		5
187	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
188	Object separation using active methods and multi-view representations. , 2008, , .		4
189	Bayesian visual feature integration with saccadic eye movements. , 2009, , .		4
190	Visual Servoing für ein- und zweiarmige Manipulationsaufgaben bei humanoiden Robotern. Automatisierungstechnik, 2012, 60, 309-317.	0.8	4
191	Visual collision detection for corrective movements during grasping on a humanoid robot. , 2014, , .		4
192	Transferring object grasping knowledge and skill across different robotic platforms. , 2015, , .		4
193	Resource-aware motion planning. , 2016, , .		4
194	The Karlsruhe ARMAR Humanoid Robot Family. , 2019, , 337-368.		4
195	Representing Spatial Object Relations as Parametric Polar Distribution for Scene Manipulation Based on Verbal Commands. , 2020, , .		4
196	Human-inspired selection of grasp hypotheses for execution on a humanoid robot. , 2011, , .		3
197	Retrieving contact points without environment knowledge. , 2012, , .		3
198	Self-adaptive corner detection on MPSoC through resource-aware programming. Journal of Systems Architecture, 2015, 61, 520-530.	4.3	3

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199	Walking pattern prediction with partial observation for partial walking assistance by using an exoskeleton system. , 2015, , .		3
200	The sense of surface orientation â€" A new sensor modality for humanoid robots. , 2016, , .		3
201	Learning and force adaptation for interactive actions. , 2016, , .		3
202	A framework for evaluating motion segmentation algorithms. , 2017, , .		3
203	Learning Efficient Omni-Directional Capture Stepping for Humanoid Robots from Human Motion and Simulation Data. , 2018, , .		3
204	A Multimodal Embedded Sensor System for Scalable Robotic and Prosthetic Fingers. , 2018, , .		3
205	A Rolling Contact Joint Lower Extremity Exoskeleton Knee. Advances in Intelligent Systems and Computing, 2019, , 263-277.	0.6	3
206	Model-Based Visual Self-localization Using Gaussian Spheres. , 2010, , 299-324.		3
207	The Karlsruhe ARMAR Humanoid Robot Family. , 2017, , 1-32.		3
208	Torque-Based Velocity Control for Safe Human-Humanoid Interaction. Advances in Intelligent Systems and Computing, 2020, , 61-68.	0.6	3
209	Probabilistic Spatio-Temporal Fusion of Affordances for Grasping and Manipulation. IEEE Robotics and Automation Letters, 2022, 7, 3226-3233.	5.1	3
210	Oriented Surface Reachability Maps for Robot Placement. , 2022, , .		3
211	Towards social integration of humanoid robots by conversational concept learning. , 2010, , .		2
212	Towards stratified model-based environmental visual perception for humanoid robots. Pattern Recognition Letters, 2011, 32, 2254-2260.	4.2	2
213	Constellation - An algorithm for finding robot configurations that satisfy multiple constraints. , 2012, , .		2
214	Learning robot dynamics with Kinematic Bézier Maps. , 2012, , .		2
215	On the Dualities Between Grasping and Whole-Body Loco-Manipulation Tasks. Springer Proceedings in Advanced Robotics, 2018, , 305-322.	1.3	2
216	Exploration and Reconstruction of Unknown Objects using a Novel Normal and Contact Sensor. , 2018, , .		2

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217	An Ontology-Based Expert System to Support the Design of Humanoid Robot Components. , 2018, , .		2
218	Feature Space Exploration for Motion Classification Based on Multi-Modal Sensor Data for Lower Limb Exoskeletons. , 2019, , .		2
219	Probabilistic Representation of Objects and Their Support Relations. Springer Proceedings in Advanced Robotics, 2021, , 510-519.	1.3	2
220	Detecting Grasp Phases and Adaption of Object-Hand Interaction Forces of a Soft Humanoid Hand Based on Tactile Feedback. , 2021, , .		2
221	BlueSky: Combining Task Planning and Activity-Centric Access Control for Assistive Humanoid Robots. , 2022, , .		2
222	Control and recognition on a humanoid head with cameras having different field of view. , 2008, , .		1
223	Guest Editorial Representations and Architectures for Cognitive Systems. IEEE Transactions on Autonomous Mental Development, 2010, 2, 265-266.	1.6	1
224	Self-adaptive harris corner detector on heterogeneous many-core processor. , 2014, , .		1
225	Multimodal gaze stabilization of a humanoid robot based on reafferences. , 2017, , .		1
226	The Rise of the Robots: The European Robotics Flagship [Regional Spotlight]. IEEE Robotics and Automation Magazine, 2018, 25, 121-122.	2.0	1
227	Grasp and Motion Planning for Humanoid Robots. Mechanisms and Machine Science, 2013, , 329-359.	0.5	1
228	Dynamic Potential Fields for Dexterous Tactile Exploration. Cognitive Systems Monographs, 2009, , 23-31.	0.1	1
229	Learning to Sequence and Blend Robot Skills via Differentiable Optimization. IEEE Robotics and Automation Letters, 2022, 7, 8431-8438.	5.1	1
230	Agiles Produktionssystem mittels lernender Roboter bei ungewissen Produktzuständen am Beispiel der Anlasser-Demontage. Automatisierungstechnik, 2022, 70, 504-516.	0.8	1
231	Erfassung und Interpretation menschlicher Handlungen für die Programmierung von Robotern in der Produktion. Automatisierungstechnik, 2022, 70, 517-533.	0.8	1
232	Manipulation strategies and Imitation learning in humanoid robots. , 2008, , .		0
233	Towards high-level, cloud-distributed robotic telepresence: Concept introduction and preliminary experiments. , 2011, , .		0
234	Changing pre-grasp strategies with increasing object location uncertainty. , 2014, , .		0

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235	Guest Editorial: "Humans and Humanoids Face to Face". International Journal of Humanoid Robotics, 2015, 12, 1502001.	1.1	0
236	Special Issue on Humanoid Robotics. Advanced Robotics, 2015, 29, 301-301.	1.8	0
237	Generation of Walking Motions Based on Whole-Body Poses and QP Control. , 2018, , .		0
238	EVALUATING AND OPTIMIZING COMPONENT-BASED ROBOT ARCHITECTURES USING NETWORK SIMULATION. , 2018, , .		0
239	Linear Contact Modeling and Stochastic Parameter Optimization for LQR-Based Whole-Body Push Recovery. , 2018, , .		0
240	Temporal Concurrent Planning with Stressed Actions. , 2018, , .		0
241	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
242	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
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