Sven Behnke

List of Publications by Year
in descending order

301 papers	7,466 citations	182225 30 h-index	169272 56 g-index
317 all docs	317 docs citations	317 times ranked	6716 citing authors

#	Article	IF	Citations
1	LatticeNet: fast spatio-temporal point cloud segmentation using permutohedral lattices. Autonomous Robots, 2022, 46, 45-60.	3.2	16
2	Special issue on the 2020 â€œRoboticsː Science and Systemsâ€•conference. Autonomous Robots, 2022, 46, 1-3.	3.2	0
3	Real-Time Pose Estimation fromÂImages forÂMultiple Humanoid Robots. Lecture Notes in Computer Science, 2022, , 91-102.	1.0	3
4	6D Object Pose Estimation Using Keypoints andÂPart Affinity Fields. Lecture Notes in Computer Science, 2022, , 78-90.	1.0	3
5	Autonomous Wall-building and Firefighting: Team NimbRoâ€™s UGV Solution for MBZIRC 2020. , 2022, 2, 55-74.		0
6	Target Chase, Wall Building, and Fire Fighting: Autonomous UAVs of Team NimbRo at MBZIRC 2020. , 2022, 2, 807-842.		1
7	Abstract Flow for Temporal Semantic Segmentation on the Permutohedral Lattice. , 2022, , .		5
8	Real-Robot Deep Reinforcement Learning: Improving Trajectory Tracking of Flexible-Joint Manipulator with Reference Correction. , 2022, , .		1
9	Bipedal Humanoid Hardware Design: a Technology Review. Current Robotics Reports, 2021, 2, 201-210.	5.1	27
10	Autonomous Fire Fighting with a UAV-UGV Team at MBZIRC 2020. , 2021, , .		16
11	Autonomous Flight in Unknown GNSS-denied Environments for Disaster Examination. , 2021, , .		9
12	Local Frequency Domain Transformer Networks for Video Prediction. , 2021, , .		6
13	Pheno4D: A spatio-temporal dataset of maize and tomato plant point clouds for phenotyping and advanced plant analysis. PLoS ONE, 2021, 16, e0256340.	1.1	39
14	Robust Skeletonization for Plant Root Structure Reconstruction from MRI. , 2021, , .		0
15	Search-based Planning of Dynamic MAV Trajectories Using Local Multiresolution State Lattices. , 2021, , .		6
16	DeepWalk: Omnidirectional Bipedal Gait by Deep Reinforcement Learning. , 2021, , .		29
17	Low-Latency Immersive 6D Televisualization with Spherical Rendering. , 2021, , .		9
18	Real-Time Multi-Modal Semantic Fusion on Unmanned Aerial Vehicles. , 2021, , .		8

#	Article	IF	Citations
19	Bimanual Telemanipulation with Force and Haptic Feedback and Predictive Limit Avoidance. , 2021, , .		7
20	T6D-Direct: Transformers for Multi-object 6D Pose Direct Regression. Lecture Notes in Computer Science, 2021, , 530-544.	1.0	8
21	NimbRo Avatar: Interactive Immersive Telepresence with Force-Feedback Telemanipulation. , 2021, , .		25
22	Real-time Multi-Adaptive-Resolution-Surfel 6D LiDAR Odometry using Continuous-time Trajectory Optimization. , 2021, , .		12
23	Mapless Humanoid Navigation Using Learned Latent Dynamics. , 2021, , .		0
24	Flexible-Joint Manipulator Trajectory Tracking with Learned Two-Stage Model employing One-Step Future Prediction. , 2021, , .		1
25	Semi-supervised Semantic Mapping Through Label Propagation with Semantic Texture Meshes. International Journal of Computer Vision, 2020, 128, 1220-1238.	10.9	12
26	Remote mobile manipulation with the centauro robot: Full‐body telepresence and autonomous operator assistance. Journal of Field Robotics, 2020, 37, 889-919.	3.2	48
27	Stillleben: Realistic Scene Synthesis for Deep Learning in Robotics. , 2020, , .		22
28	Fast Whole-Body Motion Control of Humanoid Robots with Inertia Constraints. , 2020, , .		5
29	Nimbro-OP2X: Affordable Adult-Sized 3D-Printed Open-Source Humanoid Robot for Research. International Journal of Humanoid Robotics, 2020, 17, 2050021.	0.6	5
30	Beyond Photometric Consistency: Gradient-based Dissimilarity for Improving Visual Odometry and Stereo Matching. , 2020, , .		2
31	Autonomous Wall Building with a UGV- UAV Team at MBZIRC 2020. , 2020, , .		4
32	NAT: Noise-Aware Training for Robust Neural Sequence Labeling. , 2020, , .		6
33	ConvPoseCNN: Dense Convolutional 6D Object Pose Estimation. , 2020, , .		13
34	Visual Descriptor Learning from Monocular Video. , 2020, , .		0
35	Category-Level 3D Non-Rigid Registration from Single-View RGB Images. , 2020, , .		2
36	Trajectory Generation with Fast Lidar-based 3D Collision Avoidance for Agile MAVs. , 2020, , .		2

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37	Visually Guided Balloon Popping with an Autonomous MAV at MBZIRC 2020. , 2020, , .		3
38	Autonomous MAV-based Indoor Chimney Inspection with 3D Laser Localization and Textured Surface Reconstruction. Journal of Intelligent and Robotic Systems: Theory and Applications, 2019, 93, 317-335.	2.0	27
39	Semantic Interaction in Augmented Reality Environments for Microsoft HoloLens. , 2019, , .		11
40	Detection and Tracking of Small Objects in Sparse 3D Laser Range Data. , 2019, , .		9
41	Two-Staged Acoustic Modeling Adaption for Robust Speech Recognition by the Example of German Oral History Interviews. , 2019, , .		3
42	Search-based 3D Planning and Trajectory Optimization for Safe Micro Aerial Vehicle Flight Under Sensor Visibility Constraints. , 2019, , .		14
43	Reconstruction of Textured Meshes for Fire and Heat Source Detection. , 2019, , .		3
44	Towards Learning Abstract Representations for Locomotion Planning in High-dimensional State Spaces. , 2019, , .		8
45	Fast Time-optimal Avoidance of Moving Obstacles for High-Speed MAV Flight. , 2019, , .		0
46	A VR System for Immersive Teleoperation and Live Exploration with a Mobile Robot. , 2019, , .		54
47	Directional TSDF: Modeling Surface Orientation for Coherent Meshes. , 2019, , .		3
48	Capture Steps: Robust Walking for Humanoid Robots. International Journal of Humanoid Robotics, 2019, 16, 1950032.	0.6	14
49	SemanticKITTI: A Dataset for Semantic Scene Understanding of LiDAR Sequences. , 2019, , .		800
50	Refining 6D Object Pose Predictions using Abstract Render-and-Compare. , 2019, , .		10
51	Autonomous Bimanual Functional Regrasping of Novel Object Class Instances. , 2019, , .		4
52	Interpretable and Fine-Grained Visual Explanations for Convolutional Neural Networks. , 2019, , .		76
53	Flexible Disaster Response of Tomorrow: Final Presentation and Evaluation of the CENTAURO System. IEEE Robotics and Automation Magazine, 2019, 26, 59-72.	2.2	49
54	Testing the vertical and cyber-physical integration of cognitive robots in manufacturing. Robotics and Computer-Integrated Manufacturing, 2019, 57, 213-229.	6.1	31

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55	Team NimbRo at MBZIRC 2017: Fast landing on a moving target and treasure hunting with a team of micro aerial vehicles. Journal of Field Robotics, 2019, 36, 204-229.	3.2	27
56	Team NimbRo at MBZIRC 2017: Autonomous valve stem turning using a wrench. Journal of Field Robotics, 2019, 36, 170-182.	3.2	10
57	KittingBot: A Mobile Manipulation Robot for Collaborative Kitting in Automotive Logistics. Advances in Intelligent Systems and Computing, 2019, , 849-864.	0.5	7
58	Combining Simulations and Real-Robot Experiments for Bayesian Optimization of Bipedal Gait Stabilization. Lecture Notes in Computer Science, 2019, , 70-82.	1.0	4
59	Semantic RGB-D Perception for Cognitive Service Robots. Advances in Computer Vision and Pattern Recognition, 2019, , 285-307.	0.9	2
60	Utilizing Temporal Information in Deep Convolutional Network for Efficient Soccer Ball Detection and Tracking. Lecture Notes in Computer Science, 2019, , 112-125.	1.0	10
61	RoboCup 2019 AdultSize Winner NimbRo: Deep Learning Perception, In-Walk Kick, Push Recovery, and Team Play Capabilities. Lecture Notes in Computer Science, 2019, , 631-645.	1.0	7
62	DRC Team NimbRo Rescue: Perception and Control for Centaur-Like Mobile Manipulation Robot Momaro. Springer Tracts in Advanced Robotics, 2018, , 145-190.	0.3	10
63	Transferring Category-Based Functional Grasping Skills by Latent Space Non-Rigid Registration. IEEE Robotics and Automation Letters, 2018, 3, 2662-2669.	3.3	17
64	RGB-D object detection and semantic segmentation for autonomous manipulation in clutter. International Journal of Robotics Research, 2018, 37, 437-451.	5.8	105
65	Keyframe-Based Photometric Online Calibration and Color Correction. , 2018, , .		3
66	Robust 6D Object Pose Estimation in Cluttered Scenes Using Semantic Segmentation and Pose Regression Networks. , 2018, , .		14
67	Supervised Autonomous Locomotion and Manipulation for Disaster Response with a Centaur-Like Robot. , 2018, , .		41
68	Bipedal Walking with Corrective Actions in the Tilt Phase Space. , 2018, , .		3
69	NimbRo-OP2X: Adult-Sized Open-Source 3D Printed Humanoid Robot. , 2018, , .		31
70	Online Balanced Motion Generation for Humanoid Robots. , 2018, , .		5
71	Autonomous Dual-Arm Manipulation of Familiar Objects. , 2018, , .		8
72	Learning Postural Synergies for Categorical Grasping Through Shape Space Registration. , 2018, , .		6

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73	Tilt Rotations and the Tilt Phase Space. , 2018, , .		0
74	Fused Angles and the Deficiencies of Euler Angles. , 2018, , .		5
75	Planning Hybrid Driving-Stepping Locomotion on Multiple Levels of Abstraction. , 2018, , .		19
76	Transferring Grasping Skills to Novel Instances by Latent Space Non-Rigid Registration. , 2018, , .		18
77	Efficient Continuous-Time SLAM for 3D Lidar-Based Online Mapping. , 2018, , .		118
78	Fast Object Learning and Dual-arm Coordination for Cluttered Stowing, Picking, and Packing. , 2018, , .		55
79	Fast Autonomous Flight in Warehouses for Inventory Applications. IEEE Robotics and Automation Letters, 2018, 3, 3121-3128.	3.3	71
80	Feature-based visual odometry prior for real-time semi-dense stereo SLAM. Robotics and Autonomous Systems, 2018, 109, 38-58.	3.0	25
81	Grown-Up NimbRo Robots Winning RoboCup 2017 Humanoid AdultSize Soccer Competitions. Lecture Notes in Computer Science, 2018, , 448-460.	1.0	7
82	Location Dependency in Video Prediction. Lecture Notes in Computer Science, 2018, , 630-638.	1.0	5
83	Advanced Soccer Skills and Team Play of RoboCup 2017 TeenSize Winner NimbRo. Lecture Notes in Computer Science, 2018, , 435-447.	1.0	4
84	Combining Semantic and Geometric Features for Object Class Segmentation of Indoor Scenes. IEEE Robotics and Automation Letters, 2017, 2, 49-55.	3.3	37
85	Object class segmentation of RGB-D video using recurrent convolutional neural networks. Neural Networks, 2017, 88, 105-113.	3.3	19
86	NimbRo Rescue: Solving Disaster€response Tasks with the Mobile Manipulation Robot Momaro. Journal of Field Robotics, 2017, 34, 400-425.	3.2	109
87	Fast full state trajectory generation for multirotors. , 2017, , .		21
88	ChimneySpector: Autonomous MAV-based indoor chimney inspection employing 3D laser localization and textured surface reconstruction. , 2017, , .		11
89	NimbRo picking: Versatile part handling for warehouse automation. , 2017, , .		50
90	Continuous mapping and localization for autonomous navigation in rough terrain using a 3D laser scanner. Robotics and Autonomous Systems, 2017, 88, 104-115.	3.0	77

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91	Anytime hybrid driving-stepping locomotion planning. , 2017, , .		37
92	Fast autonomous landing on a moving target at MBZIRC. , 2017, , .		14
93	Online visual robot tracking and identification using deep LSTM networks. , 2017, , .		18
94	Online depth calibration for RGB-D cameras using visual SLAM. , 2017, , .		6
95	Efficient stochastic multicriteria arm trajectory optimization. , 2017, , .		16
96	Robolink feeder: Reconfigurable bin-picking and feeding with a lightweight cable-driven manipulator. , 2017, , .		5
97	NimbRo-OP2: Grown-up 3D printed open humanoid platform for research. , 2017, , .		14
98	Collaborative object picking and delivery with a team of micro aerial vehicles at MBZIRC. , 2017, , .		17
99	Combining Feature-Based and Direct Methods for Semi-dense Real-Time Stereo Visual Odometry. Advances in Intelligent Systems and Computing, 2017, , 855-868.	0.5	25
100	Autonomous Navigation in a Warehouse with a Cognitive Micro Aerial Vehicle. Studies in Computational Intelligence, 2017, , 487-524.	0.7	5
101	First International HARTING Open Source Prize Winner: The igus Humanoid Open Platform. Lecture Notes in Computer Science, 2017, , 625-633.	1.0	0
102	Real-Time Visual Tracking and Identification for a Team of Homogeneous Humanoid Robots. Lecture Notes in Computer Science, 2017, , 230-242.	1.0	4
103	RoboCup 2016 Humanoid TeenSize Winner NimbRo: Robust Visual Perception and Soccer Behaviors. Lecture Notes in Computer Science, 2017, , 478-490.	1.0	6
104	Supervised Autonomy for Exploration and Mobile Manipulation in Rough Terrain with a Centaur-Like Robot. Frontiers in Robotics and AI, 2016, 3, .	2.0	23
105	Mobile Manipulation, Tool Use, and Intuitive Interaction for Cognitive Service Robot Cosero. Frontiers in Robotics and AI, 2016, 3, .	2.0	20
106	Multilayered Mapping and Navigation for Autonomous Micro Aerial Vehicles. Journal of Field Robotics, 2016, 33, 451-475.	3.2	59
107	Hybrid driving-stepping locomotion with the wheeled-legged robot Momaro. , 2016, , .		35
108	NimbRo Explorer: Semiautonomous Exploration and Mobile Manipulation in Rough Terrain. Journal of Field Robotics, 2016, 33, 411-430.	3.2	26

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109	Analytical time-optimal trajectory generation and control for multirotors. , 2016, , .		20
110	Semantic segmentation priors for object discovery. , 2016, , .		3
111	Joint 3D laser and visual fiducial marker based SLAM for a micro aerial vehicle. , 2016, , .		9
112	Robust extrinsic calibration of multiple stationary laser range finders. , 2016, , .		10
113	Omnidirectional bipedal walking with direct fused angle feedback mechanisms. , 2016, , .		15
114	Efficient multi-camera visual-inertial SLAM for micro aerial vehicles. , 2016, , .		29
115	Local multiresolution trajectory optimization for micro aerial vehicles employing continuous curvature transitions. , 2016, , .		9
116	Special issue on machine learning and data engineering in robotics. Advanced Robotics, 2016, 30, 705-705.	1.1	0
117	The igus Humanoid Open Platform. KI - Kunstliche Intelligenz, 2016, 30, 315-319.	2.2	7
118	Efficient Single-View 3D Co-segmentation Using Shape Similarity and Spatial Part Relations. Lecture Notes in Computer Science, 2016, , 297-308.	1.0	1
119	Focused online visual-motor coordination for a dual-arm robot manipulator. , 2016, , .		0
120	Mapping with Micro Aerial Vehicles by Registration of Sparse 3D Laser Scans. Advances in Intelligent Systems and Computing, 2016, , 1583-1599.	0.5	13
121	Continuous Motion Planning for Service Robots with Multiresolution in Time. Advances in Intelligent Systems and Computing, 2016, , 203-215.	0.5	2
122	Layered Mission and Path Planning for MAV Navigation with Partial Environment Knowledge. Advances in Intelligent Systems and Computing, 2016, , 307-319.	0.5	14
123	Local Multi-resolution Surfel Grids for MAV Motion Estimation and 3D Mapping. Advances in Intelligent Systems and Computing, 2016, , 429-442.	0.5	18
124	Autonomous Navigation for Micro Aerial Vehicles in Complex GNSS-denied Environments. Journal of Intelligent and Robotic Systems: Theory and Applications, 2016, 84, 199-216.	2.0	41
125	CURFIL: A GPU Library for Image Labeling with Random Forests. Communications in Computer and Information Science, 2016, , 416-432.	0.4	1
126	Team NimbRo Rescue at DARPA Robotics Challenge Finals. , 2015, , .		2

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127	Recurrent convolutional neural networks for object-class segmentation of RGB-D video. , 2015, , .		11
128	Autonomous MAV navigation in complex GNSS-denied 3D environments. , 2015, , .		5
129	Real-time object detection, localization and verification for fast robotic depalletizing. , 2015, , .		35
130	A skill-based system for object perception and manipulation for automating kitting tasks. , 2015, , .		17
131	Intuitive bimanual telemanipulation under communication restrictions by immersive 3D visualization and motion tracking. , 2015, , .		25
132	Child-sized 3D printed igus humanoid open platform. , 2015, , .		32
133	Registration with the Point Cloud Library: A Modular Framework for Aligning in 3-D. IEEE Robotics and Automation Magazine, 2015, 22, 110-124.	2.2	223
134	Approximate surface reconstruction and registration for RGB-D SLAM. , 2015, , .		3
135	Online Learning of Bipedal Walking Stabilization. KI - Kunstliche Intelligenz, 2015, 29, 401-405.	2.2	4
136	Evaluation of registration methods for sparse 3D laser scans. , 2015, , .		19
137	3D planning and trajectory optimization for real-time generation of smooth MAV trajectories. , 2015, , .		8
138	Gradient-driven online learning of bipedal push recovery. , 2015, , .		10
139	Fused angles: A representation of body orientation for balance. , 2015, , .		23
140	Efficient Dense Rigid-Body Motion Segmentation and Estimation in RGB-D Video. International Journal of Computer Vision, 2015, 113, 233-245.	10.9	24
141	Humanoid Robots in Soccer: Robots Versus Humans in RoboCup 2050. IEEE Robotics and Automation Magazine, 2015, 22, 147-154.	2.2	60
142	RGB-D object recognition and pose estimation based on pre-trained convolutional neural network features. , 2015, , .		205
143	A high-performance MAV for autonomous navigation in complex 3D environments. , 2015, , .		24
144	Registration of non-uniform density 3D laser scans for mapping with micro aerial vehicles. Robotics and Autonomous Systems, 2015, 74, 318-330.	3.0	11

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145	Dense real-time mapping of object-class semantics from RGB-D video. Journal of Real-Time Image Processing, 2015, 10, 599-609.	2.2	50
146	Two-layer contractive encodings for learning stable nonlinear features. Neural Networks, 2015, 64, 4-11.	3.3	21
147	Balanced Walking with Capture Steps. Lecture Notes in Computer Science, 2015, , 3-15.	1.0	10
148	Cosero, Find My Keys! Object Localization and Retrieval Using Bluetooth Low Energy Tags. Lecture Notes in Computer Science, 2015, , 195-206.	1.0	17
149	RoboCup Humanoid League Rule Developments 2002â€"2014 and Future Perspectives. Lecture Notes in Computer Science, 2015, , 649-660.	1.0	6
150	CURFIL: Random Forests for Image Labeling on GPU. , 2015, , .		9
151	Perception of Deformable Objects and Compliant Manipulation for Service Robots. , 2015, , 69-80.		3
152	Learning depth-sensitive conditional random fields for semantic segmentation of RGB-D images. , 2014, , .		49
153	Local multi-resolution representation for 6D motion estimation and mapping with a continuously rotating 3D laser scanner. , 2014, , .		60
154	Walking with capture steps. , 2014, , .		5
155	Online learning of foot placement for balanced bipedal walking. , 2014, , .		7
156	Robust sensor fusion for robot attitude estimation. , 2014, , .		9
157	Adaptive tool-use strategies for anthropomorphic service robots. , 2014, , .		11
158	Bayesian exploration and interactive demonstration in continuous state MAXQ-learning. , 2014, , .		3
159	Mobile teleoperation interfaces with adjustable autonomy for personal service robots. , 2014, , .		18
160	Online learning of foot placement. , 2014, , .		0
161	Compliant Robot Behavior Using Servo Actuator Models Identified by Iterative Learning Control. Lecture Notes in Computer Science, 2014, , 207-218.	1.0	16
162	Obstacle detection and navigation planning for autonomous micro aerial vehicles. , 2014, , .		31

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163	Efficient deformable registration of multi-resolution surfel maps for object manipulation skill transfer. , 2014, , .		9
164	Rough Terrain 3D Mapping and Navigation Using a Continuously Rotating 2D Laser Scanner. KI - Kunstliche Intelligenz, 2014, 28, 93-99.	2.2	20
165	RoboCup 2013: Robot World Cup XVII. Lecture Notes in Computer Science, 2014, , .	1.0	7
166	Approximate triangulation and region growing for efficient segmentation and smoothing of range images. Robotics and Autonomous Systems, 2014, 62, 1282-1293.	3.0	42
167	Multi-resolution surfel maps for efficient dense 3D modeling and tracking. Journal of Visual Communication and Image Representation, 2014, 25, 137-147.	1.7	153
168	Omnidirektionale Wahrnehmung fÃ¼r leichte MAVs mittels eines kontinuierlich rotierenden 3D-Laserscanners. Photogrammetrie, Fernerkundung, Geoinformation, 2014, 2014, 451-464.	1.2	9
169	Active Recognition and Manipulation for Mobile Robot Bin Picking. Springer Tracts in Advanced Robotics, 2014, , 133-153.	0.3	5
170	Active Recognition and Manipulation for Mobile Robot Bin Picking. Springer Tracts in Advanced Robotics, 2014, , 133-153.	0.3	11
171	Structured Prediction for Object Detection in Deep Neural Networks. Lecture Notes in Computer Science, 2014, , 395-402.	1.0	3
172	Fast Semantic Segmentation of RGB-D Scenes with GPU-Accelerated Deep Neural Networks. Lecture Notes in Computer Science, 2014, , 80-85.	1.0	37
173	Increasing Flexibility of Mobile Manipulation and Intuitive Human-Robot Interaction in RoboCup@Home. Lecture Notes in Computer Science, 2014, , 135-146.	1.0	8
174	Humanoid TeenSize Open Platform NimbRo-OP. Lecture Notes in Computer Science, 2014, , 568-575.	1.0	15
175	Learning to Improve Capture Steps for Disturbance Rejection in Humanoid Soccer. Lecture Notes in Computer Science, 2014, , 56-67.	1.0	3
176	Indoor Positioning and Navigation Using Time-Of-Flight Cameras. , 2013, , 165-176.		5
177	Human-Like Interaction Skills for the Mobile Communication Robot Robotinho. International Journal of Social Robotics, 2013, 5, 549-561.	3.1	22
178	Efficient 3D object perception and grasp planning for mobile manipulation in domestic environments. Robotics and Autonomous Systems, 2013, 61, 1106-1115.	3.0	39
179	Fast 6D Odometry Based on Visual Features and Depth. Advances in Intelligent Systems and Computing, 2013, , 245-256.	0.5	4
180	Fast Range Image Segmentation and Smoothing Using Approximate Surface Reconstruction and Region Growing. Advances in Intelligent Systems and Computing, 2013, , 61-73.	0.5	63

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181	Omnidirectional capture steps for bipedal walking. , 2013, , .		25
182	Combining contour and shape primitives for object detection and pose estimation of prefabricated parts. , 2013, , .		14
183	Learning sequential tasks interactively from demonstrations and own experience. , 2013, , .		1
184	Joint detection and pose tracking of multi-resolution surfel models in RGB-D. , 2013, , .		3
185	Mobile bin picking with an anthropomorphic service robot. , 2013, , .		67
186	Multi-resolution surfel mapping and real-time pose tracking using a continuously rotating 2D laser scanner. , 2013, , .		20
187	Multimodal obstacle detection and collision avoidance for micro aerial vehicles. , 2013, , .		35
188	Distinctive 3D surface entropy features for place recognition. , 2013, , .		4
189	Kooperierende Mobile Roboter. Automatisierungstechnik, 2013, 61, 233-244.	0.4	1
190	In Situ Root System Architecture Extraction from Magnetic Resonance Imaging for Water Uptake Modeling. Vadose Zone Journal, 2013, 12, 1-9.	1.3	38
191	Fast 6D Odometry Based on Visual Features and Depth. Studies in Computational Intelligence, 2013, , 5-16.	0.7	4
192	Plant Root System Analysis from MRI Images. Communications in Computer and Information Science, 2013, , 411-425.	0.4	35
193	Lateral Disturbance Rejection for the Nao Robot. Lecture Notes in Computer Science, 2013, , 1-12.	1.0	5
194	NimbRo@Home: Winning Team of the RoboCup@Home Competition 2012. Lecture Notes in Computer Science, 2013, , 94-105.	1.0	7
195	RoboCup 2012 Best Humanoid Award Winner NimbRo TeenSize. Lecture Notes in Computer Science, 2013, , 89-93.	1.0	4
196	Efficient Transmission and Rendering of RGB-D Views. Lecture Notes in Computer Science, 2013, , 517-526.	1.0	1
197	Two-Layer Contractive Encodings with Shortcuts for Semi-supervised Learning. Lecture Notes in Computer Science, 2013, , 450-457.	1.0	2
198	Efficient Dense 3D Rigid-Body Motion Segmentation in RGB-D Video. , 2013, , .		14

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199	Real-Time Plane Segmentation Using RGB-D Cameras. Lecture Notes in Computer Science, 2012, , 306-317.	1.0	139
200	SURE: Surface Entropy for Distinctive 3D Features. Lecture Notes in Computer Science, 2012, , 74-93.	1.0	19
201	Incremental action recognition and generalizing motion generation based on goal-directed features. , 2012, , .		9
202	Adjustable autonomy for mobile teleoperation of personal service robots. , 2012, , .		35
203	Semantic mapping using object-class segmentation of RGB-D images. , 2012, , .		30
204	Bayesian calibration of the hand-eye kinematics of an anthropomorphic robot. , 2012, , .		8
205	Integrating depth and color cues for dense multi-resolution scene mapping using RGB-D cameras. , 2012, , .		44
206	Benchmarking mobile manipulation in everyday environments. , 2012, , .		1
207	Utilizing the Structure of Field Lines for Efficient Soccer Robot Localization. Advanced Robotics, 2012, 26, 1603-1621.	1.1	13
208	RoboCup@Home: Demonstrating Everyday Manipulation Skills in RoboCup@Home. IEEE Robotics and Automation Magazine, 2012, 19, 34-42.	2.2	38
209	Learning Visual Obstacle Detection Using Color Histogram Features. Lecture Notes in Computer Science, 2012, , 149-161.	1.0	15
210	Local Multiresolution Path Planning in Soccer Games Based on Projected Intentions. Lecture Notes in Computer Science, 2012, , 495-506.	1.0	5
211	Towards Robust Mobility, Flexible Object Manipulation, and Intuitive Multimodal Interaction for Domestic Service Robots. Lecture Notes in Computer Science, 2012, , 51-62.	1.0	5
212	RoboCup 2011 Humanoid League Winners. Lecture Notes in Computer Science, 2012, , 37-50.	1.0	3
213	Multi-instance Methods for Partially Supervised Image Segmentation. Lecture Notes in Computer Science, 2012, , 110-119.	1.0	0
214	Real-Time Trajectory Generation by Offline Footstep Planning for a Humanoid Soccer Robot. Lecture Notes in Computer Science, 2012, , 198-209.	1.0	1
215	Following human guidance to cooperatively carry a large object. , 2011, , .		35
216	Efficient Multi-resolution Plane Segmentation of 3D Point Clouds. Lecture Notes in Computer Science, 2011, , 145-156.	1.0	49

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217	Towards joint attention for a domestic service robot - person awareness and gesture recognition using Time-of-Flight cameras. , 2011, , .		27
218	Dynamaid, an Anthropomorphic Robot for Research on Domestic Service Applications. Automatika, 2011, 52, 233-243.	1.2	1
219	Fusing Time-of-Flight Cameras and Inertial Measurement Units for Ego-Motion Estimation. Automatika, 2011, 52, 189-198.	1.2	3
220	Influence of alkyl chain length and molecular weight on the surface functionalization via adsorption/entrapment with biocidal cationic block copolymers. European Polymer Journal, 2011, 47, 2379-2390.	2.6	10
221	Exploiting local structure in Boltzmann machines. Neurocomputing, 2011, 74, 1411-1417.	3.5	4
222	Learning to interpret pointing gestures with a time-of-flight camera. , 2011, , .		68
223	Lateral capture steps for bipedal walking. , 2011, , .		16
224	Interest point detection in depth images through scale-space surface analysis. , 2011, , .		7
225	Efficient kinodynamic trajectory generation for wheeled robots. , 2011, , .		4
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