# Andreas Birk

List of Publications by Year
in descending order

| 192 papers | 3,264 citations | 218381 26 h-index | 233125 45 g-index |
|---|---|---|---|
| 199 all docs | 199 docs citations | 199 times ranked | 2225 citing authors |

| # | Article | IF | Citations |
|---|---------|----|-----------|
| 1 | Merging Occupancy Grid Maps From Multiple Robots. Proceedings of the IEEE, 2006, 94, 1384-1397. | 16.4 | 186 |
| 2 | Fast Registration Based on Noisy Planes With Unknown Correspondences for 3-D Mapping. IEEE Transactions on Robotics, 2010, 26, 424-441. | 7.3 | 181 |
| 3 | Fast plane detection and polygonalization in noisy 3D range images. , 2008, , . | | 152 |
| 4 | Multi-robot exploration under the constraints of wireless networking. Control Engineering Practice, 2007, 15, 435-445. | 3.2 | 148 |
| 5 | Product line engineering, the state of the practice. IEEE Software, 2003, 20, 52-60. | 2.1 | 116 |
| 6 | Validating the ISO/IEC 15504 measure of software requirements analysis process capability. IEEE Transactions on Software Engineering, 2000, 26, 541-566. | 4.3 | 105 |
| 7 | Online threeâ€dimensional SLAM by registration of large planar surface segments and closedâ€form poseâ€graph relaxation. Journal of Field Robotics, 2010, 27, 52-84. | 3.2 | 99 |
| 8 | Safety, Security, and Rescue Missions with an Unmanned Aerial Vehicle (UAV). Journal of Intelligent and Robotic Systems: Theory and Applications, 2011, 64, 57-76. | 2.0 | 98 |
| 9 | Rescue robotics â€" a crucial milestone on the road to autonomous systems. Advanced Robotics, 2006, 20, 595-605. | 1.1 | 73 |
| 10 | The Pinax-model for accurate and efficient refraction correction of underwater cameras in flat-pane housings. Ocean Engineering, 2017, 133, 9-22. | 1.9 | 68 |
| 11 | Beyond points: Evaluating recent 3D scan-matching algorithms. , 2015, , . | | 60 |
| 12 | On map merging. Robotics and Autonomous Systems, 2005, 53, 1-14. | 3.0 | 58 |
| 13 | A networking framework for teleoperation in safety, security, and rescue robotics. IEEE Wireless Communications, 2009, 16, 6-13. | 6.6 | 48 |
| 14 | Dexterous Underwater Manipulation from Onshore Locations: Streamlining Efficiencies for Remotely Operated Underwater Vehicles. IEEE Robotics and Automation Magazine, 2018, 25, 24-33. | 2.2 | 44 |
| 15 | Boosting cooperation by evolving trust. Applied Artificial Intelligence, 2000, 14, 769-784. | 2.0 | 42 |
| 16 | 3D forward sensor modeling and application to occupancy grid based sensor fusion. , 2007, , . | | 42 |
| 17 | Validating the ISO/IEC 15504 measures of software development process capability. Journal of Systems and Software, 2000, 51, 119-149. | 3.3 | 41 |
| 18 | Hough based terrain classification for realtime detection of drivable ground. Journal of Field Robotics, 2008, 25, 67-88. | 3.2 | 41 |

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| 19 | Spectral registration of noisy sonar data for underwater 3D mapping. Autonomous Robots, 2011, 30, 307-331. | 3.2 | 39 |
| 20 | High Fidelity Tools for Rescue Robotics: Results and Perspectives. Lecture Notes in Computer Science, 2006, , 301-311. | 1.0 | 39 |
| 21 | Fast 3D mapping by matching planes extracted from range sensor point-clouds. , 2009, , . | | 38 |
| 22 | Efficient Representation in Three-Dimensional Environment Modeling for Planetary Robotic Exploration. Advanced Robotics, 2010, 24, 1169-1197. | 1.1 | 38 |
| 23 | Spectral 6DOF Registration of Noisy 3D Range Data with Partial Overlap. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2013, 35, 954-969. | 9.7 | 32 |
| 24 | Simultaneous localization and mapping with multimodal probability distributions. International Journal of Robotics Research, 2013, 32, 143-171. | 5.8 | 32 |
| 25 | CADDY Underwater Stereo-Vision Dataset for Human–Robot Interaction (HRI) in the Context of Diver Activities. Journal of Marine Science and Engineering, 2019, 7, 16. | 1.2 | 32 |
| 26 | Uncertainty analysis for optimum plane extraction from noisy 3D range-sensor point-clouds. Intelligent Service Robotics, 2010, 3, 37-48. | 1.6 | 31 |
| 27 | No More Heavy Lifting: Robotic Solutions to the Container Unloading Problem. IEEE Robotics and Automation Magazine, 2016, 23, 94-106. | 2.2 | 31 |
| 28 | RoboGuard, a teleoperated mobile security robot. Control Engineering Practice, 2002, 10, 1259-1264. | 3.2 | 30 |
| 29 | Generalized graph SLAM: Solving local and global ambiguities through multimodal and hyperedge constraints. International Journal of Robotics Research, 2016, 35, 601-630. | 5.8 | 30 |
| 30 | CBR for Experimental Software Engineering. Lecture Notes in Computer Science, 1998, , 235-254. | 1.0 | 30 |
| 31 | Online generation of an underwater photo map with improved Fourier Mellin based registration. , 2009, , . | | 27 |
| 32 | Maximum likelihood mapping with spectral image registration. , 2010, , . | | 27 |
| 33 | Fast and robust photomapping with an Unmanned Aerial Vehicle (UAV). , 2009, , . | | 26 |
| 34 | Robotics in edutainment. , 0, , . | | 25 |
| 35 | DexROV: Dexterous Undersea Inspection and Maintenance in Presence of Communication Latencies. IFAC-PapersOnLine, 2015, 48, 218-223. | 0.5 | 25 |
| 36 | Map evaluation using matched topology graphs. Autonomous Robots, 2016, 40, 761-787. | 3.2 | 25 |

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| 37 | Revisiting uncertainty analysis for optimum planes extracted from 3D range sensor point-clouds. , 2009, , . | | 23 |
| 38 | Efficiently communicating map updates with the pose graph. , 2008, , . | | 21 |
| 39 | 3-D perception and modeling. IEEE Robotics and Automation Magazine, 2009, 16, 53-60. | 2.2 | 21 |
| 40 | Evaluation of map quality by matching and scoring high-level, topological map structures. , 2013, , . | | 21 |
| 41 | CADDYâ€"Cognitive Autonomous Diving Buddy: Two Years of Underwater Human-Robot Interaction. Marine Technology Society Journal, 2016, 50, 54-66. | 0.3 | 21 |
| 42 | Plane-based registration of sonar data for underwater 3D mapping. , 2010, , . | | 20 |
| 43 | The CO&lt;sup&gt;3&lt;/sup&gt;AUVs (Cooperative Cognitive Control for Autonomous Underwater) Tj ETQq1 1 0.784314 rgBT /Over | | 20 |
| 44 | A quantitative assessment of structural errors in grid maps. Autonomous Robots, 2010, 28, 187-196. | 3.2 | 19 |
| 45 | The European Project MORPH: Distributed UUV Systems for Multimodal, 3D Underwater Surveys. Marine Technology Society Journal, 2016, 50, 26-41. | 0.3 | 18 |
| 46 | Dexterous Undersea Interventions with Far Distance Onshore Supervision: the DexROV Project. IFAC-PapersOnLine, 2016, 49, 414-419. | 0.5 | 18 |
| 47 | Augmented autonomy: Improving human-robot team performance in Urban search and rescue. , 2008, , . | | 17 |
| 48 | The jacobs robotics approach to object recognition and localization in the context of the ICRA'11 Solutions in Perception Challenge. , 2012, , . | | 17 |
| 49 | Determining Map Quality through an Image Similarity Metric. Lecture Notes in Computer Science, 2009, , 355-365. | 1.0 | 17 |
| 50 | On-board control in the RoboCup small robots league. Advanced Robotics, 2000, 14, 27-36. | 1.1 | 16 |
| 51 | Uncertainty estimation for a 6-DoF spectral registration method as basis for sonar-based underwater 3D SLAM. , 2012, , . | | 16 |
| 52 | Scale-Free Registrations in 3D: 7 Degrees of Freedom with Fourier Mellin SOFT Transforms. International Journal of Computer Vision, 2018, 126, 731-750. | 10.9 | 16 |
| 53 | Model based design of a stereo vision system for intelligent deep-sea operations. Measurement: Journal of the International Measurement Confederation, 2019, 144, 298-310. | 2.5 | 16 |
| 54 | Systematic population, utilization, and maintenance of a repository for comprehensive reuse. Lecture Notes in Computer Science, 2000, , 25-50. | 1.0 | 15 |

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| 55 | An efficient strategy for data exchange in multi-robot mapping under underwater communication constraints. , 2010, , . | | 15 |
| 56 | What is Robotics? An Interdisciplinary Field Is Getting Even More Diverse [Education]. IEEE Robotics and Automation Magazine, 2011, 18, 94-95. | 2.2 | 15 |
| 57 | Combining Exploration and Ad-Hoc Networking in RoboCup Rescue. Lecture Notes in Computer Science, 2005, , 236-246. | 1.0 | 15 |
| 58 | Challenges for Requirements Engineering and Management in Software Product Line Development. , 2007, , 300-305. | | 15 |
| 59 | Learning to Trust. Lecture Notes in Computer Science, 2001, , 133-144. | 1.0 | 14 |
| 60 | A Robotics Course during COVID-19: Lessons Learned and Best Practices for Online Teaching beyond the Pandemic. Robotics, 2021, 10, 5. | 2.1 | 14 |
| 61 | Fast 6-DOF path planning for Autonomous Underwater Vehicles (AUV) based on 3D plane mapping. , 2011, , . | | 13 |
| 62 | The MORPH concept and its application in marine research. , 2013, , . | | 13 |
| 63 | Overview of the FP7 project &amp;#x201C;CADDY &amp;#x2014; Cognitive Autonomous Diving Buddy&amp;#x201D;. , 2015, , . | | 13 |
| 64 | Robust 3D object modeling with a low-cost RGBD-sensor and AR-markers for applications with untrained end-users. Robotics and Autonomous Systems, 2015, 66, 1-17. | 3.0 | 13 |
| 65 | Efficient continuous system integration and validation for deep-sea robotics applications. , 2017, , . | | 13 |
| 66 | RoboCube a â€œuniversalâ€•â€œspecial purposeâ€•Hardware for the RoboCup small robots league. , 1998, , 331-340. | | 13 |
| 67 | Fast Detection of Polygons in 3D Point Clouds from Noise-Prone Range Sensors. , 2007, , . | | 12 |
| 68 | Gesture-recognition as basis for a human robot interface (HRI) on a AUV. , 2011, , . | | 12 |
| 69 | Visual diver detection using multi-descriptor nearest-class-mean random forests in the context of underwater Human Robot Interaction (HRI). , 2015, , . | | 12 |
| 70 | CADDY project, year 3: The final validation trials. , 2017, , . | | 12 |
| 71 | Underwater navigation using visual markers in the context of intervention missions. International Journal of Advanced Robotic Systems, 2019, 16, 172988141983896. | 1.3 | 12 |
| 72 | Modeling underwater acoustic communications for multi-robot missions in a robotics simulator. , 2010, , . | | 11 |

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| 73 | Stereo-vision based diver pose estimation using LSTM recurrent neural networks for AUV navigation guidance. , 2017, , . | | 11 |
| 74 | Classification and Localization of Naval Mines With Superellipse Active Contours. IEEE Journal of Oceanic Engineering, 2019, 44, 767-782. | 2.1 | 11 |
| 75 | Surface Representations for 3D Mapping. KI - Kunstliche Intelligenz, 2010, 24, 249-254. | 2.2 | 10 |
| 76 | Evaluation of the robustness of planar-patches based 3D-registration using marker-based ground-truth in an outdoor urban scenario. , 2010, , . | | 10 |
| 77 | Exploration Strategies for a Robot with a Continously Rotating 3D Scanner. Lecture Notes in Computer Science, 2010, , 374-386. | 1.0 | 10 |
| 78 | Revisiting Superquadric Fitting: A Numerically Stable Formulation. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2019, 41, 220-233. | 9.7 | 10 |
| 79 | A Characterization of 3D Sensors for Response Robots. Lecture Notes in Computer Science, 2010, , 264-275. | 1.0 | 10 |
| 80 | Programming with behavior-processes. Robotics and Autonomous Systems, 2002, 39, 115-127. | 3.0 | 9 |
| 81 | Sub-pixel depth accuracy with a time of flight sensor using multimodal Gaussian analysis. , 2008, , . | | 9 |
| 82 | Using Robust Spectral Registration for Scan Matching of Sonar Range Data. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2010, 43, 611-616. | 0.4 | 9 |
| 83 | Using a fiducial map metric for assessing map quality in the context of RoboCup Rescue. , 2011, , . | | 9 |
| 84 | Object recognition in RGBD images of cluttered environments using graph-based categorization with unsupervised learning of shape parts. , 2013, , . | | 9 |
| 85 | Velvet fingers: Grasp planning and execution for an underactuated gripper with active surfaces. , 2014, , . | | 9 |
| 86 | Segmentation and classification using active contours based superellipse fitting on side scan sonar images for marine demining. , 2015, , . | | 9 |
| 87 | Distributed Communicative Exploration under underwater communication constraints. , 2011, , . | | 8 |
| 88 | Synthetic Aperture Sonar (SAS) without Navigation: Scan Registration as Basis for Near Field Synthetic Imaging in 2D. Sensors, 2020, 20, 4440. | 2.1 | 8 |
| 89 | Robotics Labs and Other Hands-On Teaching During COVID-19: Change Is Here to Stay?. IEEE Robotics and Automation Magazine, 2021, 28, 92-102. | 2.2 | 8 |
| 90 | Underwater Vision-Based Gesture Recognition: A Robustness Validation for Safe Human–Robot Interaction. IEEE Robotics and Automation Magazine, 2021, 28, 67-78. | 2.2 | 8 |

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| 91 | A HMI Supporting Adjustable Autonomy of Rescue Robots. Lecture Notes in Computer Science, 2006, , 255-266. | 1.0 | 8 |
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| 93 | A multiagent system based on heterogeneous robots. Lecture Notes in Computer Science, 1998, , 13-24. | 1.0 | 7 |
| 94 | Extraction of Semantic Floor Plans from 3D Point Cloud Maps. , 2007, , . | | 7 |
| 95 | 3D data collection at Disaster City at the 2008 NIST Response Robot Evaluation Exercise (RREE). , 2009, , . | | 7 |
| 96 | Object shape categorization in RGBD images using hierarchical graph constellation models based on unsupervisedly learned shape parts described by a set of shape specificity levels. , 2014, , . | | 7 |
| 97 | Object recognition and localization for robust grasping with a dexterous gripper in the context of container unloading. , 2014, , . | | 7 |
| 98 | EU project MORPH: Current Status After 3 Years of Cooperation Under and Above Water. IFAC-PapersOnLine, 2015, 48, 119-124. | 0.5 | 7 |
| 99 | Improved Fourier Mellin Invariant for Robust Rotation Estimation with Omni-Cameras. , 2019, , . | | 7 |
| 100 | Communicative Exploration with Robot Packs. Lecture Notes in Computer Science, 2006, , 267-278. | 1.0 | 7 |
| 101 | An N-player prisoner's dilemma in a robotic ecosystem. Robotics and Autonomous Systems, 2002, 39, 223-233. | 3.0 | 6 |
| 102 | Using Requirements Management Tools in Software Product Line Engineering: The State of the Practice. , 2007, , . | | 6 |
| 103 | Incorporating large scale SSRR scenarios into the high fidelity simulator USARSim. , 2009, , . | | 6 |
| 104 | Where Else Do You See Cheering Crowds in a Classroom? [Education. IEEE Robotics and Automation Magazine, 2010, 17, 20-20. | 2.2 | 6 |
| 105 | Spectral registration of volume data for 6-DOF spatial transformations plus scale. , 2011, , . | | 6 |
| 106 | Cooperative Cognitive Control for Autonomous Underwater Vehicles (CO3AUVs): overview and progresses in the 3rd project year. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2012, 45, 361-366. | 0.4 | 6 |
| 107 | The ESA Lunar Robotics Challenge: Simulating operations at the lunar south pole. Journal of Field Robotics, 2012, 29, 601-626. | 3.2 | 6 |
| 108 | DexROV: Enabling effective dexterous ROV operations in presence of communication latency. , 2015, , . | | 6 |

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| 109 | Adaptive Navigation Scheme for Optimal Deep-Sea Localization Using Multimodal Perception Cues. , 2019, , . | | 6 |
| 110 | Robot Learning and Self-Sufficiency: What the energy-level can tell us about a robot's performance. Lecture Notes in Computer Science, 1998, , 109-125. | 1.0 | 6 |
| 111 | A Novel Approach to Efficient Error Correction for the SwissRanger Time-of-Flight 3D Camera. Lecture Notes in Computer Science, 2009, , 247-258. | 1.0 | 6 |
| 112 | Using Simulation to Visualise and Analyse Product-Process Dependencies in Software Development Projects. Lecture Notes in Computer Science, 2000, , 88-102. | 1.0 | 5 |
| 113 | On the effects of Sampling Resolution in Improved Fourier Mellin based Registration for Underwater Mapping. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2010, 43, 617-622. | 0.4 | 5 |
| 114 | A short overview of recent advances in map evaluation. , 2012, , . | | 5 |
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| 116 | Advances in underwater mapping and their application potential for Safety, Security, and Rescue Robotics (SSRR). , 2012, , . | | 5 |
| 117 | Uncertainty estimation of AR-marker poses for graph-SLAM optimization in 3D object model generation with RGBD data. , 2013, , . | | 5 |
| 118 | A Distributed Algorithm for Cooperative 3D Exploration under Communication Constraints. Paladyn, 2013, 4, . | 1.9 | 5 |
| 119 | Representing and solving local and global ambiguities as multimodal and hyperedge constraints in a generalized graph SLAM framework. , 2014, , . | | 5 |
| 120 | Fitting superquadrics in noisy, partial views from a low-cost RGBD sensor for recognition and localization of sacks in autonomous unloading of shipping containers. , 2014, , . | | 5 |
| 121 | CADDY Project, Year 1: Overview of Technological Developments and Cooperative Behaviours˜.... IFAC-PapersOnLine, 2015, 48, 125-130. | 0.5 | 5 |
| 122 | Hierarchical graph-based discovery of non-primitive-shaped objects in unstructured environments. , 2016, , . | | 5 |
| 123 | Full 3D navigation correction using low frequency visual tracking with a stereo camera. , 2016, , . | | 5 |
| 124 | Seafloor classification for mine countermeasures operations using synthetic aperture sonar images. , 2017, , . | | 5 |
| 125 | Robust Continuous System Integration for Critical Deep-Sea Robot Operations Using Knowledge-Enabled Simulation in the Loop. , 2018, , . | | 5 |
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| 127 | A Fuzzy Controller for Autonomous Negotiation of Stairs by a Mobile Robot with Adjustable Tracks. Lecture Notes in Computer Science, 2008, , 196-207. | 1.0 | 5 |
| 128 | Detecting Humans in 2D Thermal Images by Generating 3D Models. Lecture Notes in Computer Science, 2007, , 293-307. | 1.0 | 5 |
| 129 | Diver detection by motion-segmentation and shape-analysis from a moving vehicle. , 2011, , . | | 5 |
| 130 | Fully Autonomous Operations of a Jacobs Rugbot in the RoboCup Rescue Robot League 2006. , 2007, , . | | 4 |
| 131 | Optimized Octtree Datastructure and Access Methods for 3D Mapping. , 2007, , . | | 4 |
| 132 | The True Spirit of RoboCup [Education. IEEE Robotics and Automation Magazine, 2010, 17, 108-108. | 2.2 | 4 |
| 133 | Using iFMI spectral registration for video stabilization and motion detection by an Unmanned Aerial Vehicle (UAV). , 2011, , . | | 4 |
| 134 | Physics-based damage-aware manipulation strategy planning using Scene Dynamics Anticipation. , 2016, , . | | 4 |
| 135 | Recognition and Localization of Sacks for Autonomous Container Unloading by Fitting Superquadrics in Noisy, Partial Views from a Low-cost RGBD Sensor. Journal of Intelligent and Robotic Systems: Theory and Applications, 2017, 88, 57-71. | 2.0 | 4 |
| 136 | From Multi-Modal Property Dataset to Robot-Centric Conceptual Knowledge About Household Objects. Frontiers in Robotics and AI, 2021, 8, 476084. | 2.0 | 4 |
| 137 | The VUB AI-lab RoboCupâ€™99 Small League Team. Lecture Notes in Computer Science, 2000, , 687-690. | 1.0 | 4 |
| 138 | The small league RoboCup team of the VUB AI-Lab. Lecture Notes in Computer Science, 1999, , 410-415. | 1.0 | 4 |
| 139 | A New Mechatronic Component for Adjusting the Footprint of Tracked Rescue Robots. Lecture Notes in Computer Science, 2007, , 450-457. | 1.0 | 4 |
| 140 | Mobile Robot Communication Without the Drawbacks of Wireless Networking. Lecture Notes in Computer Science, 2006, , 585-592. | 1.0 | 4 |
| 141 | A product-process dependency definition method. , 1998, , . | | 3 |
| 142 | Reconnaissance and camp security missions with an Unmanned Aerial Vehicle (UAV) at the 2009 European Land Robots Trials (ELROB). , 2009, , . | | 3 |
| 143 | Extraction of quadrics from noisy point-clouds using a sensor noise model. , 2010, , . | | 3 |
| 144 | Editorial: Safety, security, and rescue robotics special issue. Journal of Field Robotics, 2011, 28, 813-816. | 3.2 | 3 |

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| 145 | Utilizing color information in 3D scan-registration using planar-patches matching. , 2012, , . | | 3 |
| 146 | Underwater stereo data acquisition and 3D registration with a spectral method. , 2013, , . | | 3 |
| 147 | The MORPH project: Actual results. , 2015, , . | | 3 |
| 148 | Robotic bridge inspection within strategic flood evacuation planning. , 2017, , . | | 3 |
| 149 | A Divide and Conquer Method for 3D Registration of Inhomogeneous, Partially Overlapping Scans with Fourier Mellin SOFT (FMS). , 2020, , . | | 3 |
| 150 | Robotics and Intelligent Systems: A New Curriculum Development and Adaptations Needed in Coronavirus Times. Advances in Intelligent Systems and Computing, 2022, , 81-93. | 0.5 | 3 |
| 151 | Heterogeneity and On-Board Control in the Small Robots League. Lecture Notes in Computer Science, 2000, , 196-209. | 1.0 | 3 |
| 152 | Planetary Exploration in USARsim: A Case Study Including Real World Data from Mars. Lecture Notes in Computer Science, 2009, , 463-472. | 1.0 | 3 |
| 153 | Towards Cooperative and Decentralized Mapping in the Jacobs Virtual Rescue Team. Lecture Notes in Computer Science, 2009, , 225-234. | 1.0 | 3 |
| 154 | A Framework for the Continuous Monitoring and Evaluation of Improvement Programmes. Lecture Notes in Computer Science, 2000, , 20-35. | 1.0 | 2 |
| 155 | Simulating Underwater Acoustic Communications in a High Fidelity Robotics Simulator. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2010, 43, 587-592. | 0.4 | 2 |
| 156 | Using recursive spectral registrations to determine brokenness as measure of structural map errors. , 2010, , . | | 2 |
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| 158 | Semantic annotation of ground and vegetation types in 3D maps for autonomous underwater vehicle operation. , 2011, , . | | 2 |
| 159 | Towards Pathplanning for Unmanned Ground Vehicles (UGV) inÂ3D Plane-Maps of Unstructured Environments. KI - Kunstliche Intelligenz, 2011, 25, 141-144. | 2.2 | 2 |
| 160 | Cooperative 3D Exploration under Communication Constraints. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2012, 45, 89-93. | 0.4 | 2 |
| 161 | Large-scale mosaicking with spectral registration based simultaneous localization and mapping (iFMI-SLAM) in the Ligurian Sea. , 2013, , . | | 2 |
| 162 | Robust estimation of camera-tilt for iFMI based underwater photo-mapping using a calibrated monocular camera. , 2013, , . | | 2 |

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| 163 | Large-scale image mosaicking using multimodal hyperedge constraints from multiple registration methods within the Generalized Graph SLAM framework. , 2014, , . | | 2 |
| 164 | CADDY Project, Year 2: The First Validation Trials**This work is supported by the European Commission under the FP7-ICT project "CADDY - Cognitive Autonomous Diving Buddy" Grant Agreement No. 611373.. IFAC-PapersOnLine, 2016, 49, 420-425. | 0.5 | 2 |
| 165 | Automated species counting using a hierarchical classification approach with Haar cascades and multi-descriptor random forests. , 2016, , . | | 2 |
| 166 | Robotic bridge statics assessment within strategic flood evacuation planning using low-cost sensors. , 2017, , . | | 2 |
| 167 | Visual Object Categorization Based on Hierarchical Shape Motifs Learned From Noisy Point Cloud Decompositions. Journal of Intelligent and Robotic Systems: Theory and Applications, 2020, 97, 313-338. | 2.0 | 2 |
| 168 | Using Rescue Robots to Increase Construction Site Safety. , 2006, , . | | 2 |
| 169 | Using Different Humanoid Robots for Science Edutainment of Secondary School Pupils. Lecture Notes in Computer Science, 2009, , 451-462. | 1.0 | 2 |
| 170 | Learning of an anticipatory world-model and the quest for general versus reinforced knowledge. , 1998, , . | | 1 |
| 171 | Towards Object Classification Using 3D Sensor Data. , 2008, , . | | 1 |
| 172 | Initial results of cooperative AUV exploration in a high-fidelity simulation using real-world data from Monte da Guia, Azores. , 2013, , . | | 1 |
| 173 | Using fiducials in 3D map evaluation. , 2015, , . | | 1 |
| 174 | Underwater place recognition in noisy stereo data using FAB-MAP with a multimodal vocabulary from 2D texture and 3D surface descriptors. , 2015, , . | | 1 |
| 175 | Anticipation and attention for robust object recognition with RGBD-data in an industrial application scenario. , 2016, , . | | 1 |
| 176 | High-Fidelity Deep-Sea Perception Using Simulation in the Loop. IFAC-PapersOnLine, 2018, 51, 32-37. | 0.5 | 1 |
| 177 | Registration of Magnetic Resonance Tomography (MRT) Data with a Low Frequency Adaption of Fourier-Mellin-SOFT (LF-FMS). Sensors, 2021, 21, 2581. | 2.1 | 1 |
| 178 | Trends in Learning Software Organizations: Current Needs and Future Solutions. Lecture Notes in Computer Science, 2005, , 70-75. | 1.0 | 1 |
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| 180 | Continuous system integration and validation for underwater perception in offshore inspection and intervention tasks. , 2020, , 9-75. | | 1 |

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| 183 | Future RAS Support for Summer Schools [Education]. IEEE Robotics and Automation Magazine, 2011, 18, 20-20. | 2.2 | 0 |
| 184 | Propose an RAS Summer School [Education]. IEEE Robotics and Automation Magazine, 2012, 19, 104-107. | 2.2 | 0 |
| 185 | Multi-robot exploration with AUVs on cliffs and other 3D structures with a predominant orientation. , 2015, , . | | 0 |
| 186 | Visual speed adaptation for improved sensor coverage in a multi-vehicle survey mission. , 2016, , . | | 0 |
| 187 | Conceptualization of Object Compositions Using Persistent Homology. , 2018, , . | | 0 |
| 188 | Applying Behavior-Oriented Robotics to a Mobile Security Device. Lecture Notes in Computer Science, 2001, , 5-15. | 1.0 | 0 |
| 189 | From Games to Applications: Component Reuse in Rescue Robots. Lecture Notes in Computer Science, 2005, , 669-676. | 1.0 | 0 |
| 190 | Vectorization of Grid Maps by an Evolutionary Algorithm. Lecture Notes in Computer Science, 2007, , 458-465. | 1.0 | 0 |
| 191 | Creating Photo Maps with an Aerial Vehicle in USARsim. Lecture Notes in Computer Science, 2010, , 35-45. | 1.0 | 0 |
| 192 | Using Requirements Management Tools in Software Product Line Engineering: The State of the Practice. , 2007, , . | | 0 |