

# Ioannis Kostavelis

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/8561203/publications.pdf>

Version: 2024-02-01

64  
papers

1,371  
citations

471509

17  
h-index

361022

35  
g-index

68  
all docs

68  
docs citations

68  
times ranked

1149  
citing authors

| #  | ARTICLE  | IF  | CITATIONS |
|----|--|-----|-----------|
| 1  | Semantic mapping for mobile robotics tasks: A survey. <i>Robotics and Autonomous Systems</i> , 2015, 66, 86-103.   | 5.1 | 270       |
| 2  | Safety bounds in human robot interaction: A survey. <i>Safety Science</i> , 2020, 127, 104667.   | 4.9 | 153       |
| 3  | Recent trends in social aware robot navigation: A survey. <i>Robotics and Autonomous Systems</i> , 2017, 93, 85-104.   | 5.1 | 115       |
| 4  | Non-destructive quality control methods in additive manufacturing: a survey. <i>Rapid Prototyping Journal</i> , 2020, 26, 777-790.   | 3.2 | 67        |
| 5  | Robot Guided Crowd Evacuation. <i>IEEE Transactions on Automation Science and Engineering</i> , 2015, 12, 739-751.   | 5.2 | 64        |
| 6  | Learning spatially semantic representations for cognitive robot navigation. <i>Robotics and Autonomous Systems</i> , 2013, 61, 1460-1475.  | 5.1 | 57        |
| 7  | Robot navigation via spatial and temporal coherent semantic maps. <i>Engineering Applications of Artificial Intelligence</i> , 2016, 48, 173-187.  | 8.1 | 54        |
| 8  | Robot navigation in large-scale social maps: An action recognition approach. <i>Expert Systems With Applications</i> , 2016, 66, 261-273.  | 7.6 | 52        |
| 9  | Impact of metal additive manufacturing parameters on the powder bed fusion and direct energy deposition processes: a comprehensive review. <i>Progress in Additive Manufacturing</i> , 2021, 6, 349-365. | 4.8 | 48        |
| 10 | Understanding of Human Behavior with a Robotic Agent Through Daily Activity Analysis. <i>International Journal of Social Robotics</i> , 2019, 11, 437-462.   | 4.6 | 30        |
| 11 | Learning-based error modeling in FDM 3D printing process. <i>Rapid Prototyping Journal</i> , 2021, 27, 507-517.  | 3.2 | 28        |
| 12 | SPARTAN: Developing a Vision System for Future Autonomous Space Exploration Robots. <i>Journal of Field Robotics</i> , 2014, 31, 107-140.  | 6.0 | 26        |
| 13 | Thorough robot navigation based on SVM local planning. <i>Robotics and Autonomous Systems</i> , 2015, 70, 166-180.   | 5.1 | 26        |
| 14 | Semantic maps from multiple visual cues. <i>Expert Systems With Applications</i> , 2017, 68, 45-57.  | 7.6 | 26        |
| 15 | Experimental and Computational Investigation of Lattice Sandwich Structures Constructed by Additive Manufacturing Technologies. <i>Journal of Manufacturing and Materials Processing</i> , 2021, 5, 95.  | 2.2 | 22        |
| 16 | Stereo-Based Visual Odometry for Autonomous Robot Navigation. <i>International Journal of Advanced Robotic Systems</i> , 2016, 13, 21.   | 2.1 | 21        |
| 17 | Influence of Selective Laser Melting Additive Manufacturing Parameters in Inconel 718 Superalloy. <i>Materials</i> , 2022, 15, 1362.   | 2.9 | 21        |
| 18 | Robot's Workspace Enhancement with Dynamic Human Presence for Socially-Aware Navigation. <i>Lecture Notes in Computer Science</i> , 2017, , 279-288.   | 1.3 | 19        |

| #  | ARTICLE  | IF  | CITATIONS |
|----|--|-----|-----------|
| 19 | Stereovision-Based Algorithm for Obstacle Avoidance. Lecture Notes in Computer Science, 2009, , 195-204.   | 1.3 | 17        |
| 20 | Collision risk assessment for autonomous robots by offline traversability learning. Robotics and Autonomous Systems, 2012, 60, 1367-1376.                            | 5.1 | 17        |
| 21 | On the optimization of Hierarchical Temporal Memory. Pattern Recognition Letters, 2012, 33, 670-676.   | 4.2 | 16        |
| 22 | AVERT: An autonomous multi-robot system for vehicle extraction and transportation. , 2015, , .   |     | 16        |
| 23 | Robots in Crisis Management: A Survey. Lecture Notes in Business Information Processing, 2017, , 43-56.  | 1.0 | 16        |
| 24 | RAMCIP: Towards a Robotic Assistant to Support Elderly with Mild Cognitive Impairments at Home. Communications in Computer and Information Science, 2016, , 186-195. | 0.5 | 14        |
| 25 | SPARTAN system: Towards a low-cost and high-performance vision architecture for space exploratory rovers. , 2011, , .  |     | 13        |
| 26 | Object recognition using saliency maps and HTM learning. , 2012, , .   |     | 11        |
| 27 | Visual Odometry for autonomous robot navigation through efficient outlier rejection. , 2013, , .   |     | 11        |
| 28 | Learning the terrain and planning a collision-free trajectory for indoor post-disaster environments. , 2012, , .   |     | 10        |
| 29 | SPARTAN/SEXTANT/COMPASS: Advancing Space Rover Vision via Reconfigurable Platforms. Lecture Notes in Computer Science, 2015, , 475-486.                              | 1.3 | 10        |
| 30 | Autonomous Vehicle Navigation in Semi-structured Environments Based on Sparse Waypoints and LiDAR Road-tracking. , 2021, , .   |     | 10        |
| 31 | Path Tracing on Polar Depth Maps for Robot Navigation. Lecture Notes in Computer Science, 2012, , 395-404.   | 1.3 | 9         |
| 32 | Sparse deep-learning algorithm for recognition and categorisation. Electronics Letters, 2012, 48, 1265.  | 1.0 | 8         |
| 33 | Human Aware Robot Navigation in Semantically Annotated Domestic Environments. Lecture Notes in Computer Science, 2016, , 414-423.                                    | 1.3 | 7         |
| 34 | A Hybrid Human-Robot Collaborative Environment for Recycling Electrical and Electronic Equipment. , 2019, , .  |     | 6         |
| 35 | Road Tracking in Semi-structured Environments Using Spatial Distribution of Lidar Data. Lecture Notes in Computer Science, 2021, , 432-445.                          | 1.3 | 6         |
| 36 | Loop Closure Detection and SLAM in Vineyards with Deep Semantic Cues. , 2022, , .  |     | 6         |

| #  | ARTICLE  | IF  | CITATIONS |
|----|--|-----|-----------|
| 37 | Autonomous Vehicle Emergency Recovery Tool: A Cooperative Robotic System for Car Extraction. Journal of Field Robotics, 2016, 33, 1058-1086.                         | 6.0 | 5         |
| 38 | Towards Skills Evaluation of Elderly for Human-Robot Interaction. , 2018, , .  |     | 5         |
| 39 | A POMDP Design Framework for Decision Making in Assistive Robots. Lecture Notes in Computer Science, 2017, , 467-479.  | 1.3 | 5         |
| 40 | Ground Penetrating Radar Image Processing Towards Underground Utilities Detection for Robotic Applications. , 2018, , .  |     | 4         |
| 41 | Towards life-long mapping of dynamic environments using temporal persistence modeling. , 2021, , .   |     | 4         |
| 42 | Decision Making with STPA through Markov Decision Process, a Theoretic Framework for Safe Human-Robot Collaboration. Applied Sciences (Switzerland), 2021, 11, 5212. | 2.5 | 4         |
| 43 | Theta-Disparity: An Efficient Representation of the 3D Scene Structure. Advances in Intelligent Systems and Computing, 2016, , 795-806.                              | 0.6 | 3         |
| 44 | Surface/subsurface mapping with an integrated rover-GPR system: A simulation approach. , 2018, , .   |     | 3         |
| 45 | RAMCIP Robot: A Personal Robotic Assistant; Demonstration of a Complete Framework. Lecture Notes in Computer Science, 2019, , 96-111.                                | 1.3 | 3         |
| 46 | Autonomous Robot Path Planning Techniques Using Cellular Automata. Emergence, Complexity and Computation, 2015, , 175-196.   | 0.3 | 2         |
| 47 | Context-dependent social mapping. , 2016, , .  |     | 2         |
| 48 | Surface Exploration with a Robot-Trailer System for Autonomous Subsurface Scanning. , 2019, , .  |     | 2         |
| 49 | GPR Antenna localization based on A-Scans. , 2019, , .   |     | 2         |
| 50 | A Characterization of 3D Printability. Computer-Aided Design and Applications, 2021, 18, 1279-1295.  | 0.6 | 2         |
| 51 | Towards Developing Dependable Systems Suitable for Crisis Management Applications. Lecture Notes in Business Information Processing, 2017, , 77-84.                  | 1.0 | 2         |
| 52 | Robotic Assistance in Medication Intake: A Complete Pipeline. Applied Sciences (Switzerland), 2022, 12, 1379.  | 2.5 | 2         |
| 53 | Place categorization through object classification. , 2014, , .  |     | 1         |
| 54 | Body-part tracking from partial-view depth data. , 2017, , .   |     | 1         |

| #  | ARTICLE   | IF  | CITATIONS |
|----|---|-----|-----------|
| 55 | V-Disparity Based Obstacle Avoidance for Dynamic Path Planning of a Robot-Trailer. Lecture Notes in Computer Science, 2019, , 143-152.                          | 1.3 | 1         |
| 56 | Dependability Levels on Autonomous Systems. International Journal of Information Systems for Crisis Response and Management, 2017, 9, 1-12.                     | 0.7 | 1         |
| 57 | How Do You Help a Robot to Find a Place? A Supervised Learning Paradigm to Semantically Infer about Places. Lecture Notes in Computer Science, 2013, , 324-333. | 1.3 | 1         |
| 58 | Hybrid Geometric Similarity and Local Consistency Measure for GPR Hyperbola Detection. Lecture Notes in Computer Science, 2019, , 224-233.                      | 1.3 | 1         |
| 59 | Integrated Topological Planning and Scheduling for Orchestrating Large Human-Robot Collaborative Teams. Lecture Notes in Computer Science, 2020, , 23-35.       | 1.3 | 1         |
| 60 | Automatic Subsurface Map Generation Based on GPR Data Processing. , 2019, , .   |     | 0         |
| 61 | Spatially-Constrained Semantic Segmentation with Topological Maps and Visual Embeddings. Lecture Notes in Computer Science, 2021, , 117-129.                    | 1.3 | 0         |
| 62 | Intelligent Stereo Vision in Autonomous Robot Traversability Estimation. , 2013, , 192-209.   |     | 0         |
| 63 | Dependability Levels on Autonomous Systems. , 2020, , 1377-1390.  |     | 0         |
| 64 | Intelligent Stereo Vision in Autonomous Robot Traversability Estimation. , 0, , 350-365.  |     | 0         |