Ioannis Kostavelis

List of Publications by Year
in descending order

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	Robotic Assistance in Medication Intake: A Complete Pipeline. Applied Sciences (Switzerland), 2022, 12, 1379.	2.5	2
2	Influence of Selective Laser Melting Additive Manufacturing Parameters in Inconel 718 Superalloy. Materials, 2022, 15, 1362.	2.9	21
3	Loop Closure Detection and SLAM in Vineyards with Deep Semantic Cues. , 2022, , .		6
4	Towards life-long mapping of dynamic environments using temporal persistence modeling. , 2021, , .		4
5	Spatially-Constrained Semantic Segmentation with Topological Maps and Visual Embeddings. Lecture Notes in Computer Science, 2021, , 117-129.	1.3	0
6	Learning-based error modeling in FDM 3D printing process. Rapid Prototyping Journal, 2021, 27, 507-517.	3.2	28
7	A Characterization of 3D Printability. Computer-Aided Design and Applications, 2021, 18, 1279-1295.	0.6	2
8	Impact of metal additive manufacturing parameters on the powder bed fusion and direct energy deposition processes: a comprehensive review. Progress in Additive Manufacturing, 2021, 6, 349-365.	4.8	48
9	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
10	Experimental and Computational Investigation of Lattice Sandwich Structures Constructed by Additive Manufacturing Technologies. Journal of Manufacturing and Materials Processing, 2021, 5, 95.	2.2	22
11	Road Tracking in Semi-structured Environments Using Spatial Distribution of Lidar Data. Lecture Notes in Computer Science, 2021, , 432-445.	1.3	6
12	Autonomous Vehicle Navigation in Semi-structured Environments Based on Sparse Waypoints and LiDAR Road-tracking. , 2021, , .		10
13	Non-destructive quality control methods in additive manufacturing: a survey. Rapid Prototyping Journal, 2020, 26, 777-790.	3.2	67
14	Safety bounds in human robot interaction: A survey. Safety Science, 2020, 127, 104667.	4.9	153
15	Integrated Topological Planning and Scheduling for Orchestrating Large Human-Robot Collaborative Teams. Lecture Notes in Computer Science, 2020, , 23-35.	1.3	1
16	Dependability Levels on Autonomous Systems. , 2020, , 1377-1390.		0
17	Understanding of Human Behavior with a Robotic Agent Through Daily Activity Analysis. International Journal of Social Robotics, 2019, 11, 437-462.	4.6	30
18	RAMCIP Robot: A Personal Robotic Assistant; Demonstration of a Complete Framework. Lecture Notes in Computer Science, 2019, , 96-111.	1.3	3

#	Article	IF	Citations
19	A Hybrid Human-Robot Collaborative Environment for Recycling Electrical and Electronic Equipment. , 2019, , .		6
20	Automatic Subsurface Map Generation Based on GPR Data Processing. , 2019, , .		0
21	Surface Exploration with a Robot-Trailer System for Autonomous Subsurface Scanning. , 2019, , .		2
22	GPR Antenna localization based on A-Scans. , 2019, , .		2
23	V-Disparity Based Obstacle Avoidance for Dynamic Path Planning of a Robot-Trailer. Lecture Notes in Computer Science, 2019, , 143-152.	1.3	1
24	Hybrid Geometric Similarity and Local Consistency Measure for GPR Hyperbola Detection. Lecture Notes in Computer Science, 2019, , 224-233.	1.3	1
25	Ground Penetrating Radar Image Processing Towards Underground Utilities Detection for Robotic Applications. , 2018, , .		4
26	Towards Skills Evaluation of Elderly for Human-Robot Interaction. , 2018, , .		5
27	Surface/subsurface mapping with an integrated rover-GPR system: A simulation approach. , 2018, , .		3
28	Recent trends in social aware robot navigation: A survey. Robotics and Autonomous Systems, 2017, 93, 85-104.	5.1	115
29	Robotâ€™s Workspace Enhancement with Dynamic Human Presence for Socially-Aware Navigation. Lecture Notes in Computer Science, 2017, , 279-288.	1.3	19
30	Robots in Crisis Management: A Survey. Lecture Notes in Business Information Processing, 2017, , 43-56.	1.0	16
31	Semantic maps from multiple visual cues. Expert Systems With Applications, 2017, 68, 45-57.	7.6	26
32	Body-part tracking from partial-view depth data. , 2017, , .		1
33	A POMDP Design Framework for Decision Making in Assistive Robots. Lecture Notes in Computer Science, 2017, , 467-479.	1.3	5
34	Dependability Levels on Autonomous Systems. International Journal of Information Systems for Crisis Response and Management, 2017, 9, 1-12.	0.7	1
35	Towards Developing Dependable Systems Suitable for Crisis Management Applications. Lecture Notes in Business Information Processing, 2017, , 77-84.	1.0	2
36	Human Aware Robot Navigation in Semantically Annotated Domestic Environments. Lecture Notes in Computer Science, 2016, , 414-423.	1.3	7

#	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	Context-dependent social mapping. , 2016, , .		2
39	Robot navigation via spatial and temporal coherent semantic maps. Engineering Applications of Artificial Intelligence, 2016, 48, 173-187.	8.1	54
40	Stereo-Based Visual Odometry for Autonomous Robot Navigation. International Journal of Advanced Robotic Systems, 2016, 13, 21.	2.1	21
41	Robot navigation in large-scale social maps: An action recognition approach. Expert Systems With Applications, 2016, 66, 261-273.	7.6	52
42	Theta-Disparity: An Efficient Representation of the 3D Scene Structure. Advances in Intelligent Systems and Computing, 2016, , 795-806.	0.6	3
43	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
44	Semantic mapping for mobile robotics tasks: A survey. Robotics and Autonomous Systems, 2015, 66, 86-103.	5.1	270
45	Thorough robot navigation based on SVM local planning. Robotics and Autonomous Systems, 2015, 70, 166-180.	5.1	26
46	Autonomous Robot Path Planning Techniques Using Cellular Automata. Emergence, Complexity and Computation, 2015, , 175-196.	0.3	2
47	AVERT: An autonomous multi-robot system for vehicle extraction and transportation. , 2015, , .		16
48	Robot Guided Crowd Evacuation. IEEE Transactions on Automation Science and Engineering, 2015, 12, 739-751.	5.2	64
49	SPARTAN/SEXTANT/COMPASS: Advancing Space Rover Vision via Reconfigurable Platforms. Lecture Notes in Computer Science, 2015, , 475-486.	1.3	10
50	Place categorization through object classification. , 2014, , .		1
51	SPARTAN: Developing a Vision System for Future Autonomous Space Exploration Robots. Journal of Field Robotics, 2014, 31, 107-140.	6.0	26
52	Learning spatially semantic representations for cognitive robot navigation. Robotics and Autonomous Systems, 2013, 61, 1460-1475.	5.1	57
53	Visual Odometry for autonomous robot navigation through efficient outlier rejection. , 2013, , .		11
54	Intelligent Stereo Vision in Autonomous Robot Traversability Estimation. , 2013, , 192-209.		0

#	Article	IF	Citations
55	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
56	Learning the terrain and planning a collision-free trajectory for indoor post-disaster environments. , 2012, , .		10
57	Object recognition using saliency maps and HTM learning. , 2012, , .		11
58	Sparse deep-learning algorithm for recognition and categorisation. Electronics Letters, 2012, 48, 1265.	1.0	8
59	Path Tracing on Polar Depth Maps for Robot Navigation. Lecture Notes in Computer Science, 2012, , 395-404.	1.3	9
60	Collision risk assessment for autonomous robots by offline traversability learning. Robotics and Autonomous Systems, 2012, 60, 1367-1376.	5.1	17
61	On the optimization of Hierarchical Temporal Memory. Pattern Recognition Letters, 2012, 33, 670-676.	4.2	16
62	SPARTAN system: Towards a low-cost and high-performance vision architecture for space exploratory rovers. , 2011, , .		13
63	Stereovision-Based Algorithm for Obstacle Avoidance. Lecture Notes in Computer Science, 2009, , 195-204.	1.3	17
64	Intelligent Stereo Vision in Autonomous Robot Traversability Estimation. , 0, , 350-365.		0