Gregory Dudek

List of Publications by Year
in descending order

55 papers	1,587 citations	840776 11 h-index	1125743 13 g-index
55 all docs	55 docs citations	55 times ranked	1200 citing authors

#	ARTICLE	IF	CITATIONS
1	A taxonomy for multi-agent robotics. Autonomous Robots, 1996, 3, 375.	4.8	275
2	AQUA: An Amphibious Autonomous Robot. Computer, 2007, 40, 46-53.	1.1	180
3	Multi-robot collaboration for robust exploration. Annals of Mathematics and Artificial Intelligence, 2001, 31, 7-40.	1.3	123
4	Collaborative Robot Exploration and Rendezvous: Algorithms, Performance Bounds and Observations. Autonomous Robots, 2001, 11, 117-136.	4.8	105
5	A Simple Tactile Probe for Surface Identification by Mobile Robots. IEEE Transactions on Robotics, 2011, 27, 534-544.	10.3	93
6	Shape Representation and Recognition from Multiscale Curvature. Computer Vision and Image Understanding, 1997, 68, 170-189.	4.7	89
7	Multi-domain monitoring of marine environments using a heterogeneous robot team. , 2012, , .		88
8	Simultaneous planning, localization, and mapping in a camera sensor network. Robotics and Autonomous Systems, 2006, 54, 921-932.	5.1	57
9	A Mobile Robot That Learns Its Place. Neural Computation, 1997, 9, 683-699.	2.2	54
10	Enabling autonomous capabilities in underwater robotics. , 2008, , .		46
11	Underwater multi-robot convoying using visual tracking by detection. , 2017, , .		38
12	Heterogeneous Multi-Robot System for Exploration and Strategic Water Sampling. , 2018, , .		36
13	Modeling curiosity in a mobile robot for long-term autonomous exploration and monitoring. Autonomous Robots, 2016, 40, 1267-1278.	4.8	35
14	State estimation of an underwater robot using visual and inertial information. , 2011, , .		30
15	Ninja legs: Amphibious one degree of freedom robotic legs. , 2013, , .		26
16	Feature Tracking Evaluation for Pose Estimation in Underwater Environments. , 2011, , .		23
17	Robotic Coral Reef Health Assessment Using Automated Image Analysis. Journal of Field Robotics, 2017, 34, 170-187.	6.0	20
18	Learning to Drive Off Road on Smooth Terrain in Unstructured Environments Using an On-Board Camera and Sparse Aerial Images. , 2020, , .		20

#	Article	IF	Citations
19	Mapping in unknown graph-like worlds. Journal of Field Robotics, 1996, 13, 539-559.	0.7	19
20	Fourier Tag: A Smoothly Degradable Fiducial Marker System with Configurable Payload Capacity. , 2011, , .		16
21	Robust servo-control for underwater robots using banks of visual filters. , 2009, , .		15
22	Efficient Terrain Driven Coral Coverage Using Gaussian Processes for Mosaic Synthesis. , 2016, , .		14
23	Wide-Speed Autopilot System for a Swimming Hexapod Robot. , 2013, , .		13
24	ONSUM: A system for generating online navigation summaries. , 2010, , .		12
25	Asymmetric Rendezvous Search at Sea. , 2014, , .		12
26	Maintaining efficient collaboration with trust-seeking robots. , 2016, , .		12
27	Fair subdivision of multi-robot tasks. , 2013, , .		11
28	Data-driven selective sampling for marine vehicles using multi-scale paths. , 2017, , .		11
29	Collaborative Sampling Using Heterogeneous Marine Robots Driven by Visual Cues. , 2017, , .		11
30	GPU-Assisted Learning on an Autonomous Marine Robot for Vision-Based Navigation and Image Understanding. , 2018, , .		11
31	A vision-based boundary following framework for aerial vehicles. , 2010, , .		10
32	Synthetically Trained 3D Visual Tracker of Underwater Vehicles. , 2018, , .		10
33	Learning Goal Conditioned Socially Compliant Navigation From Demonstration Using Risk-Based Features. IEEE Robotics and Automation Letters, 2021, 6, 651-658.	5.1	9
34	Adaptive Parameter EXploration (APEX): Adaptation of robot autonomy from human participation. , 2014, , .		6
35	Synthesizing Neural Network Controllers with Probabilistic Model-Based Reinforcement Learning. , 2018, , .		6
36	Graphical State Space Programming: A visual programming paradigm for robot task specification. , 2011, , .		5

#	Article	IF	Citations
37	Towards Navigation Summaries: Automated Production of a Synopsis of a Robot Trajectories. , 2009, , .		4
38	Telepresence across the Ocean. , 2010, , .		4
39	Socially-Driven Collective Path Planning for Robot Missions. , 2012, , .		4
40	On the complexity of searching for an evader with a faster pursuer. , 2013, , .		4
41	Dynamic planning of redundant robots within a set-based task-priority inverse kinematics framework. , 2020, , .		4
42	One-Shot Informed Robotic Visual Search in the Wild. , 2020, , .		4
43	Graphical state-space programmability as a natural interface for robotic control. , 2010, , .		3
44	Maximizing visibility in collaborative trajectory planning. , 2014, , .		3
45	Pose Estimation From Image Data Without Explicit Object Models. , 1995, , 19-35.		3
46	State estimation for snake robots. , 2011, , .		3
47	On the Positional Uncertainty of Multi-Robot Cooperative Localization. , 2002, , 3-10.		2
48	Subsea Fauna Enumeration Using Vision-Based Marine Robots. , 2016, , .		2
49	Fast and efficient rendezvous in street networks. , 2016, , .		2
50	Visual identification of biological motion for underwater human–robot interaction. Autonomous Robots, 2018, 42, 111-124.	4.8	2
51	Shape metrics from curvature-scale space and curvature-tuned smoothing. , 1991, , .		1
52	Trajectory-Constrained Deep Latent Visual Attention for Improved Local Planning in Presence of Heterogeneous Terrain. , 2021, , .		1
53	Perception for Mobile Agents. Autonomous Robots, 2000, 8, 103-104.	4.8	0
54	Special issue on robotics: science and systems. Autonomous Robots, 2014, 37, 333-334.	4.8	0

#	Article	IF	Citations
55	Cooperative Exploration, Localization, and Visual Map Construction. Advances in Intelligent and Soft Computing, 2010, , 227-245.	0.2	0