

Keiji Nagatani

List of Publications by Year in descending order

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61
papers

1,920
citations

516710

16
h-index

289244

40
g-index

62
all docs

62
docs citations

62
times ranked

1488
citing authors

#	ARTICLE	IF	CITATIONS
1	Emergency response to the nuclear accident at the Fukushima Daiichi Nuclear Power Plants using mobile rescue robots. <i>Journal of Field Robotics</i> , 2013, 30, 44-63.	6.0	453
2	Collaborative mapping of an earthquake-damaged building via ground and aerial robots. <i>Journal of Field Robotics</i> , 2012, 29, 832-841.	6.0	294
3	Terramechanics-based model for steering maneuver of planetary exploration rovers on loose soil. <i>Journal of Field Robotics</i> , 2007, 24, 233-250.	6.0	250
4	Experimental study and analysis on driving wheels' performance for planetary exploration rovers moving in deformable soil. <i>Journal of Terramechanics</i> , 2011, 48, 27-45.	3.1	169
5	Traveling performance evaluation of planetary rovers on loose soil. <i>Journal of Field Robotics</i> , 2012, 29, 648-662.	6.0	76
6	Planetary rovers' wheel-soil interaction mechanics: new challenges and applications for wheeled mobile robots. <i>Intelligent Service Robotics</i> , 2011, 4, 17-38.	2.6	57
7	Slope traversal controls for planetary exploration rover on sandy terrain. <i>Journal of Field Robotics</i> , 2009, 26, 264-286.	6.0	48
8	Shared autonomy system for tracked vehicles on rough terrain based on continuous three-dimensional terrain scanning. <i>Journal of Field Robotics</i> , 2011, 28, 875-893.	6.0	41
9	Odometry Correction Using Visual Slip Angle Estimation for Planetary Exploration Rovers. <i>Advanced Robotics</i> , 2010, 24, 359-385.	1.8	40
10	Multirobot exploration for search and rescue missions: A report on map building in RoboCupRescue 2009. <i>Journal of Field Robotics</i> , 2011, 28, 373-387.	6.0	36
11	Modeling, Analysis, and Control of an Actively Reconfigurable Planetary Rover for Traversing Slopes Covered with Loose Soil. <i>Journal of Field Robotics</i> , 2013, 30, 875-896.	6.0	34
12	Accurate estimation of drawbar pull of wheeled mobile robots traversing sandy terrain using built-in force sensor array wheel. , 2009, , .		29
13	Design of wheels with grousers for planetary rovers traveling over loose soil. <i>Journal of Terramechanics</i> , 2013, 50, 345-353.	3.1	26
14	Development of leg-track hybrid locomotion to traverse loose slopes and irregular terrain. <i>Journal of Field Robotics</i> , 2011, 28, 950-960.	6.0	25
15	Development of a Transformable Mobile Robot with a Variable Wheel Diameter. <i>Journal of Robotics and Mechatronics</i> , 2007, 19, 252-257.	1.0	23
16	Development of a Visual Odometry System for a Wheeled Robot on Loose Soil using a Telecentric Camera. <i>Advanced Robotics</i> , 2010, 24, 1149-1167.	1.8	19
17	Sensor-based navigation for car-like mobile robots based on a generalized Voronoi graph. <i>Advanced Robotics</i> , 2003, 17, 385-401.	1.8	18
18	Development and field test of teleoperated mobile robots for active volcano observation. , 2014, , .		17

#	ARTICLE	IF	CITATIONS
19	Measurement and modeling for two-dimensional normal stress distribution of wheel on loose soil. Journal of Terramechanics, 2015, 62, 63-73.	3.1	17
20	Innovative technologies for infrastructure construction and maintenance through collaborative robots based on an open design approach. Advanced Robotics, 2021, 35, 715-722.	1.8	17
21	Local Path Planner for Mobile Robot in Dynamic Environment based on Distance Time Transform Method. Advanced Robotics, 2012, 26, 1623-1647.	1.8	16
22	Recent Trends and Issues of Volcanic Disaster Response with Mobile Robots. Journal of Robotics and Mechatronics, 2014, 26, 436-441.	1.0	15
23	Utilization of Unmanned Aerial Vehicle, Artificial Intelligence, and Remote Measurement Technology for Bridge Inspections. Journal of Robotics and Mechatronics, 2020, 32, 1244-1258.	1.0	15
24	Door-opening behavior of an autonomous mobile manipulator by sequence of action primitives. Journal of Field Robotics, 1996, 13, 709-721.	0.7	14
25	Slope traversal experiments with slip compensation control for lunar/planetary exploration rover. , 2008, , .		13
26	Sensor Information Processing in Robot Competitions and Real World Robotic Challenges. Advanced Robotics, 2012, 26, 1539-1554.	1.8	12
27	Evaluation of the reconfiguration effects of planetary rovers on their lateral traversing of sandy slopes. , 2012, , .		12
28	Designing a behavior of a mobile robot equipped with a manipulator to open and pass through a door. Robotics and Autonomous Systems, 1996, 17, 53-64.	5.1	11
29	Slope traversability analysis of reconfigurable planetary rovers. , 2012, , .		11
30	Autonomous Driving of Six-Wheeled Dump Truck with a Retrofitted Robot. Springer Proceedings in Advanced Robotics, 2021, , 59-72.	1.3	11
31	Development of multi-D.O.F. tracked vehicle to traverse weak slope and climb up rough slope. , 2013, , .		10
32	Research on traversability of tracked vehicle on slope with unfixed obstacles: derivation of climbing-over, tipping-over, and sliding-down conditions. Advanced Robotics, 2019, 33, 1060-1071.	1.8	9
33	Semantic Mapping of Construction Site From Multiple Daily Airborne LiDAR Data. IEEE Robotics and Automation Letters, 2021, 6, 3073-3080.	5.1	9
34	Micro-€unmanned aerial vehicle€-based volcano observation system for debris flow evacuation warning. Journal of Field Robotics, 2018, 35, 1222-1241.	6.0	8
35	Development and field testing of UAV-based sampling devices for obtaining volcanic products. , 2014, , .		7
36	Positioning device for outdoor mobile robots using optical sensors and lasers. Advanced Robotics, 2013, 27, 1147-1160.	1.8	6

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37	Automated Image Presentation for Backhoe Embankment Construction in Unmanned Construction Site. , 2020, , .		6
38	Attachable Sensor Boxes to Visualize Backhoe Motion. , 2020, , .		6
39	Reduction of the head-up pitching moment of small quad-rotor unmanned aerial vehicles in uniform flow. International Journal of Micro Air Vehicles, 2018, 10, 85-105.	1.3	5
40	Arbitrary Viewpoint Visualization for Teleoperated Hydraulic Excavators. Journal of Robotics and Mechatronics, 2020, 32, 1233-1243.	1.0	5
41	Prediction of Backhoe Loading Motion via the Beta-Process Hidden Markov Model. , 2020, , .		4
42	Improvement in Measurement Area of 3D LiDAR for a Mobile Robot Using a Mirror Mounted on a Manipulator. IEEE Robotics and Automation Letters, 2020, 5, 6350-6356.	5.1	3
43	Estimation of articulated angle in six-wheeled dump trucks using multiple GNSS receivers for autonomous driving. Advanced Robotics, 2021, 35, 1376-1387.	1.8	3
44	Path and Sensing Point Planning for Mobile Robot Navigation to Minimize the Risk of Collision.. Journal of the Robotics Society of Japan, 1997, 15, 197-206.	0.1	3
45	Research and Development on Robotic Technologies for Infrastructure Maintenance. Journal of Robotics and Mechatronics, 2019, 31, 744-751.	1.0	3
46	Research of Mobile Manipulator using Task Oriented Approach. Autonomous Navigation in Indoor Environment with Door Opening.. Journal of the Robotics Society of Japan, 1999, 17, 865-875.	0.1	2
47	Trafficability analysis for lunar/planetary exploration rover using Thrust-Cornering Characteristic Diagram. , 2008, , .		2
48	Field Report: UAV-Based Volcano Observation System for Debris Flow Evacuation Alarm. Springer Proceedings in Advanced Robotics, 2018, , 163-175.	1.3	2
49	Social Application of Robotics. Journal of the Robotics Society of Japan, 2008, 26, 748-749.	0.1	2
50	Measurement method for two-dimensional normal stress distribution of wheels on lateral loose soil slopes. , 2014, , .		1
51	Modeling and Control of Robots on Rough Terrain. , 2016, , 1267-1284.		1
52	Safeness visualization of terrain for teleoperation of mobile robot using 3D environment map and dynamic simulator. , 2017, , .		1
53	Velocity Control of Pneumatic Motor Attached to Retrofit-type Steering Handle for Autonomous Navigation of Conventional Six-wheeled Dump Truck. Transactions of the Society of Instrument and Control Engineers, 2021, 57, 433-444.	0.2	1
54	Development of an excavator-avoidance system for buried pipes. Advanced Robotics, 2021, 35, 1468-1483.	1.8	1

#	ARTICLE	IF	CITATIONS
55	Excavation Path Generation for Autonomous Excavator Considering Bulking Factor of Soil. , 2020, , .		1
56	Applications of Robotics in Society. Advanced Robotics, 2009, 23, 1493-1497.	1.8	0
57	An individual prediction model of the pre-loading motion for operator and backhoe pairs. Advanced Robotics, 0, , 1-16.	1.8	0
58	Research of Traversability for Tracked Robot on Slope with Unfixed Obstacles. Transactions of the Society of Instrument and Control Engineers, 2019, 55, 700-708.	0.2	0
59	The University of Tokyo: Corporate Sponsored Research Program "Construction System Management for Innovation" Journal of Robotics and Mechatronics, 2020, 32, 1230-1232.	1.0	0
60	Selection of Landing Position for Sensor Device Installation Using Drone Considering a Prospect and Ground Conditions. Transactions of the Society of Instrument and Control Engineers, 2021, 57, 511-518.	0.2	0
61	Special issue on Advanced Construction Robot System. Advanced Robotics, 2021, 35, 1375-1375.	1.8	0