Jonghoek Kim

List of Publications by Year
in descending order

69 papers	611 citations	623734 14 h-index	713466 21 g-index
70 all docs	70 docs citations	70 times ranked	322 citing authors

#	Article	IF	Citations
1	Cooperative Localization and Unknown Currents Estimation Using Multiple Autonomous Underwater Vehicles. IEEE Robotics and Automation Letters, 2020, 5, 2365-2371.	5.1	50
2	A provably complete exploration strategy by constructing Voronoi diagrams. Autonomous Robots, 2010, 29, 367-380.	4.8	31
3	Curve Tracking Control for Autonomous Vehicles with Rigidly Mounted Range Sensors. Journal of Intelligent and Robotic Systems: Theory and Applications, 2009, 56, 177-197.	3.4	30
4	Bearingsâ€only target motion analysis of a highly manoeuvring target. IET Radar, Sonar and Navigation, 2017, 11, 1011-1019.	1.8	27
5	Multi-robot rendezvous based on bearing-aided hierarchical tracking of network topology. Ad Hoc Networks, 2019, 86, 131-143.	5.5	26
6	Cooperative Exploration and Networking While Preserving Collision Avoidance. IEEE Transactions on Cybernetics, 2017, 47, 4038-4048.	9.5	24
7	Motion control of multiple autonomous ships to approach a target without being detected. International Journal of Advanced Robotic Systems, 2018, 15, 172988141876318.	2.1	24
8	Cooperative exploration and protection of a workspace assisted by information networks. Annals of Mathematics and Artificial Intelligence, 2014, 70, 203-220.	1.3	23
9	Stealth path planning for a high speed torpedo-shaped autonomous underwater vehicle to approach a target ship. Cyber-Physical Systems, 2018, 4, 1-16.	2.0	20
10	Perpendicular Parking of Car-like Robots Allowing a Cusp on the Path. IEEE Access, 2020, , 1-1.	4.2	19
11	Control laws to avoid collision with three dimensional obstacles using sensors. Ocean Engineering, 2019, 172, 342-349.	4.3	18
12	Multipoint Rendezvous in Multirobot Systems. IEEE Transactions on Cybernetics, 2020, 50, 310-323.	9.5	17
13	Target Following and Close Monitoring Using an Unmanned Surface Vehicle. IEEE Transactions on Systems, Man, and Cybernetics: Systems, 2020, 50, 4233-4242.	9.3	17
14	Capturing intruders based on Voronoi diagrams assisted by information networks. International Journal of Advanced Robotic Systems, 2017, 14, 172988141668269.	2.1	15
15	Maneuvering target tracking of underwater autonomous vehicles based on bearing-only measurements assisted by inequality constraints. Ocean Engineering, 2019, 189, 106404.	4.3	14
16	Threeâ€dimensional discreteâ€time controller to intercept a targeted UAV using a capture net towed by multiple aerial robots. IET Radar, Sonar and Navigation, 2019, 13, 682-688.	1.8	14
17	Obstacle information aided target tracking algorithms for angleâ€only tracking of a highly maneuverable target in three dimensions. IET Radar, Sonar and Navigation, 2019, 13, 1074-1080.	1.8	12
18	Hybrid TOAâ€"DOA techniques for maneuvering underwater target tracking using the sensor nodes on the sea surface. Ocean Engineering, 2021, 242, 110110.	4.3	12

#	Article	IF	Citations
19	Simultaneous Cooperative Exploration and Networking Based on Voronoi Diagrams. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2009, 42, 1-6.	0.4	10
20	Workspace exploration and protection with multiple robots assisted by sensor networks. International Journal of Advanced Robotic Systems, 2018, 15, 172988141879217.	2.1	10
21	Three-dimensional multi-robot control to chase a target while not being observed. International Journal of Advanced Robotic Systems, 2019, 16, 172988141982966.	2.1	10
22	Non-line-of-sight error mitigating algorithms for transmitter localization based on hybrid TOA/RSSI measurements. Wireless Networks, 2020, 26, 3629-3635.	3.0	10
23	Multirobot Exploration While Building Power-Efficient Sensor Networks in Three Dimensions. IEEE Transactions on Cybernetics, 2019, 49, 2771-2778.	9.5	9
24	Fast nonâ€lineâ€ofâ€sight receivers conjecturing method in TDOA localisation using obstacle information. IET Radar, Sonar and Navigation, 2019, 13, 347-351.	1.8	9
25	Truck Platoon Control Considering Heterogeneous Vehicles. Applied Sciences (Switzerland), 2020, 10, 5067.	2.5	9
26	Controllers to Chase a High-Speed Evader Using a Pursuer with Variable Speed. Applied Sciences (Switzerland), 2018, 8, 1976.	2.5	8
27	Three dimensional tracking of a maneuvering emitter utilizing doppler-bearing measurements of a constant velocity observer. Signal Processing, 2021, 189, 108246.	3.7	8
28	Observer manoeuvre control to track multiple targets considering Dopplerâ€bearing measurements in threat environments. IET Radar, Sonar and Navigation, 2019, 13, 2158-2165.	1.8	8
29	Cooperative localisation for deepâ€sea exploration using multiple unmanned underwater vehicles. IET Radar, Sonar and Navigation, 2020, 14, 1244-1248.	1.8	8
30	Distributed Rendezvous of Heterogeneous Robots with Motion-Based Power Level Estimation. Journal of Intelligent and Robotic Systems: Theory and Applications, 2020, 100, 1417-1427.	3.4	7
31	Tracking Controllers to Chase a Target Using Multiple Autonomous Underwater Vehicles Measuring the Sound Emitted From the Target. IEEE Transactions on Systems, Man, and Cybernetics: Systems, 2021, 51, 4579-4587.	9.3	7
32	Constructing 3D Underwater Sensor Networks without Sensing Holes Utilizing Heterogeneous Underwater Robots. Applied Sciences (Switzerland), 2021, 11, 4293.	2.5	7
33	Path plan strategy of an underwater robot to approach a moving emitter while maximising sound intensity measurements. IET Radar, Sonar and Navigation, 2019, 13, 795-801.	1.8	7
34	Intruder capturing game on a topological map assisted by information networks. , 2011, , .		6
35	Boundary Tracking Control for Autonomous Vehicles with Rigidly Mounted Range Sensors. Journal of Intelligent and Robotic Systems: Theory and Applications, 2019, 95, 1041-1048.	3.4	6
36	Tracking a manoeuvring target while mitigating NLOS errors in TDOA measurements. IET Radar, Sonar and Navigation, 2020, 14, 495-502.	1.8	6

#	Article	IF	Citations
37	Three dimensional distributed rendezvous in spherical underwater robots considering power consumption. Ocean Engineering, 2020, 199, 107050.	4.3	6
38	3D path planner of an autonomous underwater vehicle to track an emitter using frequency and azimuthâ€“elevation angle measurements. IET Radar, Sonar and Navigation, 2020, 14, 1236-1243.	1.8	6
39	Three Dimensional Formation Control to Pursue an Underwater Evader Utilizing Underwater Robots Measuring the Sound Generated From the Evader. IEEE Access, 2019, 7, 150720-150728.	4.2	5
40	Fast Path Planning of Autonomous Vehicles in 3D Environments. Applied Sciences (Switzerland), 2022, 12, 4014.	2.5	5
41	Locating an Underwater Target Using Angle-Only Measurements of Heterogeneous Sonobuoys Sensors with Low Accuracy. Sensors, 2022, 22, 3914.	3.8	5
42	An exploration strategy by constructing Voronoi diagrams with provable completeness. , 2009, , .		4
43	Multi-robot global sonar survey in the presence of strong currents. Ocean Engineering, 2019, 188, 106316.	4.3	4
44	Asymptotic Boundary Shrink Control With Multirobot Systems. IEEE Transactions on Systems, Man, and Cybernetics: Systems, 2022, 52, 591-605.	9.3	4
45	Direction of Arrival Estimation Using Four Isotropic Receivers. IEEE Instrumentation and Measurement Magazine, 2021, 24, 77-81.	1.6	4
46	Time-efficient path planning using two virtual robots. International Journal of Advanced Robotic Systems, 2019, 16, 172988141988674.	2.1	3
47	Optimal motion controllers for an unmanned surface vehicle to track a maneuvering underwater target based on coarse range-bearing measurements. Ocean Engineering, 2020, 216, 107973.	4.3	3
48	Autonomous Underwater Vehicle Localization Using Sound Measurements of Passing Ships. Applied Sciences (Switzerland), 2020, 10, 9139.	2.5	3
49	Inequality constrained Kalman filter for Bearing-Only Target Motion Analysis. , 2015, , .		2
50	Intruder capture algorithms considering visible intruders. International Journal of Advanced Robotic Systems, 2019, 16, 172988141984673.	2.1	2
51	Underwater surface scan utilizing an unmanned underwater vehicle with sampled range information. Ocean Engineering, 2020, 207, 107345.	4.3	2
52	Coverage control of multiple robots in cluttered threeâ€dimensional environments. IET Radar, Sonar and Navigation, 2021, 15, 1016-1029.	1.8	2
53	Topological Map Building with Multiple Agents Having Abilities of Dropping Indexed Markers. Journal of Intelligent and Robotic Systems: Theory and Applications, 2021, 103, 1.	3.4	2
54	Filter reâ€start strategy for angleâ€only tracking of a highly manoeuvrable target considering the target's destination information. IET Radar, Sonar and Navigation, 2020, 14, 935-943.	1.8	2

#	Article	IF	Citations
55	Cooperative localization and control of multiple heterogeneous robots using a string formation. Asian Journal of Control, 2023, 25, 794-806.	3.0	2
56	Fast Route Planner Considering Terrain Information. Sensors, 2022, 22, 4518.	3.8	2
57	Battery Level Estimation of Mobile Agents under Communication Constraints. , 2010, , .		1
58	Observer motion controls for multiple targets considering Doppler-bearing measurements. , 2016, , .		1
59	Autonomous Balloon Controls for Protection against Projectiles with Known Destinations. Applied Sciences (Switzerland), 2021, 11, 4077.	2.5	1
60	Autonomous rover guidance and localization by measuring the peak of a tall landmark. Asian Journal of Control, 0, , .	3.0	1
61	Power Link Optimization for a Neurostimulator in Nasal Cavity. International Journal of Antennas and Propagation, 2017, 2017, 1-6.	1.2	0
62	Guidance control to capture a target using communication between the autonomous aerial vehicle and remote sensors. IET Radar, Sonar and Navigation, 2019, 13, 1816-1825.	1.8	0
63	Robust and efficient WLS-based dynamic state estimation considering transformer core saturation. Journal of the Franklin Institute, 2020, 357, 12938-12959.	3.4	0
64	Particle Discharge Rate Analysis and Control Laws of the Exit Gate for Pyramidal Hoppers. International Journal of Control, Automation and Systems, 2021, 19, 2529-2535.	2.7	0
65	Distributed herding of multiple robots in cluttered environments. Robotics and Autonomous Systems, 2021, 146, 103889.	5.1	0
66	3D reactive surface scan utilising a robot with rigidly mounted range sensors. IET Radar, Sonar and Navigation, 2020, 14, 2010-2016.	1.8	0
67	Three dimensional motion camouflage guidance utilizing multiple leaders and one interceptor. IET Radar, Sonar and Navigation, 0, , .	1.8	0
68	Automatic Thread Defect Examination System. Applied Sciences (Switzerland), 2022, 12, 6109.	2.5	0
69	Tracking a Ground Target Utilizing Doppler-Only Measurements of a Single Passive Sonar Sensor Assisted by Straight Road Constraints. IEEE Access, 2022, 10, 74198-74206.	4.2	0