# Jinwhan Kim

List of Publications by Year
in descending order

| | | | |
|---|---|---|---|
| 133 papers | 1,656 citations | 304743<br>22 h-index | 361022<br>35 g-index |
| 133 all docs | 133 docs citations | 133 times ranked | 1370 citing authors |

| # | ARTICLE | IF | CITATIONS |
|---|---------|-----|-----------|
| 1 | Efficient COLREG-Compliant Collision Avoidance in Multi-Ship Encounter Situations. IEEE Transactions on Intelligent Transportation Systems, 2022, 23, 1899-1911. | 8.0 | 48 |
| 2 | Intent Inference-Based Ship Collision Avoidance in Encounters With Rule-Violating Vessels. IEEE Robotics and Automation Letters, 2022, 7, 518-525. | 5.1 | 6 |
| 3 | Topographic SLAM Using a Single Terrain Altimeter in GNSS-Restricted Environment. IEEE Access, 2022, 10, 10806-10815. | 4.2 | 2 |
| 4 | Ambiguity Resolution Between Constant Velocity and Coordinated Turn Models for Multimodel Target Tracking. , 2022, 6, 1-4. | | 1 |
| 5 | Bearing-Constrained Formation Tracking Control of Nonholonomic Agents Without Inter-Agent Communication. , 2022, 6, 2401-2406. | | 6 |
| 6 | Mission Planning for Underwater Survey with Autonomous Marine Vehicles. Journal of Ocean Engineering and Technology, 2022, 36, 41-49. | 1.2 | 2 |
| 7 | Robust Underwater Localization Using Acoustic Image Alignment for Autonomous Intervention Systems. IEEE Access, 2022, 10, 58447-58457. | 4.2 | 3 |
| 8 | Underwater localization using an optic and acoustic stereo imaging system for autonomous intervention robots. Electronics Letters, 2022, 58, 597-599. | 1.0 | 0 |
| 9 | Icevaning control of an Arctic offshore vessel and its experimental validation. International Journal of Naval Architecture and Ocean Engineering, 2021, 13, 208-222. | 2.3 | 2 |
| 10 | Enhanced Target Ship Tracking With Geometric Parameter Estimation for Unmanned Surface Vehicles. IEEE Access, 2021, 9, 39864-39872. | 4.2 | 7 |
| 11 | Automatic Ship Collision Avoidance in Narrow Channels through Curvilinear Coordinate Transformation. Journal of the Society of Naval Architects of Korea, 2021, 58, 191-197. | 0.5 | 1 |
| 12 | Sensor fusion of two sonar devices for underwater 3D mapping with an AUV. Autonomous Robots, 2021, 45, 543. | 4.8 | 14 |
| 13 | Intent Inference of Ship Collision Avoidance Behavior Under Maritime Traffic Rules. IEEE Access, 2021, 9, 5598-5608. | 4.2 | 10 |
| 14 | Robust Data Association for Multi-Object Detection in Maritime Environments Using Camera and Radar Measurements. IEEE Robotics and Automation Letters, 2021, 6, 5865-5872. | 5.1 | 11 |
| 15 | COLREG-compliant ship collision avoidance in narrow channels using curvilinear coordinates. IFAC-PapersOnLine, 2021, 54, 24-29. | 0.9 | 1 |
| 16 | Path Optimization for Cooperative Mapping Using Multiple Robots with Limited Sensing Capabilities. , 2021, , . | | 0 |
| 17 | Model-referenced pose estimation using monocular vision for autonomous intervention tasks. Autonomous Robots, 2020, 44, 205-216. | 4.8 | 8 |
| 18 | AUV-Based Multi-View Scanning Method for 3-D Reconstruction of Underwater Object Using Forward Scan Sonar. IEEE Sensors Journal, 2020, 20, 1592-1606. | 4.7 | 17 |

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|---|---------|----|-----------|
| 19 | Robust Loop Closure Method for Multi-Robot Map Fusion by Integration of Consistency and Data Similarity. IEEE Robotics and Automation Letters, 2020, 5, 5701-5708. | 5.1 | 16 |
| 20 | Guest Editorial: Marine Robotics and Control Systems. International Journal of Control, Automation and Systems, 2020, 18, 521-522. | 2.7 | 0 |
| 21 | Three-dimensional Visual Mapping of Underwater Ship Hull Surface Using Piecewise-planar SLAM. International Journal of Control, Automation and Systems, 2020, 18, 564-574. | 2.7 | 22 |
| 22 | Collaborative Mission and Route Planning of Multi-vehicle Systems for Autonomous Search in Marine Environment. International Journal of Control, Automation and Systems, 2020, 18, 546-555. | 2.7 | 10 |
| 23 | Autonomous collision detection and avoidance for ARAGON USV: Development and field tests. Journal of Field Robotics, 2020, 37, 987-1002. | 6.0 | 64 |
| 24 | Semantic Segmentation of Urban Scenes Using Spatial Contexts. IEEE Access, 2020, 8, 55254-55268. | 4.2 | 0 |
| 25 | Probabilistic Intent Inference for Predicting the Compliance with COLREGs between Two Surface Ships. IFAC-PapersOnLine, 2020, 53, 14595-14599. | 0.9 | 0 |
| 26 | Semantic Segmentation of Marine Radar Images using Convolutional Neural Networks. , 2019, , . | | 6 |
| 27 | Nonlinear Model Predictive Control of an Autonomous Underwater Vehicle for Terrain Profile Tracking. , 2019, , . | | 1 |
| 28 | Dynamic Grid Adaptation for Panel-Based Bathymetric SLAM. , 2019, , . | | 3 |
| 29 | Mismatched image identification using histogram of loop closure error for feature-based optical mapping. International Journal of Intelligent Robotics and Applications, 2019, 3, 196-206. | 2.8 | 0 |
| 30 | Automatic waterline detection and 3D reconstruction in model ship tests using stereo vision. Electronics Letters, 2019, 55, 527-529. | 1.0 | 4 |
| 31 | Fusing Lidar Data and Aerial Imagery with Perspective Correction for Precise Localization in Urban Canyons. , 2019, , . | | 5 |
| 32 | Robust Loop Closure Selection for Multi-robot Mapping Under Perceptual Aliasing. , 2019, , . | | 0 |
| 33 | Efficient fleet size optimization for task allocation of multiple unmanned vehicles. IFAC-PapersOnLine, 2019, 52, 297-301. | 0.9 | 0 |
| 34 | Experimental validation of a velocity obstacle based collision avoidance algorithm for unmanned surface vehicles. IFAC-PapersOnLine, 2019, 52, 329-334. | 0.9 | 21 |
| 35 | Three-Dimensional Visual Mapping of Underwater Ship Hull Surface using View-based Piecewise-Planar Measurements. IFAC-PapersOnLine, 2019, 52, 384-389. | 0.9 | 5 |
| 36 | Weighted Grid Partitioning for Panel-Based Bathymetric SLAM. , 2019, , . | | 1 |

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| 37 | Three-Dimensional Reconstruction of a Marine Floating Structure With an Unmanned Surface Vessel. IEEE Journal of Oceanic Engineering, 2019, 44, 984-996. | 3.8 | 12 |
| 38 | Precise Localization and Mapping in Indoor Parking Structures via Parameterized SLAM. IEEE Transactions on Intelligent Transportation Systems, 2019, 20, 4415-4426. | 8.0 | 28 |
| 39 | In‑water visual ship hull inspection using a hover‑capable underwater vehicle with stereo vision. Journal of Field Robotics, 2019, 36, 531-546. | 6.0 | 35 |
| 40 | Coastal SLAM With Marine Radar for USV Operation in GPS-Restricted Situations. IEEE Journal of Oceanic Engineering, 2019, 44, 300-309. | 3.8 | 43 |
| 41 | Selective image registration for efficient visual SLAM on planar surface structures in underwater environment. Autonomous Robots, 2019, 43, 1665-1679. | 4.8 | 10 |
| 42 | Fleet size optimization and collaborative route planning for multi-vehicle task allocation. , 2019, , . | | 5 |
| 43 | Probabilistic modeling of ship powering performance using full-scale operational data. Applied Ocean Research, 2019, 82, 1-9. | 4.1 | 15 |
| 44 | Automatic target tracking with time-delayed measurements for unmanned surface vehicles. , 2019, , . | | 3 |
| 45 | Automatic Ship Collision Avoidance Algorithm based on Probabilistic Velocity Obstacle with Consideration of COLREGs. Journal of the Society of Naval Architects of Korea, 2019, 56, 75-81. | 0.5 | 5 |
| 46 | Behavior-based Control Considering the Interaction Between a Human Operator and an Autonomous Surface Vehicle. Journal of Ocean Engineering and Technology, 2019, 33, 620-626. | 1.2 | 5 |
| 47 | Trajectory Design of Underwater Gliders for Maximum Advance Speed in Finite-Depth Water. Journal of Guidance, Control, and Dynamics, 2018, 41, 742-750. | 2.8 | 15 |
| 48 | Pose Estimation Considering an Uncertainty Model of Stereo Vision for In-Water Ship Hull Inspection. IFAC-PapersOnLine, 2018, 51, 400-405. | 0.9 | 8 |
| 49 | Intent inference of ship maneuvering for automatic ship collision avoidance. IFAC-PapersOnLine, 2018, 51, 384-388. | 0.9 | 15 |
| 50 | Vehicle Localization in Urban Environment Using a 2D Online Map with Building Outlines. , 2018, , . | | 2 |
| 51 | A Comparison of Nonlinear Filter Algorithms for Terrain-referenced Underwater Navigation. International Journal of Control, Automation and Systems, 2018, 16, 2977-2989. | 2.7 | 29 |
| 52 | Ship Route Optimization Considering On-Time Arrival Probability Under Environmental Uncertainty. , 2018, , . | | 2 |
| 53 | Ice Load Generation in Time Domain Based on Ice Load Spectrum for Arctic Offshore Structures. Journal of Ocean Engineering and Technology, 2018, 32, 411-418. | 1.2 | 5 |
| 54 | Predictive Evaluation of Ship Collision Risk Using the Concept of Probability Flow. IEEE Journal of Oceanic Engineering, 2017, 42, 836-845. | 3.8 | 44 |

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| 55 | Underwater pose estimation relative to planar hull surface using stereo vision. , 2017, , . | | 0 |
| 56 | 3D reconstruction of underwater objects using a wide-beam imaging sonar. , 2017, , . | | 9 |
| 57 | Panel-based bathymetric SLAM with a multibeam echosounder. , 2017, , . | | 2 |
| 58 | Coordinated weathervaning control of two surface vessels in a tandem configuration. Ocean Engineering, 2017, 130, 142-155. | 4.3 | 10 |
| 59 | Efficient multi-agent task allocation for collaborative route planning with multiple unmanned vehicles. IFAC-PapersOnLine, 2017, 50, 3580-3585. | 0.9 | 13 |
| 60 | Scalar field reconstruction based on the Gaussian process and adaptive sampling. , 2017, , . | | 2 |
| 61 | Lidar-guided autonomous landing of an aerial vehicle on a ground vehicle. , 2017, , . | | 12 |
| 62 | A quadratic-cost dual control-based approach for optimal trajectory planning under uncertainty. International Journal of Control, Automation and Systems, 2017, 15, 2253-2261. | 2.7 | 2 |
| 63 | Fast Underwater Image Mosaicing through Submapping. Journal of Intelligent and Robotic Systems: Theory and Applications, 2017, 85, 167-187. | 3.4 | 7 |
| 64 | Development of an Unmanned Surface Vehicle System for the 2014 Maritime RobotX Challenge. Journal of Field Robotics, 2017, 34, 644-665. | 6.0 | 22 |
| 65 | Nano carbon/fluoroelastomer composite bipolar plate for a vanadium redox flow battery (VRFB). Composite Structures, 2017, 159, 220-227. | 5.8 | 38 |
| 66 | Powering performance analysis of full-scale ships under environmental disturbances. IFAC-PapersOnLine, 2017, 50, 2323-2328. | 0.9 | 8 |
| 67 | Persistent automatic tracking of multiple surface vessels by fusing radar and lidar. , 2017, , . | | 19 |
| 68 | Collision probability assessment between surface ships considering maneuver intentions. , 2017, , . | | 6 |
| 69 | Semantic segmentation of urban scenes with a location prior map using lidar measurements. , 2017, , . | | 8 |
| 70 | Semantic Segmentation of Urban Scenes Using Location Prior Information. The Journal of Korea Robotics Society, 2017, 12, 249-257. | 0.4 | 0 |
| 71 | Efficient visual SLAM using selective image registration for autonomous inspection of underwater structures. , 2016, , . | | 4 |
| 72 | Probabilistic quantification of ship collision risk considering trajectory uncertainties. IFAC-PapersOnLine, 2016, 49, 109-114. | 0.9 | 12 |

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|---|---------|----|-----------|
| 73 | GPS-less Coastal Navigation using Marine Radar for USV Operation. IFAC-PapersOnLine, 2016, 49, 598-603. | 0.9 | 17 |
| 74 | Shape optimization of the corrugated composite bipolar plate (CCBP) for vanadium redox flow batteries (VRFBs). Composite Structures, 2016, 158, 333-339. | 5.8 | 10 |
| 75 | Weather-optimal control of a dynamic positioning vessel using backstepping: simulation and model experiment. IFAC-PapersOnLine, 2016, 49, 232-238. | 0.9 | 6 |
| 76 | Three-dimensional reconstruction of a semi-submersible offshore platform with an unmanned surface vehicle. , 2016, , . | | 4 |
| 77 | Semantic segmentation of urban scenes with enhanced spatial contexts. , 2016, , . | | 3 |
| 78 | Visual SLAM with keyframe selection for underwater structure inspection using an autonomous underwater vehicle. , 2016, , . | | 1 |
| 79 | Path optimization for marine vehicles in ocean currents using reinforcement learning. Journal of Marine Science and Technology, 2016, 21, 334-343. | 2.9 | 79 |
| 80 | Mobile robot navigation using grid line patterns via probabilistic measurement modeling. Intelligent Service Robotics, 2016, 9, 141-151. | 2.6 | 2 |
| 81 | Online underwater optical mapping for trajectories with gaps. Intelligent Service Robotics, 2016, 9, 217-229. | 2.6 | 4 |
| 82 | A microwave foaming method for fabricating glass fiber reinforced phenolic foam. Composite Structures, 2016, 152, 239-246. | 5.8 | 26 |
| 83 | A robust loop-closure method for visual SLAM in unstructured seafloor environments. Autonomous Robots, 2016, 40, 1095-1109. | 4.8 | 22 |
| 84 | Longitudinal trajectory optimization of an underwater glider in finite depth water. , 2016, , . | | 2 |
| 85 | Development of a fluoroelastomer/glass fiber composite flow frame for a vanadium redox flow battery (VRFB). Composite Structures, 2016, 145, 113-118. | 5.8 | 9 |
| 86 | An Explicit Data Assimilation Scheme for a Nonlinear Wave Prediction Model Based on a Pseudo-Spectral Method. IEEE Journal of Oceanic Engineering, 2016, 41, 112-122. | 3.8 | 11 |
| 87 | Autonomous collision avoidance for unmanned surface ships using onboard monocular vision. , 2015, , . | | 2 |
| 88 | Relative navigation with passive underwater acoustic sensing. , 2015, , . | | 4 |
| 89 | Optimization of fish-like locomotion using hierarchical reinforcement learning. , 2015, , . | | 2 |
| 90 | Underwater visual SLAM with loop-closure using image-to-image link recovery. , 2015, , . | | 3 |

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| 91 | Autonomous detection and tracking of a surface ship using onboard monocular vision. , 2015, , . | | 7 |
| 92 | A robust task space position tracking control of an underwater vehicle manipulator system. , 2015, , . | | 0 |
| 93 | Constrained motion planning for robot manipulators using local geometric information. Advanced Robotics, 2015, 29, 1611-1623. | 1.8 | 3 |
| 94 | Planar SLAM under a semi-submersible offshore platform with an unmanned surface vehicle. , 2015, , . | | 0 |
| 95 | Integral sliding mode controller for precise manoeuvring of autonomous underwater vehicle in the presence of unknown environmental disturbances. International Journal of Control, 2015, 88, 2055-2065. | 1.9 | 69 |
| 96 | Passive target tracking of marine traffic ships using onboard monocular camera for unmanned surface vessel. Electronics Letters, 2015, 51, 987-989. | 1.0 | 22 |
| 97 | Precision navigation and mapping under bridges with an unmanned surface vehicle. Autonomous Robots, 2015, 38, 349-362. | 4.8 | 45 |
| 98 | Coordinated motion control in task space of an autonomous underwater vehicle–manipulator system. Ocean Engineering, 2015, 104, 155-167. | 4.3 | 54 |
| 99 | Development of the light weight carbon composite tie bar. Composite Structures, 2015, 134, 124-131. | 5.8 | 7 |
| 100 | Robust PID control for position tracking of an underwater manipulator. , 2015, , . | | 0 |
| 101 | Durability of graphite coated carbon composite bipolar plates for vanadium redox flow batteries. Composite Structures, 2015, 134, 106-113. | 5.8 | 21 |
| 102 | Disturbance observer based terminal sliding mode control of an underwater manipulator. , 2014, , . | | 7 |
| 103 | Towards automatic identification of mismatched image pairs through loop constraints. Proceedings of SPIE, 2014, , . | 0.8 | 0 |
| 104 | Graph theory approach for match reduction in image mosaicing. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2014, 31, 773. | 1.5 | 4 |
| 105 | Three-dimensional reconstruction of bridge structures above the waterline with an unmanned surface vehicle. , 2014, , . | | 4 |
| 106 | Efficient image mosaicing for multi-robot visual underwater mapping. Pattern Recognition Letters, 2014, 46, 20-26. | 4.2 | 28 |
| 107 | DOTS: A Propagation Delay-Aware Opportunistic MAC Protocol for Mobile Underwater Networks. IEEE Transactions on Mobile Computing, 2014, 13, 766-782. | 5.8 | 87 |
| 108 | Robust Adaptive Tracking Control of Autonomous Underwater Vehicle-Manipulator Systems. Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME, 2014, 136, . | 1.6 | 14 |

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| 109 | Task space-based control of an underwater robotic system for position keeping in ocean currents. Advanced Robotics, 2014, 28, 1109-1119. | 1.8 | 14 |
| 110 | Nonlinear filtering for terrain-referenced underwater navigation with an acoustic altimeter. , 2014, , . | | 4 |
| 111 | Match elimination using cycle basis in underwater optical mapping. , 2013, , . | | 0 |
| 112 | Armless underwater manipulation using a small deployable agent vehicle connected by a smart cable. Ocean Engineering, 2013, 70, 149-159. | 4.3 | 21 |
| 113 | Beaconless navigation for mobile robots using grid line pattern. , 2013, , . | | 2 |
| 114 | Navigation of an unmanned surface vessel under bridges. , 2013, , . | | 7 |
| 115 | Terrain-referenced Underwater Navigation using Rao-Blackwellized Particle Filter. Journal of Institute of Control, Robotics and Systems, 2013, 19, 682-687. | 0.2 | 6 |
| 116 | A null space control of an underactuated underwater vehicle-manipulator system under ocean currents. , 2012, , . | | 5 |
| 117 | An inviscid model of vortex shedding flow around an oscillating flat plate. , 2012, , . | | 0 |
| 118 | A nonlinear task space tracking control of an underactuated underwater vehicle. , 2012, , . | | 0 |
| 119 | On data assimilation in a pseudo-spectral wave prediction model using a Kalman filter. , 2012, , . | | 0 |
| 120 | Indirect adaptive control of an autonomous underwater vehicle-manipulator system for underwater manipulation tasks. Ocean Engineering, 2012, 54, 233-243. | 4.3 | 106 |
| 121 | Comparison Between Nonlinear Filtering Techniques for Spiraling Ballistic Missile State Estimation. IEEE Transactions on Aerospace and Electronic Systems, 2012, 48, 313-328. | 4.7 | 51 |
| 122 | Modeling Air-Traffic Service Time Uncertainties for Queuing Network Analysis. IEEE Transactions on Aerospace and Electronic Systems, 2012, 48, 525-541. | 4.7 | 7 |
| 123 | An approach towards online bathymetric SLAM. , 2011, , . | | 6 |
| 124 | Onboard Estimation of Impaired Aircraft Performance Envelope. , 2011, , . | | 4 |
| 125 | Particle Filter for Ballistic Target Tracking with Glint Noise. , 2010, , . | | 2 |
| 126 | A Framework for Stochastic Air Traffic Flow Modeling and Analysis. , 2010, , . | | 9 |

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| 127 | Particle Filter for Ballistic Target Tracking with Glint Noise. Journal of Guidance, Control, and Dynamics, 2010, 33, 1918-1921. | 2.8 | 31 |
| 128 | Motion Models for use with the Maneuvering Ballistic Missile Tracking Estimators. , 2010, , . | | 12 |
| 129 | Tracking of Spiraling Reentry Vehicles with Varying Frequency using the Unscented Kalman Filter. , 2010, , . | | 3 |
| 130 | Rapid Estimation of Impaired-Aircraft Aerodynamic Parameters. Journal of Aircraft, 2010, 47, 1216-1228. | 2.4 | 10 |
| 131 | Feedback Dual Controller Design and Its Application to Monocular Vision-Based Docking. Journal of Guidance, Control, and Dynamics, 2009, 32, 1134-1142. | 2.8 | 5 |
| 132 | Comparison Between Three Spiraling Ballistic Missile State Estimators. , 2008, , . | | 14 |
| 133 | Trajectory Uncertainty Modeling for Queueing Analysis of the NAS. , 2008, , . | | 6 |