## Anastasios M Lekkas

List of Publications by Year in descending order

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35 1,161 15 25
papers citations h-index g-index

35 35 35 641 all docs docs citations times ranked citing authors

| #  | Article   | IF  | CITATIONS |
|----|---|-----|-----------|
| 1  | Integral LOS Path Following for Curved Paths Based on a Monotone Cubic Hermite Spline Parametrization. IEEE Transactions on Control Systems Technology, 2014, 22, 2287-2301.                                      | 5.2 | 283       |
| 2  | Direct and indirect adaptive integral lineâ€ofâ€sight pathâ€following controllers for marine craft exposed to ocean currents. International Journal of Adaptive Control and Signal Processing, 2017, 31, 445-463. | 4.1 | 172       |
| 3  | A Voronoi-diagram-based dynamic path-planning system for underactuated marine vessels. Control Engineering Practice, 2017, 61, 41-54.   | 5.5 | 93        |
| 4  | A Time-Varying Lookahead Distance Guidance Law for Path Following. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2012, 45, 398-403.  | 0.4 | 71        |
| 5  | Straight-Path Following for Underactuated Marine Vessels using Deep Reinforcement Learning. IFAC-PapersOnLine, 2018, 51, 329-334.   | 0.9 | 40        |
| 6  | Continuous-Curvature Path Generation Using Fermat's Spiral. Modeling, Identification and Control, 2013, 34, 183-198.  | 1.1 | 39        |
| 7  | Optimization-Based Automatic Docking and Berthing of ASVs Using Exteroceptive Sensors: Theory and Experiments. IEEE Access, 2020, 8, 204974-204986.   | 4.2 | 38        |
| 8  | Hybrid Collision Avoidance for ASVs Compliant With COLREGs Rules 8 and 13–17. Frontiers in Robotics and Al, 2020, 7, 11.  | 3.2 | 35        |
| 9  | Autonomous docking using direct optimal control. IFAC-PapersOnLine, 2019, 52, 97-102.   | 0.9 | 28        |
| 10 | Reinforcement learning-based NMPC for tracking control of ASVs: Theory and experiments. Control Engineering Practice, 2022, 120, 105024.  | 5.5 | 28        |
| 11 | Trajectory tracking and ocean current estimation for marine underactuated vehicles. , 2014, , .   |     | 27        |
| 12 | Curved Path Following with Deep Reinforcement Learning: Results from Three Vessel Models. , 2018, , .   |     | 27        |
| 13 | Minimization of cross-track and along-track errors for path tracking of marine underactuated vehicles. , 2014, , .  |     | 26        |
| 14 | Trajectory Planning and Control for Automatic Docking of ASVs with Full-Scale Experiments. IFAC-PapersOnLine, 2020, 53, 14488-14494.  | 0.9 | 25        |
| 15 | Reinforcement Learning-Based Tracking Control of USVs in Varying Operational Conditions. Frontiers in Robotics and Al, 2020, 7, 32.   | 3.2 | 24        |
| 16 | Two-Stage Optimized Trajectory Planning for ASVs Under Polygonal Obstacle Constraints: Theory and Experiments. IEEE Access, 2020, 8, 199953-199969.   | 4.2 | 22        |
| 17 | Continuous Curvature Path Planning using Voronoi diagrams and Fermat's spirals. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2013, 46, 132-137.                                   | 0.4 | 21        |
| 18 | Energy-Optimized Path Planning for Autonomous Ferries. IFAC-PapersOnLine, 2018, 51, 389-394.  | 0.9 | 19        |

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|----|---|-----|-----------|
| 19 | Online Path Planning for Surface Vehicles Exposed to Unknown Ocean Currents Using Pseudospectral Optimal Control. IFAC-PapersOnLine, 2016, 49, 1-7.   | 0.9 | 15        |
| 20 | A 3D dynamic Voronoi diagram-based path-planning system for UUVs., 2016,,.  |     | 12        |
| 21 | Reinforcement Learning based on Scenario-tree MPC for ASVs. , 2021, , .   |     | 12        |
| 22 | A Path-Velocity Decomposition Approach to Collision Avoidance for Autonomous Passenger Ferries in Confined Waters. IFAC-PapersOnLine, 2020, 53, 14628-14635.  | 0.9 | 12        |
| 23 | Energy-Optimized Hybrid Collision Avoidance for ASVs. , 2019, , .   |     | 11        |
| 24 | Dynamic Wireless Charging of Autonomous Vehicles: Small-scale demonstration of inductive power transfer as an enabling technology for self-sufficient energy supply. IEEE Electrification Magazine, 2020, 8, 37-48. | 1.8 | 11        |
| 25 | Optimal Model-Based Trajectory Planning With Static Polygonal Constraints. IEEE Transactions on Control Systems Technology, 2022, 30, 1159-1170.  | 5.2 | 11        |
| 26 | Explaining a Deep Reinforcement Learning Docking Agent Using Linear Model Trees with User Adapted Visualization. Journal of Marine Science and Engineering, 2021, 9, 1178.  | 2.6 | 11        |
| 27 | Warm-Started Optimized Trajectory Planning for ASVs. IFAC-PapersOnLine, 2019, 52, 308-314.  | 0.9 | 10        |
| 28 | A Quaternion-Based LOS Guidance Scheme for Path Following of AUVs. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2013, 46, 245-250.  | 0.4 | 8         |
| 29 | Explainable AI methods on a deep reinforcement learning agent for automatic docking. IFAC-PapersOnLine, 2021, 54, 146-152.  | 0.9 | 8         |
| 30 | Outlier Rejection in Underwater Acoustic Position Measurements Based on Prediction Errors. IFAC-PapersOnLine, 2015, 48, 82-87.  | 0.9 | 6         |
| 31 | 3D Path Following and Tracking for an Inspection Class ROV. , 2017, , .   |     | 5         |
| 32 | Three-Phase Automatic Crossing for a Passenger Ferry With Field Trials. , 2021, , .   |     | 5         |
| 33 | Comparison of AI Planning frameworks for underwater intervention drones. , 2020, , .  |     | 3         |
| 34 | Approximating a deep reinforcement learning docking agent using linear model trees. , 2021, , .   |     | 2         |
| 35 | Two Space-Time Obstacle Representations Based on Ellipsoids and Polytopes. IEEE Access, 2021, 9, 111152-111161.   | 4.2 | 1         |