Anastasios M Lekkas

List of Publications by Year
in descending order

		567281	580821
35 papers	1,161 citations	15 h-index	25 g-index
35 all docs	35 docs citations	35 times ranked	641 citing authors

#	Article	IF	Citations
1	Optimal Model-Based Trajectory Planning With Static Polygonal Constraints. IEEE Transactions on Control Systems Technology, 2022, 30, 1159-1170.	5.2	11
2	Reinforcement learning-based NMPC for tracking control of ASVs: Theory and experiments. Control Engineering Practice, 2022, 120, 105024.	5.5	28
3	Two Space-Time Obstacle Representations Based on Ellipsoids and Polytopes. IEEE Access, 2021, 9, 111152-111161.	4.2	1
4	Reinforcement Learning based on Scenario-tree MPC for ASVs. , 2021, , .		12
5	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
6	Explainable AI methods on a deep reinforcement learning agent for automatic docking. IFAC-PapersOnLine, 2021, 54, 146-152.	0.9	8
7	Three-Phase Automatic Crossing for a Passenger Ferry With Field Trials. , 2021, , .		5
8	Approximating a deep reinforcement learning docking agent using linear model trees. , 2021, , .		2
9	Two-Stage Optimized Trajectory Planning for ASVs Under Polygonal Obstacle Constraints: Theory and Experiments. IEEE Access, 2020, 8, 199953-199969.	4.2	22
10	Optimization-Based Automatic Docking and Berthing of ASVs Using Exteroceptive Sensors: Theory and Experiments. IEEE Access, 2020, 8, 204974-204986.	4.2	38
11	Hybrid Collision Avoidance for ASVs Compliant With COLREGs Rules 8 and 13â€"17. Frontiers in Robotics and AI, 2020, 7, 11.	3.2	35
12	Reinforcement Learning-Based Tracking Control of USVs in Varying Operational Conditions. Frontiers in Robotics and AI, 2020, 7, 32.	3.2	24
13	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
14	Trajectory Planning and Control for Automatic Docking of ASVs with Full-Scale Experiments. IFAC-PapersOnLine, 2020, 53, 14488-14494.	0.9	25
15	A Path-Velocity Decomposition Approach to Collision Avoidance for Autonomous Passenger Ferries in Confined Waters. IFAC-PapersOnLine, 2020, 53, 14628-14635.	0.9	12
16	Comparison of AI Planning frameworks for underwater intervention drones. , 2020, , .		3
17	Energy-Optimized Hybrid Collision Avoidance for ASVs. , 2019, , .		11
18	Autonomous docking using direct optimal control. IFAC-PapersOnLine, 2019, 52, 97-102.	0.9	28

#	Article	IF	Citations
19	Warm-Started Optimized Trajectory Planning for ASVs. IFAC-PapersOnLine, 2019, 52, 308-314.	0.9	10
20	Energy-Optimized Path Planning for Autonomous Ferries. IFAC-PapersOnLine, 2018, 51, 389-394.	0.9	19
21	Straight-Path Following for Underactuated Marine Vessels using Deep Reinforcement Learning. IFAC-PapersOnLine, 2018, 51, 329-334.	0.9	40
22	Curved Path Following with Deep Reinforcement Learning: Results from Three Vessel Models. , 2018, , .		27
23	Direct and indirect adaptive integral line‐of‐sight path‐following controllers for marine craft exposed to ocean currents. International Journal of Adaptive Control and Signal Processing, 2017, 31, 445-463.	4.1	172
24	A Voronoi-diagram-based dynamic path-planning system for underactuated marine vessels. Control Engineering Practice, 2017, 61, 41-54.	5.5	93
25	3D Path Following and Tracking for an Inspection Class ROV. , 2017, , .		5
26	A 3D dynamic Voronoi diagram-based path-planning system for UUVs. , 2016, , .		12
27	Online Path Planning for Surface Vehicles Exposed to Unknown Ocean Currents Using Pseudospectral Optimal Control. IFAC-PapersOnLine, 2016, 49, 1-7.	0.9	15
28	Outlier Rejection in Underwater Acoustic Position Measurements Based on Prediction Errors. IFAC-PapersOnLine, 2015, 48, 82-87.	0.9	6
29	Trajectory tracking and ocean current estimation for marine underactuated vehicles. , 2014, , .		27
30	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
31	Minimization of cross-track and along-track errors for path tracking of marine underactuated vehicles. , 2014, , .		26
32	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
33	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
34	Continuous-Curvature Path Generation Using Fermat's Spiral. Modeling, Identification and Control, 2013, 34, 183-198.	1.1	39
35	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