

Jonathan P How

List of Publications by Year in descending order

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300
papers

14,107
citations

66234

42
h-index

49773

87
g-index

300
all docs

300
docs citations

300
times ranked

7552
citing authors

#	ARTICLE	IF	CITATIONS
1	Consensus-Based Decentralized Auctions for Robust Task Allocation. IEEE Transactions on Robotics, 2009, 25, 912-926.	7.3	680
2	Real-Time Motion Planning With Applications to Autonomous Urban Driving. IEEE Transactions on Control Systems Technology, 2009, 17, 1105-1118.	3.2	676
3	Socially aware motion planning with deep reinforcement learning. , 2017, , .		429
4	Spacecraft Trajectory Planning with Avoidance Constraints Using Mixed-Integer Linear Programming. Journal of Guidance, Control, and Dynamics, 2002, 25, 755-764.	1.6	402
5	A perception-driven autonomous urban vehicle. Journal of Field Robotics, 2008, 25, 727-774.	3.2	364
6	Relative Dynamics and Control of Spacecraft Formations in Eccentric Orbits. Journal of Guidance, Control, and Dynamics, 2002, 25, 48-59.	1.6	347
7	Real-time indoor autonomous vehicle test environment. IEEE Control Systems, 2008, 28, 51-64.	1.0	334
8	Performance and Lyapunov Stability of a Nonlinear Path Following Guidance Method. Journal of Guidance, Control, and Dynamics, 2007, 30, 1718-1728.	1.6	333
9	Decentralized non-communicating multiagent collision avoidance with deep reinforcement learning. , 2017, , .		319
10	Motion Planning Among Dynamic, Decision-Making Agents with Deep Reinforcement Learning. , 2018, , .		317
11	A New Nonlinear Guidance Logic for Trajectory Tracking. , 2004, , .		299
12	Robust distributed model predictive control. International Journal of Control, 2007, 80, 1517-1531.	1.2	266
13	Coordination and Control of Multiple UAVs. , 2002, , .		238
14	Autonomous driving in urban environments: approaches, lessons and challenges. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2010, 368, 4649-4672.	1.6	238
15	Probabilistically safe motion planning to avoid dynamic obstacles with uncertain motion patterns. Autonomous Robots, 2013, 35, 51-76.	3.2	195
16	Driver Behavior Classification at Intersections and Validation on Large Naturalistic Data Set. IEEE Transactions on Intelligent Transportation Systems, 2012, 13, 724-736.	4.7	191
17	Co-ordination and control of distributed spacecraft systems using convex optimization techniques. International Journal of Robust and Nonlinear Control, 2002, 12, 207-242.	2.1	189
18	Safe Trajectories for Autonomous Rendezvous of Spacecraft. Journal of Guidance, Control, and Dynamics, 2008, 31, 1478-1489.	1.6	188

#	ARTICLE	IF	CITATIONS
19	Motion planning for urban driving using RRT. , 2008, , .		158
20	Air-Combat Strategy Using Approximate Dynamic Programming. Journal of Guidance, Control, and Dynamics, 2010, 33, 1641-1654.	1.6	156
21	Cooperative Distributed Robust Trajectory Optimization Using Receding Horizon MILP. IEEE Transactions on Control Systems Technology, 2011, 19, 423-431.	3.2	142
22	Distributed Robust Receding Horizon Control for Multivehicle Guidance. IEEE Transactions on Control Systems Technology, 2007, 15, 627-641.	3.2	127
23	Hover, Transition, and Level Flight Control Design for a Single-Propeller Indoor Airplane. , 2007, , .		126
24	Observer-based control of piecewise-affine systems. International Journal of Control, 2003, 76, 459-477.	1.2	122
25	Decentralized Cooperative Trajectory Planning of Multiple Aircraft with Hard Safety Guarantees. , 2004, , .		122
26	Chance Constrained RRT for Probabilistic Robustness to Environmental Uncertainty. , 2010, , .		119
27	Indoor Multi-Vehicle Flight Testbed for Fault Detection, Isolation, and Recovery. , 2006, , .		118
28	Bayesian Nonparametric Adaptive Control Using Gaussian Processes. IEEE Transactions on Neural Networks and Learning Systems, 2015, 26, 537-550.	7.2	116
29	Robust variable horizon model predictive control for vehicle maneuvering. International Journal of Robust and Nonlinear Control, 2006, 16, 333-351.	2.1	111
30	Motion Planning in Complex Environments Using Closed-loop Prediction. , 2008, , .		106
31	Vision-based guidance and control of a hovering vehicle in unknown, GPS-denied environments. , 2009, , .		100
32	An Automated Battery Management System to Enable Persistent Missions With Multiple Aerial Vehicles. IEEE/ASME Transactions on Mechatronics, 2015, 20, 275-286.	3.7	99
33	Decoupled multiagent path planning via incremental sequential convex programming. , 2015, , .		96
34	FASTER: Fast and Safe Trajectory Planner for Flights in Unknown Environments. , 2019, , .		96
35	Decentralized path planning for multi-agent teams with complex constraints. Autonomous Robots, 2012, 32, 385-403.	3.2	92
36	Multi-Task Allocation and Path Planning for Cooperating UAVs. Cooperative Systems, 2003, , 23-41.	0.3	91

#	ARTICLE	IF	CITATIONS
37	Collision Avoidance in Pedestrian-Rich Environments With Deep Reinforcement Learning. IEEE Access, 2021, 9, 10357-10377.	2.6	86
38	Robust Adaptive Control Barrier Functions: An Adaptive and Data-Driven Approach to Safety. , 2021, 5, 1031-1036.		83
39	Three Dimensional Receding Horizon Control for UAVs. , 2004, , .		82
40	Real-Time Multi-UAV Task Assignment in Dynamic and Uncertain Environments. , 2009, , .		82
41	Gauss's Variational Equation-Based Dynamics and Control for Formation Flying Spacecraft. Journal of Guidance, Control, and Dynamics, 2007, 30, 437-448.	1.6	77
42	Decentralized planning for complex missions with dynamic communication constraints. , 2010, , .		77
43	Aggressive 3-D collision avoidance for high-speed navigation. , 2017, , .		77
44	Comparison of Fixed and Variable Pitch Actuators for Agile Quadrotors. , 2011, , .		76
45	Increasing autonomy of UAVs. IEEE Robotics and Automation Magazine, 2009, 16, 43-51.	2.2	74
46	A Tutorial on Linear Function Approximators for Dynamic Programming and Reinforcement Learning. Foundations and Trends in Machine Learning, 2013, 6, 375-451.	46.6	74
47	The MITâ€œCornell collision and why it happened. Journal of Field Robotics, 2008, 25, 775-807.	3.2	73
48	Threat assessment design for driver assistance system at intersections. , 2010, , .		73
49	Robust Sampling-based Motion Planning with Asymptotic Optimality Guarantees. , 2013, , .		71
50	Demonstration of Adaptive Extended Kalman Filter for Low-Earth-Orbit Formation Estimation Using CDGPS. Navigation, Journal of the Institute of Navigation, 2003, 50, 79-93.	1.7	69
51	Multi-Agent Motion Planning for Dense and Dynamic Environments via Deep Reinforcement Learning. IEEE Robotics and Automation Letters, 2020, 5, 3221-3226.	3.3	69
52	Actuator Constrained Trajectory Generation and Control for Variable-Pitch Quadrotors. , 2012, , .		68
53	Distributed Planning Strategies to Ensure Network Connectivity for Dynamic Heterogeneous Teams. IEEE Journal on Selected Areas in Communications, 2012, 30, 861-869.	9.7	67
54	Extensions of mixed-Âµbounds to monotonic and odd monotonic nonlinearities using absolute stability theory. International Journal of Control, 1994, 60, 905-951.	1.2	65

#	ARTICLE	IF	CITATIONS
55	Behavior classification algorithms at intersections and validation using naturalistic data. , 2011, , .		64
56	Consensus-Based Auction Approaches for Decentralized Task Assignment. , 2008, , .		63
57	Gaussian Processes for Learning and Control: A Tutorial with Examples. IEEE Control Systems, 2018, 38, 53-86.	1.0	63
58	VPS-SLAM: Visual Planar Semantic SLAM for Aerial Robotic Systems. IEEE Access, 2020, 8, 60704-60718.	2.6	60
59	Seismic isolation for Advanced LIGO. Classical and Quantum Gravity, 2002, 19, 1591-1597.	1.5	59
60	Continuous trajectory planning of mobile sensors for informative forecasting. Automatica, 2010, 46, 1266-1275.	3.0	58
61	Guaranteed infinite horizon avoidance of unpredictable, dynamically constrained obstacles. Autonomous Robots, 2012, 32, 227-242.	3.2	58
62	Cooperative Vision Based Estimation and Tracking Using Multiple UAVs. , 2007, , 179-189.		58
63	The Impact of Human-Automation Collaboration in Decentralized Multiple Unmanned Vehicle Control. Proceedings of the IEEE, 2012, 100, 660-671.	16.4	57
64	Analysis and Control of a Variable-Pitch Quadrotor for Agile Flight. Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME, 2015, 137, .	0.9	57
65	SLAM with objects using a nonparametric pose graph. , 2016, , .		57
66	Mission Health Management for 24/7 Persistent Surveillance Operations. , 2007, , .		55
67	Planning for decentralized control of multiple robots under uncertainty. , 2015, , .		55
68	Dynamic Tube MPC for Nonlinear Systems. , 2019, , .		55
69	Mobile Agent Trajectory Prediction using Bayesian Nonparametric Reachability Trees. , 2011, , .		54
70	Robust Decentralized Task Assignment for Cooperative UAVs. , 2006, , .		53
71	Group health management of UAV teams with applications to persistent surveillance. , 2008, , .		51
72	Automated Battery Swap and Recharge to Enable Persistent UAV Missions. , 2011, , .		51

#	ARTICLE	IF	CITATIONS
73	Decentralized path planning for multi-agent teams in complex environments using rapidly-exploring random trees. , 2011, , .		50
74	Decentralized task allocation with coupled constraints in complex missions. , 2011, , .		49
75	Embedding Health Management into Mission Tasking for UAV Teams. Proceedings of the American Control Conference, 2007, , .	0.0	47
76	MADER: Trajectory Planner in Multiagent and Dynamic Environments. IEEE Transactions on Robotics, 2022, 38, 463-476.	7.3	47
77	A robust approach to the UAV task assignment problem. International Journal of Robust and Nonlinear Control, 2008, 18, 118-134.	2.1	46
78	L1 Adaptive Control for Indoor Autonomous Vehicles: Design Process and Flight Testing. , 2009, , .		46
79	Spacecraft formation flying control design for the Orion mission. , 1999, , .		45
80	Autonomous drifting using simulation-aided reinforcement learning. , 2016, , .		45
81	Cooperative Mission Planning for Multi-UAV Teams. , 2015, , 1447-1490.		44
82	Decentralized control of multi-robot partially observable Markov decision processes using belief space macro-actions. International Journal of Robotics Research, 2017, 36, 231-258.	5.8	44
83	Autonomous task allocation for multi-UAV systems based on the locust elastic behavior. Applied Soft Computing Journal, 2018, 71, 110-126.	4.1	44
84	A voice-commandable robotic forklift working alongside humans in minimally-prepared outdoor environments. , 2010, , .		43
85	Improving the Efficiency of a Decentralized Tasking Algorithm for UAV Teams with Asynchronous Communications. , 2010, , .		43
86	Efficient reinforcement learning for robots using informative simulated priors. , 2015, , .		43
87	Experimental Demonstrations of Real-Time MILP Control. , 2003, , .		42
88	FASTER: Fast and Safe Trajectory Planner for Navigation in Unknown Environments. IEEE Transactions on Robotics, 2022, 38, 922-938.	7.3	41
89	Asynchronous Decentralized Task Allocation for Dynamic Environments. , 2011, , .		40
90	Bounds on tracking error using closed-loop rapidly-exploring random trees. , 2010, , .		39

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91	A KYP lemma and invariance principle for systems with multiple hysteresis non-linearities. International Journal of Control, 2001, 74, 1140-1157.	1.2	38
92	Dynamic Mission Planning for Communication Control in Multiple Unmanned Aircraft Teams. Unmanned Systems, 2013, 01, 41-58.	2.7	38
93	Information-Rich Path Planning with General Constraints Using Rapidly-Exploring Random Trees. , 2010, , .		37
94	Bayesian Nonparametric Reward Learning From Demonstration. IEEE Transactions on Robotics, 2015, 31, 369-386.	7.3	37
95	Policy search for multi-robot coordination under uncertainty. International Journal of Robotics Research, 2016, 35, 1760-1778.	5.8	35
96	Decentralized control of Partially Observable Markov Decision Processes using belief space macro-actions. , 2015, , .		34
97	The MIT Indoor Multi-Vehicle Flight Testbed. Proceedings - IEEE International Conference on Robotics and Automation, 2007, , .	0.0	33
98	Threat-aware path planning in uncertain urban environments. , 2010, , .		33
99	Partial Replanning for Decentralized Dynamic Task Allocation. , 2019, , .		33
100	Onboard Detection and Localization of Drones Using Depth Maps. IEEE Access, 2020, 8, 30480-30490.	2.6	33
101	Proportional-Integral Controllers for Minimum-Phase Nonaffine-in-Control Systems. IEEE Transactions on Automatic Control, 2010, 55, 1477-1483.	3.6	32
102	Concurrent Learning Adaptive Model Predictive Control. , 2013, , 29-47.		32
103	Where to go Next: Learning a Subgoal Recommendation Policy for Navigation in Dynamic Environments. IEEE Robotics and Automation Letters, 2021, 6, 4616-4623.	3.3	32
104	Real-World Reinforcement Learning via Multifidelity Simulators. IEEE Transactions on Robotics, 2015, 31, 655-671.	7.3	31
105	Robust control design and implementation on the Middeck Active Control Experiment. Journal of Guidance, Control, and Dynamics, 1994, 17, 1163-1170.	1.6	30
106	Filter-Embedded UAV Task Assignment Algorithms for Dynamic Environments. , 2004, , .		30
107	Robust Receding Horizon Control using Generalized Constraint Tightening. Proceedings of the American Control Conference, 2007, , .	0.0	30
108	Reinforcement learning with multi-fidelity simulators. , 2014, , .		30

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109	Health aware stochastic planning for persistent package delivery missions using quadrotors. , 2014, , .		30
110	Aggressive collision avoidance with limited field-of-view sensing. , 2017, , .		30
111	Distributed Certifiably Correct Pose-Graph Optimization. IEEE Transactions on Robotics, 2021, 37, 2137-2156.	7.3	30
112	Connections between the Popov Stability Criterion and Bounds for Real Parameter Uncertainty. , 1993, , .		29
113	Multi-UAV Persistent Surveillance with Communication Constraints and Health Mangement. , 2009, , .		29
114	Distributed chance-constrained task allocation for autonomous multi-agent teams. , 2012, , .		29
115	Implementation of a Manned Vehicle - UAV Mission System. , 2004, , .		28
116	Kimera-Multi: a System for Distributed Multi-Robot Metric-Semantic Simultaneous Localization and Mapping. , 2021, , .		28
117	An online algorithm for constrained POMDPs. , 2010, , .		26
118	Design and flight testing of an autonomous variable-pitch quadrotor. , 2011, , .		26
119	Wind Uncertainty Modeling and Robust Trajectory Planning for Autonomous Parafoils. Journal of Guidance, Control, and Dynamics, 2016, 39, 1614-1630.	1.6	26
120	Efficient Targeting of Sensor Networks for Large-Scale Systems. IEEE Transactions on Control Systems Technology, 2011, 19, 1569-1577.	3.2	25
121	Robust incremental SLAM with consistency-checking. , 2015, , .		25
122	Operator Object Function Guidance for a Real-Time Unmanned Vehicle Scheduling Algorithm. Journal of Aerospace Computing, Information, and Communication, 2012, 9, 161-173.	0.8	24
123	Intelligent Cooperative Control Architecture: A Framework for Performance Improvement Using Safe Learning. Journal of Intelligent and Robotic Systems: Theory and Applications, 2013, 72, 83-103.	2.0	24
124	A Situationally Aware Voice-Commandable Robotic Forklift Working Alongside People in Unstructured Outdoor Environments. Journal of Field Robotics, 2015, 32, 590-628.	3.2	24
125	Bayesian Nonparametric Inverse Reinforcement Learning. Lecture Notes in Computer Science, 2012, , 148-163.	1.0	24
126	Three-Dimensional Flight Experiments Using On-Line Mixed-Integer Linear Programming Trajectory Optimization. Proceedings of the American Control Conference, 2007, , .	0.0	23

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127	Coordinated Targeting of Mobile Sensor Networks for Ensemble Forecast Improvement. IEEE Sensors Journal, 2011, 11, 621-633.	2.4	23
128	Bayesian nonparametric set construction for robust optimization. , 2015, , .		23
129	The role of information assumptions in decentralized task allocation: A tutorial. IEEE Control Systems, 2016, 36, 45-58.	1.0	23
130	Reachability Analysis of Neural Feedback Loops. IEEE Access, 2021, 9, 163938-163953.	2.6	23
131	Subspace based direct adaptive ?? control. International Journal of Adaptive Control and Signal Processing, 2001, 15, 535-561.	2.3	22
132	Off-policy reinforcement learning with Gaussian processes. IEEE/CAA Journal of Automatica Sinica, 2014, 1, 227-238.	8.5	22
133	Talk Resource-Efficiently to Me: Optimal Communication Planning for Distributed Loop Closure Detection. , 2018, , .		22
134	Real-Time Predictive Modeling and Robust Avoidance of Pedestrians with Uncertain, Changing Intentions. Springer Tracts in Advanced Robotics, 2015, , 161-177.	0.3	22
135	Cooperative Spacecraft Formation Flying: Model Predictive Control with Open- and Closed-Loop Robustness. Elsevier Astrodynamics Series, 2006, , 237-277.	0.4	21
136	Allowing non-submodular score functions in distributed task allocation. , 2012, , .		21
137	Bayesian nonparametric adaptive control of time-varying systems using Gaussian processes. , 2013, , .		21
138	Experimental Demonstration of Adaptive MDP-Based Planning with Model Uncertainty. , 2008, , .		20
139	Predictive Planning for Heterogeneous Human-Robot Teams. , 2010, , .		20
140	Robust Adaptive Markov Decision Processes: Planning with Model Uncertainty. IEEE Control Systems, 2012, 32, 96-109.	1.0	20
141	Robust State Estimation with Sparse Outliers. Journal of Guidance, Control, and Dynamics, 2015, 38, 1229-1240.	1.6	20
142	Real-Time Planning with Multi-Fidelity Models for Agile Flights in Unknown Environments. , 2019, , .		20
143	PANTHER: Perception-Aware Trajectory Planner in Dynamic Environments. IEEE Access, 2022, 10, 22662-22677.	2.6	20
144	Ensemble-Based Adaptive Targeting of Mobile Sensor Networks. Proceedings of the American Control Conference, 2007, , .	0.0	19

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145	Throughput Optimization in Mobile Backbone Networks. IEEE Transactions on Mobile Computing, 2011, 10, 560-572.	3.9	19
146	Model Reference Adaptive Control using Nonparametric Adaptive Elements. , 2012, , .		19
147	Asynchronous and Parallel Distributed Pose Graph Optimization. IEEE Robotics and Automation Letters, 2020, 5, 5819-5826.	3.3	19
148	A Perception-Driven Autonomous Urban Vehicle. Springer Tracts in Advanced Robotics, 2009, , 163-230.	0.3	19
149	Analysis of linear parameter-varying systems using a non-smooth dissipative systems framework. International Journal of Robust and Nonlinear Control, 2002, 12, 1067-1092.	2.1	18
150	Experimental Validation of Bayesian Nonparametric Adaptive Control Using Gaussian Processes. Journal of Aerospace Information Systems, 2014, 11, 565-578.	1.0	18
151	Decentralized Task Allocation Using Local Information Consistency Assumptions. Journal of Aerospace Information Systems, 2017, 14, 103-122.	1.0	18
152	<title>Space construction: an experimental testbed to develop enabling technologies</title>. , 1997, , .		17
153	Two-stage path planning approach for solving multiple spacecraft reconfiguration maneuvers. Journal of the Astronautical Sciences, 2008, 56, 515-544.	0.8	17
154	Case Studies in Data-Driven Verification of Dynamical Systems. , 2016, , .		17
155	An intelligent Cooperative Control Architecture. , 2010, , .		16
156	Nonparametric adaptive control using Gaussian Processes with online hyperparameter estimation. , 2013, , .		16
157	Small-variance nonparametric clustering on the hypersphere. , 2015, , .		16
158	Augmented dictionary learning for motion prediction. , 2016, , .		16
159	Measurable Augmented Reality for Prototyping Cyberphysical Systems: A Robotics Platform to Aid the Hardware Prototyping and Performance Testing of Algorithms. IEEE Control Systems, 2016, 36, 65-87.	1.0	16
160	Automatic Panâ€“Tilt Camera Control for Learning Dirichlet Process Gaussian Process (DPGP) Mixture Models of Multiple Moving Targets. IEEE Transactions on Automatic Control, 2019, 64, 159-173.	3.6	16
161	The Hybrid Information and Plan Consensus Algorithm with Imperfect Situational Awareness. Springer Tracts in Advanced Robotics, 2016, , 221-233.	0.3	16
162	J2-Modified GVE-Based MPC for Formation Flying Spacecraft. , 2005, , .		15

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163	A Robust Approach to the UAV Task Assignment Problem. , 2006, , .		15
164	Decentralized Cooperative Trajectory Optimization for UAVs with Coupling Constraints. , 2006, , .		15
165	Multi-UAV network control through dynamic task allocation: Ensuring data-rate and bit-error-rate support. , 2012, , .		15
166	Adaptive Planning for Markov Decision Processes with Uncertain Transition Models via Incremental Feature Dependency Discovery. Lecture Notes in Computer Science, 2012, , 99-115.	1.0	15
167	A hyperparameter consensus method for agreement under uncertainty. Automatica, 2012, 48, 374-380.	3.0	15
168	Robust Trajectory Planning for Autonomous Parafoils under Wind Uncertainty. , 2013, , .		15
169	Information-Theoretic Motion Planning for Constrained Sensor Networks. Journal of Aerospace Information Systems, 2013, 10, 476-496.	1.0	15
170	Health Aware Planning under uncertainty for UAV missions with heterogeneous teams. , 2013, , .		15
171	Efficient distributed sensing using adaptive censoring-based inference. Automatica, 2014, 50, 1590-1602.	3.0	15
172	MAR-CPS: Measurable Augmented Reality for Prototyping Cyber-Physical Systems. , 2015, , .		15
173	Learning for multi-robot cooperation in partially observable stochastic environments with macro-actions. , 2017, , .		15
174	A Distributed Pipeline for Scalable, Deconflicted Formation Flying. IEEE Robotics and Automation Letters, 2020, 5, 5213-5220.	3.3	15
175	A resource-aware approach to collaborative loop-closure detection with provable performance guarantees. International Journal of Robotics Research, 2021, 40, 1212-1233.	5.8	15
176	Low-frequency active vibration isolation for advanced LIGO. , 2004, 5500, 194.		14
177	Approximate dynamic programming using support vector regression. , 2008, , .		14
178	Flight Testing a Heterogeneous Multi-UAV System with Human Supervision. , 2012, , .		14
179	Planning for large-scale multiagent problems via hierarchical decomposition with applications to UAV health management. , 2014, , .		14
180	GPS Estimation Algorithms for Precise Velocity, Slip and Race-Track Position Measurements. , 0, , .		13

#	ARTICLE	IF	CITATIONS
181	Experimental demonstration of coordinated control for multi-vehicle teams. International Journal of Systems Science, 2006, 37, 385-398.	3.7	13
182	Experimental Results of Concurrent Learning Adaptive Controllers. , 2012, , .		13
183	An outer-approximation approach for information-maximizing sensor selection. Optimization Letters, 2013, 7, 745-764.	0.9	13
184	Hybrid Information and Plan Consensus in Distributed Task Allocation. , 2013, , .		13
185	A Bayesian nonparametric approach to adaptive control using Gaussian Processes. , 2013, , .		13
186	Predictive Modeling of Pedestrian Motion Patterns with Bayesian Nonparametrics. , 2016, , .		13
187	Distributed Control of Formation Flying Spacecraft Built on OA. , 2003, , .		12
188	Active Exploration in Robust Unmanned Vehicle Task Assignment. Journal of Aerospace Computing, Information, and Communication, 2011, 8, 250-268.	0.8	12
189	UAV cooperative control with stochastic risk models. , 2011, , .		12
190	A concurrent learning adaptive-optimal control architecture for nonlinear systems. , 2013, , .		12
191	Lightweight infrared sensing for relative navigation of quadrotors. , 2013, , .		12
192	Motion planning with diffusion maps. , 2016, , .		12
193	Transferable Pedestrian Motion Prediction Models at Intersections. , 2018, , .		12
194	Robustness Analysis of Neural Networks via Efficient Partitioning With Applications in Control Systems. , 2021, 5, 2114-2119.		12
195	Robust Cooperative Decentralized Trajectory Optimization using Receding Horizon MILP. Proceedings of the American Control Conference, 2007, , .	0.0	11
196	A Multi-UAV Targeting Algorithm for Ensemble Forecast Improvement. , 2007, , .		11
197	Approximate dynamic programming using Bellman residual elimination and Gaussian process regression. , 2009, , .		11
198	Anti-windup compensation for nonlinear systems via gradient projection: Application to adaptive control. , 2009, , .		11

#	ARTICLE	IF	CITATIONS
199	Probabilistic Feasibility for Nonlinear Systems with Non-Gaussian Uncertainty using RRT. , 2011, , .		11
200	Multiagent allocation of Markov decision process tasks. , 2013, , .		11
201	Human aware UAS path planning in urban environments using nonstationary MDPs. , 2014, , .		11
202	Linear Flight Control Techniques for Unmanned Aerial Vehicles. , 2015, , 529-576.		11
203	Graph-based Cross Entropy method for solving multi-robot decentralized POMDPs. , 2016, , .		11
204	Dynamic arrival rate estimation for campus Mobility On Demand network graphs. , 2016, , .		11
205	CLEAR: A Consistent Lifting, Embedding, and Alignment Rectification Algorithm for Multiview Data Association. IEEE Transactions on Robotics, 2020, 36, 1686-1703.	7.3	11
206	Human Trajectory Prediction Using Similarity-Based Multi-Model Fusion. IEEE Robotics and Automation Letters, 2021, 6, 715-722.	3.3	11
207	Search and Rescue Under the Forest Canopy Using Multiple UAS. Springer Proceedings in Advanced Robotics, 2020, , 140-152.	0.9	11
208	Partial J2 Invariance for Spacecraft Formations. , 2006, , .		10
209	Scalable reward learning from demonstration. , 2013, , .		10
210	Rapid transfer of controllers between UAVs using learning-based adaptive control. , 2013, , .		10
211	Information value in nonparametric Dirichlet-process Gaussian-process (DPGP) mixture models. Automatica, 2016, 74, 360-368.	3.0	10
212	Learning in the Curbside Coordinate Frame for a Transferable Pedestrian Trajectory Prediction Model. , 2018, , .		10
213	Dynamic Clustering Algorithms via Small-Variance Analysis of Markov Chain Mixture Models. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2019, 41, 1338-1352.	9.7	10
214	Safe Trajectories for Autonomous Rendezvous of Spacecraft. , 2006, , .		9
215	Analytical performance prediction for robust constrained model predictive control. International Journal of Control, 2006, 79, 877-894.	1.2	9
216	Unbiased Kalman Consensus Algorithm. Journal of Aerospace Computing, Information, and Communication, 2008, 5, 298-311.	0.8	9

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217	Sampling-Based Threat Assessment Algorithms for Intersection Collisions Involving Errant Drivers. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2010, 43, 581-586.	0.4	9
218	Collaborative Sensor Fusion and Management for Multiple UAVs. , 2011, , .		9
219	Improving the efficiency of Bayesian inverse reinforcement learning. , 2012, , .		9
220	Certifiable Robustness to Adversarial State Uncertainty in Deep Reinforcement Learning. IEEE Transactions on Neural Networks and Learning Systems, 2022, 33, 4184-4198.	7.2	9
221	The MIT " Cornell Collision and Why It Happened. Springer Tracts in Advanced Robotics, 2009, , 509-548.	0.3	9
222	MINVO Basis: Finding Simplexes with Minimum Volume Enclosing Polynomial Curves. CAD Computer Aided Design, 2022, 151, 103341.	1.4	9
223	Parametric Robust H Control Design Using Iterative Linear Matrix Inequalities Synthesis. Journal of Guidance, Control, and Dynamics, 2000, 23, 138-142.	1.6	8
224	Differential Semimajor Axis Estimation Performance Using Carrier-Phase Differential Global Positioning System Measurements. Journal of Guidance, Control, and Dynamics, 2007, 30, 301-313.	1.6	8
225	Equivalence between Approximate Dynamic Inversion and Proportional-Integral control. , 2008, , .		8
226	Ensuring Network Connectivity for Decentralized Planning in Dynamic Environments. , 2011, , .		8
227	Real-time dynamic planning to maintain network connectivity in a team of unmanned air vehicles. , 2011, , .		8
228	A decentralized approach to multi-agent planning in the presence of constraints and uncertainty. , 2011, , .		8
229	Scalable, MDP-based planning for multiple, cooperating agents. , 2012, , .		8
230	An optimizing sampling-based motion planner with guaranteed robustness to bounded uncertainty. , 2014, , .		8
231	Distributed Learning for Planning Under Uncertainty Problems with Heterogeneous Teams. Journal of Intelligent and Robotic Systems: Theory and Applications, 2014, 74, 529-544.	2.0	8
232	Adaptive mission planning for coupled human-robot teams. , 2016, , .		8
233	Active Sampling-Based Binary Verification of Dynamical Systems. , 2018, , .		8
234	Safe Trajectories for Autonomous Rendezvous of Spacecraft. , 2007, , .		7

#	ARTICLE	IF	CITATIONS
235	On Approximate Dynamic Inversion and Proportional-Integral control. , 2009, , .		7
236	On the roles of smoothing in planning of informative paths. , 2009, , .		7
237	Multi-Agent Planning for Persistent Missions with Automated Battery Management. , 2011, , .		7
238	Robust simultaneous localization and mapping via information matrix estimation. , 2014, , .		7
239	Hybrid model reference adaptive control for unmatched uncertainties. , 2015, , .		7
240	Online Regression for Data With Changepoints Using Gaussian Processes and Reusable Models. IEEE Transactions on Neural Networks and Learning Systems, 2016, 28, 1-14.	7.2	7
241	Human-Autonomy Teaming Using Flexible Human Performance Models: An Initial Pilot Study. Advances in Intelligent Systems and Computing, 2017, , 211-224.	0.5	7
242	SILA: An Incremental Learning Approach for Pedestrian Trajectory Prediction. , 2020, , .		7
243	Communication-Aware Consensus-Based Decentralized Task Allocation in Communication Constrained Environments. IEEE Access, 2022, 10, 19753-19767.	2.6	7
244	Hybrid Model for Receding Horizon Guidance of Agile Autonomous Rotorcraft. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2004, 37, 481-486.	0.4	6
245	Continuous motion planning for information forecast. , 2008, , .		6
246	Decentralized Information-Rich Planning and Hybrid Sensor Fusion for Uncertainty Reduction in Human-Robot Missions. , 2011, , .		6
247	Experimental Demonstration of Multi-Agent Learning and Planning under Uncertainty for Persistent Missions with Automated Battery Management. , 2012, , .		6
248	Guest Editorial: Communications Challenges and Dynamics for Unmanned Autonomous Vehicles. IEEE Journal on Selected Areas in Communications, 2012, 30, 849-851.	9.7	6
249	Reinforcement learning with misspecified model classes. , 2013, , .		6
250	Camera control for learning nonlinear target dynamics via Bayesian nonparametric Dirichlet-process Gaussian-process (DP-GP) models. , 2014, , .		6
251	Online heterogeneous multiagent learning under limited communication with applications to forest fire management. , 2015, , .		6
252	Health-Aware Multi-UAV Planning using Decentralized Partially Observable Semi-Markov Decision Processes. , 2016, , .		6

#	ARTICLE	IF	CITATIONS
253	Adaptive Observation Strategies for Forecast Error Minimization. Lecture Notes in Computer Science, 2007, , 1138-1146.	1.0	6
254	Efficient Reachability Analysis of Closed-Loop Systems with Neural Network Controllers. , 2021, , .		6
255	Analytical Performance Prediction for Robust Constrained Model Predictive Control. , 2004, , .		5
256	Optimal Microsatellite Cluster Design for Space-Based Tracking Missions. , 2007, , .		5
257	Actor-Critic Policy Learning in Cooperative Planning. , 2010, , .		5
258	Bayesian Nonparametric Model Reference Adaptive Control using Gaussian Processes. , 2013, , .		5
259	Convergence analysis of the Hybrid Information and Plan Consensus Algorithm. , 2014, , .		5
260	Learning and Predicting Pilot Behavior in Uncontrolled Airspace. , 2015, , .		5
261	Region-of-convergence estimation for learning-based adaptive controllers. , 2016, , .		5
262	Vision-Based Multirotor Following Using Synthetic Learning Techniques. Sensors, 2019, 19, 4794.	2.1	5
263	Potential Game-Theoretic Analysis of a Market-Based Decentralized Task Allocation Algorithm. Springer Tracts in Advanced Robotics, 2016, , 207-220.	0.3	5
264	Learning the Covariance Dynamics of a Large-Scale Environment for Informative Path Planning of Unmanned Aerial Vehicle Sensors. International Journal of Aeronautical and Space Sciences, 2010, 11, 326-337.	1.0	5
265	Optimization of mobile backbone networks: Improved algorithms and approximation. , 2008, , .		4
266	Autonomous aircraft flight control for constrained environments. , 2008, , .		4
267	Robust adaptive Markov Decision Processes in multi-vehicle applications. , 2009, , .		4
268	Learning Covariance Dynamics for Path Planning of UAV Sensors in a Large-Scale Dynamic Environment. , 2009, , .		4
269	Geometric properties of gradient projection anti-windup compensated systems. , 2010, , .		4
270	A Cross-Entropy Based Approach for UAV Task Allocation with Nonlinear Reward. , 2010, , .		4

#	ARTICLE	IF	CITATIONS
271	Decentralized learning-based planning for multiagent missions in the presence of actuator failures. , 2013, , .		4
272	Toward unified analysis and controller synthesis for a class of hybrid systems. Nonlinear Analysis: Theory, Methods & Applications, 2006, 65, 2216-2235.	0.6	3
273	An outer-approximation algorithm for generalized maximum entropy sampling. , 2008, , .		3
274	Active Learning in Persistent Surveillance UAV Missions. , 2009, , .		3
275	Information-rich Task Allocation and Motion Planning for Heterogeneous Sensor Platforms. , 2011, , .		3
276	Model estimation within planning and learning. , 2012, , .		3
277	Value-of-information aware active task assignment. , 2013, , .		3
278	Machine Learning for Efficient Sampling-Based Algorithms in Robust Multi-Agent Planning Under Uncertainty. , 2017, , .		3
279	Effects of Navigation Filter Properties on Formation Flying Control. , 2004, , .		2
280	Simultaneous placement and assignment for exploration in mobile backbone networks. , 2008, , .		2
281	Reaching Consensus with Imprecise Probabilities over a Network. , 2009, , .		2
282	Analysis of gradient projection anti-windup scheme. , 2010, , .		2
283	Planning under Uncertainty using Bayesian Nonparametric Models. , 2012, , .		2
284	Adaptive-Optimal Control of Constrained Nonlinear Uncertain Dynamical Systems using Concurrent Learning Model Predictive Control. , 2013, , .		2
285	Top Equations in the Field [From the Editor]. IEEE Control Systems, 2015, 35, 6-8.	1.0	2
286	Airborne Sensing for Ship Air Wake Surveys with a Tethered Autonomous UAV. , 2021, , .		2
287	Robust Control Synthesis Examples with Real Parameter Uncertainty using the Popov Criterion. , 1993, , .		1
288	Analysis of mutual information for informative forecasting using mobile sensors. , 2010, , .		1

#	ARTICLE	IF	CITATIONS
289	Region of attraction comparison for gradient projection anti-windup compensated systems. , 2011, , .		1
290	Efficient distributed sensing using adaptive censoring based inference. , 2013, , .		1
291	Distributed Control and Estimation of Robotic Vehicle Networks [About This Issue]. IEEE Control Systems, 2016, 36, 5-7.	1.0	1
292	Semantic-level decentralized multi-robot decision-making using probabilistic macro-observations. , 2017, , .		1
293	Crossmodal attentive skill learner: learning in Atari and beyond with audio"video inputs. Autonomous Agents and Multi-Agent Systems, 2020, 34, 1.	1.3	1
294	Avoid communication outages in decentralized planning. , 2010, , .		0
295	Decentralized risk sharing in teams of unmanned vehicles. , 2011, , .		0
296	Distributed Learning for Large-scale Planning Under Uncertainty Problems with Heterogeneous Teams. , 2013, , .		0
297	Value-of Information Aware Active Task Assignment. , 2013, , .		0
298	Vehicular Control [About This Issue]. IEEE Control Systems, 2015, 35, 9-11.	1.0	0
299	Importance-Weighted Adaptive Search for Multi-Class Targets. IEEE Transactions on Signal Processing, 2015, 63, 6299-6314.	3.2	0
300	Failure-Adverse Closed-Loop Statistical Verification. , 2019, , .		0