Kimon P Valavanis

List of Publications by Year
in descending order

87	1,739	586496 16	445137 33
papers	citations	h-index	g-index

221	221	221	1474
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Volume 104, Issue 1, January 2022. Journal of Intelligent and Robotic Systems: Theory and Applications, 2022, 104, 17.	2.0	0
2	VOLUME 104, Issue 2, February 2022. Journal of Intelligent and Robotic Systems: Theory and Applications, 2022, 104, 1.	2.0	0
3	VOLUME 104, Issue 3, March 2022. Journal of Intelligent and Robotic Systems: Theory and Applications, 2022, 104, 1.	2.0	0
4	VOLUME 104, Issue 4, April 2022. Journal of Intelligent and Robotic Systems: Theory and Applications, 2022, 104, 1.	2.0	0
5	VOLUME 105, Issue 1, May 2022. Journal of Intelligent and Robotic Systems: Theory and Applications, 2022, 105, 1.	2.0	0
6	Speech Enhancement Framework with Noise Suppression Using Block Principal Component Analysis. Acoustics, 2022, 4, 441-459.	0.8	1
7	Robust Time-Varying Formation Control for Tail-Sitters in Flight Mode Transitions. IEEE Transactions on Systems, Man, and Cybernetics: Systems, 2021, 51, 4102-4111.	5.9	10
8	Fully Distributed Time-Varying Formation Control for Multiple Uncertain Missiles. IEEE Transactions on Aerospace and Electronic Systems, 2021, 57, 1646-1656.	2.6	10
9	3D Real-Time Energy Efficient Path Planning for a Fleet of Fixed-Wing UAVs. , 2021, , .		0
10	Quadrotor UAV 3D Path Planning with Optical-Flow-based Obstacle Avoidance. , 2021, , .		5
11	A chaotic path planning generator enhanced by a memory technique. Robotics and Autonomous Systems, 2021, 143, 103826.	3.0	15
12	Volume 103 Issue 4, December 2021. Journal of Intelligent and Robotic Systems: Theory and Applications, 2021, 103, 1.	2.0	1
13	Error-Driven Nonlinear Feedback Design for Fuzzy Adaptive Dynamic Surface Control of Nonlinear Systems With Prescribed Tracking Performance. IEEE Transactions on Systems, Man, and Cybernetics: Systems, 2020, 50, 1013-1023.	5.9	45
14	Mathematical model derivation of an unmanned circulation control aerial vehicle UC2AV. Control Theory and Technology, 2020, 18, 1-18.	1.0	3
15	Robust Visual Servoing Control for Ground Target Tracking of Quadrotors. IEEE Transactions on Control Systems Technology, 2020, 28, 1980-1987.	3.2	32
16	A Survey of Controller Designs for New Generation UAVs: The Challenge of Uncertain Aerodynamic Parameters. International Journal of Control, Automation and Systems, 2020, 18, 801-816.	1.6	16
17	Autonomous Wind Turbine Inspection using a Quadrotor. , 2020, , .		11
18	A Chaotic Path Planning Method for 3D Area Coverage Using Modified Logistic Map and a Modulo Tactic. , 2020, , .		7

#	Article	IF	Citations
19	UAV Model-based Flight Control with Artificial Neural Networks: A Survey. Journal of Intelligent and Robotic Systems: Theory and Applications, 2020, 100, 1469-1491.	2.0	30
20	Robust Time-Varying Formation Control for a Set of Quad-Copters With Switching Interaction Communication Topology. IEEE Transactions on Vehicular Technology, 2020, 69, 6880-6890.	3.9	11
21	Robust Formation Tracking Control for Multiple Quadrotors Subject to Switching Topologies. IEEE Transactions on Control of Network Systems, 2020, 7, 1319-1329.	2.4	38
22	Nonlinear Control of Fixed-Wing UAVs with Time-Varying and Unstructured Uncertainties. Springer Tracts in Autonomous Systems, 2020, , .	0.2	1
23	A Survey of Artificial Neural Networks with Model-based Control Techniques for Flight Control of Unmanned Aerial Vehicles. , 2019, , .		11
24	Coverage Performance of a Chaotic Mobile Robot Using an Inverse Pheromone Model. , 2019, , .		3
25	A Software in the Loop (SIL) Kalman and Complementary Filter Implementation on X-Plane for UAVs. , 2019, , .		3
26	Urban Monitoring of Smart Communities Using UAS. , 2019, , .		9
27	Modeling, Control, and Wheel-Terrain Interaction Dynamics of the UGV Argo J5. , 2019, , .		4
28	New Editorial Board Members. Journal of Intelligent and Robotic Systems: Theory and Applications, 2019, 93, 3-4.	2.0	0
29	Robust formation tracking control for multiple quadrotors under aggressive maneuvers. Automatica, 2019, 105, 179-185.	3.0	85
30	An Inverse Pheromone Approach in a Chaotic Mobile Robotâ€™s Path Planning Based on a Modified Logistic Map. Technologies, 2019, 7, 84.	3.0	17
31	An Empirical Evaluation of Ground Effect for Small-Scale Rotorcraft. , 2018, , .		25
32	Robust Formation Control for Multiple Quadrotors Subject to Nonlinear Dynamics and Disturbances. , 2018, , .		3
33	An Empirical Evaluation of Ceiling Effect for Small-Scale Rotorcraft. , 2018, , .		20
34	Robust Formation Control for a Team of Satellites. , 2018, , .		0
35	Experimental evaluation of a real-time GPU-based pose estimation system for autonomous landing of rotary wings UAVs. Control Theory and Technology, 2018, 16, 145-159.	1.0	5
36	System Identification and Controller Implementation of a Centrifugal Compressor for Circulation Control Applications. Journal of Intelligent and Robotic Systems: Theory and Applications, 2018, 91, 629-650.	2.0	0

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37	The Entropy Based Approach to Modeling and Evaluating Autonomy and Intelligence of Robotic Systems. Journal of Intelligent and Robotic Systems: Theory and Applications, 2018, 91, 7-22.	2.0	13
38	Design and Development of a Control Scheme for the UC²AV: Unmanned Circulation Control Aerial Vehicle. , 2017, , .		1
39	System Identification of Circulation Control UAV Using X-Plane Flight Simulation Software and Flight Data. , 2017, , .		8
40	Unmanned Aircraft Systems challenges in design for autonomy. , 2017, , .		8
41	A controller design framework for a NextGen circulation control based UAV. , 2017, , .		5
42	Robust nonlinear control of the longitudinal flight dynamics of a circulation control fixed wing UAV. , 2017, , .		10
43	Neural adaptive dynamic surface control for mismatched uncertain nonlinear systems with nonlinear feedback errors. , 2017, , .		0
44	UC2AV:Unmanned Circulation Control Aerial Vehicle for Short Takeoff and Enhanced Payload. , 2016, , .		3
45	Development of a framework for a circulation control-based unmanned aerial vehicle. , 2016, , .		5
46	Stock trend forecasting in turbulent market periods using neuro-fuzzy systems. Operational Research, 2016, 16, 245-269.	1.3	27
47	Scaled control performance benchmarks and maneuvers for small-scale unmanned helicopters. , 2015, , .		4
48	Unmanned aerial vehicle based passive radar agile sensing for computerized ionospheric tomography. , 2015, , .		0
49	A mobile self-leveling landing platform for VTOL UAVs. , 2015, , .		15
50	Low Speed Wind Tunnel Investigation of a Circulation Control Wing for Enhanced Lift. , 2015, , .		5
51	Design and development of an Air Supply Unit for Circulation Control Wing-based UAVs. , 2015, , .		5
52	Survey of Unmanned Helicopter Model-Based Navigation and Control Techniques. Journal of Intelligent and Robotic Systems: Theory and Applications, 2015, 80, 87-138.	2.0	58
53	UAV-borne X-band radar for collision avoidance. Robotica, 2014, 32, 97-114.	1.3	29
54	Modular Design: A Plug and Play Approach to Sensory Modules, Actuation Platforms, and Task Descriptions for Robotics and Automation Applications. Journal of Intelligent and Robotic Systems: Theory and Applications, 2014, 75, 271-289.	2.0	2

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55	Development of a Circulation Control Wing for UAVs. , 2014, , .		10
56	Experimental Study of Circulation Control Wings at Low Reynolds Numbers. , 2014, , .		9
57	JINTâ€™s 25th Anniversary. Journal of Intelligent and Robotic Systems: Theory and Applications, 2013, 72, 1-3.	2.0	0
58	A Structured Approach for Modular Design in Robotics and Automation Environments. Journal of Intelligent and Robotic Systems: Theory and Applications, 2013, 72, 5-19.	2.0	5
59	Special Issue on Current Developments and State-of-the-art in Unmanned Aircraft Systems. Journal of Intelligent and Robotic Systems: Theory and Applications, 2013, 69, 3-4.	2.0	2
60	A survey of unmanned aerial vehicles (UAVs) for traffic monitoring. , 2013, , .		156
61	Coordination-free deterministic communication for embedded system using the BBC encoding. , 2013, , .		1
62	Enabling intelligent unmanned vehicles through XMOS Technology. Journal of Defense Modeling and Simulation, 2012, 9, 71-82.	1.2	8
63	Dynamic task allocation in cooperative robot teams. Robotica, 2012, 30, 721-730.	1.3	23
64	Linear Tracking Control for Small-Scale Unmanned Helicopters. IEEE Transactions on Control Systems Technology, 2012, 20, 995-1010.	3.2	80
65	A case for I/O response benchmarking of microprocessors. , 2012, , .		5
66	Improving endurance of autonomous aerial vehicles through intelligent service-station placement. , 2012, , .		9
67	Search methodologies for node recovery in robotic swarms. , 2011, , .		1
68	Nonlinear Model Predictive Control With Neural Network Optimization for Autonomous Autorotation of Small Unmanned Helicopters. IEEE Transactions on Control Systems Technology, 2011, 19, 818-831.	3.2	60
69	Velocity and heading tracking control for small-scale unmanned helicopters. , 2011, , .		9
70	A Novel Nonlinear Backstepping Controller Design for Helicopters Using the Rotation Matrix. IEEE Transactions on Control Systems Technology, 2011, 19, 465-473.	3.2	170
71	Linear and Nonlinear Control of Small-Scale Unmanned Helicopters. Intelligent Systems, Control and Automation: Science and Engineering, 2011, , .	0.3	70
72	Time Domain Parameter Estimation and Applied Discrete Nonlinear Control for Small-Scale Unmanned Helicopters. Intelligent Systems, Control and Automation: Science and Engineering, 2011, , 137-151.	0.3	0

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73	Autonomous Autorotation of Unmanned Rotorcraft using Nonlinear Model Predictive Control. Journal of Intelligent and Robotic Systems: Theory and Applications, 2010, 57, 351-369.	2.0	16
74	A Cost Effective Tracking System for Small Unmanned Aerial Systems. Journal of Intelligent and Robotic Systems: Theory and Applications, 2010, 57, 171-191.	2.0	7
75	Small unmanned helicopter autorotation using non-linear model predictive control. , 2010, , .		2
76	Guest Editorial for the Special Volume On Unmanned Aircraft Systems (UAS). Journal of Intelligent and Robotic Systems: Theory and Applications, 2009, 54, 1-2.	2.0	1
77	System Identification and Discrete Nonlinear Control of Miniature Helicopters Using Backstepping. Journal of Intelligent and Robotic Systems: Theory and Applications, 2009, 55, 223-243.	2.0	21
78	System Identification for a Miniature Helicopter at Hover Using Fuzzy Models. Journal of Intelligent and Robotic Systems: Theory and Applications, 2009, 56, 345-362.	2.0	16
79	Using a biarc filter to compute curvature extremes of NURBS curves. Engineering With Computers, 2009, 25, 379-387.	3.5	10
80	Nonlinear backstepping control design for miniature helicopters using the rotation matrix. , 2009, , .		5
81	Optimized task allocation in cooperative robot teams. , 2009, , .		10
82	Intelligent Robotic Systems: Theory, Design and Applications. , 1992, , .		66
83	Information Theoretic Modeling of Robotic & Automation Systems. Control and Dynamic Systems, 1991, 48, 387-416.	0.1	2
84	An efficient planning technique for robotic assemblies and intelligent robotic systems. Journal of Intelligent and Robotic Systems: Theory and Applications, 1990, 3, 321-347.	2.0	22
85	Efficient Plan Formulation and Organization for Robotic Assemblies and Intelligent Robotic Systems. , 1990, , .		0
86	Hardware and software for intelligent robotic systems. Journal of Intelligent and Robotic Systems: Theory and Applications, 1989, 1, 343-373.	2.0	17
87	Analytical design of intelligent machines. Automatica, 1988, 24, 123-133.	3.0	168