

Felipe González

List of Publications by Year in descending order

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Version: 2024-02-01

100
papers

2,969
citations

257429

24
h-index

206102

48
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101
all docs

101
docs citations

101
times ranked

3259
citing authors

#	ARTICLE	IF	CITATIONS
1	Predicting Canopy Chlorophyll Content in Sugarcane Crops Using Machine Learning Algorithms and Spectral Vegetation Indices Derived from UAV Multispectral Imagery. Remote Sensing, 2022, 14, 1140.	4.0	39
2	Towards a Probabilistic Based Autonomous UAV Mission Planning for Planetary Exploration. , 2021, , .		7
3	Incorporating Hierarchical Information for UAV based Semantic Mapping. , 2021, , .		2
4	UAV and AI Application for Runway Foreign Object Debris (FOD) Detection. , 2021, , .		8
5	A Multi-UAV System for Exploration and Target Finding in Cluttered and GPS-Denied Environments. , 2021, , .		11
6	LiDAR-based Computational Fluid Dynamics heat transfer models for bushfire conditions. International Journal of Disaster Risk Reduction, 2021, 66, 102587.	3.9	5
7	Drone-Based Autonomous Motion Planning System for Outdoor Environments under Object Detection Uncertainty. Remote Sensing, 2021, 13, 4481.	4.0	16
8	Cooperative Game Theory based Multi-UAV Consensus-based Formation Control. , 2020, , .		5
9	Unmanned Aerial Vehicle and Artificial Intelligence for Thermal Target Detection in Search and Rescue Applications. , 2020, , .		6
10	A Probabilistic based UAV Mission Planning and Navigation for Planetary Exploration. , 2020, , .		7
11	An Approach for Multi-UAV System Navigation and Target Finding in Cluttered Environments. , 2020, , .		5
12	Design and Testing of Recycled 3D Printed Foldable Unmanned Aerial Vehicle for Remote Sensing. , 2020, , .		8
13	Feasible Polynomial Trajectory Planning for Aerial Manipulation. , 2020, , .		0
14	Towards Simulating Semantic Onboard UAV Navigation. , 2020, , .		3
15	Autonomous UAV Navigation for Active Perception of Targets in Uncertain and Cluttered Environments. , 2020, , .		16
16	A Review of Current Approaches for UAV Autonomous Mission Planning for Mars Biosignatures Detection. , 2020, , .		13
17	A Framework for Multi-Agent UAV Exploration and Target-Finding in GPS-Denied and Partially Observable Environments. Sensors, 2020, 20, 4739.	3.8	18
18	Multi-UAV Target-Finding in Simulated Indoor Environments using Deep Reinforcement Learning. , 2020, , .		6

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19	A Method for Evaluating and Selecting Suitable Hardware for Deployment of Embedded System on UAVs. <i>Sensors</i> , 2020, 20, 4420.	3.8	6
20	UAV Framework for Autonomous Onboard Navigation and People/Object Detection in Cluttered Indoor Environments. <i>Remote Sensing</i> , 2020, 12, 3386.	4.0	53
21	A Framework for Multiple Ground Target Finding and Inspection Using a Multirotor UAS. <i>Sensors</i> , 2020, 20, 272.	3.8	9
22	Multiple Ground Target Finding and Action Using UAVs. , 2019, , .		2
23	A Framework for UAV Navigation and Exploration in GPS-Denied Environments. , 2019, , .		25
24	Search and Retrieve with a Fully Autonomous Aerial Manipulator. , 2019, , .		3
25	A Deep Reinforcement Learning Framework for UAV Navigation in Indoor Environments. , 2019, , .		24
26	Characterization of the particle emission from a ship operating at sea using an unmanned aerial vehicle. <i>Atmospheric Measurement Techniques</i> , 2019, 12, 691-702.	3.1	32
27	Using virtual reality and thermal imagery to improve statistical modelling of vulnerable and protected species. <i>PLoS ONE</i> , 2019, 14, e0217809.	2.5	8
28	A Novel Approach for Invasive Weeds and Vegetation Surveys Using UAS and Artificial Intelligence. , 2018, , .		5
29	Design and Testing of a Recycled 3D Printed and Foldable Unmanned Aerial Vehicle for Remote Sensing. , 2018, , .		8
30	A Framework for Vision-Based Multiple Target Finding and Action Using Multirotor UAVs. , 2018, , .		6
31	Generalized Trajectory Control for Tree-Structured Aerial Manipulators. , 2018, , .		2
32	Multi and hyperspectral UAV remote sensing: Grapevine phylloxera detection in vineyards. , 2018, , .		8
33	UAV tracking of mobile target in occluded, cluttered and GPS-denied environments. , 2018, , .		8
34	A Novel Methodology for Improving Plant Pest Surveillance in Vineyards and Crops Using UAV-Based Hyperspectral and Spatial Data. <i>Sensors</i> , 2018, 18, 260.	3.8	139
35	UAVs and Machine Learning Revolutionising Invasive Grass and Vegetation Surveys in Remote Arid Lands. <i>Sensors</i> , 2018, 18, 605.	3.8	46
36	Aerial Mapping of Forests Affected by Pathogens Using UAVs, Hyperspectral Sensors, and Artificial Intelligence. <i>Sensors</i> , 2018, 18, 944.	3.8	98

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37	UAVs, Hyperspectral Remote Sensing, and Machine Learning Revolutionizing Reef Monitoring. Sensors, 2018, 18, 2026.	3.8	53
38	A UAV system for autonomous target detection and gas sensing. , 2017, , .		32
39	UAV tracking and following a ground target under motion and localisation uncertainty. , 2017, , .		16
40	Visual servoing of a quadrotor with suspended slung load for object detection and tracking. , 2017, , .		3
41	Autonomous UAV with vision based on-board decision making for remote sensing and precision agriculture. , 2017, , .		78
42	Determination of the vertical profile of particle number concentration adjacent to a motorway using an unmanned aerial vehicle. Environmental Pollution, 2017, 230, 134-142.	7.5	41
43	A Methodology to Monitor Airborne PM10 Dust Particles Using a Small Unmanned Aerial Vehicle. Sensors, 2017, 17, 343.	3.8	53
44	Towards the Automatic Detection of Pre-Existing Termite Mounds through UAS and Hyperspectral Imagery. Sensors, 2017, 17, 2196.	3.8	7
45	Vision-Based Target Finding and Inspection of a Ground Target Using a Multirotor UAV System. Sensors, 2017, 17, 2929.	3.8	41
46	Enabling UAV Navigation with Sensor and Environmental Uncertainty in Cluttered and GPS-Denied Environments. Sensors, 2016, 16, 666.	3.8	39
47	Unmanned Aerial Vehicles (UAVs) and Artificial Intelligence Revolutionizing Wildlife Monitoring and Conservation. Sensors, 2016, 16, 97.	3.8	327
48	An Overview of Small Unmanned Aerial Vehicles for Air Quality Measurements: Present Applications and Future Prospectives. Sensors, 2016, 16, 1072.	3.8	270
49	Development and Validation of a UAV Based System for Air Pollution Measurements. Sensors, 2016, 16, 2202.	3.8	142
50	Open source computer-vision based guidance system for UAVs on-board decision making. , 2016, , .		29
51	UAV based target finding and tracking in GPS-denied and cluttered environments. , 2016, , .		17
52	Modelling, Simulation and Flight Test of a Model Predictive Controlled Multirotor with Heavy Slung Load. IFAC-PapersOnLine, 2016, 49, 182-187.	0.9	23
53	Design and flight testing of a bio-inspired plume tracking algorithm for unmanned aerial vehicles. , 2016, , .		4
54	Uncertainty based online planning for UAV target finding in cluttered and GPS-denied environments. , 2016, , .		18

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55	Development of a robust framework for an outdoor mobile manipulation UAV. , 2016, , .		8
56	MPC controlled multirotor with suspended slung Load: System architecture and visual load detection. , 2016, , .		14
57	Autonomous UAVs wildlife detection using thermal imaging, predictive navigation and computer vision. , 2016, , .		36
58	Increasing Autonomy Transparency through capability communication in multiple heterogeneous UAV management. , 2015, , .		13
59	An Automated Emergency Landing System for Fixed-Wing Aircraft: Planning and Control. Journal of Field Robotics, 2015, 32, 1114-1140.	6.0	19
60	Towards the Development of a Low Cost Airborne Sensing System to Monitor Dust Particles after Blasting at Open-Pit Mine Sites. Sensors, 2015, 15, 19667-19687.	3.8	110
61	A Dynamic Navigation Model for Unmanned Aircraft Systems and an Application to Autonomous Front-On Environmental Sensing and Photography Using Low-Cost Sensor Systems. Sensors, 2015, 15, 21537-21553.	3.8	12
62	Enabling Aircraft Emergency Landings Using Active Visual Site Detection. Springer Tracts in Advanced Robotics, 2015, , 167-181.	0.4	16
63	Multi-rotor with suspended load: System Dynamics and Control Toolbox. , 2015, , .		10
64	Development and Integration of a Solar Powered Unmanned Aerial Vehicle and a Wireless Sensor Network to Monitor Greenhouse Gases. Sensors, 2015, 15, 4072-4096.	3.8	114
65	Design and flight testing of an integrated solar powered UAV and WSN for remote gas sensing. , 2015, , .		22
66	Multi-Objective Optimization Model Test Case Problems. Intelligent Systems, Control and Automation: Science and Engineering, 2015, , 123-194.	0.5	0
67	Nonlinear Model Predictive Control for a multi-rotor with heavy slung load. , 2014, , .		16
68	Management of multiple heterogeneous UAVs using capability and autonomy visualisation: Theory, experiment and result. , 2014, , .		3
69	Nonlinear Actuator Fault Detection for Small-Scale UASs. Journal of Intelligent and Robotic Systems: Theory and Applications, 2014, 73, 557-572.	3.4	1
70	Recursive Actuator Fault Detection and Diagnosis for Emergency Landing of UASs. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2014, 47, 2495-2502.	0.4	5
71	Autonomous forced landing system for light general aviation aircraft in unknown environments. , 2013, , .		0
72	FPGA Implementation of an Evolutionary Algorithm for Autonomous Unmanned Aerial Vehicle On-Board Path Planning. IEEE Transactions on Evolutionary Computation, 2013, 17, 272-281.	10.0	68

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73	Wind-energy based path planning for Unmanned Aerial Vehicles using Markov Decision Processes. , 2013, , .		69
74	A UKF-based estimation strategy for actuator fault detection of UASs. , 2013, , .		9
75	Extending persistent monitoring by combining ocean models and Markov Decision Processes. , 2012, , .		8
76	Multi-objective design optimization of morphing UAV aerofoil/wing using hybridised MOGA. , 2012, , .		6
77	A review of optimization techniques used in the design of fibre composite structures for civil engineering applications. Materials & Design, 2012, 33, 534-544.	5.1	143
78	On parallel hybrid-electric propulsion system for unmanned aerial vehicles. Progress in Aerospace Sciences, 2012, 51, 1-17.	12.1	118
79	Robust multidisciplinary UAS design optimisation. Structural and Multidisciplinary Optimization, 2012, 45, 433-450.	3.5	7
80	Advanced Computational Intelligence System for Inverse Aeronautical Design Optimisation. , 2011, , .		4
81	Efficient Hybrid-Game Strategies Coupled to Evolutionary Algorithms for Robust Multidisciplinary Design Optimization in Aerospace Engineering. IEEE Transactions on Evolutionary Computation, 2011, 15, 133-150.	10.0	39
82	Hybrid-Game Strategies for multi-objective design optimization in engineering. Computers and Fluids, 2011, 47, 189-204.	2.5	30
83	Development of an autonomous unmanned aerial system to collect time-stamped samples from the atmosphere and localize potential pathogen sources. Journal of Field Robotics, 2011, 28, 961-976.	6.0	27
84	Assessment of the suitability of public mobile data networks for aircraft telemetry and control purposes. Progress in Aerospace Sciences, 2011, 47, 240-248.	12.1	5
85	Double-shock control bump design optimization using hybridized evolutionary algorithms. Proceedings of the Institution of Mechanical Engineers, Part G: Journal of Aerospace Engineering, 2011, 225, 1175-1192.	1.3	6
86	Active Transonic Aerofoil Design Optimization Using Robust Multiobjective Evolutionary Algorithms. Journal of Aircraft, 2011, 48, 1084-1094.	2.4	24
87	Advanced robust design optimization of FRP sandwich floor panels. IOP Conference Series: Materials Science and Engineering, 2010, 10, 012182.	0.6	2
88	Reduction environmental effects of civil aircraft through multi-objective flight plan optimisation. IOP Conference Series: Materials Science and Engineering, 2010, 10, 012197.	0.6	0
89	UAS Mission Path Planning System (MPPS) Using Hybrid-Game Coupled to Multi-Objective Optimizer. Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME, 2010, 132, .	1.6	21
90	Fast reconstruction of aerodynamic shapes using evolutionary algorithms and virtual nash strategies in a CFD design environment. Journal of Computational and Applied Mathematics, 2009, 232, 61-71.	2.0	17

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91	UAS Mission Path Planning System (MPPS) Using Hybrid-Game Coupled to Multi-Objective Optimiser. , 2009, , .		4
92	Evolutionary Optimisation Methods with Uncertainty for Modern Multidisciplinary Design in Aeronautical Engineering. Notes on Numerical Fluid Mechanics and Multidisciplinary Design, 2009, , 271-284.	0.3	11
93	New Aerospace Design Challenges: Robust Multidisciplinary Evolutionary Techniques. , 2009, , 343-358.		0
94	Robust evolutionary algorithms for UAV/UCAV aerodynamic and RCS design optimisation. Computers and Fluids, 2008, 37, 547-564.	2.5	34
95	Robust design optimisation using multi-objective evolutionary algorithms. Computers and Fluids, 2008, 37, 565-583.	2.5	41
96	Custom power systems and software platforms for wind farms under voltage dips situations. , 2008, , .		4
97	Computational Fluid Dynamics Analysis of Externally Blown Flap Configuration for Transport Aircraft. Journal of Aircraft, 2008, 45, 172-184.	2.4	6
98	Evolutionary methods for multidisciplinary optimization applied to the design of UAV systems. Engineering Optimization, 2007, 39, 773-795.	2.6	2
99	The Future of UAS: Standards, Regulations, and Operational Experiences [Workshop Report]. IEEE Aerospace and Electronic Systems Magazine, 2007, 22, 29-44.	1.3	5
100	Single and multi-objective UAV aerofoil optimisation via hierarchical asynchronous parallel evolutionary algorithm. Aeronautical Journal, 2006, 110, 659-672.	1.6	7