Felipe Gonzlez

List of Publications by Citations

90 papers	1,888 citations	23 h-index	41 g-index
101 ext. papers	2,459 ext. citations	3.7 avg, IF	5.28 L-index

#	Paper	IF	Citations
90	Unmanned Aerial Vehicles (UAVs) and Artificial Intelligence Revolutionizing Wildlife Monitoring and Conservation. *Sensors*, **2016**, 16,	3.8	213
89	An Overview of Small Unmanned Aerial Vehicles for Air Quality Measurements: Present Applications and Future Prospectives. *Sensors*, **2016**, 16,	3.8	180
88	A review of optimization techniques used in the design of fibre composite structures for civil engineering applications. *Materials & Design*, **2012**, 33, 534-544		113
87	A Novel Methodology for Improving Plant Pest Surveillance in Vineyards and Crops Using UAV-Based Hyperspectral and Spatial Data. *Sensors*, **2018**, 18,	3.8	95
86	Development and Validation of a UAV Based System for Air Pollution Measurements. *Sensors*, **2016**, 16,	3.8	94
85	Development and integration of a solar powered unmanned aerial vehicle and a wireless sensor network to monitor greenhouse gases. *Sensors*, **2015**, 15, 4072-96	3.8	87
84	Towards the Development of a Low Cost Airborne Sensing System to Monitor Dust Particles after Blasting at Open-Pit Mine Sites. *Sensors*, **2015**, 15, 19667-87	3.8	83
83	On parallel hybrid-electric propulsion system for unmanned aerial vehicles. *Progress in Aerospace Sciences*, **2012**, 51, 1-17	8.8	77
82	Aerial Mapping of Forests Affected by Pathogens Using UAVs, Hyperspectral Sensors, and Artificial Intelligence. *Sensors*, **2018**, 18,	3.8	64
81	FPGA Implementation of an Evolutionary Algorithm for Autonomous Unmanned Aerial Vehicle On-Board Path Planning. *IEEE Transactions on Evolutionary Computation*, **2013**, 17, 272-281	15.6	51
80	Wind-energy based path planning for Unmanned Aerial Vehicles using Markov Decision Processes **2013**,		41
79	Autonomous UAV with vision based on-board decision making for remote sensing and precision agriculture **2017**,		38
78	A Methodology to Monitor Airborne PM Dust Particles Using a Small Unmanned Aerial Vehicle. *Sensors*, **2017**, 17,	3.8	36
77	Robust design optimisation using multi-objective evolutionary algorithms. *Computers and Fluids*, **2008**, 37, 565-583	2.8	35
76	UAVs and Machine Learning Revolutionising Invasive Grass and Vegetation Surveys in Remote Arid Lands. *Sensors*, **2018**, 18,	3.8	32
75	. *IEEE Transactions on Evolutionary Computation*, **2011**, 15, 133-150	15.6	32
74	Determination of the vertical profile of particle number concentration adjacent to a motorway using an unmanned aerial vehicle. *Environmental Pollution*, **2017**, 230, 134-142	9.3	31

73	UAVs, Hyperspectral Remote Sensing, and Machine Learning Revolutionizing Reef Monitoring. *Sensors*, **2018**, 18,	3.8	28
72	Hybrid-Game Strategies for multi-objective design optimization in engineering. *Computers and Fluids*, **2011**, 47, 189-204	2.8	26
71	Robust evolutionary algorithms for UAV/UCAV aerodynamic and RCS design optimisation. *Computers and Fluids*, **2008**, 37, 547-564	2.8	25
70	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	6.7	24
69	Active Transonic Aerofoil Design Optimization Using Robust Multiobjective Evolutionary Algorithms. *Journal of Aircraft*, **2011**, 48, 1084-1094	1.6	24
68	Enabling UAV Navigation with Sensor and Environmental Uncertainty in Cluttered and GPS-Denied Environments. *Sensors*, **2016**, 16,	3.8	24
67	UAV Framework for Autonomous Onboard Navigation and People/Object Detection in Cluttered Indoor Environments. *Remote Sensing*, **2020**, 12, 3386	5	22
66	Autonomous UAVs wildlife detection using thermal imaging, predictive navigation and computer vision **2016**,		22
65	Vision-Based Target Finding and Inspection of a Ground Target Using a Multirotor UAV System. *Sensors*, **2017**, 17,	3.8	21
64	A UAV system for autonomous target detection and gas sensing **2017**,		19
63	Characterization of the particle emission from a ship operating at sea using an unmanned aerial vehicle. *Atmospheric Measurement Techniques*, **2019**, 12, 691-702	4	19
62	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	16
61	Modelling, Simulation and Flight Test of a Model Predictive Controlled Multirotor with Heavy Slung Load. *IFAC-PapersOnLine*, **2016**, 49, 182-187	0.7	16
60	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	2.4	15
59	A Deep Reinforcement Learning Framework for UAV Navigation in Indoor Environments **2019**,		13
58	Design and flight testing of an integrated solar powered UAV and WSN for remote gas sensing **2015**,		13
57	**2016**,		13
56	UAV based target finding and tracking in GPS-denied and cluttered environments **2016**,		13

55	Nonlinear Model Predictive Control for a multi-rotor with heavy slung load **2014**,		12
54	Enabling Aircraft Emergency Landings Using Active Visual Site Detection. *Springer Tracts in Advanced Robotics*, **2015**, 167-181	0.5	11
53	Increasing Autonomy Transparency through capability communication in multiple heterogeneous UAV management **2015**,		9
52	An Automated Emergency Landing System for Fixed-Wing Aircraft: Planning and Control. *Journal of Field Robotics*, **2015**, 32, 1114-1140	6.7	9
51	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	9
50	Uncertainty based online planning for UAV target finding in cluttered and GPS-denied environments **2016**,		9
49	MPC controlled multirotor with suspended slung Load: System architecture and visual load detection **2016**,		8
48	UAV tracking and following a ground target under motion and localisation uncertainty **2017**,		7
47	Multi-rotor with suspended load: System Dynamics and Control Toolbox **2015**,		7
46	A Framework for UAV Navigation and Exploration in GPS-Denied Environments **2019**,		7
45	Robust multidisciplinary UAS design optimisation. *Structural and Multidisciplinary Optimization*, **2012**, 45, 433-450	3.6	7
44	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, 21537-53	3.8	6
43	Extending persistent monitoring by combining ocean models and Markov Decision Processes **2012**,		6
42	Computational Fluid Dynamics Analysis of Externally Blown Flap Configuration for Transport Aircraft. *Journal of Aircraft*, **2008**, 45, 172-184	1.6	6
41	Single and multiobjective UAV aerofoil optimisation via hierarchical asynchronous parallel evolutionary algorithm. *Aeronautical Journal*, **2006**, 110, 659-672	0.9	6
40	Autonomous UAV Navigation for Active Perception of Targets in Uncertain and Cluttered Environments **2020**,		6
39	Development of a robust framework for an outdoor mobile manipulation UAV **2016**,		6
38	Towards the Automatic Detection of Pre-Existing Termite Mounds through UAS and Hyperspectral Imagery. *Sensors*, **2017**, 17,	3.8	5

37	**2012**,		5
36	A UKF-based estimation strategy for actuator fault detection of UASs **2013**,		5
35	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	0.9	5
34	A Framework for Multiple Ground Target Finding and Inspection Using a Multirotor UAS. *Sensors*, **2020**, 20,	3.8	5
33	A Framework for Multi-Agent UAV Exploration and Target-Finding in GPS-Denied and Partially Observable Environments. *Sensors*, **2020**, 20,	3.8	5
32	UAV tracking of mobile target in occluded, cluttered and GPS-denied environments **2018**,		4
31	Assessment of the suitability of public mobile data networks for aircraft telemetry and control purposes. *Progress in Aerospace Sciences*, **2011**, 47, 240-248	8.8	4
30	UAS Mission Path Planning System (MPPS) Using Hybrid-Game Coupled to Multi-Objective Optimiser **2009**,		4
29	. *IEEE Aerospace and Electronic Systems Magazine*, **2007**, 22, 29-44	2.4	4
28	Using virtual reality and thermal imagery to improve statistical modelling of vulnerable and protected species. *PLoS ONE*, **2019**, 14, e0217809	3.7	4
27	A Framework for Vision-Based Multiple Target Finding and Action Using Multirotor UAVs **2018**,		4
26	Multi and hyperspectral UAV remote sensing: Grapevine phylloxera detection in vineyards **2018**,		4
25	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	5	4
24	Advanced Computational Intelligence System for Inverse Aeronautical Design Optimisation **2011**,		3
23	Custom power systems and software platforms for wind farms under voltage dips situations **2008**,		3
22	Drone-Based Autonomous Motion Planning System for Outdoor Environments under Object Detection Uncertainty. *Remote Sensing*, **2021**, 13, 4481	5	3
21	Multi-UAV Target-Finding in Simulated Indoor Environments using Deep Reinforcement Learning **2020**,		3
20	Design and Testing of a Recycled 3D Printed and Foldable Unmanned Aerial Vehicle for Remote Sensing **2018**,		3

19	Visual servoing of a quadrotor with suspended slung load for object detection and tracking **2017**,		2
18	Multiple Ground Target Finding and Action Using UAVs **2019**,		2
17	**2014**,		2
16	Recursive Actuator Fault Detection and Diagnosis for Emergency Landing of UASs. *IFAC Postprint Volumes IPPV / International Federation of Automatic Control*, **2014**, 47, 2495-2502		2
15	Advanced robust design optimization of FRP sandwich floor panels. *IOP Conference Series: Materials Science and Engineering*, **2010**, 10, 012182	0.4	2
14	Evolutionary methods for multidisciplinary optimization applied to the design of UAV systems *Engineering Optimization*, **2007**, 39, 773-795	2	2
13	Unmanned Aerial Vehicle and Artificial Intelligence for Thermal Target Detection in Search and Rescue Applications **2020**,		2
12	A Method for Evaluating and Selecting Suitable Hardware for Deployment of Embedded System on UAVs. *Sensors*, **2020**, 20,	3.8	2
11	A Novel Approach for Invasive Weeds and Vegetation Surveys Using UAS and Artificial Intelligence **2018**,		2
10	**2020**,		1
9	Towards Simulating Semantic Onboard UAV Navigation **2020**,		1
8	A Review of Current Approaches for UAV Autonomous Mission Planning for Mars Biosignatures Detection **2020**,		1
7	Incorporating Hierarchical Information for UAV based Semantic Mapping **2021**,		1
6	Design and flight testing of a bio-inspired plume tracking algorithm for unmanned aerial vehicles **2016**,		1
5	Nonlinear Actuator Fault Detection for Small-Scale UASs. *Journal of Intelligent and Robotic Systems: Theory and Applications*, **2014**, 73, 557-572	2.9	0
4	LiDAR-based Computational Fluid Dynamics heat transfer models for bushfire conditions. *International Journal of Disaster Risk Reduction*, **2021**, 66, 102587	4.5	0
3	Reduction environmental effects of civil aircraft through multi-objective flight plan optimisation. *IOP Conference Series: Materials Science and Engineering*, **2010**, 10, 012197	0.4	
2	New Aerospace Design Challenges: Robust Multidisciplinary Evolutionary Techniques **2009**, 343-358		

1	Multi-Objective Optimization Model Test Case Problems. *Intelligent Systems, Control and Automation: Science and Engineering*, **2015**, 123-194	0.6