

Eric Feron

List of Publications by Year in descending order

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Version: 2024-02-01

96
papers

17,409
citations

430874

18
h-index

330143

37
g-index

99
all docs

99
docs citations

99
times ranked

7110
citing authors

#	ARTICLE	IF	CITATIONS
1	A priority-driven optimal guidance approach to moving target tracking for safe navigation in a narrow space. International Journal of Systems Science, 2022, 53, 138-153.	5.5	1
2	Design of Avionics Network Architecture Under a Reliability Constraint. IEEE Transactions on Aerospace and Electronic Systems, 2022, 58, 2327-2338.	4.7	2
3	Ariadne: A common-sense thread for enabling provable safety in air mobility systems with unreliable components. , 2022, , .		4
4	Deconfliction and Escape Considerations for Commercial Aircraft Formations. , 2022, , .		2
5	Intent-Aware Optimal Collision Avoidance and Trajectory Planning for a Pursuit Vehicle. Robotica, 2022, 40, 2505-2526.	1.9	1
6	An Accelerated Dual Fast Marching Tree Applied to Emergency Geometric Trajectory Generation. Aerospace, 2022, 9, 180.	2.2	8
7	An Assessment of Unmanned Aircraft System Operations with the Extensible Trajectory Optimization Library. , 2021, , .		2
8	Risk-Based Formal Requirement Elicitation for Automatic Spacecraft Maneuvering. , 2021, , .		3
9	Flight safety during Covid-19: A study of Charles de Gaulle airport atypical energy approaches. Transportation Research Interdisciplinary Perspectives, 2021, 9, 100327.	2.7	8
10	Natural Motion-based Trajectories for Automatic Spacecraft Collision Avoidance During Proximity Operations. , 2021, , .		8
11	Formal Specification and Analysis of Spacecraft Collision Avoidance Run Time Assurance Requirements. , 2021, , .		7
12	Avionics of Aerial Robots. Current Robotics Reports, 2021, 2, 113-124.	7.9	3
13	Decentralized Task Reallocation on Parallel Computing Architectures Targeting an Avionics Application. Journal of Optimization Theory and Applications, 2021, 191, 874.	1.5	1
14	Lyapunov Differential Equation Hierarchy and Polynomial Lyapunov Functions for Switched Implicit Systems. , 2021, , .		2
15	Verification and runtime assurance for dynamical systems with uncertainty. , 2021, , .		5
16	A Numerical Method to Compute Stability Margins of Switching Linear Systems. , 2021, , .		0
17	Pointwise-in-Time Analysis and Non-Quadratic Lyapunov Functions for Linear Time-Varying Systems. , 2021, , .		1
18	A Systems Engineering Approach to the Design and Education of a Robotic Baby. IncoSE International Symposium, 2021, 31, 327-342.	0.6	1

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19	Application of Dempster-Shafer Networks to a Real-Time Unmanned Systems Risk Analysis Framework. Journal of Aerospace Information Systems, 2021, 18, 616-631.	1.4	1
20	A High-Performance Computing Process for Urban Air Mobility Simulations. , 2021, , .		0
21	A Year Into the Pandemic: a Passenger Perspective on its Impact at Paris-Charles de Gaulle Airport. , 2021, , .		1
22	Wake Interactions Of A Tetrahedron Quadcopter. , 2020, , .		4
23	Impact of Covid-19 on passengers and airlines from passenger measurements: Managing customer satisfaction while putting the US Air Transportation System to sleep. Transportation Research Interdisciplinary Perspectives, 2020, 7, 100179.	2.7	56
24	Validating Feedback Control to Meet Stiffness Requirements in Additive Manufacturing. IEEE Transactions on Control Systems Technology, 2020, 28, 2053-2060.	5.2	10
25	Automatic Updates of Transition Potential Matrices in Dempster-Shafer Networks Based on Evidence Inputs. Sensors, 2020, 20, 3727.	3.8	4
26	A Scalable Safety Critical Control Framework for Nonlinear Systems. IEEE Access, 2020, 8, 187249-187275.	4.2	37
27	Modeling and Experimental Validation of a Fractal Tetrahedron UAS Assembly. , 2020, , .		8
28	Bounding the State Covariance Matrix for Switched Linear Systems with Noise. , 2020, , .		2
29	Memory-loss resilient controller design for temporal logic constraints. Cyber-Physical Systems, 2020, , 1-22.	2.0	0
30	Lyapunov Differential Equation Hierarchy and Polynomial Lyapunov Functions for Switched Linear Systems. , 2020, , .		2
31	Aircraft atypical approach detection using functional principal component analysis. Journal of Air Transport Management, 2020, 84, 101787.	4.5	22
32	Approach and Landing Aircraft On-Board Parameters Estimation with LSTM Networks. , 2020, , .		6
33	Door-to-Door Air Travel Time Analysis in the United States using Uber Data. , 2020, , .		0
34	Unmanned Systems Health Analysis through Evidential Reasoning Networks. , 2020, , .		2
35	Towards a Taxonomy for Automatic and Autonomous Cooperative Spacecraft Maneuvering in a Space Traffic Management Framework. , 2020, , .		2
36	Scheduling for Offloading Safety-Critical Applications Within Networked Groups of Vehicles. , 2020, , .		0

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37	Coordination and Path Planning of Cooperative UAVs in RF Localization and Relay Network. , 2020, , .		2
38	Trajectory Control of a Swashplate-less Coaxial Helicopter Using Nonlinear Techniques. , 2019, , .		1
39	Formal Verification of System States for Spacecraft Automatic Maneuvering. , 2019, , .		3
40	Implementing and Validating Air Passenger-Centric Metrics Using Mobile Phone Data. Journal of Aerospace Information Systems, 2019, 16, 132-147.	1.4	7
41	Doorway to the United States: An Exploration of Customs and Border Protection Data. , 2019, , .		1
42	Task Allocation of Safety-Critical Applications on Reconfigurable Multi-Core Architectures with an Application on Control of Propulsion System. , 2019, , .		2
43	A Scalable Controlled Set Invariance Framework with Practical Safety Guarantees. , 2019, , .		13
44	Test platform for autopilot system embedded in a model of multi-core architecture using X-Plane flight simulator. , 2019, , .		2
45	Monitor-Based Runtime Assurance for Temporal Logic Specifications. , 2019, , .		5
46	An Online Approach to Active Set Invariance. , 2018, , .		48
47	Passenger-Centric Metrics for Air Transportation Leveraging Mobile Phone and Twitter Data. , 2018, , .		2
48	Interval Observers for Secure Estimation in Cyber-Physical Systems. , 2018, , .		10
49	Credible Autocoding of The Ellipsoid Algorithm Solving Second-Order Cone Programs. , 2018, , .		0
50	3D Printing of a Leaf Spring: A Demonstration of Closed-Loop Control in Additive Manufacturing. , 2018, , .		8
51	Experimental Allocation of Safety-Critical Applications on Reconfigurable Multi-Core Architecture. , 2018, , .		4
52	Towards a Framework for Realizable Safety Critical Control through Active Set Invariance. , 2018, , .		71
53	Multi-agent systems to help managing air traffic structure. Journal of Aerospace Operations, 2018, 5, 119-148.	0.1	8
54	Triple-Integral Control for Reduced-G Atmospheric Flight. , 2018, , .		8

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55	Task allocation of safety-critical applications on reconfigurable multi-core architectures. , 2017, , .		3
56	Optimal navigation policy for an autonomous agent operating in adversarial environments. , 2016, , .		2
57	Evaluation of new enroute performance measures for air navigation service providers. , 2016, , .		0
58	Using reconfigurable multi-core architectures for safety-critical embedded systems. , 2016, , .		5
59	Multi-agent systems for air traffic conflicts resolution by local speed regulation and departure delay. , 2016, , .		6
60	Adaptive control architectures for mitigating sensor attacks in cyber-physical systems. Cyber-Physical Systems, 2016, 2, 24-52.	2.0	66
61	Data-Based Modeling and Optimization of En Route Traffic. Journal of Guidance, Control, and Dynamics, 2014, 37, 1930-1945.	2.8	27
62	Gain Scheduled Control of Gas Turbine Engines: Stability and Verification. Journal of Engineering for Gas Turbines and Power, 2014, 136, .	1.1	32
63	Gate Assignment to Minimize Passenger Transit Time and Aircraft Taxi Time. Journal of Guidance, Control, and Dynamics, 2013, 36, 467-475.	2.8	47
64	Optimization of Lyapunov Invariants in Verification of Software Systems. IEEE Transactions on Automatic Control, 2013, 58, 696-711.	5.7	14
65	Reliably Creating Collision Avoidance Advisories in Piloted Simulations. IEEE Transactions on Human-Machine Systems, 2013, 43, 416-420.	3.5	8
66	Developing proof carrying code to formally assure termination in fault tolerant distributed controls systems. , 2012, , .		5
67	On the Dubins Traveling Salesman Problem. IEEE Transactions on Automatic Control, 2012, 57, 265-270.	5.7	104
68	Impact of gate assignment on gate-holding departure control strategies. , 2012, , .		0
69	Obstacle-Sensitive Trajectory Regulation via Gain Scheduling and Semidefinite Programming. IEEE Transactions on Control Systems Technology, 2012, 20, 1107-1115.	5.2	6
70	Influence of Aircraft Maneuver Preference Variability on Airspace Usage. IEEE Transactions on Intelligent Transportation Systems, 2011, 12, 1446-1461.	8.0	12
71	Stability of spatially distributed, intersecting aircraft flows under sequential conflict resolution schemes. , 2011, , .		1
72	Bounds on Controller Taskload Rates at an Intersection for Dense Traffic. , 2011, , .		1

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73	Scheduling Continuous-Time Kalman Filters. IEEE Transactions on Automatic Control, 2011, 56, 1381-1394.	5.7	28
74	Traffic complexity of intersecting flows of aircraft under variations of pilot preferences in maneuver choice. , 2010, , .		6
75	Determining bounds on controller workload rates at an intersection. , 2010, , .		2
76	Maximizing throughput at an intersection under constrained maneuvers. , 2010, , .		1
77	From Control Systems to Control Software. IEEE Control Systems, 2010, 30, 50-71.	0.8	44
78	Scheduling Kalman filters in continuous time. , 2009, , .		6
79	A parameter-dependent Lyapunov approach for the control of nonstationary and hybrid LPV systems. , 2009, , .		2
80	Preventing Automotive Pileup Crashes in Mixed-Communication Environments. IEEE Transactions on Intelligent Transportation Systems, 2009, 10, 211-225.	8.0	31
81	Detection of Driver Fatigue Caused by Sleep Deprivation. IEEE Transactions on Systems, Man and Cybernetics, Part A: Systems and Humans, 2009, 39, 694-705.	2.9	86
82	Graceful Degradation of Air Traffic Operations: Airspace Sensitivity to Degraded Surveillance Systems. Proceedings of the IEEE, 2008, 96, 2028-2039.	21.3	18
83	Continuous path planning for a data harvesting mobile server. , 2008, , .		10
84	Multi-UAV dynamic routing with partial observations using restless bandit allocation indices. , 2008, , .		37
85	Air Traffic Complexity: An Input-Output Approach. Proceedings of the American Control Conference, 2007, , .	0.0	24
86	Optimal Fixed-Point Implementation of Digital Filters. , 2007, , .		1
87	Space Partition for Conflict Resolution of Intersecting Flows of Mobile Agents. IEEE Transactions on Intelligent Transportation Systems, 2007, 8, 512-527.	8.0	30
88	Multivehicle path planning for nonline-of-sight communication. Journal of Field Robotics, 2006, 23, 269-290.	6.0	18
89	Multi-Agent Task Assignment in the Bandit Framework. , 2006, , .		14
90	Safety Verification of Iterative Algorithms over Polynomial Vector Fields. , 2006, , .		3

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91	Linear Programming and Language Processing for Human-Unmanned Aerial-Vehicle Team Missions. Journal of Guidance, Control, and Dynamics, 2006, 29, 303-313.	2.8	27
92	Stability of Intersecting Aircraft Flows Using Heading-Change Maneuvers for Conflict Avoidance. IEEE Transactions on Intelligent Transportation Systems, 2005, 6, 357-369.	8.0	32
93	Real-Time Motion Planning for Agile Autonomous Vehicles. Journal of Guidance, Control, and Dynamics, 2002, 25, 116-129.	2.8	602
94	Mixed integer programming for multi-vehicle path planning. , 2001, , .		301
95	A control Lyapunov function approach to robust stabilization of nonlinear systems. , 1997, , .		13
96	Estimating the conservatism of Popov's criterion for real parametric uncertainties. Systems and Control Letters, 1997, 31, 173-183.	2.3	10