

Alan F Lynch

List of Publications by Year in descending order

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60
papers

1,102
citations

471371

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414303

32
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60
all docs

60
docs citations

60
times ranked

920
citing authors

#	ARTICLE	IF	CITATIONS
1	Inner-Outer Loop Control for Quadrotor UAVs With Input and State Constraints. IEEE Transactions on Control Systems Technology, 2016, 24, 1797-1804.	3.2	163
2	Nonlinear dynamic image-based visual servoing of a quadrotor. Journal of Unmanned Vehicle Systems, 2015, 3, 1-21.	0.6	93
3	Experimental Validation of Nonlinear Control for a Voltage Source Converter. IEEE Transactions on Control Systems Technology, 2009, 17, 1135-1144.	3.2	88
4	Invariant Observer Design for a Helicopter UAV Aided Inertial Navigation System. IEEE Transactions on Control Systems Technology, 2013, 21, 791-806.	3.2	58
5	Flatness-Based Feedback Control of an Automotive Solenoid Valve. IEEE Transactions on Control Systems Technology, 2007, 15, 394-401.	3.2	57
6	Integration of a Triaxial Magnetometer into a Helicopter UAV GPS-Aided INS. IEEE Transactions on Aerospace and Electronic Systems, 2012, 48, 2947-2960.	2.6	46
7	Precision Tracking of a Rotating Shaft With Magnetic Bearings by Nonlinear Decoupled Disturbance Observers. IEEE Transactions on Control Systems Technology, 2007, 15, 1112-1121.	3.2	45
8	Experimental Validation of a Helicopter Autopilot Design using Model-Based PID Control. Journal of Intelligent and Robotic Systems: Theory and Applications, 2013, 70, 385-399.	2.0	44
9	Input Saturated Visual Servoing for Unmanned Aerial Vehicles. IEEE/ASME Transactions on Mechatronics, 2017, 22, 952-960.	3.7	40
10	Adaptive Control of a Voltage Source Converter for Power Factor Correction. IEEE Transactions on Power Electronics, 2013, 28, 4767-4779.	5.4	36
11	Adaptive Output-Feedback Image-Based Visual Servoing for Quadrotor Unmanned Aerial Vehicles. IEEE Transactions on Control Systems Technology, 2020, 28, 1034-1041.	3.2	36
12	Multiple Time Scalings of a Multi-Output Observer Form. IEEE Transactions on Automatic Control, 2010, 55, 966-971.	3.6	29
13	Observer forms for perspective systems. Automatica, 2010, 46, 1829-1834.	3.0	25
14	Output-Feedback Image-Based Visual Servoing for Multirotor Unmanned Aerial Vehicle Line Following. IEEE Transactions on Aerospace and Electronic Systems, 2020, 56, 3182-3196.	2.6	25
15	State transformation-based dynamic visual servoing for an unmanned aerial vehicle. International Journal of Control, 2016, 89, 892-908.	1.2	24
16	Non-linear observer design by approximate error linearization. Systems and Control Letters, 1997, 32, 161-172.	1.3	18
17	Dynamic IBVS of a rotary wing UAV using line features. Robotica, 2016, 34, 2009-2026.	1.3	18
18	Adaptive visual servoing of UAVs using a virtual camera. IEEE Transactions on Aerospace and Electronic Systems, 2016, 52, 2529-2538.	2.6	18

#	ARTICLE	IF	CITATIONS
19	A Block Triangular Form for Nonlinear Observer Design. IEEE Transactions on Automatic Control, 2006, 51, 1803-1808.	3.6	16
20	Experimental comparison of nonlinear tracking controllers for active magnetic bearings. Control Engineering Practice, 2007, 15, 95-107.	3.2	16
21	Adaptive vector control for voltage source converters. IET Control Theory and Applications, 2013, 7, 1110-1119.	1.2	16
22	A block triangular observer form for non-linear observer design. International Journal of Control, 2008, 81, 177-188.	1.2	15
23	An efficient method for observer design with approximately linear error dynamics. International Journal of Control, 2004, 77, 607-612.	1.2	13
24	Dynamic Visual Servoing for a Quadrotor Using a Virtual Camera. Unmanned Systems, 2017, 05, 1-17.	2.7	13
25	Experimental validation of dynamic visual servoing for a quadrotor using a virtual camera. , 2015, , .		12
26	Observer design using a generalized time-scaled block triangular observer form. Systems and Control Letters, 2009, 58, 346-352.	1.3	11
27	Visual Inertial SLAM: Application to Unmanned Aerial Vehicles. IFAC-PapersOnLine, 2017, 50, 1965-1970.	0.5	11
28	A backstepping disturbance observer control for multirotor UAVs: theory and experiment. International Journal of Control, 2022, 95, 2364-2378.	1.2	11
29	Global Tracking via Output Feedback for Nonlinear MIMO Systems. IEEE Transactions on Automatic Control, 2011, 56, 2179-2184.	3.6	8
30	Model-Based Helicopter UAV Control: Experimental Results. Journal of Intelligent and Robotic Systems: Theory and Applications, 2014, 73, 19-31.	2.0	8
31	An experimental validation of magnetometer integration into a GPS-aided helicopter UAV navigation system. , 2010, , .		7
32	Internal model-based controller design using measured costs and gradients. International Journal of Control, 1998, 69, 257-270.	1.2	6
33	Adaptive control of a Voltage Source Converter. , 2010, , .		6
34	Dynamic image-based visual servoing for unmanned aerial vehicles with bounded inputs. , 2016, , .		6
35	Control-Oriented Physical Input Modelling for a Helicopter UAV. Journal of Intelligent and Robotic Systems: Theory and Applications, 2014, 73, 209-217.	2.0	5
36	Disturbance observer-based nonlinear control of a quadrotor UAV. Advanced Control for Applications, 2020, 2, e24.	0.8	5

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37	Adaptive control of an active power filter for harmonic suppression and power factor correction. International Journal of Dynamics and Control, 2022, 10, 473-482.	1.5	5
38	Quadrotor Motion Control Using Deep Reinforcement Learning. Journal of Unmanned Vehicle Systems, 0, , .	0.6	5
39	Inner-outer loop control with constraints for rotary-wing UAVs. , 2015, , .		4
40	An unmanned helicopter control with partial small body force compensation: Experimental results. Robotica, 2018, 36, 1436-1453.	1.3	4
41	Disturbance Observer-Based Integral Backstepping Control for UAVs. , 2020, , .		4
42	Exponentially Stable Motion Control for Multirotor UAVs with Rotor Drag and Disturbance Compensation. Journal of Intelligent and Robotic Systems: Theory and Applications, 2021, 103, 1.	2.0	4
43	Nonlinear tension observers for web machines*1. Automatica, 2004, 40, 1517-1517.	3.0	3
44	On the Existence of a Block Triangular Form. Proceedings of the American Control Conference, 2007, , .	0.0	3
45	Physical input modelling and identification for a helicopter UAV. , 2013, , .		3
46	A novel cascade controller for a helicopter UAV with Small Body Force compensation. , 2013, , .		3
47	A numerical analysis of the algebraic derivative method with application to magnetic bearings. , 2007, , .		2
48	Nonlinear Bearing Force and Torque Model for a Toothless Self-Bearing Servomotor. IEEE Transactions on Magnetics, 2008, 44, 1805-1814.	1.2	2
49	Experimental validation of a helicopter autopilot: Time-varying trajectory tracking. , 2013, , .		2
50	Predictor-based control design for UAVs: robust stability analysis and experimental results. International Journal of Control, 2021, 94, 1529-1543.	1.2	2
51	Time-delay robustness analysis of a nested saturation control for UAV motion control. , 2021, , 69-93.		2
52	Time scaling of a multi-output observer form. , 2008, , .		1
53	Experimental validation of an adaptive control for a Voltage Source Converter. , 2013, , .		1
54	IBVS of a rotary wing UAV using line features. , 2014, , .		1

#	ARTICLE	IF	CITATIONS
55	Observer design for visual inertial SLAM scale on a quadrotor UAV. , 2017, , .		1
56	Observer design for monocular visual inertial SLAM. Automatisierungstechnik, 2018, 66, 246-257.	0.4	1
57	Comprehensive calibration algorithm for long-endurance shipborne grid SINS. Measurement Science and Technology, 2019, 30, 105104.	1.4	1
58	Predictor-based controllers for UAVs with input delay. , 2017, , .		0
59	Observer design and applications. Automatisierungstechnik, 2018, 66, 193-194.	0.4	0
60	An Adaptive Control Scheme for a Three-Phase Active Power Filter. , 2021, , .		0