Alan F Lynch

List of Publications by Year
in descending order

60 papers	**1,102** citations	471509 **17** h-index	414414 **32** g-index
60 all docs	**60** docs citations	**60** times ranked	**920** citing authors

#	Article	IF	Citations
1	A backstepping disturbance observer control for multirotor UAVs: theory and experiment. International Journal of Control, 2022, 95, 2364-2378.	1.9	11
2	Adaptive control of an active power filter for harmonic suppression and power factor correction. International Journal of Dynamics and Control, 2022, 10, 473-482.	2.5	5
3	Predictor-based control design for UAVs: robust stability analysis and experimental results. International Journal of Control, 2021, 94, 1529-1543.	1.9	2
4	Time-delay robustness analysis of a nested saturation control for UAV motion control. , 2021, , 69-93.		2
5	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.	3.4	4
6	An Adaptive Control Scheme for a Three-Phase Active Power Filter. , 2021, , .		0
7	Adaptive Output-Feedback Image-Based Visual Servoing for Quadrotor Unmanned Aerial Vehicles. IEEE Transactions on Control Systems Technology, 2020, 28, 1034-1041.	5.2	36
8	Disturbance observerâ€based nonlinear control of a quadrotor UAV. Advanced Control for Applications, 2020, 2, e24.	1.7	5
9	Disturbance Observer-Based Integral Backstepping Control for UAVs. , 2020, , .		4
10	Output-Feedback Image-Based Visual Servoing for Multirotor Unmanned Aerial Vehicle Line Following. IEEE Transactions on Aerospace and Electronic Systems, 2020, 56, 3182-3196.	4.7	25
11	Comprehensive calibration algorithm for long-endurance shipborne grid SINS. Measurement Science and Technology, 2019, 30, 105104.	2.6	1
12	Observer design and applications. Automatisierungstechnik, 2018, 66, 193-194.	0.8	0
13	Observer design for monocular visual inertial SLAM. Automatisierungstechnik, 2018, 66, 246-257.	0.8	1
14	An unmanned helicopter control with partial small body force compensation: Experimental results. Robotica, 2018, 36, 1436-1453.	1.9	4
15	Dynamic Visual Servoing for a Quadrotor Using a Virtual Camera. Unmanned Systems, 2017, 05, 1-17.	3.6	13
16	Predictor-based controllers for UAVs with input delay. , 2017, , .		0
17	Observer design for visual inertial SLAM scale on a quadrotor UAV. , 2017, , .		1
18	Input Saturated Visual Servoing for Unmanned Aerial Vehicles. IEEE/ASME Transactions on Mechatronics, 2017, 22, 952-960.	5.8	40

#	Article	IF	Citations
19	Visual Inertial SLAM: Application to Unmanned Aerial Vehicles. IFAC-PapersOnLine, 2017, 50, 1965-1970.	0.9	11
20	Dynamic IBVS of a rotary wing UAV using line features. Robotica, 2016, 34, 2009-2026.	1.9	18
21	Adaptive visual servoing of UAVs using a virtual camera. IEEE Transactions on Aerospace and Electronic Systems, 2016, 52, 2529-2538.	4.7	18
22	Dynamic image-based visual servoing for unmanned aerial vehicles with bounded inputs. , 2016, , .		6
23	Innerâ€"Outer Loop Control for Quadrotor UAVs With Input and State Constraints. IEEE Transactions on Control Systems Technology, 2016, 24, 1797-1804.	5.2	163
24	State transformation-based dynamic visual servoing for an unmanned aerial vehicle. International Journal of Control, 2016, 89, 892-908.	1.9	24
25	Inner-outer loop control with constraints for rotary-wing UAVs. , 2015, , .		4
26	Nonlinear dynamic image-based visual servoing of a quadrotor. Journal of Unmanned Vehicle Systems, 2015, 3, 1-21.	1.2	93
27	Experimental validation of dynamic visual servoing for a quadrotor using a virtual camera. , 2015, , .		12
28	IBVS of a rotary wing UAV using line features. , 2014, , .		1
29	Model-Based Helicopter UAV Control: ExperimentalÂResults. Journal of Intelligent and Robotic Systems: Theory and Applications, 2014, 73, 19-31.	3.4	8
30	Control-Oriented Physical Input Modelling for a Helicopter UAV. Journal of Intelligent and Robotic Systems: Theory and Applications, 2014, 73, 209-217.	3.4	5
31	Adaptive vector control for voltage source converters. IET Control Theory and Applications, 2013, 7, 1110-1119.	2.1	16
32	Experimental validation of a helicopter autopilot: Time-varying trajectory tracking. , 2013, , .		2
33	Physical input modelling and identification for a helicopter UAV. , 2013, , .		3
34	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.	3.4	44
35	Adaptive Control of a Voltage Source Converter for Power Factor Correction. IEEE Transactions on Power Electronics, 2013, 28, 4767-4779.	7.9	36
36	Invariant Observer Design for a Helicopter UAV Aided Inertial Navigation System. IEEE Transactions on Control Systems Technology, 2013, 21, 791-806.	5.2	58

#	ARTICLE	IF	CITATIONS
37	Experimental validation of an adaptive control for a Voltage Source Converter. , 2013, , .		1
38	A novel cascade controller for a helicopter UAV with Small Body Force compensation. , 2013, , .		3
39	Integration of a Triaxial Magnetometer into a Helicopter UAV GPS-Aided INS. IEEE Transactions on Aerospace and Electronic Systems, 2012, 48, 2947-2960.	4.7	46
40	Global Tracking via Output Feedback for Nonlinear MIMO Systems. IEEE Transactions on Automatic Control, 2011, 56, 2179-2184.	5.7	8
41	Observer forms for perspective systems. Automatica, 2010, 46, 1829-1834.	5.0	25
42	An experimental validation of magnetometer integration into a GPS-aided helicopter UAV navigation system. , 2010, , .		7
43	Adaptive control of a Voltage Source Converter. , 2010, , .		6
44	Multiple Time Scalings of a Multi-Output Observer Form. IEEE Transactions on Automatic Control, 2010, 55, 966-971.	5.7	29
45	Observer design using a generalized time-scaled block triangular observer form. Systems and Control Letters, 2009, 58, 346-352.	2.3	11
46	Experimental Validation of Nonlinear Control for a Voltage Source Converter. IEEE Transactions on Control Systems Technology, 2009, 17, 1135-1144.	5.2	88
47	A block triangular observer form for non-linear observer design. International Journal of Control, 2008, 81, 177-188.	1.9	15
48	Nonlinear Bearing Force and Torque Model for a Toothless Self-Bearing Servomotor. IEEE Transactions on Magnetics, 2008, 44, 1805-1814.	2.1	2
49	Time scaling of a multi-output observer form. , 2008, , .		1
50	A numerical analysis of the algebraic derivative method with application to magnetic bearings. , 2007, , .		2
51	On the Existence of a Block Triangular Form. Proceedings of the American Control Conference, 2007, , .	0.0	3
52	Flatness-Based Feedback Control of an Automotive Solenoid Valve. IEEE Transactions on Control Systems Technology, 2007, 15, 394-401.	5.2	57
53	Precision Tracking of a Rotating Shaft With Magnetic Bearings by Nonlinear Decoupled Disturbance Observers. IEEE Transactions on Control Systems Technology, 2007, 15, 1112-1121.	5.2	45
54	Experimental comparison of nonlinear tracking controllers for active magnetic bearings. Control Engineering Practice, 2007, 15, 95-107.	5.5	16

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55	A Block Triangular Form for Nonlinear Observer Design. IEEE Transactions on Automatic Control, 2006, 51, 1803-1808.	5.7	16
56	An efficient method for observer design with approximately linear error dynamics. International Journal of Control, 2004, 77, 607-612.	1.9	13
57	Nonlinear tension observers for web machines*1. Automatica, 2004, 40, 1517-1517.	5.0	3
58	Internal model-based controller design using measured costs and gradients. International Journal of Control, 1998, 69, 257-270.	1.9	6
59	Non-linear observer design by approximate error linearization. Systems and Control Letters, 1997, 32, 161-172.	2.3	18
60	Quadrotor Motion Control Using Deep Reinforcement Learning. Journal of Unmanned Vehicle Systems, 0, , .	1.2	5