Masayuki Sato

List of Publications by Year
in descending order

101 papers	1,040 citations	623734 14 h-index	526287 27 g-index
101 all docs	101 docs citations	101 times ranked	479 citing authors

#	Article	IF	Citations
1	Flight Evaluation of an LPV Sliding Mode Observer for Sensor FTC. IEEE Transactions on Control Systems Technology, 2022, 30, 1319-1327.	5.2	5
2	Fault tolerant linear parameter varying flight control design, verification and validation. Journal of the Franklin Institute, 2022, 359, 653-676.	3.4	10
3	Simultaneous Fault and Input Time Delay Estimation for an Actuator System: Theory and Flight Data Validation. , 2022, 6, 1172-1177.		4
4	Synthesis of a Calibration-Free Visual Feedback Controller for an Inverted Pendulum Using a Fisheye Lens. IEEE Transactions on Industrial Electronics, 2022, 69, 13348-13358.	7.9	2
5	Conversion from Non-structured Controller to Observer-structured Controller for Linear Time-invariant Parameter-dependent Plant. Transactions of the Society of Instrument and Control Engineers, 2022, 58, 255-261.	0.2	1
6	Observer-based Scaled H_∞ Control with Optimized State Estimation Performance. Transactions of the Society of Instrument and Control Engineers, 2021, 57, 101-109.	0.2	0
7	Dual formulation of causal gain-scheduled output feedback controller design using parameter-dependent Lyapunov functions. SICE Journal of Control Measurement and System Integration, 2021, 14, 196-205.	0.7	1
8	Passive Fault-Tolerant Flight Control Design Example for Elevator Efficiency Reduction Using Structured H_∞ Control. , 2021, , .		0
9	Causal Gain-scheduled output feedback controllers using parameter-dependent Lyapunov Functions. Automatica, 2021, 129, 109569.	5.0	4
10	Luenberger Observer-Based Flight Controller Design Using Robust Control Toolbox™. , 2021, , .		2
11	Observer-Based Robust Controller Design With Simultaneous Optimization of Scaling Matrices. IEEE Transactions on Automatic Control, 2020, 65, 861-866.	5.7	10
12	Robust Gain-Scheduled Flight Controller for an In-Flight Simulator. IEEE Transactions on Aerospace and Electronic Systems, 2020, 56, 2122-2135.	4.7	15
13	Conservatism reduction for linear parameter-varying control design facing inexact scheduling parameters illustrated on flight tests. International Journal of Robust and Nonlinear Control, 2020, 30, 6130-6148.	3.7	8
14	On-line parameter estimation for indirect adaptive flight control: a practical evaluation of several techniques. , 2020, , .		3
15	Structured μ-Synthesis of Robust Attitude Control Laws for Quad-Tilt-Wing Unmanned Aerial Vehicle. Journal of Guidance, Control, and Dynamics, 2020, 43, 2258-2274.	2.8	3
16	One-shot design of performance scaling matrices and observer-based gain-scheduled controllers depending on inexact scheduling parameters. Systems and Control Letters, 2020, 137, 104632.	2.3	13
17	Flight evaluation of a sliding mode online control allocation scheme for fault tolerant control. Automatica, 2020, 114, 108829.	5.0	40
18	Design and Performance Check of Gain-Scheduled Flight Controller Depending on Uncertain Scheduling Parameters for MuPAL-α. Journal of the Japan Society for Aeronautical and Space Sciences, 2020, 68, 12-23.	0.1	0

#	Article	IF	Citations
19	Parameter Estimation in Input Matrix Under Gain Constraints in Specified Frequency Ranges. IFAC-PapersOnLine, 2020, 53, 604-609.	0.9	0
20	Pilot Assessment of Fault-Tolerant PID Flight Controller for Elevator Efficiency Reduction via Hardware-In-the-Loop Simulations. IFAC-PapersOnLine, 2020, 53, 14918-14923.	0.9	1
21	Hardware-In-the-Loop Evaluation of a Robust CâŽ Control Law on MuPAL-Î± Research Aircraft. IFAC-PapersOnLine, 2020, 53, 14833-14838.	0.9	0
22	`<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" id="M1"><mml:msub><mml:mrow><mml:mi>H</mml:mi></mml:mrow><mml:mrow><mml:mo>âˆž</mml:mo></mml:mrow></mml:msu` Control-Based Robust CAS Design for QTW-UAV via the Multiple-Model Approach with Particle Swarm Optimization. International Journal of Aerospace Engineering, 2019, 2019, 1-17.	0.9	3
23	State Feedback Synthesis for Discrete-time Linear Systems with Stochastic Parameters Guaranteeing Deterministic H2 Performance and Stochastic Stability. IFAC-PapersOnLine, 2019, 52, 664-669.	0.9	0
24	Design and Hardware-In-the-Loop Validation of a Fault-Tolerant Y* Flight Control Law. , 2019, , .		2
25	Gain-Scheduled Flight Controller Using Bounded Inexact Scheduling Parameters. IEEE Transactions on Control Systems Technology, 2018, 26, 1074-1082.	5.2	34
26	Simultaneous Design of Discrete-Time Observer-Based Robust Scaled-H8 Controllers and Scaling Matrices. SICE Journal of Control Measurement and System Integration, 2018, 11, 65-71.	0.7	6
27	<i>H</i><sub>âˆž</sub> Control-based CAS Design of QTW-UAVs Using Particle Swarm Optimization. Transactions of the Japan Society for Aeronautical and Space Sciences, 2018, 61, 226-229.	0.7	2
28	Conversion from Full-Order Controllers to Observer-Structured Controllers. , 2018, , .		1
29	Evaluation of a Sliding Mode Fault Tolerant Controller on the MuPAL-<tex>$alpha$</tex> Research Aircraft. , 2018, , .		4
30	Robust Gain-Scheduled Flight Controller via A New Formulation for Over-Bounding Scheduling Parameter Errors. IFAC-PapersOnLine, 2018, 51, 62-67.	0.9	1
31	Continuous-Time Gain-Scheduled `<tex>$H_{infty}$</tex>` Controllers with Causality for Scheduling Parameters via Parameter-Dependent Lyapunov Functions. , 2018, , .		1
32	Design and Flight Testing of an Adaptive Gain-Scheduled Controller Using On-Line Model Estimation. , 2018, , .		7
33	Robust Attitude Control Design of Quad-Tilt-Wing UAV: A Structured `<tex>$mu$</tex>`-Synthesis Approach. , 2018, , .		1
34	Flight Evaluations of Sliding Mode Fault Tolerant Controllers. , 2018, , .		2
35	A New Method for Gain-Scheduled Output Feedback Controller Design Using Inexact Scheduling Parameters. , 2018, , .		6
36	Active Fault Tolerant Control of MuPAL-a Using Sliding Modes. , 2018, , .		2

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37	Flight test of fault-tolerant flight control system using simple adaptive control with PID controller. Aircraft Engineering and Aerospace Technology, 2018, 90, 210-218.	1.2	15
38	Control Augmentation System Design for Quad-Tilt-Wing Unmanned Aerial Vehicle via Robust Output Regulation Method. IEEE Transactions on Aerospace and Electronic Systems, 2017, 53, 357-369.	4.7	31
39	Flight Demonstration of Simple Preview Altitude Control Algorithm for Unmanned Airplane. Journal of Aircraft, 2017, 54, 1571-1579.	2.4	1
40	Observer-based continuous-time robust scaled-H<inf>â^ž</inf> controller design with simultaneous optimization of scaling matrices. , 2017, , .		1
41	Continuous-time observer-based gain-scheduled output feedback controller design with simultaneous optimization of scaling matrices. , 2017, , .		1
42	Discrete-Time H â^ž Preview Feedforward Controller Using Uncertain Prior External Input Information via GKYP Lemma * *Supported by JSPS KAKENHI Grant Number 15K06159.. IFAC-PapersOnLine, 2017, 50, 1527-1532.	0.9	0
43	Flight evaluation of an LPV sliding mode controller with online control allocation. , 2017, , .		7
44	Hardware-in-the-loop evaluation of an LPV sliding mode fixed control allocation scheme on the MuPAL-Î± research aircraft. , 2017, , .		1
45	Discrete-time observer-based gain-scheduled output feedback controller design with simultaneous optimization of scaling matrices. , 2017, , .		0
46	Flight testing of an structured H-infinity controller: An EU-Japan collaborative experience. , 2017, , .		13
47	Flight Controller Design for Small Quad Tilt Wing UAV. Journal of the Japan Society for Aeronautical and Space Sciences, 2016, 64, 79-82.	0.1	8
48	Discrete-time feedforward controllers using prior external input information via descriptor system representation and GKYP lemma. , 2016, , .		0
49	Flight demonstration of Unmanned Airplane for Radiation Monitoring System with preview path-tracking controller. , 2016, , .		0
50	Design and Testing of a Low-Order Flight Control System for Quad-Tilt-Wing UAV. Journal of Guidance, Control, and Dynamics, 2016, 39, 2426-2433.	2.8	8
51	Gain-Scheduled Model-Matching Flight Controller Using Inexact Scheduling Parameters**Supported by JSPS KAKENHI Grant 15K06159. IFAC-PapersOnLine, 2016, 49, 88-93.	0.9	4
52	Flight Testing of a Gain-Scheduled Stability and Control Augmentation System for a Quad-Tilt-Wing UAV. , 2016, , .		2
53	Gain-Scheduled State Feedback Controllers for Discrete-Time LPV systems Using Scheduling Parameters Affected by Absolute and Proportional Uncertainties**This work was supported by JSPS KAKENHI Grant Numbers 23760398 and 15K06159.. IFAC-PapersOnLine, 2015, 48, 31-36.	0.9	6
54	Gain-scheduled output feedback controllers for discrete-time LPV systems using bounded inexact scheduling parameters. , 2015, , .		16

#	Article	IF	Citations
55	Notice of Removal Control performance improvement for QTW UAV by using feedforward gains. , 2015, , .		1
56	Design of Gain Scheduled Stability and Control Augmentation System for Quad-Tilt-Wing UAV. , 2015, , .		4
57	Flight Controller Design and Demonstration of Quad-Tilt-Wing Unmanned Aerial Vehicle. Journal of Guidance, Control, and Dynamics, 2015, 38, 1071-1082.	2.8	51
58	Flight Controller Design of Unmanned Airplane for Radiation Monitoring System via Structured Robust Controller Design Using Multiple Model Approach. Transactions of the Society of Instrument and Control Engineers, 2015, 51, 215-225.	0.2	3
59	Discrete-time gain-scheduled model-matching flight controller using inexact scheduling parameters. , 2014, , .		10
60	Flight Control Design and Demonstration of Unmanned Airplane for Radiation Monitoring System. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2014, 47, 2527-2532.	0.4	2
61	Gain-scheduled output-feedback controllers using inexact scheduling parameters for continuous-time LPV systems. Automatica, 2013, 49, 1019-1025.	5.0	117
62	Flight Test Verification of Flight Controller for Quad Tilt Wing Unmanned Aerial Vehicle. , 2013, , .		11
63	Robust controller synthesis for a class of uncertain systems and application to visual feedback control. , 2013, , .		6
64	Robust Gain-Scheduled flight controller using inexact scheduling parameters. , 2013, , .		14
65	Gain-Scheduled Observers Using Inexact Scheduling Parameters. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2012, 45, 369-374.	0.4	4
66	Gain-Scheduled Output-Feedback Controllers with Good Implementability and Robustness. , 2012, , 181-215.		7
67	Discrete-time Gain-Scheduled Output-Feedback controllers exploiting inexact scheduling parameters. , 2011, , .		7
68	Gain-Scheduled Output-Feedback Controllers Using Inexactly Measured Scheduling Parameters for Linear Parametrically Affine Systems. SICE Journal of Control Measurement and System Integration, 2011, 4, 145-152.	0.7	5
69	Gain-Scheduled Hâˆž Controllers being Derivative-Free of Scheduling Parameters via Parameter-Dependent Lyapunov Functions. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2011, 44, 7951-7956.	0.4	4
70	Gain-scheduled output-feedback controllers depending solely on scheduling parameters via parameter-dependent Lyapunov functions. Automatica, 2011, 47, 2786-2790.	5.0	83
71	Discrete-time Gain-Scheduled Output-Feedback controllers exploiting inexact scheduling parameters via Parameter-Dependent Lyapunov Functions. , 2011, , .		22
72	Flight Control Experiment of Multipurpose-Aviation-Laboratory-alpha In-Flight Simulator. Journal of Guidance, Control, and Dynamics, 2011, 34, 1081-1096.	2.8	31

#	Article	IF	Citations
73	Gain-scheduled open-loop system design for LPV systems using polynomially parameter-dependent Lyapunov functions. Systems and Control Letters, 2010, 59, 265-276.	2.3	14
74	Gain-Scheduled state-feedback controllers using inexactly measured scheduling parameters: H<inf>2</inf> and H<inf>∞</inf> problems. , 2010, , .		21
75	Gain-Scheduled output-feedback controllers using inexactly measured scheduling parameters. , 2010, , .		18
76	Gain-Scheduled H<inf>&#x221E;</inf> filters using inexactly measured scheduling parameters. , 2010, , .		8
77	Gain-Scheduled State-Feedback Controllers Using Inexactly Measured Scheduling Parameters: Stabilizing and H∞ Control Problems. SICE Journal of Control Measurement and System Integration, 2010, 3, 285-291.	0.7	5
78	Parameter-Dependent Slack Variable approach for positivity check of polynomials over hyper-rectangle. , 2009, , .		1
79	Disturbance suppression via robust MPC using prior disturbance data application to flight controller design for Gust Alleviation. , 2009, , .		4
80	Disturbance suppression via robust MPC using prior disturbance data: Low computational complexity method. , 2009, , .		4
81	Robust model-following controller design for LTI systems affected by parametric uncertainties: a design example for aircraft motion. International Journal of Control, 2009, 82, 689-704.	1.9	16
82	LMI Tests for Positive Definite Polynomials: Slack Variable Approach. IEEE Transactions on Automatic Control, 2009, 54, 886-891.	5.7	40
83	Inverse system design for LPV systems using parameter-dependent Lyapunov functions. Automatica, 2008, 44, 1072-1077.	5.0	17
84	Design method of gain-scheduled controllers not depending on derivatives of parameters. International Journal of Control, 2008, 81, 1013-1025.	1.9	23
85	Simultaneous Realization of Handling and Gust Responses: In-Flight Simulator Controller Design. Journal of Guidance, Control, and Dynamics, 2008, 31, 1545-1560.	2.8	19
86	Robust Stability/Performance Analysis for Polytopic Systems via Multiple Slack Variable Approach. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2008, 41, 11391-11396.	0.4	1
87	Robust stability/performance analysis for uncertain linear systems via multiple slack variable approach: Polynomial LTIPD systems. , 2007, , .		3
88	FLIGHT TEST OF IN-FLIGHT SIMULATOR CONTROLLER FOR SIMULTANEOUS SIMULATION OF GUST RESPONSE AND HANDLING RESPONSE. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2007, 40, 853-858.	0.4	0
89	Comparison Between SOS Approach and Slack Variable Approach for Non-negativity Check of Polynomial Functions: Single Variable Case. , 2007, , .		7
90	Flight test of flight controller for arbitrary maneuverability and wind gust rejection. , 2006, , .		3

#	Article	IF	Citations
91	Filter design for LPV systems using quadratically parameter-dependent Lyapunov functions. Automatica, 2006, 42, 2017-2023.	5.0	73
92	H2 Filter Design for Linear Parameter-Varying Systems using Higher-Order Parameter-Dependent Lyapunov Functions. , 2006, , .		2
93	Robust Stability/Performance Analysis for Linear Time-Invariant Polytopically Parameter-Dependent Systems using Polynomially Parameter-Dependent Lyapunov Functions. , 2006, , .		6
94	Robust Stability/Performance Analysis for Linear Time-Invariant Polynomially Parameter-Dependent Systems using Polynomially Parameter-Dependent Lyapunov Functions. , 2006, , .		25
95	Flight Test of Model-Matching Controller for In-Flight Simulator MuPAL-alpha. Journal of Guidance, Control, and Dynamics, 2006, 29, 1476-1482.	2.8	6
96	Flight Test of Flight Controller for Arbitrary Maneuverability and Wind Gust Rejection. , 2006, , .		1
97	Controller Design Using Standard Operator Model. Journal of Guidance, Control, and Dynamics, 2005, 28, 872-877.	2.8	6
98	Robust Flight Controller Design That Takes Into Account Handling Quality. Journal of Guidance, Control, and Dynamics, 2005, 28, 71-77.	2.8	8
99	Filter design for LPV systems using biquadratic Lyapunov functions. , 2004, , .		7
100	Design of Model-Matching Controllers Using the Right Inverse System With Application to MuPAL-.ALPHA. and Verification by Ground and Flight Experiments. Journal of the Japan Society for Aeronautical and Space Sciences, 2003, 51, 276-284.	0.1	6
101	Gain-scheduled inverse system and filtering system without derivatives of scheduling parameters. , 0, , .		6